

BARCLAYS PLC  
Form 20-F  
February 23, 2017

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**WASHINGTON, DC 20549**  
**FORM 20-F**

(Mark One)

**REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2016

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

OR

**SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report \_\_\_\_\_

Commission file numbers      Barclays PLC                      1-09246

Barclays Bank PLC                      1-10257

**BARCLAYS PLC**

**BARCLAYS BANK PLC**

(Exact Names of Registrants as Specified in their Charter[s])

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ENGLAND

(Jurisdiction of Incorporation or Organization)

1 CHURCHILL PLACE, LONDON E14 5HP, ENGLAND

(Address of Principal Executive Offices)

**MARIE SMITH, +44 (0)20 7116 2907, MARIE.SMITH@BARCLAYS.COM**

**1 CHURCHILL PLACE, LONDON E14 5HP, ENGLAND**

\*(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

**Barclays PLC**

Name of Each Exchange

On Which Registered

Title of Each Class

25p ordinary shares

New York Stock Exchange\*

<u>Title of Each Class</u>	<u>Name of Each Exchange</u> <u>On Which Registered</u>
American Depositary Shares, each representing four 25p ordinary shares	New York Stock Exchange
4.375% Fixed Rate Subordinated Notes due 2024	New York Stock Exchange
2.75% Fixed Rate Senior Notes due 2019	New York Stock Exchange
2.00% Fixed Rate Senior Notes due 2018	New York Stock Exchange
3.65% Fixed Rate Senior Notes due 2025	New York Stock Exchange
2.875% Fixed Rate Senior Notes due 2020	New York Stock Exchange
5.25% Fixed Rate Senior Notes due 2045	New York Stock Exchange
3.25% Fixed Rate Senior Notes due 2021	New York Stock Exchange
4.375% Fixed Rate Senior Notes due 2026	New York Stock Exchange
5.20% Fixed Rate Subordinated Notes due 2026	New York Stock Exchange
3.20% Fixed Rate Senior Notes due 2021	New York Stock Exchange
Floating Rate Senior Notes due 2021	New York Stock Exchange
Floating Rate Senior Notes due 2023	New York Stock Exchange

<u>Title of Each Class</u>	<u>Name of Each Exchange On Which Registered</u>
3.684% Fixed Rate Senior Notes due 2023	New York Stock Exchange
4.337% Fixed Rate Senior Notes due 2028	New York Stock Exchange
4.950% Fixed Rate Senior Notes due 2047	New York Stock Exchange

\* Not for trading, but in connection with the registration of American Depositary Shares, pursuant to the requirements to the Securities and Exchange Commission.

**Barclays Bank PLC**

<u>Title of Each Class</u>	<u>Name of Each Exchange On Which Registered</u>
Callable Floating Rate Notes 2035	New York Stock Exchange
Non-Cumulative Callable Dollar Preference Shares, Series 3	New York Stock Exchange*
American Depositary Shares, Series 3, each representing one Non-Cumulative Callable Dollar Preference Share, Series 3	New York Stock Exchange
Non-Cumulative Callable Dollar Preference Shares, Series 5	New York Stock Exchange*
American Depositary Shares, Series 5, each representing one Non-Cumulative Callable Dollar Preference Share, Series 5	New York Stock Exchange
5.140% Lower Tier 2 Notes due October 2020	New York Stock Exchange
iPath® Bloomberg Commodity Index Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Agriculture Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Aluminum Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Cocoa Subindex Total Return <sup>SM</sup> ETN	NYSE Arca

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iPath® Bloomberg Coffee Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Copper Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Cotton Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Energy Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Grains Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Industrial Metals Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Lead Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Livestock Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Natural Gas Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Nickel Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Platinum Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Precious Metals Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Softs Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Sugar Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® Bloomberg Tin Subindex Total Return <sup>SM</sup> ETN	NYSE Arca
iPath® S&P GSCI® Total Return Index ETN	NYSE Arca
iPath® S&P GSCI® Crude Oil Total Return Index ETN	NYSE Arca
iPath® CBOE S&P 500 BuyWrite Index <sup>SM</sup> ETN	NYSE Arca
iPath® MSCI India Index <sup>SM</sup> ETN	NYSE Arca
iPath® EUR/USD Exchange Rate ETN	NYSE Arca
iPath® GBP/USD Exchange Rate ETN	NYSE Arca
iPath® JPY/USD Exchange Rate ETN	NYSE Arca

iPath® S&P 500 VIX Short-Term Futures™ ETN

NYSE Arca

iPath® S&P 500 VIX Mid-Term Futures™ ETN	NYSE Arca
iPath® Inverse S&P 500 VIX Short-Term Futures™ ETN	NYSE Arca
iPath® Long Extended Russell 1000® TR Index ETN	NYSE Arca
iPath® Long Extended Russell 2000® TR Index ETN	NYSE Arca
iPath® Long Enhanced MSCI EAFE® TR Index ETN	NYSE Arca
iPath® Long Enhanced MSCI Emerging Markets Index ETN	NYSE Arca
iPath® Short Enhanced MSCI Emerging Markets Index ETN	NYSE Arca
iPath® Long Extended S&P 500® TR Index ETN	NYSE Arca
iPath® Global Carbon ETN	NYSE Arca
iPath® Optimized Currency Carry ETN	NYSE Arca
iPath® US Treasury Steepener ETN	NASDAQ
iPath® US Treasury Flatteners ETN	NASDAQ
iPath® US Treasury 2-year Bull ETN	NASDAQ
iPath® US Treasury 2-year Bear ETN	NASDAQ
iPath® US Treasury 10-year Bull ETN	NASDAQ
iPath® US Treasury 10-year Bear ETN	NASDAQ
iPath® US Treasury Long Bond Bull ETN	NASDAQ
iPath® US Treasury Long Bond Bear ETN	NASDAQ
iPath® Pure Beta Broad Commodity ETN	NYSE Arca
iPath® Pure Beta S&P GSCI®-Weighted ETN	NYSE Arca
iPath® Pure Beta Cocoa ETN	NYSE Arca
iPath® Pure Beta Coffee ETN	NYSE Arca

iPath® Pure Beta Cotton ETN

NYSE Arca



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iPath® Pure Beta Sugar ETN	NYSE Arca
iPath® Pure Beta Aluminum ETN	NYSE Arca
iPath® Pure Beta Copper ETN	NYSE Arca
iPath® Pure Beta Lead ETN	NYSE Arca
iPath® Pure Beta Nickel ETN	NYSE Arca
iPath® Pure Beta Crude Oil ETN	NYSE Arca
iPath® Seasonal Natural Gas ETN	NYSE Arca
iPath® Pure Beta Agriculture ETN	NYSE Arca
iPath® Pure Beta Grains ETN	NYSE Arca
iPath® Pure Beta Softs ETN	NYSE Arca
iPath® Pure Beta Industrial Metals ETN	NYSE Arca
iPath® Pure Beta Energy ETN	NYSE Arca
iPath® Pure Beta Livestock ETN	NYSE Arca
iPath® Pure Beta Precious Metals ETN	NYSE Arca
iPath® US Treasury 5-year Bull ETN	NASDAQ
iPath® US Treasury 5-year Bear ETN	NASDAQ
iPath® S&P 500 Dynamic VIX ETN	NYSE Arca
iPath® Inverse S&P 500 VIX Short-Term Futures™ ETN (II)	NYSE Arca
iPath® GEMS Index™ ETN	NYSE Arca
iPath® GEMS Asia 8 ETN	NYSE Arca
iPath® Asian and Gulf Currency Revaluation ETN	NYSE Arca
iPath® S&P MLP ETN	NYSE Arca
	NYSE Arca

iPath® Series B S&P GSCI Crude Oil Total Return Index  
ETN

Barclays ETN+ S&P 500® VEQTOR ETN

NYSE Arca

Barclays ETN+ Shiller CAPE™ ETNs	NYSE Arca
Barclays ETN+ Select MLP ETN	NYSE Arca
Barclays ETN+ FI Enhanced Europe 50 ETN	NYSE Arca
Barclays ETN+ FI Enhanced Global High Yield ETN	NYSE Arca
Barclays ETN+ FI Enhanced Europe 50 ETN Series B	NYSE Arca
Barclays Women in Leadership ETN	NYSE Arca
Barclays Return on Disability ETN	NYSE Arca
Barclays Inverse US Treasury Composite ETN	NASDAQ

\* Not for trading, but in connection with the registration of American Depositary Shares, pursuant to the requirements to the Securities and Exchange Commission.

Securities registered or to be registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

Indicate the number of outstanding shares of each of the issuers' classes of capital or common stock as of the close of the period covered by the annual report.

Barclays PLC	25p ordinary shares	16,804,603,949
Barclays Bank PLC	£1 ordinary shares	2,342,558,515
	£1 preference shares	1,000
	£100 preference shares	20,930
	100 preference shares	31,856
	\$0.25 preference shares	161,000,000
	\$100 preference shares	58,133

Indicate by check mark if each registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

If this report is an annual or transition report, indicate by check mark if the registrants are not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act 1934.

Yes No

Note Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrants: (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) have been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrants have submitted electronically and posted on their corporate Web sites, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

Indicate by check mark whether each registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

Barclays PLC

Large Accelerated Filer	Accelerated Filer	Non-Accelerated Filer
Barclays Bank PLC		

Large Accelerated Filer	Accelerated Filer	Non-Accelerated Filer
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\*Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting Standards as issued by the International Accounting Standards Board

Other

\*If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:

Item 17

Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS.)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.

Yes No

## SEC Form 20-F Cross reference information

<b>Form 20-F item number</b>	<b>Page and caption references in this document*</b>
<b>1 Identity of Directors, Senior Management and Advisers</b>	Not applicable
<b>2 Offer Statistics and Expected Timetable</b>	Not applicable
<b>3 Key Information</b>	
A. Selected financial data	193, 195, 321-322, 447-448
B. Capitalization and indebtedness	Not applicable
C. Reason for the offer and use of proceeds	Not applicable
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<b>5 Operating and Financial Review and Prospects</b>	
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A.	Major shareholders	45, 331-332
B.	Related party transactions	210, 302-304 (note 41), 426, 446 (note r)
C.	Interests of experts and counsel	Not applicable

<b>Form 20-F item number</b>	<b>Page and caption references in this document*</b>
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E. Dilution	Not applicable
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<b>12 Description of Securities Other than Equity Securities</b>	
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B. Warrants and Rights	Not applicable
C. Other Securities	Not applicable
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<b>13 Defaults, Dividends Arrearages and Delinquencies</b>	Not applicable
<b>14 Material Modifications to the Rights of Security Holders and Use of Proceeds</b>	Not applicable
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<b>16F Change in Registrant's Certifying Accountant</b>	Not applicable
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<b>17 Financial Statements</b>	Not applicable (See Item 8)
<b>18 Financial Statements</b>	Not applicable (See Item 8)
<b>19 Exhibits</b>	Exhibit Index

\* Captions have been included only in respect of pages with multiple sections on the same page in order to identify the relevant caption on that page covered by the corresponding Form 20-F item number.

Building the bank  
of the future

Barclays PLC and Barclays Bank PLC

2016 Annual Report on Form 20-F

## Notes

The term Barclays or Group refers to Barclays PLC together with its subsidiaries. Unless otherwise stated, the income statement analysis compares the year ended 31 December 2016 to the corresponding 12 months of 2015 and balance sheet analysis as at 31 December 2016 with comparatives relating to 31 December 2015. The abbreviations £m and £bn represent millions and thousands of millions of Pounds Sterling respectively; the abbreviations \$m and \$bn represent millions and thousands of millions of US Dollars respectively; and the abbreviations m and bn represent millions and thousands of millions of Euros respectively.

Comparatives have been restated to reflect the implementation of the Group business reorganisation. These restatements were detailed in our Form 6-K filed with the SEC dated 15 April 2016.

The information in this announcement, which was approved by the Board of Directors on 22 February 2017, does not comprise statutory accounts within the meaning of Section 434 of the Companies Act 2006. Statutory accounts for the year ended 31 December 2015, which included certain information required for the Joint Annual Report on Form 20-F of Barclays PLC and Barclays Bank PLC to the SEC and which contained an unqualified audit report under Section 495 of the Companies Act 2006 (which did not make any statements under Section 498 of the Companies Act 2006) have been delivered to the Registrar of Companies in accordance with Section 441 of the Companies Act 2006.

Barclays is a frequent issuer in the debt capital markets and regularly meets with investors via formal road-shows and other ad hoc meetings. Consistent with its usual practice, Barclays expects that from time to time over the coming quarter it will meet with investors globally to discuss these results and other matters relating to the Group.

### **Certain non-IFRS measures**

Barclays management believes that the non-International Financial Reporting Standards (non-IFRS) measures included in this document provide valuable information to readers of its financial statements because they enable the reader to identify a more consistent basis for comparing the business performance between financial periods, and provide more detail concerning the elements of performance which the managers of these businesses are most directly able to influence or are relevant for an assessment of the Group. They also reflect an important aspect of the way in which operating targets are defined and performance is monitored by Barclays management. However, any non-IFRS measures in this document are not a substitute for IFRS measures and readers should consider the IFRS measures as well.

There are a number of key judgement areas, for example impairment calculations, which are based on models and which are subject to ongoing adjustment and modifications. Reported numbers reflect best estimates and judgements at the given point in time.

Notable items as set out on page 197 are considered to be significant items impacting comparability of performance and have been called out for each of the business segments.

Relevant terms that are used in this document but are not defined under applicable regulatory guidance or International Financial Reporting Standards (IFRS) are explained in the Results glossary of non-IFRS performance measures on page 212 and the glossary of terms on pages 449 to 464.

Key non-IFRS measures included in this document, and the most directly comparable IFRS measures, are:

Attributable profit/(loss) excluding notable items represents profit after tax excluding notable items less profit attributable to non-controlling interests. The comparable IFRS measure is attributable profit. A reconciliation is presented on pages vi to vii;

Average tangible shareholders' equity is calculated as the average equity adjusted to remove the effect of goodwill and intangible assets. The comparable IFRS measure is average equity. A reconciliation is provided on page ix;

Average allocated tangible equity represents the average tangible equity that is allocated to Barclays Core, and to the businesses. The comparable IFRS measure is average equity. A reconciliation is provided on page ix;

Average tangible equity is equivalent to average tangible shareholders' equity;

Barclays Core results are considered to be non-IFRS because Barclays Core represents the sum of three Operating Segments, each of which is prepared in accordance with IFRS 8; Operating Segments : Barclays UK, Barclays International and Head Office. A reconciliation is provided on pages vi to viii;

Basic earnings per share excluding notable items represents attributable profit excluding all notable items (page 197) divided by the basic weighted average number of shares in issue. The comparable IFRS measure is basic earnings per share. A reconciliation is provided on page 215;

Core basic earnings per share excluding notable items represents basic earnings per share excluding notable items calculated for Barclays Core. Barclays Core represents the sum of three Operating Segments, each of which is prepared in accordance with IFRS 8, Operating Segments : Barclays UK, Barclays International and Head Office. The comparable IFRS measure is basic earnings per share. A reconciliation is provided on page 215;

Cost: income ratio excluding notable items represents the ratio between total operating expenses excluding notable items and total income excluding notable items. The comparable IFRS measure is cost: income ratio. A reconciliation is provided on pages vi to viii;

Core cost: income ratio excluding notable items represents cost: income ratio excluding notable items calculated for Barclays Core. Barclays Core represents the sum of three Operating Segments, each of which is prepared in accordance with IFRS 8, Operating Segments : Barclays UK, Barclays International and Head Office. The comparable IFRS measure is cost: income ratio. A reconciliation is provided on pages vi to viii;

Total income excluding notable items represents total income excluding the impact of own credit, gain on disposal of Barclays' share of Visa Europe Limited, revision of Education, Social Housing, and Local Authority (ESHLA) valuation methodology and gain on US Lehman acquisition assets. The comparable IFRS measure is total income. A full list of notable items is shown on page 197. A reconciliation is provided on pages vi to viii;

Net operating income excluding notable items represents net operating income excluding the impact of own credit, gain on disposal of Barclays' share of Visa Europe Limited, gain on US Lehman acquisition assets and revision of Education, Social Housing, and Local Authority (ESHLA) valuation methodology. The comparable IFRS measure is net operating income. A full list of notable items is shown on page 197. A reconciliation is provided on pages vi to viii;



Total operating expenses excluding notable items represents total operating expenses excluding the impact of provisions for UK customer redress, provisions for ongoing investigations and litigation including Foreign Exchange, gain on valuation of a component of the defined retirement benefit liability, impairment of goodwill and other assets relating to businesses being disposed and losses on sale relating to the Spanish, Portuguese and Italian businesses. The comparable IFRS measure is total operating expenses. A full list of notable items is shown on page 197. A reconciliation is provided on pages vi to viii;

Profit after tax excluding notable items represents profit after tax excluding the post-tax impact of own credit, impairment of goodwill and other assets relating to businesses being disposed, provisions for UK customer redress, gain on US Lehman acquisition assets, provisions for ongoing investigations and litigation including Foreign Exchange, losses on sale relating to the Spanish, Portuguese and Italian businesses, revision of Education, Social Housing, and Local Authority (ESHLA) valuation methodology, gain on a valuation of a component of the defined retirement benefit liability, and gain on disposal of Barclays share of Visa Europe Limited. The comparable IFRS measure is profit after tax. A reconciliation is provided on pages vi to viii;

Profit before tax excluding notable items represents profit before tax excluding the impact of own credit, impairment of goodwill and other assets relating to businesses being disposed, provisions for UK customer redress, excluding gain on US Lehman acquisition assets, provisions for ongoing investigations and litigation including Foreign Exchange, losses on sale relating to the Spanish, Portuguese and Italian businesses, revision of Education, Social Housing, and Local Authority (ESHLA) valuation methodology, gain on a valuation of a component of the defined retirement benefit liability, and gain on disposal of Barclays share of Visa Europe Limited. The comparable IFRS measure is profit before tax. A reconciliation is provided on pages vi to viii;

Return on average allocated tangible equity represents the return on average tangible equity that is allocated to Barclays Core, and to the businesses. The comparable IFRS measure is return on equity. A reconciliation is provided on page ix;

Attributable profit/(loss) excluding notable items represents attributable profit excluding the post-tax impact of own credit, impairment of goodwill and other assets relating to businesses being disposed, provisions for UK customer redress, gain on US Lehman acquisition assets, provisions for ongoing investigations and litigation including Foreign Exchange, losses on sale relating to the Spanish, Portuguese and Italian businesses, revision of Education, Social Housing, and Local Authority (ESHLA) valuation methodology, gain on a valuation of a component of the defined retirement benefit liability, and gain on disposal of Barclays share of Visa Europe Limited. The comparable IFRS measure is attributable profit. A full list of notable items is shown on page 197. A reconciliation to IFRS is presented on pages vi to viii;

Return on average tangible shareholders' equity excluding notable items represents attributable profit excluding notable items, including an adjustment for the tax credit recorded in reserves in respect of other equity instruments, as a proportion of average shareholders' equity excluding non-controlling interests and other equity instruments adjusted for the deduction of intangible assets and goodwill. The comparable IFRS measure is return on equity. A reconciliation is provided on page 214;

Return on average tangible shareholders' equity is calculated as the return on equity adjusted to remove the effect of goodwill and intangible assets. The comparable IFRS measure is return on equity. A reconciliation is provided on page ix;

Tangible net asset value per share is calculated by dividing shareholders' equity, excluding non-controlling interests and other equity instruments, less goodwill and intangible assets, by the number of issued ordinary shares. The components of the calculation have been included on page 215;

Total operating expenses, excluding conduct and litigation charges, and other notable items represents total operating expenses excluding the impact of impairment of goodwill and other assets relating to businesses being disposed, provisions for UK customer redress, provisions for ongoing investigations and litigation including Foreign Exchange, and gain on a valuation of a component of the defined retirement benefit liability. The comparable IFRS measure is total operating expenses. A reconciliation is provided on pages vi to viii;

Total operating expenses excluding conduct and litigation charges represents total operating expenses excluding the impact of provisions for UK customer redress, and provisions for ongoing investigations and litigation including Foreign Exchange. The comparable IFRS measure is total operating expenses. A reconciliation to IFRS is provided on pages vi to viii; and

Transitional CET1 ratio according to FSA October 2012. This measure is calculated by taking into account the statement of the Financial Services Authority, the predecessor of the Prudential Regulation Authority, on CRD IV transitional provisions in October 2012, assuming such provisions were applied as at 1 January 2014. This ratio is used as the relevant measure starting 1 January 2014 for purposes of determining whether the automatic write-down trigger (specified as a Transitional CET1 ratio according to FSA October 2012 of less than 7.00%) has occurred under the terms of the Contingent Capital Notes issued by Barclays Bank PLC on November 21, 2012 (CUSIP: 06740L8C2) and April 10, 2013 (CUSIP: 06739FHK0). Please refer to page 155 for a reconciliation of this measure to CRD IV CET1 ratio.

## **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 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 similar words or phrases. The meaning of these words and phrases is intended to be forward-looking. Examples of forward-looking statements include, among others, statements or guidance regarding the Group's future financial position, income growth, assets, impairment charges, provisions, notable items, business strategy, structural reform, capital, leverage and other regulatory ratios, payment of dividends (including dividend pay-out ratios and expected payment strategies), projected levels of growth in the banking and financial markets, projected costs or savings, original and revised commitments and targets in connection with the strategic cost programme and the Group Strategy Update, rundown of assets and businesses within Barclays Non-Core, sell down of the Group's interest in Barclays Africa Group Limited, estimates of capital expenditures and plans and objectives for

future operations, projected employee numbers 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, 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, future levels of notable items, 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 (including with regard to the future structure of the Group) applicable to past, current and future periods; UK, US, Africa, Eurozone and global macroeconomic and business conditions; the effects of continued 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 Group or any securities issued by such entities; the potential for one or more countries exiting the Eurozone; the implications of the results of the 23 June 2016 referendum in the United Kingdom and the disruption that may result in the UK and globally from the withdrawal of the United Kingdom from the European Union; the implementation of the strategic cost programme; and the success of future acquisitions, disposals and other strategic transactions. A number of these influences and factors are beyond the Group's control. As a result, the 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 Group's forward-looking statements. Additional risks and factors which may impact the Group's future financial condition and performance are identified in our filings with the SEC which are available on the SEC's website at [www.sec.gov](http://www.sec.gov).

Any forward-looking statements made herein speak only as of the date they are made and it should not be assumed that they have been revised or updated in the light of new information or future events. Except as required by the Prudential Regulation Authority, the Financial Conduct Authority, the London Stock Exchange plc (the LSE) or applicable law, Barclays expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in Barclays' expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based. The reader should, however, consult any additional disclosures that Barclays has made or may make in documents it has published or may publish via the Regulatory News Service of the LSE and/or has filed or may file with the SEC.



Subject to our obligations under the applicable laws and regulations of the UK and the US 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.

### **Market and other data**

This document contains information, including statistical data, about certain Barclays markets and its competitive position. Except as otherwise indicated, this information is taken or derived from Datastream and other external sources. Barclays cannot guarantee the accuracy of information taken from external sources, or that, in respect of internal estimates, a third party using different methods would obtain the same estimates as Barclays.

### **Uses of Internet addresses**

This document contains inactive textual addresses to internet websites operated by us and third parties. Reference to such websites is made for information purposes only, and information found at such websites is not incorporated by reference into this document.

### **References to Pillar 3 report**

This document contains references throughout to Barclays annual risk report, the Pillar 3. Reference to the aforementioned report is made for information purposes only, and information found in this report is not incorporated by reference into this document.

## Barclays Group results

	31.12.16					
	Barclays	Barclays	Head	Barclays	Barclays	Barclays
reconciliation	UK	International	Office	Core	Non-Core	Group
for the year ended	£m	£m	£m	£m	£m	£m
<b>Total income</b>	<b>7,517</b>	<b>14,995</b>	<b>103</b>	<b>22,615</b>	<b>(1,164)</b>	<b>21,451</b>
Own credit	-	-	(35)	(35)	-	(35)
Gain on disposal of Barclays share of Visa Europe Limited	151	464	-	615	-	615
<b>Total income excluding notable items</b>	<b>7,366</b>	<b>14,531</b>	<b>138</b>	<b>22,035</b>	<b>(1,164)</b>	<b>20,871</b>
Credit impairment charges and other provisions	(896)	(1,355)	-	(2,251)	(122)	(2,373)
<b>Net operating income/(expenses)</b>	<b>6,621</b>	<b>13,640</b>	<b>103</b>	<b>20,364</b>	<b>(1,286)</b>	<b>19,078</b>
Notable items	151	464	(35)	580	-	580
<b>Net operating income/(expenses) excluding notable items</b>	<b>6,470</b>	<b>13,176</b>	<b>138</b>	<b>19,784</b>	<b>(1,286)</b>	<b>18,498</b>
<b>Operating expenses</b>	<b>(3,792)</b>	<b>(9,129)</b>	<b>(135)</b>	<b>(13,056)</b>	<b>(1,509)</b>	<b>(14,565)</b>
UK bank levy	(48)	(284)	(2)	(334)	(76)	(410)
<b>Total operating expenses excluding litigation and conduct, and other notable items</b>	<b>(3,840)</b>	<b>(9,413)</b>	<b>(137)</b>	<b>(13,390)</b>	<b>(1,585)</b>	<b>(14,975)</b>
<b>Litigation and conduct</b>	<b>(1,042)</b>	<b>(48)</b>	<b>(27)</b>	<b>(1,117)</b>	<b>(246)</b>	<b>(1,363)</b>
Provisions for UK customer redress	(1,000)	-	-	(1,000)	-	(1,000)
<b>Litigation and conduct excluding notable items</b>	<b>(42)</b>	<b>(48)</b>	<b>(27)</b>	<b>(117)</b>	<b>(246)</b>	<b>(363)</b>
<b>Total operating expenses</b>	<b>(4,882)</b>	<b>(9,461)</b>	<b>(164)</b>	<b>(14,507)</b>	<b>(1,831)</b>	<b>(16,338)</b>
Notable items	(1,000)	-	-	(1,000)	-	(1,000)
<b>Total operating expenses excluding notable items</b>	<b>(3,882)</b>	<b>(9,461)</b>	<b>(164)</b>	<b>(13,507)</b>	<b>(1,831)</b>	<b>(15,338)</b>
Cost: income ratio	65%	63%	n/a	64%	n/a	76%
Cost: income ratio excluding notable items	53%	65%	n/a	61%	n/a	72%
<b>Other net (expenses)/income</b>	<b>(1)</b>	<b>32</b>	<b>128</b>	<b>159</b>	<b>331</b>	<b>490</b>
<b>Profit/(loss) before tax</b>	<b>1,738</b>	<b>4,211</b>	<b>67</b>	<b>6,016</b>	<b>(2,786)</b>	<b>3,230</b>
Notable items	(849)	464	(35)	(420)	-	(420)
	<b>2,587</b>	<b>3,747</b>	<b>102</b>	<b>6,436</b>	<b>(2,786)</b>	<b>3,650</b>

<b>Profit/(loss) before tax excluding notable items</b>						
<b>Attributable profit/(loss)<sup>1</sup></b>	<b>828</b>	<b>2,412</b>	<b>110</b>	<b>3,350</b>	<b>(1,916)</b>	<b>1,623</b>
Notable items	(857)	451	(25)	(431)	-	(431)
<b>Attributable profit/(loss) excluding notable items<sup>1</sup></b>	<b>1,685</b>	<b>1,961</b>	<b>135</b>	<b>3,781</b>	<b>(1,916)</b>	<b>2,054</b>
Risk weighted assets (£bn) <sup>1</sup>	67.5	212.7	53.3	333.5	32.1	365.6

1 *Attributable profit in respect of the Africa Banking discontinued operation is reported at the Group level only. Allocated tangible equity, RWAs and leverage exposure are reported in Head Office within Core.*

Barclays Group results reconciliation for the year ended	31.12.15					
	Barclays UK £m	Barclays International £m	Head Office m	Barclays Core £m	Barclays Non-Core £m	Barclays Group £m
<b>Total income</b>	<b>7,343</b>	<b>13,747</b>	<b>338</b>	<b>21,428</b>	<b>612</b>	<b>22,040</b>
Own credit	-	-	430	430	-	430
Gains on US Lehman acquisition assets	-	496	-	496	-	496
<b>Total income excluding notable items</b>	<b>7,343</b>	<b>13,251</b>	<b>(92)</b>	<b>20,502</b>	<b>612</b>	<b>21,114</b>
Credit impairment charges and other provisions	(706)	(922)	-	(1,628)	(134)	(1,762)
<b>Net operating income</b>	<b>6,637</b>	<b>12,825</b>	<b>338</b>	<b>19,800</b>	<b>478</b>	<b>20,278</b>
Notable items	-	496	430	926	-	926
<b>Net operating income/(expenses) excluding notable items</b>	<b>6,637</b>	<b>12,329</b>	<b>(92)</b>	<b>18,874</b>	<b>478</b>	<b>19,352</b>
<b>Operating expenses</b>	<b>(3,464)</b>	<b>(8,029)</b>	<b>(272)</b>	<b>(11,765)</b>	<b>(1,958)</b>	<b>(13,723)</b>
Gain on valuation of a component of the defined retirement benefit liability	296	133	-	429	-	429
Impairment of goodwill and other assets relating to businesses being disposed	-	-	-	-	(96)	(96)
Losses on sale relating to the Spanish, Portuguese and Italian businesses	-	-	-	-	(3)	(3)
<b>Operating expenses excluding notable items</b>	<b>(3,760)</b>	<b>(8,162)</b>	<b>(272)</b>	<b>(12,194)</b>	<b>(1,859)</b>	<b>(14,053)</b>
UK bank levy	(77)	(253)	(8)	(338)	(88)	(426)
<b>Total operating expenses excluding litigation and conduct, and other notable items</b>	<b>(3,837)</b>	<b>(8,415)</b>	<b>(280)</b>	<b>(12,532)</b>	<b>(1,947)</b>	<b>(14,479)</b>
<b>Litigation and conduct</b>	<b>(2,511)</b>	<b>(1,310)</b>	<b>(66)</b>	<b>(3,887)</b>	<b>(500)</b>	<b>(4,387)</b>
Provisions for UK customer redress	(2,431)	(218)	-	(2,649)	(123)	(2,772)
Provisions for ongoing investigations and litigation including Foreign Exchange	-	(984)	(52)	(1,036)	(201)	(1,237)
<b>Litigation and conduct excluding notable items</b>	<b>(80)</b>	<b>(108)</b>	<b>(14)</b>	<b>(202)</b>	<b>(176)</b>	<b>(378)</b>
<b>Total operating expenses</b>	<b>(6,052)</b>	<b>(9,592)</b>	<b>(346)</b>	<b>(15,990)</b>	<b>(2,546)</b>	<b>(18,536)</b>
Notable items	(2,135)	(1,069)	(52)	(3,256)	(423)	(3,679)
<b>Total operating expenses excluding notable items</b>	<b>(3,917)</b>	<b>(8,523)</b>	<b>(294)</b>	<b>(12,734)</b>	<b>(2,123)</b>	<b>(14,857)</b>
Cost: income ratio	82%	70%	n/a	75%	n/a	84%
Cost: income ratio excluding notable items	53%	64%	n/a	62%	n/a	70%

<b>Other net income/(expenses)</b>	-	<b>45</b>	<b>(106)</b>	<b>(61)</b>	<b>(535)</b>	<b>(596)</b>
Losses on sale relating to the Spanish, Portuguese and Italian businesses	-	-	(112)	(112)	(465)	(577)
<b>Other net income/(expenses) excluding notable items</b>	-	<b>45</b>	<b>6</b>	<b>51</b>	<b>(70)</b>	<b>(19)</b>
<b>Profit/(loss) before tax</b>	<b>585</b>	<b>3,278</b>	<b>(114)</b>	<b>3,749</b>	<b>(2,603)</b>	<b>1,146</b>
Notable items	(2,135)	(573)	266	(2,442)	(888)	(3,330)
<b>Profit/(loss) before tax excluding notable items</b>	<b>2,720</b>	<b>3,851</b>	<b>(380)</b>	<b>6,191</b>	<b>(1,715)</b>	<b>4,476</b>
<b>Attributable (loss)/profit<sup>1</sup></b>	<b>(47)</b>	<b>1,758</b>	<b>11</b>	<b>1,722</b>	<b>(2,418)</b>	<b>(394)</b>
Notable items	(2,008)	(562)	(187)	(2,383)	(707)	(3,090)
<b>Attributable profit/(loss) excluding notable items<sup>1</sup></b>	<b>1,961</b>	<b>2,320</b>	<b>(176)</b>	<b>4,105</b>	<b>(1,711)</b>	<b>2,696</b>
Average allocated tangible equity (£bn)						
<b>1</b>	9.3	24.9	2.6	36.8	10.9	47.7
Risk weighted assets (£bn) <sup>1</sup>	69.5	194.8	39.7	304.1	54.3	358.4

*1 Attributable profit in respect of the Africa Banking discontinued operation is reported at the Group level only. Allocated tangible equity, RWAs and leverage exposure are reported in Head Office within Core.*

## Barclays Group results reconciliation

	31.12.14					
	Barclays	Barclays	Head	Barclays	Barclays	Barclays
for the year ended	UK	International	Office	Core	Non-Core	Group
	£m	£m	m	£m	£m	£m
<b>Total income</b>	<b>7,436</b>	<b>12,908</b>	<b>276</b>	<b>20,620</b>	<b>1,143</b>	<b>21,763</b>
Own credit	-	-	34	34	-	34
Revision of ESHLA valuation methodology	-	-	-	-	(935)	(935)
Gains on US Lehman acquisition assets	-	461	-	461	-	461
<b>Total income excluding notable items</b>	<b>7,436</b>	<b>12,447</b>	<b>242</b>	<b>20,125</b>	<b>2,078</b>	<b>22,203</b>
Credit impairment charges and other provisions	(901)	(679)	-	(1,580)	(241)	(1,821)
<b>Net operating income</b>	<b>6,535</b>	<b>12,229</b>	<b>276</b>	<b>19,040</b>	<b>902</b>	<b>19,942</b>
Notable items	-	461	34	495	(935)	(440)
<b>Net operating income/(expenses) excluding notable items</b>	<b>6,535</b>	<b>11,768</b>	<b>242</b>	<b>18,545</b>	<b>1,837</b>	<b>20,382</b>
<b>Operating expenses</b>	<b>(4,108)</b>	<b>(8,170)</b>	<b>(70)</b>	<b>(12,348)</b>	<b>(2,611)</b>	<b>(14,959)</b>
UK bank levy	(59)	(248)	(9)	(316)	(102)	(418)
<b>Total operating expenses excluding litigation and conduct, and other notable items</b>	<b>(4,167)</b>	<b>(8,418)</b>	<b>(79)</b>	<b>(12,664)</b>	<b>(2,713)</b>	<b>(15,377)</b>
<b>Litigation and conduct</b>	<b>(1,108)</b>	<b>(1,333)</b>	<b>(65)</b>	<b>(2,506)</b>	<b>(301)</b>	<b>(2,807)</b>
Provisions for UK customer redress	(1,067)	32	-	(1,035)	(75)	(1,110)
Provisions for ongoing investigations and litigation	-	-	-	-	-	-
including Foreign Exchange	-	(1,250)	-	(1,250)	-	(1,250)
<b>Litigation and conduct excluding notable items</b>	<b>(41)</b>	<b>(115)</b>	<b>(65)</b>	<b>(221)</b>	<b>(226)</b>	<b>(447)</b>
<b>Total operating expenses</b>	<b>(5,275)</b>	<b>(9,751)</b>	<b>(144)</b>	<b>(15,170)</b>	<b>(3,014)</b>	<b>(18,184)</b>
Notable items	(1,067)	(1,218)	-	(2,285)	(75)	(2,360)
<b>Total operating expenses excluding notable items</b>	<b>(4,208)</b>	<b>(8,533)</b>	<b>(144)</b>	<b>(12,885)</b>	<b>(2,939)</b>	<b>(15,824)</b>
Cost: income ratio	71%	76%	n/a	74%	n/a	84%
Cost: income ratio excluding notable items	57%	69%	n/a	64%	n/a	71%
<b>Other net (expenses)/income</b>	<b>-</b>	<b>52</b>	<b>316</b>	<b>368</b>	<b>(813)</b>	<b>(445)</b>
Losses on sale relating to the Spanish, Portuguese and Italian businesses	-	-	315	315	(761)	(446)
<b>Other net (expenses)/income excluding notable items</b>	<b>-</b>	<b>52</b>	<b>1</b>	<b>53</b>	<b>(52)</b>	<b>1</b>
<b>Profit/(loss) before tax</b>	<b>1,260</b>	<b>2,530</b>	<b>448</b>	<b>4,238</b>	<b>(2,925)</b>	<b>1,313</b>

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Notable items	(1,067)	(757)	349	(1,475)	(1,771)	(3,246)
<b>Profit/(loss) before tax excluding notable items</b>	<b>2,327</b>	<b>3,287</b>	<b>99</b>	<b>5,713</b>	<b>1,154</b>	<b>4,559</b>
<b>Attributable profit/(loss)<sup>1</sup></b>	<b>852</b>	<b>926</b>	<b>374</b>	<b>2,152</b>	<b>(2,659)</b>	<b>(174)</b>
Notable items	(855)	(808)	260	(1,403)	(1,550)	(2,605)
<b>Attributable profit/(loss) excluding notable items<sup>1</sup></b>	<b>1,707</b>	<b>1,734</b>	<b>114</b>	<b>3,555</b>	<b>(1,109)</b>	<b>2,779</b>
Average allocated tangible equity (£bn) <sup>1</sup>	9.1	25.0	(2.7)	31.4	15.6	47.0
Risk weighted assets (£bn) <sup>1</sup>	69.3	201.7	41.8	312.8	89.1	401.9

*1 Attributable profit in respect of the Africa Banking discontinued operation is reported at the Group level only. Allocated tangible equity, RWAs and leverage exposure are reported in Head Office within Core.*

	2016	2015	2014
<b>Average allocated equity<sup>a</sup></b>	£bn	£bn	£bn
Barclays UK	13.4	13.7	13.1
Corporate and Investment Bank	23.2	23.1	23.1
Consumer, Cards and Payments	5.0	4.0	4.0
Barclays International	28.2	27.1	27.1
Head Office <sup>b</sup>	8.0	3.9	(1.3)
<b>Barclays Core</b>	<b>49.6</b>	<b>44.7</b>	<b>38.9</b>
<b>Barclays Non-Core</b>	<b>7.8</b>	<b>11.2</b>	<b>16.0</b>
<b>Barclays Group</b>	<b>57.4</b>	<b>55.9</b>	<b>54.9</b>
<b>Effect of Goodwill and Intangibles</b>	£bn	£bn	£bn
Barclays UK	(4.5)	(4.4)	(3.9)
Corporate and Investment Bank	(1.4)	(1.2)	(1.2)
Consumer, Cards and Payments	(1.3)	(1.0)	(1.0)
Barclays International	(2.7)	(2.2)	(2.2)
Head Office <sup>b</sup>	(1.4)	(1.3)	(1.4)
<b>Barclays Core</b>	<b>(8.6)</b>	<b>(7.9)</b>	<b>(7.6)</b>
<b>Barclays Non-Core</b>	<b>(0.1)</b>	<b>(0.3)</b>	<b>(0.3)</b>
<b>Barclays Group</b>	<b>(8.7)</b>	<b>(8.2)</b>	<b>(7.9)</b>
<b>Average allocated tangible equity<sup>c</sup></b>	£bn	£bn	£bn
Barclays UK	8.9	9.3	9.1
Corporate and Investment Bank	21.9	21.9	22.0
Consumer, Cards and Payments	3.6	3.0	3.0
Barclays International	25.5	24.9	25.0
Head Office <sup>b</sup>	6.5	2.6	(2.7)
<b>Barclays Core</b>	<b>41.0</b>	<b>36.8</b>	<b>31.4</b>
<b>Barclays Non-Core</b>	<b>7.8</b>	<b>10.9</b>	<b>15.6</b>
<b>Barclays Group</b>	<b>48.7</b>	<b>47.7</b>	<b>47.0</b>

## Notes

<sup>a</sup>This table shows the allocation of Group average equity across IFRS and non-IFRS segments



bIncludes the African Banking discontinued operation

cThis table shows average tangible equity for the Group and for the IFRS and non-IFRS reporting segments

	2016	2015	2014
<b>Profit/(loss) attributable to ordinary equity holders of the parent</b>	<b>£m</b>	£m	£m
Barclays UK	857	(33)	869
Corporate and Investment Bank	1,342	1,180	421
Consumer, Cards and Payments	1,153	620	528
Barclays International	2,495	1,800	949
Head Office	109	11	373
<b>Barclays Core</b>	<b>3,461</b>	1,778	2,191
<b>Barclays Non-Core</b>	<b>(1,899)</b>	(2,405)	(2,645)
Africa Banking discontinued operation	189	302	334
<b>Barclays Group</b>	<b>1,751</b>	(324)	(120)
	<b>2016</b>	2015	2014
<b>Average allocated equity<sup>a</sup></b>	<b>£bn</b>	£bn	£bn
Barclays UK	13.4	13.7	13.1
Corporate and Investment Bank	23.2	23.1	23.1
Consumer, Cards and Payments	5.0	4.0	4.0
Barclays International	28.2	27.1	27.1
Head Office <sup>b</sup>	8.0	3.9	(1.3)
<b>Barclays Core</b>	<b>49.6</b>	44.7	38.9
<b>Barclays Non-Core</b>	<b>7.8</b>	11.2	16.0
<b>Barclays Group</b>	<b>57.4</b>	55.9	54.9
	<b>2016</b>	2015	2014
<b>Return on average allocated equity<sup>c</sup></b>	<b>%</b>	%	%
Barclays UK	6.4%	(0.2%)	6.6%
Corporate and Investment Bank	5.8%	5.1%	1.8%
Consumer, Cards and Payments	23.1%	15.3%	13.2%
Barclays International	8.8%	6.6%	3.5%
<b>Barclays Core</b>	<b>7.0%</b>	4.0%	5.6%
<b>Barclays Group</b>	<b>3.0%</b>	(0.6%)	(0.2%)

Notes

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a This table shows the allocation of Group average equity across IFRS and non-IFRS reporting segments

b Includes the African Banking discontinued operation

c This table shows return on average equity for the Group and the return on average allocated equity for the IFRS and non-IFRS reporting segments

x

Governance

**Our corporate governance processes and the role they play in supporting the delivery of our strategy, including reports from the Chairman and each of the Board Committee Chairmen.**

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Governance: Directors report

[UK Corporate Governance Code - index to disclosures](#)

**The purpose of corporate governance is to facilitate effective, entrepreneurial and prudent management that can deliver the long-term success of the company.**

### The UK Corporate Governance Code

The UK Corporate Governance Code (the Code) is not a rigid set of rules. It consists of principles (main and supporting) and provisions. The Listing Rules require companies to apply the main principles and report to shareholders on how they have done so. You can find our disclosures as follows:

		Page
<b>Leadership</b>	Every company should be headed by an effective board which is collectively responsible for the long-term success of the company.	Board of Directors Composition of the Board 3 to 4 39
	There should be a clear division of responsibilities at the head of the company between the running of the board and the executive responsibility for the running of the company's business. No one individual should have unfettered powers of decision.	Roles on the Board 37
	The chairman is responsible for leadership of the board and ensuring its effectiveness on all aspects of its role.	Roles on the Board 37
	As part of their role as members of a unitary board, non-executive directors should constructively challenge and help develop proposals on strategy.	Roles on the Board 37
<b>Effectiveness</b>	The board and its committees should have the appropriate balance of skills, experience, independence and knowledge of the company to enable them to discharge their respective duties and responsibilities effectively.	Board of Directors 3 to 4

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	There should be a formal, rigorous and transparent procedure for the appointment of new directors to the board.	Appointment and re-election of Directors	32
	All directors should be able to allocate sufficient time to the company to discharge their responsibilities effectively.	Attendance time commitment	38
	All directors should receive an induction on joining the board and should regularly update and refresh their skills and knowledge.	Induction, training and development	39
	The board should be supplied in a timely manner with information in a form and of a quality appropriate to enable it to discharge its duties.	Information provided to the Board	40
	The board should undertake a formal and rigorous annual evaluation of its own performance and that of its committees and individual directors.	Review of Board and Board Committee effectiveness	33
	All directors should be submitted for re-election at regular intervals, subject to continued satisfactory performance.	Roles on the Board Appointment and re-election of Directors	37 32
<b>Accountability</b>	The board should present a fair, balanced and understandable assessment of the company's position and prospects.	Risk management going concern	97 to 114 32
	The board is responsible for determining the nature and extent of the principal risks it is willing to take in achieving its strategic objectives. The board should maintain sound risk management and internal control systems.	Risk management and internal control	40 to 41
	The board should establish formal and transparent arrangements for considering how they should apply the corporate reporting, risk management and internal control principles, and for maintaining an appropriate relationship with the company's auditors.	Board Audit Committee report	10 to 19
<b>Remuneration</b>	Executive directors' remuneration should be designed to promote the long-term success of the company. Performance-related elements should be transparent, stretching and rigorously applied.	Remuneration report	51 to 85
	There should be a formal and transparent procedure for developing policy on executive remuneration and for fixing the remuneration packages of individual directors. No director should be involved in deciding his or her own	Remuneration report	51 to 85

remuneration.

<b>Relations with shareholders</b>	<p>There should be a dialogue with shareholders based on the mutual understanding of objectives. The board as a whole has responsibility for ensuring that a satisfactory dialogue with shareholders takes place.</p>	Stakeholder engagement	41 to 42
	<p>The board should use general meetings to communicate with investors and to encourage their participation.</p>	Stakeholder engagement	41 to 42

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Governance: Directors report

Who we are

## Board of Directors

### Board of Directors

Barclays understands the importance of having a Board containing the right balance of skills, experience and diversity and the composition of the Board is regularly reviewed by the Board Nominations Committee. The skills and experience of the current Directors and the value they bring to the Barclays Board is described below.

Full biographies can be accessed online via

[home.barclays/investorrelations](http://home.barclays/investorrelations)

### Relevant skills and experience

#### John McFarlane

Chairman

Appointed:

1 January 2015

John is a senior figure in global banking and financial services circles and is in his 42nd year in the sector, including 22 years as a main board director, 10 years as a CEO and six years as a chairman. John is Chairman of Barclays PLC and Barclays Bank PLC. He is also a non-executive director of Westfield Corporation and Old Oak Holdings Limited. He is chairman of TheCityUK and a member of the Financial Services Trade and Investment Board and the European Financial Round Table. John was formerly chairman of Aviva plc, where he oversaw a transformation of the company and for a brief period he was also chairman of FirstGroup plc. He was also a non-executive director of The Royal Bank of Scotland plc, joining at the time of the UK government rescue. Prior to that for 10 years he was chief executive officer of Australia and New Zealand Banking Group Ltd, Group Executive Director of Standard Chartered plc and head of Citibank in the UK.

### Other current appointments

None

### Committees

Nom\*

### Relevant skills and experience

#### Jes Staley

Group Chief Executive

Appointed:

1 December 2015

Jes joined Barclays as Group Chief Executive on 1 December 2015. He has nearly four decades of extensive experience in banking and financial services. He worked for more than 30 years at J P Morgan, initially training as a commercial banker, later advancing to the leadership of major businesses involving equities, private banking and asset management and ultimately heading the company's Global Investment Bank. Most recently, Jes served as Managing Partner at BlueMountain Capital. These roles have provided him with a vast experience in leadership and he brings a wealth of investment banking knowledge to Barclays' Board.

### Other current appointments

None

### Committees

None

### Relevant skills and experience

#### Sir Gerry Grimstone

Deputy Chairman and Senior Independent Director

Appointed:

1 January 2016

Sir Gerry brings to the Board a wealth of investment banking, financial services and commercial experience gained through his senior roles at Schrodgers and his various board positions. Sir Gerry has global business experience across the UK, Asia, the Middle East and the US. Sir Gerry has significant experience as a non-executive director and chairman. He is currently the chairman of Standard Life plc, independent non-executive board member of Deloitte LLP and the lead non-executive at the Ministry of Defence.

### Other current appointments

Financial Services Trade and Investment Board

### Committees

Nom, Rep\*

### Relevant skills and experience

**Mike Ashley**

Non-executive

Mike has deep knowledge of auditing and associated regulatory issues, having worked at KPMG for over 20 years, where he was a partner. Mike was the lead engagement partner on the audits of large financial services groups including HSBC, Standard Chartered and the Bank of England. While at KPMG, Mike was Head of Quality and Risk Management for KPMG Europe LLP, responsible for the management of professional risks and quality control. He also held the role of KPMG UK's Ethics Partner.

Appointed:

18 September 2013

### Other current appointments

ICAEW Ethics Standards Committee; Chairman, Government Internal Audit Agency; Charity Commission

### Committees

Aud\*, Nom, Ris, Rep

### Relevant skills and experience

**Tim Breedon**

Non-executive

Tim joined Barclays after a distinguished career with Legal & General, where, among other roles, he was the group chief executive until June 2012. Tim's experience as a CEO enables him to provide challenge, advice and support to the Executive on performance and decision-making.

Appointed:

1 November 2012

Tim brings to the Board extensive financial services experience, knowledge of risk management and UK and EU regulation, as well as an understanding of the key issues for investors.

### Other current appointments

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Marie Curie Cancer Care; Chairman, Apax Global Alpha Limited; Chairman, The Northview Group

### Committees

Aud, Nom, Rem, Ris\*

### Relevant skills and experience

#### Mary Francis CBE

Non-executive

Appointed:

1 October 2016

Mary has extensive board-level experience across a range of industries. She is a non-executive Director of Swiss Re Group and Enscopl and was formerly Senior Independent director of Centrica and a non-executive director of the Bank of England, Aviva and Alliance and Leicester. She held senior executive positions in the UK Treasury and Prime Minister's Office and in the City as Director General of the Association of British Insurers. She brings to Barclays strong understanding of the interaction between public and private sectors and skills in strategic decision-making and all aspects of board governance.

### Other current appointments

Advisory Panel of The Institute of Business Ethics

### Committees

Rem, Rep

### Relevant skills and experience

#### Crawford Gillies

Non-executive

Appointed:

1 May 2014

Crawford has extensive business and management experience, gained with Bain & Company and Standard Life plc. These roles have provided him with experience in strategic decision-making and knowledge of company strategy across various sectors and geographical locations.

Crawford has also held board and committee chairman positions during his career, notably as chairman of the remuneration committees of Standard Life plc and MITIE Group PLC.

**Other current appointments**

SSE plc; Control Risks International; The Edrington Group Limited

**Committees**

Aud, Nom, Rem\*

Governance: Directors report

Who we are

## Board of Directors

### Relevant skills and experience

#### Reuben Jeffery III

Non-executive

Reuben has extensive financial services experience, particularly within investment banking and wealth management, through his role as CEO and president of Rockefeller & Co. Inc. and Rockefeller Financial Services Inc. and his former senior roles with Goldman Sachs, including as the managing partner of the Paris office. His various government roles in the US, including as chairman of the Commodity Futures Trading Commission, provides Barclays Board with insight into the US political and regulatory environment.

Appointed:

16 July 2009

### Other current appointments

Advisory Board of Towerbrook Capital Partners LP; Rothschild Capital Management Limited; Financial Services Volunteer Corps; The Asia Foundation

### Committees

Nom, Ris

### Relevant skills and experience

#### Tushar Morzaria

Group Finance Director

Tushar joined Barclays in 2013 having spent the previous four years in senior management roles with JP Morgan Chase, most recently as the CFO of its Corporate & Investment Bank. Throughout his time with JP Morgan he gained strategic financial management and regulatory relations experience. Since joining the Barclays Board he has been a driving influence on the Group's cost reduction programme and managing the Group's capital plan, particularly in response to Structural Reform.

Appointed:

### Other current appointments

15 October 2013

Member of the 100 Group main committee

### Committees

None

### Relevant skills and experience

Dambisa is an international economist and commentator on the global economy, having completed a PhD in economics. Dambisa has a background in financial services and a wide knowledge and understanding of African economic, political and social issues, in addition to her experience as a director of companies with complex, global operations. She served as a non-executive director of SABMiller Plc from 2009-2016.

**Dambisa Moyo**

Non-executive

### Other current appointments

Appointed:

Chevron Corporation; Barrick Gold Corporation; Seagate Technology plc

1 May 2010

### Committees

Rem, Rep

### Relevant skills and experience

Diane holds the role of general counsel and company secretary of ABB Limited, a listed pioneering technology leader in electrification products, robotics and motion, industrial automation and power grids. Diane's legal background, combined with her knowledge of regulatory and compliance requirements bring a unique perspective to discussions of the Board and its committees.

**Diane de Saint Victor**

Non-executive

### Other current appointments

Appointed:

American Chamber of Commerce in France

1 March 2013

### Committees

Rep

### Relevant skills and experience

**Diane Schueneman**

Non-executive

Diane joined Barclays after an extensive career at Merrill Lynch, holding a variety of senior roles, including responsibility for banking, brokerage services and technology provided to the company's retail and middle market clients, and latterly for IT, operations and client services worldwide. She brings a wealth of experience in managing global, cross-discipline business operations, client services and technology in the financial services industry. Diane is a member of the board of Barclays US LLC, Barclays US intermediate holding company.

Appointed:

25 June 2015

### Other current appointments

None

### Committees

Aud, Ris

### Relevant skills and experience

**Steve Thieke**

Non-executive

Steve has significant experience in financial services, in both investment banking with J P Morgan, where among other roles he served as the chairman of the risk management committee, and in regulation, through roles with the Federal Reserve Bank of New York and the Financial Services Authority. He also has significant board experience, having served in both executive and non-executive director roles in his career. Steve is chairman of the board of Barclays US LLC.

Appointed:

7 January 2014

### Other current appointments

None

### Committees

Ris



**Company Secretary**

**Relevant skills and experience**

**Claire Davies**

Claire is a solicitor and a Fellow of the Institute of Chartered Secretaries and Administrators. She has substantial experience in legal, compliance and company secretarial roles gained in-house and in professional services. She was appointed Barclays Group Company Secretary with effect from 1 December 2016, a role she has previously held at Legal & General plc and Lloyds Banking Group plc. More recently, she was Society Secretary at the Co-operative Group. She is a non-executive member of the audit and risk committee of the Department for Business, Energy & Industrial Strategy.

Appointed:

1 December 2016

*Note*

*The composition of the board is shown as at 22 February 2017.*

**Committee membership key**

Aud	Board Audit Committee
Nom	Board Nominations Committee
Rem	Board Remuneration Committee
Rep	Board Reputation Committee
Ris	Board Risk Committee
*	Committee Chairman

Who we are

**Group Executive Committee**

**Group Executive Committee**

Biographies for Jes Staley, Group Chief Executive, and Tushar Morzaria, Group Finance Director, who are members of the Group Executive Committee, which is chaired by Jes Staley, can be found on pages 3 and 4.

**Paul Compton**

Group Chief

Operating Officer

**Bob Hoyt**

Group General

Counsel

**Tristram Roberts**

Group Human

Resources Director

**Mike Roemer**

Group Head of

Compliance

**Amer Sajed**

CEO, Barclaycard

International

**Tim Throsby**

President, Barclays

International and  
Chief Executive

Officer, Corporate  
and Investment Bank

**Ashok Vaswani**  
CEO, Barclays UK

**CS Venkatakrisnan**  
Chief Risk Officer

Group Executive Committee meetings are also attended on a regular basis by the Chief Internal Auditor, Sally Clark, and by an ex-officio member, drawn from senior management. The current ex-officio member is Kathryn McLeland, Head of Investor Relations.

### **Board diversity**

The Board has a balanced and diverse range of skills and experience. All Board appointments are made on merit, in the context of the diversity of skills, experience, background and gender required to be effective.

### **Balance of non-executive Directors: executive Directors**

1	Chairman	1
2	Executive Directors	2
3	Non-executive Directors	10

### **Gender balance**

Male: Female **9:4**

**Length of tenure**

(Chairman and non-executive Directors)

0-3 years **6**

3-6 years **3**

6-9 years **2**

**Geographical mix**

(Chairman and non-executive Directors)

UK **6**

US **3**

**1**

Continental Europe

Other **1**

## Industry/background experience

(Chairman and non-executive Directors)<sup>a</sup>

Financial Services	10 (91%)
Political/regulatory contacts	11 (100%)
Current/recent Chair/CEO	3 (27%)
Accountancy/financial	1 (9%)
International (US)	3 (27%)
International (Europe)	1 (9%)
International (Rest of the World)	3 (27%)
Operations and Technology	1 (9%)

Note

<sup>a</sup> Individual Directors may fall into one or more categories

Governance: Directors' report

[What we did in 2016](#)

[Chairman's introduction](#)

**Strong and effective governance benefits companies and the UK economy more generally, by instilling public confidence and respect for the corporate sector, making the UK an attractive place to do business.**

### **Dear Fellow Shareholders**

Welcome to my 2016 corporate governance report. When I think about corporate governance, I inevitably focus on how strong and effective governance acts to provide the necessary checks and balances at the very top of companies, thus supporting better decision-making and accountability. In turn, this benefits companies and the UK economy more generally, by instilling public confidence and respect for the corporate sector and making the UK an attractive place to do business, something that has grown in importance post the EU Referendum. As a bank, gaining this confidence and respect is paramount. Our business is founded on and operates on trust – the trust of our customers and clients, our employees and the wider public. Strong and effective corporate governance has a vital role in ensuring that we earn and keep that trust.

### **What is the role of the Board?**

I firmly believe that the role of the Board is to focus on long-term, sustainable value creation. At the heart of our strategy, which we announced in March 2016, is building on our strength as a transatlantic consumer, corporate and investment bank, with global reach. To this end, the Board has provided critical oversight of executive management in developing and delivering this strategy, creating a smaller, simplified bank capable of producing high quality returns for our shareholders on a sustainable basis.

### **What were the Board's key areas of focus in 2016?**

During 2016, the Board focused its activity to support management in delivery of the agreed strategy. A summary of key items considered by the Board can be found pages 8 to 9. The main areas of Board activity have been on ensuring that we have strong foundations in place by focusing on the performance of our Core businesses, and on completing the restructuring of Barclays by accelerating the run-down of the Non-Core businesses. We also took the difficult, but important, decision to sell-down our holding in Barclays Africa. Progress in these areas is enabling us to build the Barclays of the future. As part of ensuring we are well-positioned, and to meet regulatory requirements, we have aligned our business more closely with our legal entity structure and geographic locations. You can read more about the Board's role in preparing Barclays for Structural Reform in the case study on page 9. We also had to deal with the impacts of the UK's vote to leave the EU and held a special meeting in the days following the EU Referendum result to assess the position for Barclays. You can read more about how we prepared for the EU Referendum in the case study on page 24.

### **How effective is the Board?**

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Effective delivery of long-term, sustainable value for shareholders requires an effective Board. It is an important part of my role as Chairman to satisfy myself that the Board – both collectively and its individual members – operates effectively. Each year, we conduct a self-assessment of our performance, with the aid of an independent facilitator, and you can read a report on the outcomes of the 2016 self-assessment on pages 34 to 35. We also describe the actions we took during 2016 in response to any matters identified for improvement during the 2015 self-assessment. I hope this provides a flavour of how seriously the Board regards this important exercise.

The working relationship between the Board and executive management is, of course, critical to the effectiveness of the Board and I am pleased to report that we enjoy a healthy, constructive relationship, with an appropriate level of creative tension that helps drive productive discussions in the boardroom.

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### **How did the Board change in 2016?**

To be effective, the Board needs the right people and, in particular, it needs to have the right balance and diversity of skills, experience and perspectives. It is important that the composition of the Board brings to bear a broad range of social perspectives and talent on decision-making and that the Board is able to connect with the demographics of Barclays' customers and clients and employees. We have a healthy non-executive presence on the Board, which was strengthened further during 2016 with the appointments of Sir Gerry Grimstone as Deputy Chairman and Senior Independent Director and Mary Francis as a non-executive Director. Both are highly-experienced non-executive Directors and add to the depth of experience and talent on the Board. During 2016, Wendy Lucas-Bull and Frits van Paasschen, both non-executive Directors, left the Board and I thank them on behalf of the Board for their service.

In early 2016, we set ourselves a new Board diversity target, which is to have 33% women on the Board by 2020. We currently have 31% women on the Board and are pleased with the progress we are making towards our target. Of course, diversity is not just about gender and although we have not set any other Board diversity targets, such as ethnicity, when it discusses and assesses Board composition and prospective candidates the Board Nominations Committee considers a number of factors before making its recommendations. Ultimately, maintaining the overall effectiveness of the Board is paramount and we maintain the position that all appointments to the Board are made on merit. More information on the Board appointments process can be found on page 32.

### **How does the Board ensure that high standards of business conduct are maintained?**

There can be no argument that to be successful and to create long-term, sustainable value, we must maintain consumer and market trust and confidence. We need to act with transparency and integrity in every interaction we have with all of our stakeholders and this behaviour is integral to the way in which we operate. This is why as a Board we have continued to wholeheartedly support Barclays' shared purpose and common values. *The Barclays Way*, which is endorsed by me, as Chairman, outlines the purpose and values that govern our way of working across our businesses globally. Of course, the challenge we have, in a large organisation such as Barclays, is to ensure that all employees do the right thing day in, day out. To address this challenge, all employees continue to be required to undertake training on *The Barclays Way* annually, with the Board Reputation Committee tracking completion rates. Additionally, the Board Reputation Committee hears directly from the senior management in each business on how they are addressing any conduct and cultural matters specific to that business, thus holding senior management to account for the values and behaviours in their business. You can read more about the work of the Board Reputation Committee on pages 25 to 28.

### **How does the Board take account of Barclays' wider stakeholders?**

I've referred a number of times to the Board's role in creating and delivering shareholder value in a long-term, sustainable way. This can only be achieved by being acutely alive to the impact that our business decisions might have on our customers, clients, employees and others and by fully understanding and appreciating the wider societal obligations that we have. These issues are important for the Board and the Board Reputation Committee fulfils a vital



role on behalf of the Board by monitoring key indicators across the areas of conduct, culture, citizenship and customer complaints. This includes, for example, assessing not only the volumes of customer complaints that we receive, but also the way in which they are handled. It covers assessing the results from regular employee opinion surveys and the actions being taken to address any common issues or themes that arise across the business. It also includes oversight of the delivery of our citizenship strategy, the *Shared Growth Ambition*, where our long-term aim is to create and grow a collection of products, services and partnerships that improve the lives of people in the communities that we serve. All of this activity can and does support the Board's over-arching objective of delivering sustainable returns for our shareholders.

You can read more about the *Shared Growth Ambition* at

**[home.barclays/citizenship](http://home.barclays/citizenship)**

### **Looking ahead**

I expect 2017 to be a pivotal year for Barclays in the delivery of its strategy; a year when we will complete our restructuring and establish ourselves as a bank that is recognised for financial strength, financial transparency, operational stability, underpinned by a values-driven culture. We are incredibly focused and working hard as your Board to engender respect and trust for our Company and the profession of banking, in order to support our customers and clients, to contribute to the UK's reputation as a place to do business and to deliver long-term value to shareholders.

**John McFarlane**

Chairman

22 February 2017

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Governance: Directors report

## Board activity in 2016

During 2016 the Board focused on a number of specific areas, outlined in the table below, in line with Barclays three strategic goals and five principal risks:

### Strategic goals

- Have strong foundations in place
- Accelerate the completion of restructuring
- Build the Barclays of the future

### Principal risks

- Credit
- Market
- Funding
- Operational
- Conduct

### Board allocation of time (%)

	2016	2015
1 Strategy formulation and implementation monitoring	55	56
2 Finance (incl. capital and liquidity)	17	11
3 Governance and Risk (incl. regulatory issues)	26	29
4 Other (incl. compensation)	2	4

Strategic Goal [Principal Risks](#)

### Strategy formulation and monitoring

§ Debated the potential impact of the EU Referendum and the contingency plans being developed. Following the result of the Referendum, discussed and assessed the implications for the UK, the banking sector and for Barclays, including a presentation from a third party on the political aspects and their potential implications

§ Regularly debated and monitored the progress of Barclays preparations for Structural Reform – see the case study on page 9 for further details

§ Reflected on the position of Barclays Africa in the Barclays Group and its impact on Barclays' capital position, deciding to sell-down Barclays' holding to a position where Barclays Africa accounting and regulatory de-consolidation could be achieved

§ Assessed the progress of strategy execution in each of Barclays UK, Barclays International's investment bank and corporate business and the Cards business, via presentations from the heads of each business

§ Monitored the progress of the run-down of Barclays Non-Core via regular presentations from the heads of the Non-Core business

§ Discussed regular updates from the Group Chief Executive on the progress being made against the Group's execution priorities and received insights on stakeholder issues (including those arising from customers and clients, employees, regulators and governments) and cultural matters, including results from employee opinion surveys

§ Debated and provided input to management on the formulation of overall Group strategy, including

- the impact of structural change and the creation of new subsidiary legal entities in the Group

- the progress of the sell-down of Barclays Africa, including potential options, costs of separation, potential conduct risks and customer impacts

- the impact of the EU Referendum result, taking into account an assessment of possible political scenarios and the potential impacts on each of Barclays businesses in terms of capital, operations, economics, regulation, clients and customers

  - a strategic approach to costs optimisation

  - constraints and risks to strategy execution, covering economic assumptions; expected regulatory requirements on capital and solvency ratios at Group and subsidiary legal entity level; anticipated changes to accounting rules; investor expectations; and potential impacts for clients and customers

  - potential growth opportunities, covering an assessment of the competitive landscape for Barclays UK, Barclays International and the Cards business; key trends and risks for each business in terms of economics, regulation, customers, employees and technology; near-term focus areas and potential transformational opportunities

## **Finance, including capital and liquidity**

§ Debated and approved the Group's Medium Term Plan for 2016-2018 and short-term plan for 2016, with a focus on producing increased returns in future

§ Regularly assessed financial performance of the Group and its main businesses via reports from the Group Finance Director

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§ Reviewed and approved Barclays' financial results prior to publication, including approving final and interim dividends

§ Discussed market and investor reaction to Barclays' strategic and financial results announcements, with insights provided by the Head of Investor Relations

§ Provided input, guidance and advice to senior management on the high-level shape of Barclays 2017-2019 Medium Term Plan and subsequently approved the final plan

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### **Governance and risk, including regulatory issues**

- § Debated and approved 2016 risk appetite for the Barclays Group
- § Regularly assessed Barclays overall risk profile and emerging risk themes, hearing directly from the Chief Risk Officer and the Chairman of the Board Risk Committee
- § Evaluated Barclays operational and technology capability, including specific updates on cyber-risk capability and the strategy for infrastructure services. Approved Barclays International's investment bank's IT and Data Global Strategy
- § Approved the Group's 2016 Recovery Plan and US Resolution Plan
- § Held specific meetings with representatives of Barclays' UK and US regulators to hear first-hand about regulatory expectations and their specific views on Barclays
- § Evaluated the status of Barclays' risk and control environment and the plans in place to enhance the risk and control framework and approved a revised Enterprise Risk Management Framework (ERMF)
- § Considered regular updates from the Group General Counsel on the legal risks facing Barclays
- § Heard regularly from the chairmen of the Board's principal Board Committees on the matters discussed at Board Committee meetings
- § Received updates from the chairman of Barclays US IHC on matters discussed at its board meetings
- § Heard directly from representatives of the Banking Standards Board on its assessment of the culture in Barclays and the banking sector as a whole

### **Other, including compensation**

- § Reviewed Barclays' Talent Management strategy and the process for succession planning for key executive positions, hearing directly from the Group HR Director and the Chairman of the Board Nominations Committee
  - § Received and debated a presentation from the independent facilitator of the 2016 Board effectiveness review on the outcomes and potential areas of focus for improvement
- The above analysis reflects the ERMF that was in place during 2016.

## Governance in Action

### Preparing for Structural Reform

Law and regulation in the UK, and associated regulatory rules, require Barclays to separate its retail banking operations into a separate, independent legal entity (known as ring-fencing). Barclays has an internal Structural Reform Programme in place to implement these required changes in the UK. A new UK banking entity is being established as the ring-fenced bank (Barclays UK) and will serve retail and small business customers, as well as UK wealth and credit card customers. Barclays International will continue to serve corporate, institutional and investment banking clients and will also serve international wealth and credit card customers. A Group Service Company will be established to support the revised operating entity structure.

These structural changes will have a material impact on the way in which Barclays operates in future.

Consequently, the progress of the Structural Reform Programme featured heavily on the Board's agenda during 2016, given the scale of change required and the potential material risks associated with transitioning to the new structure and with the new structure itself. The Board evaluated progress of the Structural Reform Programme at seven of the eight Board meetings held during 2016, including specifically evaluating the impact of structural change as part of the annual Group strategy Board meeting. Specific matters addressed by the Board included:

§ structural Reform design and implementation plans, including evaluating any identified risks and challenges; considering regulatory feedback on the plans and the status of actions arising from regulatory engagement; and agreeing the internal accountability framework

§ debating the potential implications of Structural Reform on Barclays' pension scheme, both in terms of the potential impact on Barclays and on pension scheme members

§ conducting an assessment of the overall conduct risk considerations associated with Structural Reform, focusing on the potential impacts for clients and customers

§ evaluating the work being conducted to address sort-code migration, covering technology planning and implementation and customer impact considerations.

Separately, during 2016, Barclays' US businesses were organised under an Intermediate Holding Company (IHC) in order to meet US legal requirements. The IHC became operational from 1 July 2016. The Board was regularly updated on progress of implementation, any risks and challenges and how they were being managed.

Board Committees have supported the Board in overseeing the implementation of Structural Reform on matters that fall directly within their remit. For example, the Board Nominations Committee determined the proposed composition of the boards of the new operating entities and is in the process of identifying and evaluating proposed candidates for appointment to those boards. It also discussed and endorsed a set of Governance Guiding Principles, which will govern the relationship between the parent company and its new operating entities. The Board Risk Committee spends time at each meeting assessing

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§ assessing the progress being made with establishing the new legal entity for Barclays UK, including any necessary regulatory licencing requirements and preparations for the ring-fence transfer scheme

the prospective capital and liquidity impacts of Structural Reform, while the Board Audit Committee has evaluated the potential accounting implications. More information can be found in the individual Board Committee reports on the pages that follow.

§ monitoring the creation of the Group Service Company, including assessing its design, its board governance structure, its control and oversight framework and the execution milestones to be achieved

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Governance: Directors report

[What we did in 2016](#)

**[Board Audit Committee report](#)**

**Change has continued apace and it has been critical to focus on ensuring that the commitment to strengthening the control environment is maintained throughout this transformational period.**

### **Dear Fellow Shareholders**

My report to you last year highlighted the significant degree of change that Barclays was facing, driven by its own strategic aims and by the demands of Structural Reform. Change has continued apace and it has been critical for the Committee to focus on ensuring the commitment to strengthening the control environment is maintained throughout this transformational period. Barclays has during 2016 put in place a significantly changed senior management team and my Committee colleagues and I are greatly encouraged by the renewed focus and vigour with which the control environment is being addressed and the sense of personal accountability that we are seeing. A significant development in the fourth quarter of 2016 was the creation of a chief controls office and the appointment of a Chief Controls Officer, which will drive forward the delivery of an enhanced programme designed to strengthen the control environment and remediate any known issues. Although the new controls office structure is in its infancy, I welcome the more strategic approach that is now being taken to embed accountability for a strong control environment into the first line of management. Such is the importance of this programme to Barclays that, for its initial phase, progress on the framework will be reported directly to the full Board. In assessing control issues for disclosure in the Annual Report, the Committee has continued to apply similar definitions to those used for assessing internal financial controls for the purposes of Sarbanes-Oxley. The conclusion we have reached is that there are no control issues that are considered to be a material weakness, which merit specific disclosure. Further details may be found in the Risk Management and Internal Control section on page 40.



Our busy agenda in 2016 continued to include our responsibilities for overseeing the performance and effectiveness of internal and external audit, the main independent assurance mechanisms that serve to protect shareholders' interests. The Committee also continued to exercise its responsibilities for ensuring the integrity of Barclays' published financial information by debating and challenging the judgements made by management and the assumptions and estimates on which they are based. The exercise of appropriate judgement in preparing the financial statements is critical in ensuring that Barclays reports to its shareholders in a fair, balanced and transparent way. The report that follows sets out details of the material matters considered by the Committee since my last report.

A significant change that the Committee has been overseeing is the transition to KPMG as Barclays' statutory auditor, following the audit tender concluded in 2015. I met regularly with the PwC lead audit partner and his KPMG successor during 2016. KPMG has been shadowing the current auditor, PwC, during the 2016 year-end audit and the Committee is already seeing some value from the new perspective provided by KPMG on accounting estimates and policies. You can read more about auditor transition in the case study on page 19.

The introduction in March 2016 of the UK's Senior Managers Regime allocated to me specific prescribed responsibilities for safeguarding the independence of and overseeing the performance of the internal audit function, including the performance of the Chief Internal Auditor, in line with regulatory requirements. In practice, little has changed in the way in which I fulfil my responsibilities: I continue to hold regular meetings with the Chief Internal Auditor and members of her senior management team to ensure I am aware of current work programmes and any emerging issues and I also agree the Chief Internal Auditor's objectives and the outcomes of her performance assessment. During 2016, the PRA undertook a review of Barclays Internal Audit (BIA) and made a number of recommendations to increase its effectiveness and the Committee's monitoring thereof. An action plan has been developed

to address these recommendations. The Committee also held a networking event with BIA during 2016, enabling Committee members to meet less formally with senior members of the BIA team.

An additional responsibility I have assumed under the Senior Managers Regime is that of Whistleblower's Champion, a position required by the FCA to be held at Board level. As champion, I have specific responsibility for the integrity, independence and effectiveness of the Barclays' policies and procedures on whistleblowing, including the procedures for protecting employees who raise concerns from detrimental treatment. During 2016, I recorded a video message to all employees Group-wide, highlighting my role as Whistleblower's Champion and raising awareness of the policies and procedures we have in place.

I continued to work closely with my fellow Board Committee chairmen during 2016, particularly with the Board Risk Committee chairman on the question of operational risk issues, which each Committee has a role in overseeing. I attended meetings of the IHC audit committee to gain a first-hand insight into the issues being addressed by that committee and have invited its chairman to attend a Committee meeting in early 2017 by way of reciprocating. I met frequently with other members of senior management, including the Group Finance Director, and continued my engagement with Barclays' regulators both in the UK and US.

### **Committee performance**

The Committee's performance during 2016 was assessed as part of the independently facilitated annual Board effectiveness review. The conclusion of my Board colleagues was that the Committee is regarded as thorough and the Board takes assurance from the quality of the Committee's work. The main area identified for improvement was to ensure that the Committee continues to strike an appropriate balance between covering issues in appropriate detail and taking a strategic approach to its oversight and supervision of management. The review also commented on the need to strengthen the depth of financial and accounting expertise on the Committee via new appointments, which is a matter that was already under consideration during 2016, and the need to ensure that the way in which the Committee works with the Board Reputation and Board Risk Committees continues to capture all significant issues effectively while minimising any overlap. I will be seeking to address each of these areas over the coming year. You can read more about the outcomes of the Board effectiveness review on pages 33 to 35.

### **Looking ahead**

The Committee is looking forward to working with both the new Chief Controls Officer and with the new auditor, KPMG, during 2017. In addition to overseeing management's progress on enhancing the control environment, the Committee will be focusing on some significant accounting issues, including the Group's preparedness for the implementation of IFRS9 and the accounting implications of Structural Reform. We will also be closely monitoring the implementation of the action plan to address the recommendations arising from the PRA's review of BIA.

**Mike Ashley**

Chairman, Board Audit Committee

22 February 2017

**Board Audit Committee allocation of time (%)**

	2016	2015
1 Control issues	23	18
2 Business control environment	19	16
3 Financial results	36	27
4 Internal audit matters	11	7
5 External audit matters	6	26
(including, in 2015, external audit tender)		
6 Other (including governance and compliance)	4	6

**Committee composition and meetings**

The Committee is composed solely of independent non-executive Directors, with membership designed to provide the breadth of financial expertise and commercial acumen its needs to fulfil its responsibilities. Its members as a whole have experience of the banking and financial services sector in addition to general management and commercial experience. Diane Schueneman was appointed to the Committee with effect from 18 February 2016, bringing valuable insights into operational and technology risk and controls. Diane de Saint Victor retired from the Committee at the end of May 2016. Mike Ashley is the designated financial expert on the Committee for the purposes of the US Sarbanes-Oxley Act. Although each member of the Committee has financial and/ or financial services experience, the Board has identified that the Committee could be strengthened by the appointment of an additional member with direct accounting and auditing experience. Consideration is being given to further appointments to the Committee in this regard, however, given the impact of Structural Reform, the search for suitable candidates is being addressed in the context of overall Board composition requirements. You can find more details of the experience of Committee members in their biographies on pages 3 and 4.

The Committee met 12 times in 2016 and the chart above shows how it allocated its time. Meetings are generally arranged well in advance and are usually scheduled in line with Barclays' financial reporting timetable. Two of the meetings were arranged specifically to provide the Committee opportunity to consider particular issues relevant to the financial statements, such as the viability statement and the proposed deadline for PPI claims. Committee meetings were attended by management, including the Group Chief Executive, Group Finance Director, Chief Internal Auditor, Chief Risk Officer, Chief Operating Officer, General Counsel and Head of Compliance, as well as representatives from the businesses and other functions. In future, the Chief Controls Officer will attend meetings on a regular basis. The lead audit partner of the external auditor attended all Committee meetings and the Committee held a number of private sessions with each of the Chief Internal Auditor or the lead auditor partner, which were not attended by management. From 1 July 2016, the lead audit partner of KPMG also attended meetings as part of the statutory auditor transition process. Representatives from the PRA also attended a meeting during 2016.

Member	Meetings attended/eligible to attend
Mike Ashley	12/12
Tim Breedon	12/12
Crawford Gillies*	11/12
Diane de Saint Victor (to 31 May 2016)	8/8
Diane Schueneman (from 18 February 2016)	9/9

\*Did not attend one meeting convened at short notice owing to a prior commitment

#### **Committee role and responsibilities**

The Committee is responsible for:

§ assessing the integrity of the Group's financial reporting and satisfying itself that any significant financial judgements made by management are sound

§ evaluating the effectiveness of the Group's internal controls, including internal financial controls

§ scrutinising the activities and performance of the internal and external auditors, including monitoring their independence and objectivity.

The Committee's terms of reference are available at **[home.barclays/corporategovernance](http://home.barclays/corporategovernance)**

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## **Board Audit Committee report**

### **The Committee's work**

The significant matters addressed by the Committee during 2016 and in evaluating Barclays' 2016 annual report and financial statements, are described on the following pages.

### **Financial statement reporting issues**

The Committee's main responsibility in relation to Barclays' financial reporting is to review with both management and the external auditor the appropriateness of Barclays' financial statements, including quarterly results announcements and half-year and annual financial statements and supporting analyst presentations, with its primary focus being on:

§ the quality and acceptability of accounting policies and practices

§ any correspondence from financial reporting regulators in relation to Barclays' financial reporting

§ material areas where significant judgements have been made, along with any significant assumptions or estimates, or where significant issues have been discussed with or challenged by the external auditor

§ an assessment of whether the Annual Report, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess Barclays' position and performance, business model and strategy.

### *Accounting policies and practices*

The Committee discussed reports from management in relation to the identification of critical accounting judgements and key sources of estimation uncertainty, significant accounting policies and the proposed disclosure of these in the 2016 Annual Report. Following discussions with both management and the external auditor, the Committee approved the critical accounting judgements, significant accounting policies and disclosures, which are set out in note 1, Significant accounting policies, to the consolidated financial statements. There were no significant changes in accounting policy during the period. During 2016, the Committee was regularly updated on Barclays' preparations for the implementation of IFRS9 (Financial Instruments), which is effective from 1 January 2018, including the key technical decisions and interpretations required and Barclays' proposed approach for each. The Committee also

considered the accounting implications of Structural Reform and the establishment of the ring-fenced bank. These will continue to be areas of focus in 2017.

### *Financial reporting regulators and Barclays*

During the third quarter of 2016, Barclays received a comment letter from the Corporate Reporting Review Team (CRRT) of the Financial Reporting Council (FRC) in relation to its thematic review of tax disclosures. The comment letter covered the disclosure of uncertain tax provisions in Barclays' 2015 annual report and financial statements. The CRRT requested and was provided with additional information in respect of Barclays' disclosure of uncertain tax positions, including an advance copy of Barclays' enhanced policy for such disclosure (see page 236), and subsequently confirmed in writing that it had closed its enquiries.\*

The Committee from time to time considers comment letters from the SEC in relation to its reviews of Barclays' annual report and other publicly filed financial statements. Such comment letters and Barclays' responses are made publicly available by the SEC on its website, www.sec.gov, once it has closed each such review. The Committee sought to ensure that Barclays took due account of the SEC's views in its external reporting.

### *Significant judgements and issues*

The significant judgements and issues and actions taken by the Committee in relation to the 2016 annual report and financial statements are outlined below. The significant judgements and issues are broadly comparable in nature to prior years. Each of these matters was discussed with the external auditor during the year.

\*The CRRT's review was based on Barclays' annual report and financial statements and did not benefit from detailed knowledge of Barclays' business or the transactions entered into. The closure of the CRRT's enquiries provides no assurance that Barclays' annual report and accounts are correct in all material respects, as the FRC's role is not to verify information but to ensure compliance with reporting requirements. The FRC accepts no liability for reliance on its closure letter from Barclays or any third party, including but not limited to investors and shareholders.

Area of focus	Reporting issue	Role of the Committee	Conclusion/action taken
<b>Conduct provisions</b> (see Note 27 to the financial statements).	Barclays makes certain assumptions and estimates, analysis of which underpins provisions made for the costs of customer redress, such as for Payment Protection Insurance (PPI).	§ Regularly analysed the judgements and estimates made with regard to Barclays' provisioning for PPI claims, taking into account forecasts and assumptions made for PPI complaints and actual claims experience for Barclays and the industry as a whole.	The Committee and management continue to monitor closely any changes in customer or claims management companies' behaviour in light of the Plevin case and the proposed FCA timebar. Over the course of 2016, having assessed actual claims experience and the potential impact of the proposed timebar and the Plevin case, the Committee agreed to recognise additional provisions of £1000m

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§ Debated the potential impact on the future range of provisions arising from the FCA's proposed timebar on claims and the expected deadline of June 2019, discussing the levels of uncertainty in the projections. in 2016, bringing Barclays' total cumulative provisions against the cost of PPI redress and associated processing costs to £8.4bn, of which £2.0bn is remaining.

§ Discussed the potential range of outcomes that might arise from the Plevin case (the 2014 UK Supreme Court ruling in Plevin v Paragon Personal Finance Ltd) and whether any increase in provisions was required.

§ Evaluated proposed additional provisions for PPI and whether the analysis performed by management was consistent with prior periods and reflected known trend data and whether Barclays' approach was consistent with that taken by industry peers.

§ Assessed provisions for alternative PPI (card protection and payment break plan insurance) and the claims experience compared to the range of reasonable high and low end scenarios that had been determined.



Area of focus	Reporting issue	Role of the Committee	Conclusion/action taken
<p><b>Legal, competition and regulatory provisions</b></p> <p>(see Notes 27-29 to the financial statements).</p>	<p>Barclays is engaged in various legal, competition and regulatory matters. The extent of the impact on Barclays of these matters cannot always be predicted, but matters can give rise to provisioning for contingent and other liabilities depending on the relevant facts and circumstances. The level of provisioning is subject to management judgement on the basis of legal advice and is therefore an area of focus for the Committee.</p>	<p>§ Evaluated advice on the status of current legal, competition and regulatory matters.</p> <p>§ Assessed management's judgements and estimates of the levels of provisions to be taken and the adequacy of those provisions, based on available information and evidence.</p> <p>§ Considered the adequacy of disclosure, recognising that any decision to set provisions involves significant judgement.</p>	<p>The Committee discussed provisions and utilisation. Having reviewed the information available to determine what was probable and could be reliably estimated, the Committee agreed that no additional provision should be made at the full year for ongoing investigations and litigation.</p> <p>Further information may be found on pages 270 to 280.</p>
<p><b>Valuations</b></p> <p>(see Notes 14-18 to the financial statements).</p>	<p>Barclays exercises judgement in the valuation and disclosure of financial instruments, derivative assets and certain portfolios, particularly where quoted market prices are not available, including the Group Education, Social Housing and Local Authority (ESHLA) portfolio.</p>	<p>§ Evaluated reports from Barclays Valuations Committee, with particular focus on the restructuring of the ESHLA portfolio and its subsequent de-recognition; a valuation disparity with a third party in respect of a specific long-dated derivative portfolio; and an assessment of the impact of negative interest</p>	<p>The Committee confirmed its agreement to the restructuring and de-recognition of the ESHLA portfolio and concluded that it was a de-recognition event. It noted the lack of progress made in resolving the third-party valuation disparity, which has been outstanding for some time, and satisfied itself on the</p>

rates on the valuation of derivatives.

basis of the information available to it that Barclays valuation methodology remains appropriate. It approved a revision to the model used for valuing the remaining ESHLA portfolio recommended by the Valuations Committee.

§ Considered proposals from the Valuations Committee to revise the valuations approach for the remaining ESHLA portfolio and to revise the approach to the marking of Own Credit.

**Impairment**

(see Note 7 to the financial statements).

Where appropriate, Barclays models potential impairment performance, allowing for certain assumptions and sensitivities, to agree allowances for credit impairment, including agreeing the timing of the recognition of any impairment and estimating the size, particularly where forbearance has been granted.

§ Assessed impairment experience against forecast and whether impairment provisions were appropriate.

§ Evaluated the appropriateness and timing of the impairment taken in connection with Barclays exposures to the oil and gas sectors, including the impact of single name losses in the oil and commodities sectors.

§ Debated the adjustment in impairment taken in the Cards business for informal forbearance arrangements and the potential impact of changes in emergence modelling.

§ Considered a report from the Group Impairment Committee on the adequacy of loan impairment allowances as at 31 December 2016, including assessing internal and external trends, methodologies and key management judgements.

The Committee challenged the timing of the oil and gas impairment taken in the half-year results, although confirmed that the provision was adequate. It welcomed the proposal to create a new Group Impairment Committee and enhance the role of the Group Finance function in assessing impairment provisioning. It agreed a post-model adjustment of £250m for impairment in the UK and US Cards businesses during the third quarter of 2016 and obtained clarification on the impairment policy for the Cards business. At the full year, having debated the report from the Group Impairment Committee it confirmed the adequacy of the full year impairment charge of £2.4bn.

<b>Tax</b> (see Note 10 to the financial statements).	Barclays is subject to taxation in a number of jurisdictions globally and makes judgements with regard to provisioning for tax at risk and on the recognition and measurement of deferred tax assets.	§ Evaluated the appropriateness of tax risk provisions to cover existing tax risk.  § Debated the forecasts and assumptions supporting the recognition and valuation of deferred tax assets.	The Committee confirmed the tax risk provisions for the full year and the treatment of deferred tax assets.
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Governance: Directors report

What we did in 2016

**Board Audit Committee report**

Area of focus	Reporting issue	Role of the Committee	Conclusion/action taken
<b>Long-term viability</b>	The Directors are required to make a statement in the Annual Report as to the long-term viability of Barclays. The Committee provides advice to the Board on the form and content of the statement, including the underlying assumptions.	<p>§ Evaluated at year end a report from management setting out the view of Barclays long-term viability. This report was based on Barclays Medium Term Plan (MTP) and covered forecasts for capital, liquidity and leverage, including forecast performance against regulatory targets, outcomes of the stress test of the MTP and forecast capital and liquidity performance against stress hurdle rates, funding and liquidity forecasts and an assessment of global risk themes and the Group's risk profile.</p>	Taking into account the assessment by the Board Risk Committee of stress testing results and risk appetite, the Committee agreed to recommend the viability statement to the Board for approval.
		<p>§ Considered the viability statement in conjunction with Barclays risk statements and strategy/business model disclosures.</p>	
		<p>§ Addressed specific feedback from investors and other stakeholders on viability statements in general.</p>	

**Fair, balanced and understandable reporting**

(including country-by-country reporting and Pillar 3 reporting).

Barclays is required to ensure that its external reporting is fair, balanced and understandable. The Committee undertakes an assessment on behalf of the Board in order to provide the Board with assurance that it can make the statement required by the Code.

§ Assessed, via discussion with and challenge of management, including the Group Chief Executive and Group Finance Director, whether disclosures in Barclays published financial statements were fair, balanced and understandable.

Having evaluated all of the available information and the assurances provided by management, the Committee concluded that the processes underlying the preparation of Barclays published financial statements, including the 2016 annual report and financial statements, were appropriate in ensuring that those statements were fair, balanced and understandable.

§ Evaluated reports from Barclays Disclosure Committee on its assessment of the content, accuracy and tone of the disclosures.

In assessing Barclays financial results statements over the course of 2016, the Committee specifically addressed and provided input to management on the disclosure and presentation of:

§ Established via reports from management that there were no indications of fraud relating to financial reporting matters.

§ Evaluated the outputs of Barclays internal control assessments and Sarbanes-Oxley s404 internal control process.

§ Barclays restated financial results, including the allocations to Barclays UK and Barclays International and the separation of the Cards business.

§ Assessed disclosure controls and procedures.

§ the sell-down of Barclays holding in Barclays Africa and its classification as held for sale.

§ Confirmed that management had reported on and evidenced the basis on which representations to the external auditors were made.

§ guidance provided to the market on the costs of Structural Reform.

§ the Group Finance Director's presentations to analysts.

§ alternative performance measures in view of new guidance from the European Securities & Markets Association.

§ core performance and headcount.

§ operational risk capital and guidance on capital levels.

§ the level of segmental reporting.

The Committee recommended to the Board that the 2016 annual report and financial statements are fair, balanced and understandable.

## Other significant matters

Apart from financial reporting matters the Committee has responsibility for oversight of the effectiveness of Barclays internal controls, the performance and effectiveness of BIA and the performance, objectivity and independence of the external auditor. The most significant matters considered during 2016 are described below:

Area of focus	Matter addressed	Role of the Committee	Conclusion/action taken
<p><b>Internal control</b></p> <p>Read more about the Barclays internal control and risk management processes on pages 40 and 41</p>	<p>The effectiveness of the overall control environment, including the status of any material control issues and the progress of specific remediation plans.</p>	<p>§ Evaluated and tracked the status of the most material control issues identified by management via regular reports from the Head of Operational Risk and latterly from the Chief Controls Officer.</p> <p>§ Evaluated the status of specific material control issues and associated remediation plans, including in particular those relating to Security of Secret and Confidential Data; Infrastructure Access Management; Group Resilience; IT Security; Data Governance; Model Risk Management; and Unsupported Infrastructure and Applications, all of which remained open at the end of 2016.</p>	<p>The Committee requested enhancements to reporting to make clear where operational risk was outside appetite and the actions being taken. The Committee welcomed the improvements made to the lessons-learned process and proposed that the new Group Controls Committee should play a role in setting standards for lessons-learned exercises and deciding when they should be conducted. The Committee endorsed the work being taken forward, under the leadership of the Chief Controls Officer, to address any feedback from regulators on Barclays control environment, noting that the Board would directly oversee the progress being made to address</p>

§ Discussed lessons learned from specific control incidents and how these could be applied to Barclays business globally, via an enhanced lessons-learned process.

specific regulatory feedback. The Committee also challenged management to ensure that the RCSA process was sufficiently robust in light of some specific control issues that had emerged after certain RCSAs had been completed.

§ Debated any regulatory reports or other feedback received from regulators on Barclays overall control environment.

§ Assessed the status of the enhancements being made to Barclays risk and control self-assessment (RCSA) process to support disclosures in Barclays annual report.

The effectiveness of the management control approach and control environment in each individual business, including the status of any material control issues and the progress of specific remediation plans.

§ Assessed individual reports from Barclays UK, Barclays International, the Cards business, Barclays Non Core operations, Barclays International's US investment banking operations and Barclays Africa, including questioning directly the heads of those businesses on their management control approach/culture and control environment, including any specific control issues, resilience issues, the status and progress of any remediation plans or workstreams and plans to enhance the control environment.

The Committee welcomed the decision by Barclaycard to redirect strategic investment towards enhancing its control environment and to restrict growth in new business while certain control issues, such as fraud levels in the US, were addressed. To make clear the levels of personal accountability expected, the Committee asked for the control objectives for each member of the Group Executive Committee for 2016 to be made more specific, with an emphasis on prioritising control issues.

§ Tracked plans for implementing revised control governance structures in each business to align with changes in Barclays



organisational structure.

§ Provided feedback on the 2016 control objectives for each member of the Group Executive Committee.

Governance: Directors report

What we did in 2016

## Board Audit Committee report

Area of focus	Matter addressed	Role of the Committee	Conclusion/action taken
	The effectiveness of the control environment in the Chief Operating Office (COO) and the status and remediation of any material control issues.	<p>§ Scrutinised on a regular basis the COO control environment, taking the opportunity to directly challenge and question functional leaders, including the Chief Operating Officer on the progress of remediation plans.</p> <p>§ Debated the clarity of accountability and standards of consistency needed, given decentralisation of the business.</p> <p>§ Addressed the issue of resilience and associated risk appetite, discussing in particular the impact of change on resilience initiatives.</p> <p>§ Discussed the impact of the proposed sell-down of Barclays holding in Barclays Africa, including any ongoing support requirements on COO-related material control issues.</p>	The Committee emphasised the need for clear ownership and accountability between the business and COO for technology control issues, which has been addressed via the implementation of the new organisational management structure. In view of the volume of technology and change remediation required, the Committee tasked the Chief Operating Officer with enhancing the processes for self-identification and logging of risk and control issues. The Committee also asked the new Chief Information Officer to conduct a deep dive into Technology control issues, the outputs of which were evaluated by the Committee in the fourth quarter of 2016. The Committee welcomed the improved clarity of the plans to enhance the COO control environment and will receive further regular updates throughout 2017.

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The adequacy of the Group's arrangements to allow employees to raise concerns in confidence without fear of retaliation and the outcomes of any substantiated cases.

§ Evaluated the results of benchmarking exercise to compare Barclays' processes and case volumes to 40 peer companies.

§ Tracked the progress of the internal campaign to raise awareness among employees on raising concerns.

§ Monitored the trends in reported and substantiated whistleblowing cases, including any information on any instances of retaliation.

The Committee concluded that Barclays' processes were appropriate and in line with peers. It noted that the successful internal campaign had generated an increase in the number of whistleblowing reports, all of which were investigated. Volumes of cases remain proportionate to Barclays' size and footprint. The Committee asked management to provide additional detail in its future reports where any whistleblowing investigation was outstanding for more than six months. In future, as Barclays Whistleblowing Champion, the Chairman of the Committee will make an annual report to the Board on whistleblowing matters.

Area of focus	Matter addressed	Role of the Committee	Conclusion/action taken
<b>Internal audit</b>	The performance of BIA and delivery of the internal audit plan, including scope of work performed, the level of resources and the methodology and coverage of the internal audit plan.	<p>§ Scrutinised and agreed internal audit plans and deliverables for 2016, including agreeing the areas of focus, such as technology, data, change, execution risk, and the resources required.</p> <p>§ Monitored delivery of the agreed audit plans, including assessing internal audit resources and attrition levels and any impacts on the plan.</p> <p>§ Debated audit risk appetite and issue validation.</p> <p>§ Tracked the levels of unsatisfactory audits, including discussing the time taken to issue audit reports and the reasons for any delays.</p>	The Committee approved an increase in headcount to ensure appropriate audit coverage of technology and change and agreed an interim audit risk appetite level pending recruitment, subject to the delivery of mitigating actions assigned to the Chief Operating Officer. The Committee emphasised to management that it was not content with the number of unsatisfactory audits and considered setting a target for management. It also asked BIA to disclose in its reports the reasons for any delay in issuing audit reports, along with details of any audit work that was deferred or cancelled. In view of the additional expectations placed on BIA, the Committee requested details of internal audit vacancies, business areas and skills sets and encouraged the Chief Internal Auditor to consider internal transfers and other creative solutions to fill resourcing gaps. It agreed with BIA the action plan

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§ Discussed BIA's assessment of the management control approach and control environment in Barclays UK, Barclays International and the COO. to address the recommendations arising from the PRA review of BIA's performance. The Committee confirmed that it was satisfied with the outcomes of the self-assessment of BIA performance, which evidenced that the function generally conforms to the standards set by the Institute of Internal Auditors. It further confirmed that it felt able to rely on the work of BIA in discharging its own responsibilities.

§ Debated with BIA the possibility of auditing culture.

§ Evaluated the outcomes from BIA's annual self-assessment.

§ Debated feedback received from the PRA on the performance of BIA and discussed the increased regulatory expectations of BIA and the impact on internal audit plans and resources.

### External audit

The work and performance of PwC, including the maintenance of audit quality during the period of transition to a new auditor.

§ Met with key members of the PwC audit team to discuss the 2016 audit plan and agree areas of focus.

The Committee approved the audit plan and the main areas of focus.

§ Assessed regular reports from PwC on the progress of the 2016 audit and any material issues identified, including debating with PwC whether any changes to the audit plan were needed following the UK's vote to leave the EU.

**Read more about the Committee's role in assessing the performance, effectiveness and independence of the external auditor and the quality of the external audit below.**

§ Discussed PwC's report on certain control areas and the control environment, including a specific report on controls over access to payment systems requested by the Committee.

§ Discussed the draft audit  
opinion ahead of 2016 year end.

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## **Board Audit Committee report**

The Committee also covered the following matters:

§ tracked the progress of specific work being done to enhance Barclays' financial crime controls and the deployment of a revised financial crime operating model. The Committee also assessed the Group Money Laundering Officer's annual report and was briefed on any issues arising from the publication of the information known as the Panama Papers

§ assessed the status of the programme in place to ensure Barclays' compliance with client assets regulatory requirements, including approving the annual client assets audit report and discussing the potential impact of Structural Reform on client assets

§ evaluated the outcomes of the assessment of the Committee's performance and any areas of Committee performance that needed to be enhanced

§ reviewed and updated its terms of reference, recommending them to the Board for approval.

### **External auditor**

PwC, and its predecessor firms, has been Barclays' external auditor since 1896. An external audit tender was conducted in 2015, with a view to rotating the external audit firm for the 2017 audit onwards. PwC was not asked to tender. The tender process completed in summer 2015 and the Board announced in July 2015 that it had appointed KPMG as Barclays' statutory auditor with effect from the 2017 financial year. Henry Daubeney of PwC has been Barclays' senior statutory auditor with effect from the audit for the 2015 financial year. He will be succeeded by an audit partner from KPMG with effect from the audit for the 2017 financial year.

### **Assessing external auditor effectiveness, auditor objectivity and independence and non-audit services**

The Committee is responsible for assessing the effectiveness, objectivity and independence of the Group's auditor, PwC. This responsibility was discharged throughout the year at formal Committee meetings, during private meetings with PwC and via discussions with key executive stakeholders. In addition to the matters noted above, during 2016 the Committee:

§ approved the terms of the audit engagement letter and associated fees, on behalf of the Board

§ discussed and agreed revisions to the *Group Policy on the Provision of Services by the Group Statutory Auditor* and regularly analysed reports from management on the non-audit services provided to Barclays. Read more about non-audit services below

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§ evaluated and approved revisions to the *Group Policy on Employment of Employees or Workers from the Statutory Auditor* and ensured compliance with the policy by regularly assessing reports from management detailing any appointments made

§ assessed the draft report to the PRA prepared by PwC regarding its detailed audit work on specific topics

§ was briefed by PwC on critical accounting estimates, where significant judgement is needed

§ assessed any potential threats to its independence self-identified and reported by PwC

§ reviewed the report on PwC issued by the FRC's Audit Quality Review team.

PwC's performance, independence and objectivity during 2016 were formally assessed at the beginning of 2017 by way of a questionnaire completed by key stakeholders across the Group. The questionnaire was designed to evaluate PwC's audit process and addressed matters including the quality of planning and communication, technical knowledge, the level of scrutiny and challenge applied and PwC's understanding of the business. The Committee was particularly interested in assessing whether audit quality was being maintained throughout the period of transition to a new auditor and that the appropriate degree of challenge and scepticism was being maintained. The results of the evaluation confirmed that both PwC and the audit process were effective. In view of the external audit tender conducted in 2015 and the decision to appoint KPMG as Barclays' external auditor with effect from the 2017 financial year, PwC will resign as the Group's statutory auditor at the conclusion of the 2016 audit and the Board will resolve to appoint KPMG to fill the vacancy. A resolution to appoint KPMG as auditor will be proposed at Barclays' 2017 AGM. PwC will be available at the 2017 AGM to answer any questions.

### Non-audit services

In order to safeguard the auditor's independence and objectivity, Barclays has in place a policy setting out the circumstances in which the auditor may be engaged to provide services other than those covered by the Group audit. *The Group Policy on the Provision of Services by the Group Statutory Auditor* (the Policy) applies to all Barclays subsidiaries and other material entities over which Barclays has significant influence. The core principle of the Policy is that non-audit services (other than those legally required to be carried out by the Group's auditor) should only be performed by the auditor in certain, controlled circumstances. The Policy sets out those types of services that are strictly prohibited and those that are allowable in principle. Any service types that do not fall within either list are considered by the Committee Chairman on a case by case basis, supported by a risk assessment provided by management. Since October 2015, the Committee has also required all new engagements of KPMG for non-audit services to be considered in light of the Policy and has maintained oversight of such services on the same basis as for PwC. In particular, KPMG was not permitted to provide any non-audit service that might have continued beyond mid-2016 if it had potential to cause independence issues.

During 2016, the Policy was revised to reflect the FRC's draft Ethical Standard for Auditors published in September 2015, which implemented the EU's revised Statutory Audit Directive. The new Ethical Standard is effective from financial years commencing on or after 17 June 2016, meaning that Barclays must comply with effect from 1 January 2017. However, the Committee decided to early adopt the requirements of the new Ethical Standard from 1 July 2016, to align with the point at which KPMG started its required period of independence. In order to comply with the new Ethical Standard, significant amendments were made to the list of services that are strictly prohibited by the Policy. A number of services being undertaken by PwC or KPMG were required to be exited following adoption of the new Policy, with any exceptions being approved by the Chairman and notified to the Committee.

Under the Policy, the Committee has pre-approved all allowable services up to £100,000, or £25,000 for tax advisory services, however, all proposed work, regardless of the fees, must be sponsored by a senior executive and recorded on a centralised online system, with a detailed explanation of the clear commercial benefit arising from engaging the



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auditor over other potential service providers. The audit firm engagement partner must also confirm that the engagement has been approved in accordance with the auditor's own internal ethical standards and does not pose any threat to the auditor's independence or objectivity. All requests to engage the auditor are assessed by independent management before work can commence. Requests for allowable service types in respect of which the fees are expected to meet or exceed the above thresholds must be approved by the Chairman of the Committee before work is permitted to begin. Services where the fees are expected to be £250,000 or higher must be approved by the Committee as a whole. All expenses and disbursements must be included in the fees calculation. The thresholds were not amended when the Policy was revised in 2016.

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During 2016, all engagements where expected fees met or exceeded the above thresholds were evaluated by either the Committee Chairman or the Committee as a whole who, before confirming any approval, assured themselves that there was justifiable reason for engaging the auditor and that its independence and objectivity would not be threatened. No requests to use PwC were declined in 2016 (2015: two), with one request to use KPMG declined (2015: n/a). On a quarterly basis, the Committee scrutinised details of individually approved and pre-approved services undertaken by PwC and KPMG in order to satisfy itself that they posed no risk to independence, either in isolation or on an aggregated basis. For the purposes of the Policy, the Committee has determined that any pre-approved service of a value of under £50,000 is to be regarded as clearly trivial in terms of its impact on Barclays' financial statements and has required the Group Financial Controller to specifically review and confirm to the Committee that any pre-approved service with a value of £50,000 - £100,000 (or up to £25,000 for tax advisory services) may be regarded as clearly trivial. The Committee undertook a review of pre-approved services at its meeting in December 2016 and satisfied itself that such pre-approved services were clearly trivial in the context of their impact on the financial statements.

The fees paid to PwC for the year ended 31 December 2016 amounted to £49m (2015: £43m), of which £8m (2015: £9m) was payable in respect of non-audit services. Non-audit services represented 20.6% of the statutory audit fee (2015: 24.2%). A breakdown of the fees paid to the auditor for statutory audit and non-audit work can be found in Note 42 on page 304.

### Governance in Action Statutory auditor transition

A significant activity for the Committee during 2016 has been overseeing the transition of Barclays' statutory auditor from PwC to KPMG. Following the audit tender that concluded in mid-2015, KPMG will become Barclays' statutory auditor with effect from the 2017 financial year onwards. The Committee has undertaken activity to manage the transition period to facilitate a smooth handover of responsibilities.

The Committee has overseen the steps required to enable KPMG to achieve independence by 1 July 2016. This included:

- § assigning a dedicated transition team to support operational activities, including progressing a global master services agreement and local jurisdictional agreements

- § agreeing with KPMG the overall plan to achieve independence and assessing regular reports from KPMG on the progress being made

- § monitoring the orderly termination of non-audit services being provided by KPMG to Barclays that would be prohibited when KPMG becomes statutory

Of the £8m of non-audit services provided by PwC during 2016, the significant categories of engagement, i.e. services where the fees amounted to more than £500,000, included:

§ audit-related services: additional work to facilitate the transition to KPMG as Barclays' statutory auditor

§ transaction support: services provided in connection with the sell-down of Barclays' holding in Barclays Africa, including acting as the reporting accountant on the circular issued to Barclays shareholders and providing comfort on associated documentation

§ quality assurance: performed on behalf of Barclays Africa over work conducted by Barclays in connection with the separation arrangements from Barclays.

The fees paid to KPMG for non-audit work during 2016 were £17.3m (2015: £38m). Significant categories of engagement approved in 2016 included:

§ Audit-related services: services provided in connection with minimum regulatory requirements for audits of benchmark interest rate submissions.

**The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014**

As described in this report, Barclays is in compliance with the requirements of The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014, which relates to the frequency and governance of tenders for

auditor

§ requiring KPMG to comply from 1 June 2016 with the provisions of the Group's policies relating to the statutory auditor, specifically, *The Group Policy on the Provision of Services by the Group Statutory Auditor and the Group Policy on Employment of Employees or Workers from the Statutory Auditor*, and requiring management to report to the Committee on any services or appointments undertaken in line with these policies

§ accepting a formal independence letter from KPMG. This included a list of ongoing non-audit services that are deemed permissible and which have been approved in accordance with Barclays' policy and confirmation of KPMG's compliance with applicable ethics and independence rules.

Once independence was achieved, the Committee oversaw the handover plan and the transition to business as usual. This included:

§ inviting the lead audit partner of KPMG to attend Committee meetings as part of the process of shadowing PwC's 2016 audit

§ arranging for the lead audit partner of KPMG to attend meetings of the Board Reputation Committee and Board Risk Committee

§ receiving a briefing from KPMG on accounting developments, covering: Impairment and the impact of IFRS9 (Financial Instruments); Valuations; Negative interest rates; Structural Reform; IFRS15 (Revenue from contracts with customers) and IFRS16 (Leases)

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the appointment of the external auditor and the setting of a policy on the provision of non-audit services.

§ discussing with KPMG accounting policy interpretations following KPMG's review of Barclays accounting policies

§ assessing regular reports from KPMG on the progress being made with key activities, including building the Barclays audit team and gaining an understanding of Barclays' key processes, systems and controls

§ reviewing the report on KPMG issued by the FRC's Audit Quality Review team

§ scheduling a planning meeting between the Committee and KPMG for the second quarter of 2017 to discuss the audit strategy and provide input.

Governance: Directors report

What we did in 2016

## Board Risk Committee report

**The Committee's focus during 2016 has been driven by a number of key challenges, including emerging economic and political risks, notably those associated with the EU Referendum and the subsequent vote by the UK to leave the EU.**

### Dear Fellow Shareholders

The Committee's focus during 2016 has been driven by a number of key challenges. First, Barclays has been implementing its new strategy and executing its Structural Reform Programme, which has some particular implications in terms of capital and liquidity management across Barclays' legal entities. Second, there was continued focus on any emerging risks arising in our key markets in the UK, US and South Africa as a consequence of any macroeconomic deterioration or disruption in financial market conditions. Finally, there were the challenges presented by emerging economic and political risks, notably those associated with the EU Referendum and the subsequent vote by the UK to leave the EU.

Considerations for risk appetite for 2016 and the Medium Term Plan (MTP) included credit cycle conditions; the impact of ongoing low commodity prices; a potential slowdown in China; and the likelihood of interest rate rises. Consequently, the recommendation of the risk function, which was endorsed by the Committee, was that a conservative approach to growth should be maintained,

managing risk in their businesses, with the chief executives of each business attending Committee meetings to present directly to the Committee, with the support of their chief risk officers, on the risk profile of their business and how risk is being managed.

My own responsibilities as Chairman of the Committee were re-emphasised during 2016, with the introduction in March 2016 of the UK's Senior Managers Regime. Under this regulatory regime, I have specific prescribed responsibilities for safeguarding the independence of and overseeing the performance of the risk function, including the performance of the Chief Risk Officer, in line with regulatory requirements. In addition to my regular meetings with the Chief Risk Officer and members of his senior management, I have led the Committee in encouraging the risk function to develop a way of assessing risk management capability, which we have also agreed will be subject to a periodic, external review. The risk function has also been encouraged to develop a way of measuring risk culture across the Group.

During 2016, I continued to liaise closely with the Chairman of the Board Audit Committee, particularly with regard to operational risk issues, where there is some degree of overlap between the remit of the two committees. I also attended a meeting of the risk committee of Barclays US IHC to gain a first-hand insight into the risk issues being addressed by management in that entity. I continued my practice of meeting regularly with other members of senior management and continued to engage with Barclays regulators in the UK and US.

with a focus on core products and markets. We expected continued volatility in external conditions and aimed to ensure that the Group was conservatively positioned. Headwinds developed during 2016 with the potential to have a significant first-order impact on Barclays businesses, including heightened economic risk in the UK post the EU Referendum; increased geo-political risk following the US presidential election; and the IAS19 position of Barclays' pension scheme, which is vulnerable to market volatility. Other emerging risks with the potential to impact Barclays include interest rate and credit spread movements; UK property price stress; potential transmission impacts of any slowdown in China; and ongoing volatility in oil prices, which remain low. All of these potential risks continue to be actively managed and the risk profile and actions taken are subject to regular oversight by the Committee. In these circumstances, we were pleased with the capital and leverage performance for 2016, although impairment performance was adverse to plan, primarily as a result of one-off effects reflecting management's review of impairment modelling in the UK and US Cards businesses.

In early 2016, Barclays appointed a new Chief Risk Officer, CS Venkatakrisnan, an appointment that was recommended to the Board by the Committee. The Committee oversaw the transition, specifically requesting information from the outgoing Chief Risk Officer on the transition plans and handover arrangements and seeking assurance from the new Chief Risk Officer that he had been provided with all of the information needed to enable him to fulfil his responsibilities. The Committee has welcomed the opportunity to work closely with the new Chief Risk Officer during 2016. We have also seen greater emphasis emerge over 2016 on the responsibilities of the first line of defence for

### **Committee performance**

The Committee's performance during 2016 was assessed as part of the independently facilitated annual Board effectiveness review. I am pleased to report that the conclusion of my Board colleagues was that the Committee is regarded as thorough and effective and that the Board has a high degree of confidence in the diligence and coverage of the Committee. The main area identified for improvement was to ensure that the co-operation and collaboration between the Committee and the Board Audit and Board Reputation Committees continues to capture all significant risk issues effectively. I will be working even more closely with my fellow Board Committee chairmen on this over the coming year. You can read more about the outcomes of the Board effectiveness review on pages 33 to 35.

### **Looking ahead**

2017 will be a key year for Barclays in delivering its strategy, as it completes its restructuring and makes significant steps in implementing the new legal entity structure required under Structural Reform. I expect the Committee to focus on strategic risk, with an emphasis on promoting even greater linkages between strategy formulation and risk management, and ensuring that there is appropriate global oversight of risk across the new Group structure.

**Tim Breedon**

Chairman, Board Risk Committee

22 February 2017

**Board Risk Committee allocation of time (%)**

	2016	2015
1 Risk profile/risk appetite (including capital and liquidity management)	52	43
2 Key risk issues	26	31
3 Internal control/risk policies	8	11
4 Other (including remuneration and governance issues)	14	15

**Committee composition and meetings**

The Committee is comprised solely of independent non-executive Directors. Details of the skills and experience of the Committee members can be found in their biographies on pages 3 and 4.

The Committee met eight times in 2016, with one of the meetings held at Barclays New York offices. A meeting was held specifically to consider the risk considerations arising from the outcome of the EU Referendum result, further details of which can be found on page 24. The chart above shows how the Committee allocated its time during 2016. Committee meetings were attended by management, including the Group Chief Executive, Group Finance Director, Chief Internal Auditor, Chief Risk Officer, Barclays Treasurer and General Counsel, as well as representatives from the businesses and other representatives from the risk function. Representatives from the current external auditor, PwC and, from 1 July 2016, representatives from the incoming external auditor, KPMG, also attended meetings.

**Member**

Tim Breedon  
Mike Ashley  
Reuben Jeffery\*  
Diane Schueneman  
Steve Thieke

**Meetings attended/eligible to attend**

8/8  
8/8  
7/8  
8/8  
8/8

\*Did not attend one meeting owing to a prior commitment

**Committee role and responsibilities**

The Committee's main responsibilities include:

§ recommending to the Board the total level of financial and operational risk the Group is prepared to take (risk appetite) to achieve the creation of long-term shareholder value

§ monitoring financial and operational risk appetite, including setting limits for individual types of risk, e.g., credit, market and funding risk

§ monitoring the Group's financial and operational risk profile

§ ensuring that financial and operational risk is taken into account during the due diligence phase of any strategic transaction

§ providing input from a financial and operational risk perspective into the deliberations of the Board Remuneration Committee.

The Committee's terms of reference are available at [home.barclays/corporategovernance](http://home.barclays/corporategovernance)

### The Committee's work

The significant matters addressed by the Committee during 2016 are described below:

Area of focus	Matter addressed	Role of the Committee	Conclusion/action taken
<p><b>Risk appetite and stress testing, i.e.</b> the level of risk the Group chooses to take in pursuit of its business objectives, including testing whether the Group's financial position and risk profile provide sufficient resilience to withstand the impact of severe economic stress.</p>	<p>The risk context to MTP, the financial parameters and constraints and mandate and scale limits for specific business risk exposures; the Group's internal stress testing exercises, including scenario selection and financial constraints, stress testing themes and the results and implications of stress tests, including those run by the Bank of England (BoE).</p>	<p>§ Assessed the risk context for the 2016 MTP, including general economic and financial conditions and how these had been reflected in planning assumptions.</p> <p>§ Debated the assumptions, parameters and results of the internal stress test of the risk appetite of the 2016 MTP.</p> <p>§ Discussed and agreed mandate and scale limits for market and credit risk.</p> <p>§ Approved the parameters for the European Banking Authority stress test.</p>	<p>The Committee recommended the proposed risk appetite for 2016 to the Board for approval, although asked management to develop a contingency plan with identified triggers and actions that could be implemented if the stress occurred. It also emphasised to management that mandate and scale limits should be set at appropriate levels, reflecting the desire to focus on conservative growth in core products and markets. The Committee approved credit and market risk limits and requested that additional limits were set for market risk in order to enhance monitoring and control. It also asked management to review limits and guidelines and develop a revised framework for single name risk management, which it subsequently considered and</p>



§ Approved the parameters for BoE stress test scenario expansion.

§ Evaluated the BoE stress test results, including updates on stress testing governance and methodology and assessing potential contingency plan actions.

§ Debated regulatory and market reaction to the BoE stress test results.

§ Considered and approved internal stress test themes and the financial constraints and scenarios for stress testing risk appetite for the 2017 MTP.

§ Regularly monitored the progress of the US IHC in preparing for the Comprehensive Capital Analysis and Review (CCAR) stress test.

approved. The Committee approved the stress test results for submission to the BoE. After evaluating feedback from the BoE on the stress test, the Committee encouraged management to engage with the BoE on specific points where additional clarity on regulatory expectations was desirable.

Governance: Directors' report

What we did in 2016

## Board Risk Committee report

Area of focus	Matter addressed	Role of the Committee	Conclusion/action taken
<p><b>Capital and funding, i.e.</b> having sufficient capital and financial resources to meet the Group's regulatory requirements and its obligations as they fall due, to support growth and strategic options.</p>	<p>The trajectory to achieving required regulatory and internal targets and capital and leverage ratios, including the potential impact of Structural Reform and legal entity requirements.</p>	<p>§ Debated on a regular basis, capital performance against plan, tracking the capital trajectory, any challenges and opportunities and regulatory policy developments.</p> <p>§ Assessed on a regular basis liquidity performance against both internal and regulatory requirements.</p> <p>§ Regularly monitored capital and funding requirements on a legal entity basis, including evaluating proposed capital and liquidity processes for Barclays UK.</p> <p>§ Debated with management proposed actions to be taken to restructure the Group's asset swaps and ESHLA portfolio in order to reduce the impact of market volatility on capital.</p>	<p>The Committee supported the forecast capital and funding trajectory and the actions identified by management to manage the Group's capital position, including the actions taken to restructure asset swaps and the ESHLA portfolio. The Committee approved the proposed capital and liquidity processes for Barclays UK for submission to the regulator.</p>
<p><b>Political and economic risk, i.e.</b> the impact on</p>	<p>The potential impact on the Group's risk profile of political developments,</p>	<p>§ Closely monitored the potential impact of the UK's EU Referendum on the Group's risk</p>	<p>The Committee identified interest rate risk as a potential area of emerging risk and asked</p>

<p>the Group's risk profile of political and economic developments and macroeconomic conditions.</p>	<p>such as the UK's EU Referendum and the US Presidential election, political and economic risk in South Africa, and weakening macroeconomic conditions, such as disruption and volatility in financial markets.</p>	<p>profile and risk management <b>see the case study below for further details.</b></p>	<p>management for an assessment of Barclays' sensitivity to changes in interest rates and inflation, which was presented to the Committee in the fourth quarter. The Committee suggested that the Board was briefed on this subject and a briefing session is planned for 2017.</p>
		<p>§ Requested an assessment of the potential impact of negative interest rates in the UK on Barclays and on UK banks generally, evaluating the potential impact on risk appetite, on customers and on Barclays models.</p>	<p>The Committee satisfied itself that the actions taken to position Barclays' business in South Africa were appropriate in the context of the identified economic and political risk. It continues to keep the potential impact of a Chinese slowdown under active review and will be updated by management in early 2017 with an assessment of the risk horizon. Given the political and economic uncertainty in Italy that re-emerged in late 2016, the Committee asked management to renew its focus on reducing any redenomination risk arising from Barclays' operations in Italy.</p>
		<p>§ Continued to assess the economic and political situation in South Africa and the potential impact on the Group's risk profile, including assessing the potential risk of a sovereign credit rating downgrade and the action taken by management to position the business appropriately.</p>	
		<p>§ Continued to assess Chinese economic metrics and the potential for the global impact of any economic slowdown in China.</p>	
		<p>§ Discussed the impact of market volatility on Barclays' pension scheme.</p>	
		<p>§ Monitored Barclays' exposures to certain European banks in view of potential specific stresses for individual banks and general economic and political conditions in the Eurozone.</p>	

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<b>Specific sector risk, i.e. the Group's risk profile in sectors showing signs of stress, such as the oil sector.</b>	The Group's exposures to the oil and commodities sectors in light of the ongoing price weakness and volatility in these sectors during 2016.	§ Continued to regularly assess the Group's exposures to the oil sector, including how the portfolio was performing and whether this was in line with expectations given the actions that had been taken to manage or restructure Barclays exposures.	The Committee satisfied itself that the actions taken by management were appropriate. Given ongoing volatility in this sector it will continue to monitor the portfolio for any further signs of stress that may require additional action.
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Area of focus	Matter addressed	Role of the Committee	Conclusion/action taken
<p><b>Credit risk</b>, i.e. the potential for financial loss if customers fail to fulfil their contractual obligations.</p>	<p>Conditions in the UK housing market, particularly in London and the South East and the Group's risk appetite for and management of sectors such as the buy-to-let sector, given changes in taxation; levels of UK consumer indebtedness, particularly in the context of the risk of rising interest rates; and the performance of the Cards business, particularly the US Cards business, including levels of impairment.</p>	<p>§ Continued to assess conditions in the UK property market for any signs of stress.</p> <p>§ Evaluated how management was tracking and responding to rising levels of consumer indebtedness.</p> <p>§ Scrutinised the performance of the Cards business, including reviewing performance against risk appetite, evaluating the drivers of impairment in the UK and US businesses and assessing actions being taken to ensure that the performance of certain business segments remained within agreed risk appetite.</p>	<p>The Committee continued to encourage management to carry on with its conservative approach to UK mortgage lending, particularly in view of signs of slowdown the market post the EU Referendum. It also encouraged management to continue its close monitoring of overall levels of consumer indebtedness. The Committee challenged the credit performance of certain business segments in the US Cards business and encouraged management to complete the actions that had been identified to improve credit performance. It also emphasised to management the need to strengthen the linkages between business strategy and risk appetite.</p>
<p><b>Operational risk</b>, i.e. costs arising</p>	<p>The Group's operational risk capital requirements</p>	<p>§ Tracked operational risk key indicators via regular reports from</p>	<p>The Committee focused its attention on the financial and</p>

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<p>from human factors, inadequate processes and systems or external events.</p>	<p>and any material changes to the Group's operational risk profile and performance of specific operational risks against agreed risk appetite.</p>	<p>the Head of Operational Risk.</p> <p>§ Evaluated the potential impact of regulatory developments on operational risk capital requirements.</p> <p>§ Debated specific areas of operational risk, including fraud; transaction operations; technology; payments; and cyber-risk, evaluating the extent of any losses, the overall threat landscape, risk trends and the controls in place, in order to assess the potential impact on operational risk capital requirements.</p>	<p>capital impacts of operational risk, with specific attention on key risks that were outside appetite. It encouraged management to implement greater links between the control environment in each business and the operational risk capital allocated to that business. It also emphasised to management that there should be greater co-ordination between the key risks highlighted to the Committee and the operational risk control issues escalated to the Board Audit Committee, which is being addressed via the new chief controls office.</p>
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**Risk framework and governance**

<p>The frameworks, policies and talent and tools in place to support effective risk management and oversight.</p>	<p>§ Evaluated model risk and plans in place to enhance Barclays models and modelling capabilities.</p> <p>§ Tracked the progress of significant risk management projects, including the plans in place to achieve compliance with BCBS239 risk data aggregation principles.</p> <p>§ Debated any risk management matters raised by Barclays regulators and the actions being taken by management to respond.</p> <p>§ Discussed and endorsed the revised Enterprise Risk Management Framework (ERMF) from the perspective of financial</p>	<p>The Committee will continue to track the delivery of plans to enhance modelling and will focus on this during 2017 as part of its oversight of the model risk principal risk. The Committee encouraged management to continue to improve risk data quality, including embedding accountability for risk data quality with the business chief risk officers. The Committee will continue to track management's response to any risk management matters raised by the Group's regulators.</p> <p>The Committee was satisfied that the handover to the new Chief Risk Officer was appropriate. The Committee welcomed the development of a risk management capability scorecard and asked for risk management</p>
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and operational risk.

§ Oversaw the transition and handover to a new Chief Risk Officer.

§ Encouraged management to find ways of assessing risk capability and risk management culture.

capability to be evaluated by an external third party on a periodic basis, with a view to starting in 2017. It also welcomed the proposal to measure risk culture and asked for this to be fed into the Board Reputation Committee s overall assessment of Barclays culture.

**Remuneration**

The scope of any risk adjustments to be taken into account by the Board Remuneration Committee when making remuneration decisions for 2016.

§ Debated the Risk function s view of 2016 performance, making a recommendation to the Board Remuneration Committee on the financial and operational risk factors to be taken into account in remuneration decisions for 2016.

The Committee asked for capital and liquidity on a stressed basis to be taken into account when finalising the risk input to remuneration decisions.

Governance: Directors report

[What we did in 2016](#)

## **Board Risk Committee report**

In addition, the Committee also covered the following matters in 2016:

§ assessed Barclays' exposures to the leveraged finance market and general conditions in that market

§ was briefed by PwC on any risk matters associated with the 2015 year-end audit, specifically impairment; the valuation of the ESHLA portfolio; and a valuation disparity with a third party

§ evaluated the outcomes of the assessment of the Committee's performance and any areas of Committee performance that needed to be enhanced

§ reviewed and updated its terms of reference, recommending them to the Board for approval

## **Governance in Action**

### **contingency planning for the UK's EU Referendum**

A significant external risk event in 2016 was the UK's Referendum on its continued membership of the EU. The Board Risk Committee actively tracked this emerging risk throughout 2016, both before and after the vote.



Pre-EU Referendum activity by the Committee included:

Post-EU Referendum activity by the Committee included:

§ debating the UK's potential exit from the EU, including evaluating an assessment of the potential impacts on Barclays of a leave vote and discussing the key messages for policymakers and prudential authorities on the risks

§ convening a special meeting to discuss and evaluate the effectiveness of Barclays' preparations, concluding that the plans developed had been executed satisfactorily

§ evaluating Barclays' potential exposures if there were to be a vote to leave the EU, including assessing the steps taken by management to mitigate any risk (such as reducing any currency mismatches) in order to position Barclays defensively to manage the impact of any volatility on market and funding risk

§ assessing the performance of the actions taken to manage the impact of volatility on market and funding risk

§ assessing the likelihood of any operational risk issues that might arise if there was a period of market volatility following a leave vote

§ evaluating a revised stressed outlook, based on revised economic assumptions, and its impact on Barclays' risk profile, deliberating the effect of the revised outlook on forecast impairment and on capital and funding, market risk and credit risk

§ conducting an overall review of the appropriateness of Barclays' preparations for any market dislocation

§ considering Barclays' exposures to European banks in anticipation of potential market disruption in the Eurozone and the actions that had been taken to limit such exposures

§ reporting to the Board on the Committee's deliberations.

§ discussing with management the actions that had been taken to reduce risk appetite and limits on exposures to residential property development, high loan-to-value mortgages and buy-to-let lending and other actions that had been implemented to manage risk in higher risk retail segments and corporate portfolios

In addition to the activities undertaken by the Committee, Board members, including certain non-executive Directors, participated in a Group crisis management planning exercise based on the UK voting to leave the EU. The exercise focused on Barclays' response and communications planning in the event of a vote to leave; articulating some of the high level impact scenarios following a vote to leave; and determining the decisions and ensuing direction required from Barclays' Crisis Leadership Team.

§ encouraging management to consider the strategic implications of the leave vote

§ emphasising to management the need to fully and openly engage on matters of mutual concern with the UK government and regulators given the new political and economic environment

§ continuing to track the potential impact of the leave vote and the actions being taken by management to deal with any emerging signs of stress in Barclays' portfolios

§ reporting to the Board on the Committee's deliberations.

The full Board also met in the aftermath of the vote result to be briefed on how Barclays had performed during the period of volatility immediately following the result, including discussing Barclays' capital and liquidity position; market conditions; communications with employees and with customers and clients; contact with regulators and the UK government; the outlook for the UK economy; share price performance and potential strategic impacts.

Read more about Barclays' risk management on pages 342 to 403.

Governance: Directors report

What we did in 2016

## Board Reputation Committee report

**Achieving and sustaining a culture where all of our people demonstrate consistent behaviours and conduct underpinned by the Barclays values is key to delivering high performance for all our stakeholders and, therefore, to our long-term success.**

### Dear Fellow Shareholders

One of the key areas of focus for the Committee during 2016 was encouraging management to develop a way of better understanding and measuring intangible areas such as behaviour and culture. Barclays has a strong and resonant purpose, Helping people achieve their ambitions in the right way, and a well understood set of values, Respect, Integrity, Service, Excellence and Stewardship. This culture is firmly endorsed from the top: achieving and sustaining a culture where all of our people demonstrate consistent behaviours and conduct, underpinned by Barclays values, is key to delivering high performance for all our stakeholders and, therefore, to our long-term success.

Our challenge has been how to co-ordinate the efforts to build culture across the Group and obtain assurance that progress is being made. Significant focus was given during 2016 to developing consistent measurement and reporting of culture and you can read about the Committee's role in this important initiative in the case study on page 28. A similar approach has been taken to developing a set of indicators to allow us to measure progress across the

This is my first report as Chairman of the Board Reputation Committee and I wish to record my thanks to Sir Michael Rake, who I succeeded as Chairman on 1 January 2016, and to Wendy Lucas-Bull and Frits van Paasschen, who both stepped down from the Committee on their retirement from the Barclays Board during 2016. Mike Ashley and Mary Francis subsequently joined the Committee to ensure we have the right balance of skills and experience and appropriate cross-membership with other Board Committees.

The report on pages 26 to 28 sets out details of the material matters considered by the Committee during 2016.

### Committee performance

The Committee's performance during 2016 was assessed as part of the independently facilitated annual Board effectiveness review. I can report that my fellow Board members considered that the Committee has made progress in defining its role and is performing well. The main area identified for improvement was around ensuring that Board members have greater awareness of the Committee's mandate and core agenda. You can read more about the outcomes of the Board effectiveness review on pages 33 to 35.

### Looking ahead

Cultural transformation remains firmly on the Committee's agenda and we will continue to track key

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Committee's other areas of responsibility: conduct, complaints and citizenship.

During 2016, the Committee continued to track the exposure of Barclays, and the financial sector in general, to reputational risks. It also placed a renewed focus on the initiatives under way to build and manage Barclays reputation with its key stakeholders. We also continued to exercise oversight of the Barclays Compliance function, including approving its annual business plan, budget and resources.

Under the UK's Senior Manager Regime, which was introduced in March 2016, I have specific responsibilities with regard to safeguarding the independence and integrity of Barclays Compliance function and for overseeing its performance, including that of the Head of Compliance. To this end, I regularly meet with the Head of Compliance to receive briefings on the work of Compliance and provide support when necessary. I also meet regularly with other members of senior management, including those in the Corporate Relations, Citizenship and Reputation Risk teams.

indicators and measure the progress being made. This will be increasingly important as Barclays implements its Structural Reform Programme and begins to establish separate legal entities within the Group. My key objective in 2016 was to put the Committee at the centre of Barclays' drive to be a leader in conduct, culture and reputation - matters at which we have not always excelled in the past. There is still lots to do, but I believe that the leadership and processes that we have now put in place give us a great foundation on which to build.

**Sir Gerry Grimstone**

Chairman, Board Reputation Committee

22 February 2017

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Governance: Directors report

What we did in 2016

**Board Reputation Committee report****Board Reputation Committee allocation of time (%)**

	2016	2015
1 Citizenship	8	6
2 Reputational issues	27	13
3 Culture, conduct and compliance	57	57
4 Operational risk*	0	19
5 Other	8	6

\*Oversight of operational risk now falls within the remit of the Board Risk Committee

**Committee composition and meetings**

The Committee comprises independent non-executive Directors. During 2016 there were a number of changes to the membership of the Committee, which are set out in the table opposite.

The Committee met five times during 2016 with one of the meetings held at Barclays New York offices. The chart above shows how it allocated its time. Committee meetings were attended by representatives from management, including the Group Chief Executive, Chief Internal Auditor, Chief Risk Officer, General Counsel, Group Corporate Relations Director and Heads of Compliance, Conduct Risk and Operational Risk, as well as representatives from the businesses and other functions. Representatives from the FCA also attended a meeting during 2016.

Member	Meetings attended/eligible to attend
Sir Gerry Grimstone (from 1 January 2016)	5/5
Mike Ashley (from 1 May 2016)	4/4
Mary Francis (from 1 November 2016)	2/2
Wendy Lucas-Bull (to 1 March 2016)	0/0*
Dambisa Moyo	5/5
Diane de Saint Victor	5/5

Frits van Paasschen (to 28 April 2016)

1/1

\*There were no Committee meetings held prior to 1 March 2016, when Wendy Lucas-Bull left the Committee

**Committee role and responsibilities**

The principal purpose of the Committee is to:

§ support the Board in promoting its collective vision of Barclays' purpose, values, culture and behaviours

§ ensure, on behalf of the Board, the efficiency of the processes for identification and management of conduct and reputational risk

§ oversee Barclays' conduct in relation to its corporate and societal obligations, including setting the guidance, direction and policies for Barclays' approach to customer and regulatory matters and Barclays' Citizenship Strategy, including the management of Barclays' economic, social and environmental contribution.

[The Committee's terms of reference are available at](#)

[home.barclays/corporategovernance](http://home.barclays/corporategovernance)

### **The Committee's work**

The significant matters addressed by the Committee during 2016 are described below:

<a href="#">Area of focus</a>	<a href="#">Matter addressed</a>	<a href="#">Role of the Committee</a>	<a href="#">Conclusion/action taken</a>
Conduct risk	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.	<p>§ Discussed updates from management on conduct risk and requested the development of a dashboard report of conduct indicators to be presented to each meeting.</p> <p>§ Monitored on a regular basis performance against agreed conduct risk indicators.</p>	The Committee requested further focus on product propositions and suitability and updates on product development and controls. In 2017, it will receive a quarterly report on new products. It provided input on the development of the dashboard, including requesting that it incorporates reports from BIA and draws on external data points where available. The

§ Debated the indicators that had been developed to measure material conduct risks and issues, including providing feedback on indicators for policy breaches.

§ Discussed with BIA its view of the management of conduct risk across the Group, with particular emphasis on maintaining focus on conduct risk through periods of change.

§ Provided input, via the Committee Chairman, to the scope of BIA's review of the conduct risk programme.

§ Discussed directly with the senior management of Barclays International and Barclays UK their view of conduct and cultural issues in those businesses and the status of any initiatives in place to strengthen conduct and culture.

§ Confirmed with management that reviews had been undertaken to learn lessons from issues that had arisen at other banks and financial institutions, e.g. sales-based incentive schemes.

§ Tracked the levels of attestation by colleagues globally to *The Barclays Way*,

Committee reiterated to management the importance of ensuring that the focus on conduct is maintained in those businesses or jurisdictions that Barclays is exiting or where it is reducing its presence. The Committee encouraged management to bring contingent workers into the scope of *The Barclays Way* training and arrangements are being made for all Committee members to complete the training themselves.

the Group's code of conduct.

The scope of any conduct risk adjustments to be taken into account by the Board Remuneration Committee when making remuneration decisions for 2016.

§ Considered the proposed adjustments to be made to the incentive pool from a conduct risk perspective.

The Committee endorsed the methodology used and the resulting adjustments proposed.



Area of focus	Matter addressed	Role of the Committee	Conclusion/action taken
<b>Cultural change</b>	The progress being made on embedding of cultural change.	<p>§ Debated reports on the progress being made to effect cultural change across Barclays globally, discussing the measures being taken to define the desired culture and how it would be measured.</p> <p>§ Requested that a single report of cultural indicators was developed for reporting to each meeting and monitored on a regular basis performance against the agreed indicators.</p> <p>§ Discussed the status of the actions arising from the Banking Standards Board's (BSB) 2015 assessment of Barclays, the progress of the 2016 assessment and the resulting 2016 assessment report, asking management for greater co-ordination between the BSB's work and internal employee surveys.</p>	<p><b>Read more about the development of the culture measurement framework in the case study on page 28.</b></p>

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<b>Complaints</b>	Ensuring fair outcomes for customers by monitoring volumes of complaints received and the standard and quality of complaints handling processes.	§ Requested the development of a dashboard report of complaints indicators to be presented to each meeting.	The Committee encouraged management to develop a way of defining and reporting on complaints in the Barclays International's investment bank and a standard on complaint handling in that business will be issued in the first quarter of 2017. The Committee requested that additional information on the top root causes of complaints was included in future reports.
		§ Monitored on a regular basis performance against agreed complaints indicators.	
		§ Discussed the way in which complaints are handled and the focus on resolving complaints at first point of contact.	
		§ Debated imminent industry-wide changes in the way in which reportable complaints are recorded and the potential for reputation risk.	
<b>Citizenship</b>	The status of Barclays Citizenship Plan 2016-2018, the <i>Shared Growth Ambition</i> .	§ Debated the targets to be set for the Shared Growth initiatives.	The Committee provided feedback on how the <i>Shared Growth Ambition</i> was articulated and requested additional information on the focus areas and metrics and how progress would be measured and reported. Its feedback was incorporated into the plan, which was launched in June 2016.
		§ Agreed with the proposal to focus activity around the themes of access to employment, to financial and digital empowerment and to financing.	
		§ Assessed status updates on the progress of the <i>Shared Growth Ambition</i> .	
		§ Requested the development of a dashboard report of	

citizenship indicators to be presented to each meeting and monitored on a regular basis performance against agreed indicators.

§ Considered and recommended to the Board for approval Barclays statement under the UK's Modern Slavery Act, which can be found on Barclays' website.

**Reputation risk**

Ensuring that Barclays anticipates, identifies and manages reputational issues that may impact it or the industry now or in the future.

§ Monitored current reputation risk issues, including Barclays involvement in sensitive sectors such as defence or energy and fossil fuels.

§ Assessed emerging reputational issues, such as climate change and the relaxation of certain sanctions against Iran.

§ Evaluated the measures being taken to proactively build and manage Barclays reputation with stakeholders.

§ Assessed external opinion survey results, the trends in indicators and factors influencing the survey results, including the potential impact of the EU Referendum and government leadership changes in the UK and US.

The Committee provided feedback on the form and content of the reputation risk reports and how Barclays-specific and systemic risks might be monitored. It approved changes to Barclays Sanctions Policy with regard to sanctions with Iran. The Committee requested a regular report setting out a rolling 12-month view of Barclays communications campaigns. It also requested and received an update on Barclays' crisis management plans. It requested and received further information on Barclays business in low tax jurisdictions. It asked for and receives regular reports from the Tax Management Oversight Committee on the transactions it has reviewed.

§ Discussed the reputational risks associated with tax and how this was being managed across the Group, including the effectiveness of Barclays Tax Principles and Code of Conduct.

Governance: Directors report

What we did in 2016

## Board Reputation Committee Report

The Committee also covered the following matters:

§ discussed the progress of plans to develop the Barclays brand

§ endorsed the 2017 priorities for Barclays Corporate Relations team

§ assessed the revised ERMF from a conduct and reputation risk perspective and recommended it to the Board for approval

§ approved the 2016 Compliance business plan and tracked progress, including updates on resourcing and attrition levels

§ received a report on management's annual review of the effectiveness of compliance with the Volcker Rule (restrictions on proprietary trading and certain fund investments by banks operating in the US)

§ assessed and discussed a report on the Committee's performance during 2015

§ approved revisions to its terms of reference and recommended them to the Board for approval.

Read more about Barclays' risk management on pages 342 to 403.

## Governance in Action

### measuring cultural progress

A primary area of focus for the Committee in 2016 was providing challenge and support to management in its delivery of cultural change. The Group Executive Committee confirmed conduct, culture and values as one of its execution priorities for 2016, with the aim of monitoring cultural change and bringing together different cultural indicators to form a coherent and consolidated view of culture across Barclays.

Senior representatives from Compliance, Risk, HR and BIA presented to the Committee in early 2016 on the progress of implementing cultural change and proposals for developing a set of key indicators, along with clear governance structures and accountability for monitoring and sustaining cultural progress. The Committee debated and endorsed the following objectives:

§ identify the desired culture end-state and how to measure progress towards achieving it

§ develop a cultural measurement tool that provides simple and consistent reporting relevant to all stakeholders

§ use the insights obtained to drive actions and further embed and sustain the desired values-based culture.

Ten cultural outcomes were identified, firmly linked to Barclays values:

Value

Cultural outcomes

For each desired cultural outcome, a set of internal qualitative and quantitative indicators was identified, along with external perception indicators. The indicators proposed were drawn from existing indicators used in the Group, such as the results from Your View (the employee opinion survey), results from Barrett Values Surveys of Barclays Executive and Senior Leadership Group, external opinion survey results, BIA reports, performance reviews and indicators relating to risk management and compliance. Assessing these indicators will ensure that ongoing efforts are focused on priority issues and challenges that may impede cultural transformation.

In debating and endorsing the proposed cultural outcomes and indicators, the Committee provided feedback to management. It discussed in particular:

§ how to embed the desired culture across middle-management and whether a targeted action plan was needed for this population

§ how structuring incentives in the right way, based on personal accountability, could help drive the right culture and behaviours

§ whether a more holistic approach was needed to performance reviews, with even more focus on rewarding how things were done, rather than what was achieved

§ that indicators based around the how assessments from performance reviews might be incorporated as a measure of success

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Respect	Inclusion	Collaboration	<p>§ that existing indicators on audit issues and regulatory actions could be incorporated as a measure of success.</p> <p>Feedback from the Committee was subsequently incorporated into the measurement tool. The Committee also requested the development of a culture dashboard, setting out quarterly performance against the agreed indicators. The first such report was made in September 2016, with a further report in December 2016, allowing the Committee to debate the results and trends and the areas identified for potential deep dive reviews or targeted action. During 2017, the Committee will continue to assess the quarterly indicators, the potential themes emerging and any specific challenges identified at a business and functional level.</p>
Integrity	Speaking up	Personal accountability	
Service	Customer/client centricity	Balanced short and long-term needs	
Excellence	Simplicity and efficiency	High performance	
Stewardship	Continuous improvement	Strong reputation	

Governance: Directors report

What we did in 2016

## Board Nominations Committee report

**It is a key part of our role to be satisfied that there are proper processes in place for executive succession.**

### Dear Fellow Shareholders

Following his appointment as Group Chief Executive at the end of 2015, Jes Staley has been building his Group Executive Committee. Board level consideration is required for appointments to the Group Executive Committee and throughout 2016 the Board Nominations Committee continued to embed its oversight of Group Executive Committee succession planning. The Committee was updated on Barclays talent and succession strategy and presented with role profiles and outputs from reviews of internal successors to Group Executive Committee roles.

It is a key part of our role to be satisfied that there are proper processes in place for executive succession and at our regular meetings we discussed how potential successors are being provided with wider, relevant experience as part of their development.

Another ongoing area of focus for the Committee in 2016 was the composition of our subsidiary boards in light of the legal, regulatory and governance requirements of Structural Reform. A great deal of consideration has been given to ensuring the independence of the board and board committees of Barclays strategically significant subsidiaries, while allowing for collaboration between those

When considering Board and Board Committee composition and succession plans diversity remains at the front of our minds. We continued to receive regular updates on diversity and inclusion during 2016 and were pleased to hear that the number of women in senior leadership positions had increased for the third successive year. As a Board we met our target of 25% female representation by 2015 and are progressing towards the target we set ourselves last year of 33% female representation by 2020. Diversity is not just about gender, however, and we are always mindful of diversity in all of its forms, even where we have not set specific targets.

Certain responsibilities for me as Chairman of the Committee have been prescribed by the Senior Managers Regime that was introduced in the UK in March 2016. Under that regime, I am responsible for ensuring that the Committee remains independent and that it performs effectively, fulfilling the responsibilities expected of it by our regulators in terms of overseeing decisions around the structure, size, composition, diversity and performance of the Board. The report that follows describes how these responsibilities have been fulfilled. I would like to take this opportunity to thank my fellow Committee members for their continued support during 2016.

### Committee performance

The performance of the Committee was assessed as part of the annual Board effectiveness review and I am pleased to report that it was assessed to be performing effectively. An area identified for improvement was



boards and the Barclays Board. We have deliberated at length on the structure of the subsidiary boards and how they will report into and interact with our Group Board, which must continue to have appropriate oversight to ensure the effective operation of the Group and the protection of shareholder interests. During 2016, we finalised and recommended to the Board a set of Governance Guiding Principles, which document the high level expectations of the relationship that will exist between Barclays and its strategically significant subsidiaries.

The Committee regularly considered the balance of skills, experience and diversity needed on the Board during 2016. We refreshed the Board skills matrix to reflect the future strategy of the Group, identifying the attributes required to further strengthen and enhance the Board's effectiveness. We conducted searches for new non-executive Directors, approving the appointment of Mary Francis as non-executive Director: Mary brings both financial services experience and significant non-executive directorship experience to the Board. We also considered subsidiary board composition at each of our Committee meetings, with a particular focus on populating the strategically significant subsidiary boards as we continue to embed Structural Reform. It is fair to say that attracting candidates with the skills, experience and qualities we need remains a considerable task: serving on a bank board is not an undertaking that anyone considers lightly and our success in securing the right candidates has been necessarily limited by the challenges they perceive.

around ensuring that there are more regular reports to the Board on the status of recruitment of new non-executive Directors, which I will address. The report on the Board effectiveness review contains more information and can be found on pages 33 to 35.

### **Looking ahead**

In 2017 we will continue to support the implementation of the new Group structure, ensuring that we have the right people in place to take Barclays forward. As appropriate, we will continue to make recommendations to the Board to ensure that we remain at the forefront of best practice corporate governance standards.

### **John McFarlane**

Chairman, Board Nominations Committee

22 February 2017

Governance: Directors report

What we did in 2016

**Board Nominations Committee report****Board Nominations Committee allocation of time (%)**

	2016	2015
1 Corporate governance matters	20	17
2 Board and Committee composition	36	24
3 Succession planning and talent	31	47
4 Board effectiveness	8	6
5 Other	5	6

**Committee composition and meetings**

The Committee is composed solely of independent non-executive Directors. John McFarlane, as Chairman of the Board, is also Chairman of the Committee. Mike Ashley, Tim Breedon, Crawford Gillies, and Sir Gerry Grimstone, being the Chairmen of each of the other Board Committees, and Reuben Jeffery, are also members of the Committee. Details of the skills and experience of the Committee members can be found in their biographies on pages 3 and 4.

During 2016 there were seven meetings of the Committee, including one joint meeting with the Board Remuneration Committee. Three of these meetings were held at short notice to deal with specific matters. Attendance by members at Committee meetings is shown opposite and the chart above shows how the Committee allocated its time. Committee meetings were attended by the Group Chief Executive, with the Group HR Director, the Head of Talent, and the Global Head of Diversity and Inclusion attending as appropriate.

**Member**

John McFarlane  
Mike Ashley  
Tim Breedon\*  
Crawford Gillies  
Sir Gerry Grimstone\*  
Reuben Jeffery\*

**Meetings attended/eligible to attend**

7/7  
7/7  
4/7  
7/7  
6/7  
6/7

\*Did not attend certain meetings arranged and held at short notice owing to prior commitments

Note

The Chairman and the Group Chief Executive excuse themselves from meetings when the Committee focuses on the matter of succession to their roles.

### Committee role and responsibilities

The principal purpose of the Committee is to:

§ support and advise the Board in ensuring that the composition of the Board and its Committees is appropriate and enables them to function effectively

§ examine the skills, experience and diversity on the Board and plan succession for key Board appointments, planning ahead to deal with upcoming retirements and to fill any expected skills gaps

§ provide Board level oversight of the Group's talent management programme and diversity and inclusion initiatives

§ agree the annual Board effectiveness review process and monitor the progress of any actions arising.

You can find the Committee's terms of reference at [home.barclays/corporategovernance](http://home.barclays/corporategovernance)

### The Committee's work

The significant matters addressed by the Committee during 2016 are described below:

Area of focus	Matter considered	Role of the Committee	Conclusion/action taken
<b>Board and Board Committee composition</b>	The membership of the Board and the current and future composition of the Board and its Committees.	<p>§ Debated a forward-looking plan of the expected skills and experience needed on the Board in the context of future strategic direction.</p> <p>§ Evaluated the revised Board skills matrix and, in consideration of known and expected changes to the Board, conducted a search for non-executive Directors.</p>	The Committee approved the revised skills matrix and agreed to conduct a search for new non-executive Directors in line with the requirements identified. It recommended the appointment of Mary Francis to the Board as non-executive Director and she subsequently joined the Board with effect from 1 October 2016. The Committee concluded that additional accounting and auditing experience was needed in order to provide further options for succession to the Board Audit Committee

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§ Reviewed the membership of Board Committees.

chairmanship over time and a search for potential candidates continues.

§ Considered and provided input to Board Committee Chairman succession plans.

**Please refer to page 32 for more details of the Board's approach to the recruitment of new Directors.**

Area of focus	Matter considered	Role of the Committee	Conclusion/action taken
<b>Executive succession planning and talent management</b>	<p>Group Executive Committee composition and succession following the appointment of the new Group Chief Executive in 2015.</p> <p>Oversight of Group Chief Executive succession and appointments to key positions.</p>	<p>§ Discussed updates from the Group HR Director on Group Executive Committee succession plans, including assessing emergency cover and the existing talent pipeline.</p> <p>§ Considered external assessments and benchmarking of internal talent.</p> <p>§ Debated approval requirements for appointments to the Group Executive Committee and other key positions across the Group.</p>	<p>The Committee requested a presentation of key outputs from the Group Executive Committee offsite meeting on talent. It also asked to receive reports of the executive assessments carried out by an external facilitator. The Committee agreed the approval requirements for key positions, and subsequently approved the appointment of Tim Throsby as President of Barclays International in accordance with those requirements.</p>
<b>Governance implications of Structural Reform and strategically significant subsidiary board composition</b>	<p>The board and board committee composition of strategically significant subsidiaries, including board size, structure and proposed interactions.</p> <p>The governance principles for the relationship between Barclays and its strategically significant subsidiaries.</p>	<p>§ Finalised Governance Guiding Principles for the Group post-Structural Reform, which set out ultimate decision-making powers, while respecting the rights and responsibilities of the boards of the strategically significant subsidiaries.</p> <p>§ Debated the required structure and composition of the strategically significant subsidiary boards and board committees in light of regulatory requirements and</p>	<p>The Committee endorsed and recommended the Governance Guiding Principles to the Board for approval. It agreed the structure of the strategically significant subsidiary boards and commenced a search for non-executive directors, including for the position of chairman of Barclays UK, and agreed the process of the appointing of the chairman of Barclays International. The Committee approved the appointment of Directors to the US IHC board, including agreeing the fees to be paid to them. It also approved</p>

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feedback.

appointments to the Barclays Africa board.

§ Scrutinised the proposed board skills matrix for Barclays UK.

§ Considered candidates for the positions of chairman of Barclays UK and Barclays International.

§ Considered appointments to the Board of, and the associated fees for, the US IHC board.

§ Considered appointments to the Barclays Africa board.

**Board effectiveness**

The progress made against the actions identified in the 2015 Board effectiveness review.

§ Discussed and agreed the proposed actions to be taken in response to the findings of the 2015 review.

The Committee recommended the proposed action plan and 2016 Board objectives to the Board for approval. The Committee agreed and recommended the process for the 2016 effectiveness review, which proceeded as recommended.

The 2016 effectiveness review of the Board and its Committees.

§ Reassessed the status of the actions throughout the year and tracked the progress of the action plan.

§ Confirmed the process to be followed for the 2016 review.

**Governance**

Changes to the Board's corporate governance framework following the implementation of the Senior

§ Reviewed updates to *Corporate Governance in Barclays* and the *Charter of Expectations* following the

Approved and recommended to the Board for approval the updated corporate governance documents and role profiles for

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Managers Regime in March  
2016.

implementation of the Senior  
Managers Regime in order to  
integrate the requirements into  
the existing corporate  
governance framework,  
applying particular focus to the  
updated individual role  
profiles.

key positions on the Board.

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Governance: Directors report

[What we did in 2016](#)

## **Board Nominations Committee report**

In addition the Committee covered the following matters:

§ received a presentation from the PRA on its annual review of Barclays

§ proposals for the 2016 Corporate Governance Report

§ review of the Committee's effectiveness and its terms of reference.

### **Appointment and re-election of Directors**

Board and Board Committee composition is a standing item for consideration at each Committee meeting. This includes the consideration of potential new non-executive Director appointments, both in respect of planned succession for known retirements and as a result of the ongoing review of the skills and experience needed on the Board in order for it to continue to operate effectively.

The Committee frequently considers a skills matrix for the Board, which identifies the core competencies, skills, diversity and experience required for the Board to deliver its strategic aims and govern the Group effectively. Each attribute identified in the skills matrix has a target weighting attached to it and these are regularly updated over time to reflect the needs of the Group. The Committee reviews the skills matrix when considering a new appointment to the Board, as well as reviewing the current and expected Board and Board Committee composition. This helps to determine a timeline for proposed appointments to the Board.

When recruiting a new non-executive Director the specific skills that are needed are identified, for example, an individual with international experience, or recent history serving on a particular board committee. The *Charter of Expectations* contains the key competencies and skills expected of non-executive Directors, and these, in addition to other details such as expected time commitment, will be included in an individual specification. The Committee as a whole then considers curriculum vitae and references for potential candidates. Any candidates who are shortlisted will be interviewed by members of the Committee and, if applicable, key shareholders and Barclays regulators may be asked to provide feedback on the proposed appointment. The Board is updated on the progress of the recruitment and interview process, and any feedback from the interviews is provided to the Board alongside a recommendation for appointment.



Executive search firms Egon Zehnder, JCA Group and MWM Consulting were instructed to assist with the search for non-executive Directors during 2016. None of these firms has any other connection to Barclays, other than to provide recruitment services. Open advertising for Board positions was not used in 2016, as the Committee believes that targeted recruitment is the optimal way of recruiting for Board positions. All of the firms used for non-executive Director recruitment have signed up to the voluntary code of conduct for executive search firms, which include measures designed to improve gender diversity on boards.

In 2016, Barclays announced the appointment of Mary Francis as non-executive Director and she joined the Board with effect from 1 October 2016. As previously reported, Mary has extensive board level experience across a range of industries. Wendy Lucas-Bull stood down from the Board in March 2016 following the announcement of Barclays intention to reduce its shareholding in Barclays Africa Group Limited, and Frits van Paasschen did not stand for re-election at the 2016 AGM.

The Directors in office at the end of 2016 were subject to an effectiveness review, as described on page 33. Based on the results of the review the Board accepted the view of the Committee that each Director proposed for re-election continues to be effective and that they each demonstrated the level of commitment required in connection with their role on the Board and the needs of the business. Diane de Saint Victor and Steve Thieke have each signalled their intention to retire from the Board at the 2017 AGM.

### **Diversity statement**

The Board has had regard to two important publications that were issued in 2016: the *Hampton-Alexander Review* recommendations to improve gender balance in FTSE leadership teams and the *Parker Review* recommendations on the ethnic diversity of UK boards. The Committee reported last year that the Board had exceeded its target of 25% female Directors by the end of 2015 and had set a new target of 33% gender Board representation by 2020. This target has been formally reflected in the Board Diversity Policy, which can be found online at [home.barclays/corporategovernance](http://home.barclays/corporategovernance). Below Board level the Group met its 2016 target of 24% female senior leaders. The Committee is mindful that the Group Executive Committee does not currently include any women, but is satisfied with the level of diversity across that Committee and with the percentage of women amongst the direct reports of Group Executive Committee members (25% at the end of 2016). To broaden the scope of the perspectives and contributions made to Group Executive Committee meetings an initiative was implemented by the Group Chief Executive during 2016 to create one ex-officio position on the Committee, with each appointee serving for a four-month rotation. The first appointee was Kathryn McLeland, Head of Investor Relations. With regard to ethnic diversity, the Board considers that Barclays is currently well-positioned in terms of representation at Board level and also at Group Executive Committee level when taking into account the Parker Review definition (being individuals of Black, East Asian, Latin American, Middle Eastern or South Asian ethno-cultural backgrounds).

During 2016, the Committee received regular updates from the Global Head of Diversity and Inclusion covering the full spectrum of Barclays' diversity and inclusion agenda. For 2017, the Committee has requested additional information regarding social inclusion.

The Committee recognises the importance of ensuring that there is diversity of gender, ethnicity, geography and business experience on the Board, while continuing to recommend all appointments based on merit in the context of the skills and experience required. The Barclays Board female diversity target is noted in the Board skills matrix, which identifies the core competencies and skills needed for an effective Board. When executive search firms are engaged to assist with the recruitment of a new Director diversity is identified as a key factor. In addition, the external Board evaluation considered diversity when assessing the effectiveness of the Board.

More details on Barclays' diversity and inclusion strategy can be found on page 48

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### **Review of Board and Board Committee effectiveness**

Each year the Board conducts an externally facilitated self-assessment of the effectiveness of the Board, the Board Committees and the individual Directors. Independent Board Evaluation facilitated the effectiveness review for 2015 and was engaged to conduct the 2016 review, which built on the findings of the 2015 review, including assessing the progress of the actions that had been identified. Independent Board Evaluation is an independent external consultancy with no other connection to Barclays. In order to ensure that high quality feedback was received, Ffion Hague, the consultant, based the review on face-to-face interviews with the Directors. The Directors received an agenda prior to their interview, which focused on areas for improvement identified in the 2015 effectiveness review as well as any new issues that had emerged since that review was conducted. In addition to the interviews, Ffion Hague attended Board and Board Committee meetings as an observer, met with members of the Group Executive Committee, the Company Secretary and other members of senior management, along with seeking feedback from external stakeholders.

In December 2016, Independent Board Evaluation presented a report to the Board on the findings of the effectiveness review. In addition, the Chairman was provided with a report and feedback on the performance of each of the Directors, and the Senior Independent Director received a report on the Chairman. Board Committee chairmen received individual reports on the performance of the Board Committees.

Following consideration of the findings of the 2016 effectiveness review the Directors remain satisfied that the Board and each of the Board Committees are operating effectively. Progress relative to 2015 was good and the Board remains committed to making further changes to ensure that it is considered to be at the top of the range of effectiveness for a FTSE100 company. Following the conclusion of the review the Board Nominations Committee, with support from the Company Secretary, prepared a detailed action planning document. An overview of actions that were identified to help the Board to maintain and improve its effectiveness have been disclosed on the following pages 34 and 35, as well as an update on the actions taken following the 2015 effectiveness review.

Governance: Directors report

What we did in 2016

## Board Nominations Committee report

### Review of Board and Board Committee Effectiveness

<p><b>Board priorities</b></p>	<p><b>Leveraging Board experience in support of executives</b></p>	<p><b>Greater awareness of Board Committee work</b></p>
<p><b>2015 findings</b></p> <p>To ensure that the Board agenda is optimised, including time for blue-sky discussion of major risks.</p>	<p><b>2015 findings</b></p> <p>To continue to ensure that all non-executive Directors have the opportunity to contribute to strategic debate.</p>	<p><b>2015 findings</b></p> <p>To continue to raise awareness across all Board members of the significant issues considered by Board Committees and to continue to refine the remit and scope of the Board Reputation Committee.</p>
<p><b>Actions taken in 2016</b></p> <p>In early 2016 a set of Board objectives was agreed in order to track progress against the Board's priorities.</p> <p>Board agendas were updated to allow more time for discussion of strategic options. This was also the focus for the 2016 Board Strategy Offsite. Board dinners were used for more free-ranging discussions, with suggested topics notified to the</p>	<p><b>Actions taken in 2016</b></p> <p>John McFarlane and Sir Gerry Grimstone took responsibility for ensuring that all non-executive Directors were involved in strategic decision making.</p> <p>In the course of the year, it was decided that partnering non-executive Directors with members of the Group Executive Committee would not be taken forward. However, the experience of</p>	<p><b>Actions taken in 2016</b></p> <p>All Directors have access to Board Committee meeting papers and minutes, and have been reminded that they may attend Board Committee meetings whether or not they are members. Some Directors made use of this option during 2016. Board Committee Chairmen have continued to report to the Board on specific matters discussed at Board Committee meetings.</p>

Directors in advance. No decisions were taken or required as part of these discussions, which were used to inform the broader debate at subsequent Board meetings.

non-executive Directors has been leveraged as appropriate, e.g. the appointments of Steve Thieke and Diane Schueneman to the board of Barclays US IHC. Non-executive Directors continue to make a valuable contribution to the Board and its Committees.

During 2016 Sir Gerry Grimstone, chairman of the Board Reputation Committee took action to define and focus its role and scope more clearly, including implementing new reporting initiatives such as the development of dashboard reports.

### 2016 findings

Create regular broad-based risk oversight sessions for the Board to allow Directors to look across the risk spectrum.

### 2016 findings

The Board effectiveness review reported on positive and constructive relations between the new Board and the new management team.

### 2016 findings

Continue to optimise the information flow between Directors in the run-up to Structural Reform in 2018.

Schedule a debate on the role of the Board and non-executive Directors and link the conclusions to revised Board objectives to help focus the Board's agenda over the coming year.

Consider agreeing common values for the Group and the banking subsidiary boards in the new structure.

For 2017 this finding will be renamed as *Optimise communication and collaboration between directors, boards and committees.*

### Actions to be taken in 2017

We will continue to identify opportunities for more free-ranging discussion of risk, including as part of the annual Board strategy session.

The role of the Group Board and Group non-executive Directors will be reviewed in the context of Structural Reform.

### Actions to be taken in 2017

The Board will continue to support and challenge executive management, with particular focus on execution of strategy.

### Actions to be taken in 2017

The Chairman will continue to use his meetings with non-executive Directors ahead of Board meetings to ensure that all non-executive Directors are briefed on current issues.

Opportunities for the Board (and, in due course, the banking subsidiary boards) to spend more time together around Board meetings will be identified.

Once the subsidiary boards are established, a common set of values will be agreed to supplement the Governance Guiding Principles that are already in place.

### Improvements to the Board appointment process

#### 2015 findings

To continue to assess the skills and experience needed on the Board and to ensure that Board composition is balanced between UK and international members.

To enhance Board succession planning, particularly in respect of key roles.

#### Actions taken in 2016

During 2016 a revised Board succession plan and updated skills matrix were presented to the Board Nominations Committee. The plan addresses immediate needs as well as longer-term requirements to take account of the tenure of non-executive Directors. The succession plan included succession to key roles and considered the optimum size of the Board. The future composition of the Board post-Structural Reform has also been considered.

### Director induction

#### 2015 findings

To enhance the Board training and induction programme, with particular focus on the training needs of Board members from outside the financial services sector.

#### Actions taken in 2016

The Board training programme for 2016 included specific sessions aimed primarily at non-executive Directors without a financial services background. Details of the training programme offered during 2016 can be found on page 39.

### Dealing more strategically with global regulation

#### 2015 findings

To continue to provide opportunities for Board members to provide early input to thinking on major issues and decisions.

#### Actions taken in 2016

The Board's agenda during 2016 focused more on strategic issues, including the capital and liquidity impacts of Structural Reform. For a description of the Board's activity in 2016, including the input provided to management on the formulation of Group strategy and other significant decisions, see page 8 to 9.

In addition, the Board received updates on executive talent management and succession planning during 2016.

**2016 findings**

Continue to refine the Board skills matrix to ensure it aligns with the Group's strategy and informs the succession plan for key Board roles. Implement more regular reporting to the Board on potential non-executive Directors under consideration.

**2016 findings**

Continue to enhance the Director induction with a focus on providing broader governance training to anyone who has not previously served on a UK plc board.

**2016 findings**

Review reporting arrangements on strategy implementation and review the KPIs or dashboard reports for key initiatives.

For 2017 this finding will be renamed as *Optimise reporting to the Board on strategy and execution priorities*.

**Actions to be taken in 2017**

The Board skills matrix will be kept under review, with separate skills matrices to be agreed with the respective chairmen of the banking subsidiaries. The Group Board succession plan will continue to be reviewed on a regular basis by the Board Nominations Committee and the Chairman will keep current Board members regularly updated on recruitment plans and potential candidates.

**Actions to be taken in 2017**

The Director induction programme will be reviewed and refreshed to factor in tailored governance training for new Directors. This is also being extended to directors of the new banking subsidiaries.

**Actions to be taken in 2017**

The form and content of reporting to the Board will be reviewed and refreshed by management to ensure that the Board is provided with appropriate management information on strategy and execution priorities. Specific topics that the Board indicated that it wished to review have been factored into the 2017 Board agenda.





## How we comply

### Leadership

#### The Role of the Board

The Board of Directors is responsible for promoting the highest standards of corporate governance in Barclays. We act in a way that we consider promotes the success of Barclays for the benefit of shareholders as a whole, and are accountable to the shareholders for creating and delivering sustainable value. It is our responsibility as the Board to ensure that management not only delivers on short-term objectives, but promotes the long-term growth of Barclays. The existing corporate governance framework embeds the right culture, values and behaviours throughout the Group and supports our role in determining strategic objectives and policies.

In addition to setting strategy and overseeing its implementation we are also responsible for ensuring that management maintains an effective system of internal control. An effective system of internal control should provide assurance of effective and efficient operations, internal financial controls and compliance with law and regulation. In meeting this responsibility we consider what is appropriate for the Group's business and reputation, the materiality of financial and other risks and the relevant costs and benefits of implementing controls.

The Board is the decision-making body for matters that, owing to their strategic, financial or reputational implications or consequences, are considered significant to the Group. A formal schedule of powers reserved to the Board ensures that our control of these key decisions is maintained. A summary of the matters reserved to the Board can be found at [home.barclays/corporategovernance](http://home.barclays/corporategovernance). It includes the approval of appointments to the Board, Barclays' strategy, financial statements, capital expenditure and any major acquisitions, mergers or disposals.

#### Board Governance framework

The main Board Committees are the Board Audit Committee, the Board Nominations Committee, the Board Remuneration Committee, the Board Reputation Committee and the Board Risk Committee. Under the authority of our Articles of Association, each Board Committee has had specific responsibilities delegated to it by the Board. Further information on the role and activities of each of the Board Committees can be found in this report and in their individual terms of reference, which have been approved by the Board and are available at [barclays/corporategovernance](http://barclays/corporategovernance).

In addition, the Regulatory Investigations Committee was formed in 2012 and focuses on providing Board-level oversight of regulatory investigations. In 2016 the Committee met five times. John McFarlane is the Committee Chairman and the other Committee members are Mike Ashley, Sir Gerry Grimstone, Diane de Saint Victor and Jes Staley.

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## Board Governance framework

### Roles on the Board

Executive and non-executive Directors share the same duties and are subject to the same constraints but, in line with the principles of the Code, a clear division of responsibilities has been established. It is the responsibility of the Chairman to lead and manage the work of the Board, while responsibility for the day-to-day management of Barclays has been delegated to the Group Chief Executive. The Group Chief Executive is supported in this role by the Group Executive Committee. Further information on membership of the Group Executive Committee can be found on page 5.

As a Board we have set out our expectations of each Director in *Barclays Charter of Expectations*. This includes role profiles and the behaviours and competencies required for each role on the Board, namely the Chairman, Deputy Chairman, Senior Independent Director, non-executive Directors, executive Directors and Committee Chairmen. The Board Nominations Committee reviews the *Charter of Expectations* annually to ensure it remains relevant and up-to-date. It is published on [home.barclays/corporategovernance](http://home.barclays/corporategovernance) to ensure that there is complete transparency of the standards we set for ourselves.

## How we comply

**Attendance**

As members of the Board of Directors we are expected to attend each Board meeting and in 2016 we attended both scheduled and additional Board meetings, as disclosed in the table below. The Chairman met privately with the non-executive Directors ahead of each scheduled Board meeting, and if, owing to exceptional circumstances, a Director was not able to attend a Board meeting they ensured that their views were made known to the Chairman in advance of the meeting.

Board attendance	Independent	Scheduled			Additional		
		meetings eligible to attend	Scheduled meetings attended	% attendance	meetings eligible to attend	Additional meetings attended	% attendance
<b>Group Chairman</b>							
John McFarlane	On appointment	8	8	100	2	2	100
<b>Executive Directors</b>							
Tushar Morzaria	Executive Director	8	8	100	2	2	100
Jes Staley	Executive Director	8	8	100	2	2	100
<b>Non-executive Directors</b>							
Mike Ashley	Independent	8	8	100	2	1	50
Tim Breedon	Independent	8	8	100	2	2	100
Mary Francis	Independent	2	2	100	0	0	n/a
Crawford Gillies	Independent	8	8	100	2	2	100
Sir Gerry Grimstone	Senior Independent Director	8	8	100	2	2	100

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Reuben Jeffery III	Independent	8	7	88	2	1	50
Dambisa Moyo	Independent	8	8	100	2	2	100
Diane de Saint Victor	Independent	8	7	88	2	2	100
Diane Schueneman	Independent	8	8	100	2	2	100
Steve Thieke	Independent	8	8	100	2	2	100
<b>Former Directors</b>							
Wendy Lucas-Bull	Non-independent	1	1	100	1	1	100
Frits van Paasschen	Independent	3	3	100	1	1	100
<b>Secretary</b>							
Claire Davies		1	1	100	0	0	n/a
<b>Former Secretary</b>							
Lawrence Dickinson		7	7	100	2	2	100

Unable to attend one scheduled meeting owing to prior commitments.

<b>Board Committee cross-membership</b>				
	<b>Board Audit Committee</b>	<b>Board Nominations Committee</b>	<b>Board Remunerations Committee</b>	<b>Board Reputation Committee</b>
<b>Board Risk Committee</b>	3	3	1	1
<b>Board Reputation Committee</b>	1	2	2	
<b>Board Remuneration</b>	2	2		

Committee						
Board Nominations Committee		3				

## Effectiveness

### Composition of the Board

In line with the requirements of the Code a majority of the Board are independent non-executive Directors. The Board currently comprises a Chairman, who was independent on appointment, two executive Directors and ten non-executive Directors. We consider the independence of our non-executive Directors annually, using the independence criteria set out in the Code and by reviewing performance against behaviours that we have identified as essential in order to be considered independent. The independence criteria can be found in *Corporate Governance in Barclays* at [home.barclays/corporategovernance](http://home.barclays/corporategovernance).

The Board Nominations Committee considers Board succession planning and regularly reviews the composition of the Board and the Board Committees to ensure that there is an appropriate balance and diversity of skills, experience, independence and knowledge. The size of the Board is not fixed and may be revised from time to time to reflect the changing needs of the business and the Board Nominations Committee will consider the balance of skills and experience of current Directors when considering a proposed appointment.

Each year we carry out an effectiveness review in order to evaluate our performance as a Board, as well as the performance of each of the Board Committees and individual Directors. This annual review assesses whether each of us continues to discharge our respective duties and responsibilities effectively and is considered when deciding whether individual Directors will offer themselves for election or re-election at the AGM. More information on the 2016 Board effectiveness review can be found on page 33.

Our biographies containing our relevant skills and experience, Board Committee membership and other principal appointments can be found on pages 3 and 4. Details of changes to the Board in 2016 and year to date are disclosed on page 43.

The service contracts for the executive Directors and the letters of appointment for the Chairman and non-executive Directors are available for inspection at our registered office.

### Time commitment

It is expected that in order to discharge our responsibilities effectively we will each allocate sufficient time to our role on the Board. We are expected to attend, and to be well prepared for, all Board and Board Committee meetings, as well as making time to understand the business, meet with executives and regulators, and complete ongoing training. As stated in our *Charter of Expectations*, time commitment is agreed with each non-executive Director on an individual basis. Disclosed below is the average expected time commitment for the role of non-executive Director and the other non-executive positions on the Board. For these additional positions there is an expectation that, in order to effectively fulfil extra responsibilities, additional time commitment is required.



Role	Expected time commitment
<b>Chairman</b>	80% of a full time position
<b>Deputy Chairman</b>	At least 0.5 days a week
<b>Senior Independent Director</b>	As required to fulfil the role
<b>Non-executive Director</b>	30 days a year (membership of one Board Committee included, increasing to 40 days a year if a member of two Board Committees)
<b>Committee Chairmen</b>	At least 60 days a year (including non-executive Director time commitment)

The Chairman must commit to expend whatever time is necessary to fulfil his duties and, while this is expected to be equivalent to 80% of a full time position, his Chairmanship of the Group and leadership of the Board has priority over other business commitments. In exceptional circumstances we are all expected to commit significantly more time to our work on the Board.

## Induction

On appointment to the Board all Directors receive a comprehensive induction which is tailored to the new Director's individual requirements. The induction schedule is designed to quickly provide the new Director with an understanding of how the Group works and the key issues that it faces. The Company Secretary consults the Chairman when designing an induction schedule, giving consideration to the particular needs of the new Director. When a Director is joining a Board Committee the schedule includes an induction to the operation of that committee.

On completion of the induction programme the Director should have sufficient knowledge and understanding of the nature of the business, and the opportunities and challenges facing Barclays, to enable them to effectively contribute to strategic discussions and oversight of the Group.

In 2016 Sir Gerry Grimstone and Mary Francis both received induction programmes on joining the Board. In line with normal practice, they met with the Company Secretary, the current non-executive Directors and members of the Group Executive Committee and the Senior Leadership Group. In addition, Sir Gerry Grimstone met with Sir Michael Rake, the outgoing Deputy Chairman and Senior Independent Director, and former Chairman of the Board Reputation Committee.

## Training and development

In order to continue to contribute effectively to Board and Board Committee meetings we are regularly provided with the opportunity to take part in ongoing training and development. As part of our annual performance review with the Chairman we discuss any particular development needs that can be met through either formal training or meeting with a particular senior executive.

The Company Secretary organises a formal training schedule for the year, covering both Board and Board Committee training requirements, to ensure that our insight into the Group's business and awareness of the external environment in which we operate continues after our formal induction schedules have been completed.

During 2016 we attended briefings on the following subjects:

§ capital and liquidity (including regulatory targets and constraints)

§ the Federal Reserve's CCAR exercise

§ group Resilience

§ cyber Risk

§ a presentation from Compliance and Regulatory Relations on the regulatory expectations of Directors and the PRA's threshold conditions

§ a briefing from Finance and Risk on the impact of IFRS9

§ an accounting update presented by KPMG

§ an update on the implementation of the Senior Managers Regime

§ strategic planning and crisis management plans ahead of the EU Referendum

§ internal briefings on Structural Reform.

These briefing sessions were supplemented by written material, such as a briefing note on the implementation of the Market Abuse Regulation in the UK.

In addition, site visits were arranged to Barclays UK and Cards US operations, as well as the regular business visits and engagements that we may undertake. This included the attendance of our Board Audit Committee Chairman and Board Risk Committee Chairman at US IHC board committee meetings at Barclays' offices in New York.

### **Conflicts of interest**

In accordance with the Companies Act 2006 and the Articles of Association the Board has the authority to authorise conflicts of interest. Directors are required to declare any potential or actual conflicts of interest that could interfere with their ability to act in the best interests of the Group. The Company Secretary maintains a conflicts register, which is a record of actual and potential conflicts, together with any Board authorisation of the conflict. The authorisations are for an indefinite period but are reviewed annually by the Board Nominations Committee. The Board retains the power to vary or terminate the authorisation at any time.

## How we comply

### Information provided to the Board

The Role Profile for the Chairman, as set out in our *Charter of Expectations*, confirms his responsibility for ensuring that members of the Board receive accurate, timely and high-quality information. In particular, we require information about Barclays performance to enable us to take sound decisions, monitor effectively and provide advice to promote the success of the Company. Working in collaboration with the Chairman, the Company Secretary is responsible for ensuring good governance and consults Directors to ensure that good information flows exist and that the Board receives the information it requires in order to be effective.

Throughout the year both the executive Directors and senior executives keep the Board informed of key developments in the business through regular reports and updates. These are in addition to the presentations that the Board and Board Committees receive as part of their formal meetings. Directors are able to seek independent and professional advice at Barclays expense, if required, to enable Directors to fulfil their obligations as members of the Board.

### Accountability

#### Risk management and internal control

The Directors are responsible for ensuring that management maintains an effective system of risk management and internal control and for assessing its effectiveness. Such a system is designed to identify, evaluate and manage, rather than eliminate, the risk of failure to achieve business objectives and can only provide reasonable and not absolute assurance against material misstatement or loss.

Barclays is committed to operating within a strong system of internal control that enables business to be transacted and risk taken without exposing itself to unacceptable potential losses or reputational damage. Barclays has an overarching framework that sets out the Group's approach to internal governance, *The Barclays Guide*, which establishes the mechanisms and processes by which the Board directs the organisation, through setting the tone and expectations from the top, delegating its authority and assessing compliance.

A key component of *The Barclays Guide* is the *Enterprise Risk Management Framework* (ERMF). The purpose of the ERMF is to identify and set minimum requirements in respect of the main risks to achieving the Group's strategic objectives and to provide reasonable assurance that internal controls are effective. The key elements of the Group's system of internal control, which is aligned to the recommendations of *The Committee of Sponsoring Organizations of the Treadway Commission, Internal Control – Integrated Framework* (2013 COSO), are set out in the risk control frameworks relating to each of the Group's Principal and Key Risks. As well as incorporating our internal requirements, these reflect material Group-wide legal and regulatory requirements relating to internal control and assurance.

#### Effectiveness of internal controls

Key controls are assessed on a regular basis for both design and operating effectiveness. Issues arising out of business risk and control assessments and other internal and external sources are examined to identify pervasive themes. Where appropriate, control issues are reported to the Board Audit Committee (BAC). In addition, regular reports are made to the BAC by management, BIA and the Finance, Compliance and Legal functions covering, in particular, financial controls, compliance and other operational controls.

### **Risk management and internal control framework**

The ERMF is the Group's Internal Control Framework. It is refreshed annually and has been substantially revised during 2016. The BAC receives quarterly reports relating to the effectiveness of the Control Environment covering all risks and controls including financial, operational and compliance risk.

The BAC formally reviews the system of internal control and risk management annually. Throughout the year ended 31 December 2016 and to date, the Group has operated a system of internal control that provides reasonable assurance of effective operations covering all controls, including financial and operational controls and compliance with laws and regulations. Processes are in place for identifying, evaluating and managing the principal risks facing the Group in accordance with the *Guidance on Risk Management, Internal Control and Related Financial and Business Reporting* published by the Financial Reporting Council.

The review of the effectiveness of the system of risk management and internal control is achieved through a four-step approach which is centred on reviewing the effectiveness of the Barclays Guide and its component parts:

1. Governance Risk & Control meetings of the Business and Functional Executive Committees monitor, review and challenge the effective operation of key risk management and control processes, including the results of audits and reviews undertaken by BIA (which include assessments of the Control Environment and Management Control Approach) and examinations and assessments undertaken by our primary regulators, on an ongoing basis as part of the system of risk management and internal control. The remediation of issues identified within the Control Environment is regularly monitored by management and the BAC.
2. Testing of the Governance Risk and Control meetings held within the Executive Committees provides assurance that the committees are effectively overseeing the Control Environment and associated risk management and internal control processes.
3. The owners of the key governance processes which comprise *The Barclays Guide* undertake a review to confirm that processes have been implemented.
4. The annual review of the system of risk management and internal control brings together the results of the activities completed in steps 1 to 3 to ensure that each of the key processes has been effectively reviewed. Regular reports are made to the Board covering risks of Group level significance. The Board Risk Committee and the Board Reputation Committee examine reports covering the Principal Risks (Credit Risk, Market risk, Capital Risk, Liquidity Risk, Operational Risk and Conduct Risk) as well as reports on risk measurement methodologies and risk appetite. Further details of risk management procedures and potential risk factors are given in the Risk Management section on pages 86 to 114.

### **Controls over financial reporting**

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A framework of disclosure controls and procedures is in place to support the approval of the Group's financial statements. The Legal and Technical Review Committee is responsible for examining the Group's financial reports and disclosures to ensure that they have been subject to adequate verification and comply with applicable standards and legislation. The Committee reports its conclusions to the Disclosure Committee. The Disclosure Committee examines the content and accuracy of the disclosures and reports its conclusions to the Board Audit Committee which debates its conclusions and provides further challenge. Finally, the Board scrutinises and approves results announcements and the Annual Report, and ensures that appropriate disclosures have been made. This governance process ensures that both management and the Board are given sufficient opportunity to debate and challenge the Group's financial statements and other significant disclosures before they are made public.

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## **Management's report on internal control over financial reporting**

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed under the supervision of the principal executive and principal financial officers to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union and issued by the International Accounting Standards Board (IASB). Internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; provide reasonable assurances that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS and that receipts and expenditures are being made only in accordance with authorisations of management and the respective Directors; and provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use or disposition of assets that could have a material effect on the financial statements.

Internal control systems, no matter how well designed, have inherent limitations and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that internal controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has assessed Barclays PLC Group's and Barclays Bank PLC Group's internal control over financial reporting as of 31 December 2016. In making its assessment, management has utilised the criteria set forth by the 2013 COSO framework. Management concluded that, based on its assessment, the internal control over financial reporting was effective as of 31 December 2016. Our independent registered public accounting firm has issued a report on the Barclays PLC's internal control over financial reporting, which is set out on page 18.

The system of internal financial and operational controls is also subject to regulatory oversight in the UK and overseas. Further information on supervision by the financial services regulators is provided under Supervision and Regulation in the Risk review section on pages 182 to 189.

## **Changes in internal control over financial reporting**

There have been no changes in the Group's internal control over financial reporting that occurred during the period covered by this report which have materially affected or are reasonably likely to materially affect the Group's internal control over financial reporting.

## **Remuneration**

The Board has delegated responsibility for the consideration and approval of the remuneration arrangements of the Chairman, executive Directors, other senior executives and certain Group employees to the Board Remuneration Committee. The Board as a whole, with the non-executive Directors abstaining, considers annually the fees paid to

non-executive Directors. Information on the activities of the Board Remuneration Committee in 2016 can be found on pages 51 to 85 of the Directors' remuneration report, which forms part of the corporate governance statement.

## **Stakeholder engagement**

### **Investor engagement**

The Board is committed to promoting effective channels of communication with our shareholders and upholding good corporate governance as a means of building stronger and more engaged relationships with them. Our comprehensive Investor Relations engagement with the market helps us to understand investor views about Barclays, which are communicated regularly to the Board. Our shareholder communication guidelines, which underpin all investor engagement, are available on our website at [home.barclays/barclays-investor-relations](http://home.barclays/barclays-investor-relations).

### **Institutional investors**

In 2016, our Investor Relations engagement with institutional investors took place throughout the year, both following our quarterly results as well as outside of the reporting cycle. This allowed the opportunity for existing and potential new investors to engage with Barclays regularly, promoting dialogue on longer-term strategic developments as well as on the recent financial performance of the Group.

The Directors, in conjunction with the senior executive team and Investor Relations, participated in varied forms of engagement, including investor meetings, seminars and conferences across many geographic locations, reflecting the diverse nature of our equity and debt institutional ownership. Divisional management also presented extensively to investors, promoting greater awareness and understanding of our operational businesses.

During 2016, discussions with investors were focused on the continued execution of our strategy, following the appointment of Jes Staley as Group Chief Executive, and the strategic update announced on 1 March 2016.

Investor meetings focused on corporate governance also took place throughout the year, with the Chairman, Senior Independent Director, other Board representatives and the Company Secretary.

We held conference calls/webcasts for our quarterly results briefings and an in-person presentation for our 2015 full year results in March 2016, all hosted by the Group Chief Executive and Group Finance Director. In addition, the Group Finance Director held a quarterly breakfast briefing for sellside analysts, with a transcript of the discussions uploaded to our website. For fixed income investors we held conference calls at our full year and half year results, hosted by our Group Finance Director and Group Treasurer.

The Investor Relations section of our website is an important communication channel that enables the effective distribution of information to the market in a clear and consistent manner. Executive management presentations, speeches and, where possible, webcast replays are uploaded to our website on a timely basis. In 2016, we also created an improved 'About Barclays' factsheet, allowing investors the opportunity to understand Barclays' strategy and key financial metrics at a glance. We also continued to provide short videos summarising the key messages in our results from our Group Chief Executive and Group Finance Director.

## How we comply

### Private shareholders

During 2016, we continued to communicate with our private shareholders through our shareholder mailings. Shareholders can also choose to sign up to Shareview so that they receive information about Barclays and their shareholding directly by email. On a practical level, over 60,000 shareholders did not cash their Shares Not Taken Up (SNTU) cheque following the Rights Issue in September 2013. In 2016, we continued the tracing process to reunite these shareholders with their SNTU monies and any unclaimed dividends. By the end of 2016, we had returned over £1.65m to our shareholders in addition to the £2.2m returned in 2015. We also launched a Special Share Dealing Service in November 2016 aimed at shareholders with relatively small shareholdings for whom it might otherwise be uneconomical to deal. One option open to shareholders was to donate their sale proceeds to ShareGift. As a result of this initiative, more than £100,000 was donated.

### Our AGM

The Board and the senior executive team continue to consider our AGM as a key date in the diary. The AGM provides us with our main opportunity to engage with shareholders, particularly our private shareholders, on the key issues facing the Group and any questions they may have. A number of Directors, including the Chairman, were available for informal discussion either before or after the meeting. All resolutions proposed at the 2016 AGM, which were considered on a poll, were passed with votes for ranging from 86% to 99.9% of the total votes cast.

The 2017 AGM will be held on wednesday 10 May 2017 at the Royal Festival Hall in London. The Notice of AGM can be found in a separate document, which is sent out at least 20 working days before the AGM and also made available at [home.barclays/agm](http://home.barclays/agm). Voting on the resolutions will again be by poll and the results will be announced via the Regulatory News Service and made available on our website on the same day. We encourage any shareholders who are unable to attend on the day to vote in advance of the meeting via [home.barclays/investorrelations/vote](http://home.barclays/investorrelations/vote) or through Shareview ([www.shareview.co.uk](http://www.shareview.co.uk)).

### Engagement timeline



Governance: Directors report

## Other Statutory Information

### The Directors present their report together with the audited accounts for the year ended 31 December 2016.

Other information that is relevant to the Directors report, and which is incorporated by reference into this report, can be located as follows:

	Page
Employee involvement	47
Policy concerning the employment of disabled persons	49
Financial instruments	242
Hedge accounting policy	226
Remuneration policy, including details of the remuneration of each Director and Directors' interests in shares	51 to 85
Corporate governance report	2 to 42
Risk review	86 to 189

Disclosures required pursuant to Listing Rule 9.8.4R can be found on the following pages:

	Page
Long-term incentive schemes	63
Director emoluments	302
Allotment for cash of equity securities	284
Waiver of dividends	43

### Profit and dividends

Statutory profit after tax for 2016 was £2,828m (2015: £623m). The final dividend for 2016 of 2.0p per share will be paid on 5 April 2017 to shareholders whose names are on the Register of Members at the close of business on 3 March 2017. With the interim dividend totalling 1.0p per ordinary share, paid in September 2016, the total distribution for 2016 is 3.0p (2015: 6.5p) per ordinary share. The interim and final dividends for 2016 amounted to £757m (2016: £1,081m).

The nominee companies of certain Barclays employee benefit trusts holding shares in Barclays in connection with the operation of the Company's share plans have lodged evergreen dividend waivers on shares held by them that have not been allocated to employees. The total amount of dividends waived during the year ended 31 December 2016 was £2.6m (2015: £6.4m).

### Board of Directors

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The names of the current Directors of Barclays PLC, along with their biographical details, are set out on pages 3 and 4 and are incorporated into this report by reference. Changes to Directors during the year are set out below.

Name	Role	Effective date of appointment/ resignation
Sir Gerald (Gerry) Grimstone	Non-executive Director	Appointed 1 January 2016
Mary Francis	Non-executive Director	Appointed 1 October 2016
Wendy Lucas-Bull	Non-executive Director	Retired 1 March 2016
Frits van Paasschen	Non-executive Director	Retired 28 April 2016

### **Appointment and retirement of Directors**

The appointment and retirement of Directors is governed by the Company's Articles of Association (the Articles), the UK Corporate Governance Code (the Code), the Companies Act 2006 and related legislation.

The Articles may only be amended by a special resolution of the shareholders. The Board has the power to appoint additional Directors or to fill a casual vacancy amongst the Directors. Any such Director holds office only until the next AGM and may offer himself/herself for re-election. The Code recommends that all directors of FTSE 350 companies should be subject to annual re-election and all Directors will stand for election or re-election at the 2017 AGM with the exception of Diane de Saint Victor and Steve Thieke.

Governance: Directors report

[Other statutory information](#)

## **Directors indemnities**

Qualifying third party indemnity provisions (as defined by section 234 of the Companies Act 2006) were in force during the course of the financial year ended 31 December 2016 for the benefit of the then Directors and, at the date of this report, are in force for the benefit of the Directors in relation to certain losses and liabilities which they may incur (or have incurred) in connection with their duties, powers or office. In addition, the Company maintains Directors & Officers Liability Insurance which gives appropriate cover for legal action brought against its Directors.

Qualifying pension scheme indemnity provisions (as defined by section 235 of the Companies Act 2006) were in force during the course of the financial year ended 31 December 2016 for the benefit of the then Directors, and at the date of this report are in force for the benefit of directors of Barclays Pension Funds Trustees Limited as Trustee of the Barclays Bank UK Retirement Fund. The directors of the Trustee are indemnified against liability incurred in connection with the company's activities as Trustee of the Barclays Bank UK Retirement Fund.

Similarly, qualifying pension scheme indemnities were in force during 2016 for the benefit of directors of Barclays Executive Schemes Trustees Limited as Trustee of Barclays Bank International Limited Zambia Staff Pension Fund (1965), Barclays Capital International Pension Scheme (No.1), and Barclays PLC Funded Unapproved Retirement Benefits Scheme. The directors of the Trustee are indemnified against liability incurred in connection with the company's activities as Trustee of the schemes above.

## **Political donations**

The Group did not give any money for political purposes in the UK, the rest of the EU or outside of the EU, nor did it make any political donations to political parties or other political organisations, or to any independent election candidates, or incur any political expenditure during the year.

In accordance with the US Federal Election Campaign Act, Barclays provides administrative support to a federal Political Action Committee (PAC) in the US funded by the voluntary political contributions of eligible employees. The PAC is not controlled by Barclays and all decisions regarding the amounts and recipients of contributions are directed by a steering committee comprising employees eligible to contribute to the PAC. Contributions to political organisations reported by the PAC during the calendar year 2016 totalled \$12,500 (2015: \$79,500).

## **Environment**

Barclays focuses on addressing environmental issues where we believe we have the greatest potential to make a difference. We focus on managing our own carbon footprint and reducing our absolute carbon emissions; developing products and services to help enable the transition to a low-carbon economy, and managing the risks of climate change to our operations, clients, customers and society at large. We invest in improving the energy efficiency of our operations and offset the emissions remaining through the purchase of carbon credits. We also have a long-standing commitment to managing the environmental and social risks associated with our lending practices, which is embedded

into our Credit Risk processes. A governance structure is in place to facilitate clear dialogue across the business and with suppliers around issues of potential environmental and social risk.

We have disclosed global greenhouse gas emissions that we are responsible for as set out by The Companies Act 2006 (Strategic Report and Directors Report) Regulations 2013. We provide fuller disclosure on (i) financing solutions for the lower carbon economy, (ii) environmental risk management and (iii) management of our carbon and environmental footprint in the Barclays Environmental, Social and Governance (ESG) Supplement available on our website at [home.barclays.com/citizenship](http://home.barclays.com/citizenship).

	Current reporting year <sup>a</sup> 2016	Previous reporting year <sup>b</sup> 2015	Previous reporting year <sup>c</sup> 2014	Comparison year <sup>d</sup> 2013
<b>Global GHG emissions</b>				
Total CO <sub>2</sub> e (tonnes) <sup>e</sup>	678,412	712,916	830,668	968,781
Scope 1 CO <sub>2</sub> e emissions (tonnes) <sup>f</sup>	46,571	56,642	49,994	58,176
Scope 2 CO <sub>2</sub> e emissions (tonnes) <sup>g</sup>	538,783	520,098	655,426	723,993
Scope 3 CO <sub>2</sub> e emissions (tonnes) <sup>h</sup>	93,059	136,176	125,248	186,612
<b>Intensity Ratio<sup>i</sup></b>				
Total full time employees (FTE)	119,300	129,400	132,300	139,600
Total CO <sub>2</sub> e per FTE (tonnes)	5.69	5.51	6.28	6.94
Scope 2 market based emissions (tonnes) <sup>j</sup>	596,198			
Notes				

a 2016 Reporting Year covers Q4 2015 and Q1, 2, 3 of 2016. The carbon reporting year is not fully aligned to the financial reporting year covered by the Directors report.

b 2015 Reporting Year covers Q4 2014 and Q1, 2, 3 of 2015.

c 2014 Reporting Year covers Q4 2013 and Q1, 2, 3 of 2014.

d 2013 Reporting Year covers Q4 2012 and Q1, 2, 3 of 2013.

e The methodology used to calculate our CO<sub>2</sub>e emissions is the operational control approach on reporting boundaries as defined by the World Resources Institute/ World Business Council for Sustainable Development (WRI / WBCSD) Greenhouse Gas Protocol (GHG): A Corporate Accounting and Reporting Standard, Revised Edition. Where properties are covered by Barclays consolidated financial statements but are leased to tenants who are invoiced for utilities, these emissions are not included in the Group GHG calculations. We also capture consumption from properties which are yet to be consolidated by Barclays and as such Barclays still is responsible for the utility cost.

f Scope 1 covers direct combustion of fuels and company owned vehicles (from UK and South Africa only, which is the most material contributors). Fugitive emissions reported in Scope 1 for 2013 – 2016 cover emissions from Americas, Asia-Pacific and South Africa. Scope 1 fugitive emissions excludes the UK whilst we amend our governance procedures in the UK Business travel is reported in Scope 1.

g Scope 2 covers emissions from electricity and steam purchased for own use. Scope 2 emissions are using location based emission factors. Please see line below for Scope 2 Market Based emissions.

h Scope 3 covers indirect emissions from business travel (global flights and ground transport from the UK and South Africa). From 2014 onwards car hire data covers the USA and India. Ground transportation data (excluding Scope 1 company cars) covers only countries where this type of transport is material and data is available.

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i Intensity ratio calculations have been calculated using location based emission factors only.

j Scope 2 Market Based emissions have been reported for 2016 only.

### **Research and development**

In the ordinary course of business the Group develops new products and services in each of its business divisions.

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## Share capital

### Share capital structure

The Company has ordinary shares in issue. The Company's Articles also allow for the issuance of sterling, US dollar, euro and yen preference shares (preference shares). No preference shares have been issued as at 20 February 2017 (the latest practicable date for inclusion in this report). Ordinary shares therefore represent 100% of the total issued share capital as at 31 December 2016 and as at 20 February 2017 (the latest practicable date for inclusion in this report). Details of the movement in ordinary share capital during the year can be found in Note 31 on page 284.

### Voting

Every member who is present in person or represented at any general meeting of the Company, and who is entitled to vote, has one vote on a show of hands. Every proxy present has one vote. The proxy will have one vote for and one vote against a resolution if he/she has been instructed to vote for or against the resolution by different members or in one direction by a member while another member has permitted the proxy discretion as to how to vote. On a poll, every member who is present or represented and who is entitled to vote has one vote for every share held. In the case of joint holders, only the vote of the senior holder (as determined by order in the share register) or his proxy may be counted. If any sum payable remains unpaid in relation to a member's shareholding, that member is not entitled to vote that share or exercise any other right in relation to a meeting of the Company unless the Board otherwise determine. If any member, or any other person appearing to be interested in any of the Company's ordinary shares, is served with a notice under section 793 of the Companies Act 2006 and does not supply the Company with the information required in the notice, then the Board, in its absolute discretion, may direct that that member shall not be entitled to attend or vote at any meeting of the Company. The Board may further direct that if the shares of the defaulting member represent 0.25% or more of the issued shares of the relevant class, that dividends or other monies payable on those shares shall be retained by the Company until the direction ceases to have effect and that no transfer of those shares shall be registered (other than certain specified excepted transfers). A direction ceases to have effect seven days after the Company has received the information requested, or when the Company is notified that an excepted transfer of all of the relevant shares to a third party has occurred, or as the Board otherwise determines.

### Transfers

Ordinary shares may be held in either certificated or uncertificated form. Certificated ordinary shares shall be transferred in writing in any usual or other form approved by the Secretary and executed by or on behalf of the transferor. Transfers of uncertificated ordinary shares shall be made in accordance with the Companies Act 2006 and CREST Regulations.

The Board is not bound to register a transfer of partly-paid ordinary shares or fully-paid shares in exceptional circumstances approved by the FCA. The Board may also decline to register an instrument of transfer of certificated ordinary shares unless it is duly stamped and deposited at the prescribed place and accompanied by the share

certificate(s) and such other evidence as reasonably required by the Board to evidence right to transfer, it is in respect of one class of shares only, and it is in favour of a single transferee or not more than four joint transferees (except in the case of executors or trustees of a member).

In accordance with the provisions of Section 84 of the Small Business, Enterprise and Employment Act 2015, preference shares may only be issued in registered form. Preference shares shall be transferred in writing in any usual or other form approved by the Secretary and executed by or on behalf of the transferor. The Company's registrar shall register such transfers of preference shares by making the appropriate entries in the register of preference shares. Each preference share shall confer, in the event of a winding up or any return of capital by reduction of capital (other than, unless otherwise provided by their terms of issue, a redemption or purchase by the Company of any of its issued shares, or a reduction of share capital), the right to receive out of the surplus assets of the Company available for distribution amongst the members and in priority to the holders of the ordinary shares and any other shares in the Company ranking junior to the relevant series of preference shares

and pari passu with any other class of preference shares (other than any class of shares then in issue ranking in priority to the relevant series of preference shares), repayment of the amount paid up or treated as paid up in respect of the nominal value of the preference share together with any premium which was paid or treated as paid when the preference share was issued in addition to an amount equal to accrued and unpaid dividends.

### **Variation of rights**

The rights attached to any class of shares may be varied either with the consent in writing of the holders of at least 75% in nominal value of the issued shares of that class, or with the sanction of a special resolution passed at a separate meeting of the holders of the shares of that class. The rights of shares shall not (unless expressly provided by the rights attached to such shares) be deemed varied by the creation of further shares ranking equally with them or subsequent to them.

### **Limitations on foreign shareholders**

There are no restrictions imposed by the Articles of Association or (subject to the effect of any economic sanctions that may be in force from time to time) by current UK laws which relate only to non-residents of the UK and which limit the rights of such non-residents to hold or (when entitled to do so) vote the ordinary shares.

### **Exercisability of rights under an employee share scheme**

Employee Benefit Trusts (EBTs) operate in connection with certain of the Group's Employee Share Plans (Plans). The trustees of the EBTs may exercise all rights attached to the shares in accordance with their fiduciary duties other than as specifically restricted in the relevant Plan governing documents. The trustees of the EBTs have informed the Company that their normal policy is to abstain from voting in respect of the Barclays shares held in trust. The trustees of the Global Sharepurchase EBT and UK Sharepurchase EBTs may vote in respect of Barclays shares held in the EBTs, but only as instructed by participants in those Plans in respect of their partnership shares and (when vested) matching and dividend shares. The trustees will not otherwise vote in respect of shares held in the Sharepurchase EBTs.

### **Special rights**

There are no persons holding securities that carry special rights with regard to the control of the Company.

### **Major shareholders<sup>a</sup>**

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Major shareholders do not have different voting rights from those of other shareholders. Information provided to the Company by substantial shareholders pursuant to the FCA's Disclosure Guidance and Transparency Rules are published via a Regulatory Information Service and is available on the Company's website. As at 31 December 2016, the Company had been notified under Rule 5 of the Disclosure Guidance and Transparency Rules of the following holdings of voting rights in its shares.

Person interested	Number of Barclays shares	% of total voting rights attaching to issued share capital <sup>a</sup>
The Capital Group Companies Inc. <sup>b</sup>	1,172,090,125	6.98
Qatar Holding LLC <sup>c</sup>	1,017,455,690	5.99
BlackRock, Inc. <sup>d</sup>	922,509,972	5.45
Norges Bank Notes	512,348,359	3.03

a Significant shareholders for the last 3 years are shown on page 331.

b The percentage of voting rights detailed above was calculated at the time of the relevant disclosures made in accordance with Rule 5 of the Disclosure Guidance and Transparency Rules.

c The Capital Group Companies Inc (CG) holds its shares via CG Management companies and funds. Part of the CG holding is held as American Depositary Receipts.

d Qatar Holding LLC is wholly-owned by Qatar Investment Authority.

e Total shown includes 3,860,531 contracts for difference to which voting rights are attached. Part of the holding is held as American Depositary Receipts. On 19 January 2017, BlackRock, Inc. disclosed by way of a Schedule 13G filed with the SEC, beneficial ownership of 1,054,988,420 ordinary shares of the Company as of 31 December 2016, representing 6.2% of that class of shares.

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Governance: Directors report

## Other Statutory Information

Between 31 December 2016 and 20 February 2017 (the latest practicable date for inclusion in this report) the Company was notified that Norges Bank now holds 508,175,594 Barclays shares, representing 2.996% of the total voting rights attached to issued share capital.

### **Powers of Directors to issue or buy back the Company's shares**

The powers of the Directors are determined by the Companies Act 2006 and the Company's Articles. The Directors are authorised to issue and allot shares and to buy back shares subject to annual shareholder approval at the AGM. Such authorities were granted by shareholders at the 2016 AGM. It will be proposed at the 2017 AGM that the Directors be granted new authorities to allot and buy back shares.

### **Repurchase of shares**

The Company did not repurchase any of its ordinary shares during 2016 (2015: none). As at 20 February 2017 (the latest practicable date for inclusion in this report) the Company had an unexpired authority to repurchase ordinary shares up to a maximum of 1,681m ordinary shares.

### **Change of control**

There are no significant agreements to which the Company is a party that are affected by a change of control of the Company following a takeover bid. There are no agreements between the Company and its Directors or employees providing for compensation for loss of office or employment that occurs because of a takeover bid.

### **Going concern**

The Group's business activities, financial position, capital, factors likely to affect its future development and performance, and its objectives and policies in managing the financial risks to which it is exposed are discussed in the Risk Management section.

The Directors considered it appropriate to prepare the financial statements on a going concern basis.

### **Disclosure of information to the auditor**

Each Director confirms that, so far as he/she is aware, there is no relevant audit information of which the Company's auditors are unaware and that each of the Directors has taken all the steps that he/she ought to have taken as a Director to make himself/herself aware of any relevant audit information and to establish that the Company's auditors are aware of that information. This confirmation is given pursuant to section 418 of the Companies Act 2006 and should be interpreted in accordance with and subject to those provisions.

### **Directors' responsibilities**

The following statement, which should be read in conjunction with the report of the independent registered public accounting firm set out on page 218, is made with a view to distinguishing for shareholders the respective responsibilities of the Directors and of the auditors in relation to the accounts.

The Directors are required by the Companies Act 2006 to prepare accounts for each financial year and, with regards to Group accounts, in accordance with Article 4 of the IAS Regulation. The Directors have prepared Group and individual accounts in accordance with IFRS as adopted by the EU. The accounts are required by law and IFRS to present fairly the financial position and performance of the Company and the Group for that period. The Companies Act 2006 provides, in relation to such accounts, that references to accounts giving a true and fair view are references to fair presentation.

The Directors consider that, in preparing the accounts on pages 216 to 316, and the additional information contained on pages 86 to 189, the Group has used appropriate accounting policies, supported by reasonable judgements and estimates, and that all accounting standards which they consider to be applicable have been followed.

Having taken all the matters considered by the Board and brought to the attention of the Board during the year into account, the Directors are satisfied that the Annual Report and Financial Statements, taken as a whole, are fair, balanced and understandable, and provide the information necessary for shareholders to assess the Company's position and performance, business model and strategy.

#### **Directors' responsibility statement**

The Directors have responsibility for ensuring that the Company and the Group keep accounting records which disclose with reasonable accuracy the financial position of the Company and the Group and which enable them to ensure that the accounts comply with the Companies Act 2006.

The Directors are responsible for the maintenance and integrity of the Company's website. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The Directors have a general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

The Directors, whose names and functions are set out on pages 3 and 4, confirm to the best of their knowledge that:

- (a) the financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole; and
- (b) the management report, which is incorporated in the Directors' Report on pages 2 to 46, includes a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

By order of the Board

**Claire Davies**

Company Secretary

22 February 2017

Registered in England.

Company No. 48839

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Governance: People

## **Culture and Values**

We are four years into a cultural change journey at Barclays. Over this period we have defined a common set of values and embedded them across the organisation, ensuring they are recognised and understood by our employees. We recognise that fostering the right culture at Barclays is critical to our success and we have placed continued focus on the importance of a values based culture to the organisation. Early in 2016 conduct, culture and values was established as one of the strategic priorities for the year, and within that we have developed a culture measurement framework to manage and measure progress in embedding a values based culture across Barclays. This framework is anchored in our values and through quarterly indicators and insights we are able to assess what we are doing well and where we might need to focus attention and prioritise management action across our businesses and functions. The quarterly indicators and insights are presented to the Board Reputation Committee and the Group Executive Committee and shared with our senior leadership teams with a view to becoming an integral part of our regular management reporting so that we can ensure our priorities and decisions are focused in the right areas. The insights from the indicators and metrics within the culture measurement framework this year support the view that our ongoing efforts are having a positive impact in continuing to create a culture that will help us build the Barclays of the future.

## **Your View**

Engagement of our employees is one of the key indicators of cultural health and we recognise the importance of listening to our colleagues and maintaining an open, two-way dialogue. The views of our colleagues shape the decisions we make, helping us create an environment in which colleagues want to work, and which in turn we believe will drive high performance. To ensure that we constantly review and reappraise to see what is working, in 2016, the annual Your View survey, our employee opinion survey, became a quarterly pulse survey excluding Africa, providing colleagues the opportunity on a more regular basis to say how it feels to work at Barclays. In the third quarter of the year, we surveyed 50% of all colleagues and the remaining 50% were surveyed in the fourth quarter. Starting from 2017, each quarter 25% of colleagues excluding Africa will be invited to take part in Your View.

The Your View results have continued to measure Sustainable Engagement and this year we have been provided with more regular snapshots. The quarterly results were then aggregated at the end of the year into an overall annual picture of engagement. At the end of 2016 Sustainable Engagement of our colleagues has remained stable year on year at 75%. Areas of particular strength from the annual results include: colleagues feeling safe to speak up (81% favourable, up 6% points on 2015); colleagues feeling proud of the contribution Barclays makes to the community and society (88% favourable, up 3% points on 2015) and employees feeling respected regardless of their job (83% favourable, up 4% points on 2015). In addition, the commitment and discretionary effort of employees continues to be very high with 94% saying they believe they work beyond what is required of them to help Barclays succeed. Along with the insights from the quarterly indicators within the culture measurement framework, these results evidence that we continue to make strong progress in embedding a values based culture across the bank.

## **Leadership and Learning**

Our leadership and learning solutions are underpinned by our values and are focused on supporting our colleagues to develop critical skills and capabilities. Both the Barclays Academy and our Global Curriculum provide colleagues with development resources, through a variety of formats and content. In 2016 our employees spent an average of 40 hours each on training through formal programmes, in addition to having access to many other informal learning opportunities that are not captured through our learning management system. We continue to assess candidate alignment to our Values and Behaviours through our recruitment and promotion processes and we also ensure new joiners attend the Being Barclays Global Induction programme, which provides in-depth experience of the Values. All colleagues are required to attest and demonstrate their understanding of expected behaviours through the Global Code of Conduct (The Barclays Way).

This year a new event was launched, sponsored by the Group CEO, to

begin to develop the next generation of enterprise leaders who actively contribute towards rebuilding the profession of banking through their own leadership and their influence of others. By bringing together high potential senior leaders from across our businesses and functions we seek to strengthen collaboration and an enterprise wide perspective amongst our senior leaders to deliver improved solutions and products for our customers and clients.

We have continued to launch and refresh learning and leadership initiatives with particular focus on supporting the development of line managers. Examples include our Manager Excellence Programme, the iLead programme for high potential Directors, and the Senior Leadership Development programme in the Banking business. All our leadership development activities follow a common principle of leaders teaching leaders, creating opportunities for knowledge sharing across different parts of Barclays.

### **Early careers and apprenticeships**

Barclays is committed to helping people achieve their ambitions when they enter the world of work whether they are a young person entering the workplace for the first time or an experienced professional seeking to develop new skills. Barclays Early Careers proposition includes graduate, internship and apprenticeship programmes and in 2016 we hired over 750 interns and 700 graduates. Since 2012 we have created over 3,000 apprenticeships. We provide pathways for progression from apprentice to graduate supported by recognised qualifications and, in doing so, help to create an internal talent pipeline.

The ambition in 2016 for our apprenticeship programmes was to widen accessibility and ensure our programmes are fully inclusive. We expanded our Bolder Apprenticeship Programme, targeting long-term unemployed adults over the age of 24, and we also piloted our Able to Enable Programme targeting the long-term unemployed who have a disability. These programmes along with our place on the UK Government's Apprenticeship Delivery Board reflect our commitment to tackling societal issues and attracting diverse talent. Throughout 2016 we have continued to receive external recognition for our apprenticeship programmes.

We have transformed the way we recruit for our EMEA Internship and Graduate programmes to deliver an improved candidate experience and to ensure that we are assessing candidates against the right skills and qualities. This recruitment process helps to drive diversity and inclusion as students are able to demonstrate ability and potential throughout the process so that recruitment outcomes are based on performance and not on the basis of academic grades, universities attended and previous work experience. This year in the Americas we rolled out our first

Sophomore Springboard programme aimed at preparing a diverse range of students for an internship in their junior year. This was the first phase of a two year strategy to identify diverse talent early on.

### **Industrial relations**

Barclays has a long-standing partnership approach to industrial relations and we value the relationships we have with over 30 trade unions, works councils and staff associations around the world. Within the UK we have a formal

partnership with Unite which has been in place for over 15 years and is one of the longest standing partnerships in the UK. Throughout 2016, we have continued to have regular, constructive dialogue with employee representatives on a wide range of topics that impact our employees in order to seek their feedback prior to implementation. Regional consultation forums have also provided a platform for bringing together and engaging employee representatives on a wide range of topics that affect the interests of our employees.

### **Managing change**

Where restructuring is necessary to support our strategy, we have consulted on proposals with our recognised trade unions or employee forums and impacted employees, prior to implementation. In line with our Values and to ensure we treat all colleagues with respect, we seek to avoid compulsory redundancies wherever possible and we try to find ways in which we can achieve this during consultation. We continue to place significant emphasis on both voluntary redundancy programmes as well as internal redeployment through our Internals First programme. Internals First supports colleagues who have been impacted by change and provides individual support to ensure that we retain talent within

## Governance: People

Barclays. In 2016, over 1,000 colleagues registered for Internals First support and we redeployed 32% of them within Barclays. Throughout 2016, colleagues have attended Internals First careers and networking events and opted for outplacement support services. When an employee does leave Barclays as a consequence of restructuring, our commitment is to ensure that they are given the best support for the next stage in their career. To achieve this, Barclays provides a global career transition service which offers personalised advice and support for employees placed at risk of redundancy. We also hope to keep in touch with former colleagues through the Barclays Global Alumni Programme which provides a platform for current and former employees to connect with Barclays and one another through global networking events, monthly e-newsletters and access to career opportunities.

### **Internal Mobility**

During 2016 internal mobility has been a key focus. Being able to attract and retain talented individuals, as well as provide them with the opportunity to take control of their career and development at Barclays is one of our most important ambitions. Our aim is that by supporting internal mobility across Barclays and making it simple and easy for colleagues to move internally, we are successfully retaining and developing our internal talent. To promote this and provide colleagues with opportunities to broaden their experience, the Group CEO launched *Apply Within*, our internal mobility programme, early in 2016. We have developed multiple tools and resources for colleagues to find new internal career opportunities and for managers to find and assess suitable internal candidates. Global careers fairs, the Barclays Mentoring Tool and enhancements to the *My Career* online portal, which was launched in 2015, are part of the campaign. Thousands of colleagues have visited the *My Career* portal this year to update career profiles, upload CVs and import LinkedIn profiles and our Resourcing teams have sought to match vacant roles to colleagues' skills and aspirations. We have increased our internal recruitment percentage to 48% firm wide (excluding Africa).

### **Wellbeing**

By actively supporting employees to be healthy and happy, we will deliver better outcomes for colleagues, for Barclays and for society. Our global wellbeing programme *Be Well* launched in 2015 and has focused on health education, a Global Speaker Series, health risk identification, prevention and management as well as new leadership and management programmes to help line managers support colleagues. The insights developed this year through our wellbeing programme help to identify themes and areas to focus on in 2017.

### **Performance Management**

Barclays approach to performance management is key to enabling the delivery of our strategy and to continue to embed a values-based culture. Colleagues align their objectives ( *what* they will deliver) to business and team goals to support the delivery of our strategy and good customer outcomes. Behavioural expectations ( *how* they will achieve their objectives) are set in the context of our Values. This year we have enhanced the focus on balancing the *what* and the *how* through the launch of our *Let's talk about how* campaign to remind colleagues that *how* they achieve their objectives is just as important as *what* they achieve. Both the campaign and the *Values in Action* framework provide tools and resources for colleagues to bring to life the behaviours that underpin our Values and to enhance the quality

of performance reviews.

Our global recognition programme provides colleagues the opportunity to recognise the outstanding achievements of those who have demonstrated our Values. We continue to see a year on year increase in the number of colleagues receiving a Values Thank You message from a fellow colleague, with over 250,000 sent in 2016.

Colleagues are also encouraged to be involved with the company's performance by participating in our all-employee share plans, which have been running successfully for over 10 years.

Barclays regularly updates employees regarding the financial and economic factors affecting the company's performance throughout the year, using a variety of communications channels. These include CEO and senior leader communications, line manager briefing packs, video

interviews and talking points which are distributed to employees every quarter to coincide with Barclays' financial reporting calendar. They are all designed to build awareness and understanding of Barclays' results and the broader macroeconomic environment, and to drive dialogue. We also hold a variety of events for employees to hear directly from the CEO and the Group Executive Committee and to ask them questions.

We have also recently introduced an Ask the Experts communication which gives perspectives from across the bank on what Barclays' results mean and how they are received by different stakeholders. Flagship campaigns are released to all employees each quarter, covering topics such as wellbeing, recognition and dynamic working to raise awareness of the tools being introduced to help them develop their careers at Barclays and to provide them with the opportunity to understand and engage in employee initiatives. Colleagues are also kept informed through regular intranet and email updates about the progress Barclays is making across activity such as Diversity and Inclusion and Performance Management.

Employees are invited to share their opinion on what it is like to work at Barclays through regular interactive events with senior leaders. These events provide employees with the opportunity to discuss their perspective on a range of areas to help senior management understand what is working well and where we need to improve. Any changes that are implemented as a result of colleague feedback are communicated through leadership briefings and engagement initiatives across each business and function.

## **Diversity and Inclusion**

Barclays' global Diversity and Inclusion (D&I) strategy establishes objectives, initiatives and plans across each of five core pillars: Gender, LGBT, Disability, Multicultural and Multigenerational. As an organisation we remain focussed on increasing the diversity of our employees and by continuing to foster an inclusive culture we seek to ensure that employees of all backgrounds are treated equally and have the opportunity to be successful.

In recognition of this in 2016 we have continued to develop opportunities to attract and retain a diverse pipeline of talented employees across the bank. This year we have launched new initiatives including our Encore! Returnship Programme which offers leadership development and training opportunities to professionals who have taken a career break and are looking to re-enter the workforce. Also launched in 2016 is our Able to Enable apprenticeship initiative which targets the long-term unemployed who have a disability. Working with Remploy and by providing a bespoke, supportive selection process, which includes a 13 week development experience, we hope to provide opportunities for this population.

In June we announced enhancements to our US Leave of Absence policies for Childcare and Military Leave, supporting our commitment to creating a diverse and inclusive environment through policies that help employees successfully integrate their profession and personal lives.



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Providing leadership development to ensure we are continuing to build an inclusive work environment is paramount to our diversity strategy and in 2016 our Unconscious Bias Training, previously delivered to over 8,000 senior leaders, was deployed to our junior populations with over 1,900 attending workshops to date.

We always have more to do, but are pleased when our progress towards greater inclusion is recognised. During 2016, we continued to receive national and international recognition from respected organisations such as the Business Disability Forum in the UK, Human Rights Campaign in the US and Community Business for our achievements, citing our D&I work as innovative, robust and sustainable.

### **Gender**

Sustaining progress towards increasing female representation at all levels across Barclays remains a core focus of our talent management and leadership succession processes. Across our organisation and the financial services industry we hope to see more females in senior roles and we are determined to enable women to fulfil their career aspirations. As referenced in the Board Nominations Committee section on pages 29 to 35 we revised our Board Diversity Policy in 2015 to reflect our new target of minimum 33% female representation on our Board by 2020.

Our Board membership currently has 31% female representation, reflecting that we are on track to meet our 2020 target.

As a founding signatory of the HM Treasury Women in Leadership Charter and supporter of the Hampton-Alexander Review we proactively set gender targets and at the end of 2016 female representation across the senior leadership population stood at 24% representing the third consecutive year-on-year increase and progress towards our 2018 Women in Leadership goal of 26%. In line with the recommendations from the Hampton-Alexander Review, from 2017, we will publish the combined number of women on the Group Executive Committee and in the direct reports to the Executive Committee. At the end of 2016 female representation across this population stood at 25%. We will also use the review output to inform the update of our Women in Leadership targets.

At all levels our gender pipeline has continued to strengthen thanks to extensive programmes which focus on building capability and capacity, such as our Global Women in Leadership conference with over 5,000 colleagues participating, the Encore! Returnship Programme and the number of female graduate hires we have made increasing from 31% in 2014 to 39% in 2016. The Barclays Women's Initiatives Network (WiN) also provides targeted development and networking opportunities such as group mentoring, careers fairs, and events helping to connect both junior and senior colleagues from across the organisation.

Recognising our efforts, we were invited to be a corporate IMPACT champion by the United Nations in their HeForShe campaign on gender equality. Internally we have asked colleagues to show their support by pledging a specific commitment that will contribute to gender parity. Since launching HeForShe, 60% of new members are male and many are now taking a more visible role as mentors and sponsors, helping to contribute towards gender diversity and greater inclusion. Staying at the vanguard of good practice requires sustained commitment and we value independent assessment that allows us to calibrate our approach. For the ninth year running, we were pleased to be included in The Times Top 50 Workplaces for Women in the UK, and for the fourth successive year to be named in Working Mother 100 Best Companies in the US.

## Female representation

## LGBT

An inclusive culture is vital for colleagues to have the freedom and choice to bring their whole selves to work. Enabling that culture, are our Spectrum Allies - colleagues who are committed to inclusion and equality. By educating others and visibly supporting equality, allies help to make LGBT colleagues, friends and family feel safer and more comfortable in leading their lives. The Spectrum Allies campaign has identified over 7,000 colleagues globally as

LGBT allies in 2016.

#nofilter was the theme of Pride in London 2016, which we were proud to be the headline sponsor of for the third consecutive year. More than 1,100 colleagues, leaders, friends and family came together for Pride in London and hundreds of colleagues marched at the head of the parade in June. Events for our colleagues, customers and clients took place throughout June to celebrate Pride month, and a partnership between the BUK Marketing Team and Thomson Reuters resulted in a successful social media campaign, including over 10,000 downloads of the Pride in London smartphone application, in which Barclays nofilter advert was

highlighted.

Barclays ATM messaging conveyed our advocacy for IDAHOBIT (International Day Against Homophobia, Biphobia and Transphobia) and for World Aids Day, £ for £ matching augmented colleague fundraising for organisations leading on the treatment and prevention of HIV and Aids.

Independent recognition reflects the sustained impact of our global work. Stonewall continue to name us as one of just eight Star Performer organisations seen as leaders globally. Role-model colleagues were this year recognised in the Financial Times OUTstanding list of 100 LGBT business leaders, and in the Pride Power List. Awards simply serve to motivate us to continue to shape our culture so that colleagues really can bring their whole selves to work. Through the Your View survey we provide colleagues with the opportunity to identify as being LGBT, with 3% of colleagues identifying as being LGBT in 2016.

## Disability

Our aspiration to become the most accessible bank remains firm. Progressing our aim, this year in partnership with the Lord Mayor of the City we expanded our internal campaign, This Is Me, into the City of London to encourage other organisations to join in eliminating the stigma associated with mental health issues. Over 70 organisations have already signed up for This is Me in The City. Through our corporate accessibility portal, we have now made our learning on accessibility and inclusion available for any organisation.

We give continued to give full and fair consideration to applications from candidates who may have a disability. Our people processes ensure all colleagues can progress their careers, with comprehensive training and development including our Disability Confident eLearning, and through tailored and needs-based workplace adjustments where relevant. This year we reviewed our Workplace Adjustment process to make it simpler and easier for colleagues and our Adjustment Passport outlines colleagues reasonable adjustments to eliminate the need for colleagues to inform new line managers and to increase the ease of internal mobility. Employees who become disabled during their employment with us can access a full range of services and support ensuring we retain their talent.

Our efforts were recognised when Barclays achieved 98% in the Business Disability Forum's world-renown Disability Standard the highest ever score awarded to any organisation since the introduction of the Disability Standard in 2004.

## Multigenerational

We benefit from the diverse perspectives of employees from five generations and need to ensure our workplace is inclusive for all. Dynamic Working, our signature campaign relevant to colleagues every life stage with the strapline of how do your work your life, is encouraging the integration of personal and professional responsibilities through

smarter work patterns.

## Governance: People

As an example of our commitment to colleagues in different life stages, we are one of the eight founding members in the Equality and Human Rights Commissions (EHRC) Working Forward campaign that aims to make British workplaces the best they can be for pregnant women and working mothers. Our Working Families network is supporting the campaign by running integration workshops for returners from parental and adoption leave.

The Emerge network supports colleagues early in their career or new to financial services and the multigenerational composition of our workforce. This year a global reverse mentoring programme was launched with over 200 successful reverse mentoring partnerships established. Our Bolder Apprentice Programme continues to grow and our Returnship programmes, both in the UK and US, are proving to be successful.

Changing careers is also important, which is why our Armed Forces Transitioning, Employment and Rehabilitation (AFTER) programme continued to see ex-military talent join our company, or be supported to gain relevant work-ready skills. Since the programme began in 2010 AFTER has assisted over 4,000 veterans in employment transition, we have hired nearly 400 ex-military talent and over £4m has been donated to military charities to assist wounded and injured personnel in employment transition. Meanwhile, our LifeSkills programmes continue to prepare young people for their first steps into the world of work.

Working Families UK recognised Barclays for best embedded workplace flexibility through our Dynamic Working Campaign. In Singapore, we won the Most Empowering Company for Mums award by the National Trades Union Congress, while in the US we were included in the 100 Best Companies for Working Mothers. In the UK, our approach to talent attraction was recognised by Working Mums as well as by Business In the Community.

## Multicultural

Barclays global footprint makes multicultural inclusion imperative. Fostering cross-cultural connections is enabled by Embrace our multicultural network. Through the year Embrace has partnered with leaders and engaged colleagues across our global community to host discussions to gain insight and ideas on how we can better serve our multicultural customers and clients. Embrace also helped us mark important cultural and religious calendar dates throughout 2016 such as Diwali and Eid, creating communications and events to bring to life the rich multicultural diversity of our people. Day to day, this diversity is enabled by, for example, dedicated quiet rooms in many of our larger sites for prayer and reflection, and by serving halal and kosher food in our canteens.

Barclays Apprenticeship Programme reflects our commitment to recruit a diverse workforce. Since the programme launched in 2012, we have recruited over 3,000 apprentices who are considered NEET (Not in Education, Employment or Training). 30% identify as Black, Asian and Minority Ethnic, which is 19% higher than the national apprenticeship average of 11%. In addition, 43% of our apprentices are from a disadvantaged area, as defined by the Department of Education.

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Through this scheme we are making a positive impact on both youth unemployment and social mobility.

Ensuring Black, Asian and Minority Ethnic (BAME) female entrepreneurs can sustain and develop their businesses has been a shared focus via our partnership with the UK Women's Business Council, and in 2016 we also supported the Black British Business Awards to celebrate the achievements of BAME leaders in the UK. The multicultural profile of the organisation was acknowledged externally with senior leader role models recognised in the top 100 inaugural UPstanding Executive Power List of BAME leaders in the UK and US and in the Powerlist an annual publication of Britain's most influential people of African and African Caribbean heritage.

### Permanent Employees by region

	2016	2015	2014
United Kingdom	46,400	49,000	48,600
Continental Europe	4,700	7,400	9,900
Americas	9,700	10,600	10,900
Africa and Middle East	42,800	43,600	44,700
Asia Pacific	15,700	18,800	18,200
Total	119,300	129,400	132,300

Governance: Remuneration report

[Annual statement from the Chairman of the Board Remuneration Committee](#)

Summary

**We remain focused on aligning our pay to performance and setting pay at a level which allows us to attract, retain and motivate, but is no more than necessary to ensure that we accelerate the delivery of shareholder value. The inherent tension between these important considerations continues to be a key component of the Committee's deliberations.**

## Remuneration Committee members

### Chairman

Crawford Gillies

### Members

Tim Breedon

Mary Francis (from November 2016) Dambisa Moyo

Steve Thieke (until March 2016)

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The tables marked 'audited' in the report have been audited by PricewaterhouseCoopers LLP

### Dear Fellow Shareholders

As Chairman of the Board Remuneration Committee, I am pleased to introduce the Remuneration report for 2016. I set out below the business context which influenced the major decisions taken by the Committee for the year. This year's report also includes a new Directors' remuneration policy, which has been updated for regulatory changes, and simplified where possible.

### Performance and pay

We remain focused on aligning our pay to performance and setting pay at a level which allows us to attract, retain and motivate, but is no more than necessary to ensure that we accelerate the delivery of shareholder value. The inherent tension between these important considerations continues to be a key component of the Committee's deliberations.

2016 represented a year of strong progress against our strategy. We have moved a step closer towards completing the restructuring of Barclays – a restructuring that will create a simplified bank focused on delivering long-term sustainable value for all our stakeholders. Our Core businesses are performing well, the rundown of Non-Core businesses has accelerated and Barclays continues to explore opportunities to reduce its shareholding in BAGL to a level that would permit regulatory deconsolidation. The result will be the creation of a high performing transatlantic consumer, corporate and investment bank.

Our Core businesses delivered profit before tax up materially, 60% up compared to 2015. Excluding notable items this increase was 4%, and 10% excluding the impact of changes to our deferral arrangements (further detail overleaf). Core costs of £13.4bn exceeded guidance due to changes to the deferral arrangements. Return on Tangible Equity (RoTE) in our Core businesses has increased to 8.4% in 2016 (2015: 4.8%). Excluding notable items, Core RoTE was 9.4% (2015: 11.2%).

Non-Core has executed well against strategy, accelerating the rundown while preserving capital, delivering a £22bn reduction in Risk Weighted Assets.

Group profit before tax for 2016 is 182% up from 2015, at £3,230m, in part driven by a material reduction in costs associated with risk and conduct events in 2016. The Group's capital position continues to strengthen with a 2016 year end CRD IV fully loaded Common Equity Tier 1 (CET1) ratio of 12.4% (2015: 11.4%).



The Committee's deliberations on the 2016 incentive pool reflected Group performance and strategic delivery in both the Core and Non-Core businesses. We reached the decision that an overall Group incentive pool of £1,533m, down slightly from £1,544m in 2015, is appropriate notwithstanding strong 2016 delivery. This level of incentive pool also absorbs the material adverse impact of foreign exchange movements through the year, which more than offset the impact of reductions in staff numbers in the year.

The Core compensation to net income (excluding notable items) ratio decreased from 34.0% in 2015 to 32.7% in 2016 excluding the impact of the deferral changes, increasing slightly to 34.7% including the impact of these changes. At a Group level, the ratio increased to 40.2% (2015: 37.7%) driven by Non-Core as it continues to be run down.

### **Risk and conduct**

The Committee takes risk and conduct issues very seriously and ensures that appropriate adjustments are made at both the individual level and to the incentive pool.

Individual performance management reviews assess individuals' alignment with Barclays' Values, which in turn impacts individual incentive decisions. Employees who exhibit Barclays' Values, resulting in positive risk and conduct outcomes, are rewarded accordingly while those who are directly or indirectly accountable for risk and conduct issues have their remuneration adjusted downwards. This includes reductions in current year bonus and, where appropriate, reductions through the application of malus and, going forward, clawback.

Governance: Remuneration report

## Annual statement from the Chairman of the Board Remuneration Committee

Collective adjustments have also been made to the Group incentive pool for specific material risk and conduct events, and to take account of an overall assessment of a wide range of future risks including conduct, non-financial factors that can support the delivery of a strong risk management and conduct culture and other factors including reputation, impact on customers, markets and other stakeholders.

### Changes to deferral arrangements

Under existing incentive deferral arrangements, there is a limited relationship between in-year performance costs booked and changes in the incentive pool. This is a result of high overall levels of deferral, as well as the way that the costs of those deferrals have been recognised in our accounts. The effect of this is that if we chose for example to reduce the incentive pool in a given year due to underperformance, there would be limited impact on costs for the year in question. This lack of in-year flexibility on such an important cost line is not ideal. From 2016, a change in the recognition timing of deferral costs, together with a harmonisation of deferral levels across the Group will result in improvements to the Group's operational flexibility going into 2017 and beyond.

These changes are described in further detail on page 56.

### New remuneration policy for 2017

We will be seeking shareholder approval for a new Directors' remuneration policy (DRP) at the 2017 AGM. The new policy adopts, where possible, a more simplified and transparent approach to remuneration and is more closely aligned to Barclays' remuneration philosophy. Changes in the policy also address recent regulatory developments in particular the requirement to defer bonuses and Long Term Incentive Plan (LTIP) awards for a period of up to seven years. We have also introduced a new requirement for executive Directors to hold shares for two years post-termination.

The Committee was supportive of an even more simplified approach than that proposed, but the Committee concluded that while this alternative was attractive, there was not yet sufficient clarity on major shareholders' expectations for us to propose such a change at the present time. The proposed changes to the DRP have been discussed with a number of our larger shareholders and institutional shareholder bodies, and overall they are broadly supportive of the changes. An at a glance summary of the new policy can be found on pages 53 and 54 of this report and the full policy is set out on pages 60 to 72.

### Key remuneration decisions for executive Directors

Based on the performance of our executive Directors against the performance measures set at the beginning of the year, the Committee approved a 2016 bonus award of £1,318,000 (60% of maximum) for Jes Staley and £854,000 (61% of maximum) for Tushar Morzaria. Further details of the Committee's 2016 decisions for the executive Directors are set out on pages 73 and 74. 70% of Jes Staley's annual bonus and 60% of Tushar Morzaria's annual bonus have been deferred in shares. The period over which variable remuneration has been deferred has increased to seven years. Unvested variable remuneration is subject to malus during the vesting period. All variable remuneration awarded to

the executive Directors is also subject to clawback for a period of up to 10 years.

The Committee has agreed that Jes Staley's Fixed Pay will be unchanged for 2017 at £2,350,000 (2016: salary £1,200,000 and Role Based Pay (RBP) £1,150,000). The Committee has agreed that Tushar Morzaria's Fixed Pay will be increased to £1,650,000 for 2017 (2016: salary £800,000 and RBP £750,000). In considering the appropriate level of Tushar Morzaria's Total fixed pay (Fixed Pay plus Pension), the Committee took account of the time he has been in role without any increase (over three years), his strong performance and importance to the organisation, and industry market rates for the role. The Committee concluded that an increase of 5.7%, being less than the cumulative increase paid to UK employees over the same period, was warranted but agreed that the executive Directors would not be eligible for any further increase in the next three years (i.e. during the new policy period).

From 2017, Barclays is evolving from the existing Balanced Scorecard approach to one which better reflects progress towards our strategic goals. While many of the performance measures remain consistent with the Balanced Scorecard, the new Performance Measurement Framework allows for a more holistic assessment and broadens our approach to strategic non-financial measures while retaining a balance of key financial performance measures. The framework has been incorporated into the measures for the 2017 annual bonus and LTIP with effect from the 2017 award. Financial measures will guide 60% of the maximum opportunity for the 2017 annual bonus, and 70% of the maximum opportunity for the 2017 LTIP award.

### **Agenda for 2017**

The Committee will continue to focus on ensuring that remuneration is aligned to the delivery of our strategy and sustainable shareholder returns. The Committee will also continue to monitor the competitiveness of our remuneration in the light of recent regulatory changes by the PRA, FCA and EBA. These changes have compounded the competitive disadvantage for UK based global firms attributable to the lack of a global level regulatory playing field.

We will also continue to progress further our agenda to address pay inequality, further details on page 58, which is in line with the proposals in the Government's Green Paper on Corporate Governance Reform. The Committee welcomes this Green Paper and supports its intent to strengthen accountability over executive pay. We have provided our views on the proposals via an industry response and will monitor developments over the coming months.

### **Our Remuneration report**

The report has been prepared in accordance with the remuneration disclosures required by the Large and Medium-sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013. We are seeking shareholder approval at the 2017 AGM for our new DRP, the Remuneration report (other than the part containing the DRP) and revisions to the Barclays LTIP in response to changes in regulatory requirements. Further details can be found in the 2017 AGM Notice of Meeting.

I am grateful for the feedback received from our larger shareholders on our remuneration proposals and value the insight the discussions provide. I hope you will support these resolutions at the 2017 AGM.

On behalf of the Board

**Crawford Gillies**

Chairman, Board Remuneration Committee

22 February 2017

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Governance: Remuneration report

[New Directors remuneration policy at a glance](#)

## Introduction

Barclays' new DRP is subject to shareholder approval at the 2017 AGM on 10 May 2017 and, if approved, is intended to apply immediately, for three years to the date of the 2020 AGM.

### What were the key factors taken into account when determining the new DRP?

The Committee considered the Barclays' remuneration philosophy (adopted in 2015), regulatory developments and its experience of operating the prior DRP when designing the new DRP.

Inputs	Outcomes
Alignment with Barclays' remuneration philosophy	<ul style="list-style-type: none"> <li>§ Attract and retain talent needed to deliver Barclays strategy</li> <li>§ Align pay with investor interests</li> <li>§ Reward sustainable performance</li> <li>§ Support Barclays' Values and culture</li> <li>§ Align with risk appetite, risk exposure and conduct expectations</li> <li>§ Be clear, transparent and as simple as possible</li> </ul>

Regulatory developments

§ Longer deferral periods:

7 year pro-rata, from year 3 for PRA Senior Managers (including executive Directors)

Extension of clawback periods from 7 to 10 years for PRA Senior Managers (including executive Directors)

§ Applies for first time for 2017 performance year:

Prohibition on dividend equivalents on deferred shares

Increase to one year (from 6 months) holding period for awards delivered in shares

Requirement that LTIP grants are based on performance over prior year as well as forward-looking performance period

**What are the key changes to the DRP?**

**Key changes**

Fixed pay

§ Fixed Pay introduced, replacing salary and RBP

§ Fixed Pay delivered 50% in cash and 50% in shares (subject to 5 year holding period lifting pro-rata)

§ Fixed Pay will not change during the policy period for either of the current executive Directors

	§ Pension allowance retained at current levels, but limited to 10% of Fixed Pay for new hires
Variable pay	§ Bonus and LTIP combined for regulatory deferral purposes
Performance measures	§ Bonus: Financial measures <sup>3</sup> 60%
	§ LTIP: Financial measures <sup>3</sup> 70%
Delivery	§ Any bonus deferral vests in equal tranches between the third and seventh anniversary of award
	§ LTIP performance is tested at end of 3 year performance period and vests in equal tranches between the third and seventh anniversary of award
Shareholding requirement	§ Requirement increased to 200% of Total fixed pay (i.e. Fixed Pay plus Pension) within 5 years from their respective date of appointment (from 400% of salary to equivalent of 457% of salary for CEO)
	§ New requirement to hold shares worth 100% of Total fixed pay (or pro-rata thereof) for 2 years post-termination
Employment contracts	§ For new hires, asymmetry for notice periods removed i.e. 6 months from the Company and 6 months from the Director (from 12 months from the Company and 6 months from the Director)

Full details of the changes to the DRP can be found on page 65.

The full DRP is set out on pages 60 to 72.





Governance: Remuneration report

[New Directors remuneration policy at a glance](#)

### How will the new DRP be implemented?

The following charts illustrate how the vesting profiles of maximum total compensation for the Group CEO would change from the current policy to the new policy. All share awards are subject to additional holding periods following vesting, during which shares may not be sold or transferred.

Subject to shareholder approval of the new DRP, the proposed DRP will apply from the 2017 performance year.

### How will the executive Directors remuneration be structured in 2017?

#### Total fixed pay

	Fixed Pay £000	Pension £000
Jes Staley	2,350	396
Tushar Morzaria	1,650	200

#### Annual bonus

Maximum 80% of Total fixed pay

##### 2017 Performance measures and weighting:

Profit before tax excluding notable items	22.5%
CET1 ratio	22.5%
Cost:Income ratio excluding notable items	15.0%
Strategic/non-financial	20.0%
Personal objectives	20.0%

#### LTIP

Maximum 120% of Total fixed pay

##### 2017-2019 cycle performance measures and weighting:

RoTE excluding notable items	25%
CET1 ratio as at 31.12.19	25%
Cost:Income ratio excluding notable items	20%
Strategic/non-financial	15%
Risk Scorecard	15%

Governance: Remuneration report

## 2016 incentives

This section provides details of how the 2016 total incentive award decisions were made.

### 2016 pay and performance headlines

The key performance considerations which the Committee took into account in making its remuneration decisions for 2016 are highlighted below:

§ Group profit before tax was up 182% at £3,230m (2015: £1,146m)

§ Group CET1 ratio was up to 12.4% (2015: 11.4%)

§ Core profit before tax was up 60% from 2015 at £6,016m. Excluding notable items Core profit before tax was up 4% to £6,436m (2015: £6,191m), and up 10% excluding the impact of deferral changes made in 2016

§ RoTE in our Core businesses increased to 8.4% in 2016 (2015: 4.8%). Excluding notable items, Core RoTE was 9.4% (2015: 11.2%)

§ strong execution of the rundown of Non-Core resulting in a reduction in Risk Weighted Assets of £22bn. The pay outcomes and decisions can be summarised as follows:

§ total compensation costs increased 2% to £7,445m (2015: £7,301m) including the impact of the deferral changes. Excluding this impact compensation costs were down 3%

§ total incentive awards granted were slightly down at £1,533m (2015: £1,544m)

- § the level of incentive pool absorbs the material adverse impact of foreign exchange movements through the year which more than offset the impact of reductions in staff numbers in the year
- § the Core compensation to net income ratio improved to (excluding notable items) 32.7% (2015: 34.0%) excluding the impact of deferral changes, increasing slightly to 34.7% including the impact of these changes
- § Group compensation to net income ratio (excluding notable items) was 40.2% (2015: 37.7%) driven by Non-Core income reduction as it runs down
- § Corporate and Investment Bank (CIB) front office incentive awards were also slightly down at £875m (2015: £884m). Excluding the impact of deferral changes made in 2016, CIB compensation to net income ratio (excluding notable items) was 39.2% (2015: 40.3%)
- § there has been continued strong differentiation on the basis of individual performance to allow the Group to more effectively manage compensation costs.

#### **2016 total incentive award decisions**

The Committee's 2016 incentives decisions took full consideration of financial and non-financial performance and also the material repositioning of incentives undertaken since 2010. Since 2010, the Group incentive pool has declined steadily, from £3,484m in 2010 to £1,533m in 2016 – a decrease of 56% over six years.

#### Notes

- a. Part of the reduction in incentive pools in 2014 was due to the introduction of RBP.
- b. The 2015 Group incentive pool has been restated from £1,669m to reflect the treatment of Africa Banking as a discontinued operation. The 2010 – 2014 Group incentive pools have not been restated.

Governance: Remuneration report

## 2016 incentives

**Total incentive awards granted – current year**

	Barclays Group		% change
	Year ended 31.12.16	Year ended 31.12.15	
	£m	£m	
<b>Incentive awards granted</b>			
Bonus pool	1,459	1,453	0
Commissions and other incentives <sup>a</sup>	74	91	19
<b>Total incentive awards granted</b>	<b>1,533</b>	1,544	1
Proportion of bonus pool that is deferred %	30	46	
<b>Reconciliation of incentive awards granted to income statement charge:</b>			
Less: deferred bonuses granted but not charged in current year	(300)	(665)	55
Add: current year charges for deferred bonuses from previous years	690	856	19
Other <sup>b</sup>	(26)	26	
<b>Income statement charge for performance costs<sup>c</sup></b>	<b>1,897</b>	1,761	(8)
<b>Total compensation costs<sup>d,e</sup></b>	<b>7,445</b>	7,301	(2)
<b>Total compensation costs before the impact of deferral changes<sup>d,e</sup></b>	<b>7,050</b>	7,301	3
Notes			

aAwards included in 2015 as commitments are now reflected in Bonus pool for consistency with 2016.

bDifference between incentive awards granted and Income Statement charge for commissions and other incentives.

cIncludes the £395m impact of changes to deferral arrangements.

d2015 total compensation costs have been adjusted to exclude the impact of a £429m gain on valuation of a component of the defined benefit liability.

eIn addition £212m of Group compensation (2015: £236m) was capitalised as internally generated software.

**Changes to deferral arrangements**

From 2016 onwards, costs in relation to deferred bonuses are expensed from the performance year in respect of which they are granted. Approximately 33% of deferred bonus costs will be taken in the year of performance, being the year prior to granting (previously 0%). This acceleration of future cost immediately improves the link between in-year performance costs and the size of the incentive pool.

The relationship between in-year performance costs and changes in the incentive pool will be further improved through a change to harmonise the deferral approach for all staff across the Group, creating internal consistency. Historically, we have applied deferral levels significantly higher than those required by our regulators for bonus payments made specifically to senior staff in our Investment Bank, making them defer 100% of incentive awards over at least three years, with nothing paid at all in the year in which the performance is delivered. This meant that any change to the Investment Bank pool in incentive awards to those staff had limited impact on the in-year performance costs recognised in our accounts. This approach also put us out of step with peer practice where deferral levels are typically lower. Our new Group deferral approach ensures that all staff will defer at least what is required by our regulators, while all of our highest paid staff will continue to defer more than is required to preserve the strong alignment to future Group performance. This change means that any change in incentive awards will now have a direct and immediate impact on performance costs for the year when the charge is made.

The alignment of deferral levels across the Group also helps from a global competitive perspective given the differences in approach being adopted by the different regulatory regimes. The differences have widened given the recent changes in the UK e.g. the increase in deferral duration to seven years for PRA Senior Managers and to five years for many other MRTs (from three years previously). Harmonising our deferral approach makes the delivery less uncompetitive outside the UK while importantly maintaining our responsibility to all our stakeholders.

### Impact of deferral changes

	Barclays Group	
	Year ended 31.12.16	Year ended 31.12.15
<b>Barclays Group</b>	%	%
Compensation costs as a % of net income (excluding notable items)		
Before impact of deferral changes	38.1	37.7
After impact of deferral changes	40.2	37.7
<b>Barclays Core</b>	%	%
Compensation costs as a % of net income (excluding notable items)		
Before impact of deferral changes	32.7	34.0
After impact of deferral changes	34.7	34.0

Governance: Remuneration report

Remuneration policy for all employees

This section sets out Barclays' remuneration policy for all employees, explaining the philosophy underlying the structure of remuneration packages, and how this links remuneration to the achievement of sustained high performance and long-term value creation.

**Remuneration philosophy**

In October 2015, the Committee formally adopted a revised, simplified remuneration philosophy which articulates Barclays' overarching remuneration approach and is set out below.

**Barclays' remuneration philosophy**

Attract and retain talent needed to deliver Barclays' strategy	Long-term success depends on the talent of our employees. This means attracting and retaining an appropriate range of talent to deliver against our strategy, and paying the right amount for that talent
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Align pay with investor interests	Ensure employees' interests are aligned with those of investors (equity and debt holders), both in structure and the appropriate balance of returns
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Reward sustainable performance	Sustainable performance means making a positive contribution to stakeholders, in both the short and longer term, playing a valuable role in society
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Support Barclays Values and culture	Results must be achieved in a manner consistent with our Values. Our Values and culture should drive the way that business is conducted
Align with risk appetite, risk exposure and conduct expectations	Designed to reward employees for achieving results in line with the Bank's risk appetite and conduct expectations
Be clear, transparent and as simple as possible	All employees and stakeholders should understand how we reward our employees. Remuneration structures should be as simple as possible so that everyone can understand how they work and the behaviours they reward

### Culture and remuneration

Barclays' remuneration philosophy links remuneration to achieving sustained high performance and creating long-term value. Our remuneration philosophy applies to all employees globally across Barclays and aims to reinforce our belief that effective performance management is critical to enabling the delivery of our business strategy in line with our Values. Employees who adhere to the Barclays Values and contribute to Barclays' success are rewarded accordingly.

This is achieved by basing performance assessment on clear standards of delivery and behaviour, and starts with employees aligning their objectives (what they will deliver) to business and team goals in order to support the delivery of the business strategy and good customer outcomes. Behavioural expectations (how people will achieve their objectives) are set in the context of our Values.

Individual performance is assessed against both financial and non-financial criteria. Other factors are also taken into consideration within the overall performance assessment, including core job responsibilities, behaviours towards risk and control, colleague and stakeholder feedback as well as input from the Risk and Compliance functions, where appropriate.

Through our performance management approach we emphasise the equal importance of both what an individual has delivered as well as how they have achieved this, encouraging balanced consideration of each dimension. Both of these elements are assessed and rated independently of each other. In 2016 we eliminated the requirement to have an overall rating which should allow for more robust and reflective conversations between managers and team members on the individual components of performance.

A key part of the performance management philosophy promotes ongoing quality dialogue throughout the year. This helps manage performance messages effectively and allows for more timely recognition as well as appropriate coaching and support where needed.

By linking individual performance assessment to Barclays' strategy and our Values and, in turn, to remuneration decisions, a clear alignment between what we are striving to achieve, how we go about this, and ultimately, how we recognise this in individual financial terms is achieved.

## **Risk, conduct and remuneration**

Another key feature of our remuneration philosophy is the alignment of remuneration with our risk appetite and with the conduct expectations of Barclays, our regulators and stakeholders. The Committee takes risk and conduct events very seriously and ensures that there are appropriate adjustments to individual remuneration and, where necessary, the incentive pool.

The Remuneration Review Panel, which reports to the Committee, supports the Committee in this process. The Panel is chaired by the Chief Risk Officer and includes senior representatives from the key control functions of Risk, Compliance, Internal Audit, Legal and HR as well as the CEOs of Barclays UK and Barclays International. It sets the policy and processes for assessing compensation adjustments for risk and conduct events.

We have robust processes for considering risk and conduct as part of individual performance management processes with outcomes reflected in individual remuneration decisions. Line managers have primary accountability for ensuring the risk and conduct issues are considered when assessing performance and making remuneration decisions. In addition, there is a secondary review by the control functions for individuals involved in significant failures of risk management, conduct issues, regulatory actions or other major incidents which impact either the Group or business to ensure these issues are also considered. When considering individual responsibility, a variety of factors are taken into account such as whether an individual was directly responsible or whether the individual, by virtue of seniority, could be deemed indirectly responsible, including staff who drive the Group's culture and set its strategy.

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Governance: Remuneration report

Remuneration policy for all employees

**Actions which may be taken where risk management and conduct falls below required standards include:**

**Adjustment** Current year annual bonuses are adjusted downwards where individuals are found to be responsible (either directly or indirectly) in a risk or misconduct event.

**Malus** Deferred unvested bonuses from prior years are subject to malus provisions which enable the Committee to reduce the vesting level of deferred bonuses (including to nil) at its discretion. Events which may lead the Committee to do this include, but are not limited to, employee misconduct or a material failure of risk management.

**Clawback** Clawback applies to any variable remuneration awarded to a PRA Material Risk Taker (MRT) on or after 1 January 2015 in respect of years for which they are a MRT. Barclays may apply clawback if, at any time during the seven year period from the date on which variable remuneration is awarded to a MRT: (i) there is reasonable evidence of employee misbehaviour or material error, and/or (ii) the firm or the business unit suffers a material failure of risk management, taking account of the individual's proximity to and responsibility for that incident.

Clawback may be extended to 10 years for PRA Senior Managers where there are outstanding internal or regulatory investigations at the end of the 7 year clawback period.

Where possible, an adjustment will be made to current year annual bonus, before the application of malus and then clawback.

In addition to reductions to individuals' bonuses, the Committee considers and makes collective adjustments to the incentive pool for specific material risk and conduct events. In 2016, the impact of these collective adjustments, resulting from both the direct financial impact on performance and the additional adjustments applied by the Committee, is a reduction of £150m.

We have also adjusted the incentive pool to take account of an assessment of a wide range of future risks including conduct, non-financial factors that can support the delivery of a strong risk environment, control and conduct culture and other factors including reputation, impact on customers, markets and other stakeholders.

### **Remuneration levels**

Barclays is a long-standing supporter of the Living Wage. As an accredited Living Wage employer, Barclays commits to ensure that all permanent UK employees and those UK employees of third party contractors who provide services to us at our sites, are paid at least the current London or UK Living Wage. This is a commitment which we have also extended to all our UK employed apprentices.

Barclays is also fully committed to addressing pay inequality. Barclays' work in this area is illustrated by recent union pay deals and the repositioning of the incentive pools over recent years. Over the past few years, we have consciously redirected the bonus pool funding, providing proportionally more to junior employees.

For UK employees, average Total Compensation (fixed pay plus bonus) for Managing Directors has reduced materially since 2010 (broadly in line with the reduction in the incentive pool). Over the same period, junior populations have been protected and have seen small increases in Total Compensation despite a challenging business environment. Similarly, salaries have been consciously increased for those within lower corporate grades within the UK. The UK pay deal which was in place for the 2014-2016 period provided non-management populations (primarily outside of the Investment Bank) with a 7.5% merit increase over the three-year period. A new three-year pay deal with Unite was reached in January 2017 which commits for the non-management population to a 7.5% merit increase over the 2017-2019 period and also commits to a minimum increase of 10% for the most junior graded employees.

### **Remuneration structure**

The remuneration structure for employees is closely aligned with that for executive Directors, set out in detail in the DRP which is at pages 60 to 72 of this report and for which shareholder approval is being sought at the 2017 AGM. The primary exception being that the executive Directors participate in the Barclays' LTIP.

Employees receive salary, pension and other benefits and are eligible to be considered for an annual bonus. Employees in some customer-facing businesses participate in formulaic incentive plans including plans which have good customer outcomes as the primary performance measure. The plans also recognise how results have been achieved in line with Barclays' Values. Some senior employees also receive RBP. For executive Directors, under the new DRP, salary and RBP are replaced by Fixed Pay. Remuneration of MRTs is subject to the 2:1 maximum ratio of variable to total fixed pay. A total of 1,561 (2015: 1,523) individuals were MRTs in 2016.

The remuneration of employees engaged in control functions is determined independently from the business they support and within the parameters of the incentive pool allocated to them by the Committee.

## Fixed remuneration

**Salary** Salaries reflect individuals' skills and experience and are reviewed annually in the context of annual performance assessment. They are increased where justified by role change, increased responsibility or a change in the appropriate market rate.

Salaries may also be increased in line with local statutory requirements and in line with union and works council commitments.

**Role Based Pay (RBP)** A small number of senior employees receive a class of fixed pay called RBP to recognise the seniority, breadth and depth of their role.

**Pension and benefits** The provision of a competitive package of benefits is important to attracting and retaining the talented staff needed to deliver Barclays' strategy. Employees have access to a range of country-specific company-funded benefits, including pension schemes, healthcare, life assurance and Barclays' share plans as well as other voluntary employee funded benefits. The cost of providing these benefits is defined and controlled.

## Variable remuneration

**Annual bonus** Annual bonuses incentivise and reward the achievement of Group, business and individual objectives, and reward employees for demonstrating individual behaviours in line with Barclays Values.

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The ability to recognise performance through variable remuneration enables the Group to control its cost base flexibly and to react to events and market circumstances. Bonuses remain a key feature of remuneration practice in the highly competitive and mobile market for talent in the financial services sector. The Committee is careful to control the proportion of variable to fixed remuneration paid to individuals.

From 2016, the typical deferral structures are:

For MRTs:		For non-MRTs:	
Incentive award	Amount deferred	Incentive award	Amount deferred
< £500,000	40% of total award	Up to £65,000	0%
£500,000 to £1,000,000	60% of total award	> £65,000	Graduated level of deferral
<sup>3</sup> £1,000,000	60% up to £1,000,000		
	100% above £1,000,000		

Deferred bonuses are generally delivered in equal portions as deferred cash and deferred shares subject to the rules of the deferred cash and share plans (as amended from time to time) and continued service. From 2016, deferred bonuses are subject to either a 3, 5 or 7 year deferral period in line with regulatory requirements.

### Share plans

Alignment of senior employees with shareholders is achieved through deferral of incentive pay. We also encourage wider employee shareholding through the all-employee share plans. 82% of the global employee population (excluding Africa) is eligible to participate.

Governance: Remuneration report

[Directors remuneration policy](#)

This section sets out the proposed new Barclays forward-looking remuneration policy for Directors, which has evolved from the existing policy and explains each element of remuneration and how it operates. The policy described in this section is intended to apply for three years beginning on the date of the 2017 AGM, subject to shareholder approval.

The existing policy can be found on pages 100 to 110 of the 2013 Annual Report or at [home.barclays/annualreport](http://home.barclays/annualreport).

## Remuneration policy for executive Directors

[Element and purpose](#)   [Operation](#)

[Maximum value and performance measures](#)

### A. Fixed pay

<p><b>Fixed Pay</b></p> <p>To reward skills and experience appropriate for the breadth and depth of the role and to provide the basis for a competitive remuneration package</p>	<p>Fixed Pay is determined with reference to market practice and historical market data (on which the Committee receives independent advice), and reflects the individual's experience and role.</p> <p>Executive Directors' total compensation is benchmarked against comparable roles in the following banks: Bank of America, BNP Paribas, Citigroup, Credit Suisse, Deutsche Bank, HSBC, JP Morgan Chase &amp; Co, Lloyds, Morgan Stanley, Standard Chartered and UBS. The Committee may amend the list of comparator companies to ensure it remains relevant to Barclays or if circumstances make this necessary (for example, as a result of takeovers or mergers).</p>	<p>Fixed Pay for executive Directors is set within the benchmark range determined by the Committee taking into account their experience and performance.</p> <p>The maximum Fixed Pay is £2,350,000 for Jes Staley (Group Chief Executive) and £1,650,000 for Tushar Morzaria (Group Finance Director).</p>
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50% of Fixed Pay is delivered in cash (paid monthly), and 50% is delivered in shares. The shares are delivered quarterly and are subject to a holding period with restrictions lifting over five years (20% each year). As the executive Directors beneficially own the shares, they will be entitled to any dividends paid on those shares.

These amounts are fixed and will not change during the policy period for these individuals.

There are no performance measures.

Malus and clawback provisions do not apply to Fixed Pay.

### **Pension**

To enable executive Directors to build long-term retirement savings

Executive Directors receive an annual cash allowance in lieu of participation in a pension arrangement.

The maximum annual cash allowance is £396,000 for Jes Staley (Group Chief Executive) and £200,000 for Tushar Morzaria (Group Finance Director).

These amounts are fixed and will not change during the policy period for these individuals.

### **Benefits**

To provide a competitive and cost effective benefits package appropriate to the role and location

Executive Directors' benefits provision includes, but is not restricted to, private medical cover, annual health check, life and ill health income protection, car cash allowance, and use of a Company vehicle and driver when required for business purposes.

The maximum value of the benefit is determined by the nature of the benefit itself and costs of provision may depend on external factors, e.g. insurance costs.

In addition to the above, if an executive Director were to relocate, additional support would be provided for a defined and limited period of time in line with Barclays' general employee mobility policy including, but not restricted to, the provision of temporary accommodation, tax advice, home leave related costs, payment of removal costs and relocation flights for the executive Director, spouse and children. Barclays will pay the executive Director's tax on the relocation costs but will not tax equalise and will also not pay the tax on any other employment income.

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Remuneration policy for executive Directors continued

Element and purpose	Operation	Maximum value and performance measures
<b>B. Variable pay</b>		
<p><b>Annual bonus</b></p> <p>To reward delivery of short-term financial targets set each year, the individual performance of the executive Directors in achieving those targets, and their contribution to delivering Barclays strategic objectives</p> <p>Delivery in part in shares with a holding period increases alignment with shareholders. Deferred bonuses encourage longer term focus and retention</p>	<p><b>Determination of annual bonus</b></p> <p>Individual bonuses are discretionary and decisions are based on the Committee's judgement of executive Directors' performance in the year, measured against Group and personal objectives.</p> <p><b>Delivery structure</b></p> <p>Annual bonuses are delivered as a combination of cash and shares, a proportion of which may be deferred and/or subject to a holding period.</p> <p>Deferral proportions and vesting profiles will be structured so that, in combination with any LTIP award, the proportion of variable pay that is deferred is no less than that required by regulations.</p>	<p>The maximum annual bonus opportunity is 80% of Total fixed pay. For these purposes Total fixed pay is Fixed Pay plus Pension.</p> <p>The performance measures by which any executive Director's bonus is assessed include financial and non-financial measures which also include risk-related measures and personal objectives. In making its assessment of any bonus, the Committee will consider financial factors to guide at least 60% of the bonus opportunity. Any bonus is discretionary and any amount may be awarded from zero to the maximum value.</p>



Deferred bonuses are granted by the Committee (or an authorised sub-committee) at its discretion, subject to the relevant plan rules as amended from time to time.

The Committee has the discretion to vary the measures and their respective weightings within each category. The measures and weightings will be disclosed annually as part of the Annual report on Directors remuneration.

Dividend equivalents, in the form of additional shares, are payable on the vested deferred bonus shares, equal to the dividends paid or payable between the award date and the relevant release date. If dividend equivalents are not permissible under regulations, the number of deferred bonus shares to be awarded will be based on a share price discounted by reference to an expected dividend yield over the vesting period. In such circumstances, the Committee has discretion to reduce (not increase) the number of shares that vest if actual dividends paid over the period are materially lower than the original dividend assumption.

A notional discount may be applied to the deferred bonus awards for the purposes of calculating the 2:1 cap to the extent this is permitted by regulations (currently a discount is permitted on up to 25% of variable pay where the conditions for applying such a discount are met).

#### **Operation of risk and conduct adjustment, malus and clawback**

Any bonus awarded will reflect appropriate consideration in relation to Group risk and conduct events. Individual bonus decisions may also reflect appropriate reductions in relation to specific risk and conduct events. Any bonus is also subject to malus and clawback provisions.

The malus provisions enable the Committee to reduce the amount of unvested bonus (including to nil) prior to the unvested bonus vesting in specified circumstances, including, but not limited to:

§ a participant deliberately misleading Barclays, the market and/or shareholders in relation to the financial

performance of the Barclays Group

§ a participant causing harm to Barclays' reputation or where his/her actions have amounted to misconduct, incompetence or negligence

§ a material restatement of the financial statements of the Barclays Group or any subsidiary, or the Group or any business unit suffering a material downturn in its financial performance

§ a material failure of risk management in the Barclays Group

§ a significant deterioration in the financial health of the Barclays Group

Governance: Remuneration report

[Directors remuneration policy](#)

## Remuneration policy for executive Directors continued

Element and purpose

Operation

Maximum value and performance measures

### B. Variable pay continued

The clawback provisions enable amounts to be recovered after they have vested (for a period of seven years from grant/ten years in specified circumstances e.g. where a relevant investigation is ongoing at the end of the initial seven year period) in circumstances where (i) a participant's actions or omissions have amounted to misbehaviour and material error and/or (ii) Barclays or the relevant business unit has suffered a material failure of risk management.

#### Timing of receipt

Non-deferred cash components of any bonus are paid following the performance year to which they relate, normally in March. Non-deferred share bonuses are also awarded normally in March and are subject to a holding period (after the payment of tax) in line with regulations and with release no faster than permitted by regulations (currently minimum of six months, increasing to one year for the 2017 performance year).

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Deferred share bonuses are structured so that no deferred shares vest faster than permitted by regulations (currently in five equal tranches with the first vesting on or around the third anniversary of grant and the last tranche vesting on or around the seventh anniversary of grant). Vesting is also subject to the provisions of the plan rules including employment and the malus and clawback provisions (as explained above). Any shares that vest are subject to an additional holding period (after payment of tax) in line with regulations and with release no faster than permitted by regulations (currently minimum of six months, increasing to one year for the 2017 performance year).

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## Remuneration policy for executive Directors continued

Element and purpose	Operation	Maximum value and performance measures
<b>B. Variable pay continued</b>		
<p><b>Long Term Incentive Plan (LTIP) award</b></p> <p>To reward execution of Barclays' strategy over a multi-year period</p> <p>Long-term performance measurement, deferral and holding periods encourage a long-term view and align executive Directors' interests with those of shareholders. Malus and clawback provisions discourage excessive risk-taking and inappropriate behaviours</p>	<p><b>Determination of LTIP award</b></p> <p>LTIP awards are made by the Committee following discussion of recommendations made by the Chairman (for the Group Chief Executive's LTIP award) and by the Group Chief Executive (for other executive Directors LTIP awards) based on satisfactory performance over the prior year.</p> <p><b>Delivery structure</b></p> <p>LTIP awards are granted subject to the plan rules and are satisfied in Barclays' shares (although they may be satisfied in other instruments as may be required by regulation).</p> <p>LTIP awards are structured so that when combined with the annual bonus the proportion of variable pay that is deferred is no less than that required by regulations.</p>	<p>The maximum annual LTIP award is 120% of Total fixed pay. For these purposes Total fixed pay is Fixed Pay plus Pension.</p> <p>Vesting is dependent on performance measures and service.</p> <p>Forward-looking performance measures will be based on financial performance and other long-term strategic measures. The Committee has discretion to change the weightings but financial measures will be at least 70% of the total opportunity. Measures and weightings will be set in advance</p>

For each award, forward-looking performance measures are set at grant and there is no retesting allowed of those conditions. The Committee has, within the parameters set out opposite, the flexibility to vary the weighting of performance measures and calibration for each award prior to its grant.

The Committee has discretion, and in line with the plan rules approved by shareholders, in exceptional circumstances to amend targets, measures, or the number of awards if an event happens (for example, a major transaction) that, in the opinion of the Committee, causes the original targets or measures to be no longer appropriate or such adjustment to be reasonable. The Committee also has the discretion to reduce the vesting of any award, including to nil, if it deems that the outcome is not consistent with performance delivered.

Dividend equivalents, in the form of additional shares, are payable on the vested deferred shares, equal to the dividends paid or payable between the award date and the relevant release date. If dividend equivalents are not permissible under regulations, the number of shares to be awarded will be based on a share price discounted by reference to an expected dividend yield over the vesting period. In such circumstances, the Committee has discretion to reduce (not increase) the number of shares that vest if actual dividends paid over the period are materially lower than the original dividend assumption.

A notional discount may be applied to LTIP awards for the purposes of calculating the 2:1 cap to the extent this is permitted by regulations (currently a discount is permitted on up to 25% of variable pay where the conditions for applying such a discount are met).

### **Operation of malus and clawback**

The achievement of performance measures determines the extent to which LTIP awards will vest. Awards are also subject to malus during the vesting period and

of each grant. The threshold and maximum level of performance for each financial performance measure will be disclosed annually as part of the Annual report on Directors remuneration. Straight-line vesting applies between threshold and maximum for the financial measures and weightings with no more than 25% vesting at threshold performance.

clawback for a period of seven years (10 years in specific circumstances) from the date of award which enables the Committee to reduce the vesting level of awards (including to nil). This is explained further in the annual bonus paragraphs above.

### **Timing of receipt**

Barclays LTIP awards are structured so that no award vests before the third anniversary of grant and an award vests no faster than permitted by regulations (currently in five equal tranches with the first tranche vesting on or around the third anniversary of grant and the last tranche vesting on or around the seventh anniversary of the grant date). Any shares that vest are subject to an additional holding period (after payment of tax) in line with regulations, with restrictions lifting no faster than permitted by regulations (currently minimum of six months, increasing to one year for the 2017 performance year).

Governance: Remuneration report

[Directors remuneration policy](#)

## Remuneration policy for executive Directors continued

Element and purpose	Operation	Maximum value and performance measures
<b>C. Other</b>		
<b>All employee share plans</b>	Executive Directors are entitled to participate in:	<p>(i) Savings between £5 and the maximum set by Barclays (which will be no more than the HMRC maximum) per month. There are no performance measures.</p> <p>(ii) Contributions of between £10 and the maximum set by Barclays (which will be no more than the HMRC maximum) per tax year which Barclays may match up to HMRC maximum (current match is £600). There are no performance measures.</p>
To provide an opportunity for executive Directors to voluntarily invest in the Company through UK HMRC employee tax advantaged share schemes	<p>(i) Barclays Sharesave under which they can make monthly savings over a period of three or five years linked to the grant of an option over Barclays shares which can be at a discount of up to 20% on the share price set at the start.</p> <p>(ii) Barclays Sharepurchase under which they can make contributions (monthly or lump sum) out of pre-tax pay (if based in the United Kingdom) which are used to acquire Barclays shares.</p>	
<b>Previous legacy awards</b>	Awards granted and/or payments agreed at a time where a previous policy, approved by shareholders, was in place, may be released and/or paid in accordance with such previous policy notwithstanding that such awards and/or payments may not be in line with the new policy described above.	In line with existing arrangements.
To honour existing awards and payments		



**Shareholding requirement**

To further enhance the alignment of shareholders and executive Directors interests in long-term value creation

Executive Directors must build up a shareholding of 200% of Total fixed pay (i.e. Fixed Pay plus Pension) within five years from the date of appointment as executive Director. They have a reasonable period to build up to this requirement again if it is not met because of a significant share price depreciation.

Barclays shares worth a minimum of 200% of Total fixed pay must be held within five years plus a shareholding of 100% of Total fixed pay (or pro-rata thereof) for two years post termination.

Executive Directors must also continue to hold a shareholding for two years post-termination as follows:

(i) if the executive Director has been employed for more than five years: 100% of Total fixed pay; or

(ii) if the executive Director has been employed for less than five years: either

(a) grow their holding to the pro-rated requirement if the pro-rated requirement has not been met. Directors would only be allowed to sell shares to pay for tax liabilities which crystallise when deferred awards vest on or after termination; or

(b) if the pro-rated requirement has been exceeded, executive Directors would be allowed to sell shares above this requirement and also sell shares to pay for tax liabilities which crystallise when deferred awards vest on or after termination.

Shares that count towards the requirement are beneficially owned shares including any vested share awards subject only to holding periods (including vested LTIPs, vested deferred share bonuses, Fixed Pay shares, and RBP shares). Shares from unvested deferred share bonuses and unvested LTIPs do not count towards the requirement.

<b>Outside appointments</b>	Executive Directors may accept one non-executive Director board appointment in another listed company.	Not applicable.
To encourage self-development and allow for the introduction of external insight and practice	The Chairman's approval must be sought before accepting an appointment. Fees may be retained by the executive Director. Neither of the executive Directors currently hold an outside appointment.	

## Notes to the table on pages 60 to 64

### Performance measures and targets

The Committee select financial performance measures which are fundamental to delivery against the Bank's strategy and are considered to be the most important financial measures used by the executive Directors to oversee the direction of the business. The non-financial performance measures and sources of data are chosen to represent key indicators of sustainable performance that are robustly monitored and reported on to management. The measures are determined in consultation with major shareholders.

Financial targets are set to be stretching but achievable and are aligned to enhancing shareholder value. In respect of the LTIP, the financial measures, weightings and targets will be disclosed at the start of the relevant performance period. In respect of the annual bonus, the financial measures and weightings will be disclosed at the start of the relevant performance year. The Committee is of the opinion that the financial targets for the annual bonus are commercially sensitive in respect of the Company and that it would be detrimental to disclose details at the start of the relevant performance year. Performance against the targets will be disclosed at the end of the relevant performance year in that year's remuneration report, subject to commercial sensitivity no longer remaining.

The existing Balanced Scorecard has evolved into a Performance Measurement framework which better reflects progress towards our strategic and non-financial goals. Enhancements to the available sources of management information and reporting, ranging from internal dashboards to external third party measures, allows for a more holistic view of sustainable business performance, rather than focusing on a few narrowly defined targets. The evaluation will focus on key performance measures (many continuing from the Balanced Scorecard), with a detailed retrospective disclosure on progress throughout the period against each category, together with supporting rationale for payments.

### Changes in remuneration policy for 2017

The following table provides a summary of the changes to the DRP for 2017:

Element	Change	Rationale for change
<b>Fixed Pay</b>	<ul style="list-style-type: none"> <li>§ Consolidate salary and RBP into a single Fixed Pay element (delivered 50% in cash and 50% in shares subject to a 5 year holding period lifting pro-rata).</li> <li>§ Fixed Pay will not change during the policy period for either of the current</li> </ul>	§ Simplicity, transparency.

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executive Directors.

<b>Pension</b>	<p>Continue pension allowance as a separate allowance:</p> <p style="padding-left: 20px;">for existing executive Directors, amount unchanged but fixed for the duration of this policy</p> <p style="padding-left: 20px;">for new hires, pension allowance limited to 10% of Fixed Pay.</p>	<p>§ Supports simplified approach to fixed pay.</p>
<b>Variable pay</b>	<p>§ Combine annual bonus and LTIP for deferral purposes, while retaining maximum variable at 200% of Total fixed pay and 60:40 split between maximum LTIP and annual bonus.</p> <p>§ Performance measures</p> <p style="padding-left: 20px;">Bonus: financial performance measures at least 60%.</p> <p style="padding-left: 20px;">LTIP: financial performance measures at least 70%.</p> <p>§ Dividends</p> <p style="padding-left: 20px;">Where regulatory constraints prevent dividend alignment, use discounted share price to calculate number of shares under award.</p> <p style="padding-left: 20px;">Committee has discretion to reduce the number of shares that vest if actual dividends paid are materially lower than original dividend assumption.</p>	<p>§ Mitigates the global competitive impact of longer deferral periods and holding periods under the PRA Remuneration Rules and the EBA Guidelines on sound remuneration policies</p> <p>§ Simplicity, transparency.</p> <p>§ Recreates shareholder alignment lost through regulatory dividend prohibition.</p>
<b>Shareholding requirement</b>	<p>§ Increase requirement to 200% of Total fixed pay (i.e. Fixed Pay plus Pension) from 400% of Salary.</p> <p>§ Introduce shareholding requirement of 2 years post termination of 100% of Total fixed pay (or pro-rata thereof).</p>	<p>§ Longer and stronger shareholder alignment (equivalent to 457% of salary for CEO).</p>
<b>Employment contracts</b>	<p>§ For new hires, 6 months notice from the Company and 6 months notice from the executive Director.</p>	<p>§ Remove asymmetry for notice periods.</p> <p>§ Alignment between the employee and the Company.</p>
<b>Leavers</b>	<p>§ Apply eligible leaver treatment to deferred bonus and LTIP awards from 5 years (except for termination for gross misconduct). Ability to apply malus for the full vesting period maintained.</p>	<p>§ Partially mitigates the global competitive impact of longer deferral periods (increasing from 3 years to 7 years) and holding periods under the PRA Remuneration Rules and the EBA Guidelines respectively.</p>

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§ Pro-ration of LTIP for eligible leavers retained but based on 4 year performance period, i.e. includes assessment period prior to grant.

§

Clawback extended to 10 years in specific circumstances.

§ Alignment to the EBA Guidelines for performance assessment prior to award.

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Governance: Remuneration report

[Directors remuneration policy](#)

### **Differences between the remuneration policy of the executive Directors and the policy for all employees of the Barclays Group**

The structure of remuneration packages for executive Directors is closely aligned with that for the broader employee population. Employees receive salary, pension and benefits and are eligible to be considered for a bonus and to participate in all-employee share plans. The broader employee population typically does not have a contractual limit on the quantum of remuneration and does not receive RBP which is paid only to some, but not all, MRTs and other senior employees. Under the new DRP, executive Directors do not receive RBP.

As with executive Directors, variable pay for the broader employee population is performance based. Variable pay for executive Directors and the broader employee population are subject to deferral requirements. Executive Directors and other MRTs are subject to deferral at a minimum rate of 40% (for variable pay of less than £500,000) or 60% (for variable pay between £500,000 and £1,000,000) or 60% up to £1,000,000 and 100% above £1,000,000 (for variable pay of more than £1,000,000). For non-MRTs, bonuses in excess of £65,000 are currently subject to a graduated level of deferral. The terms of deferred bonus awards for executive Directors and the wider employee population are broadly the same, in particular the vesting of all deferred bonuses (subject to service and malus conditions).

The broader employee population does not currently participate in the Barclays LTIP.

### **How shareholder views and broader employee pay are taken into account by the Committee in setting policy and making remuneration decisions**

We recognise that remuneration is an area of particular interest to shareholders and that in setting and considering changes to remuneration it is critical that we listen to and take into account their views. Accordingly, a series of meetings are held each year with major shareholders and shareholder representative groups. The Committee Chairman attends these meetings, accompanied by senior Barclays employees (including the Group Reward and Performance Director and the Company Secretary). The Committee notes that shareholder views on some matters are not always unanimous, but values the insight and engagement that these interactions provide, including the expression of sometimes different views. This engagement is meaningful and helpful to the Committee in its work and contributes directly to the decisions made by the Committee. Shareholders' feedback has been incorporated into the new DRP.

The Committee takes account of the pay and employment conditions of the broader employee base when it considers the remuneration of the executive Directors. The Committee receives and reviews analyses of summary remuneration proposals for employees across all of the Group's businesses. When the Committee considers executive Directors remuneration, it therefore makes that consideration in the context of a detailed understanding of remuneration for the broader employee population to ensure consistency throughout the Group.



## Executive Directors policy on recruitment

Barclays operates in a highly specialised sector and many of its competitors for talent are outside of the United Kingdom. The Committee's approach to remuneration on recruitment is to pay no more than is necessary to attract the best candidates to the role.

Approval of the remuneration packages offered on appointment to any new executive Director is a specific requirement of the Committee's Terms of Reference. The terms of such packages must be approved by the Committee in consultation with the Chairman and (except for the terms of his own remuneration) the Group Chief Executive.

Any new executive Director's package would include the same elements as those of the existing executive Directors, as shown below.

### Element of remuneration

### Commentary

### Maximum value

#### Fixed Pay

Determined by experience, market practice, market conditions and ability to recruit.

As determined by the Committee with reference to these factors. Fixed Pay will only exceed amounts paid to current executive Directors, as considered reasonable by the Committee, by reference to these factors.

If on appointment Fixed Pay is equal to or greater than maximum stated for the relevant role in the policy (for current executive Director), no changes are allowed over the policy period.

If on appointment Fixed Pay is at a level below the maximum stated for the relevant role in the policy (for current executive Director), the



Committee retains the discretion to realign Fixed Pay over a transitional period which may mean that annual Fixed Pay increases for the new appointee are required up to such maximum amounts.

<b>Pension</b>	In line with policy.	10% of Fixed Pay.
<b>Benefits</b>	In line with policy.	In line with policy.
<b>Annual Bonus</b>	In line with policy.	80% of Total fixed pay.
<b>Long Term Incentive Plan</b>	In line with policy.	120% of Total fixed pay.
<b>Buy-out</b>	<p>The Committee can consider buying out forfeited bonus opportunity or incentive awards that the new executive Director has forfeited as a result of accepting the appointment with Barclays, subject to proof of forfeiture where applicable.</p> <p>As required by the PRA Remuneration Rules, any award made to compensate for forfeited remuneration from the new executive Director's previous employment may not be more generous than, and must mirror as far as possible the expected value, timing and form of delivery of, the terms of the forfeited remuneration and must be in the best long-term interests of Barclays. Barclays' deferral policy shall however apply as a minimum to any buy-out of annual bonus opportunity.</p>	<p>The value of any buy-out is not included within the maximum incentive levels above since it relates to a buy-out of forfeited bonus opportunity or incentive awards from a previous employer.</p>

Where a senior executive is promoted to the Board, his or her existing contractual commitments agreed prior to his or her appointment may still be honoured in accordance with the terms of the relevant commitment including vesting of any pre-existing deferred bonus or long-term incentive awards.

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[Directors remuneration policy](#)

### Executive Directors policy on payment for loss of office (including or following a takeover)

The Committee's approach to payments in the event of termination is to take account of the individual circumstances including the reason for termination, individual performance, contractual obligations and the terms of the deferred bonus plans and LTIPs in which the executive Director participates.

### Provisions relating to executive Directors' termination

Standard provision	Policy	Details
<b>Notice periods in executive Directors' service contracts</b>	<p>For existing executive Directors, twelve months notice from the Company and six months notice from the executive Director.</p> <p>For new executive Director hires, six months notice from the Company and six months notice from the executive Director.</p>	<p>Executive Directors may be required to work during the notice period or may be placed on garden leave or, if not required to work the full notice period, may be provided with pay in lieu of notice (subject to mitigation where relevant).</p>
<b>Pay during notice period or payment in lieu of notice per service contracts</b>	<p>Fixed Pay payable and continuation of pension and other contractual benefits while an employee during notice period.</p>	<p>Fixed Pay delivered in cash is payable in phased instalments (or lump sum) and subject to mitigation if paid in instalments and executive Director obtains alternative employment during the notice period or while on garden leave.</p> <p>Fixed Pay delivered in shares is delivered on the next quarterly delivery date and is pro-rated for the number of days from the start of the relevant quarter to the termination date. Where Barclays elects to terminate the employment with immediate effect by making a</p>

payment in lieu of notice, the executive Director will not receive any shares that would otherwise have been payable during the period for which the payment in lieu is made (unless required otherwise by regulations or local law).

In the event of termination for gross misconduct neither notice nor payment in lieu of notice is given.

**Treatment of annual bonus on termination** No automatic entitlement to bonus on termination, but may be considered at the Committee's discretion pro-rated for service, and subject to performance measures being met. No bonus would be payable in the case of gross misconduct or resignation.

**Treatment of unvested deferred bonus awards** In the case of death or if the executive Director is an eligible leaver the executive Director would continue to be eligible to be considered for unvested portions of deferred awards, subject to the rules of the relevant plan, unless the Committee determines otherwise in exceptional circumstances. Eligible leaver is defined as leaving due to injury, disability or ill health, retirement, redundancy, the business or company which employs the executive Director ceasing to be part of the Group or the employer terminating employment, other than in circumstances which amount to gross misconduct or dismissal for cause. In addition, the Committee will apply its discretion to treat resignation on or after the fifth anniversary of the date of grant as eligible leaver status. Outstanding deferred bonus awards would lapse if the executive Director leaves by reason of resignation prior to fifth anniversary, is terminated for gross misconduct or cause, or is otherwise not designated an eligible leaver. In an eligible leaver situation, deferred bonus awards may be considered for release in full on the scheduled release dates unless the Committee determines otherwise in exceptional circumstances. After release, the shares are subject to an additional holding period in line with regulations (currently minimum of six months, increasing to one year for the 2017 performance year).

Deferred awards are subject to malus provisions which enable the Committee to reduce the

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vesting level of deferred bonuses (including to nil) and once vested are subject to clawback provisions (as described above).

In the event of a takeover or other major corporate event, the Committee has absolute discretion to determine whether all outstanding awards would vest early or whether they should continue in the same or revised form following the change of control. The Committee may also determine that participants may exchange existing awards for awards over shares in an acquiring company with the agreement of that company.

**Provisions relating to executive Directors' termination** continued

## Standard provision

## Policy

## Details

**Treatment of unvested awards under the LTIP**

In the case of death or if the executive Director is an 'eligible leaver' the executive Director would continue to be entitled to be considered for an award. 'Eligible leaver' is defined as leaving due to injury, disability or ill health, retirement, redundancy, the business or company which employs the executive Director ceasing to be part of the Group or for any other reason if the Committee decides at its discretion. In addition, the Committee will apply its discretion to treat resignation on or after the fifth anniversary of the date of grant as 'eligible leaver' status. Outstanding unvested awards under the LTIP would lapse if the executive Director leaves by reason of resignation prior to fifth anniversary, is terminated for gross misconduct, or is otherwise not designated an 'eligible leaver'.

In an 'eligible leaver' situation, awards may be considered for release on the scheduled release dates, pro-rated for time (over the whole performance period, including the assessment period prior to grant for awards granted on or after 10 May 2017) and performance, subject to the Committee's discretion to determine otherwise in exceptional circumstances, in accordance with the plan rules, as amended from time to time. After release, the shares (net of deductions for tax) are subject to an additional holding period (currently minimum of six months, increasing to one year for the 2017 performance year).

Awards are subject to malus provisions which enable the Committee to reduce the vesting level of awards (including to nil) and once vested, awards are subject to clawback provisions (as described above).

In the event of a takeover or other major corporate event (but excluding an internal reorganisation of the Group), the Committee has absolute discretion to determine whether all outstanding awards vest subject to the achievement of any performance conditions. The

Committee has discretion to apply a pro-rata reduction to reflect the unexpired part of the vesting period. The Committee may also determine that participants may exchange awards for awards over shares in an acquiring company with the agreement of that company. In the event of an internal reorganisation, the Committee may determine that outstanding awards will be exchanged for equivalent awards in another company.

### **Repatriation**

Except in the case of gross misconduct or resignation, where an executive Director has been relocated at the commencement of employment, the Company may pay for the executive Director's repatriation costs in line with Barclays' general employee mobility policy including temporary accommodation, payment of removal costs and relocation flights for the executive Director, spouse and children. The Company will pay the executive Director's tax on the relocation costs but will not tax equalise and will also not pay tax on his or her other income relating to the termination of employment.

### **Other**

Except in the case of gross misconduct or resignation, the Company may pay for the executive Director's legal fees and tax advice relating to the termination of employment and provide outplacement services. The Company may pay the executive Director's tax on these particular costs.

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### **Illustrative scenarios for executive Directors remuneration**

The charts below show the potential value of the current executive Directors' 2017 total remuneration under the new DRP in three scenarios: Minimum (i.e. Fixed Pay, Pension and benefits), Maximum (i.e. Fixed Pay, Pension and benefits and the maximum variable pay that may be awarded) and Mid-point (i.e. Fixed Pay, Pension and benefits and 50% of the maximum variable pay that may be awarded). For the purposes of these charts, the value of benefits is based on an estimated annual value for 2017. The scenarios do not reflect share price movement between award and vesting.

A significant proportion of the potential remuneration of the executive Directors is variable and is therefore performance-related. It is also subject to deferral, additional holding periods, malus and clawback.

**Total remuneration opportunity: Group Chief Executive (£000)**

**Total remuneration opportunity: Group Finance Director (£000)**

In the above illustrative scenarios, benefits include regular contractual benefits. Additional ad hoc benefits may arise, for example, overseas relocation of executive Directors, but will always be provided in line with the DRP.

## Remuneration policy for non-executive Directors

This section provides details of the remuneration policy for the Chairman and non-executive Directors.

Element and purpose	Operation	Maximum value
<p><b>Fees</b></p> <p>Reflect individual responsibilities and membership of Board Committees and are set to attract non-executive Directors who have relevant skills and experience to oversee the implementation of our strategy</p> <p>Fees are set at a level which reflects the role, responsibilities and time commitment which are expected from the Chairman, Deputy Chairman and non-executive Directors</p>	<p>The Chairman and Deputy Chairman are paid an all-inclusive fee for all Board responsibilities. The Chairman has a minimum time commitment equivalent to at least 80% of a full-time role. The other non-executive Directors receive a basic Board fee, with additional fees payable where individuals serve as a member or Chairman of a Committee of the Board.</p> <p>Fees are reviewed each year by the Board as a whole.</p> <p>£30,000 (Chairman: £100,000) after tax and national insurance contributions per annum of each non-executive Director's basic fee is used to purchase Barclays shares which are retained on the non-executive Director's behalf until they retire from the Board.</p>	<p>Fees are reviewed against those for non-executive Directors in companies of similar size and complexity. Other than in exceptional circumstances, fees will not increase by more than 20% above the current fee levels during this policy period (basic fees last increased in 2011).</p>



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Some non-executive Directors may also receive fees as directors of subsidiary companies of Barclays PLC. In the case of certain subsidiary appointments, such additional remuneration is approved by the Board Nominations Committee.

### **Benefits**

The Chairman is provided with private medical cover subject to the terms of the Barclays scheme rules from time to time, and is provided with the use of a Company vehicle and driver when required for business purposes.

Benefits which are minor in nature and in any event do not exceed a cost of £500 may be provided to non-executive Directors in specific circumstances.

Non-executive Directors are not eligible to join Barclays pension plans.

### **Expenses**

The Chairman and non-executive Directors are reimbursed for any reasonable and appropriate expenses incurred for business reasons. Any tax that arises on these reimbursed expenses is paid by Barclays.

### **Bonus and share plans**

The Chairman is required to be eligible to participate in HMRC employee tax advantaged share schemes, due to his 80% of a full-role time commitment, but has opted not to participate. The Chairman is not eligible to participate in any other Barclays cash, share or long-term incentive plans.

All other non-executive Directors are not eligible to participate in Barclays cash, share or long-term incentive plans.

### **Notice and termination provisions**

Each non-executive Director's appointment is for an initial six year term, renewable at Barclays' discretion for a single term of three years thereafter and subject to annual re-election by shareholders.

**Notice period**

Chairman: twelve months from the Company (six months from the Chairman).  
Non-executive Directors: six months from the Company (six months from the non-executive Director).

**Termination payment policy**

The Chairman's appointment may be terminated by Barclays on 12 months' notice or immediately in which case 12 months' fees and contractual benefits are payable in instalments at the times they would have been received had the appointment continued, but subject to mitigation if he or she were to obtain alternative employment. There are similar termination provisions for non-executive Directors based on 6 months' fees. No continuing payments of fees (or benefits) are due if a non-executive Director is not re-elected by shareholders at the Barclays AGM.

In accordance with the policy table above, any new Chairman and Deputy Chairman would be paid an all-inclusive fee only and any new non-executive Director would be paid a basic fee for their appointment as a non-executive Director, plus fees for their participation on and/or chairing of any Board committees, time apportioned in the first year as necessary. No sign-on payments are offered to non-executive Directors.

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## Service contracts and letters of appointment

All executive Directors have a service contract whereas all non-executive Directors have a letter of appointment. Copies of the service contracts and letters of appointment respectively are available for inspection at the Company's registered office. The dates of the current Directors' service contracts and letters of appointment are shown in the table below.

### Effective date

#### Chairman

John McFarlane	1 January 2015 (non-executive Director), 24 April 2015 (Chairman)
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#### Executive Directors

Jes Staley	1 December 2015
Tushar Morzaria	15 October 2013

#### Non-executive Directors

Michael Ashley	18 September 2013
Tim Breedon	1 November 2012
Mary Francis	1 October 2016
Crawford Gillies	1 May 2014
Sir Gerry Grimstone	1 January 2016
Reuben Jeffery III	16 July 2009
Dambisa Moyo	1 May 2010
Diane de Saint Victor	1 March 2013
Diane Schueneman	25 June 2015
Steve Thieke	7 January 2014

All Directors are put forward for re-election at each AGM, unless they have indicated that they will not seek re-election at the AGM.

## Discretion

In addition to the various operational discretions that the Committee can exercise in the performance of its duties (including those discretions set out in the Company's share plans), the Committee reserves the right to make either minor or administrative amendments to the policy to benefit its operation or to make more material amendments in order to comply with new laws, regulations and/or regulatory guidance. The Committee would only exercise this right if it believed it was in the best interests of the Company to do so and where it is not possible, practicable or proportionate to seek or await shareholder approval in General Meeting.

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This section explains how our Directors remuneration policy was implemented during 2016.

## Executive Directors

### Executive Directors: Single total figure for 2016 remuneration (audited)

The following table shows a single total figure for 2016 remuneration in respect of qualifying service for each executive Director together with comparative figures for 2015.

	Salary		Role Based Pay		Taxable benefits		Annual bonus		LTIP		Pension		Total
	£000		£000		£000		£000		£000		£000		
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	
Jes Staley <sup>a</sup>	1,200	100	1,150	96	169	48	1,318				396	33	4,233
Tushar Morzaria	800	800	750	750	44	82	854	701	1,008		200	200	3,650

aThe 2015 figures for Jes Staley relate to the period from 1 December 2015 when he joined the Board as Group Chief Executive.

### Additional information in respect of each element of pay for the executive Directors (audited)

#### Salary

Jes Staley has been paid a salary of £1,200,000 per annum since his appointment to the Group Chief Executive role on 1 December 2015. Tushar Morzaria was paid a salary of £800,000 per annum as Group Finance Director.

#### Role Based Pay (RBP)

Executive Directors received RBP which was delivered quarterly in shares, subject to a holding period with restrictions lifting over five years (20% each year). The value shown is of shares at the date awarded.

#### Taxable benefits

Taxable benefits include private medical cover, life and ill health income protection, tax advice, relocation, car allowance, the use of a company vehicle and driver when required for business purposes and other benefits that are considered minor in nature.

## Annual bonus

Annual bonuses are discretionary and are typically awarded in Q1 following the financial year to which they relate. The Committee considered each of the executive Directors' performance against the financial (50% weighting) and Balanced Scorecard (35% weighting) performance measures which had been set to reflect strategic priorities for 2016. Performance against their individual personal objectives (15% weighting) is assessed on an individual basis.

### 2016 annual bonus outcomes

#### Financial (50% weighting)

The approach taken to assessing financial performance against each of the financial measures is based on a straight-line outcome between 25% for threshold performance and 100% applicable to each measure for achievement of maximum performance.

The formulaic outcome from 2016 performance against the financial measures gave a total of 29% out of 50% being payable attributable to those measures. A summary of the assessment is provided in the following table.

Financial		Threshold	Maximum	2016	2016
performance measure	Weighting	25%	100%	Actual	Outcome
Profit before tax (excluding notable items)	20%	£3.45bn	£4.20bn	£3.65bn	9%
Costs (excluding notable items)	10%	£14.6bn	£13.7bn	£15.3bn	0%
CET1 ratio	20%	11.1%	11.6%	12.4%	20%
<b>Total Financial</b>	<b>50%</b>				<b>29%</b>

When reflecting upon the appropriate 2016 bonus, the Committee considered the impact of the deferral changes on the formulaic outcomes against the financial measures. In particular, the Committee noted that while the decision to accelerate the deferral charges would improve the Group's operational flexibility going into 2017 and beyond, it would also lead to a lower 2016 bonus outcome than could have been justified absent the changes. However, on balance, the Committee felt that the overall outcomes were appropriate particularly given the on-going focus to rebalance towards improving shareholder returns.

#### Balanced Scorecard (35% weighting)

Progress in relation to each of the 5Cs of the Balanced Scorecard was assessed by the Committee. The Committee took a similar approach as for 2015 i.e. based on a three-point scale in relation to each measure, with 0% to 2% for below target, 3% or 4% for a met target, and 5% to 7% for above target progress against a particular Balanced Scorecard component.

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Based on this approach to assessing performance against 2016 Balanced Scorecard milestones, the Committee agreed a 18% outcome out of a maximum of 35%. A summary of the assessment is provided in the following table.

Balanced Scorecard	5 Cs	Weighting	Metric	2016 Target	2016 Actual	2016 Outcome out of maximum 7% for each C
Customer and Client		7%	PCB, Barclaycard and Africa Banking weighted average ranking of RNPS v peer sets	4th	4th	4%
Colleague		7%	Client Franchise Risk Sustained engagement of colleagues score	6th	5th	3%
Citizenship		7%	% women in senior leadership	77-79%	75%	
			Citizenship Plan initiatives on track or ahead	Plan targets	8/10	5%
Conduct Company <sup>b</sup>		7%	Conduct Reputation (YouGov Survey)	5.5-5.6/10	5.4/10	2%
		7%	Return on tangible equity <sup>c</sup>	4.8%	4.4%	
			Cost:Income ratio <sup>c</sup>	70%	72%	4%
			CET1 ratio	11.3%	12.4%	
<b>Total Balanced Scorecard</b>		<b>35%</b>				<b>18%</b>

aCompany metrics have been updated to reflect the 1 March 2016 strategy announcement.

bExcluding notable items.

cCost: Income ratio expressed as total operating expenses of the Group, including Africa, divided by the total income of these businesses.

#### Individual outcomes including assessment of personal objectives

Performance against each of the executive Directors individual personal objectives (15% weighting overall) was assessed by the Committee on an individual basis.

**(i) Jes Staley**

A summary of the assessment for Jes Staley against his specific performance measures is provided in the following table.

Performance measure		Weighting	Outcome
Financial	See table on page 73	50%	29%
Balanced Scorecard 5Cs	See table above	35%	18%
Personal objectives	Judgemental assessment see below	15%	13%
Total		100%	60%

**Final outcome approved by the Remuneration Committee****60%**

The Committee assessed Jes Staley's performance against his 2016 personal objectives (as set out on page 97 of the 2015 Annual Report) and concluded that Jes Staley had delivered a very strong performance throughout the year. By the end of 2016, a clear new strategy was firmly embedded and a new Core organisational structure consistent with structural reform has been implemented. The Core businesses have performed well, delivering improved profitability and cost income efficiency. At the same time significant progress has been made in exiting the Non-Core businesses. Jes Staley has demonstrated strong leadership, strengthened the management team and has instilled a more effective performance ethic and culture within the organisation. Given his strong personal performance, the Committee judged that 13% of a maximum of 15% attributable to individual objectives was appropriate.

In aggregate, the performance assessment for Jes Staley resulted in an overall formulaic outcome of 60% of maximum bonus opportunity being achieved. The resulting 2016 bonus is £1,318,000 of which 70% is deferred under the Share Value Plan and will vest in five equal tranches from the third to seventh anniversary (subject to the rules of the Share Value Plan as amended from time to time).

**(ii) Tushar Morzaria**

A summary of the assessment for Tushar Morzaria against his specific performance measures is provided in the following table.

Performance measure		Weighting	Outcome
Financial	See table on page 73	50%	29%
Balanced Scorecard 5Cs	See table above	35%	18%
Personal objectives	Judgemental assessment see below	15%	14%
Total		100%	61%

**Final outcome approved by the Remuneration Committee****61%**

The Committee assessed Tushar Morzaria's performance against his 2016 personal objectives (as set out on page 97 of the 2015 Annual Report) and concluded that Tushar Morzaria had delivered an outstanding performance in 2016. In doing so, the Committee noted the role provided by Tushar Morzaria in reshaping the business and in particular, recognised his contribution in the significant progress in exiting Non-Core, resulting in a reduction of 22bn in Risk Weighted Assets and his focus in delivering an organisation with a significantly higher CET1 ratio and lower Cost:Income ratio. In doing so, it was also noted that Tushar Morzaria has continued to develop very strong working relationships with shareholders, investors and regulators, while also improving the performance delivery within the Finance Functions. Given his exceptional personal performance during 2016, the Committee judged that 14% of a maximum 15% attributable to individual objectives was appropriate.



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In aggregate, the performance assessment for Tushar Morzaria resulted in an overall formulaic outcome of 61% of maximum bonus opportunity being achieved. The resulting 2016 bonus is £854,000 of which 60% is deferred under the Share Value Plan and will vest in five equal tranches from the third to seventh anniversary (subject to the rules of the Share Value Plan as amended from time to time).

All shares (whether deferred or not) are subject to a further six month holding period from the point of release. 2016 bonuses are subject to clawback provisions and, additionally, unvested deferred 2016 bonuses are subject to malus provisions which enable the Committee to reduce the vesting level of deferred bonuses (including to nil).

**LTIP**

The LTIP amount included in Tushar Morzaria's 2016 single total figure is the value of the amount scheduled to be released in relation to the LTIP award granted in 2014 in respect of performance period 2014-2016 (by reference to Q4 average share price). As Jes Staley was not a participant in this cycle, the LTIP figure in the single figure table is zero for him. Release is dependent on, among other things, performance over the period from 1 January 2014 to 31 December 2016. Straight line vesting applied between the threshold and maximum points in respect of the RoRWA and loan loss rate measures. The performance achieved against the performance targets is as follows.

Performance measure	Weighting	Threshold	Maximum vesting	Actual	% of award vesting
Return on risk weighted assets (RoRWA)	50%	23% of award vests for average annual RoRWA of 1.08%	Average annual RoRWA of 1.52%	0.33%	0%
Loan loss rate	20%	7% of award vests for average annual loan loss rate of 70bps	Average annual loan loss rate of 55bps or below	50bps	20%
Balanced Scorecard	30%	Performance against the Balanced Scorecard was assessed by the Committee to determine the percentage of the award that may vest between 0% and 30%. Each of the 5Cs in the Balanced Scorecard has equal weighting.		See below	14%
<b>Total</b>					<b>34%</b>

A summary of the Committee's assessment against the Balanced Scorecard performance measure over the three year performance period is provided below.

Category

Performance

Vesting out of

		maximum 6%
		for each C
Customer and Client	<p>§ Relationship Net Promoter Score performance against peers was 4th during the period. Across key product categories, notably UK current accounts and UK credit cards, Barclays scores have improved with more customers advocating our brands.</p> <p>§ Client Franchise Rank remained stable at 5th rank throughout the period, a positive result given the shift in strategy to focus on geographies and businesses of strength in the Investment Bank.</p>	3%
Colleague	<p>§ Continued improvement in the female representation across our senior leadership, rising from 22% in 2014 to 24% at the end of 2016.</p> <p>§ Colleague engagement improved from 72% in 2014 to 75% overall in 2016, a positive result in the light of the change the organisation has undergone over the period.</p>	3%
Citizenship	<p>§ Continuing on from the successful Citizenship Plan, which closed 2015 with 10 out of 11 initiatives on or ahead of target, Barclays Group (ex Africa) exceeded objectives on all 6 initiatives in the first year of the Shared Growth Ambition.</p> <p>§ Africa also delivered strong performance on investment in education and SME financing, both of which were on track for 2016. Two objectives were off-track due to external challenges which impacted the delivery of planned employability and financial inclusion interventions (although foundations are now established which will enable strong 2017 momentum).</p>	4%
Conduct	<p>§ Conduct reputation, as measured by the YouGov survey, remained at or below 5.4 over the period.</p> <p>§ However, new conduct items and costs have reduced.</p>	1%
Company	<p>§ The CET1 ratio has strengthened significantly over the period, to 12.4% at the end of 2016.</p> <p>§ However, returns excluding notable items (both RoE and RoTE) were below target through much of the period.</p>	3%
<b>Total</b>		<b>14%</b>

The LTIP award is also subject to a discretionary underpin whereby the Committee must be satisfied with the underlying financial health of the Group based on profit before tax. The Committee was satisfied that this underpin was met, and accordingly determined that the award should be considered for release to the extent of 34% of the maximum number of shares under the total award. The shares are scheduled to be released in March 2017. After release, the shares are subject to an additional two year holding period.

## Pension

Executive Directors are paid cash in lieu of pension contributions. The cash allowance in 2016 was 33% of salary for Jes Staley and 25% of salary for Tushar Morzaria. No other benefits were received by the executive Directors from any Barclays pension plans.

## Executive Directors: other LTIP awards

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The Directors' remuneration reporting regulations require inclusion in the single total figure of only the value of the LTIP awards whose last year of performance ends in the relevant financial year and whose vesting outcome is known. For 2016, this is the award to Tushar Morzaria under the 2014-2016 LTIP cycle and further details are set out on page 75. This section sets out other LTIP cycles in which the executive Directors participate, the outcome of which remains dependent on future performance.

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### LTIP awards to be granted during 2017

The Committee decided to make an award under the 2017-2019 LTIP cycle to Jes Staley and Tushar Morzaria with a face value at grant of 120% of their respective Total fixed pay at 31 December 2016.

The 2017-2019 LTIP award will be subject to the following forward-looking performance measures.

Performance measure	Weighting	Threshold	Maximum vesting
Return on tangible equity (RoTE) excluding notable items	25%	6.25% of award vests for average RoTE excluding notable items of 7.5%	Average RoTE excluding notable items of 9.5%
CET1 ratio as at 31 December 2019	25%	CET1 ratio must remain at or above an acceptable level for any of this element to vest. The threshold will be reviewed and set annually based on market conditions and regulatory requirements (11% on 31 December 2017) 6.25% of award vests for CET1 ratio 100 basis points above the mandatory distribution restrictions hurdle (MDRH)	CET1 ratio 200 basis points above the MDRH
Cost:Income ratio excluding notable items	20%	5% of award vests for average Cost:Income ratio of 63%	Average Cost:Income ratio of 58%
Risk Scorecard	15%	The Risk Scorecard captures a range of risks and is aligned with the annual incentive risk adjustment framework agreed with the PRA. The current framework measures performance against three broad categories – Capital and Liquidity, Control Environment and Conduct using a combination of quantitative and qualitative metrics. The framework may be updated from time to time in line with the Group's risk strategy. Specific targets within each of the categories are deemed to be commercially sensitive. Retrospective disclosure of performance will be made in the 2019 Remuneration report.	
Strategic / Non-financial measures	15%	§ The existing Balanced Scorecard has evolved into a Performance Measurement framework in line with the objective of delivering a simplified Barclays through the strategic actions announced in March 2016. The evaluation will focus on key performance measures (many continuing from the Balanced Scorecard), with a detailed retrospective narrative on progress throughout the period against each	

category.

§ Performance against the Strategic/Non-financial Measures will be assessed by the Committee to determine the percentage of the award that may vest between 0% and 15%. The measures are organised around 3 main categories: Customer & Client, Colleague and Citizenship. Each of the three main categories has equal weighting. Measures will likely include, but not be limited to, the following:

Customer & Client: NPS for consumer businesses, Client rankings and market shares for the Corporate and Investment Bank, complaints performance and volume of lending provided to customers and clients.

Colleague: Diversity and Inclusion statistics (including women in senior leadership), Employee sustainable engagement survey scores and conduct and culture measures.

Citizenship: Delivery against our Shared Growth Ambition, Colleague engagement in Citizenship activities and external benchmarks and surveys.

Straight line vesting applies between the threshold and maximum points in respect of the financial measures.

The award is subject to a discretionary underpin by which the Committee must be satisfied with the underlying financial health of the Group.

## Outstanding LTIP awards

### *(i) LTIP awards granted during 2015*

The performance measures for the awards made under the 2015-2017 LTIP cycle are shown below.

Performance measure	Weighting	Threshold	Maximum vesting
Net generated equity <sup>a</sup>	30%	7.5% of award vests for Net Generated Equity of £1,363m	Net Generated Equity of £1,844m
Core return on risk weighted assets (RoRWA) excluding own credit	20%	5% of award vests for average annual Core RoRWA of 1.34%	Average annual Core RoRWA of 1.81%
Non-Core drag on return on equity (RoE) excluding notable items	10%	2.5% of award vests for Non-Core drag on RoE of 4.02%	Non-Core drag on RoE of 2.97%
Loan loss rate	10%	2.5% of award vests for average annual loan loss rate of 70bps	Average annual loan loss rate of 55bps or below
Balanced Scorecard	30%	Performance against the Balanced Scorecard is assessed by the Committee to determine the percentage of the award that may vest between 0% and 30%. Each of the 5Cs in the Balanced Scorecard has equal weighting. The targets within each of the 5Cs are deemed to be commercially sensitive. However, retrospective disclosure of the targets and performance against them will be made in the 2017 Remuneration report subject to commercial sensitivity no longer remaining.	

Note

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aNet generated equity is a metric which converts changes in the CET1 ratio into an absolute capital equivalent measure. For remuneration purposes, net generated equity will exclude inorganic actions such as rights issues, as determined by the Committee.

Straight line vesting applies between the threshold and maximum points in respect of the financial and risk measures. The award is subject to a discretionary underpin by which the Committee must be satisfied with the underlying financial health of the Group.

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*(ii) LTIP awards granted during 2016*

An award was made to Tushar Morzaria on 14 March 2016 under the 2016-2018 LTIP cycle at a share price on the date of grant of £1.6535, in accordance with our Directors' remuneration policy. This is the price used to calculate the face value below. Jes Staley was not eligible for a grant under the 2016-2018 LTIP cycle.

	% of fixed pay	Number of shares	Face value at grant	Performance period
Tushar Morzaria	120%	1,270,033	£2,100,000	2016-2018

The performance measures for the 2016-2018 LTIP awards are as follows:

Performance measure	Weighting	Threshold	Maximum vesting
Return on tangible equity (RoTE) excluding notable items	25%	6.25% of award vests for average RoTE of 7.5%	Average RoTE of 10.0%
CET1 ratio as at 31 December 2018	25%	6.25% of award vests for CET1 ratio of 11.6%	CET1 ratio of 12.7%
Cost:Income ratio excluding notable items	20%	5% of award vests for average Cost:Income ratio of 66%	Average Cost:Income ratio of 58%
Risk Scorecard	15%	Performance against the Risk Scorecard is assessed by the Committee, with input from the Group Risk function, Board Risk Committee and Board Reputation Committee as appropriate, to determine the percentage of the award that may vest between 0% and 15%. The Risk Scorecard measures performance against three broad categories – Risk Profile (including Conduct), Control Environment and Risk Capability – using a combination of quantitative and qualitative metrics. Specific targets within each of the categories are deemed to be commercially sensitive. Retrospective disclosure of performance will be made in the 2018 Remuneration report subject to commercial sensitivity no longer	



Balanced Scorecard 15% remaining.  
 Performance against the Balanced Scorecard is assessed by the Committee to determine the percentage of the award that may vest between 0% and 15%. Each of the 5Cs in the Balanced Scorecard has equal weighting. Assessment will be made against progress towards the 2018 targets.

Straight line vesting applies between the threshold and maximum points in respect of the financial and risk measures. The award is subject to a discretionary underpin by which the Committee must be satisfied with the underlying financial health of the Group.

**Executive Directors: Statement of implementation of remuneration policy in 2017**

The executive Directors package for 2017, in line with the new DRP, will be implemented with effect from the 2017 AGM as follows:

	Jes Staley	Tushar Morzaria	Comments
Fixed Pay	£2,350,000	£1,650,000	Fixed Pay replaces Salary and Role Based Pay. Fixed Pay delivered 50% in cash and 50% in shares (subject to 5 year holding period lifting pro rata)
			No change in Fixed Pay from 2016 for Jes Staley
Pension	£396,000	£200,000	Fixed Pay has increased to £1,650k from £1,550k for Tushar Morzaria No change from 2016
Maximum Bonus	80% of Total Fixed Pay <sup>a</sup>	80% of Total Fixed Pay <sup>a</sup>	Total variable opportunity unchanged
Maximum LTIP	120% of Total Fixed Pay <sup>a</sup>	120% of Total Fixed Pay <sup>a</sup>	Bonus and LTIP combined for regulatory deferral purposes

Note:

<sup>a</sup>Total Fixed Pay is defined as Fixed Pay plus Pension

In considering the appropriate level of Tushar Morzaria's Total fixed pay (Fixed Pay plus Pension), the Committee took account of the time he has been in role without any increase (over three years), his strong performance and importance to the organisation, and industry market rates for the role. The Committee concluded that an increase of 5.7%, being less than the increase paid to UK employees over the same period, was warranted but agreed that the executive Directors would not be eligible for any further increase in the next three years (i.e. during the new policy period).

Governance: Remuneration report

[Annual report on Directors remuneration](#)

## Clawback and malus

Barclays may apply clawback if at any time during the seven year period from the date on which any variable remuneration is awarded: (i) there is reasonable evidence of individual misbehaviour or material error, and/or (ii) the firm suffers a material failure of risk management, taking account of the individual's proximity to, and responsibility for, that incident. For variable remuneration awards granted to executive Directors in respect of 2016 onwards, the clawback period may be extended to 10 years in circumstances where the Company or a regulatory authority has commenced an investigation which could potentially lead to the application of clawback.

Malus provisions will continue to apply to unvested deferred awards.

## Deferral

A 7 year deferral period (with no vesting prior to the third anniversary of award, and vesting in equal tranches between the third and seventh year) will apply to any 2017 deferred variable remuneration awarded to the executive Directors.

## 2017 Annual bonus performance measures

Performance measures with appropriately stretching targets have been selected to cover a range of financial and non-financial goals that support the key strategic objectives of the Company. The performance measures and weightings are shown below.

Financial (60% weighting)                      § Profit before tax excluding notable items (22.5% weighting)

   § Cost:Income ratio excluding notable items (15% weighting)

A performance target range has been set for each financial measure.

   § CET1 ratio (22.5% weighting)

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Strategic/Non-financial  
(20% weighting)

§ The existing Balanced Scorecard has evolved into a Performance Measurement framework in line with the objective of delivering a simplified Barclays through the strategic actions announced in March 2016. Enhancements to the available sources of management information and reporting, ranging from internal dashboards to external third party measures, allows for a more holistic view of sustainable business performance, rather than focusing on a few narrowly defined targets. The evaluation will focus on key performance measures (many continuing from the Balanced Scorecard), with a detailed retrospective narrative on progress throughout the period against each category.

§ Performance against the Strategic/Non-financial Measures will be assessed by the Committee to determine the percentage of the award that may vest between 0% and 20%. The measures are organised around 3 main categories: Customer & Client, Colleague and Citizenship. Each of the three main categories has equal weighting. Measures will likely include, but not be limited to, the following:

Customer & Client: NPS for consumer businesses, Client rankings and market shares for the Corporate and Investment Bank, complaints performance and volume of lending provided to customers and clients.

Colleague: Diversity and Inclusion statistics (including women in senior leadership), Employee sustainable engagement survey scores and conduct and culture measures.

Citizenship: Delivery against our Shared Growth Ambition, Colleague engagement in Citizenship activities and external benchmarks and surveys.

Personal (20% weighting) The executive Directors have the following joint personal objectives for 2017:

§ Deliver on 2017 financial commitments including continued improvement in RoTE, the Cost:Income ratio and continued build-up of our capital base (CET1 ratio)

§ Exit Non-Core and ensure successful reintegration of remaining assets / businesses into Core

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§ Achieve the sell-down of Barclays Africa Group Ltd to obtain regulatory deconsolidation

§ Ensure successful implementation of the 2017 Structural Reform programme, including creation of the Service Company and establishment of subsidiary Boards for Barclays UK and Barclays International

§ Identify and implement as far as possible in 2017 a structural solution to ensure continued access to the single market in Europe

§ Manage risk and control effectively and make continued progress in resolving legacy conduct and litigation matters.

In addition, individual personal objectives for 2017 are as follows:

Jes Staley:

§ Make continued progress towards a high performing culture in line with our Values while also strengthening employee engagement

§ Improve customer and client satisfaction while reducing the number of overall complaints

§ Strengthen succession planning pipeline for Group and Business Unit/Functional Executive Committees and continue to improve percentage of women in senior leadership positions.

Tushar Morzaria:

§ Demonstrate effective management of external relationships and reputation

§ Continue to strengthen team performance, talent pipeline and employee engagement in Group Finance, Tax and Treasury.

Detailed calibration of the Financial and Strategic targets is commercially sensitive and it is not appropriate to disclose this information externally on a prospective basis. Disclosure of achievement will be made in the 2017 Annual Report subject to the targets no longer being commercially sensitive. The Committee may exercise its discretion to amend the formulaic outcome of assessment against the targets. Any exercise of discretion will be disclosed and explained.

## Performance graph and table

The performance graph below illustrates the performance of Barclays over the financial years from 2009 to 2016 in terms of total shareholder return compared with that of the companies comprising the FTSE 100 index. The index has been selected because it represents a cross-section of leading UK companies.

In addition, the table below provides a summary of the total remuneration of the relevant Group Chief Executive over the same period as the previous graph. For the purpose of calculating the value of the remuneration of the Group Chief Executive, data has been collated on a basis consistent with the 'single figure' methodology.

Year	2009	2010	2011	2012	2012	2013	2014	2015	2016
Group Chief Executive	John Varley	John Varley	Bob Diamond	Bob Diamond <sup>a</sup>	Antony Jenkins <sup>b</sup>	Antony Jenkins	Antony Jenkins	Antony Jenkins <sup>b</sup>	John McFarlane
Group Chief Executive single figure of total remuneration £000s	2,050	4,567	11,070 <sup>e</sup>	1,892	529	1,602	5,467 <sup>f</sup>	3,399	30,000
Annual bonus against maximum opportunity %	0%	100%	80%	0%	0%	0%	57%	48%	N/A
Long-term incentive vesting against maximum opportunity %	50%	16%	N/A <sup>g</sup>	0%	N/A <sup>g</sup>	N/A <sup>g</sup>	30%	39%	N/A
Notes									

<sup>a</sup>Bob Diamond left the Board on 3 July 2012.

<sup>b</sup>Antony Jenkins became Group Chief Executive on 30 August 2012 and left the Board on 16 July 2015.

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cJohn McFarlane was Executive Chairman from 17 July 2015 to 30 November 2015. His fees, which remained unchanged, have been pro-rated for his time in the position. He was not eligible to receive a bonus or LTIP.

dJes Staley became Group Chief Executive on 1 December 2015.

eThis figure includes £5,745k tax equalisation as set out in the 2011 Remuneration report. Bob Diamond was tax equalised on tax above the UK rate where that could not be offset by a double tax treaty.

fAntony Jenkins 2014 pay is higher than in earlier years since he declined a bonus in 2012 and 2013 and did not have LTIP vesting in those years.

gNot a participant in a long-term incentive award which vested in the period.

### Percentage change in Group Chief Executive s remuneration

The table below shows how the percentage change in the Group Chief Executive s salary, benefits and bonus between 2015 and 2016 compares with the percentage change in the average of each of those components of pay for UK based employees.

	Fixed Pay	Benefits	Annual bonus
Group Chief Executive <sup>a</sup>	0%	118% <sup>b</sup>	N/A <sup>c</sup>
Average based on UK employees <sup>d</sup>	3.6%	No change	(0.1)%

Notes

aThe 2015 figures for the Group Chief Executive are based on the Group Chief Executive, Jes Staley, and are annualised in order to provide a meaningful comparison of the year on year change in remuneration for the Group Chief Executive and UK based employees.

bThe percentage increase in benefits for the Group Chief Executive arises primarily as a result of relocation provided in 2016.

cThe Group Chief Executive did not receive an annual bonus in 2015.

dCertain populations were excluded to enable a meaningful like for like comparison.

We have chosen UK based employees as the comparator group as it is the most representative group for pay structure comparisons.

### Relative importance of spend on pay

A year on year comparison of Group compensation costs and distributions to shareholders is shown below.

#### Note

a2015 Group compensation costs have been adjusted to exclude the impact of £429m gain on valuation of a component of the defined benefit liability.

Governance: Remuneration report

[Annual report on Directors remuneration](#)**Chairman and non-executive Directors**

Remuneration for non-executive Directors reflects their responsibilities and time commitment and the level of fees paid to non-executive Directors of comparable major UK companies.

**Chairman and non-executive Directors: Single total figure for 2016 fees (audited)**

	Fees		Benefits		Total	
	2016	2015	2016	2015	2016	2015
	£000	£000	£000	£000	£000	£000
<b>Chairman</b>						
John McFarlane <sup>a</sup>	800	628	1	11	801	639
Sir David Walker <sup>b</sup>		285		6		291
<b>Non-executive Directors</b>						
Mike Ashley	207	207			207	207
Tim Breedon	220	232			220	232
Mary Francis <sup>c</sup>	29				29	
Crawford Gillies	195	178			195	178
Sir Gerry Grimstone <sup>d</sup>	250				250	
Reuben Jeffery III	120	135			120	135
Wendy Lucas-Bull <sup>e</sup>	64	358			64	358
Dambisa Moyo	135	152			135	152
Frits van Paasschen <sup>f</sup>	35	88			35	88
Diane de Saint Victor	118	135			118	135
Diane Schueneman <sup>gh</sup>	232	74			232	74
Steve Thieke <sup>h</sup>	221	184			221	184
Sir Michael Rake <sup>i</sup>		250				250
Sir John Sunderland <sup>j</sup>		60				60
<b>Total</b>	<b>2,626</b>	<b>2,966</b>	<b>1</b>	<b>17</b>	<b>2,627</b>	<b>2,983</b>

Non-executive Directors are reimbursed expenses that are incurred for business reasons. Any tax that arises on these reimbursed expenses is paid by Barclays.

The Chairman is provided with private medical cover and the use of a company vehicle and driver when required for business purposes.

Notes

aJohn McFarlane joined the Board as a non-executive Director with effect from 1 January 2015 and as Chairman from 24 April 2015. The 2015 total includes non-executive Director fees of £78,000 for the period from 1 January 2015 to



24 April 2015.

b Sir David Walker retired from the Board with effect from 23 April 2015.

c Mary Francis joined the Board as a non-executive Director with effect from 1 October 2016.

d Sir Gerry Grimstone joined the Board as a non-executive Director from 1 January 2016 and succeeded Sir Michael Rake as Senior Independent Director and Deputy Chairman with effect from 1 January 2016.

e Wendy Lucas-Bull retired from the Board with effect from 1 March 2016. Figures include fees received by Wendy Lucas-Bull for her role as Chairman of Barclays Africa Group Limited.

f Frits van Paasschen retired from the Board with effect from 28 April 2016.

g Diane Schueneman joined the Board as a non-executive Director with effect from 25 June 2015.

h Diane Schueneman and Steve Thieke both served in 2016 on the US Governance Review Board, which was an advisory board set up as the forerunner of the board of our US intermediate holding company which was established during 2016. They each subsequently joined the board of the US intermediate holding company on its formation. The 2015 figures for Diane Schueneman and Steve Thieke included fees of \$37,500 and \$75,000 respectively for their roles on the US Governance Review Board. The 2016 figures include fees of \$138,000 and \$150,000 respectively for their roles on the US Governance Review Board and the board of the US intermediate holding company. In addition, Steve Thieke waived fees of \$63,000.

i Sir Michael Rake retired from the Board with effect from 31 December 2015.

j Sir John Sunderland retired from the Board with effect from 23 April 2015.

### Chairman and non-executive Directors: Statement of implementation of remuneration policy in 2017

2017 fees, subject to annual review in line with policy, for the Chairman and non-executive Directors are shown below.

	1 January 2017	1 January 2016	Percentage
	£000	£000	Increase
Chairman <sup>a</sup>	800	800	0
Deputy Chairman <sup>a</sup>	250	250	0
Board member	80	80	0
<b>Additional responsibilities</b>			
Senior Independent Director	30	30	0
Chairman of Board Audit or Board Remuneration Committee	70	70	0
Chairman of Board Risk Committee	70	60	17
Chairman of Board Reputation Committee	50	50	0
Membership of Board Audit or Board Remuneration Committee	30	30	0
Membership of Board Reputation or Board Risk Committee	25	25	0
Membership of Board Nominations Committee	15	15	0
Notes			

a The Chairman and Deputy Chairman do not receive any other additional responsibility fees in addition to the Chairman and Deputy Chairman fees respectively.

b The basic fee payable to non-executive Directors was last increased in May 2011. Some revisions have been made to the additional fees payable to Board Committee Chairman to reflect time commitment and responsibilities.

## Payments to former Directors

### Former Group Chief Executive: Antony Jenkins

Antony Jenkins continued to receive base salary, RBP, benefits and pension allowance until 7 July 2016 (the Termination Date). Full details of his eligibility to variable pay were disclosed in the 2015 Directors Remuneration report (page 101 of the 2015 Annual Report).

### Former Group Finance Director: Chris Lucas

In 2016, Chris Lucas continued to be eligible to receive life assurance cover, private medical cover and payments under the Executive Income Protection Plan (EIPP). Full details of his eligibility under the EIPP were disclosed in the 2013 Directors Remuneration report (page 115 of the 2013 Annual Report). Chris Lucas did not receive any other payment or benefit in 2016.

## Directors shareholdings and share interests

### Executive Directors shareholdings and share interests (audited)

The chart below shows the value of Barclays shares held beneficially by Jes Staley and Tushar Morzaria as at 21 February 2017 that count towards the shareholding requirement of, as a minimum, Barclays shares worth four times salary. The current executive Directors have five years from their respective date of appointment to meet this requirement. At close of business on 21 February 2017, the market value of Barclays ordinary shares was £2,375m.

### Interests in Barclays PLC Shares (audited)

The table below shows shares owned beneficially by all the Directors and shares over which executive Directors hold awards which are subject to either deferral terms or performance measures. The shares shown below, that are subject to performance measures, are based on the maximum number of shares that may be released.

Owned outright	Unvested Not subject to Subject to	performance	Total as at 31 December 2016 (or date)	Total as at 21 February 2017
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		performance	measures	of retirement
		measures		from the Board,
				if earlier)
<b>Executive Directors</b>				
Jes Staley	4,243,848			4,243,848
Tushar Morzaria	1,466,204	3,474,246	578,391	5,518,841
<b>Chairman</b>				
John McFarlane	46,852			46,852
<b>Non-executive Directors</b>				
Mike Ashley	65,290			65,290
Tim Breedon	29,755			29,755
Mary Francis <sup>a</sup>	7,600			7,600
Crawford Gillies	70,208			70,208
Sir Gerry Grimstone	103,288			103,288
Reuben Jeffery III	200,196			200,196
Wendy Lucas-Bull <sup>b</sup>	15,672			15,672
Dambisa Moyo	51,192			51,192
Frits van Paasschen <sup>c</sup>	23,681			23,681
Diane de Saint Victor	36,691			36,691
Diane Schueneman	16,004			16,004
Steve Thieke	55,073			55,073
Notes				

aMary Francis joined the Board as a non-executive Director with effect from 1 October 2016.

bWendy Lucas-Bull retired from the Board as a non-executive Director with effect from 1 March 2016.

cFrits van Paasschen retired from the Board as a non-executive Director with effect from 28 April 2016.

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## **Barclays Board Remuneration Committee**

The Board Remuneration Committee is responsible for overseeing Barclays remuneration as described in more detail below.

### **Terms of Reference**

The role of the Committee is to:

§ set the overarching principles and parameters of remuneration policy across the Group

§ consider and approve the remuneration arrangements of (i) the Chairman, (ii) the executive Directors, (iii) members of the Barclays Group Executive Committee and any other senior executives specified by the Committee from time to time, and (iv) all other Group employees whose total annual compensation exceeds an amount determined by the Committee from time to time (currently £2m)

§ exercise oversight for remuneration issues.

The Committee considers all aspects of the design and operation of remuneration policy to ensure a coherent approach is taken in respect of all employees. In discharging this responsibility the Committee seeks to ensure that the policy assesses, among other things, the impact of pay arrangements on culture and all elements of risk management. The Committee also approves incentive pools for all major businesses and functions, regularly reviews the design and provision of retirement benefits, and considers and approves measures designed to promote the alignment of the interests of shareholders and employees. The Committee and its members work as necessary with other Board Committees, and is authorised to select and appoint its own advisers as required.

The Terms of Reference can be found at [home.barclays/corporategovernance](http://home.barclays/corporategovernance) or from the Company Secretary on request.

### **Chairman and members**

The Chairman and members of the Committee are as follows:

§ Crawford Gillies, Committee member since 1 May 2014 and Chairman since 24 April 2015

§ Tim Breedon, Committee member since 1 December 2012

§ Mary Francis, Committee member since 1 November 2016

§ Dambisa Moyo, Committee member since 1 September 2015.

**Former member**

Steve Thieke left the Committee on 1 March 2016 having been a Committee member since 6 February 2014.

All current members are considered independent by the Board.

**Remuneration Committee attendance in 2016**

	Number of meetings eligible to attend	Number of meetings attended
Crawford Gillies	9	9
Tim Breedon	9	8
Mary Francis	2	2
Dambisa Moyo	9	9
Steve Thieke	3	3

The performance of the Committee is reviewed each year as part of the Board Effectiveness Review. The December 2016 review concluded that Board members have full confidence in the effectiveness and thoroughness of the Committee. Full details of the Board Effectiveness review can be found on page 33.

**Advisers to the Remuneration Committee**

Until February 2016, the Committee was advised by Willis Towers Watson. The Committee is satisfied that the advice provided by Willis Towers Watson to the Committee was independent and objective. Willis Towers Watson is a signatory to, and its appointment as adviser to the Committee was conditional on adherence to, the voluntary UK Code of Conduct for executive remuneration consultants.

During the rest of 2016, the Committee decided not to engage an independent adviser but Willis Towers Watson continued to provide the Committee with market data on compensation when considering incentive levels and remuneration packages.

Fees for the Committee work were charged on a time/cost basis and Willis Towers Watson was paid a total of £48,000 (excluding VAT) in fees for its advice to the Committee in 2016 relating to the executive Directors (either exclusively or along with other employees within the Committee's Terms of Reference).

Willis Towers Watson also provides pensions advice, advice on health and benefits provision, assistance and technology support for employee surveys and performance management, and remuneration data to the Group. Willis Towers Watson also provides pensions advice and administration services to the Barclays Bank UK Retirement Fund.

In the course of its deliberations, the Committee also considers the views of the Group Chief Executive, Group Human Resources Director and the Group Reward and Performance Director. The Group Finance Director and Chief Risk Officer provide regular updates on Group and business financial performance and the Group's risk profile respectively.

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No Barclays employee or Director participates in discussions with, or decisions of, the Committee relating to his or her own remuneration. No other advisers provided significant services to the Committee in the year.

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## Remuneration Committee activities in 2016

The following provides a summary of the Committee's activities during 2016 and at the January and February 2017 meetings at which 2016 remuneration decisions were finalised.

Meeting	Fixed and variable pay issues	Governance, risk and other matters
<b>January 2016</b>	§ 2015 incentive funding proposals	§ Finance and Risk updates
<b>February 2016</b> (Two meetings)	§ Approved executive Directors and senior executives 2016 fixed pay	§ Approved 2015 Remuneration report
	§ Approved 2016 executive Directors annual bonus performance measures	§ Finance and Risk updates including ex ante risk adjustment
	§ Approved Group fixed pay budgets for 2016	§ Appointment of Committee independent adviser
	§ Approved final 2015 incentive funding	§ Updates on headcount and employee attrition
	§ Approved proposals for executive Directors and senior executives 2015 bonuses and 2016 LTIP awards for executive Directors	§ Consideration of the outcomes of the 2015 Committee effectiveness review

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<b>June 2016</b>	§ Barclays deferral approach	§ Review of Directors remuneration policy
	§ Impact of corporate restructuring on executive Director and Group Executive Committee members remuneration	§ Update on Structural Reform
<b>July 2016</b>		§ Review of Barclays broader remuneration philosophy
		§ Review of Directors remuneration policy
<b>September 2016</b>	§ Approved Tim Throsby's appointment and remuneration arrangements  (joint meeting with Nominations Committee)	
<b>October 2016</b>		§ Review of Directors remuneration policy
<b>November 2016</b>	§ 2016 incentive funding projections including risk adjustments	§ Annual review of Committee Terms of Reference
	§ 2017 LTIP performance measures	§ Finance and Risk updates
		§ Updates on headcount and employee attrition



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§ 2016 payround shareholder engagement planning

**December 2016** § Initial considerations on senior executives 2016 bonuses and 2017 fixed pay § Review of draft Directors remuneration policy

§ 2017 LTIP performance measures § Finance and Risk updates

§ 2016 incentive funding proposals including risk adjustments § Updates on headcount and employee attrition

**January 2017** § 2016 incentive funding proposals including risk adjustments § Finance and Risk updates

§ 2016 bonus proposals for senior executives

§ Barclays deferral approach

**February 2017** § Approved executive Directors and senior executives 2017 fixed pay § Approved 2016 Remuneration report

§ Approved 2017 executive Directors annual bonus performance measures § Finance and Risk updates

§ Approved Group fixed pay budgets for 2017 § Updates on headcount and employee attrition

§ Approved final 2016 incentive funding including risk adjustments

§ Approved proposals for executive Directors and senior executives 2016 bonuses and 2017 LTIP awards for executive Directors

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Regular items: market and stakeholder updates including PRA/FCA, US Federal Reserve and other regulatory matters; updates from Remuneration Review Panel meetings; operation of the Committee's Control Framework on hiring, retention and termination; and LTIP performance updates.

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### Statement of voting at Annual General Meeting

The table below shows the voting result in respect of our remuneration arrangements at the AGM held on 28 April 2016 and the last policy vote at the AGM held on 24 April 2014:

	For	Against	
	% of	% of	Withheld
	votes cast	votes cast	Number
	Number	Number	Number
Advisory vote on the 2015 Remuneration report	93.60% 11,351,168,552	6.40% 776,042,467	83,768,745
Binding vote on the Directors remuneration policy	93.21% 9,936,116,114	6.79% 723,914,712	154,598,278

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Governance: Remuneration report

## Additional remuneration disclosures

This section contains voluntary disclosures about levels of remuneration for our eight most highly paid senior executive officers, levels of remuneration of employees in the Barclays Group and outstanding share plan and LTIP awards for our executive Directors.

**2016 total remuneration of the eight highest paid senior executive officers below Board level**

The table below shows remuneration for the eight highest paid senior executive officers below Board level who were Key Management Personnel in 2016.

**Eight highest paid senior executive officers below Board level**

	1	2	3	4	5	6	7	8
	2016	2016	2016	2016	2016	2016	2016	2016
	£000	£000	£000	£000	£000	£000	£000	£000
Fixed Pay (salary and RBP)	1,813	1,500	1,974	1,925	1,250	1,300	1,170	1,049
Current year cash bonus	200	200	200	200	200	190	198	105
Current year share bonus	200	200	200	200	200	190	198	105
Deferred cash bonus	2,233	1,125	813	825	375	285	297	158
Deferred share bonus	2,233	1,125	813	825	375	285	297	158
<b>Total remuneration</b>	<b>6,679</b>	<b>4,150</b>	<b>4,000</b>	<b>3,975</b>	<b>2,400</b>	<b>2,250</b>	<b>2,160</b>	<b>1,575</b>

**Total remuneration of the employees in the Barclays Group**

The table below shows the number of employees in the Barclays Group in 2015 and 2016 in bands by reference to total remuneration. Total remuneration comprises salary, RBP, other allowances, bonus and the value at award of LTIP awards.

**Total remuneration of the employees in the Barclays Group**

Remuneration band	2016	Number of employees 2015 Constant currency	2015 Actual
	£0 to £25,000	33,989	38,457
£25,001 to £50,000	22,927	25,220	25,153
£50,001 to £100,000	17,063	18,869	18,885
£100,001 to £250,000	9,098	10,047	9,210
£250,001, to £500,000	2,093	2,367	2,181
£500,001 to £1,000,000	771	879	740
£1,000,001 to £2,500,000	307	309	264
£2,500,001 to £5,000,000	46	51	50
Above £5m	11	9	5

Barclays is a global business. Of those employees earning above £1m in total remuneration for 2016 in the table above, 63% are based in the US, 32% in the UK, and 5% in the rest of the world.

The number of employees paid above £1m is slightly down year on year on a constant currency basis (364 in 2016 vs. 369 in 2015).

#### Outstanding share plan and LTIP awards (audited)

Plan	Number of shares under award at 1 January 2016 (maximum)	Number of shares awarded in year (maximum)	Market price on award date	Number of shares released	Market price on release date	Number of shares under award at 31 December 2016 (maximum)	Value of release £000	perfo p sc rele
<b>Jes Staley</b> Share Value Plan 2015	896,450		£2.34	896,450	£1.65		1,479	
<b>Tushar Morzaria</b> Barclays LTIP 2014-2016	1,375,811		£2.31			1,375,811		31/
Barclays LTIP 2015-2017	828,402		£2.54			828,402		31/
Barclays LTIP 2016-2018		1,270,033	£1.65			1,270,033		31/
Share Value Plan 2013	322,440		£2.51	243,616	£1.65	78,824	402	17/
Share Value Plan 2014	206,372		£2.31	103,186	£1.65	103,186	170	16/
	213,017		£2.54	71,005	£1.65	142,012	117	14/

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Share  
Value Plan  
2015  
Share  
Value Plan

2016 254,369 £1.65 254,369

06/

The interests shown in the table above are the maximum number of Barclays shares that may be received under each plan. Executive Directors do not pay for any share plan or LTIP awards. No shares lapsed during 2016.

Jes Staley received 19,846 dividend equivalent shares from SVP awards released in 2016 and Tushar Morzaria received 27,503 dividend equivalent shares from SVP awards released in 2016.

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## Risk review

**The management of risk is a critical underpinning to the execution of Barclays' strategy. The material risks and uncertainties the Group faces across its business and portfolios are key areas of management focus.**

For a more detailed breakdown of our Risk Management approach please see pages 98 to 114.

## Material existing and emerging risks

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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.	§ Material existing and emerging risks potentially impacting more than one Principal Risk	89
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## Risk management

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Risk review

Material existing and emerging risks

### **Analysis of material existing and emerging risks**

This section describes the material risks to which senior management pay particular attention, which they believe could cause the future results of the Group's operations, financial condition and prospects to differ materially from current expectations.

For more information about the major risk policies which underlie risk exposures, see the Risk management section between pages 97 to 114.

## Material existing and emerging risks

### Material existing and emerging risks to the Group's future performance

**This section describes the material risks to which senior management pay particular attention, which they believe could cause the future results of the Group's operations, financial condition and prospects to differ materially from current expectations. These expectations include the ability to pay dividends, maintain appropriate levels of capital and meet capital and leverage ratio targets, and achieve stated commitments. In addition, risks relating to the Group that are not currently known, or that are currently deemed immaterial, may individually or cumulatively have the potential to materially affect the future results of the Group's operations, financial condition and prospects.**

Material risks and their impact are described below in two sections: i) risks which senior management believe are likely to affect more than one Principal Risk; and ii) risks which senior management believe are likely to impact a single Principal Risk. An emerging risk is a risk that has the potential to have a significant detrimental effect on the Group's performance, but currently the outcome and the time horizon for the crystallisation of its possible impact is more uncertain and more difficult to predict than for other risk factors that are not identified as emerging risks. A revised ERMF was approved by the Board in December 2016. This includes a revised risk taxonomy comprising eight Principal Risks (Model Risk, Reputation Risk and Legal Risk were not previously classified as Principal Risks). Additional detail on ERMF and Principal Risks may be found on pages 98.

Additional detail on the management of risks may be found in Barclays' Approach to Managing Risk in the Barclays PLC 2016 Pillar 3 Report.

### Material existing and emerging risks potentially impacting more than one Principal Risk

#### i) Structural reform

The UK Financial Services (Banking Reform) Act 2013 (the UK Banking Reform Act) and associated secondary legislation and regulatory rules, require all UK deposit-taking banks with over £25bn of deposits (from individuals and small businesses) to separate certain day-to-day banking activities (e.g. deposit-taking) offered to retail and smaller business customers from other wholesale and investment banking services.

Through the creation of Barclays' ring-fenced bank, the Group will ensure that core deposits placed within the European Economic Area (EEA) are ring-fenced to meet the requirements of the legislation by 2019. The implementation of these changes involves a number of risks which include:

§ The Group must restructure its intra-group and external capital, funding and liquidity arrangements to meet regulatory requirements and support business needs. The changes will impact the sources of funding available to the different entities, including preventing the non ring-fenced bank's access to certain categories of deposit funding. These changes may result in higher funding costs.

- § The changes to the Group structure may negatively impact the assessment made by credit rating agencies and creditors. The risk profile and key risk drivers of the ring-fenced bank and the non ring-fenced bank will be specific to the activities and risk profile of each entity. As a result different Group entities are likely to be assessed differently and this may result in differences in credit ratings. Changes to the credit assessment at the Group or individual entity level, including the potential for ratings downgrades and ratings differences across entities, could impact access and cost of certain sources of funding.
- § Implementation of ring-fencing introduces a number of execution risks. Technology change could result in outages or operational errors. Legal challenge to the ring-fence transfer scheme may delay the transfer of assets and liabilities to the ring-fenced bank. In particular, the setup of the Group Service Company as a separate legal entity servicing both trading entities (i.e. ring-fenced bank and non ring-fenced bank) will require a number of intra-group service level agreements to be established and agreed between the Group Service Company and the trading entities and will require the Group to set up a new approach to manage, fund and deliver the activities that will be provided by this entity. Delayed delivery could increase reputational risk or result in regulatory non-compliance. Uncertain customer preference (for placement in the ring-fenced or non ring-fenced bank) may result in changes to design and implementation plans.
- § At the European level, structural reform regulation is still being developed as highlighted by the European Union proposal issued in November 2016 for Intermediate Holding Companies. The impact of final rules on Barclays businesses is still to be assessed once European regulation is finalised. Final rules will need to be considered alongside EU Referendum implications. The implementation date for these proposals will depend on the date on which any final legislation is agreed.
- § There is a risk that Barclays does not meet regulatory requirements across the new structure. Failure to meet these requirements may have an adverse impact on the Group's profitability, operating flexibility, flexibility of deployment of capital and funding, return on equity, ability to pay dividends, credit ratings, and/or financial condition.

## **ii) Business conditions, general economy and geopolitical issues**

The Group's performance could be adversely affected in relation to more than one Principal Risk by a weak or deteriorating global economy or political instability. These factors may also occur in one or more of the Group's main countries of operation.

The Group offers a broad range of services including to retail, institutional and government customers, in a large number of countries. The breadth of these operations means that deterioration in the economic environment, or an increase in political instability in countries where the Group is active, or in any other systemically important economy, could adversely affect the Group's performance and prospects.

For the Group, a deterioration of conditions in its key markets could affect performance in a number of ways including, for example: (i) deteriorating business, consumer or investor confidence leading to reduced levels of client activity, or indirectly, a material adverse impact on GDP growth in significant markets and therefore on Group performance; (ii) higher levels of default rates and impairment; (iii) mark to market losses in trading portfolios resulting from changes in factors such as credit ratings, share prices and solvency of counterparties; and (iv) lower levels of fixed asset investment and productivity growth overall.

Global growth is expected to remain modest in 2017, with low single digit growth in advanced economies alongside a slowdown in emerging markets. This moderate economic performance, lower commodity prices and increased geopolitical tensions mean that the distribution of risks to global economic activity continues to be biased to the downside. Commodity prices, particularly oil prices, remain depressed, but could fall further if growth in demand remains weak or supply takes longer than expected to adjust. At the same time, countries with high reliance on

commodity-related earnings have already experienced a tightening of financial conditions. A sustained period of low prices risks triggering further financial distress, default and contagion, for our customers, their suppliers and local communities, and resulting losses for Barclays.

Moreover, sentiment towards emerging markets as a whole continues to be driven in large part by developments in China, where there is significant concern around the ability of authorities to manage growth whilst transitioning towards services. A stronger than expected slowdown could result if authorities fail to appropriately manage the end of the investment and credit-led boom, while the consequences from a faster slowdown would flow through both financial and trade channels into other economies, and affect commodity markets.

Whilst tightening of monetary policy by the US Federal Reserve was not as pronounced as expected during 2016, a moderate increase in activity is expected during 2017, the increasing divergence of policies between major advanced economies risks triggering further financial market volatility. Changes to interest rate expectations could ignite further volatility and US Dollar appreciation, particularly if the US Federal Reserve were to increase interest rates faster than markets currently expect. Emerging markets have already seen growth slow following increased . capital outflows, but growth may slow further if tighter US interest rate policy drives further reallocation of capital.

In several countries, reversals of capital inflows, as well as fiscal austerity, have already caused deterioration in political stability. This could be exacerbated by a renewed rise in asset price volatility or sustained pressure on government finances. In addition, geopolitical tensions in some areas of the world, including the Middle East and Eastern Europe are already acute, and are at risk of further deterioration.

In the US, the policy platform of the new administration is expected to be clarified during the early part of 2017. There is the possibility of significant changes in policy in sectors including trade, healthcare and commodities which may have an impact on associated Barclays portfolios. Proposed policy changes (including tax-cuts and significant infrastructure spending) are likely to result in higher global growth,

Risk review

Material existing and emerging risks

**Material existing and emerging risks to the Group's future performance**

further reinforcing the move towards global deflation. Political change may increase uncertainty as to regulatory trends, both in the US and the EU.

In the UK, the vote in favour of leaving the EU has given rise to political uncertainty with attendant consequences for investment and confidence. See vi) EU Referendum on page 91.

**iii) Change and execution risk**

The Group continues to drive changes to its functional capabilities and operating environment in order to allow the business to exploit emerging and digital technologies, and improve customer experience whilst also embedding enhanced regulatory requirements, strategic realignment, and business model changes. The complexity, increasing pace, and volume of changes underway simultaneously mean there is heightened execution risk and potential for change not being delivered to plan.

Failure to adequately manage this risk could result in extended outages and disruption, financial loss, customer detriment, legal liability, potential regulatory censure and reputational damage.

**iv) Risks arising from regulation of the financial services industry**

The financial services industry continues to be the focus of significant regulatory change and scrutiny which may adversely affect the Group's business, financial performance, capital and risk management strategies. For further information on regulations affecting the Group, including significant regulatory developments, please see the section on Supervision and Regulation on page 182.

*a) Regulatory change*

The Group, in common with much of the financial services industry, remains subject to significant levels of regulatory change and increasing scrutiny in many of the countries in which it operates (including, in particular, the UK and the US). This has led to a more intensive approach to supervision and oversight, increased expectations and enhanced requirements. As a result, regulatory risk will remain a focus for senior management and consume significant levels of business resources. Furthermore, this more intensive approach and the enhanced requirements, uncertainty and extent of international regulatory coordination as enhanced supervisory standards are developed and implemented may adversely affect the Group's business, capital and risk management strategies and/or may result in the Group deciding to modify its legal entity structure, capital and funding structures and business mix, or to exit certain business activities altogether or not to expand in areas despite otherwise attractive potential.

*b) Changes in prudential requirements, including changes to CRD IV*

The Group's results and ability to conduct its business may be negatively affected by changes or additions to supervisory and prudential expectations, including in relation to any minimum requirements for own funds and



eligible liabilities, leverage or liquidity requirements, applicable buffers and/or add-ons to such minimum requirements and RWA calculation methodologies all as may be set by international, EU or national authorities from time to time (including, for example, through changes being proposed to the CRD IV framework).

Changes to or additional supervisory and prudential expectations, either individually or in aggregate, may lead to unexpected enhanced requirements in relation to the Group's capital, leverage, liquidity and funding ratios or alter the way such ratios are calculated. This may result in, amongst other things, a need for further management actions to meet the changed requirements, such as: increasing capital or liquidity resources, reducing leverage and risk weighted assets; modifying legal entity structure (including with regard to issuance and deployment of capital and funding for the Group); changing the Group's business mix or exiting other businesses; and/or undertaking other actions to strengthen the Group's position. See Treasury and Capital Risk on page 104 and Supervision and Regulation on page 184 for more information.

### *c) Market infrastructure reforms*

Financial market infrastructure is subject to extensive and increasing regulation in many of the Group's markets. The derivatives market has been the subject of particular focus across the G20 countries, requiring the clearing of standardised derivatives and the mandatory margining of non-cleared derivatives. More broadly, the recast Markets in Financial Instruments Directive in Europe (MiFID II) will fundamentally change the framework for market infrastructure, the Benchmarks Regulation will regulate the use of benchmarks in the EU, and regulation governing Central Securities Depositories will increase the requirements upon participants in the financial markets.

It is possible that these additional regulations, and the related expenses and requirements, will increase the cost of and therefore impact willingness of participation in the financial markets.

### *d) Recovery and resolution planning*

In recent years, there has been a strong regulatory focus on resolvability from regulators globally, and Barclays continues to work with the relevant authorities to identify and address potential impediments to the Group's resolvability. As part of this work, the Group is required to submit formal Recovery and Resolution Plan (RRP) submissions to UK, US and South African regulators describing Barclays' strategy for recovery and rapid and orderly resolution. These submissions are evaluated by regulators on the basis of both qualitative and quantitative metrics, the specifics of which may become more rigorous over time.

Should the relevant authorities in any jurisdiction ultimately determine that a resolution plan were not credible or would not facilitate an orderly resolution, Barclays or its subsidiaries could be made subject to more stringent capital, leverage or liquidity requirements, or restrictions on growth, activities or operations. The potential structural changes that may be required to address such a determination may negatively impact the financial or competitive position or results of operations of the Group, as well as increase the risk that the Group would be unable to maintain appropriate prudential ratios or be restricted from making intra group or external capital contributions.

### *e) Stress testing*

The Group and certain of its members are subject to supervisory stress testing exercises in a number of jurisdictions. These exercises currently include the programmes of the BoE, the EBA, the FDIC, the FRB and the SARB. These exercises are designed to assess the resilience of banks to adverse economic or financial developments and ensure that they have robust, forward-looking capital and liquidity management processes that account for the risks associated with their business profile. Assessment by regulators is on both a quantitative and qualitative basis, the latter focusing on the Group's or certain of its members' business model, data provision, stress testing capability and internal management processes and controls. The stress testing requirements to which the Group and its members are subject are becoming increasingly stringent, including in the US where the newly sub-consolidated operations and the IHC

will be stress-tested and examined under the FRB's annual CCAR programme for the first time in 2017. Failure to meet requirements of regulatory stress tests, or the failure by regulators to approve the stress test results and capital plans of the Group, could result in the Group being required to enhance its capital position, limit capital distributions or position capital in specific subsidiaries. For more information on stress testing, please see Supervision and Regulation on page 184.

**v) Regulatory action in the event of a bank failure**

As described under Supervision of the Group, Regulation in the EU and UK, Recovery and Resolution developments on page 183 UK resolution authorities have the right under certain circumstances to intervene in the Group pursuant to the stabilisation and resolution powers granted to them under the Banking Act and other applicable legislation.

If any of the powers conferred on the BoE were to be exercised, or there were an increased risk of exercise, in respect of the Group or any entity within the Group, this might result in a material adverse effect on the rights or interests of shareholders and creditors including holders of debt securities and could have a material adverse effect on the market price of shares and other securities issued by the Group. Such effects could include losses of shareholdings or associated rights including, the dilution of percentage ownership of the Group's share capital, and may result in creditors, including debt holders, losing all or a part of the value of their investment in the Group's issued securities.

#### **vi) EU referendum**

The UK held a referendum on 23 June 2016 on whether it should remain a member of the EU. This resulted in a vote in favour of leaving the EU. The result of the referendum means that the long-term nature of the UK's relationship with the EU is unclear and there is uncertainty as to the nature and timing of any agreement with the EU on the terms of exit. In the interim, there is a risk of uncertainty for both the UK and the EU, which could adversely affect the economy of the UK and the other economies in which we operate. The potential risks associated with an exit from the EU have been carefully considered by the Board and include:

##### *Market risk*

§ Potential for continued market volatility (notably FX and interest rates) given political uncertainty which could affect the value of Trading Book positions.

##### *Credit risk*

§ Increased risk of a UK recession with lower growth, higher unemployment and falling UK house prices. This would likely negatively impact a number of Barclays' portfolios, notably: higher Loan to Value home loans, UK unsecured lending including cards and Commercial Real Estate exposures.

##### *Operational risk*

§ Changes to current EU 'Passporting' rights: the UK's withdrawal from the EU may result in the loss of cross-border market access rights which would require Barclays to make alternative licensing arrangements in EU jurisdictions in which Barclays continues to operate.

§ Uncertainty over UK's future approach to EU freedom of movement will impact Barclays' access to the EU talent pool, decisions on hiring from the EU of critical roles and rights to work of current Barclays non-UK EU citizens located in the UK and UK citizens located in the EU.

##### *Legal risk*

§ The legal framework within which Barclays operates could change and become more uncertain as the UK takes steps to replace or repeal certain laws currently in force, which are based on EU legislation and regulation. Certainty of existing contracts, enforceability of legal obligations and uncertainty around the outcome of disputes

may be affected until the impacts of the loss of the current jurisdictional arrangements between UK and EU courts and the universal enforceability of judgements across the EU, are fully known (including the status of existing EU case law).

*Treasury and capital risk*

§ Potential for credit spread widening and reduced investor appetite for Barclays debt issuance, which could negatively impact the cost of and/or access to funding. Potential for continued market volatility could affect interest rate risk in the banking book, as well as securities held by Barclays for liquidity purposes.

§ Changes in the long-term outlook for UK interest rates might also adversely affect UK Pension IAS19 liabilities.

**vii) Impairment**

The introduction of the impairment requirements of IFRS 9 *Financial Instruments*, due to be implemented on 1 January 2018, is expected to result in higher impairment loss allowances that are recognised earlier, on a more forward looking basis and on a broader scope of financial instruments than is the case under IAS 39. Measurement will involve increased complexity, judgement and is expected to have a material financial impact and impairment charges will tend to be more volatile. Unsecured products with longer expected lives, such as revolving credit cards, are expected to be most impacted. The capital treatment on the increased reserves is the subject of ongoing discussion with regulators and across the industry, but there is potential for significant adverse impact on regulatory capital ratios. In addition, the move from incurred to expected credit losses has the potential to impact the Group's performance under stressed economic conditions or regulatory stress tests. For more information please refer to Note 1 Significant Accounting Policies on pages 226 to 230.

Barclays has a jointly accountable risk and finance implementation and governance programme with representation from all impacted departments. During 2016, work continued on the design and build of impairment models, systems, processes, governance, controls and data collection and continues to be refined during 2017. During 2017, there is a planned parallel run which includes continued model, process and output validation, testing, calibration and analysis.

There will be three different layers of impairment committees. In addition to the existing Group and Business level committees, Legal Entity committees for Barclays UK and Barclays International will also be in place. Committees will be chaired by the Chief Risk Officer (CRO), with joint accountability by both CROs and Chief Financial Officers (CFOs) for signing off the results. The new IFRS 9 impairment committee structure, with underlying key controls, is expected to be in operation from Q2 2017. There will also be a Scenarios Management Committee to review and approve the scenario process. The scope of review will include the scenarios and scenario narratives, the core set of macroeconomic variables and any management overlays. The Scenario Management Committee will attest that the scenarios adequately account for the non-linearity and asymmetry of the loss distribution. Reported results and key messages will be communicated to the Board Audit Committee and Risk Executive Committee, who will have oversight roles and provide challenge of key assumptions, including the basis of the scenarios adopted.

**Material existing and emerging risks by Principal Risk**

**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.**

The Group may suffer financial loss if any of its customers, clients or market counterparties fails to fulfil their contractual obligations to the Group. The Group may also suffer loss when the value of its investment in the financial instruments of an entity falls as a result of that entity's credit rating being downgraded. In addition, the Group may

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incur significant unrealised gains or losses due to changes in the Group's credit spreads or those of third parties, as these changes affect the fair value of the Group's derivative instruments, debt securities that the Group holds or issues, and loans held at fair value.

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Risk review

Material existing and emerging risks

Material existing and emerging risks to the Group's future performance

**i) Deterioration in political and economic environment**

The Group's performance is at risk from deterioration in the political and economic environment (see also Business conditions, general economy and geopolitical issues on page 89) which may result from a number of uncertainties, including the following:

*a) Specific regions*

Adverse impacts on customers' ability to service debt and may result in higher impairment charges for the Group.

*United Kingdom*

Following the EU referendum on 23 June 2016 (see EU Referendum on page 91), the UK may experience a period of political and economic uncertainty throughout the negotiation period during which exit options are hard to fully and accurately predict. The initial impact has been the depreciation of Sterling resulting in higher costs for companies exposed to imports and a more favourable environment for exporters. Rising domestic costs resulting from higher import prices may impact household incomes and the affordability of consumer loans and home loans. In turn this may affect businesses dependent on consumers for revenue. There has also been a reduction in activity in both commercial and residential real estate markets which has the potential to impact value.

*United States*

A significant proportion of the Group's portfolio is located in the US, including a major credit card portfolio and a range of corporate and investment banking exposures. Stress in the US economy, weakening GDP, rising unemployment and/or an increase in interest rates could lead to increased levels of impairment.

*Emerging Markets*

Slower growth in China continues to affect a number of emerging economies, particularly those with high fiscal deficits and those reliant on short-term external financing and/or material reliance on commodity exports. Their vulnerability has been further impacted by the fall, and sustained volatility in oil prices, the strong US dollar and the winding down of quantitative easing policies by some central banks. The impact on the Group may vary depending on the vulnerabilities present in each country, but the impact may result in increased impairment charges through sovereign defaults, or the inability or unwillingness of clients and counterparties in that country to meet their debt obligations.

*South Africa*

The negative economic outlook in South Africa continues, with a challenging domestic and external economic environment and ongoing political uncertainty. Real GDP growth remains low resulting in these domestic and global factors impacting credit quality across our portfolios. In the retail sector, concerns remain over the level of consumer indebtedness and affordability, particularly as interest rates rise.

*b) Interest rate rises, including as a result of slowing of monetary stimulus, could impact consumer debt affordability and corporate profitability*

To the extent that central banks increase interest rates in certain developed markets, particularly in our main markets, the UK and the US, they are expected to be small and gradual in scale during 2017, albeit following differing timetables. Recent increases in interest rates occurred in the US with a 0.25% rise in December 2015 and the same rise in December 2016. Whilst further increases may support Group income, future interest rate increases, if larger or more frequent than expectations, could cause stress in the loan portfolio and underwriting activity of the Group. This would be particularly applicable to non-investment grade lending, leading to the possibility of the Group incurring higher impairment. Higher credit losses driving an increased impairment allowance would most notably impact retail unsecured and secured portfolios as a result of a reduction in recoverability and value of the Group's assets, coupled with a decline in collateral values.

Interest rate increases in developed markets may also negatively impact emerging economies, as capital flows to mature markets to take advantage of the higher returns and strengthening economic fundamentals.

**ii) Specific sectors**

The Group is subject to risks arising from changes in credit quality and recovery rate of loans and advances due from borrowers and counterparties in a specific portfolio. Any deterioration in credit quality could lead to lower recoverability and higher impairment in a specific sector. The following are areas of uncertainties to the Group's portfolio which could have a material impact on performance.

*a) UK property*

With UK property representing a significant portion of the overall UK Corporate and Retail credit exposure, the Group is at risk from a fall in property prices in both the residential and commercial sectors in the UK. Strong house price growth in London and the South East of the UK, fuelled by foreign investment, strong buy-to-let (BTL) demand and subdued housing supply, has resulted in affordability metrics becoming stretched. Average house prices as at the end of 2016 were more than 7.9 times average earnings.

However, the recent EU referendum has had a negative impact on home loan applications due to the increased uncertainty in the UK housing market, with ongoing concerns regarding the potential for falling house prices, particularly in London and the South East. Further, a weakening economy would impact the home loan portfolio as costs rise off the back of higher interest rates and customers are impacted by inflationary affordability pressures. Potential losses would likely be most pronounced in the higher Loan to Value (LTV) segments as falling house prices lead to higher impairment and negative capital impact as loss given default (LGD) rates increase.

*b) Natural resources*

Despite limited recovery in oil and commodities prices, the risk of losses and increased impairment is more pronounced where leverage is higher, or in sectors currently subject to strain, notably oil and gas, mining and metals and commodities. Sustained oil price depression from its recent high continues and is driven by ongoing global excess supply. The positioning of these portfolios focuses on investment grade customers or collateralised positions. Continued stress in this market does have the potential to further increase credit losses and impairment where a decline in the value of oil impacts both customer revenue and the value of our underlying collateral.

*c) Large single name losses*

The Group has large individual exposures to single name counterparties. The default of such counterparties could have a significant impact on the carrying value of these assets. In addition, where such counterparty risk has been mitigated by taking collateral, credit risk may remain high if the collateral held cannot be realised, or has to be liquidated at prices which are insufficient to recover the full amount of the loan or derivative exposure. Any such defaults could have a material adverse effect on the Group's results due to, for example, increased credit losses and higher impairment charges.

*d) Leverage finance underwriting*

The Group takes on significant sub-investment grade underwriting exposure, including single name risk, particularly in the US and Europe. The Group is exposed to credit events and market volatility during the underwriting period. Any adverse events during this period may potentially result in loss for the Group or an increased capital requirement should there be a need to hold the exposure for an extended period.



## 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.**

Increased uncertainty across global markets from such factors as an unexpected slowdown in global economic growth, sudden changes in monetary policy, unexpected foreign exchange volatility, especially if accompanied by a significant deterioration in the depth of marketplace liquidity (emerging risk).

The trading business model is focused on client facilitation in wholesale financial markets, ranging from underwriting of debt and equity on behalf of issuers, to acting as a market maker in exchange-traded and over the counter products, to providing risk management solutions.

The Group's trading business is generally adversely exposed to a prolonged period of elevated asset price volatility, particularly if it negatively affects the depth of marketplace liquidity. Such a scenario could impact the Group's ability to execute client trades and may also result in lower client flow-driven income and/or market-based losses on its existing portfolio of market risks. These can include having to absorb higher hedging costs from rebalancing risks that need to be managed dynamically as market levels and their associated volatilities change.

## Treasury and capital risk

**The risk that the Group may not achieve its business plans because of the availability of planned liquidity, a shortfall in capital or a mismatch in the interest rate exposures of its assets and liabilities.**

The Group may not be able to achieve its business plans due to: i) being unable to maintain appropriate capital ratios; ii) being unable to meet its obligations as they fall due; iii) rating agency downgrades; iv) adverse changes in foreign exchange rates on capital ratios; v) negative interest rates; and vi) adverse movements in the pension fund.

### i) Inability to maintain appropriate prudential ratios

Should the Group be unable to maintain or achieve appropriate capital ratios this could lead to: an inability to support business activity; a failure to meet regulatory capital requirements including any additional capital add-ons or the requirements set for regulatory stress tests; increased cost of funding due to deterioration in investor appetite or credit ratings; restrictions on distributions including the ability to meet dividend targets; and/or the need to take additional measures to strengthen the Group's capital or leverage position. While the requirements in CRD IV are now in force in the UK, further changes to regulatory capital requirements could occur, whether as a result of (i) further changes to EU legislation (for example, expected implementation of Bank of International Settlements (BIS) regulatory update recommendations through CRD V, etc); (ii) relevant binding regulatory technical standards updates by the European Banking Authority (EBA); (iii) changes to UK legislation; (iv) changes to PRA rules; (v) additional capital

requirements through Financial Policy Committee (FPC) recommendations; or (vi) changes to International Financial Reporting Standards (IFRS). Such changes, either individually and/or in aggregate, may lead to further unexpected additional requirements in relation to the Group's regulatory capital. For example, during 2016, the European Commission proposed substantial changes to the CRD IV framework (including CRR) in line with internationally-agreed standards. These include changes to the regulatory definition of trading activity, standardised and advanced RWA calculation methodologies for market risk and new standardised RWA rules for counterparty credit risk. The proposal also includes phase-in arrangements for the regulatory capital impact of IFRS9 and the ongoing interaction of IFRS9 with the regulatory framework. The Basel Committee has continued its post-crisis work on RWA and leverage reform. Further standards are expected during the course of 2017 on RWAs for credit risk and operational risk, limitations on the use of internal models for RWA purposes and possible floors based on standardised RWAs. The implementation timeframe for these changes is not yet certain.

Additional prudential requirements may also arise from other regulatory reforms, including UK, EU and US proposals on bank structural reform and current proposals for Minimum Requirement for own funds and Eligible Liabilities (MREL) under the EU Bank Recovery and Resolution Directive (BRRD). Included within these reforms are the Bank of England's latest responses to consultation and statement of policy on MREL requirements for UK banks which were published in November 2016 and which remain subject to further changes.

Many of the expected regulatory proposals are still subject to finalisation, with calibration and timing of implementation still to be determined, and there is potential for the impacts to be different from those originally expected when in final form. Overall, it is likely that these changes in law and regulation will have an impact on the Group as they are likely, when implemented, to require changes to the legal entity structure of the Group and how businesses are capitalised and funded. Any such increased prudential requirements may also constrain the Group's planned activities, require balance sheet reductions and could increase the Group's costs, impact the Group's earnings and restrict the Group's ability to pay dividends. Moreover, if combined with a period of market dislocation or when there is significant competition for the type of funding that the Group needs, it may be more difficult and/or costly to increase the Group's capital resources.

## **ii) Inability to manage liquidity and funding risk effectively**

Failure to manage its liquidity and funding risk effectively may result in the Group either not having sufficient financial resources to meet its payment obligations as they fall due or, although solvent, only being able to meet these obligations at excessive cost. This could cause the Group to fail to meet regulatory liquidity standards, be unable to support day-to-day banking activities, or no longer be a going concern.

## **iii) Credit rating changes and the impact on funding costs**

A credit rating assesses the creditworthiness of the Group, its subsidiaries and branches, and is based on reviews of a broad range of business and financial attributes including risk management processes and procedures, capital strength, asset quality, earnings, funding, liquidity, accounting and governance. Any adverse event to one or more of these attributes may lead to a downgrade, which in turn could result in contractual outflows to meet contractual requirements on existing contracts. Furthermore, outflows related to a multiple-notch credit rating downgrade are included in the LRA stress scenarios and a portion of the liquidity pool is held against this risk. There is a risk that any potential downgrades could impact the Group's performance should borrowing cost and liquidity change significantly versus expectations or the credit spreads of the Group be negatively affected.

For further information please refer to Credit Ratings in the Liquidity Risk Performance section on page 172.

## **iv) Adverse changes in foreign exchange rates on capital ratios**

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The Group has capital resources, risk weighted assets and leverage exposures denominated in foreign currencies. Changes in foreign currency exchange rates may adversely impact the Sterling equivalent value of these items. As a result, the Group's regulatory capital ratios are sensitive to foreign currency movements, and any failure to appropriately manage the Group's balance sheet to take account of foreign currency movements could result in an adverse impact on regulatory capital and leverage ratios.

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## Risk review

### Material existing and emerging risks

#### Material existing and emerging risks to the Group's future performance

##### v) Negative interest rates

A fall in interest rates leading to an environment with negative nominal interest rates would adversely impact Group profitability as retail and corporate business income would decrease due to margin compression. This is because the significant reduction in asset income would not be offset by a reduction in cost in liabilities due to the presence of a floor in our customer deposit and savings rates which are typically set at positive level of rates.

##### vi) Adverse movements in the pension fund

Adverse movements between pension assets and liabilities for defined benefit pension schemes could contribute to a pension deficit. The liabilities discount rate is a key driver and, in accordance with International Financial Reporting Standards (IAS 19), is derived from the yields of high quality corporate bonds (deemed to be those with AA ratings) and consequently includes exposure to both risk-free yields and credit spreads. Therefore, the Group's defined benefits scheme valuation would be adversely affected by a prolonged fall in the discount rate or a persistent low rate and/or credit spread environment. Inflation is another significant risk driver to the pension fund, as the liabilities are adversely impacted by an increase in long-term inflation expectations. However in the long term, inflation and rates risk tend to be negatively correlated and therefore partially offset each other.

### 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.**

The Group is exposed to many types of operational risk. These include: fraudulent and other internal and external criminal activities; breakdowns in processes, controls or procedures (or their inadequacy relative to the size and scope of the Group's business); systems failures or an attempt by an external party to make a service or supporting technological infrastructure unavailable to its intended users, known as a denial of service attack; and the risk of geopolitical cyber threat activity which destabilises or destroys the Group's information technology, or critical technological infrastructure the Group depends upon but does not control. The Group is also subject to the risk of business disruption arising from events wholly or partially beyond its control, for example natural disasters, acts of terrorism, epidemics and transport or utility failures, which may give rise to losses or reductions in service to customers and/or economic loss to the Group. All of these risks are also applicable where the Group relies on outside suppliers or vendors to provide services to it and its customers. The operational risks that the Group is exposed to could change rapidly and there is no guarantee that the Group's processes, controls, procedures and systems are sufficient to address, or could adapt promptly to, such changing risks to avoid the risk of loss.

##### i) Cyber risk

The risk posed by cyber attacks is growing, with financial institutions being a primary target of increasingly capable cyber crime groups, as demonstrated by sophisticated targeted attacks against global payment networks throughout

2016. The increased maturity of online marketplaces for criminal services and stolen data has reduced barriers to entry for criminals perpetrating financial attacks which carry high reward and low risk of law enforcement prosecution.

The cyber threat increases the inherent risk to the Group's data (whether it is held by the Group or in its supply chain), to the integrity of financial transactions of the Group, its clients, counterparties and customers, and to the availability of the Group's services. Failure to adequately manage this risk, and to continually review and update processes, could result in increased fraud losses, inability to perform critical economic functions, customer detriment, potential regulatory censure and penalty, legal liability and reputational damage.

## **ii) Infrastructure and technology resilience**

The failure of the Group's and its suppliers' technology infrastructures remain a material risk driver for the Group. The increased use of technologies to support business strategy, and customer and client demand, means any failures will be felt more immediately and with greater impact.

Failure to adequately manage resilience in our technologies, real-estate, and business and suppliers' processes, may result in disruption to normal service which could in turn result in significant customer detriment, cost to reimburse losses incurred by our customers, potential regulatory censure or penalty, and reputational damage.

## **iii) Ability to hire and retain appropriately qualified employees**

The Group requires a diverse mix of highly skilled and qualified colleagues to deliver its strategy and so is dependent on attracting and retaining appropriately qualified and experienced individuals. Barclays' ability to attract and retain such talent is impacted by a range of external and internal factors.

External regulation such as the introduction of the Individual Accountability Regime and the required deferral and claw back provisions of our compensation arrangements may make Barclays a less attractive proposition relative to both our international competitors and other industries. Similarly, the impact of the planned exit of the UK from the EU could potentially have an impact on our ability to hire and retain key employees.

Failure to attract or prevent the departure of appropriately qualified employees who are dedicated to overseeing and managing current and future regulatory standards and expectations, or who have the necessary skills required to deliver the Group strategy, could negatively impact our financial performance, control environment, level of employee engagement and may result in disruption to service which could in turn lead to customer detriment and reputational damage.

## **iv) Tax risk**

The Group is required to comply with the domestic and international tax laws and practice of all countries in which it has business operations. There is a risk that the Group could suffer losses due to additional tax charges, other financial costs or reputational damage as a result of failing to comply with such laws and practice or by failing to manage its tax affairs in an appropriate manner. The Group also faces emerging risks from domestic and international tax developments. For example, the OECD's Base Erosion and Profit Shifting ( BEPS ) project, and the implementation of its recommendations into domestic law in countries around the world, has the potential to significantly increase the compliance burden on the Group, as well as to increase the incidence of double taxation on the Group as a result of different countries adopting different interpretations and approaches to the BEPS recommendations.

## **v) Critical accounting estimates and judgements**

The preparation of financial statements in accordance with IFRS requires the use of estimates. It also requires management to exercise judgement in applying relevant accounting policies. The key areas involving a higher degree

of judgement or complexity, or areas where assumptions are significant to the consolidated and individual financial statements include provisions for conduct and legal, competition and regulatory matters, fair value of financial instruments, credit impairment charges for amortised cost assets, impairment and valuation of available for sale investments, and accounting for pensions and post-retirements benefits. There is a risk that if the judgement exercised, or the estimates or assumptions used, subsequently turn out to be incorrect, this could result in significant loss to the Group, beyond what was anticipated or provided for.

As part of the assets in the Non-Core business, the Group holds a UK portfolio of generally longer-term loans to counterparties in Education, Social Housing and Local Authorities (ESHLA) sectors, which are measured on a fair value basis. The valuation of this portfolio is subject to substantial uncertainty due to the long-dated nature of the portfolios, the lack of a secondary market in the relevant loans and unobservable loan spreads. As a result of these factors, the Group may be required to revise the fair values of these portfolios to reflect, among other things, changes in valuation methodologies due to changes in industry valuation practices and as further market evidence is obtained in connection with the Non-Core asset run-off and exit process. For further information refer to Note 18 Fair value of financial instruments of the Group's consolidated financial statements.

The further development of standards and interpretations under IFRS could also significantly impact the financial results, condition and prospects of the Group.

#### **vi) Outsourcing**

The Group depends on suppliers for the provision of many of our services, though the Group continues to be accountable for risk arising from the actions of such suppliers. Failure to monitor and control our suppliers could potentially lead to client information, or our critical infrastructures and services, not being adequately protected.

The dependency on suppliers and sub-contracting of outsourced services introduces concentration risk where the failure of specific suppliers could have an impact on our ability to continue to provide services that are material to the Group.

Failure to adequately manage outsourcing risk could result in increased losses, inability to perform critical economic functions, customer detriment, potential regulatory censure and penalty, legal liability and reputational damage.

#### **vii) Data quality**

The quality of the data used in models across Barclays has a material impact on the accuracy and completeness of our risk and financial metrics. The evolution of complex modelling underpinning risk decisions, forecasting and capital calculations, demands greater precision in our data. Failure to manage data standards accordingly may have a material adverse effect on the quality of our risk management.

#### **viii) Operational precision and payments**

The risk of material errors in operational processes, including payments, are exacerbated during the present period of significant levels of structural and regulatory change, the evolving technology landscape, and a transition to digital channel capabilities.

Material operational or payment errors could disadvantage our customers, clients or counterparties and could result in regulatory censure and penalties, legal liability and reputational damage.

## Model risk

### **The risk of the potential adverse consequences from financial assessments or decisions based on incorrect or misused model outputs and reports.**

Barclays uses models to support a broad range of business and risk management activities, including informing business decisions and strategies, measuring and limiting risk, valuing exposures, conducting stress testing, assessing capital adequacy, supporting new business acceptance and risk/reward evaluation, managing client assets, or meeting reporting requirements.

Models are imperfect and incomplete representations of reality, and so they may be subject to errors affecting the accuracy of their outputs. Models may also be misused. Model errors or misuse may result in the Group making inappropriate business decisions and being subject to financial loss, regulatory risk, reputational risk and/or inadequate capital reporting.

## Conduct risk

### **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.**

Barclays is committed to ensuring that positive customer and client outcomes and protecting market integrity are integral to the way the firm operates. This includes taking reasonable steps to ensure our culture and strategy are appropriately aligned to these objectives; our products and services are reasonably designed and delivered to meet the needs of our customers and clients, as well as maintaining the fair and orderly operation of the markets in which we do business.

Certain other risks referenced herein may result in detriment to customers, clients and market integrity if not managed effectively. These include but are not limited to: cyber risk; infrastructure and technology resilience; ability to hire and retain qualified people; outsourcing; data quality; operational precision and payments; regulatory change; structural reform; change and execution risk; and the exit of the UK from the EU.

### **i) Execution of strategic divestment in Non-Core businesses**

As Barclays executes strategic decisions to exit products, businesses or countries, the firm must consider and mitigate any potential detriment to customers, clients and market integrity. There is a risk some customers and clients may have reduced market access and a limited choice of alternative providers, or transitions to alternate providers could cause disruptions. There is also a risk the firm's strategic divestments may impact market liquidity or result in adverse pricing movements. In connection with any country exits, there is a risk that any ongoing cross-border activities into those countries are not conducted in accordance with local laws and regulations. The crystallisation of any of these risks could cause detriment to customers, clients and market integrity, as well as regulatory sanctions, financial loss and reputational damage.

### **ii) Product governance and sales practices**

Effective product governance, including design, approval and periodic review of products, and appropriate controls over various internal and third-party sales channels are critical to ensuring positive outcomes for customers and clients. In particular, Barclays must ensure that its remuneration practices and performance management framework are designed to prevent conflicts of interest and inappropriate sales incentives. Failure of product governance and sales controls could result in the sale of products and services that fail to meet the needs of, or are unsuitable for, customers



and clients, regulatory sanctions, financial loss and reputational damage.

### **iii) Trading controls and benchmark submissions**

Maintaining controls over trading activities and benchmark submissions is critical to ensuring the trust of our customers, clients and other market participants. These controls must be designed to ensure compliance with all applicable regulatory requirements, as well as to prevent market manipulation, unauthorised trading and inadvertent errors. A failure of these controls could result in detriment to customers and clients, disruptions to market integrity, regulatory sanctions, financial loss and reputational damage. The risk of failure could be enhanced by the changes necessary to address various new regulations, including but not limited to the Markets in Financial Instruments Directive II.

### **iv) Financial Crime**

The management of Financial Crime remains a key area of regulatory focus. Delivering a robust control environment to ensure that the Bank effectively manages the risks of Money Laundering, Terrorist Financing, Sanctions and Bribery and Corruption protects the Bank, its customers and its employees, as well as society at large, from the negative effects of financial crime. Failure to maintain an effective control environment may lead to regulatory sanctions, financial loss and reputational damage.

## Risk review

### Material existing and emerging risks

#### Material existing and emerging risks to the Group's future performance

##### v) Data protection and privacy

The proper handling of data and protection of data privacy is critical to developing trust and sustaining long-term relationships with our customers and clients. Inadequate protection of data (including data held and managed by third party suppliers) could lead to security compromise, data loss, financial loss and other potential detriment to our customers and clients, as well as regulatory sanctions, financial loss and reputational damage. The risk of failure could be enhanced by the changes necessary to address various new regulations, including but not limited to the EU Data Protection Initiative.

##### vi) Regulatory focus on culture and accountability

Various regulators around the world have emphasised the importance of culture and personal accountability in helping to ensure appropriate conduct and drive positive outcomes for customers, clients and markets integrity. Regulatory changes such as the new UK Senior Managers Regime and Conduct Rules coming into effect in 2017, along with similar regulations in other jurisdictions, will require Barclays to enhance its organisational and operational governance to evidence its effective management of culture and accountability. Failure to meet these new requirements and expectations may lead to regulatory sanctions, financial loss and reputational damage.

### 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.**

#### Climate change, human rights and support for the defence sector

Any one transaction, investment or event that, in the perception of key stakeholders reduces their trust in the firm's integrity and competence, may have the potential to give rise to risk to Barclays reputation. Barclays' association with sensitive sectors is often an area of concern for stakeholders and the following topics have been of particular interest:

**Fossil fuels:** As the Paris agreement on CO<sub>2</sub> emissions comes into force, banks are coming under increased pressure from civil society, shareholders and potentially national governments regarding the management and disclosure of their climate risks and opportunities, including the activities of certain sections of their client base;

**Human Trafficking:** The UK Modern Slavery Act came into force in October 2015 and with the scrutiny of global business investments rising, the risks of association with human rights violations are growing within the banking sector, through the perceived indirect involvement in human rights abuses committed by clients and customers. Campaigners have been seeking to hold all parties in the value chain to account for environmental and human rights violations where they occur; and

Defence Sector: Supporting the manufacture and export of military and riot control goods and services continues to require significant review internally in order to ensure compliance with all relevant requirements and to avoid reputational damage.

## 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.**

Legal disputes, regulatory investigations, fines and other sanctions relating to conduct of business and breaches of legislation and/or regulations may negatively affect the Group's results, reputation and ability to conduct its business.

The Group conducts diverse activities in a highly regulated global market and therefore is exposed to the risk of fines and other sanctions relating to the conduct of its business. In recent years authorities have increasingly investigated past practices, pursued alleged breaches and imposed heavy penalties on financial services firms. This trend is expected to continue. A breach of applicable legislation and/or regulations could result in the Group or its staff being subject to criminal prosecution, regulatory censure, fines and other sanctions in the jurisdictions in which it operates, particularly in the UK and the US. Where clients, customers or other third parties are harmed by the

Group's conduct, this may also give rise to legal proceedings, including class actions. Other legal disputes may also arise between the Group and third parties relating to matters such as breaches, enforcement of legal rights or obligations arising under contracts, statutes or common law. Adverse findings in any such matters may result in the Group being liable to third parties seeking damages, or may result in the Group's rights not being enforced as intended.

Details of legal, competition and regulatory matters to which the Group is currently exposed are set out in Note 29 legal, competition and regulatory matters. In addition to matters specifically described in Note 29, the Group is engaged in various other legal proceedings in the UK and US and a number of other overseas jurisdictions which arise in the ordinary course of business. The Group is also subject to requests for information, investigations and other reviews by regulators, governmental and other public bodies in connection with business activities in which the Group is or has been engaged. The Group is keeping all relevant agencies briefed as appropriate in relation to these matters on an ongoing basis. In light of the uncertainties involved in legal, competition and regulatory matters, there can be no assurance that the outcome of a particular matter or matters will not be material to the Group's results of operations or cash flow for a particular period, depending on, amongst other things, the amount of the loss resulting from the matter(s) and the amount of income otherwise reported for the period.

The outcome of legal, competition and regulatory matters, both those to which the Group is currently exposed and any others which may arise in the future, is difficult to predict. However, in connection with such matters the Group may incur significant expense, regardless of the ultimate outcome, and any such matters could expose the Group to any of the following: substantial monetary damages and/or fines; remediation of affected customers and clients; other penalties and injunctive relief; additional litigation; criminal prosecution in certain circumstances; the loss of any existing agreed protection from prosecution; regulatory restrictions on the Group's business operations including the withdrawal of authorisations; increased regulatory compliance requirements; suspension of operations; public reprimands; loss of significant assets or business; a negative effect on the Group's reputation; loss of investor confidence and/or dismissal or resignation of key individuals.

In January 2017, Barclays PLC was sentenced to serve three years of probation from the date of the sentencing order in accordance with the terms of its May 2015 plea agreement with the DOJ. During the term of probation Barclays PLC must, amongst other things, (i) commit no crime whatsoever in violation of the federal laws of the United States, (ii) implement and continue to implement a compliance programme designed to prevent and detect the conduct that gave rise to the plea agreement and (iii) strengthen its compliance and internal controls as required by relevant regulatory or enforcement agencies. Potential consequences of breaching the plea agreement include the imposition of

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additional terms and conditions on the Group, an extension of the agreement, or the criminal prosecution of Barclays PLC, which could, in turn, entail further financial penalties and collateral consequences and have a material adverse effect on the Group's business, operating results or financial position.

There is also a risk that the outcome of any legal, competition or regulatory matters in which the Group is involved may give rise to changes in law or regulation as part of a wider response by relevant law makers and regulators. A decision in any matter, either against the Group or another financial institution facing similar claims, could lead to further claims against the Group.

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Risk review

Risk management

## An overview of Barclays

### approach to risk management

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For a more detailed breakdown on our risk review and risk management contents please see pages 86 to 87.

More detailed information on how Barclays manages these risks can be found in Barclays PLC 2016 Pillar 3 Report.



Risk review

Risk management

**Barclays risk management strategy**

## **Introduction**

Barclays engages in activities which entail risk taking, every day, throughout its business. This section introduces these risks, and outlines key governance arrangements for managing them. These include roles and responsibilities, frameworks, policies and standards, assurance and lessons learned processes. The Group's approach to fostering a strong Risk Culture is also described.

## **Enterprise Risk Management Framework (ERMF)**

The Group has clear risk management objectives and a strategy to deliver them through core risk management processes. The ERMF sets the strategic direction by defining clear standards, objectives and responsibilities for all areas of Barclays. It supports the CEO and CRO in embedding effective risk management and a strong Risk Culture.

The ERMF sets out:

§ Principal Risks faced by the Group

§ Risk Appetite requirements

§ Roles and responsibilities for risk management

§ Risk Committee structure.

A revised ERMF was approved by the Board in December 2016. This includes a revised risk taxonomy comprising eight Principal Risks. Credit, market, funding, operational and conduct risks have been aligned to this new taxonomy and the management of these risks has not materially changed. Model risk, reputation risk and legal risk are newly classified as Principal Risks in the latest version of the ERMF, reflecting the heightened importance of these risk types in the current environment. In 2016, Model risk was managed in accordance with dedicated policies linked to the ERMF. These policies supplemented the key risk control frameworks underlying the financial risk types and applied to all businesses and functions in which financial risks were incurred or managed. Reputation risk was considered as part of conduct risk and legal risk was included as a sub-risk type under operational risk. In this Annual Report, the Risk Management sections (pages 97 to 114) follow the new Principal Risk taxonomy of eight risks, reflecting our current approach to risk management. The Risk Performance sections (pages 116-181) follow the Principal Risk taxonomy (of five risks) which prevailed during 2016. Information on reputation risk performance in 2016 is included as part of the conduct risk section. Information on legal risk management in 2016 can be found in the Material Existing and Emerging Risks section (page 89), the Supervision and Regulation section (page 182) and Note 29 to the



Financial Statements (page 280). The definition of the Three Lines of Defence and associated responsibilities were also revised. The ERMF also contains a revised governance structure, including new Group and Business Risk committees, with representation from the first and second lines of defence.

## Principal Risks

The ERMF identifies Principal Risks and sets out responsibilities and risk management standards. Note that Legal, Reputation and Model risks are Principal Risks from January 2017 following Board approval in December 2016.

### 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: This comprises:

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.

§ 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.

§ Conduct risk: 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.

§ 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.

### **Risk Appetite for the Principal Risks**

Risk Appetite is defined as the level of risk which the firm is prepared to accept in the conduct of its activities. The Risk Appetite of the firm:

§ specifies the level of risk we are willing to take and why, to enable specific risk taking activities

§ considers all Principal Risks individually and, where appropriate, in aggregate

§ communicates the acceptable level of risk for different risk types; this may be expressed in financial or non-financial terms, and is measured and effectively monitored

§ describes agreed parameters for the firm's performance under varying levels of financial stress with respect to profitability

§ is considered in key decision-making processes, including business planning, mergers and acquisitions, new product approvals and business change initiatives.

Risk Appetite is approved and disseminated across legal entities and businesses, including by use of Mandate and Scale limits to enable and control specific activities that have material concentration risk implications for the firm. These limits also help reduce the likelihood and size of one-off losses. The Risk Appetite must be formally reviewed on at least an annual frequency in conjunction with the Medium Term Planning (MTP) process and approved by the Board.

### **Roles and responsibilities in the management of risk – the Three Lines of Defence**

All colleagues have a responsibility to contribute to the risk management of the Group. These responsibilities are set out in the Three Lines of Defence. In 2016 these definitions were simplified. Regardless of their function, all teams who manage processes in the firm are responsible for designing, implementing, remediating, monitoring and testing the controls for those processes.

#### **First Line of Defence:**

The First Line comprises all employees engaged in the revenue generating and client facing areas of the firm and all associated support

functions, including Finance, Treasury, Technology and Operations, Human Resources etc. Employees in the first line are responsible for:

§ identifying all the risks in the activities in which they are engaged, and developing appropriate policies, standards and controls to govern their activities

§ operating within any and all limits which the Risk and Compliance functions establish in connection with the Risk Appetite of the firm

§ escalating risk events to senior managers and Risk and Compliance.

Internal controls are critical to running a cost-effective and stable business. To ensure these controls remain strong, sustainable, and efficient the new strategic position of Chief Controls Officer has been created. The Chief Controls Office will help to maintain and enhance an effective and consistent control framework across the organisation.

The First Line must establish their own policies and controls (subject to the Controls Framework of the firm), particularly with respect to operational activities, and require their colleagues to manage all controls to specified tolerances. These control-related activities are also considered First Line and are permitted so long as they are within any applicable limits established by Risk or Compliance. All activities in the first line are subject to oversight from the relevant parts of the second and third lines.

### **Second Line of Defence:**

Employees of Risk and Compliance comprise the Second Line of Defence. The role of the Second Line is to establish the limits, rules and constraints under which first line activities shall be performed, consistent with the Risk Appetite of the firm, and to monitor the performance of the First Line against these limits and constraints.

The Second Line may not establish limits for all First Line activities, especially those related to Operational Risk. The controls for these will ordinarily be established by Controls Officers operating within the Controls Framework of the firm, under the oversight of the Second Line.

The Second Line can also undertake certain additional activities if, in the judgement of the Group CRO, this will reduce the firm's exposure to risk.

### **Third Line of Defence:**

Employees of Internal Audit comprise the Third Line of Defence. They provide independent assurance to the Board and Executive Management over the effectiveness of governance, risk management and control over current, systemic and evolving risks.

The Legal department does not sit in any of the three lines, but supports them all. The Legal department is, however, subject to oversight from Risk and Compliance, with respect to Operational and Conduct risks.

### **Roles and responsibilities in the management of risk risk committees**

Business Risk Committees consider risk matters relevant to their business, and escalate as required to the Group Risk Committee (GRC), whose Chairman in turn escalates to Board Committees and the Board.

There are five Board-level fora which review and monitor risk across the Group. These are: The main Board, the Board Risk Committee, the Board Audit Committee, the Board Reputation Committee and the Board Remuneration Committee.

The Chairman of each Committee prepares a statement each year on the committee's activities, which is included in this report from page 6 to 28.

## **The Board**

One of the Board's (Board of Directors of Barclays PLC) responsibilities is the approval of Risk Appetite (see the Risk Management and Strategy section on page 98), which is the level of risk the Group chooses to take in pursuit of its business objectives. The Group CRO (GCRO) 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. It oversees the management of the most significant risks through regular review of risk exposures. Executive management responsibilities relating to this are set out in the ERMF.

### **The Board Risk Committee (BRC)**

The BRC monitors the Group's risk profile against the agreed financial appetite. Where actual performance differs from expectations, the actions taken by management are reviewed to ensure 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 executive directors. The Group Finance Director (GFD) and the GCRO attend each meeting as a matter of course.

The BRC also considers the Group's risk appetite statement for operational risk and evaluates the Group's operational risk profile and operational risk monitoring.

The BRC receives regular and comprehensive reports on risk methodologies, the effectiveness of the risk management framework, and the Group's risk profile, including the key 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 CRO or senior risk managers in the businesses.

### **The Board Reputation Committee (RepCo)**

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The RepCo reviews management's recommendations on conduct and reputational risk and the effectiveness of the processes by which the Group identifies and manages these risks. It also reviews and monitors the effectiveness of Barclays' Citizenship strategy, including the management of Barclays' economic, social and environmental contribution.

In addition, the Board Audit and Board Remuneration Committees receive regular risk reports to assist them in the undertaking of their

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**Barclays risk management strategy**

duties.

### **The 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 quarterly review of the adequacy of impairment allowances, which it reviews relative to the risk inherent in the portfolios, the business environment, the Group's policies and methodologies and the performance trends of peer banks. The Chairman of the BAC also sits on the BRC.

### **The Board Remuneration Committee (RemCo)**

The RemCo receives a detailed report on risk management performance from the BRC, regular updates on the risk profile and proposals on an ex-ante and ex-post risk adjustments to variable remuneration. These inputs are considered in the setting of performance incentives.

Summaries of the relevant business, professional and risk management experience of the Directors of the Board are presented in the Board of Directors section on pages 3 to 4.

### **Barclays Risk Culture**

Barclays defines Risk Culture as norms, attitudes and behaviours related to risk awareness, risk taking and risk management. At Barclays this is reflected in how we 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 all aspects of colleagues working relationships, specifically (but not exclusively) with other Barclays employees, customers and clients, governments and regulators, business partners, suppliers, competitors and the broader community.

### **Definition of Risk Culture and its determinants**

We review our culture through the lens of four determinants, associated with desired outcomes:

§ **Management and governance:** Consistent tone from the top; responsibilities are clear to enable identification and challenge

§ **Motivation and incentives:** The right behaviours are rewarded and modelled

§ **Competence and effectiveness:** Colleagues are enabled to identify, coordinate, escalate and address risk and control matters

§ **Integrity:** Colleagues are willing to meet their risk management responsibilities; colleagues escalate issues on a timely basis.

### **Management and governance**

Leaders must demonstrate through their everyday behaviours the importance of strong risk management and ensure that their teams have sufficient resource and capability to manage the risk environment.

The simplification of the Three Lines of Defence, as well as the reorganisation of business and risk committees with First and Second Lines of defence representation, promote ownership and accountabilities for risk management.

### **Motivation and incentives**

Barclays seeks to ensure that compensation and promotion decisions take account of risk behaviours.

Management of risk and control is assessed as part of the annual performance appraisal process for all colleagues globally. Positive risk management behaviours will be rewarded and considered as part of promotion decisions, particularly to Managing Director.

### **Competence and effectiveness**

A risk capability scorecard was developed for the Board Risk Committee to monitor and measure capability, and to identify any areas for improvement. Barclays has also appointed a Chief Risk Officer for Treasury and Capital and a Head of Model Risk Management.

### **Integrity**

The *Being Barclays* global induction supports new colleagues in understanding how risk management culture and practices support how the Group does business and the link to Barclays' values. The Leadership Curriculum covers building, sustaining and supporting a trustworthy organisation and is offered to colleagues globally.

The continued promotion and reinforcement of Barclays' Values, as well as the Barclays Way was reflected in the near-perfect rate of completion of related training by employees. Messages and communications from the Chief Risk Officer emphasise the importance of early escalation of risk issues.

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Risk management

**Credit risk management**

## 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 granting of credit is one of the Group's major sources of income and, as a Principal Risk, the Group dedicates considerable resources to its control. The credit risk that the Group faces arises mainly from wholesale and retail loans and advances together with the counterparty credit risk arising from derivative contracts with clients. Other sources of credit risk arise from trading activities, including: debt securities, settlement balances with market counterparties; available for sale assets and reverse repurchase agreements.

Credit risk management objectives are to:

- § maintain a framework of controls to ensure credit risk taking is based on sound credit risk management principles
- § identify, assess and measure credit risk clearly and accurately across the 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
- § ensure that risk-reward objectives are met



More information of the reporting of credit risk can be found in Barclays PLC 2016 Pillar 3 Report.

### **Organisation and structure**

Wholesale and retail portfolios are managed separately to reflect the differing nature of the assets; wholesale balances tend to be larger in value and are managed on an individual basis, while retail balances are larger in number but smaller in value and are, therefore, managed on a homogenous portfolio basis.

Credit risk management responsibilities have been structured so that decisions are taken as close as possible to the business, while ensuring robust review and challenge of performance, risk infrastructure and strategic plans. The credit risk management teams in each business are accountable to the relevant Business CRO who, in turn, reports to the Group CRO.

### **Board oversight and flow of risk related information**

#### **Organisation and structure**

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**Credit risk management**

### **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 policies 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 review and validation 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 entrusted with 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 the Group Senior Credit Officer (GSCO), the Group's most senior credit risk sanctioner. For exposures in excess of the GSCO's authority, approval by Group CRO is required. 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 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.

### **Credit risk mitigation**

The Group employs a range of techniques and strategies to actively mitigate the counterparty credit risks. These can broadly be divided into three types:

§ netting and set-off

§ collateral

§ risk transfer.

#### **Netting and set-off**

In most jurisdictions in which the 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, the Group's normal practice is 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.

### **Collateral**

The 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

§ wholesale lending: a fixed charge over commercial property and other physical assets, in various forms

§ other retail lending: includes charges over motor vehicles and other physical assets, second lien charges over residential property, and finance lease receivables

§ derivatives: the Group also often seeks to enter into a margin agreement (e.g. CSA) with counterparties with which the Group has master netting agreements in place

§ reverse repurchase agreements: collateral typically comprises highly liquid securities which have been legally transferred to the 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 securitisations 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 credit worthy 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.

Detailed policies are in place to ensure that credit risk mitigation is appropriately recognised and recorded and more information can be found in the Barclays PLC 2016 Pillar 3 Report.

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Risk management

**Market risk management**

## **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**

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, the 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.

Market risk in the businesses resides primarily in Barclays International, Group Treasury and Non-Core. These businesses have the mandate to incur market risk.

Market risk oversight and challenge is provided by business committees and Group committees, including the Market Risk Committee.

#### **Roles and responsibilities**

The objectives of market risk management are to:

§ understand and control market risk by robust measurement, limit setting, reporting and oversight

§ facilitate business growth within a controlled and transparent risk management framework

§ ensure that market risk in the businesses is controlled according to the allocated appetite

§ support the Non-Core strategy of asset reductions by ensuring that market risk remains within agreed risk appetite. To ensure the above objectives are met, a well-established governance structure is in place to manage these risks consistent with the ERMF. See page 98 on risk management strategy, governance and risk culture.

The BRC recommends market risk appetite to the Board for their approval. The Market Risk Principal Risk Officer (MRPRO) is responsible for the Market Risk Control Framework and, under delegated authority from the CRO, agrees with the BCROs a limit framework within the context of the approved market risk appetite.

Across the Group, market risk oversight and challenge is provided by business committees, Group committees, including the Market Risk Committee.

The Market Risk Committee approves and makes recommendations concerning the Group-wide market risk profile. This includes overseeing the operation of the Market Risk Framework and associated standards and policies; reviewing arising market or regulatory issues, limits and utilisation; and risk appetite levels to the Board. The Committee is chaired by the MRPRO and attendees include the business heads of market risk, business aligned market risk managers and Internal Audit.

The head of each business is accountable for all market risks associated with its activities, while the head of the market risk team covering each business is responsible for implementing the risk control framework for market risk.

More information on market risk management can be found in Barclays PLC 2016 Pillar 3 Report.

## Organisation and structure

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## Treasury and capital risk management

### Treasury and capital risk

The risk that the Group may not achieve its business plans because of the availability of planned liquidity, a shortfall in capital or a mismatch in the interest rate exposures of its assets and liabilities. The Treasury and Capital Risk function is an independent risk function with responsibility for oversight of the following risks:

**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 Treasury manages treasury and capital risk on a day-to-day basis with the Treasury Committee acting as the principal management body. To ensure 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 and liquidity risk management activities.

To ensure 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, non-traded market risk (NTMR) and pension risk management activities. The following describes the structure and governance associated with the risk types within the Treasury and Capital Risk function.

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## Liquidity risk management

### Overview

The efficient management of liquidity is essential to the Group in retaining the confidence of the financial markets and ensuring that the business is sustainable. There is a control framework in place for managing liquidity risk and this is designed to meet the following objectives:

§ to maintain liquidity resources that are sufficient in amount and quality and a funding profile that is appropriate to meet the liquidity risk appetite as expressed by the Board

§ to maintain market confidence in the Group's name.

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. Treasury has the primary responsibility for managing liquidity risk within the set risk appetite.

### 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 the Group has implemented to manage liquidity risk within the Liquidity Risk Appetite (LRA) and is subject to annual review.

The Board sets the LRA over Group stress tests and is represented as the level of risk the Group chooses to take in pursuit of its business objectives and in meeting its regulatory obligations. The approved LRA is implemented in line with the control framework and policy for liquidity risk

### Control framework

Barclays has a comprehensive control framework for managing the Group's liquidity risk. It is designed to deliver the appropriate term and structure of funding consistent with the LRA set by the Board.

The control framework incorporates a range of ongoing business management tools to monitor, limit and stress test the Group's balance sheet and contingent liabilities and a Contingency Funding 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 the Group's obligations as they fall due.

The stress tests assess the potential contractual and contingent stress outflows under a range of scenarios, which are then used to determine the size of the liquidity pool that is immediately available to meet anticipated outflows if a stress occurs.

The Group maintains a Contingency Funding Plan which details how liquidity stress events of varying severity would be managed. Since the precise nature of any stress event cannot be known in advance, the plans 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. Barclays also maintains Recovery Plans which consider actions to generate additional liquidity in order to facilitate recovery in a severe stress.

### **Risk Appetite and planning**

Barclays has established a LRA over Group stress tests and is represented as the level of liquidity risk the 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 stressed net contractual and contingent 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 Individual Liquidity Adequacy Assessment Process (ILAAP).

The stress outflows are used to determine the size of the 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 the 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 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 the Group's Contingency Funding Plan (CFP).

### **Contingency funding plan and recovery and resolution planning**

Barclays maintains a CFP which is designed to provide a framework where a liquidity stress could be effectively managed. The CFP is proportionate to the nature, scale and complexity of the business and is tested to ensure that it is

operationally robust. The CFP details the circumstances in which the plan could be invoked, including as a result of adverse movements in liquidity early warning indicators. As part of the plan, the Barclays Treasurer has established a

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## Treasury and capital risk management

Liquidity Management Committee (LMC). On invocation of the CFP by the Executive Committee, the LMC would meet to identify the likely impact of the event on the Group and determine the appropriate response for the nature and severity of the stress.

The CFP provides a communication plan and includes management actions to respond to liquidity stresses of varying severity. This could include monetising the liquidity pool, slowing the extension of credit, increasing the tenor of funding and securitising or selling assets.

### 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.

#### Organisation and structure

The management of capital risk is integral to the 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 the 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 the Group's objectives.

The Board approves the Group capital plan, internal and regulatory stress tests, and the Group recovery plan. The Treasury Committee is responsible for monitoring and managing capital risk in line with the Group's capital management objectives, capital plan and risk frameworks. The Board Risk Committee reviews the risk profile, and annually reviews risk appetite and the impact of stress scenarios on the Group capital plan/forecast in order to agree the Group's projected capital adequacy.

Local management ensures compliance with an entity's minimum regulatory capital requirements by reporting to local Asset and Liability Committees with oversight by the Group's Treasury Committee, as required.

#### Roles and responsibilities

Treasury has the primary responsibility for managing and monitoring capital and reports to the Group Finance Director. The Treasury and Capital Risk function contains a Capital Risk Oversight team, and is an independent risk function that reports to the Group CRO and is responsible for oversight of capital risk.

### **Capital risk management**

The Group's capital management strategy is driven by the strategic aims of the Group and the risk appetite set by the Board. The Group's objectives are achieved through well embedded capital management practices.

### **Capital planning and allocation**

The Group assesses its capital requirements on multiple bases, with the Group's capital plan set in consideration of the Group's risk profile and appetite, strategic and performance objectives, regulatory requirements, 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 of ensuring that the Group maintains an adequate level of capital to support its capital requirements.

The PRA determines the regulatory capital requirements for the consolidated Group. Under these regulatory frameworks, capital requirements are set in consideration of the level of risk that the firm is exposed to and the factors above, and are measured through both risk-based RWAs and leverage-based metrics. An internal assessment of the Bank's capital adequacy is undertaken through the Internal Capital Adequacy Assessment Process (ICAAP) and is used to inform the capital requirements of the firm.

The Group expects to meet the minimum requirements for capital and leverage both during the transition period and upon full implementation, and also holds an internal buffer sized according to the firm's assessment of capital risk.

Through the capital planning process, capital allocations are approved by the Group Executive Committee, taking into consideration the risk appetite and strategic aims of the 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 ensure that Barclays' capital plans remain appropriate and that risks to the plans are considered.

Limits are in place to support alignment with the capital plan and adherence to regulatory requirements, and are monitored through appropriately governed forums. Capital risks against firm-specific and macroeconomic early warning indicators are monitored and reported to the Treasury Committee, with clear escalation channels to senior management. 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 the 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.

The 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 the Group capital plan to ensure 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, the Group Recovery Plan defines the actions and implementation strategies available to the Group to increase or preserve capital resources in the situation that a stress occurs that is more severe than anticipated.

### **Transferability of capital**

Surplus capital held in Group entities is required to be repatriated to Barclays Bank PLC 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 redeployment of capital across legal entities. Pre and post the implementation of ring-fencing, capital is managed for the Group as a whole as well as its operating subsidiaries to ensure fungibility and redeployment of capital while meeting relevant internal and regulatory targets at entity levels.

### **Foreign exchange risk**

The Group has capital resources and RWAs 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, the Group's regulatory capital ratios are sensitive to foreign currency movements.

The Group's capital ratio management strategy is to minimise the volatility of the capital ratios caused by foreign exchange rate movements. To achieve this, the Group aims to maintain the ratio of foreign currency CET1, Tier 1 and Total capital resources to foreign currency RWAs the same as the Group's consolidated capital ratios.

The Group's investments in foreign currency subsidiaries and branches, to the extent that they are not hedged for foreign exchange movements, translate into GBP upon consolidation creating CET1 capital resources sensitive to foreign currency movements. Changes in the GBP value of the investments due to foreign currency movements are captured in the currency translation reserve, resulting in a movement in CET1 capital.

To create foreign currency Tier 1 and Total Capital resources additional to the CET1 capital resources, the Group issues debt capital in non-Sterling currencies, where possible. This is primarily achieved through the issuance of debt capital from Barclays PLC or Barclays Bank PLC in US Dollar and Euro, but can also be achieved by subsidiaries issuing capital in local currencies.

### **Pension risk**

The Group maintains a number of defined benefit pension schemes for past and current employees. The ability of the pension fund to meet the projected pension payments is maintained principally through investments.

Pension risk arises because the estimated market value of the pension fund assets might decline; investment returns might reduce; or the estimated value of the pension liabilities might increase as a result of changes to the market process. The Group monitors the market risks arising from its defined benefit pension schemes and works with the Trustees to address shortfalls. In these circumstances, the Group could be required or might choose to make extra contributions to the pension fund. The Group's main defined benefit scheme was closed to new entrants in 2012.

Risk review

Risk management

**Treasury and capital risk management**

**Interest rate risk in the banking book management**

**Overview**

Banking book operations generate non-traded market risk, primarily through interest rate risk arising from the sensitivity of net interest margins to changes in interest rates. To manage interest rate risk within its defined risk appetite, the principal banking businesses engage in internal derivative trades with Treasury. However, the businesses remain susceptible to market risk from six key sources:

- § direct risk: the mismatch between the run-off of product balances and the associated interest rate hedge, given that the balance sheet is held static
- § structural risk: the impact of the rate shock on the rolling hedge replenishment rate on non-maturity products, given that the balance sheet is held static
- § prepayment risk: balance run-off may be faster or slower than expected, due to customer behaviour in response to general economic conditions or interest rates. This can lead to a mismatch between the actual balance of products and the hedges executed with Treasury based on initial expectations
- § recruitment risk: the volume of new business may be lower or higher than expected, requiring the business to unwind pre-hedging or execute hedging transactions with Treasury at different rates than expected
- § residual risk and margin compression: the business may retain a small element of interest rate risk to facilitate the day-to-day management of customer business. Additionally, in the current low interest rate environment, deposits on which the Group sets the interest rate are exposed to margin compression. This is because for any further fall in base rates the Group must absorb an increasing amount of the rate move in its margin
- § lag risk: the risk of being unable to re-price products immediately after a change in interest rates due to both mandatory notification periods and operational constraints in large volume mailings. This is highly prevalent in managed rates savings product (e.g. Everyday Saver) where customers must be informed in writing of any planned reduction in their savings rates.

Non-traded market risk also arises from the Liquidity Buffer investment portfolio, which is managed to a defined risk appetite. Investments in the liquidity buffer are generally subject to available for sale accounting rules; changes in the



value of these assets impact capital via the available for sale reserve.

## **Roles and responsibilities**

### **The Treasury Market Risk team:**

§ provides risk management oversight and monitoring of all traded and non-traded market risk in Treasury, which specifically includes risk management of the liquidity buffer, funding activities, asset and liability management hedging, residual interest rate risk from the hedge accounting solution and foreign exchange translation hedging

§ sets and monitors risk limits to ensure non-traded market risk taken in Treasury and the customer banking book adheres to agreed risk appetite.

The Interest Rate Risk in the Banking Book team:

§ assesses interest rate risk in the banking book, particularly as it relates to customer banking book and Treasury

§ acts as review and challenge of the First Line's risk management practices and decisions including the hedging activity performed by Treasury on behalf of the business

§ acts as review and challenge for the behavioural assumptions used in hedging and transfer pricing.

Risk review

Risk management

**Operational risk management**

## **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.

### **Overview**

The management of operational risk has two key objectives:

§ minimise the impact of losses suffered, both in the normal course of business (small losses) and from extreme events (large losses)

§ improve the effective management of the Group and strengthen its brand and external reputation.

The Group is committed to the management and measurement of operational risk and was granted a waiver by the FSA (now the PRA) to operate an Advanced Measurement Approach (AMA) for operational risk, which commenced in January 2008. The majority of the Group calculates regulatory capital requirements using AMA (94% of capital requirements), except for small parts of the organisation acquired since the original permission (6% of capital requirements) using the Basic Indicator Approach (BIA). The Group works to benchmark its internal operational risk management and measurement practices with peer banks and to drive the further development of advanced techniques.

The Group is committed to operating within a strong system of internal controls that enables business to be transacted and risk taken without exposing the Group to unacceptable potential losses or reputational damages. The Group has an overarching framework that sets out the approach to internal governance. This guide establishes the mechanisms and processes by which the Board directs the organisation, through setting the tone and expectations from the top, delegating authority and monitoring compliance.

### **Organisation and structure**

Operational Risk comprises a number of specific risks defined as follow:

- § **external supplier:** inadequate selection and ongoing management of external suppliers
  
  - § **financial reporting:** reporting misstatement or omission within external financial or regulatory reporting
  
  - § **fraud:** dishonest behaviour with the intent to make a gain or cause a loss to others
  
  - § **information:** inadequate protection of the Group's information in accordance with its value and sensitivity
  
  - § **payments process:** failure in operation of payments processes
  
  - § **people:** inadequate people capabilities, and/or performance/reward structures, and/or inappropriate behaviours
  
  - § **premises and security:** unavailability of premises (to meet business demand) and/or safe working environments, and inadequate protection of physical assets, employees and customers against external threats
  
  - § **taxation:** failure to comply with tax laws and practice which could lead to financial penalties, additional tax charges or reputational damages
  
  - § **technology (including cyber security):** failure to develop and deploy secure, stable and reliable technology solutions which includes risk of loss or detriment to the Group's business and customers as a result of actions committed or facilitated through the use of networked information systems
  
  - § **transaction operations:** failure in the management of critical transaction processes.
- In order to ensure complete coverage of the potential adverse impacts on the Group arising from operational risk, the operational risk taxonomy extends beyond the operational risks listed above to cover areas included within conduct risk. For more information on conduct risk please see page 112.

These risks may result in financial and/or non-financial impacts including legal/regulatory breaches or reputational damages.

## Organisation and structure

Risk review

Risk management

## Operational risk management

### Roles and responsibilities

The prime responsibility for the management of operational risk and the compliance with control requirements rests with the 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 governance, risk and control. Businesses 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 Group Head of Operational Risk is responsible for establishing, owning and maintaining an appropriate Group-wide Operational Risk Framework and for overseeing the portfolio of operational risk across the Group.

Operational risk management acts in a Second Line of Defence capacity, and is responsible for implementation of the framework and monitoring operational risk events and risk exposures. Key indicators (KIs) allow the Group to monitor its operational risk profile and alert management when risk levels exceed acceptable ranges or risk appetite levels and drive timely decision making and actions. Through attendance at business GRC meetings, operational risk management provides specific risk input into the issues highlighted and the overall risk profile of the business. 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 BRC or the BAC.

### Risk and control self-assessments

The Group identifies and assesses all material risks within each business and evaluates the key controls in place to mitigate those risks. Managers in the businesses use self-assessment techniques to identify risks, evaluate the effectiveness of key controls in place and assess whether the risks are being effectively managed. The businesses are then able to make decisions on what action, if any, is required to reduce the level of risk to the Group. These risk assessments are monitored on a regular basis to ensure that each business continually understands the risks it faces.

Risk review

Risk management

**Model risk management**

## **Model risk**

The risk of the potential adverse consequences from financial assessment or decisions based on incorrect or misused model outputs and reports.

### **Overview**

Barclays 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.

Because 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 ensuring that model risk is assessed and managed 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 allocates substantial resources to identify and record models and their usage, document and monitor the performance of models, validate models and ensure that model limitations are adequately addressed.

Barclays has a dedicated Model Risk Management (MRM) function that consists of two main units: 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.

The model risk 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, as well as vendor models and CCAR benchmarking.

Barclays is continuously enhancing model risk management. MRM reports to the Group Chief Risk Officer and operates a global framework. Implementation of best practice standards is a central objective of the Group. Large new model development programmes are currently in motion to implement the model requirements of UK structural reform, CCAR, FRTB and IFRS9.

### **Roles and responsibilities**

The key model risk management activities include:

§ ensuring that models are correctly identified across all relevant areas of the firm, and recorded in the Group Models Database (GMD), the Group-wide model inventory. The heads of the relevant areas (typically, the Business Chief Risk Officers, Business Chief Executive Officers, the Treasurer, the Chief Financial Officer) annually attest to the completeness and accuracy of the model inventory. MGC undertakes regular conformance reviews on the model inventory. These activities are detailed in the Model Inventory, Workflow and Taxonomy Standard

§ ensuring 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 ensure that the model presented to IVU is and remains fit for purpose, in accordance with the Model Documentation Standard, and the Model Testing, Monitoring and Annual Review Standard

§ ensuring that every model is subject to validation and approval by IVU, prior to being implemented and on a continual basis, in accordance with the Model Validation and Approval Standard. 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

§ specific Standards cover model risk management activities relating to CCAR benchmarking and challenger modelling, model overlays, vendor models, and model complexity and materiality.

### **Organisation and structure**



Risk review

Risk management

**Conduct risk management**

## **Conduct risk**

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.

### **Overview**

The Group defines, manages and mitigates conduct risk with the goals of providing positive customer and client outcomes and protecting market integrity. This includes taking reasonable steps to ensure our culture and strategy are appropriately aligned to these goals; our products and services are reasonably designed and delivered to meet the needs of our customers and clients as well as promoting the fair and orderly operation of the markets in which we do business.

As part of the Enterprise Risk Management Framework (ERMF) refresh (page 98), Reputation risk has been designated as a Principal Risk and Financial Crime has been designated as a Risk Category under Conduct Risk.

### **Organisation and structure**

The Group Risk Committee (GRC) is the most senior Executive body responsible for reviewing and monitoring the effectiveness of Barclays' management of Conduct risk.

### **Roles and responsibilities**

The Conduct Risk Principal Risk Framework (PRF) comprises a number of elements that allow the Group to manage and measure its conduct risk profile.

The PRF is implemented vertically across the Group through an organisational structure that requires all businesses to implement and operate their own conduct risk frameworks that meet the requirements within the ERMF.

The primary responsibility for managing conduct risk and compliance with control requirements sits with the business where the risk arises. The Conduct Risk Accountable Executive for each business is responsible for ensuring the implementation of, and adherence to the PRF.



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The Group Chief Compliance Officer is responsible for owning and maintaining an appropriate Group-wide Conduct Risk PRF and for overseeing Group-wide conduct risk management.

Businesses are required to report their conduct risks on both a quarterly and an event-driven basis. The quarterly reports detail the 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. For details please refer to the Risk Review, Conduct Risk Performance section of this report on page 180.

### Organisation and structure

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Risk review

Risk management

**Reputation risk management**

## 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' integrity and competence may reduce the attractiveness of Barclays 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.

With effect from 2017, Reputation risk has been redesignated as a Principal Risk within the Enterprise Risk Management Framework.

### Organisation and structure

The Group Risk Committee (GRC) is the most senior Executive body responsible for reviewing and monitoring the effectiveness of Barclays' management of Reputation risk.

### Roles and responsibilities

The Chief Compliance Officer is accountable for ensuring that a Reputation Principal Risk Framework and policies are developed and that they are subject to limits, 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 Principal Risk Framework sets out what is required to ensure Reputation risk is managed effectively and consistently across the bank.

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.

Each business is required to operate within established Reputation risk appetite and to submit quarterly reports to the Group Reputation Management team, highlighting their most significant current and potential Reputation risks and issues and how they are being managed. These reports are a key internal source of information for the quarterly

Reputation risk reports which are prepared for the Group Risk Committee and the Board Reputation Committee.

## Organisation and structure

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Risk review

Risk management

Legal risk

## 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.

### Overview

With effect from 2017, Legal risk, which was previously a Key Risk under operational risk, has been re-designated as a Principal Risk within the Enterprise Risk Management Framework.

The Legal Risk Framework prescribes Group-wide requirements for the identification, measurement and management of Legal risk, covering assessment, risk appetite, key indicators and governance. The Group General Counsel (GCC) is the Legal Principal Risk Officer and owns the Legal Risk Framework and the associated legal policies.

Legal risk is defined by the five respective Legal Policies:

§ **Contractual arrangements** failure to have enforceable contracts in place or for contracts to be enforceable as intended

§ **Litigation management** failure to adequately manage litigation involving Barclays as either claimant or defendant

§ **Intellectual property (IP)** failure to protect the Group's IP assets or Barclays infringing IP rights of third parties

§ **Competition/antitrust law** failure to follow competition/antitrust law or failure to manage relationships with competition and antitrust authorities

§ **Use of law firms** failure to control instruction of an external law firm.

Group-wide and Business/Function specific Standards may be put in place to support the implementation of the legal policies. The standards are aligned to one of the policies and are implemented by Businesses/ Functions.

## Organisation and structure

The Group Risk Committee (GRC) is the most senior executive body responsible for reviewing and monitoring the effectiveness of Barclays' management of Legal risk. Escalation paths from this forum exist to the Board of Barclays PLC.

## Roles and responsibilities

The Legal Risk Framework sets out what is required to ensure Legal risk is managed effectively and consistently across the bank.

The primary responsibility for managing Legal risk and adherence to the control requirements sits with the business where the risk arises.

On behalf of the businesses, the aligned General Counsel or Legal Senior Management, will undertake Legal risk appetite assessments and provide advice and guidance on Legal risk management. The Legal risk assessment includes both quantitative and qualitative criteria including:

§ Knowledge of Legal risk material control issues or weaknesses

§ Emerging risks resulting from upcoming changes in the control environment, systems, or internal organisational structures

§ Potential implications on Barclays of forthcoming changes in the external legal and regulatory environment and/or prevailing decisions from courts and enforcing authorities as they relate to defined legal risks.

The Legal Principal Risk Officer is responsible for owning and maintaining an appropriate Legal Risk Framework and for overseeing Group-wide legal risk management.

## Organisation and structure

Risk review

Risk performance

Maintaining our risk profile at an acceptable and appropriate level is essential to ensure our continued performance. This section provides a review of the performance of the Group in 2016 for each of the five Principal Risks in operation throughout the year, which are credit, market, funding, operational, and conduct risk.

Please refer to the Risk Management section (pages 97 to 114) for an overview of the changes to Barclays' Principal Risk taxonomy in December 2016.

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Funding risk – capital risk	152
Funding risk – liquidity risk	159
Operational risk	178
Conduct risk	180

For a more comprehensive breakdown on our Risk review and Risk management contents please see pages 86 to 87.

Risk review

Risk performance

**Credit risk**

### **Analysis of credit risk**

Credit risk is the risk of the Group suffering financial loss should any of its customers, clients, or market counterparties fail to fulfil their contractual obligations to the Group.

This section details the Group's credit risk profile and provides information on the Group's exposure to loans and advances to customer and banks, maximum exposures with collateral held and net impairment charges raised in the year. It provides information on balances that are categorised as credit risk loans, balances in forbearance, as well as exposure to and performance metrics for specific portfolios and asset types.

### **Key metrics**

**Credit impairment charges in 2016 were 35% higher than 2015:**

**+£608m Group**

Loan impairment increased reflecting a higher charge following the management review of the UK and US cards portfolio impairment modelling and a number of single name exposures.

**+£555m Retail Core**

Increased charges primarily due to a charge following the review of UK and US cards portfolio impairment modelling.

Underlying performance across key portfolios has remained stable and broadly within expectations

**+£63m Wholesale Core**

Increased charges reflecting limited range of single name exposures.

**-£10m Non-Core**

Decreased charges reflecting lower charges in European businesses.

Net Loans and advances to customers and banks decreased by 2% in 2016

The loan loss rate rose to 53bps

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§ The Group's maximum exposure and collateral and other credit enhancements held	119	
§ The Group's approach to manage and represent credit quality	121	This section provides a macro view of the Group's credit exposures.
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Geographic concentrations	123	
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§ Loans and advances to customers and banks	127	In addition to Group-wide concentrations, Credit Risk monitors exposure performance across a range of specific portfolios where the risk profile is considered to be
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Secured home loans	129	heightened.
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§ Analysis of problem loans	132	The Group monitors exposures to assets where there is a
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		During this time, customer/client assets are separately monitored to ensure that remedies are completed.
		This section outlines the Group's current exposure to assets with this treatment.
§ Impairment	138	The Group holds impairment provisions on the balance sheet as a result of the raising of a charge against profit for incurred losses in the lending book. An impairment allowance may either be identified or unidentified and individual or collective.
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§ Analysis of debt securities	139	This section outlines the movements in allowance for impairment by asset class exposure, material management adjustments to model output, analysis of debt securities

§ Analysis of derivatives

and derivatives.

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Risk review

Risk performance

**Credit risk**

## **Credit risk**

Credit risk is the risk of the Group suffering financial loss if any of its customers, clients or market counterparties fails to fulfil their contractual obligations to the Group.

All disclosures in this section (pages 118 to 120) are unaudited unless otherwise stated. Disclosures for 2016 exclude BAGL balances which are now recognised as held for sale, comparative tables for 2015 include BAGL balances unless otherwise stated.

### **Overview**

Credit risk represents a significant risk to the Group and mainly arises from exposure to wholesale and retail loans and advances together with the counterparty credit risk arising from derivative contracts entered into with clients. A summary of performance may be found below.

This section provides an analysis of areas of particular interest or potentially of higher risk, including: i) balance sheet, including the maximum exposure, and collateral, and loans and advances; ii) areas of concentration; iii) exposure to and performance metrics for specific portfolios and assets types, including home loans, credit cards and UK commercial real estate; iv) exposure and performance of loans on concession programmes, including forbearance; v) problem loans, including credit risk loans (CRLs); and vi) impairment, including impairment stock and management adjustments to model outputs.

Please see risk management section on pages 101 to 102 for details of governance, policies and procedures.

### **Summary of performance in the period**

Credit impairment charges increased £0.6bn to £2.4bn including a £0.3bn charge in Q316 following the management review of the UK and US cards portfolio impairment modelling. Overall, this resulted in an 11bps increase in the loan loss rate to 53bps.

Credit Risk Loans (CRLs) remained stable at £6.5bn (2015: £6.4bn) with the Group's CRL coverage ratio increasing to 71% (2015: 65%) mainly within retail portfolios.

Total loans and advances net of impairment decreased by £11.4bn to £449.5bn driven by a £31bn decrease due to the reclassification of BAGL balances to held for sale and £9bn from the exit of other assets in Non-Core. This was offset by lending growth of £20bn and a net £9bn increase in settlement and cash collateral balances.

## Analysis of the Balance Sheet

### Group's maximum exposure and collateral and other credit enhancements held

#### Basis of preparation

The following tables present a reconciliation between the Group's maximum exposure and its net exposure to credit risk; reflecting the financial effects of collateral, credit enhancements and other actions taken to mitigate the Group's exposure.

For financial assets recognised on the balance sheet, maximum exposure to credit risk represents the balance sheet carrying value after allowance for impairment. For off-balance sheet guarantees, the maximum exposure is the maximum amount that the Group would have to pay if the guarantees were to be called upon. For loan commitments and other credit related commitments that are irrevocable over the life of the respective facilities, the maximum exposure is the full amount of the committed facilities.

This and subsequent analyses of credit risk include only financial assets subject to credit risk. They exclude other financial assets not subject to credit risk, mainly equity securities held for trading, as available for sale or designated at fair value, and traded commodities. Assets designated at fair value in respect of linked liabilities to customers under investment contracts have also not been included as the Group is not exposed to credit risk on these assets. Credit losses in these portfolios, if any, would lead to a reduction in the linked liabilities and not result in a loss to the Group. For off-balance sheet exposures certain contingent liabilities not subject to credit risk such as performance guarantees are excluded.

Both on- and off-balance sheet exposures for 2016 exclude BAGL balances now held for sale. Comparative tables for 2015 include BAGL balances unless stated otherwise.

The Group mitigates the credit risk to which it is exposed through netting and set-off, collateral and risk transfer. Further detail on the Group's policies to each of these forms of credit enhancement is presented in the Barclays Pillar 3 Report.

#### Overview

As at 31 December 2016, the Group's net exposure to credit risk after taking into account netting and set-off, collateral and risk transfer increased 6% to £740.7bn, reflecting an increase in maximum exposure of 3% and an increase in level of mitigation held of 1%. Overall, the extent to which the Group holds mitigation against its total exposure remained stable at 47% (2015: 48%).

Of the remaining exposure left unmitigated, a significant portion relates to cash held at central banks, financial investment debt securities issued by governments, cash collateral and settlement balances, all of which are considered lower risk. Trading portfolio liability positions, which to a significant extent economically hedge trading portfolio assets but which are not held specifically for risk management purposes, are excluded from the analysis. The credit quality of counterparties to derivative, financial investments and wholesale loan assets are predominantly investment grade. Further analysis on the credit quality of assets is presented on pages 121 to 122.

Where collateral has been obtained in the event of default, the Group does not, as a rule, use such assets for its own operations and they are usually sold on a timely basis. The carrying value of assets held by the Group as at

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31 December 2016, as a result of the enforcement of collateral, was £16m (2015: £69m).

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**Maximum exposure and effects of collateral and other credit enhancements (audited)**

	Maximum exposure £m	Netting and set-off £m	Collateral Cash £m	Non-cash £m	Risk transfer £m	Net exposure £m
<b>As at 31 December 2016</b>						
<b>On-balance sheet:</b>						
<b>Cash and balances at central banks</b>	102,353					102,353
<b>Items in the course of collection from other banks</b>	1,467					1,467
<b>Trading portfolio assets:</b>						
Debt securities	38,789					38,789
Traded loans	2,975			(270)		2,705
<b>Total trading portfolio assets</b>	41,764			(270)		41,494
<b>Financial assets designated at fair value:</b>						
Loans and advances	10,519		(17)	(4,107)	(432)	5,963
Debt securities	70					70
Reverse repurchase agreements	63,162		(688)	(62,233)		241
Other financial assets	262					262
<b>Total financial assets designated at fair value</b>	74,013		(705)	(66,340)	(432)	6,536
<b>Derivative financial instruments</b>	346,626	(273,602)	(41,641)	(8,282)	(5,205)	17,896
<b>Loans and advances to banks</b>	43,251		(4)	(4,896)	(22)	38,329
<b>Loans and advances to customers:</b>						
Home loans	144,765		(184)	(143,912)		669
Credit cards, unsecured and other retail lending	57,808		(235)	(5,258)	(95)	52,220
Corporate loans	190,211	(8,622)	(320)	(52,029)	(5,087)	124,153
<b>Total loans and advances to customers</b>	392,784	(8,622)	(739)	(201,199)	(5,182)	177,042
<b>Reverse repurchase agreements and other similar secured lending</b>	13,454		(79)	(13,242)		133
<b>Financial investments - debt securities</b>	62,879			(533)	(1,286)	61,060
<b>Other assets</b>	1,205					1,205
<b>Total on-balance sheet</b>	1,079,796	(282,224)	(43,168)	(294,762)	(12,127)	447,515
<b>Off-balance sheet:</b>						
Contingent Liabilities	19,908		(247)	(1,403)	(130)	18,128

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Documentary credits and other short-term trade-related transactions	1,005	(24)	(18)	(3)	960
Forward starting reverse repurchase agreements	24		(24)		
Standby facilities, credit lines and other commitments	302,657	(321)	(26,524)	(1,704)	274,108
<b>Total off-balance sheet</b>	<b>323,594</b>	<b>(592)</b>	<b>(27,969)</b>	<b>(1,837)</b>	<b>293,196</b>
<b>Total</b>	<b>1,403,390</b>	<b>(282,224)</b>	<b>(43,760)</b>	<b>(322,731)</b>	<b>(13,964)</b>
					<b>740,711</b>

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## Risk review

## Risk performance

## Credit risk

**Maximum exposure and effects of collateral and other credit enhancements (audited)**

	Maximum exposure £m	Netting and set-off £m	Collateral		Risk transfer £m	Net exposure £m
			Cash £m	Non-cash £m		
<b>As at 31 December 2015</b>						
<b>On-balance sheet:</b>						
<b>Cash and balances at central banks</b>	49,711					49,711
<b>Items in the course of collection from other banks</b>	1,011					1,011
<b>Trading portfolio assets:</b>						
Debt securities	45,576					45,576
Traded loans	2,474			(607)	(1)	1,866
<b>Total trading portfolio assets</b>	48,050			(607)	(1)	47,442
<b>Financial assets designated at fair value:</b>						
Loans and advances	17,913		(21)	(5,850)	(515)	11,527
Debt securities	1,383					1,383
Reverse repurchase agreements	49,513		(315)	(49,027)		171
Other financial assets	375					375
<b>Total financial assets designated at fair value</b>	69,184		(336)	(54,877)	(515)	13,456
<b>Derivative financial instruments</b>	327,709	(259,582)	(34,918)	(7,484)	(5,529)	20,196
<b>Loans and advances to banks</b>	41,349		(4)	(4,072)	(64)	37,209
<b>Loans and advances to customers:</b>						
Home loans	155,863		(221)	(154,355)	(634)	653
Credit cards, unsecured and other retail lending	67,840	(12)	(1,076)	(14,512)	(1,761)	50,479
Corporate loans	175,514	(8,399)	(593)	(45,788)	(4,401)	116,333
<b>Total loans and advances to customers</b>	399,217	(8,411)	(1,890)	(214,655)	(6,796)	167,465
<b>Reverse repurchase agreements and other similar secured lending</b>	28,187		(166)	(27,619)		402
<b>Financial investments - debt securities</b>	89,278			(832)	(811)	87,635
<b>Other assets</b>	1,410					1,410
<b>Total on-balance sheet</b>	1,055,106	(267,993)	(37,314)	(310,146)	(13,716)	425,937
<b>Off-balance sheet:</b>						
Contingent liabilities	20,576		(604)	(1,408)	(104)	18,460
Documentary credits and other short-term trade-related transactions	845		(33)	(57)	(3)	752

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Forward starting reverse repurchase agreements	93			(91)		2
Standby facilities, credit lines and other commitments	281,369		(313)	(24,156)	(662)	256,238
<b>Total off-balance sheet</b>	302,883		(950)	(25,712)	(769)	275,452
<b>Total</b>	1,357,989	(267,993)	(38,264)	(335,858)	(14,485)	701,389

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## The Group's approach to management and representation of credit quality

### Asset credit quality

All loans and advances are categorised as either neither past due nor impaired, past due but not impaired, or past due and impaired, which includes restructured loans. For the purposes of the disclosures in the balance sheet credit quality section below and the analysis of loans and advances and impairment section (page 138):

§ loans neither past due nor impaired consist predominantly of wholesale and retail loans that are performing. These loans, although unimpaired may carry an unidentified impairment

§ a loan is considered past due and classified as Higher risk when the borrower has failed to make a payment when due under the terms of the loan contract

§ loans on forbearance programmes, as defined on page 134, are categorised as Higher risk

§ the impairment allowance includes allowances against financial assets that have been individually impaired and those subject to collective impairment.

The Group uses the following internal measures to determine credit quality for loans that are performing:

Default Grade	Wholesale lending Probability of default	Credit Quality Description
1-3	0.0-0.05%	Strong
4-5	0.05-0.15%	
6-8	0.15-0.30%	Satisfactory
9-11	0.30-0.60%	
12-14	0.60-2.15%	
15-19	2.15-11.35%	Higher risk
20 - 21	11.35%+	

For retail clients, a range of analytical tools is used to derive the probability of default of clients at inception and on an ongoing basis.

For loans that are performing, these descriptions can be summarised as follows:

**Strong:** there is a very high likelihood of the asset being recovered in full.

**Satisfactory:** while there is a high likelihood that the asset will be recovered and therefore, of no cause for concern to the Group, the asset may not be collateralised, or may relate to retail facilities, such as credit card balances and unsecured loans, which have been classified as satisfactory, regardless of the fact that the output of internal grading models may have indicated a strong or high classification. At the lower end of this grade there are customers that are being more carefully monitored, for example, corporate customers which are indicating some evidence of deterioration, home loans with a high loan to value, and unsecured retail loans operating outside normal product guidelines.

**Higher risk:** there is concern over the obligor's ability to make payments when due. However, these have not yet converted to actual delinquency. There may also be doubts over the value of collateral or security provided. However, the borrower or counterparty is continuing to make payments when due and is expected to settle all outstanding amounts of principal and interest.

Loans that are past due are monitored closely, with impairment allowances raised as appropriate and in line with the Group's impairment policies. These loans are all considered Higher risk for the purpose of this analysis of credit quality.

### Debt securities

For assets held at fair value, the carrying value on the balance sheet will include, among other things, the credit risk of the issuer. Most listed and some unlisted securities are rated by external rating agencies. The Group mainly uses external credit ratings provided by Standard & Poor's, Fitch or Moody's. Where such ratings are not available or are not current, the Group will use its own internal ratings for the securities.

### Balance sheet credit quality

The following tables present the credit quality of Group assets exposed to credit risk.

### Overview

As at 31 December 2016, the ratio of the Group's assets classified as strong remained broadly stable at 86% (2015: 85%) of total assets exposed to credit risk.

## Risk review

## Risk performance

## Credit risk

Further analysis of debt securities by issuer and issuer type and netting and collateral arrangements on derivative financial instruments is presented on pages 139 and 140 respectively.

## Balance sheet credit quality (audited)

As at 31 December 2016	Strong (including investment grade) £m	Satisfactory (BB+ to B) £m	Higher risk (B- and below) £m	Maximum exposure to credit risk £m	Strong (including investment grade) %	Satisfactory (BB+ to B) %	Higher risk (B- and below) %	Maximum exposure to credit risk %
Cash and balances at central banks	102,353			102,353	100			
Items in the course of collection from other banks	1,328	130	9	1,467	91	9		
Trading portfolio assets:								
Debt securities	37,037	1,344	408	38,789	96	3	1	
Traded loans	594	1,977	404	2,975	20	66	14	
<b>Total trading portfolio assets</b>	<b>37,631</b>	<b>3,321</b>	<b>812</b>	<b>41,764</b>	<b>90</b>	<b>8</b>	<b>2</b>	
Financial assets designated at fair value:								
Loans and advances	9,692	533	294	10,519	92	5	3	
Debt securities	59	11		70	84	16		
Reverse repurchase agreements	53,151	9,999	12	63,162	84	16		

Other financial assets	244	18		262	93	7		
<b>Total financial assets designated at fair value</b>	<b>63,146</b>	<b>10,561</b>	<b>306</b>	<b>74,013</b>	<b>85</b>	<b>14</b>	<b>1</b>	
Derivative financial instruments	330,737	14,963	926	346,626	95	5		
Loans and advances to banks	39,159	3,830	262	43,251	91	9		
Loans and advances to customers:								
Home loans	136,922	2,589	5,254	144,765	95	1	4	
Credit cards, unsecured and other retail lending	5,343	50,685	1,780	57,808	9	88	3	
Corporate loans	140,414	37,170	12,627	190,211	74	19	7	
<b>Total loans and advances to customers</b>	<b>282,679</b>	<b>90,444</b>	<b>19,661</b>	<b>392,784</b>	<b>72</b>	<b>23</b>	<b>5</b>	
Reverse repurchase agreements and other similar secured lending	9,364	4,090		13,454	70	30		
Financial investments debt securities	62,842	30	7	62,879	100			
Other assets	1,085	117	3	1,205	90	10		
<b>Total assets</b>	<b>930,324</b>	<b>127,486</b>	<b>21,986</b>	<b>1,079,796</b>	<b>86</b>	<b>12</b>	<b>2</b>	

**Balance sheet credit quality (audited)**

As at 31 December 2015	Strong (including investment grade)	Satisfactory (BB+ to B)	Higher risk (B- and below)	Maximum exposure to credit risk	Strong (including investment grade)	Satisfactory (BB+ to B)	Higher risk (B- and below)	
	£m	£m	£m	£m	%	%	%	
Cash and balances at	49,711			49,711	100			

<b>central banks</b>								
<b>Items in the course of collection from other banks</b>	922	62	27	1,011	91	6	3	
<b>Trading portfolio assets:</b>								
Debt securities	43,118	2,217	241	45,576	95	5		
Traded loans	329	1,880	265	2,474	13	76	11	
<b>Total trading portfolio assets</b>	43,447	4,097	506	48,050	90	9	1	
<b>Financial assets designated at fair value:</b>								
Loans and advances	16,751	790	372	17,913	94	4	2	
Debt securities	1,378	3	2	1,383	100			
Reverse repurchase agreements	41,145	8,352	16	49,513	83	17		
Other financial assets	313	62		375	83	17		
<b>Total financial assets designated at fair value</b>	59,587	9,207	390	69,184	86	13	1	
<b>Derivative financial instruments</b>	313,114	13,270	1,325	327,709	96	4		
<b>Loans and advances to banks</b>	39,059	1,163	1,127	41,349	94	3	3	
<b>Loans and advances to customers:</b>								
Home loans	139,252	9,704	6,907	155,863	89	6	5	
Credit cards, unsecured and other retail lending	12,347	51,294	4,199	67,840	18	76	6	
Corporate loans	125,743	39,600	10,171	175,514	72	22	6	
	277,342	100,598	21,277	399,217	70	25	5	

<b>Total loans and advances to customers</b>							
<b>Reverse repurchase agreements and other similar secured lending</b>	23,040	5,147		28,187	82	18	
<b>Financial investments</b>							
<b>debt securities</b>	88,536	632	110	89,278	99	1	
<b>Other assets</b>	1,142	233	35	1,410	81	17	2
<b>Total assets</b>	895,900	134,409	24,797	1,055,106	85	13	2

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## Analysis of the concentration of credit risk

A concentration of credit risk exists when a number of counterparties are located in a geographical region or are engaged in similar activities and have similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions. The Group implements limits on concentrations in order to mitigate the risk. The analyses of credit risk concentrations presented below are based on the location of the counterparty or customer or the industry in which they are engaged. Further detail on the Group's policies with regard to managing concentration risk is presented on page 370.

## Geographic concentrations

As at 31 December 2016, the geographic concentration of the Group's assets remained broadly consistent with 2015. Exposure is concentrated in the UK 41% (2015: 40%), in the Americas 33% (2015: 31%) and Europe 21% (2015: 20%). The decrease of £58bn in Africa and the Middle East is due to the reclassification of BAGL balances now held for sale.

Information on exposures to Eurozone countries is presented on page 124.

## Credit risk concentrations by geography (audited)

	United Kingdom	Europe	Americas	Africa and Middle East	Asia	Total
	£m	£m	£m	£m	£m	£m
<b>As at 31 December 2016</b>						
<b>On-balance sheet:</b>						
Cash and balances at central banks	30,485	40,439	24,859	77	6,493	102,353
Items in the course of collection from other banks	969	498				1,467
Trading portfolio assets	8,981	9,171	19,848	435	3,329	41,764
Financial assets designated at fair value	25,821	10,244	33,181	733	4,034	74,013
Derivative financial instruments	108,559	107,337	105,129	1,493	24,108	346,626
Loans and advances to banks	7,458	12,674	16,894	1,778	4,447	43,251
Loans and advances to customers	253,752	47,050	81,045	3,089	7,848	392,784
Reverse repurchase agreements and other similar secured lending	218	309	11,439	92	1,396	13,454
Financial Investments - debt securities	18,126	27,763	12,030	251	4,709	62,879
Other assets	987		137	10	71	1,205
<b>Total on-balance sheet</b>	<b>455,356</b>	<b>255,485</b>	<b>304,562</b>	<b>7,958</b>	<b>56,435</b>	<b>1,079,796</b>

**Off-balance sheet:**

Contingent liabilities	8,268	3,275	6,910	702	753	19,908
Documentary credits and other short-term trade related transactions	915	9		40	41	1,005
Forward starting reverse repurchase agreements	14	1	5	2	2	24
Standby facilities, credit lines and other commitments	106,413	35,475	156,072	1,692	3,005	302,657
<b>Total off-balance sheet</b>	<b>115,610</b>	<b>38,760</b>	<b>162,987</b>	<b>2,436</b>	<b>3,801</b>	<b>323,594</b>
<b>Total</b>	<b>570,966</b>	<b>294,245</b>	<b>467,549</b>	<b>10,394</b>	<b>60,236</b>	<b>1,403,390</b>

**Credit risk concentrations by geography (audited)**

	United Kingdom	Europe	Americas	Africa and Middle East	Asia	Total
As at 31 December 2015	£m	£m	£m	£m	£m	£m
<b>On-balance sheet:</b>						
Cash and balances at central banks	14,061	19,094	13,288	2,055	1,213	49,711
Items in the course of collection from other banks	543	72		396		1,011
Trading portfolio assets	7,150	10,012	23,641	2,111	5,136	48,050
Financial assets designated at fair value	22,991	5,562	35,910	3,039	1,682	69,184
Derivative financial instruments	99,658	103,498	101,592	3,054	19,907	327,709
Loans and advances to banks	10,733	9,918	13,078	2,900	4,720	41,349
Loans and advances to customers	239,086	47,372	69,803	33,461	9,495	399,217
Reverse repurchase agreements and other similar secured lending	5,905	4,361	15,684	915	1,322	28,187
Financial investments - debt securities	20,509	40,344	20,520	3,999	3,906	89,278
Other assets	868	4	131	314	93	1,410
<b>Total on-balance sheet</b>	<b>421,504</b>	<b>240,237</b>	<b>293,647</b>	<b>52,244</b>	<b>47,474</b>	<b>1,055,106</b>
<b>Off-balance sheet:</b>						
Contingent liabilities	9,543	3,020	5,047	2,505	461	20,576
Documentary credits and other short-term trade related transactions	594	58		193		845
Forward starting reverse repurchase agreements	9	5	65		14	93
Standby facilities, credit lines and other commitments	104,797	34,370	125,456	13,600	3,146	281,369
<b>Total off-balance sheet</b>	<b>114,943</b>	<b>37,453</b>	<b>130,568</b>	<b>16,298</b>	<b>3,621</b>	<b>302,883</b>
<b>Total</b>	<b>536,447</b>	<b>277,690</b>	<b>424,215</b>	<b>68,542</b>	<b>51,095</b>	<b>1,357,989</b>

Risk review

Risk performance

**Credit risk**

### **Exposures to Eurozone countries**

The following table shows Barclays most significant current exposure (above £4bn net on-balance sheet exposure) to Eurozone countries.

### **Basis of preparation**

The Group presents the direct balance sheet exposure to credit and market risk by country, with the totals reflecting allowance for impairment, netting and cash collateral held where appropriate.

The net on-balance sheet exposure includes:

§ Loans and advances held at amortised cost, net of impairment. Settlement balances and cash collateral are excluded from this analysis

§ Trading assets and liabilities are presented by issuer type on a net basis. Where liability positions exceed asset positions by issuer type, exposures are presented as nil

§ Derivative assets and liabilities are presented by counterparty type on a net basis. Cash collateral held is then added to give a net credit exposure. Where liability positions and collateral held exceed asset positions by counterparty type, exposures are presented as nil

§ Financial investments – debt securities principally relating to investments in government bonds and other debt securities

§ Other assets held for sale. Businesses held for sale with European exposures are included within the Financial institutions category

The analysis excludes financial assets not subject to credit risk

§ Equity securities held for trading, as financial investments or designated at fair value, and traded commodities

§ Reverse repurchase agreements measured at amortised cost and at fair value which are materially fully collateralised

Gross exposure reflects total exposures before the effects of economic hedging by way of trading portfolio liabilities, derivative liabilities and cash collateral, but after taking into account impairment allowances and IFRS netting.

The Italian home loans of £9.7bn (2015: £9.5bn) are secured on residential property with average balance weighted marked to market LTVs of 61.8% (2015: 60.6%) and CRL coverage of 36% (2015: 31%). 90 days arrear and gross charge-off rates remained stable at 1.2% (2015: 1.2%) and 0.8% (2015: 0.7%) respectively.

### Net exposure by country and counterparty

	Sovereign	Financial institutions	Corporate	Home loans	Other retail lending	Net on-balance sheet exposure	Gross on-balance sheet exposure	C
	£m	£m	£m	£m	£m	£m	£m	con
<b>As at 31 December 2016</b>								
Italy	2,668	299	763	9,741	331	13,802	18,580	
Germany	5,250	3,399	1,379	8	2,967	13,003	47,964	
France	3,708	6,886	1,160	736	139	12,629	41,056	
Ireland	6	2,230	1,855	30	9	4,130	6,474	
<b>Total</b>	<b>11,632</b>	<b>12,814</b>	<b>5,157</b>	<b>10,515</b>	<b>3,446</b>	<b>43,564</b>	<b>114,074</b>	
<b>As at 31 December 2015</b>								
Italy	1,708	2,283	1,039	9,505	675	15,210	20,586	
Germany	7,494	3,621	1,602	9	2,313	15,039	50,930	
France	7,426	4,967	805	1,472	152	14,822	43,427	
Ireland	9	2,824	1,282	37	51	4,203	7,454	
<b>Total</b>	<b>16,637</b>	<b>13,695</b>	<b>4,728</b>	<b>11,023</b>	<b>3,191</b>	<b>49,274</b>	<b>122,397</b>	

## Industry concentrations

The concentration of the Group's assets by industry remained broadly consistent year on year. As at 31 December 2016, total assets concentrated towards banks and other financial institutions was 43% (2015: 42%), predominantly within derivative financial instruments. The proportion of the overall balance concentrated towards governments and central banks remained stable at 14% (2015: 12%) and home loans at 11% (2015: 12%).

## Credit risk concentrations by industry (audited)

As at 31 December 2016	Banks	Other financial insti- tutions	Manu- facturing	Const- ruction and property	Govern- ment and central bank	Energy and water	Wholesale and retail distribu- tion and leisure	Business and other services	Home loans
On-balance sheet:	£m	£m	£m	£m	£m	£m	£m	£m	£m
Cash and balances at central banks					102,353				
Items in the course of collection from other banks	1,467								
Trading portfolio assets	2,231	7,998	1,625	565	21,047	3,733	324	2,972	257
Financial assets designated at fair value	14,714	49,783	3	5,699	856	5	33	2,811	33
Derivative financial instruments	182,664	139,066	2,913	3,488	6,547	4,585	810	3,392	
Loans and advances to	38,932				4,319				

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banks									
Loans and advances to customers		91,812	12,337	24,200	12,028	7,384	12,967	21,838	144,765
Reverse repurchase agreements and other similar secured lending	2,596	10,568		38	252				
Financial investments - debt securities	12,842	4,877			44,263		43	807	
Other assets	975	205			25				
<b>Total on-balance sheet</b>	<b>256,421</b>	<b>304,309</b>	<b>16,878</b>	<b>33,990</b>	<b>191,690</b>	<b>15,707</b>	<b>14,177</b>	<b>31,820</b>	<b>145,055</b>
<b>Off-balance sheet:</b>									
Contingent liabilities	1,484	4,232	3,387	707	8	2,649	1,032	4,847	40
Documentary credits and other short-term trade related transactions	433		377				157	38	
Forward starting reverse repurchase agreements	5	19							
Standby facilities, credit lines and other commitments	1,016	29,310	38,829	11,876	400	29,699	14,741	26,359	9,610
<b>Total off-balance sheet</b>	<b>2,938</b>	<b>33,561</b>	<b>42,593</b>	<b>12,583</b>	<b>408</b>	<b>32,348</b>	<b>15,930</b>	<b>31,244</b>	<b>9,650</b>
<b>Total</b>	<b>259,359</b>	<b>337,870</b>	<b>59,471</b>	<b>46,573</b>	<b>192,098</b>	<b>48,055</b>	<b>30,107</b>	<b>63,064</b>	<b>154,705</b>

Other risks being monitored include exposures to the oil and gas sector. Net on-balance sheet exposure to the oil and gas sector was £4.2bn (2015: £4.4bn), with contingent liabilities and commitments to this sector of £16.0bn (2015: £13.8bn). Impairment charges were £94m (2015: £106m). The ratio of the Group's net total exposures classified as strong or satisfactory was 93% (2015: 97%) of the total net exposure to credit risk to this sector.

Risk review

Risk performance

Credit risk

**Credit risk concentrations by industry  
(audited)**

As at 31 December 2015	Banks	Other financial insti- tutions	Manu- facturing	Const- ruction and property	Govern- ment and central bank	Energy and water	Wholesale and retail distribu- tion and leisure	Business and other services	Home loans
On-balance sheet:	£m	£m	£m	£m	£m	£m	£m	£m	£m
Cash and balances at central banks					49,711				
Items in the course of collection from other banks	1,011								
Trading portfolio assets	1,897	11,826	970	538	25,797	2,554	315	2,727	550
Financial assets designated at fair value	14,015	35,109	104	8,642	7,380	33	191	3,402	229
Derivative financial instruments	185,782	114,727	2,701	2,940	6,113	4,538	1,063	5,346	
Loans and advances to banks	36,829				4,520				
Loans and advances to customers		80,729	12,297	23,519	5,940	7,743	13,830	25,728	155,863
Reverse repurchase agreements and other	8,676	18,022		1,011	305		35	138	

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similar secured lending									
Financial investments - debt securities	9,745	6,114	68	43	67,645	182	107	5,134	
Other assets	312	1,077			20				
<b>Total on-balance sheet</b>	258,267	267,604	16,140	36,693	167,431	15,050	15,541	42,475	156,642
<b>Off-balance sheet:</b>									
Contingent liabilities	1,152	4,698	3,142	958	9	3,073	1,301	4,645	100
Documentary credits and other short-term trade related transactions	378	17	142	1		3	129	50	
Forward starting reverse repurchase agreements	78	15							
Standby facilities, credit lines and other commitments	946	31,152	35,865	11,337	871	26,217	15,054	23,180	11,708
<b>Total off-balance sheet</b>	2,554	35,882	39,149	12,296	880	29,293	16,484	27,875	11,808
<b>Total</b>	260,821	303,486	55,289	48,989	168,311	44,343	32,025	70,350	168,450

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As the principal source of credit risk to the Group, loans and advances to customers and banks is analysed in detail below:

### Analysis of loans and advances and impairment to customers and banks

As at	Gross L&A	Impairment allowance	L&A net of impairment	Credit risk loans	CRLs % of gross L&A	Loan impairment charges <sup>a</sup>	Loan loss rates
31 December	£m	£m	£m	£m	%	£m	bps
2016							
Barclays UK	155,729	1,519	154,210	2,044	1.3	866	56
Barclays International	33,485	1,492	31,993	1,249	3.7	1,085	324
Barclays Core	189,214	3,011	186,203	3,293	1.7	1,951	103
Barclays Non-Core	10,319	385	9,934	838	8.1	102	99
<b>Total Group retail</b>	<b>199,533</b>	<b>3,396</b>	<b>196,137</b>	<b>4,131</b>	<b>2.1</b>	<b>2,053</b>	<b>103</b>
Barclays UK	15,204	282	14,922	591	3.9	30	20
Barclays International	180,102	748	179,354	1,470	0.8	258	14
Barclays Core	199,716	1,030	198,686	2,061	1.0	288	14
Barclays Non-Core	41,406	194	41,212	299	0.7	11	3
<b>Total Group wholesale</b>	<b>241,122</b>	<b>1,224</b>	<b>239,898</b>	<b>2,360</b>	<b>1.0</b>	<b>299</b>	<b>12</b>
<b>Total loans and advances at amortised cost</b>	<b>440,655</b>	<b>4,620</b>	<b>436,035</b>	<b>6,491</b>	<b>1.5</b>	<b>2,352</b>	<b>53</b>
Traded loans	2,975	n/a	2,975	n/a			
Loans and advances designated at fair value	10,519	n/a	10,519	n/a			
<b>Loans and advances held at fair value</b>	<b>13,494</b>	<b>n/a</b>	<b>13,494</b>	<b>n/a</b>			
<b>Total loans and advances</b>	<b>454,149</b>	<b>4,620</b>	<b>449,529</b>	<b>6,491</b>			

**As at  
31 December  
2015**

Barclays UK Barclays	153,539	1,556	151,983	2,238	1.5	682	44
International Head Office	26,041	896	25,145	863	3.3	714	274
Barclays Core Barclays	179,580	2,452	177,128	3,101	1.7	1,396	78
Non-Core	12,588	465	12,123	936	7.4	139	110
<b>Total Group retail</b>	192,168	2,917	189,251	4,037	2.1	1,535	80
Barclays UK Barclays	16,400	312	16,088	636	3.9	24	15
International Head Office	159,776	617	159,159	1,331	0.8	201	13
Barclays Core Barclays	5,767		5,767				
Non-Core	181,943	929	181,014	1,967	1.1	225	12
<b>Total Group wholesale</b>	39,979	336	39,643	441	1.1	(16)	(4)
<b>Total loans and advances at amortised cost<sup>b</sup></b>	221,922	1,265	220,657	2,408	1.1	209	9
BAGL loans and advances at amortised cost	414,090	4,182	409,908	6,445	1.6	1,744	42
Traded loans	31,397	739	30,658	1,372			
Loans and advances designated at fair value	2,474	n/a	2,474	n/a			
<b>Loans and advances held at fair value</b>	17,913	n/a	17,913	n/a			
<b>Total loans and advances</b>	20,387	n/a	20,387	n/a			
	465,874	4,921	460,953	7,817			

Total loans and advances decreased by £11.4bn to £449.5bn driven by a £31bn decrease due to the reclassification of BAGL balances to held for sale and £9bn from the exit of other assets in Non-Core. This was offset by lending of £20bn driven by volume growth and foreign currency movements due to the appreciation of average US Dollar and Euro against Sterling. There was also a net £9bn increase in settlement and cash collateral balances.

Credit risk loans (CRLs) and the ratio of CRLs to gross loans and advances excluding BAGL balances now held for sale remained stable at £6.5bn (2015: £6.4bn) and 1.5% (2015: 1.6%) respectively.

Loan impairment charges increased £0.6bn to £2.4bn primarily due to increased charges following the management review of impairment modelling for UK and US cards portfolios and the impairment of a number of single name exposures. Overall, this resulted in an 11bps increase in the loan loss rate to 53bps.

Notes

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aExcluding impairment charges on available for sale investments and reverse repurchase agreements.

bExcluding BAGL balances now held for sale.

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Risk review

Risk performance

**Credit risk**

### Analysis of specific portfolios and asset types

This section provides an analysis of principal portfolios and businesses in the retail and wholesale segments. In particular, home loans, credit cards, overdrafts and unsecured loans are covered for retail segments. In addition, this section details exposures to UK commercial real estate.

#### Secured home loans

The UK home loans portfolio comprises first lien home loans and accounts for 98%<sup>a</sup> (2015: 98%) of the Group's Core home loan balances and 91% (2015: 90%) of the Group's total home loan balances. Italy home loans accounts for 100% (2015: 91%) of the Group's Non-Core home loan balances and 7% (2015: 7%) of the Group's total home loan balances.

#### Home loans principal portfolios<sup>b</sup>

##### As at 31 December

	Barclays UK	
	2016	2015
Gross loans and advances (£m)	129,136	127,750
>90 day arrears, excluding recovery book (%)	0.2	0.2
Non-performing proportion of outstanding balances (%)	0.6	0.7
Annualised gross charge-off rates (%)	0.3	0.3
Recovery book proportion of outstanding balances (%)	0.4	0.4
Recovery book impairment coverage ratio (%)	9.1	10.1

Barclays UK: Portfolio performance remained steady reflecting the continuing low base rate environment, house price appreciation and steady economic conditions. Non-performing proportion of outstanding balances and recovery book impairment coverage reduced due to a reduction in repossession stock.

Within the UK home loans portfolio:

§ owner-occupied interest-only home loans comprised 31% (2015: 32%) of total balances. The average balance weighted LTV on these loans reduced to 41.7% (2015: 44.7%) as house prices have improved across core regions, and >90 day arrears excluding recovery book remained steady at 0.2% (2015: 0.2%)

§ buy-to-let home loans comprised 9% (2015: 9%) of total balances. The average balance weighted LTV reduced to 52.6% (2015: 54.6%), and >90 day arrears excluding recovery book reduced to 0.1% (2015: 0.2%).

## Home loans principal portfolios distribution of balances by LTV

As at	Distribution of balances		Impairment coverage ratio		Non-performing balances		Non-performing impairment coverage		Recovery book		Recovery book	
	of		of		of		of		of		of	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
<b>31 December Barclays UK</b>	%	%	%	%	%	%	%	%	%	%	%	%
<=75%	91.8	92.1	0.1	0.1	0.6	0.6	4.2	4.7	0.4	0.4	5.9	6.8
>75% and <=80%	3.5	3.4	0.2	0.2	0.6	1.0	17.1	13.5	0.4	0.8	22.1	15.7
>80% and <=85%	2.1	2.1	0.2	0.3	0.8	1.0	20.4	16.7	0.6	0.7	25.0	21.4
>85% and <=90%	1.3	1.4	0.3	0.3	0.7	1.3	23.0	15.7	0.6	1.0	25.4	17.8
>90% and <=95%	0.8	0.6	0.4	0.6	1.1	1.8	28.3	25.7	0.8	1.5	33.7	28.2
>95% and <=100%	0.3	0.2	0.7	1.3	1.9	4.0	23.4	25.4	1.5	3.5	27.0	27.9
>100%	0.2	0.2	3.1	3.4	5.7	7.0	38.6	35.6	5.0	5.6	40.9	41.2

## Home loans principal portfolios Average LTV

As at 31 December	Barclays UK	
	2016	2015
<b>Portfolio marked to market LTV (%):</b>		
Balance weighted	47.7	49.2
Valuation weighted	35.6	37.3
<b>Performing balances (%):</b>		
Balance weighted	47.3	48.8
Valuation weighted	35.5	37.3
<b>Non-performing balances (%):</b>		
Balance weighted	52.5	56.5
Valuation weighted	41.7	45.1
<b>For &gt;100% LTVs:</b>		
Balances (£m)	239	310
Marked to market collateral (£m)	210	260
Average LTV: balance weighted (%)	118.4	123.0
Average LTV: valuation weighted (%)	113.1	118.5
% of balances in recovery book	5.0	5.6
Notes		

a Remaining balance includes Wealth portfolio.

b Gross loans and advances include loans and advances to customers and banks. Risk metrics based on exposures to customers only.

c Portfolio marked to market based on the most updated valuation including recovery book balances. Updated valuations reflect the application of the latest house price index available in the country as at 31 December 2016.



Balance weighted LTV in the UK reduced to 47.7% (2015: 49.2%) due to an increase in average house prices across core regions.

The house price appreciation resulted in a 23% reduction in home loans that have LTV >100% to £239m (2015: £310m).

### Home loans principal portfolios new lending

As at 31 December	Barclays UK	
	2016	2015
New home loan bookings (£m)	19,885	18,812
New home loans proportion above 85% LTV (%)	8.6	8.2
Average LTV on new home loans: balance weighted (%)	63.4	63.9
Average LTV on new home loans: valuation weighted (%)	54.4	55.0

**Barclays UK:** New lending in 2016 increased by 6%, reflecting a steady risk profile against the backdrop of heightened market activity. Average balance weighted LTV on new lending remained broadly stable at 63.4% (2015: 63.9%).

### Credit cards and unsecured loans

The principal portfolios listed below accounted for 94% (2015: 92%) of the Group's total credit cards and unsecured loans.

### Credit cards and unsecured loans principal portfolios

	Gross loans and advances <sup>a</sup>	30 day arrears, excluding recovery book	90 day arrears, excluding recovery book	Annualised gross charge-off rates	Recovery book proportion of outstanding balances	Recovery book impairment coverage ratio
	£m	%	%	%	%	%
<b>As at 31 December 2016</b>						
<b>Barclays UK</b>						
UK cards <sup>b</sup>	17,833	1.9	0.9	5.5	3.0	83.8
UK personal loans	6,076	2.1	0.9	3.1	4.7	77.2
<b>Barclays International</b>						
US cards <sup>b</sup>	23,915	2.6	1.3	4.5	2.4	83.6

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Barclays Partner Finance	4,041	1.5	0.6	2.5	2.6	81.5
Germany cards	1,812	2.6	1.0	3.7	2.7	79.0
<b>As at 31 December 2015</b>						
<b>Barclays UK</b>						
UK cards <sup>b</sup>	18,502	2.3	1.2	5.2	3.6	82.6
UK personal loans	5,476	1.9	0.8	3.0	7.5	73.9
<b>Barclays International</b>						
US cards <sup>b</sup>	16,699	2.2	1.1	3.9	2.0	84.8
Barclays Partner Finance <sup>c</sup>	3,986	1.5	0.6	2.4	2.5	82.2
Germany cards	1,419	2.3	1.0	3.8	2.7	81.2

**UK cards:** Gross loans and advances decreased 4% to £17.8bn primarily due to reduced loans and advances to banks. Annualised gross charge-off rates increased due to accelerated asset sales in the latter half of the year and accelerated charge-off of informal arrangements stock. The recovery book impairment coverage ratio increased reflecting the impact of increased flow into charge-off.

**UK personal loans:** 30 day arrears increased to 2.1% (2015: 1.9%) and 90 day arrears increased to 0.9% (2015: 0.8%) partially driven by portfolio growth and an increased level of operational delinquency from new customer acquisitions. The recovery book proportion of outstanding balances reduced to 4.7% (2015: 7.5%) due to an asset sale that also resulted in an increase in the recovery book impairment coverage ratio to 77.2% (2015: 73.9%).

**US cards:** Gross loans and advances increased 43% to £23.9bn due to portfolio growth, new acquisitions and appreciation of USD against GBP. Increased arrears and charge-off rate were driven by a change in portfolio mix, volume growth and the appreciation of average USD against GBP.

**Barclays Partner Finance:** Portfolio arrears and charge-off rates remained broadly steady during 2016.

**Germany cards:** Loans and advances were 28% higher mainly due to a combination of the appreciation of EUR against GBP and portfolio growth. 90 day arrears and charge off rates remained stable, while the recovery book coverage ratio reduced slightly reflecting favourable recovery expectations.

Notes

aGross loans and advances include loans and advances to customers and banks. Risk metrics based on exposures to customers.

bFor UK and US cards, outstanding recovery book balances for acquired portfolios recognised at fair value (which have no related impairment allowance) have been excluded from the recovery book impairment coverage ratio.

Losses have been recognised where related to additional spend from acquired accounts in the period post acquisition.

c2015 figures for recovery book coverage ratio restated from 85.2% to 82.2% to reflect more granular allocation of management adjustments to the recovery book.



## Risk review

## Risk performance

## Credit risk

## Wholesale loans and advances at amortised cost

## Analysis of wholesale loans and advances at amortised cost

	Gross L&A £m	Impairment allowance £m	L&A net of impairment £m	Credit risk loans £m	CRLs % of gross L&A %	Loan impairment charges £m	Loan loss rates bps
As at 31 December 2016							
Banks	35,979		35,979				
Other financial institutions	91,673	14	91,659	89	0.1	6	1
Manufacturing Construction	12,373	130	12,243	226	1.8	37	30
Property	3,418	40	3,378	58	1.7	5	15
Government and central bank	20,541	137	20,404	464	2.3	27	13
Energy and water	15,847		15,847				
Wholesale and retail distribution and leisure	7,569	181	7,388	348	4.6	102	135
Business and other services	12,995	169	12,826	258	2.0	38	29
Home loans <sup>a</sup>	21,210	284	20,926	331	1.6	54	25
Cards, unsecured loans and other personal lending <sup>a</sup>	5,497	48	5,449	190	3.5	9	16
Other	5,329	129	5,200	207	3.9	6	11
<b>Total wholesale loans and</b>	<b>8,691</b>	<b>92</b>	<b>8,599</b>	<b>189</b>	<b>2.2</b>	<b>15</b>	<b>17</b>
	<b>241,122</b>	<b>1,224</b>	<b>239,898</b>	<b>2,360</b>	<b>1.0</b>	<b>299</b>	<b>12</b>

<b>advances at amortised cost</b>								
<b>As at 31 December 2015</b>								
Banks	32,824		32,824					
Other financial institutions	78,766	28	78,738	63	0.1	4	1	
Manufacturing	10,107	114	9,993	183	1.8	17	17	
Construction	3,358	44	3,314	54	1.6	4	12	
Property	18,444	217	18,227	713	3.9	34	18	
Government and central bank	9,686		9,686					
Energy and water	7,370	120	7,250	296	4.0	101	137	
Wholesale and retail distribution and leisure	12,542	195	12,347	287	2.3	7	6	
Business and other services	23,403	261	23,142	341	1.5	23	10	
Home loans <sup>a</sup>	5,769	26	5,743	159	2.8			
Cards, unsecured loans and other personal lending <sup>a</sup>	8,894	107	8,787	166	1.9	2	2	
Other	10,759	153	10,606	146	1.4	17	16	
<b>Total wholesale loans and advances at amortised cost</b>	<b>221,922</b>	<b>1,265</b>	<b>220,657</b>	<b>2,408</b>	<b>1.1</b>	<b>209</b>	<b>9</b>	
BAGL loans and advances at amortised cost	13,985	200	13,785	513	3.7			
<b>Total wholesale loans and advances at amortised cost</b>	<b>235,907</b>	<b>1,465</b>	<b>234,442</b>	<b>2,921</b>	<b>1.2</b>			
Excluding BAGL balances:								

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§ Wholesale loans and advances increased by £19bn to £241bn (2015: £222bn) due to increased lending of £11bn driven by volume growth and foreign currency movements due to the appreciation of average US Dollar and Euro against Sterling, £8bn due to the reclassification of ESHLA loans now recognised at amortised cost and a net £9bn increase in settlement and cash collateral balances, offset by £9bn from the exit of assets in Non-Core.

§ CRLs remained stable at £2.4bn (2015: £2.4bn).

§ Loan impairment charges increased to £299m (2015: £209m) from a number of single name exposures. The loan loss rates increased to 12bps (2015: 9bps).

### Note

aIncluded in the above analysis are Wealth and Private Banking exposures measured on an individual customer exposure basis.

**Exposure to UK commercial real estate (CRE)**

The UK CRE portfolio includes property investment, development, trading and house builders but excludes social housing and contractors.

**UK CRE summary<sup>a</sup>**

As at 31 December	2016	2015
UK CRE loans and advances (£m)	11,227	10,690
Past due balances (£m)	83	152
Balances past due as % of UK CRE balances (%)	0.7	1.4
Impairment allowances (£m)	58	79
Past due coverage ratio (%)	69.9	52.0
Total collateral (£m)	23,225	21,858
<b>Twelve months ended 31 December</b>		
Impairment (credit)/charge (£m)	(2)	3

**Maturity analysis of exposure to UK CRE****Contractual maturity of UK CRE loans and advances at amortised cost**

	Past due balances	Not more than six months	Over six months but not more than one year	Over one year but not more than two years	Over two years but not more than five years	Over five years but not more than ten years	Over ten years	Total loan advances
As at	£m	£m	£m	£m	£m	£m	£m	£m
31 December 2016	83	774	668	1,200	6,318	700	1,484	11,227
2015	152	784	744	929	5,678	852	1,551	10,690

Total exposure to UK commercial real estate following the 2015 restatement rose moderately from £10.7bn to £11.2bn primarily in medium-term deals. Past due balances fell to £83m from £152m due to favourable recovery activity and a selective approach to new deals in this sector.

**UK CRE LTV analysis**

As at 31 December Group	Balances		Balances as proportion	
	2016 £m	2015 £m	2016 £m	2015 £m
<=75%	7,884	7,208	70	68
>75% and <=100%	102	244	1	2
>100% and <=125%	15	109		1
>125%	60	18	1	
Unassessed balances <sup>b</sup>	2,286	2,370	20	22
Unsecured balances <sup>c</sup>	880	741	8	7
<b>Total</b>	<b>11,227</b>	<b>10,690</b>	<b>100</b>	<b>100</b>

## Notes

aBased on the most recent valuation assessment, 2015 year end numbers have been restated following closer alignment of industry classifications between corporate banking and business lending.

bCorporate Banking balances under £1m.

cUnsecured balances primarily relate to working capital facilities agreed to CRE companies.

## Risk review

## Risk performance

## Credit risk

## Analysis of problem loans

Loans that are past due or assessed as impaired within this section are reflected in the balance sheet credit quality tables on page 122 as being Higher Risk.

## Age analysis of loans and advances that are past due but not impaired (audited)

The following table presents an age analysis of loans and advances that are past due but not impaired. Loans that are past due but not impaired consist predominantly of wholesale loans that are past due but individually assessed as not being impaired. These loans although individually assessed as unimpaired, may carry an unidentified impairment provision.

## Loans and advances past due but not impaired (audited)

	Past due up to 1 month	Past due 1-2 months	Past due 2-3 months	Past due 3-6 months	Past due 6 months and over	Total
	£m	£m	£m	£m	£m	£m
<b>As at 31 December 2016</b>						
Loans and advances designated at fair value	29	8	18		16	71
Home loans	1			33	31	65
Credit cards, unsecured and other retail lending	2		2	11	77	92
Corporate loans	6,962	1,235	149	178	354	8,878
<b>Total</b>	<b>6,994</b>	<b>1,243</b>	<b>169</b>	<b>222</b>	<b>478</b>	<b>9,106</b>
<b>As at 31 December 2015</b>						
Loans and advances designated at fair value	70	14			209	293
Home loans	22	8	6	24	80	140
Credit cards, unsecured and other retail lending	288	14	15	93	120	530
Corporate loans	5,862	897	207	226	280	7,472
<b>Total</b>	<b>6,242</b>	<b>933</b>	<b>228</b>	<b>343</b>	<b>689</b>	<b>8,435</b>

Corporate loans past due up to 1 month increased £1.1bn to £7.0bn primarily driven by the appreciation of average USD against GBP.

**Analysis of loans and advances assessed as impaired (audited)**

The following table presents an analysis of loans and advances into those collectively or individually assessed as impaired. The table includes an age analysis for loans and advances collectively assessed as impaired.

Loans that are collectively assessed as impaired consist predominantly of retail loans that are one day or more past due for which a collective allowance is raised. Wholesale loans that are past due, individually assessed as unimpaired, but which carry an unidentified impairment provision, are excluded from this category.

Loans that are individually assessed as impaired consist predominantly of wholesale loans that are past due and for which an individual allowance has been raised.

Home loans, unsecured loans and credit card receivables that are subject to forbearance in the retail portfolios are included within the collectively assessed for impairment category. Where wholesale loans under forbearance have been impaired, these form part of individually assessed impaired loans.

**Loans and advances assessed as impaired (audited)**

	Past due up to 1 month	Past due 1-2 months	Past due 2-3 months	Past due 3-6 months	Past due 6 months and over	Total collectively assessed	Individually assessed for impairment	Total
	£m	£m	£m	£m	£m	£m	£m	£m
<b>As at 31 December 2016</b>								
Home loans	2,866	795	201	298	452	4,612	820	5,432
Credit cards, unsecured and other retail lending	1,135	354	250	516	1,702	3,957	492	4,449
Corporate loans	288	53	35	72	131	579	1,580	2,159
<b>Total</b>	<b>4,289</b>	<b>1,202</b>	<b>486</b>	<b>886</b>	<b>2,285</b>	<b>9,148</b>	<b>2,892</b>	<b>12,040</b>
<b>As at 31 December 2015</b>								
Home loans	3,672	1,036	278	364	812	6,162	648	6,810
Credit cards, unsecured and other retail lending	1,241	691	284	541	1,792	4,549	964	5,513
Corporate loans	251	76	45	76	96	544	1,786	2,330
<b>Total</b>	<b>5,164</b>	<b>1,803</b>	<b>607</b>	<b>981</b>	<b>2,700</b>	<b>11,255</b>	<b>3,398</b>	<b>14,653</b>

The decrease in loans collectively assessed as impaired to £9.1bn (2015: £11.3bn) predominantly relates to BAGL balances now held for sale.





## Potential credit risk loans (PCRLs) and coverage ratios

The Group reports potentially and actually impaired loans as PCRLs. PCRLs comprise two categories of loans: credit risk loans (CRLs) and potential problem loans (PPLs).

### CRLs comprise three classes of loans:

§ *impaired loans*: comprises loans where an individually identified impairment allowance has been raised. This category also includes all retail loans that have been transferred to a recovery book. See page 134 for further analysis of impaired loans

§ *accruing past due 90 days or more*: comprises loans that are 90 days or more past due with respect to principal or interest

§ *impaired and restructured loans*: comprises loans not included above where, for economic or legal reasons related to the debtor's financial difficulties, a concession has been granted to the debtor that would not otherwise be considered. For information on restructured loans refer to disclosures on forbearance on pages 134 to 137.

PPLs are loans that are currently complying with repayment terms but where serious doubt exists as to the ability of the borrower to continue to comply with such terms in the near future. If the credit quality of wholesale loan on a watchlist deteriorates to the highest category, or a retail loan deteriorates to delinquency cycle 2 (typically when past due 60 to 90 days), consideration is given to including it within the PPL category.

## Potential credit risk loans and coverage ratios by business

	CRLs		PPLs		PCRLs	
	2016	2015	2016	2015	2016	2015
As at 31 December	£m	£m	£m	£m	£m	£m
Barclays UK	2,044	2,238	310	382	2,354	2,620
Barclays International	1,249	863	192	117	1,441	980
Barclays Core	3,293	3,101	502	499	3,795	3,600
Barclays Non-Core	838	936	11	26	849	962
<b>Total retail</b>	<b>4,131</b>	<b>4,037</b>	<b>513</b>	<b>525</b>	<b>4,644</b>	<b>4,562</b>
Barclays UK	591	637	94	127	685	764
Barclays International	1,470	1,330	1,530	877	3,000	2,207

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Barclays Core	2,061	1,967	1,624	1,004	3,685	2,971
Barclays Non-Core	299	441	59	122	358	563
<b>Total wholesale</b>	<b>2,360</b>	<b>2,408</b>	<b>1,683</b>	<b>1,126</b>	<b>4,043</b>	<b>3,534</b>
<b>Total retail and wholesale</b>	<b>6,491</b>	<b>6,445</b>	<b>2,196</b>	<b>1,651</b>	<b>8,687</b>	<b>8,096</b>
<b>BAGL</b>		1,372		399		1,771
<b>Group total</b>	<b>6,491</b>	<b>7,817</b>	<b>2,196</b>	<b>2,050</b>	<b>8,687</b>	<b>9,867</b>

	Impairment allowance		CRL coverage		PCRL coverage	
	2016	2015	2016	2015	2016	2015
As at 31 December	£m	£m	%	%	%	%
Barclays UK	1,519	1,556	74.3	69.5	64.5	59.4
Barclays International	1,492	897	119.5	103.9	103.5	91.5
Barclays Core	3,011	2,453	91.4	79.1	79.3	68.1
Barclays Non-Core	385	464	45.9	49.6	45.3	48.2
<b>Total retail</b>	<b>3,396</b>	<b>2,917</b>	<b>82.2</b>	<b>72.3</b>	<b>73.1</b>	<b>63.9</b>
Barclays UK	282	312	47.7	49.0	41.2	40.8
Barclays International	748	617	50.9	46.4	24.9	28.0
Barclays Core	1,030	929	50.0	47.2	28.0	31.3
Barclays Non-Core	194	336	64.9	76.2	54.2	59.7
<b>Total wholesale</b>	<b>1,224</b>	<b>1,265</b>	<b>51.9</b>	<b>52.5</b>	<b>30.3</b>	<b>35.8</b>
<b>Total retail and wholesale</b>	<b>4,620</b>	<b>4,182</b>	<b>71.2</b>	<b>64.9</b>	<b>53.2</b>	<b>51.7</b>
<b>BAGL</b>		739		53.9		41.7
<b>Group total</b>	<b>4,620</b>	<b>4,921</b>	<b>71.2</b>	<b>63.0</b>	<b>53.2</b>	<b>49.9</b>

§ Excluding BAGL balances, CRLs remained stable at £6.5bn (2015: £6.4bn) with the Group's CRL coverage ratio increasing to 71% (2015: 65%) mainly within retail portfolios.

§ The CRL coverage ratio for retail portfolios increased to 82% (2015: 72%) primarily due to increased impairment allowances following the management review of the UK and US cards portfolio impairment modelling.

§ PPLs increased to £2.2bn (2015: £1.7bn) primarily within Barclays International wholesale portfolios. The increase was driven by exposures within the Corporate and Investment bank across a number of industries.

## Risk review

## Risk performance

## Credit risk

## Impaired loans

The following table represents an analysis of impaired loans in line with the disclosure recommended by the Enhanced Disclosure Taskforce. Impaired loans are a subcomponent of CRLs (defined on page 133) and comprise loans where an individually identified impairment allowance has been raised. This category also includes all retail loans that have been transferred to a recovery book. For the majority of products, transfer to a recovery book occurs for loans that are past due over 6 months unless a forbearance agreement is agreed. Earlier transfer points may occur depending on specific circumstances. Impaired loans may include loans that are still performing, fully collateralised loans or where indebtedness has already been written down to the expected realisable value.

## Movement in impaired loans

	At beginning of year	Classified as impaired during the year	Transferred to not impaired during the year	Repayments	Amounts written off	Acquisitions and disposals	Exchange and other adjustments
	£m	£m	£m	£m	£m	£m	
<b>2016</b>							
Home loans	1,337	308	(150)	(171)	(19)		
Credit cards, unsecured and other retail lending	2,200	1,761	(17)	(136)	(1,605)	(92)	
Corporate loans	2,098	984	(427)	(220)	(331)	(15)	
<b>Total impaired loans</b>	<b>5,635</b>	<b>3,053</b>	<b>(594)</b>	<b>(527)</b>	<b>(1,955)</b>	<b>(107)</b>	
<b>2015</b>							
Home loans	1,503	602	(192)	(272)	(97)		
Credit cards, unsecured and other retail	2,613	2,226	(112)	(269)	(1,873)		

lending  
Corporate

loans	2,683	1,032	(558)	(208)	(333)	(43)
-------	-------	-------	-------	-------	-------	------

**Total  
impaired  
loans**

	6,799	3,860	(862)	(749)	(2,303)	(43)
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### Forbearance

Forbearance measures consist of concessions towards a debtor that is experiencing or about to experience difficulties in meeting commitments ( financial difficulties ).

### Analysis of forbearance programmes

As at 31 December	Balances		Impairment allowance		Impairment allowance
	2016	2015	2016	2015	
	£m	£m	£m	£m	
Barclays UK	926	1,036	237	191	
Barclays International	243	185	57	46	
<b>Barclays Core</b>	<b>1,169</b>	<b>1,221</b>	<b>294</b>	<b>237</b>	
Barclays Non-Core	211	247	9	20	
<b>Total retail</b>	<b>1,380</b>	<b>1,468</b>	<b>303</b>	<b>257</b>	
Barclays UK	589	412	62	32	
Barclays International	2,044	1,333	257	196	
<b>Barclays Core</b>	<b>2,633</b>	<b>1,745</b>	<b>319</b>	<b>228</b>	
Barclays Non-Core	269	459	50	146	
<b>Total wholesale</b>	<b>2,902</b>	<b>2,204</b>	<b>369</b>	<b>374</b>	
<b>Group total<sup>b</sup></b>	<b>4,282</b>	<b>3,672</b>	<b>672</b>	<b>631</b>	

Balances on forbearance programmes increased 17% driven by an increase in forborne loans in Barclays International.

Retail balances on forbearance programmes reduced 6% to £1.4bn and reflected a decrease in Barclays UK and Barclays Non-Core offset by an increase in Barclays International portfolios.

§ Barclays UK: The reduction was driven by UK cards portfolio, where balances on forbearance plans are lower due to the application of an updated entry criteria, as well as asset sales.

§ Barclays International: The increase in US cards forbearance was in line with portfolio growth and appreciation of the US Dollar against Sterling.

Wholesale balances on forbearance increased by 32% to £2.9bn due to an increase in the Barclays Core portfolio where forbearance programmes increased mainly in performing segments of the corporate portfolio due to a change in methodology, extending the previously narrow scope of forbearance in relation to adjustment on non-enforcement of

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convenants. This change has been applied consistently across the corporate portfolio with the increase primarily at the higher end of the corporate portfolio where there is a greater tendency for exposure to be under covenants.

### Notes

aExchange and other adjustments for 2016 includes the reclassification of £1,015m related to BAGL balances now held for sale offset by currency movements due to the appreciation of average US Dollar and Euro against Sterling.

bExcludes BAGL balances now held for sale.

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## Retail forbearance programmes

Forbearance on the Group's principal retail portfolios in the US and UK is presented below. The principal portfolios listed below account for 73% (2015: 76%) of total retail forbearance balances.

### Analysis of key portfolios in forbearance programmes

	Balances on forbearance programmes					Marked to market	Marked to market	Impairment allowances	Total
	% of gross loans and advances		Of which: Past due of which:		Past due of 91 or more days	LTV of forbearance balances	LTV of forbearance balances	marked against forbearance programmes	
	Total advances	past due	past due	past due	past due	%	%	£m	%
	£m	%	£m	£m	£m				
<b>As at 31 December 2016</b>									
<b>Barclays UK</b>									
UK home loans	390	0.3	188	149	53	44.7	31.3	3	0.8
UK cards	337	1.9	255	59	23	n/a	n/a	185	54.9
UK personal loans	94	1.5	58	26	10	n/a	n/a	38	40.4
<b>Barclays International</b>									
US cards	186	0.8	139	35	12	n/a	n/a	38	20.4
<b>As at 31 December 2015</b>									
<b>Barclays UK</b>									
UK home loans	445	0.3	211	177	57	48.0	34.1	4	0.8
UK cards	448	2.4	414	31	3	n/a	n/a	159	35.5
UK personal loans	85	1.6	60	22	3	n/a	n/a	21	24.6
<b>Barclays International</b>									
US cards	133	0.8	92	30	11	n/a	n/a	30	22.7

§ **UK home loans:** Balances under forbearance decreased by 12% to £390m, principally due to fewer customers requiring forbearance in a stable macroeconomic environment. Total past due balances reduced by 14% to £202m in line with falling total balances under forbearance.

- § **UK cards:** Balances on forbearance plans have reduced due to an updated entry criteria, as well as asset sales. The forbearance impairment coverage ratio has increased due to implementation of updated impairment methodology.
- § **UK personal loans:** Increased forbearance coverage ratio reflects the changes in methodology to align with the impairment policy.
- § **US cards:** Balances are higher in line with portfolio growth while the balances in arrears remain stable. Past-due balances as a proportion of total balances have reduced, which reflects in the lower forbearance impairment coverage ratio.

## Risk review

## Risk performance

## Credit risk

## Forbearance by type

	UK home loans		Barclays UK UK cards		UK personal loans		Barclays Intern US cards
	2016	2015	2016	2015	2016	2015	2016
As at 31 December	£m	£m	£m	£m	£m	£m	£m
Payment concession	96	103	45	21			
Interest only conversion	84	94					
Term extension	210	248			16	6	
Fully amortising Repayment plan <sup>a</sup>			218	427	65	79	97
Interest rate concession			74		13		89
<b>Total</b>	<b>390</b>	<b>445</b>	<b>337</b>	<b>448</b>	<b>94</b>	<b>85</b>	<b>186</b>

Payment concessions in UK cards increased to £45m (2015: £21m), including an additional £31m identified in second half of the year following a review of policy adherence. These balances have been appropriately provisioned.

Repayment plan balances in UK cards decreased to £218m (2015: £427m) driven by an asset sale and the continued reduction in repayment plan volumes. Following review of policy adherence, additional interest rate concession for UK cards (£74m) and repayment plan for UK personal loans (£13m) were identified in the year.

## Wholesale forbearance programmes

The tables below detail balance information for wholesale forbearance cases.

Analysis of wholesale balances in forbearance programmes<sup>b</sup>

Total balances £m	% of gross loans and advances %	Balances on forbearance programmes			Balances 91 days or more past due £m	Impairment allowances marked against balances on forbearance programmes £m	ba for pro
		Performing balances £m	Impaired up-to-date balances £m	Of which: Balances between 1 and 90 days past due £m			



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<b>As at 31 December 2016</b>								
Barclays UK	589	3.9	187	93	78	231	62	
Barclays International	2,044	1.1	1,285	567	33	159	257	
<b>Total Barclays Core</b>	<b>2,633</b>	<b>1.3</b>	<b>1,472</b>	<b>660</b>	<b>111</b>	<b>390</b>	<b>319</b>	
Barclays Non-Core	269	0.6	57	44	25	143	50	
<b>Total</b>	<b>2,902</b>	<b>1.2</b>	<b>1,529</b>	<b>704</b>	<b>136</b>	<b>533</b>	<b>369</b>	
<b>As at 31 December 2015</b>								
Barclays UK	412	2.5	153	48	30	181	32	
Barclays International	1,333	0.8	614	423	61	235	196	
<b>Total Barclays Core</b>	<b>1,745</b>	<b>1.0</b>	<b>767</b>	<b>471</b>	<b>91</b>	<b>416</b>	<b>228</b>	
Barclays Non-Core	459	1.1	118	101	5	235	146	
<b>Total</b>	<b>2,204</b>	<b>1.0</b>	<b>885</b>	<b>572</b>	<b>96</b>	<b>651</b>	<b>374</b>	

Notes

aRepayment plan represents a reduction to the minimum payment due requirements and interest rate.

b2015 figures restated due to restructuring of portfolio from Barclays International to Non-Core Figures exclude BAGL balances now held for sale.

**Wholesale forbearance reporting split by exposure class**

	Corporate £m	Personal and trusts £m	Other £m	Total £m
<b>As at 31 December 2016</b>				
Restructure: reduced contractual cash flows	32			32
Restructure: maturity date extension	411	107		518
Restructure: changed cash flow profile (other than extension)	346	1		347
Restructure: payment other than cash	10			10
Change in security	7			7
Adjustments or non-enforcement of covenants	1,242	155		1,397
Other (e.g. capital repayment holiday; restructure pending)	438	153		591
<b>Total</b>	<b>2,486</b>	<b>416</b>		<b>2,902</b>
<b>As at 31 December 2015</b>				
Restructure: reduced contractual cash flows	155			155
Restructure: maturity date extension	563	23	62	648
Restructure: changed cash flow profile (other than extension)	250	1		251
Restructure: payment other than cash	12			12
Change in security	7	1		8
Adjustments or non-enforcement of covenants	295	92		387
Other (e.g. capital repayment holiday; restructure pending)	535	208		743
<b>Total</b>	<b>1,817</b>	<b>325</b>	<b>62</b>	<b>2,204</b>

**Wholesale forbearance reporting split by business unit**

	Barclays UK £m	Barclays International £m	Barclays Non-Core £m	Total £m
<b>As at 31 December 2016</b>				
Restructure: reduced contractual cash flows	3	29		32
Restructure: maturity date extension	114	316	88	518
Restructure: changed cash flow profile (other than extension)	180	164	3	347

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Restructure: payment other than cash		10		10
Change in security	1	6		7
Adjustments or non-enforcements of covenants	132	1,212	53	1,397
Other (e.g. capital repayment holiday; restructure pending)	159	307	125	591
<b>Total</b>	<b>589</b>	<b>2,044</b>	<b>269</b>	<b>2,902</b>

**As at 31 December 2015**

Restructure: reduced contractual cash flows	1	130	24	155
Restructure: maturity date extension	77	287	284	648
Restructure: changed cash flow profile (other than extension)	51	199	1	251
Restructure: payment other than cash		12		12
Change in security	1	7		8
Adjustments or non-enforcements of covenants	71	260	56	387
Other (e.g. capital repayment holiday; restructure pending)	211	438	94	743
<b>Total</b>	<b>412</b>	<b>1,333</b>	<b>459</b>	<b>2,204</b>

**Wholesale forbearance flows in 2016**

	<b>£m</b>
<b>As at 1 January 2016</b>	<b>2,204</b>
Added to forbearance	<b>1,811</b>
Removed from forbearance (credit improvement)	<b>(383)</b>
Fully or partially repaid and other movements	<b>(442)</b>
Written off/moved to recovery book	<b>(288)</b>
<b>As at 31 December 2016</b>	<b>2,902</b>

## Risk review

## Risk performance

## Credit risk

## Impairment

## Impairment allowances

Impairment allowances decreased 6% to £4,620m primarily due to the reclassification of BAGL balances now held for sale, partially offset by the impact of a management review of impairment modelling within the credit cards portfolios and increases within Barclays International due to volume growth, the appreciation of average US Dollar and Euro against Sterling and increased impairment for a number of single name exposures.

## Movements in allowance for impairment by asset class (audited)

	At beginning of year	Acquisitions and disposals	Unwind of discount	Exchange and other adjustments <sup>a</sup>	Amounts written off	Recoveries	Amounts charged to income statement	31
	£m	£m	£m	£m	£m	£m	£m	
<b>2016</b>								
Home loans	518	(3)	(5)	(108)	(23)		88	
Credit cards, unsecured and other retail lending	3,394	(2)	(70)	(709)	(1,806)	296	1,957	
Corporate loans	1,009			81	(364)	69	298	
<b>Total impairment allowance</b>	<b>4,921</b>	<b>(5)</b>	<b>(75)</b>	<b>(736)</b>	<b>(2,193)</b>	<b>365</b>	<b>2,343</b>	
<b>2015</b>								
Home loans	547		(32)	(64)	(94)	7	154	
Credit cards, unsecured and other retail lending	3,345		(105)	(170)	(1,848)	301	1,871	
Corporate loans	1,563		(12)	(383)	(335)	92	84	
<b>Total impairment</b>	<b>5,455</b>		<b>(149)</b>	<b>(617)</b>	<b>(2,277)</b>	<b>400</b>	<b>2,109</b>	

**allowance****Management adjustments to models for impairment**

Management adjustments to models for impairment are applied in order to factor in certain conditions or changes in policy that are not incorporated into the relevant impairment models, or to ensure that the impairment allowance reflects all known facts and circumstances at the period end. Adjustments typically increase the model derived impairment allowance. Where applicable, management adjustments are reviewed and incorporated into future model development.

Management adjustments to models of more than £10m with respect to impairment allowance in our principal portfolios are presented below.

**Principal portfolios that have management adjustments greater than £10m**

	2016		2015	
	Total management adjustments to impairment stock, including forbearance	Proportion of total impairment stock	Total management adjustments to impairment stock, including forbearance	Proportion of total impairment stock
As at 31 December	£m	%	£m	%
<b>Barclays UK</b>				
UK cards	312	34	147	17
UK home loans	70	69	68	67
UK business lending	69	33	67	36
<b>Barclays International</b>				
US cards	278	24	58	9
Corporate Banking	71	14	116	25
Barclays Partner Finance	59	37	41	28
Germany cards	29	23	20	21

During 2016, the models were aligned to a strengthened Retail Impairment Policy, following which adjustments were reviewed.

**UK and US cards:** Higher provisions held pending full implementation of newly developed and independently approved models with enhanced methodology following an impairment policy revision in Q316.

**UK home loans:** To capture the potential impact from an increase in the house price to earnings ratio, change in the impairment methodology and increased coverage on interest-only loans maturing in the next five years.

**UK business lending:** To align to impairment policy requirements, potential impact from commercial property price deterioration and the susceptibility of minimum debt service customers to interest rate rises not currently captured in models.

**Corporate Banking:** Reflects release against single names in the oil and gas sector.

**Barclays Partner Finance:** Due to increased risk in the secured motor portfolio along with adjustments on account of impairment methodology.

**Germany cards:** To align to impairment methodology and increased cover on forbearance programme.

Note

aExchange and other adjustments for 2016 primarily includes the reclassification of £762m related to BAGL now held for sale offset by currency movements due to the appreciation of average US Dollar and Euro against Sterling.

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## Analysis of debt securities

Debt securities include government securities held as part of the Group's treasury management portfolio for liquidity and regulatory purposes, and are for use on a continuing basis in the activities of the Group.

The following tables provide an analysis of debt securities held by the Group for trading and investment purposes by issuer type, and where the Group held government securities exceeding 10% of shareholders' equity.

Further information on the credit quality of debt securities is presented on pages 121 to 122. Further disclosure on sovereign exposures in the Eurozone is presented on page 124

### Debt securities

As at 31 December	2016		2015	
	£m	%	£m	%
<b>Of which issued by:</b>				
Governments and other public bodies	64,852	63.7	96,537	70.9
Corporate and other issuers	28,284	27.8	26,166	19.2
US agency	6,208	6.1	8,927	6.6
Mortgage and asset backed securities	2,372	2.3	4,009	2.9
Bank and building society certificates of deposit	23	0.1	598	0.4
<b>Total</b>	<b>101,739</b>	<b>100.0</b>	136,237	100.0

### Government securities

As at 31 December	2016	2015
	Fair value £m	Fair value £m
United Kingdom	20,145	22,372
United States	16,284	26,119
<b>Analysis of derivatives (audited)</b>		

The tables below set out the fair values of the derivative assets together with the value of those assets subject to enforceable counterparty netting arrangements for which the Group holds offsetting liabilities and eligible collateral.

### Derivative assets

2016

2015

	Balance sheet assets	Counterparty netting	Net exposure	Balance sheet assets	Counterparty netting	Net exposure
As at 31 December	£m	£m	£m	£m	£m	£m
Foreign exchange	79,744	59,040	20,704	54,936	40,301	14,635
Interest rate	228,652	185,723	42,929	231,426	190,513	40,913
Credit derivatives	16,273	12,891	3,382	18,181	14,110	4,071
Equity and stock index	17,089	12,603	4,486	13,799	8,358	5,441
Commodity derivatives	4,868	3,345	1,523	9,367	6,300	3,067
<b>Total derivative assets</b>	<b>346,626</b>	<b>273,602</b>	<b>73,024</b>	<b>327,709</b>	<b>259,582</b>	<b>68,127</b>
<b>Cash collateral held</b>			<b>41,641</b>			<b>34,918</b>
<b>Net exposure less collateral</b>			<b>31,383</b>			<b>33,209</b>

Derivative asset exposures would be £315bn (2015: £295bn) lower than reported under IFRS if netting were permitted for assets and liabilities with the same counterparty or for which the Group holds cash collateral. Similarly, derivative liabilities would be £317bn (2015: £295bn) lower reflecting counterparty netting and collateral placed. In addition, non-cash collateral of £8bn (2015: £7bn) was held in respect of derivative assets. The Group received collateral from clients in support of over the counter derivative transactions. These transactions are generally undertaken under International Swaps and Derivative Association (ISDA) agreements governed by either UK or New York law.

Exposure relating to derivatives, repurchase agreements, reverse repurchase agreements, stock borrowing and loan transactions is calculated using internal PRA approved models. These are used as the basis to assess both regulatory capital and capital appetite and are managed on a daily basis. The methodology encompasses all relevant factors to enable the current value to be calculated and the future value to be estimated, for example, current market rates, market volatility and legal documentation (including collateral rights).



## Risk review

## Risk performance

## Credit risk

The table below sets out the fair value and notional amounts of OTC derivative instruments by type of collateral arrangement.

## Derivatives by collateral arrangement

	2016			2015		
	Notional contract amount	Fair value		Notional contract amount	Fair value	
		Assets £m	Liabilities £m		Assets £m	Liabilities £m
<b>Unilateral in favour of Barclays</b>						
Foreign exchange	17,713	607	(274)	15,645	242	(308)
Interest rate	6,666	1,017	(60)	4,365	846	(65)
Credit derivatives	174	3	(2)	277	2	(7)
Equity and stock index	390	3	(147)	303	4	(146)
Commodity derivatives	753	33	(26)	905	150	(30)
<b>Total unilateral in favour of Barclays</b>	<b>25,696</b>	<b>1,663</b>	<b>(509)</b>	<b>21,495</b>	<b>1,244</b>	<b>(556)</b>
<b>Unilateral in favour of counterparty</b>						
Foreign exchange	20,837	786	(2,549)	50,343	810	(2,107)
Interest rate	108,915	3,795	(5,979)	121,231	4,436	(6,981)
Credit derivatives	152	3	(7)	140	3	(1)
Equity and stock index	1,121	312	(49)	827	100	(83)
Commodity derivatives	1,231	67	(66)	74		(3)
<b>Total unilateral in favour of counterparty</b>	<b>132,256</b>	<b>4,963</b>	<b>(8,650)</b>	<b>172,615</b>	<b>5,349</b>	<b>(9,175)</b>
<b>Bilateral arrangement</b>						
Foreign exchange	3,772,477	70,464	(68,788)	2,878,125	46,831	(50,899)
Interest rate	7,335,641	187,155	(179,650)	7,315,345	197,900	(188,293)
Credit derivatives	608,859	11,422	(9,994)	663,090	13,617	(11,985)
Equity and stock index	192,448	6,146	(9,692)	144,108	4,991	(8,297)
Commodity derivatives	11,766	1,318	(1,442)	36,794	3,164	(3,104)
<b>Total bilateral arrangement</b>	<b>11,921,191</b>	<b>276,505</b>	<b>(269,566)</b>	<b>11,037,462</b>	<b>266,503</b>	<b>(262,578)</b>
<b>Uncollateralised derivatives</b>						

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Foreign exchange	363,921	7,490	(6,287)	271,819	7,008	(5,424)
Interest rate	184,362	5,723	(2,459)	193,565	6,091	(2,907)
Credit derivatives	5,872	383	(510)	7,881	467	(700)
Equity and stock index	13,706	2,558	(3,385)	6,672	2,204	(3,075)
Commodity derivatives	16,389	504	(748)	13,347	1,733	(1,667)
<b>Total uncollateralised derivatives</b>	<b>584,250</b>	<b>16,658</b>	<b>(13,389)</b>	<b>493,284</b>	<b>17,503</b>	<b>(13,773)</b>
<b>Total OTC derivative assets/(liabilities)</b>	<b>12,663,393</b>	<b>299,789</b>	<b>(292,114)</b>	<b>11,724,856</b>	<b>290,599</b>	<b>(286,082)</b>

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Risk review

Risk performance

**Market risk**

### **Analysis of market risk**

Market risk is the risk of a reduction in earnings or capital due to volatility of trading book positions or an inability to fully hedge the banking book balance sheet.

This section contains key disclosures describing the Group's market risk profile, highlighting regulatory as well as management measures.

### **Key metrics**

**Value at Risk increased in the year due to increased volatility. The income sensitivity to falling rates has increased compared to 2015 as a result of the lower GBP rate environment and subsequent deposit repricing.**

24%

Increase in management Value at Risk

-£220m

Decrease in Annual Earnings at Risk from a negative 25bps shock in interest rates (floored assumption)

Risk review

Risk performance

Market risk

Page

## Summary of Contents

§ Overview of Market Risk and Summary of Performance in the Period	143	Outlines key measures used to summarise the market risk profile of the bank such as Value at Risk (VaR) and Annual Earnings at Risk (AEaR). A distinction is made between management and regulatory measures.
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§ Balance sheet view of trading and banking books	144	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.
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## Traded Market Risk

§ Review of Management Measures		The Group discloses details on management measures of market risk. Total management VaR includes all trading positions and is presented on a diversified basis by risk factor.
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The daily average, maximum and minimum values of	145	
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    management VaR

    Business scenario stresses

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This section also outlines stress scenarios including macroeconomic conditions modelled as part of the Group's risk management framework.

§ Review of Regulatory Measures		
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Analysis of Regulatory VaR, SVaR, IRC and Comprehensive Risk	146	Group's regulatory measures of market risk under the approved internal models approach are also disclosed.
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    Measure

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Breakdown of the major regulatory risk measures by portfolio.		As part of this year's disclosure, both 1-day and 10-day VaR have been included.
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<b>Non-Traded Market Risk</b>		A description of the non-traded market risk framework is provided.
§ Overview	147	
§ Net Interest Income Sensitivity	147	
by business unit		The Group discloses a sensitivity analysis on pre-tax net interest income for non-trading financial assets and liabilities. The analysis is carried out by Business Unit and currency.
by currency		
§ Economic Capital by Business Unit	148	
§ Analysis of Equity Sensitivity	148	The Group measures some non-traded market risks, in particular prepayment, recruitment and residual risk using an Economic Capital methodology.
§ Volatility of the available for sale portfolio in the liquidity pool	149	
§ Foreign Exchange Risk	149	
Transactional foreign currency exposure	149	The Group discloses the overall impact of a parallel shift in interest rates on retained earnings, available for sale and cash flow hedges.
Translational foreign exchange exposure	149	
Functional currency of operations.	150	
§ Pension Risk Review	150	The Group measures the volatility of the value of the available for sale instruments in the liquidity pool through non-traded market risk VaR.
Assets and liabilities	150	
IAS19 position	151	
Risk measurement	151	The Group discloses the two sources of foreign exchange risk that it is exposed to.
		A review focusing on the UK retirement fund, which represents majority of the Group's total retirement benefit obligation.

Risk review

Risk performance

**Market risk**

## **Market risk**

Market risk is the risk of a reduction in earnings or capital due to volatility of the trading book positions or as a consequence of running a banking book balance sheet and liquidity funding pools.

All disclosures in this section [pages 143-151] are unaudited unless otherwise stated. Disclosures for 2016 and 2015 exclude BAGL balances held for sale unless otherwise stated.

### **Overview of market risk**

This section contains key statistics describing the market risk profile of the Group, such as Value at Risk (VaR) and Annual Earnings at risk (AEaR) measures. A distinction is made between regulatory and management measures within the section. The market risk management section on pages 144 to 147 provides descriptions of these metrics:

§ page 144 provides a view of market risk in the context of the Group's balance sheet

§ pages 145 to 146 cover the management of traded market risk.

Management measures are shown from page 145 and regulatory equivalent measures are shown from page 146

§ non-traded market risk, arising from our banking books, is reviewed from page 147.

### **Measures of market risk in the Group and accounting measures**

Traded market risk measures such as VaR and balance sheet exposure measures have fundamental differences:

§ balance sheet measures show accruals-based balances or marked to market values as at the reporting date

§

VaR measures also take account of current marked to market values, but in addition hedging effects between positions are considered

§ market risk measures are expressed in terms of changes in value or volatilities as opposed to static values. For these reasons, it is not possible to present direct reconciliations of traded market risk and accounting measures. The table Balance sheet view of trading and banking books , on page 144, helps the reader understand the main categories of assets and liabilities subject to regulatory market risk measures.

### **Summary of performance in the period**

Overall, the Group has maintained a steady risk profile, with key movements outlined below:

§ measures of traded market risk, such as value at risk (VaR), increased in the year mainly due to the underlying movements to credit spreads and volatility in the cross currency markets driven by market structural changes

§ Annual Earnings at Risk (AEaR), is a key measure of interest rate risk volatility in the banking book (IRRBB). This sensitivity measure decreased in 2016, driven by two factors: the reduction in GBP base rate in August 2016 with the 0% model floor; and additional protection that the Group has put in place to reduce exposure to a possible further reduction in GBP base rate

§ pension risks are disclosed from page 150 onwards.

Risk review

Risk performance

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 books is shown on an IFRS accounting scope of consolidation. The reconciliation between the accounting and regulatory scope of consolidation is shown in the Barclays PLC 2016 Pillar 3 Report.

**Balance sheet split by trading and banking books**

	Banking book <sup>a</sup>	Trading book	Total
	£m	£m	£m
<b>As at 31 December 2016</b>			
Cash and balances at central banks	102,353		102,353
Items in course of collection from other banks	1,467		1,467
Trading portfolio assets	1,160	79,080	80,240
Financial assets designated at fair value	10,475	68,133	78,608
Derivative financial instruments	1,551	345,075	346,626
Financial investments	63,317		63,317
Loans and advances to banks	42,288	963	43,251
Loans and advances to customers	373,156	19,628	392,784
Reverse repurchase agreements and other similar secured lending	13,454		13,454
Prepayments, accrued income and other assets	2,893		2,893
Investments in associates and joint ventures	684		684
Property, plant and equipment	2,825		2,825
Goodwill and intangible assets	7,726		7,726
Current tax assets	561		561
Deferred tax assets	4,869		4,869
Retirement benefit assets	14		14
Assets included in disposal groups classified as held for sale <sup>b</sup>	64,139	7,315	71,454
<b>Total assets</b>	<b>692,932</b>	<b>520,194</b>	<b>1,213,126</b>
Deposits from banks	46,905	1,309	48,214
Items in course of collection due to other banks	636		636
Customer accounts	408,434	14,744	423,178



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Repurchase agreements and other similar secured borrowing	19,760		19,760
Trading portfolio liabilities		34,687	34,687
Financial liabilities designated at fair value:	5,059	90,972	96,031
Derivative financial instruments	883	339,604	340,487
Debt securities in issue	75,932		75,932
Subordinated liabilities	23,383		23,383
Accruals, deferred income and other liabilities	8,830	41	8,871
Provisions	4,134		4,134
Current tax liabilities	737		737
Deferred tax liabilities	29		29
Retirement benefit liabilities	390		390
Liabilities included in disposal groups classified as held for sale <sup>b</sup>	60,703	4,589	65,292
<b>Total liabilities</b>	<b>655,815</b>	<b>485,946</b>	<b>1,141,761</b>

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, IRC and APR) see the risk management section on page 146.

Notes

aThe 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 factors where the Group holds debt and equity securities respectively, either as financial assets designated at fair value (see Note 15) or as available for sale (see Note 17).

bIncluding BAGL.

## 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 page 89 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 Barclays International, Non-Core, BAGL 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.

### The daily average, maximum and minimum values of management VaR<sup>a</sup>

#### Management VaR (95%) (audited)

	2016			2015		
	Average	High <sup>b</sup>	Low <sup>b</sup>	Average	High <sup>b</sup>	Low <sup>b</sup>
For the year ended	£m	£m	£m	£m	£m	£m
<b>31 December</b>						
Credit risk	16	24	9	11	17	8
Interest rate risk	7	13	4	6	14	4
Equity risk	7	11	4	8	18	4
Basis risk	5	9	3	3	4	2
Spread risk	3	5	2	3	6	2
Foreign exchange risk	3	5	2	3	6	1
Commodity risk	2	4	1	2	3	1
Inflation risk	2	3	2	3	5	2
Diversification effect <sup>b</sup>	(24)	n/a	n/a	(22)	n/a	n/a
<b>Total management VaR</b>	<b>21</b>	<b>29</b>	<b>13</b>	<b>17</b>	<b>25</b>	<b>12</b>

Average Credit Risk VaR increased by £5m to £16m (2015: £11m) primarily due to the underlying volatile movements to credit spreads given own credit contribution.

Average Basis VaR increased by £2m to £5m (2015: £3m) primarily due to a combination of structural changes in the cross currency markets that led to higher volatility and higher client activity in G10 cross currency basis.

Average Equity VaR decreased by £1m to £7m (2015: £8m) reflecting reduced cash portfolio activities and a more conservative risk profile maintained in the derivatives portfolio.

Average Foreign Exchange Risk VaR was stable as a result of maintaining a conservative risk profile in the derivatives portfolio.

### **Group Management VaR<sup>a</sup> (£m)**

The daily VaR chart illustrates an average increasing trend in 2016. Intermittent VaR increases were due to increased client flow in periods of heightened volatility in specific markets and subsequent risk management of the position.

#### Notes

aIncluding BAGL.

bDiversification 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. Historic correlations between losses are taken into account in making these assessments. The high and low VaR figures 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.

Risk review

Risk performance

**Market risk**

### Business Scenario Stresses

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

In 2016, the scenario analyses showed that the largest market risk related impacts would be due to a severe deterioration in market liquidity and global recession.

### Review of regulatory measures

The following disclosures provide details on regulatory measures of Market risk. See the Barclays Pillar 3 Report for more detail on regulatory measures and the differences when compared to management measures.

The Group's market risk capital requirement comprises two elements:

§ the market risk of trading book positions booked to legal entities that 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 as required

§ trading book positions that do not meet the conditions for inclusion within the approved internal models approach.

The capital requirement for these positions is calculated using standardised rules

The table below summarises the regulatory market risk measures, under the internal models approach. See Table

Market risk own funds requirements in the Barclays 2016 Pillar 3 Report for a breakdown of capital requirements by approach.

### Analysis of Regulatory VaR, SVaR, IRC and Comprehensive Risk Measure

	Year-end £m	Avg. £m	Max £m	Min £m
<b>As at 31 December 2016</b>				
Regulatory VaR (1-day)	33	26	34	18
Regulatory VaR (10-day) <sup>a</sup>	105	84	108	57
SVaR (1-day)	65	56	75	34

SVaR (10-day) <sup>a</sup>	205	178	236	109
IRC	154	155	238	112
Comprehensive Risk Measure	2	5	12	2

**As at 31 December 2015**

Regulatory VaR (1-day)	26	28	46	20
Regulatory VaR (10-day) <sup>a</sup>	82	89	145	63
SVaR (1-day)	44	54	68	38
SVaR (10-day) <sup>a</sup>	139	171	215	120
IRC	129	142	254	59
Comprehensive Risk Measure	12	15	27	11

Overall, there was an increase in average IRC in 2016, with no significant movements in other internal model components:

§ **Regulatory VaR/SVaR:** Remained broadly stable year on year.

§ **IRC:** Increased primarily due to positional increases in the third quarter of 2016.

§ **Comprehensive Risk Measure:** Reduced as a result of further reductions in a specific legacy portfolio.

**Breakdown of the major regulatory risk measures by portfolio**

As at 31 December 2016	Macro £m	Equities £m	Credit £m	Barclays International Treasury <sup>b</sup> £m	Banking <sup>b</sup> £m	Group Treasury £m	Barclays Non-Core £m
Regulatory VaR (1-day)	14	12	6	14	12	5	6
Regulatory VaR (10-day)	44	38	20	45	40	15	21
SVaR (1-day)	22	43	7	30	18	9	22
SVaR (10-day)	69	137	24	95	58	30	69
IRC	220	8	146	196	25	10	18
Comprehensive Risk Measure							2

The table above shows the primary portfolios which drove the trading businesses' modelled capital requirement as at 31 December 2016. The stand-alone portfolio results diversify at the total level and are not necessarily additive. Regulatory VaR, SVaR, IRC and Comprehensive Risk Measure in the prior table show the diversified results at a Group level.

## Notes

<sup>a</sup>The 10 day VaR is based on scaling of 1 day VaR model output. More information about Regulatory and Stressed VaR methodology is available in the Barclays PLC 2016 Pillar 3 Report.

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bIn the fourth quarter, the Client Capital Management (CCM) portfolio was split into Barclays International Treasury, Banking and Agency Derivative Services (ADS) and Financing. For the purposes of the disclosures, only material portfolios (Barclays International Treasury and Banking) have been included.

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## Non-traded market risk

### Overview

The non-traded market risk framework covers exposures in the banking book, mostly consisting of exposures relating to accrual accounted and available for sale instruments. The potential volatility of the net interest income of the bank is measured by an Annual Earnings at Risk (AEaR) metric that is monitored regularly and reported to Senior Management and the Board Risk Committee as part of the limit monitoring framework.

### 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 in the Barclays Pillar 3 Report. 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 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.

### Net interest income sensitivity (AEaR) by business unit<sup>a,b</sup> (audited)

	Barclays	Barclays	Barclays	
	UK	International	Non-Core	Total
	£m	£m	£m	£m
<b>As at 31 December 2016</b>				
+25bps	5	16	1	22
-25bps	(130)	(90)		(220)
<b>As at 31 December 2015</b>				
+25bps	16	21	5	42
-25bps	(50)	(41)		(91)

The income sensitivity to falling rates has increased compared to 2015 as a result of the lower GBP rate environment and subsequent deposit re-pricing.

**Net interest income sensitivity (AEaR) by currency<sup>c</sup>**

	<b>+25 basis points £m</b>	<b>-25 basis points £m</b>
<b>As at 31 December 2016</b>		
GBP	9	(215)
USD	3	(5)
EUR	7	1
Other currencies	3	(1)
<b>Total</b>	<b>22</b>	<b>(220)</b>
<b>As percentage of net interest income</b>	<b>0.21%</b>	<b>(2.09%)</b>

## Notes

aThe investment banking part of Barclays International has been excluded.

bExcludes Treasury operations, which are driven by the Group's investments in the liquidity pool, which are risk managed using VaR measures described on page 149. Treasury's net interest income sensitivity (AEaR) sensitivity to a +25/-25bps move is £(39)m / £36m respectively.

cIncludes Barclays UK, Barclays International (excluding investment banking) and Non-Core sensitivity. Treasury excluded.



Risk review

Risk performance

Market risk

### Economic Capital by business unit

Barclays measures some non-traded market risks using an economic capital (EC) methodology. EC is predominantly calculated using a daily VaR model scaled to a 99% confidence interval. A 99.98% confidence interval, as previously reported, is considered to be a very extreme shock i.e. a 1 in 5000 event. A 99% confidence interval is considered more appropriate and also aligns to other regulatory submissions. For more information on definitions of prepayment, recruitment and residual risk, and on how EC is used to manage market risk, see the treasury and capital risk management section on page 372.

### Economic Capital by business unit

	Barclays UK £m	Barclays International <sup>a</sup> £m	Barclays Non-Core <sup>b</sup> £m	Total £m
<b>As at 31 December 2016</b>				
Prepayment risk	27	8		35
Recruitment risk	18	1	1	20
Residual risk	1	23	12	36
Total	46	32	13	91
<b>As at 31 December 2015</b>				
Prepayment risk	20	7		27
Recruitment risk	39	4	4	47
Residual risk	2	26	3	31
Total	61	37	7	105

Total Economic Capital decreased by £14m to £91m (2015: £105m), mainly driven by recruitment risk in Barclays UK which decreased by £21m due to a reduction in market rates and volatility.

### Analysis of equity sensitivity

The equity sensitivity table below measures the overall impact of a +/- 25bps movement in interest rates on retained earnings, available for sale and cash flow hedge reserves. This data is captured using a DV01 metric which is an indicator of the shift in value for a 1 basis point movement in the yield curve.

### Analysis of equity sensitivity (audited)

2016

2015

	+25 basis points £m	-25 basis points £m	+25 basis points £m	-25 basis points £m
<b>As at 31 December</b>				
Net interest income	22	(220)	42	(91)
Taxation effects on the above	(7)	66	(13)	27
<b>Effect on profit for the year</b>	<b>15</b>	<b>(154)</b>	<b>29</b>	<b>(64)</b>
<b>As percentage of net profit after tax</b>	<b>0.54%</b>	<b>(5.45%)</b>	<b>4.72%</b>	<b>(10.22%)</b>
Effect on profit for the year (per above)	15	(154)	29	(64)
Available for sale reserve	(154)	114	(180)	248
Cash flow hedge reserve	(732)	692	(754)	694
Taxation effects on the above	222	(202)	280	(283)
<b>Effect on equity</b>	<b>(649)</b>	<b>450</b>	<b>(625)</b>	<b>595</b>
<b>As percentage of equity</b>	<b>(0.91%)</b>	<b>0.63%</b>	<b>(0.95%)</b>	<b>0.90%</b>

In relation to the net interest income sensitivity table on page 147, the impact of a 25bps movement in rates is largely driven by Barclays UK.

The change in available for sale reserve sensitivities was driven by a reduction in interest rate risk in the liquidity pool during the year. Movements in the available for sale reserve would impact CRD IV fully loaded CET1 capital, however the movement in the cash flow hedge reserve would not impact CET1 capital.

#### Notes

aResidual risk for Barclays International includes Barclays Bank Delaware products to align with the NII disclosure.

Prior period restated on the same basis for consistency.

bOnly retail exposures within Non-Core are captured in this measure.

### Volatility of the available for sale portfolio in the liquidity pool

Changes in value of available for sale exposures flow directly through capital via the available for sale reserve. The volatility of the value of the available for sale 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 available for sale exposures. These exposures are in the banking book and do not meet the criteria for trading book treatment.

### Volatility of the AFS portfolio in Liquidity Pool

#### Analysis of volatility of the available for sale portfolio in the liquidity pool

For the year ended 31 December	2016			2015		
	Average £m	High £m	Low £m	Average £m	High £m	Low £m
Non-traded market Value at Risk (daily, 95%)	40	46	32	42	49	37

The Non-traded VaR is mainly driven by volatility of interest rates in developed markets in the chart above. The sharp reduction in available for sale VaR at the end of September was driven by a reduction in outright interest rate risk taken in the liquidity pool, which was re-established in early October.

### Foreign exchange risk

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

#### a) Transactional foreign currency exposure

Transactional foreign exchange 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, EUR and ZAR. 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 using the CET1 capital movements to broadly match the revaluation of the Group's foreign currency RWA exposures.

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

## Risk review

## Risk performance

## Market risk

**Functional currency of operations  
(audited)**

	Foreign currency net investments £m	Borrowings which the net investments £m	Derivatives hedged the net investments £m	Structural currency exposures pre-economic hedges £m	Economic hedges £m	Remaining structural currency exposures £m
<b>As at 31 December 2016</b>						
USD	29,460	(12,769)		16,691	(7,898)	8,793
EUR	2,121	(363)		1,758	(2,053)	(295)
ZAR	3,679		(2,571)	1,108		1,108
JPY	438	(209)	(224)	5		5
Other	2,793		(1,318)	1,475		1,475
Total	38,491	(13,341)	(4,113)	21,037	(9,951)	11,086
<b>As at 31 December 2015</b>						
USD	24,712	(8,839)	(1,158)	14,715	(7,008)	7,707
EUR	2,002	(630)	(14)	1,358	(1,764)	(406)
ZAR	3,201	(4)	(99)	3,098		3,098
JPY	383	(168)	(205)	10		10
Other	2,927		(1,294)	1,633		1,633
Total	33,225	(9,641)	(2,770)	20,814	(8,772)	12,042

During 2016, total structural currency exposure net of hedging instruments decreased by £1.0bn to £11.1bn (2015: £12.0bn). The decrease was broadly driven by an increase in ZAR hedges following Barclays announcement to reduce the Group's interest in BAGL. Foreign currency net investments increased by £5.3bn to £38.5bn (2015: £33.2bn) driven predominantly by the appreciation of US Dollar against Sterling. The hedges associated with these investments increased by £5.0bn to £17.5bn (2015: £12.4bn).

**Pension risk review**

The UK Retirement Fund (UKRF) represents approximately 96% (2015: 92%) of the 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 estimated market value of the pension fund assets may decline, investment returns may reduce or the estimated value of the pension liabilities may increase.

See the Barclays PLC 2016 Pillar 3 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 ensures 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 against interest rates and equities. The split of scheme assets is shown within Note 35. The fair value of the UKRF assets was £31.8bn as at 31 December 2016.

## Liabilities

The UKRF retirement benefit obligations are a series of future cash flows with relatively long duration. On an IAS19 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 curve):

§ 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 the Group's defined benefit schemes and this risk is set to reduce over time as our 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 2016) that takes account of future inflation indexing of payments to beneficiaries, with the majority of the cash flows (approximately 83%) falling between 0 and 40 years, peaking within the 11 to 20 year band and reducing thereafter. The shape may vary depending on changes in inflation expectation and mortality.

For more detail on the UKRF's financial and demographic assumptions see Note 35 Pensions and post retirement benefits.

## Proportion of liability cash flows

## Net IAS19 Position

The graph above shows the UKRF's net IAS19 pension position for each quarter-end for the past two years. The volatility shown by the fluctuation in the net IAS19 pension position is reflective of the movements observed in the market.

In Q2 2016, the UKRF IAS19 position deteriorated as the AA discount rate moved lower, driven by both a decrease in long-dated government bond yields as well as tightening in credit spreads.

During H2 2016, this trend continued driven by the outcome of the EU Referendum in June as well as the Bank of England's announcement on quantitative easing in August. These events drove significant market moves adversely affecting the UKRF AA discount rate. For example, the market index IBOXX £-Corp AA yield was 53bps lower between June and September.

Gilt yields reverted higher in the months following September which was also reflected in higher AA discount rate. As a result, the net IAS19 position reverted close to zero as at 31 December 2016.

Please see Note 35 for the sensitivity of the UKRF to change 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 positions on a total portfolio level. This ensures that the risks, diversification and liability matching characteristics of the UKRF obligations and investments are adequately captured. VaR is measured and monitored on a monthly basis. Risks are reviewed and reported regularly at forums including Market Risk Committee, Group Risk Committee, Pensions Management Group and Pension Executive Board. The VaR model takes into account the valuation of the liabilities based on an IAS19 basis (see Note 35). The Trustee receives quarterly VaR measures on a funding basis.

The pension liability is also sensitive to post-retirement mortality assumptions which are also reviewed regularly. See Note 35 for more details.

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

Barclays defined benefit pension schemes affects capital in two ways:

- § An IAS19 deficit is treated as a liability on the 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 IAS19 surplus is treated as an asset on the balance sheet and increases shareholders' equity, however is deducted for the purposes of determining CET1 capital.
- § In the Group's statutory balance sheet, an IAS19 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 the 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 the Group's overall regulatory minimum requirement for CET1 capital, Tier 1 capital and total capital. More detail on minimum regulatory requirements can be found in the Funding Risk Capital section on page 152.



Risk review

Risk performance

**Funding risk**   **Capital**

### **Analysis of capital risk**

Capital risk is the risk that the Group has insufficient capital resources to (i) meet minimum regulatory requirements in all jurisdictions; (ii) support its credit rating; and (iii) support its business strategy.

This section details Barclays' capital position providing information on both capital resources and capital requirements. It also provides details of the leverage ratio and exposures.

### **Key metrics**

12.4%

### **Fully loaded Common Equity Tier 1 ratio**

The fully loaded CRD IV CET1 ratio increased to 12.4% (2015: 11.4%) reflecting an increase in CET1 capital of £4.5bn to £45.2bn, despite RWAs increasing by £7bn to £366bn.

The increase in CET1 capital was largely driven by profits of £2.1bn generated in the period, after absorbing the impact of notable items. Other favourable movements included the currency translation reserve as a result of the appreciation of all major currencies against Sterling.

The increase in RWAs was principally due to the appreciation of South African Rand, US Dollar and Euro against Sterling and business growth, which more than offset RWA reductions in Non-Core.

4.6%

### **Leverage ratio**

The leverage ratio increased to 4.6% (2015: 4.5%) driven by a £5.8bn increase in fully loaded Tier 1 capital to £52.0bn partially offset by an increase in the leverage exposure of £97bn to £1,125bn.

Total IFRS assets increased 8% to £1,213bn from 2015 contributing to the 9% increase in the leverage exposure.

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§ Capital risk overview and summary of performance	154	Capital risk is the risk that the Group has insufficient capital resources to (i) meet minimum regulatory requirements in all jurisdictions; (ii) support its credit rating; and (iii) support its business strategy.
§ Regulatory minimum capital and leverage requirements		This section details Barclays' capital position providing information on both capital resources and capital requirements. It also provides details of the leverage ratio and exposures.
Capital		
Leverage		
§ Analysis of capital resources	155	This section outlines the Group's capital ratios, capital composition, and provides information on significant movements in CET1 capital during the year.
Capital ratios		
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§ Analysis of risk weighted assets	157	This section outlines risk weighted assets by risk type, business and macro drivers.
Risk weighted assets by risk type and business		
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Leverage ratio and exposures		



Risk review

Risk performance

**Funding risk**   **Capital**

## Capital risk

Capital risk is the risk that the Group has insufficient capital resources to:

meet minimum regulatory requirements in all jurisdictions

support its credit rating; and

support its business strategy.

More details on monitoring and managing capital risk may be found in the Risk Management sections on pages 97 to 114

All disclosures in this section (pages 154 to 178) are unaudited unless otherwise stated. Disclosures for 2016 and 2015 include BAGL balances held for sale unless otherwise stated.

## Overview

The fully loaded CRD IV CET1 ratio, among other metrics, is a measure of the capital strength and resilience of Barclays. Maintenance of our capital is vital in order to meet the minimum capital requirements of regulatory authorities and to fund growth within our businesses.

This section provides an overview of the Group's: (i) regulatory minimum capital and leverage requirements; (ii) capital resources; (iii) risk weighted assets (RWAs); and (iv) leverage ratio and exposures.

## Summary of performance in the period

Barclays continues to be in excess of the minimum transitional and fully loaded capital requirements and PRA capital and leverage requirements.

The fully loaded CET1 ratio increased to 12.4% (2015: 11.4%) reflecting an increase in CET1 capital of £4.5bn to £45.2bn, despite RWAs increasing by £7bn to £366bn.

The increase in CET1 capital was largely driven by profits of £2.1bn generated in the period, after absorbing the impact of notable items. Other favourable movements included the currency translation reserve as a result of the appreciation of all major currencies against Sterling.

The increase in RWAs was principally due to the appreciation of South African Rand, US Dollar and Euro against Sterling and business growth, which more than offset RWA reductions in Non-Core.

The leverage ratio increased to 4.6% (2015: 4.5%) driven by a £5.8bn increase in fully loaded Tier 1 capital to £52.0bn partially offset by an increase in the leverage exposure of £97bn to £1,125bn.

Total IFRS assets increased 8% to £1,213bn from 2015 contributing to the 9% increase in leverage exposure.

The IFRS asset increase was mainly driven by loans and advances and other assets which increased £82bn to £707bn. The increase was primarily due to the appreciation of major currencies against Sterling, an increase in liquidity pool assets, and lending growth in Barclays UK and Barclays International. This was partially offset by the rundown and exit of Non-Core assets.

Net derivative leverage exposure, remained broadly flat as an increase in assets of £19bn to £347bn was offset by an increase in derivative liabilities resulting in regulatory derivative netting increasing £20bn to £313bn. The increase was mainly within foreign exchange derivatives driven by an increase in trade volumes and appreciation of all major currencies against Sterling.

## Regulatory minimum capital and leverage requirements

### Capital

Barclays' current regulatory requirement is to meet a fully loaded CRD IV CET1 ratio comprising the required 4.5% minimum CET1 ratio and, phased in from 2016, a Combined Buffer Requirement. This currently comprises a Capital Conservation Buffer (CCB) of 2.5% and a Globally Systemically Important Institution (G-SII) buffer determined by the PRA in line with guidance from the Financial Stability Board (FSB). Both buffers are subject to phased implementation, the CCB is phased in at 25% per annum with 0.625% applicable for 2016. The G-SII buffer for 2016 and 2017 has been set at 2% and is also phased in at 25% per annum with 0.5% applicable for 2016 and 1% for 2017. On 21 November 2016 the FSB confirmed that the G-SII buffer for 2018 will be 1.5% with 1.1% applicable for 2018 and taking full effect from 2019 onwards.

Also forming part of the Combined Buffer Requirement is a Counter-Cyclical Capital Buffer (CCyB) and a Systemic Risk Buffer (SRB). On 30 November 2016 the Financial Policy Committee (FPC) reaffirmed that it expects to maintain a CCyB of 0% on UK exposures until at least June 2017. Other national authorities also determine the appropriate CCyBs that should be applied to exposures in their jurisdiction. During 2016, CCyBs started to apply for Barclays' exposures to other jurisdictions; however based on current exposures these are not material. No SRB has been set to date.

In addition, Barclays' Pillar 2A requirement as per the PRA's Individual Capital Guidance (ICG) for 2016 based on a point in time assessment was 3.9% of which 56% needs to be met in CET1 form, equating to approximately 2.2% of RWAs. The Pillar 2A requirement is subject to at least annual review and for 2017 Barclays' Pillar 2A add-on will be 4.0%, with approximately 2.3% of RWAs needing to be met in CET1 form. All capital, RWA and leverage calculations reflect Barclays' interpretation of the current rules.

The CRD IV CET1 transitional minimum capital requirement for 2016 is 7.8% including the 4.5% CET1 ratio requirement, 2.2% of Pillar 2A, a 0.625% CCB buffer, a 0.5% G-SII buffer and a 0% CCyB.

## Leverage

Effective 1 January 2016, Barclays is required to disclose a leverage ratio and an average leverage ratio applicable to the Group:

§ The leverage ratio is consistent with the December 2015 method of calculation and has been included in our disclosure. The calculation uses the end point CRR definition of Tier 1 capital for the numerator and the CRR definition of leverage exposure. The current expected minimum fully loaded requirement is 3%, but this could be impacted by the Basel Consultation on the Leverage Framework

§ The average leverage ratio as outlined by the PRA Supervisory Statement SS45/15 and the updated PRA rulebook is calculated as the capital measure divided by the exposure measure, where the capital and exposure measure is based on the average of the last day of each month in the quarter. The expected end point minimum requirement is 3.5% comprising of the 3% minimum requirement, a fully phased in G-SII additional leverage ratio buffer (G-SII ALRB) and a countercyclical leverage ratio buffer (CCLB). The minimum requirement is on a phased basis in line with CET1 G-SII buffer which results in a minimum requirement of 3.175% at 31 December 2016.

In August 2016, the PRA implemented the FPC's recommendation to allow firms to exclude qualifying central bank claims from the calculation of the leverage exposure measure, as long as these are matched by deposits denominated in the same currency, subject to firms obtaining permission from the PRA. This change in reporting requirements is effective 1 April 2017, which will result in a modification to the calculation of the exposure measure for the purpose of calculating the UK leverage ratio. At 31 December 2016, Barclays' reported leverage ratio and average leverage ratio disclosed is unaffected by this announcement as firms are required to disclose based on the existing rules.

## Capital Resources

The CRR and Capital Requirements Directive (CRD) implemented Basel III within the EU (collectively known as CRD IV) on 1 January 2014. The rules are supplemented by Regulatory Technical Standards and the PRA's rulebook, including the implementation of transitional rules. However, rules and guidance are still subject to change as certain aspects of CRD IV are dependent on final technical standards and clarifications to be issued by the EBA and adopted by the European Commission and the PRA.

### Capital ratios

#### As at 31 December

	2016	2015
Fully Loaded CET1 <sup>a,b</sup>	12.4%	11.4%
PRA Transitional Tier 1 <sup>c,d</sup>	15.6%	14.7%
PRA Transitional Total Capital <sup>c,d</sup>	19.6%	18.6%

### Capital resources (audited)

	2016	2015
As at 31 December	£m	£m
<b>Shareholders' equity (excluding non-controlling interests) per the balance sheet</b>	<b>64,873</b>	59,810
Less: other equity instruments (recognised as AT1 capital)	(6,449)	(5,305)
Adjustment to retained earnings for foreseeable dividends	(388)	(631)
Minority interests (amount allowed in consolidated CET1)	1,825	950
<b>Other regulatory adjustments and deductions</b>		
Additional value adjustments (PVA)	(1,571)	(1,602)
Goodwill and intangible assets	(9,054)	(8,234)
Deferred tax assets that rely on future profitability excluding temporary differences	(494)	(855)
Fair value reserves related to gains or losses on cash flow hedges	(2,104)	(1,231)
Excess of expected losses over impairment	(1,294)	(1,365)
Gains or losses on liabilities at fair value resulting from own credit	86	127
Defined benefit pension fund assets	(38)	(689)
Direct and indirect holdings by an institution of own CET1 instruments	(50)	(57)
Deferred tax assets arising from temporary differences (amount above 10% threshold)	(183)	
Other regulatory adjustments	45	(177)
<b>Fully loaded CET1 capital</b>	<b>45,204</b>	40,741
<b>Additional Tier 1 (AT1) capital</b>		
Capital instruments and the related share premium accounts	6,449	5,305
Qualifying AT1 capital (including minority interests) issued by subsidiaries	5,445	6,718



Other regulatory adjustments and deductions	(130)	(130)
<b>Transitional AT1 capital<sup>e</sup></b>	<b>11,764</b>	11,893
<b>PRA transitional Tier 1 capital</b>	<b>56,968</b>	52,634
<b>Tier 2 (T2) capital</b>		
Capital instruments and the related share premium accounts	3,769	1,757
Qualifying Tier 2 capital (including minority interests) issued by subsidiaries	11,366	12,389
Other regulatory adjustments and deductions	(257)	(253)
<b>PRA transitional total regulatory capital</b>	<b>71,846</b>	66,527

## Notes

aThe transitional regulatory adjustments to CET1 capital are no longer applicable resulting in CET1 capital on a fully loaded basis being equal to that on a transitional basis.

bThe CRD IV CET1 ratio (FSA October 2012 transitional statement) as applicable to Barclays Tier 2 Contingent Capital Notes was 13.7% based on £50.0bn of transitional CRD IV CET 1 capital and £366bn RWAs. *The transitional CET1 ratio according to the FSA October 2012 transitional statement would be 13.7%. This is calculated as CET1 capital as adjusted for the transitional relief (£50.0bn), divided by CRD IV RWAs. The following transitional relief items are added back to CET1 capital: Goodwill and Intangibles (£3.6bn), Deferred tax asset (£0.2bn), Expected losses over impairment (£0.5bn), Excess minority interest (£0.2bn) and Deferred tax assets arising from temporary differences (amount above 10% threshold) (£0.2bn).*

cThe PRA transitional capital is based on the PRA Rulebook and accompanying supervisory statements.

dAs at 31 December 2016, Barclays fully loaded Tier 1 capital was £51,993m, and the fully loaded Tier 1 ratio was 14.2%. Fully loaded total regulatory capital was £67,772m and the fully loaded total capital ratio was 18.5%. The fully loaded Tier 1 capital and total capital measures are calculated without applying the transitional provisions set out in CRD IV and assessing compliance of AT1 and Tier 2 instruments against the relevant criteria in CRD IV.

eOf the £11.8bn transitional AT1 capital, fully loaded AT1 capital used for the leverage ratio comprises the £6.4bn capital instruments and related share premium accounts, £0.5bn qualifying minority interests and £0.1bn capital deductions. It excludes legacy Tier 1 capital instruments issued by subsidiaries that are subject to grandfathering.

Risk review

Risk performance

Funding risk    Capital

## Movement in CET1 capital

	2016
	£m
<b>Opening balance as at 1 January</b>	<b>40,741</b>
Profit for the period attributable to equity holders	2,080
Own credit	(41)
Dividends paid and foreseen	(843)
<b>Increase in retained regulatory capital generated from earnings</b>	<b>1,196</b>
Net impact of share awards	535
Available for sale reserves	(391)
Currency translation reserves	3,674
Other reserves	(778)
<b>Increase in other qualifying reserves</b>	<b>3,040</b>
Retirement benefit reserve	(988)
Defined benefit pension fund asset deduction	651
<b>Net impact of pensions</b>	<b>(337)</b>
Minority interests	875
Additional value adjustments (PVA)	31
Goodwill and intangible assets	(820)
Deferred tax assets that rely on future profitability excluding those arising from temporary differences	361
Excess of expected loss over impairment	71
Direct and indirect holdings by an institution of own CET1 instruments	7
Deferred tax assets arising from temporary differences (amount above 10% threshold)	(183)
Other regulatory adjustments	222
<b>Increase in regulatory capital due to adjustments and deductions</b>	<b>564</b>
<b>Closing balance as at 31 December</b>	<b>45,204</b>

The CET1 ratio improved to 12.4% (2015: 11.4%) primarily driven by an increase in CET1 capital of £4.5bn to £45.2bn as a result of profits of £2.1bn generated in the year, after absorbing the impact of notable items. Regulatory capital generated from earnings after absorbing the impact of own credit and dividends paid and foreseen increased CET1 capital by £1.2bn. Other significant movements in the year were:

§ a £3.0bn increase in other qualifying reserves including a £3.7bn increase in the currency translation reserves as US Dollar, Euro and South African Rand strengthened against Sterling; partially offset by a £0.4bn decrease as a result of preference share redemptions and a £0.4bn decrease in available for sale reserves;

§ a £0.3bn decrease, net of tax, as a result of movements relating to pensions. There was a £1.0bn decrease in the retirement benefit reserve largely due to the UKRF, which is the Group's main pension scheme, moving from a £0.8bn surplus in December 2015 to a £27m deficit in December 2016. The decrease in reserves was partially offset by the removal of a £0.7bn capital deduction for the UKRF asset in December 2015;

§ a £0.9bn increase in minority interests following the sale of 12.2% of BAGL's issued share capital was partially offset by £0.3bn higher capital deductions.

Transitional AT1 capital remained largely flat in the period as redemptions and repurchases of £1.3bn of CRD IV end point non qualifying preference shares, tier one notes and reserve capital instruments were offset by the issuance of \$1.5bn of end point qualifying AT1 capital instruments.

## Risk weighted assets

## Risk weighted assets (RWAs) by risk type and business

As at 31 December	Credit risk		Counterparty credit risk <sup>a,b</sup>			CVA	Market risk	
	Std	IRB	Std	IRB	Settlement Risk		Std	IMA
2016	£m	£m	£m	£m	£m	£m	£m	£m
Barclays UK Barclays	5,592	49,591	47					
International Head Office <sup>c</sup>	53,201 9,048	82,327 27,122	13,515 77	13,706 1,157	30	3,581 927	9,343 482	9,460 2,323
<b>Barclays Core</b>	<b>67,841</b>	<b>159,040</b>	<b>13,639</b>	<b>14,863</b>	<b>30</b>	<b>4,508</b>	<b>9,825</b>	<b>11,783</b>
Barclays Non-Core	4,714	9,945	1,043	6,081	37	2,235	477	2,928
<b>Barclays Group</b>	<b>72,555</b>	<b>168,985</b>	<b>14,682</b>	<b>20,944</b>	<b>67</b>	<b>6,743</b>	<b>10,302</b>	<b>14,711</b>
<b>As at 31 December 2015</b>								
Barclays UK Barclays	6,562	50,763	26					
International Head Office <sup>c</sup>	45,892 8,291	77,275 20,156	10,463 54	11,055 538	516 8	3,406 382	8,373 399	10,196 1,903
<b>Barclays Core</b>	<b>60,745</b>	<b>148,194</b>	<b>10,543</b>	<b>11,593</b>	<b>524</b>	<b>3,788</b>	<b>8,772</b>	<b>12,099</b>
Barclays Non-Core	8,704	12,797	1,653	9,430	1	7,480	1,714	3,679
<b>Barclays Group</b>	<b>69,449</b>	<b>160,991</b>	<b>12,196</b>	<b>21,023</b>	<b>525</b>	<b>11,268</b>	<b>10,486</b>	<b>15,778</b>

## Movement analysis of risk weighted assets

Risk weighted	Credit risk £bn	Counterparty credit risk <sup>a,b</sup>	Market risk £bn
------------------	--------------------	--	--------------------

**assets****£bn****As at****1 January****2016**

Book size

Acquisitions

and disposals

Book quality

Model updates

Methodology

and policy

Foreign exchange

movement<sup>d</sup>**As at****31 December****2016**

RWAs increased £7.2bn to £365.6bn, driven by:

**230.4****0.8****(6.4)****(0.5)****(2.9)****1.1****19.0****241.5****45.0****1.2****(0.2)****(0.4)****(2.0)****(1.2)****42.4****26.3****(0.6)****0.6****(0.3)****(1.0)****25.0**

§ book size increased RWAs by £1.4bn primarily due to an increase in trading activity in Barclays International and business growth in corporate and consumer lending partially offset by securitisation transactions

§ acquisitions and disposals decreased RWAs by £6.6bn primarily due to the rundown of Non-Core portfolios, including the sale of Portuguese and Italian businesses

§ model updates decreased RWAs by £5.2bn primarily driven by model changes in Barclays UK mortgages following formal approval

§ methodology and Policy decreased RWAs by £1.1bn primarily driven by the effect of collateral modelling for mismatched FX collateral on average CVA and a new treatment for sovereign exposures partly offset by modelled wholesale recalibration

§ foreign exchange movements increased RWAs by £19.0bn primarily driven by the appreciation of South African Rand, US Dollar and Euro against Sterling.

Notes

aRWAs in relation to default fund contributions are included in counterparty credit risk.

bRWAs in relation to credit valuation adjustment (CVA) are included in counterparty credit risk.

cIncludes Africa Banking discontinued operations.

dForeign exchange movement does not include FX for modelled counterparty risk or modelled market risk.

Risk review

Risk performance

Funding risk Capital

**Leverage ratio and exposures**

At 31 December 2016, Barclays' leverage ratio was 4.6% (2015: 4.5%) and the average leverage ratio was 4.3%, which exceeds the transitional minimum requirement for Barclays of 3.175% and expected end point minimum requirement of 3.5%.

The impact of the PRA rule modification to allow firms to exclude qualifying central bank claims from the calculation of the leverage exposure measure would have resulted in an average leverage ratio of 4.5% and a leverage ratio at 31 December 2016 of 5.0%.

**Leverage exposure**

	As at <b>31.12.16</b> £bn	As at 31.12.15 £bn
<b>Accounting assets</b>		
Derivative financial instruments	347	328
Cash collateral	67	62
Reverse repurchase agreements and other similar secured lending	13	28
Financial assets designated at fair value <sup>a</sup>	79	77
Loans and advances and other assets	707	625
<b>Total IFRS assets</b>	<b>1,213</b>	1,120
<b>Regulatory consolidation adjustments</b>	<b>(6)</b>	(10)
<b>Derivatives adjustments</b>		
Derivatives netting	(313)	(293)
Adjustments to cash collateral	(50)	(46)
Net written credit protection	12	15
Potential Future Exposure (PFE) on derivatives	136	129
<b>Total derivatives adjustments</b>	<b>(215)</b>	(195)
<b>Securities financing transactions (SFTs) adjustments</b>	<b>29</b>	16
<b>Regulatory deductions and other adjustments</b>	<b>(15)</b>	(14)
<b>Weighted off-balance sheet commitments</b>	<b>119</b>	111
<b>Total leverage exposure</b>	<b>1,125</b>	1,028
Fully loaded CET1 capital	45.2	40.7

Fully loaded AT1 capital	6.8	5.4
<b>Fully loaded Tier 1 capital</b>	<b>52.0</b>	46.2
<b>Leverage ratio</b>	<b>4.6%</b>	4.5%

The leverage ratio increased to 4.6% (2015: 4.5%) primarily driven by a £5.8bn increase in fully loaded Tier 1 capital to £52.0bn (December 2015: £46.2bn), partially offset by an increase in the leverage exposure of £97bn to £1,125bn (2015: £1,028bn):

§ the IFRS asset increase was mainly driven by loans and advances and other assets which increased £82bn to £707bn. The increase was primarily due to the appreciation of major currencies against Sterling, an increase in liquidity pool assets, and lending growth in Barclays UK and Barclays International. This was partially offset by the rundown and exit of Non-Core assets

§ SFT adjustments increased by £13bn to £29bn, primarily as a result of a change in treatment of securities pre-positioned for use against undrawn central bank lending facilities

§ PFE on derivatives increased by £7bn to £136bn primarily driven by the appreciation of major currencies against Sterling, partially offset by compression activity, sale of positions and maturity of trades

§ weighted off-balance sheet commitments increased by £8bn to £119bn primarily driven by the appreciation of major currencies against Sterling.

The average leverage exposure measure for Q4 2016 was £1,206bn resulting in an average leverage ratio of 4.3%. The CET1 capital held against the 0.175% transitional G-SII ALRB was £2bn. The impact of the CCLB is currently nil.

The difference between the average leverage ratio and the leverage ratio was primarily driven by higher positions in October and November within trading portfolio assets, reverse repurchase agreements and settlements balances.

#### Note

a Included within financial assets designated at fair value are reverse repurchase agreements designated at fair value of £63bn (2015: £50bn).



Risk review

Risk performance

**Funding risk**   **liquidity**

### **Analysis of liquidity risk**

Liquidity risk is the risk that a firm, although solvent, either does not have sufficient financial resources available to enable it to meet its obligations as they fall due, or can secure such resources only at excessive cost.

This section details the Group's liquidity risk profile and provides information on the way the Group manages that risk.

### **Key metrics**

#### **131% LCR**

The Group strengthened its liquidity position during the year, increasing its surplus to internal and regulatory requirements

#### **£12bn Term**

#### **Issuance**

The Group maintains access to stable and diverse sources of funding across customer

deposits and wholesale debt

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§ Liquidity risk overview and summary of performance		The risk that the firm, although solvent, either does not have sufficient financial resources available to enable it to meet its obligations as they fall due, or can secure such resources only at excessive cost.
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§ Liquidity management at BAGL Group	173	Liquidity risk is managed separately at BAGL Group due to local currency, funding and regulatory requirements.
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Risk review

Risk performance

**Funding risk**   **liquidity**

## Liquidity risk

Liquidity risk is the risk that the Group, although solvent, either does not have sufficient financial resources available to meet its obligations as they fall due, or can secure such resources only at excessive cost. This also results in a firm's inability to meet regulatory liquidity requirements. This risk is inherent in all banking operations and can be affected by a range of Group-specific and market-wide events.

All disclosures in this section (pages 161 to 177) are unaudited and exclude BAGL unless otherwise stated.

### Overview

The Group has a comprehensive Key Risk Control Framework for managing the Group's liquidity risk. The Liquidity Framework meets the PRA's standards and is designed to ensure the Group maintains liquidity resources that are sufficient in amount and quality, and a funding profile that is appropriate to meet the liquidity risk appetite. The Liquidity Framework is delivered via a combination of policy formation, review and governance, analysis, stress testing, limit setting and monitoring.

Liquidity risk is managed separately at Barclays Africa Group Limited (BAGL) due to local currency and funding requirements. Unless stated otherwise, all disclosures in this section exclude BAGL and they are reported on a standalone basis. Adjusting for local requirements, BAGL liquidity risk is managed on a consistent basis to the Group.

This section provides an analysis of the Group's: i) liquidity risk stress testing; ii) internal and regulatory stress tests; iii) liquidity pool; iv) funding structure and funding relationships; v) wholesale funding; vi) term financing; vii) encumbrance; viii) repurchase agreements; ix) credit ratings; x) liquidity management at BAGL; and xi) contractual maturity of financial assets and liabilities.

For further detail on liquidity risk governance and framework see page 384.

### Summary of performance in the period

The Group continued to maintain surpluses to its internal and regulatory requirements. The liquidity pool increased to £165bn (2015: £145bn), primarily driven by the depreciation of GBP against other major currencies and net increase in retail and commercial deposits and wholesale funding to support business growth. The Liquidity Coverage Ratio

(LCR) was 131% (December 2015: 133%), equivalent to a surplus of £39bn (December 2015: £37bn). Wholesale funding outstanding excluding repurchase agreements was £158bn (December 2015: £142bn). The increase was driven by the prudent management of the liquidity position, holding company issuance and depreciation of GBP against other major currencies. The Group issued £12.1bn equivalent of capital and senior unsecured debt from the holding company of which £8.6bn equivalent and £0.7bn equivalent in public and private senior unsecured debt respectively, and £2.8bn of capital instruments. In the same period £7.4bn of Barclays Bank PLC capital and senior unsecured debt was bought back or called.

### **Liquidity risk stress testing**

Under the Liquidity Framework, the Group has established a Liquidity Risk Appetite (LRA) together with the appropriate limits for the management of the liquidity risk. This is the level of liquidity risk the 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 internal stress tests. It is measured with reference to the liquidity pool compared to anticipated stressed net contractual and contingent outflows for each of three short-term stress scenarios.

### **Liquidity Risk Appetite**

As part of the LRA, the Group runs three primary short-term liquidity stress scenarios, aligned to the PRA's prescribed stresses:

§ 90-day market-wide stress event

§ 30-day Barclays-specific stress event

§ combined 30-day market-wide and Barclays-specific stress event.

Under normal market conditions, the liquidity pool is managed to be at a target of at least 100% of anticipated outflows under each of these stress scenarios. The 30-day Barclays-specific stress scenario results in the greatest net outflows of each of the liquidity stress tests. The combined 30-day scenario assumes outflows consistent with a firm-specific stress for the first two weeks of the stress period, followed by relatively lower outflows consistent with a market-wide stress for the remainder of the stress period.

Barclays also evaluates its long-term LRA, one year stress test based on prolonged closure of capital markets.

**Key LRA assumptions include:**

**For the year ended 31 December 2016**

**Drivers of**

**Liquidity Risk**      LRA Specific Stress    Key Assumptions

**Wholesale Secured  
and Unsecured  
Funding Risk**

- § Zero rollover of maturing wholesale unsecured funding
- § Loss of repo capacity on non-extremely liquid repos at contractual maturity date
- § Withdrawal of contractual buyback obligations, excess client futures margin, PB client cash and overlifts
- § Haircuts applied to the market value of marketable assets held in the liquidity buffer

**Retail and Corporate  
Funding Risk**

- § Retail and Corporate deposit outflows as counterparties seek to diversify their deposit balances

**Intra-day Liquidity  
Risk**

- § Liquidity held against intra-day requirements for the settlement of cash and securities under a stress

**Intra-Group  
Liquidity Risk**

- § Liquidity support for material subsidiaries. Surplus liquidity held within certain subsidiaries is not taken as a benefit to the wider Group.

**Cross-Currency  
Liquidity Risk**

- § Currency liquidity cash flows at contractual maturity for physically settled FX forwards and cross currency swaps

- Off-Balance Sheet Liquidity Risk**
- § Drawdown on committed facilities based on facility and counterparty type
  - § Collateral outflows due to a 2 notch credit rating downgrade
  - § Increase in the Group's initial margin requirement across all major exchanges
  - § Variation margin outflows from collateralised risk positions
  - § Outflow of collateral owing but not called
  - § Loss of internal sources of funding within the Prime Brokerage synthetics business

- Franchise-Viability Risk**
- § Liquidity held in order to meet outflows that are non-contractual in nature, but are necessary in order to support the firm's ongoing franchise (e.g. debt buybacks)

- Funding Concentration Risk**
- § Liquidity held against largest wholesale funding counterparty refusing to roll

- Management Actions**
- § Specifically defined actions that raise liquidity or mitigate cash outflows that would be conducted in a manner so as not to increase market volatility, whilst maintaining all core franchises

### Liquidity regulation

The Group monitors its position against the CRD IV Delegated Act Liquidity Coverage Ratio (LCR) and the Basel III Net Stable Funding Ratio (NSFR).

The LCR is designed to promote short-term resilience of a bank's liquidity risk profile by ensuring that it holds sufficient High Quality Liquid Assets to survive an acute stress scenario lasting for 30 days. The NSFR has a time horizon of 12 months and has been developed to promote a sustainable maturity structure of assets and liabilities.

The CRD IV LCR became effective on 1 October 2015, with a minimum ratio requirement in the UK of 80% as at 31 December 2016; this will increase to 90% on 1 January 2017 and then to 100% on 1 January 2018. As of 31 December 2016, the Group reported a CRD IV LCR of 131% (2015: 133%).

In October 2014, the BCBS published a final standard for the NSFR with the minimum requirement to be introduced in January 2018 at 100% on an ongoing basis. On 23 November 2016 the European Commission published draft amendments to the Capital Requirements Regulation (CRR) including its proposed implementation of NSFR in the



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EU. This proposal makes a number of changes from Basel NSFR, particularly in the treatment of derivative and secured financing transactions. Barclays is in the process of assessing the impact of these changes on its NSFR ratio, and notes that NSFR is not proposed to be a binding regulation in the EU until two years after the European legislation is finalised. We remain above 100% well ahead of implementation timelines, based on a conservative interpretation of the Basel rule.

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Risk review

Risk performance

**Funding risk**   **liquidity**

### Comparing internal and regulatory liquidity stress tests

The LRA stress scenarios and the CRD IV LCR are all broadly comparable short-term stress scenarios in which the adequacy of defined liquidity resources is assessed against contractual and contingent stress outflows. The CRD IV LCR stress tests provide an independent assessment of the Group's liquidity risk profile.

<b>Stress Test</b>	<b>Barclays LRA</b>	<b>CRD IV LCR</b>
Time Horizon	30 to 90 days	30 days
Calculation	Liquid assets to net cash outflows	Liquid assets to net cash outflows
As at 31 December 2016, the Group held eligible liquid assets in excess of 100% of stress requirements for all three short-term LRA scenarios and the CRD IV LCR requirement.		

### Compliance with internal and regulatory stress tests

	<b>Barclays LRA (30 day Barclays- specific requirement)<sup>a, b</sup></b>	<b>CRD IV LCR<sup>b</sup></b>
<b>As at 31 December 2016</b>	<b>£bn</b>	<b>£bn</b>
Eligible liquidity buffer	173	166
Net stress outflows	(144)	(127)
<b>Surplus</b>	<b>29</b>	<b>39</b>
Liquidity pool as a percentage of anticipated net outflows as at 31 December 2016	120%	131%
Liquidity pool as a percentage of anticipated net outflows as at 31 December 2015	131%	133%

The Group plans to maintain its surplus to the internal and regulatory stress requirements at an efficient level, while considering risks to market funding conditions and its liquidity position. The continuous reassessment of these risks may lead to appropriate actions being taken with respect to sizing of the liquidity pool.

Notes

aOf the three stress scenarios monitored as part of the LRA, the 30-day Barclays-specific scenario results in the lowest ratio at 120% (December 2015: 131%). This compares to 134% (December 2015: 144%) under the 90-day market-wide scenario, and 144% (December 2015: 133%) under the 30-day combined scenario.

bIncludes BAGL.

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**Liquidity pool**

The Group liquidity pool as at 31 December 2016 was £165bn (2015: £145bn). During 2016, the month-end liquidity pool ranged from £132bn to £175bn (2015: £142bn to £168bn), and the month-end average balance was £153bn (2015: £155bn). The liquidity pool is held unencumbered and is not used to support payment or clearing requirements. Such requirements are treated as part of our regular business funding. The liquidity pool is intended to offset stress outflows, and comprises the following cash and unencumbered assets.

**Composition of the Group liquidity pool as at 31 December 2016****Liquidity pool of which CRD IV LCR eligible**

	<b>Liquidity</b>				2015
	<b>pool</b>	<b>Cash</b>	<b>Level 1</b>	<b>Level 2A</b>	<b>Liquidity pool</b>
	<b>£bn</b>	<b>£bn</b>	<b>£bn</b>	<b>£bn</b>	<b>£bn</b>
<b>Cash and deposits with central banks<sup>a</sup></b>	<b>103</b>	<b>101</b>			48
<b>Government bonds<sup>b</sup></b>					
AAA to AA-	34		34		
A+ to A-	3		3		
BBB+ to BBB-	1		1		
Other LCR Ineligible Government bonds	1				
<b>Total government bonds</b>	<b>39</b>		<b>38</b>		75
<b>Other</b>					
Government Guaranteed Issuers, PSEs and GSEs	12		9	3	
International Organisations and MDBs	6		7		
Covered bonds	1		1		
Corporate bonds					
Other	4				
<b>Total Other</b>	<b>23</b>		<b>17</b>	<b>3</b>	22
<b>Total as at 31 December 2016</b>	<b>165</b>	<b>101</b>	<b>55</b>	<b>3</b>	
Total as at 31 December 2015	145	45	87	8	

The Group liquidity pool is well diversified by major currencies and the Group monitors LRA stress scenarios for major currencies.

### Liquidity pool by currency

	USD	EUR	GBP	Other	Total
	£bn	£bn	£bn	£bn	£bn
<b>Liquidity pool as at 31 December 2016</b>	<b>44</b>	<b>36</b>	<b>49</b>	<b>36</b>	<b>165</b>
Liquidity pool as at 31 December 2015	41	33	46	25	145

### Management of the Group liquidity pool

The composition of the liquidity pool is subject to limits set by the Board, Treasury Committee and the independent 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.

The Group manages the liquidity pool on a centralised basis. As at 31 December 2016, 91% of the liquidity pool was located in Barclays Bank PLC (2015: 94%) and was available to meet liquidity needs across the Group. The residual liquidity pool is held predominantly within Barclays Capital Inc. (BCI). The portion of the liquidity pool outside of Barclays Bank PLC is held against entity-specific stressed 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.

### Notes

aOf which over 98% (2015: over 97%) was placed with the Bank of England, US Federal Reserve, European Central Bank, Bank of Japan and Swiss National Bank.

bOf which over 90% (2015: over 92%) are comprised of UK, US, Japanese, French, German, Danish, Swiss and Dutch securities.

Risk review

Risk performance

**Funding risk**   **liquidity**

### Contingent liquidity

In addition to the Group liquidity pool, the Group has access to other unencumbered assets which provide a source of contingent liquidity. While these are not relied on in the Group's LRA, a portion of these assets may be monetised in a stress to generate liquidity through use as collateral for secured funding or through outright sale.

In either a Barclays-specific or market-wide liquidity stress, liquidity available via market sources could be severely disrupted. In circumstances where market liquidity is unavailable or available only at heavily discounted prices, the Group could generate liquidity via central bank facilities. The Group maintains a significant amount of collateral pre-positioned at central banks and available to raise funding.

For more detail on the Group's other unencumbered assets see page 168.

### Funding structure and funding relationships

The basis for sound liquidity risk management is a solid funding structure that reduces the probability of a liquidity stress leading to an inability to meet funding obligations as they fall due. The Group's overall funding strategy is to develop a diversified funding base (geographically, by type and by counterparty) and maintain access to a variety of alternative funding sources, to provide protection against unexpected fluctuations, while minimising the cost of funding.

Within this, the Group aims to align the sources and uses of funding. As such, retail and commercial customer loans and advances are largely funded by customer deposits, with the surplus funding the liquidity pool. Other assets, together with other loans and advances and unencumbered assets, are funded by long-term wholesale debt and equity.

The majority of reverse repurchase agreements are matched by repurchase agreements. The liquidity pool is predominantly funded through wholesale markets. These funding relationships are summarised below:

	2016	2015		2016	2015
	£bn	£bn		£bn	£bn
<b>Assets</b>			<b>Liabilities</b>		
Loans and advances to customers <sup>a</sup>	326	336	Customer accounts <sup>a</sup>	374	374
Group liquidity pool	165	145	< 1 Year wholesale funding	70	54
			> 1 Year wholesale funding	88	88
Other assets	185	135	Equity and other liabilities	151	104

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Reverse repurchase agreements and other similar secured lending <sup>b</sup>	190	178	Repurchase agreements and other similar secured borrowing <sup>b</sup>	190	178
Derivative financial instruments <sup>b</sup>	347	326	Derivative financial instruments <sup>b</sup>	340	322
Total assets	1,213	1,120	Total liabilities	1,213	1,120

**Deposit funding**

**Deposit funding (audited)**

	2016			2015
	Loans and advances to customers	Customer deposits	Loan to deposit ratio	Loan to deposit ratio
Funding of loans and advances to customers	£bn	£bn	%	%
<b>As at 31 December 2016</b>				
Barclays UK	167	189		
Barclays International	98	152		
Non-Core	19			
<b>Total Barclays UK, Barclays International and Non-Core<sup>c</sup></b>	<b>284</b>	<b>341</b>	<b>83%</b>	86%
Barclays International, Head Office and Non-Core <sup>d</sup>	109	82		
<b>Total</b>	<b>393</b>	<b>423</b>	<b>93%</b>	95%

Total Barclays UK, Barclays International and Non-Core<sup>c</sup> are largely funded by customer deposits. The loan to deposit ratio for these businesses was 83% (2015: 86%). The customer deposits in excess of loans and advances are primarily used to fund liquidity buffer requirements for these businesses. The loan to deposit ratio for the Group was 93% (2015: 95%).

As at 31 December 2016, £139bn (2015: £129bn) of total customer deposits were insured through the UK Financial Services Compensation Scheme (FSCS) and other similar schemes. In addition to these customer deposits, there were £4bn (2015: £4bn) of other liabilities insured by governments.

Notes

aExcluding cash collateral and settlement balances.

bComprised of reverse repurchase agreements that provide financing to customers collateralised by highly liquid securities on a short-term basis or are used to settle short-term inventory positions and repo financing of trading portfolio assets.

cExcluding investment banking businesses.

dIncluding investment banking businesses.

Although, contractually, current accounts are repayable on demand and savings accounts at short notice, the Group's broad base of customers, numerically and by depositor type, helps protect against unexpected fluctuations in balances. Such accounts form a stable funding base for the Group's operations and liquidity needs. The Group assesses the behavioural maturity of both customer assets and liabilities to identify structural balance sheet funding gaps. Customer behaviour is determined by quantitative modelling combined with qualitative assessment taking into account for historical experience, current customer composition, and macroeconomic projections. These behavioural profiles represent our forward looking expectation of the run-off profile. The relatively low cash outflow within one year demonstrates that customer funding remains broadly matched with customer assets from a behavioural perspective.

### Behavioural maturity profile

	Loans and advances to customers £bn	Customer deposits £bn	Customer funding surplus/ (deficit) £bn	Behavioural maturity profile cash outflow/(inflow)		
				Not more than one year £bn	Over one year but not more than five years £bn	More than five years £bn
<b>As at 31 December 2016</b>						
Barclays UK	167	189	22	(2)	(19)	43
Barclays International	98	152	54	3	17	34
Barclays Non-Core	19		(19)	(1)	(6)	(12)
<b>Total</b>	<b>284</b>	<b>341</b>	<b>57</b>		<b>(8)</b>	<b>65</b>
<b>As at 31 December 2015</b>						
Barclays UK	166	176	10	(4)	(26)	40
Barclays International	88	135	47	11	18	18
Africa (discontinued)	29	29		1		(1)
Barclays Non-Core	17	8	(9)	1	(1)	(9)
<b>Total</b>	<b>300</b>	<b>348</b>	<b>48</b>	<b>9</b>	<b>(9)</b>	<b>48</b>
<b>Wholesale funding Group</b>						

Wholesale funding relationships are summarised below:

### Assets

### Liabilities



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	<b>2016</b>	<b>2015</b>		<b>2016</b>	<b>2015</b>
	<b>£bn</b>	<b>£bn</b>		<b>£bn</b>	<b>£bn</b>
Trading portfolio assets	<b>33</b>	28	Repurchase agreements	<b>75</b>	70
Reverse repurchase agreements	<b>42</b>	42			
Reverse repurchase agreements	<b>35</b>	34	Trading portfolio liabilities	<b>35</b>	34
Derivative financial instruments	<b>347</b>	326	Derivative financial instruments	<b>340</b>	322
Liquidity pool	<b>108</b>	97	Less than 1 year wholesale debt	<b>70</b>	54
Other assets <sup>a</sup>	<b>109</b>	103	Greater than 1 year wholesale debt and equity	<b>154</b>	150

Repurchase agreements fund reverse repurchase agreements and trading portfolio assets. Trading portfolio liabilities are settled by the remainder of reverse repurchase agreements (see Note 19 Offsetting financial assets and financial liabilities for further detail on netting).

Derivative liabilities and assets are largely matched. A substantial proportion of balance sheet derivative positions qualify for counterparty netting and the remaining portions are largely offset once netted against cash collateral received and paid.

Wholesale debt, along with the surplus of customer deposits to loans and advances to customers, is used to fund the liquidity pool. Term wholesale debt and equity largely fund other assets.

Note

<sup>a</sup>Predominantly available for sale investments, financial assets designated at fair value and loans and advances to banks funded by greater than one year wholesale debt and equity and trading portfolio assets partially.

## Risk review

## Risk performance

## Funding risk liquidity

Composition of wholesale funding<sup>a</sup>

The Group maintains access to a variety of sources of wholesale funds in major currencies, including those available from term investors across a variety of distribution channels and geographies, money markets, and repo markets. The Group has direct access to US, European and Asian capital markets through its global investment banking operations and long-term investors through its clients worldwide, and is an active participant in money markets. As a result, wholesale funding is well diversified by product, maturity, geography and major currency.

As at 31 December 2016, the Group's total wholesale funding outstanding (excluding repurchase agreements) was £158bn (December 2015: £142bn). £70bn (December 2015: £54bn) of wholesale funding matures in less than one year, of which £22bn (December 2015: £14bn)<sup>b</sup> relates to term funding.

As at 31 December 2016, outstanding wholesale funding comprised £26bn (December 2015: £25bn) of secured funding and £132bn (December 2015: £117bn) of unsecured funding.

As the Group progresses to a Single Point of Entry resolution model, Barclays continues to issue debt capital and term senior unsecured funding from Barclays PLC, the holding company, replacing maturing debt in Barclays Bank PLC.

Maturity profile of wholesale funding<sup>b</sup>

	<1 month £bn	1-3 months £bn	3-6 months £bn	6-12 months £bn	<1 year £bn	1-2 years £bn	2-3 years £bn	3-4 years £bn	4-5 years £bn	>5 years £bn	Total £bn
<b>Barclays PLC</b>											
Senior unsecured (Public benchmark)						0.9	1.6	1.1	4.5	7.9	16.0
Senior unsecured (Privately placed)						0.1			0.2	0.5	0.8
Subordinated liabilities								1.1		2.7	3.8
<b>Barclays Bank PLC</b>											
Deposits from banks	9.2	4.3	1.7	1.1	16.3	0.2		0.3			16.8

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Certificates of deposit and commercial paper	0.3	5.2	5.6	10.9	22.0	0.7	1.1	0.5	0.5	0.3	25.1
Asset backed commercial paper	3.7	3.1	0.7		7.5						7.5
Senior unsecured (Public benchmark)	1.7	0.6	1.6		3.9		2.7	0.7	0.7	1.1	9.1
Senior unsecured (Privately placed) <sup>c</sup>	0.6	1.5	3.6	3.5	9.2	7.3	5.5	3.2	1.6	10.0	36.8
Covered bonds		1.8	1.6	1.5	4.9	1.0	1.8		1.0	3.7	12.4
Asset backed securities		0.6	1.0	0.6	2.2	0.7	1.4	0.4		0.7	5.4
Subordinated liabilities				1.3	1.3	3.2	0.1	1.0	5.5	8.5	19.6
Other <sup>d</sup>	1.1	0.2	0.6	1.1	3.0	0.2	0.2	0.3	0.1	0.7	4.5
<b>Total as at 31 December 2016</b>	<b>16.6</b>	<b>17.3</b>	<b>16.4</b>	<b>20.0</b>	<b>70.3</b>	<b>14.3</b>	<b>14.4</b>	<b>8.6</b>	<b>14.1</b>	<b>36.1</b>	<b>157.8</b>
<b>Of which secured</b>	<b>3.7</b>	<b>5.6</b>	<b>3.4</b>	<b>2.3</b>	<b>15.0</b>	<b>1.8</b>	<b>3.2</b>	<b>0.4</b>	<b>1.0</b>	<b>4.4</b>	<b>25.8</b>
<b>Of which unsecured</b>	<b>12.9</b>	<b>11.7</b>	<b>13.0</b>	<b>17.7</b>	<b>55.3</b>	<b>12.5</b>	<b>11.2</b>	<b>8.2</b>	<b>13.1</b>	<b>31.7</b>	<b>132.0</b>
Total as at 31 December 2015	15.8	15.3	8.6	13.8	53.5	16.5	12.6	13.7	8.3	37.3	141.9
Of which secured	4.2	3.9	1.6	0.3	10.0	5.1	2.4	2.8	0.5	4.5	25.3
Of which unsecured	11.6	11.4	7.0	13.5	43.5	11.4	10.2	10.9	7.8	32.8	116.6

Outstanding wholesale funding includes £37.6bn (December 2015: £35.1bn) of privately placed senior unsecured notes in issue. These notes are issued through a variety of distribution channels including intermediaries and private banks. Although not a requirement, the liquidity pool exceeded wholesale funding maturing in less than one year by £95bn (December 2015: £91bn).

Notes

aThe composition of wholesale funds comprises the balance sheet reported deposits from banks, financial liabilities at fair value, debt securities in issue and subordinated liabilities, excluding cash collateral and settlement balances and

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collateral swaps. Included within deposits from banks are £4.5bn of liabilities drawn in the European Central Bank's facilities.

bTerm funding maturities comprise public benchmark and privately placed senior unsecured notes, covered bonds/asset-backed securities (ABS) and subordinated debt where the original maturity of the instrument was more than 1 year.

cIncludes structured notes of £30.8bn, £7.7bn of which matures within one year.

dPrimarily comprised of fair value deposits of £3.0bn and secured financing transactions of physical gold of £0.5bn.

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### Currency composition of wholesale debt

As at 31 December 2016, the proportion of wholesale funding by major currencies was as follows:

### Currency composition of wholesale funding

	USD	EUR	GBP	Other
	%	%	%	%
Deposits from banks	22	44	30	4
Certificates of deposits and commercial paper	44	48	7	1
Asset backed commercial paper	89	8	3	
Senior unsecured (public benchmark)	51	25	16	8
Senior unsecured (privately placed)	48	25	11	16
Covered bonds/ABS	30	42	28	
Subordinated liabilities	53	28	19	
<b>Total as at 31 December 2016</b>	<b>48</b>	<b>32</b>	<b>16</b>	<b>4</b>
Total as at 31 December 2015	38	31	23	8

To manage cross-currency refinancing risk the Group manages foreign exchange cash flow limits, which limit risk at specific maturities. The composition of wholesale funding is materially unchanged.

### Term financing

The Group issued £12.1bn equivalent of capital and senior unsecured debt from the holding company of which £8.6bn equivalent and £0.7bn equivalent in public and private senior unsecured debt respectively, and £2.8bn of capital instruments. In the same period £7.4bn of Barclays Bank PLC capital and senior unsecured debt was bought back or called.

The Group has £21.2bn of term funding maturing in 2017 and £13.2bn in 2018.

The Group expect to continue issuing public wholesale debt in 2017 from Barclays PLC, in order to ensure compliance with new prospective loss absorbency requirements and to maintain a stable and diverse funding base by type, currency and distribution channel.

### 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 secured 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.

Encumbered assets have been defined consistently with the Group's reporting requirements under Article 100 of the Capital Requirements Regulation (CRR). Securities and commodities 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. This includes external repurchase or other similar agreements with market counterparts.

Excluding assets positioned at central banks, as at 31 December 2016, £168bn (December 2015: £157bn) of the Group's assets were encumbered, primarily due to cash collateral posted, firm financing of trading portfolio assets and other securities and funding secured against loans and advances to customers.

Assets may also be encumbered under secured funding arrangements with central banks. In advance of such encumbrance, assets are often positioned with central banks to facilitate efficient future draw down. £63bn (December 2015: £88bn) of on-balance sheet assets were positioned at the central banks, consisting of encumbered assets and collateral pre-positioned and available for use in secured financing transactions.

£277bn (December 2015: £212bn) of on and off-balance sheet assets not positioned at the central bank were identified as readily available and available for use in secured financing transactions. Additionally, they include cash and securities held in the Group liquidity pool as well as unencumbered assets which provide a source of contingent liquidity. While these additional assets are not relied upon in the Group's LRA, a portion of these assets may be monetised to generate liquidity through use as collateral for secured funding or through outright sale. Loans and advances to customers are only classified as readily available if they are already in a form, such that, they can be used to raise funding without further management actions. This includes excess collateral already in secured funding vehicles.

£231bn (December 2015: £208bn) of assets not positioned at the central bank were identified as available as collateral. These assets are not subject to any restrictions on their ability to secure funding, to be offered as collateral, or to be sold to reduce potential future funding requirements, but are not immediately available in the normal course of business in their current form. They primarily consist of loans and advances which would be suitable for use in secured funding structures but are conservatively classified as not readily available because they are not in transferable form.

Not available as collateral consists of assets that cannot be pledged or used as security for funding due to restrictions that prevent their pledge or use as security for funding in the normal course of business.

Derivatives and reverse repo assets relate specifically to derivatives, reverse repurchase agreements and other similar secured lending. These are shown separately as these on-balance sheet assets cannot be pledged. However, these assets can give rise to the receipt of non-cash assets which are held off-balance sheet, and can be used to raise secured funding or meet additional funding requirements.

In addition, £406bn (December 2015: £265bn) of the total £466bn (December 2015: £306bn) securities accepted as collateral, and held off-balance sheet, were on-pledged, the significant majority of which related to matched-book activity where reverse repurchase agreements are matched by repurchase agreements entered into to facilitate client activity. The remainder relates primarily to reverse repurchases used to settle trading portfolio liabilities as well as collateral posted against derivatives margin requirements.



Risk review

Risk performance

Funding risk liquidity

## Asset encumbrance

On-balance sheet	Assets encumbered as a result of transactions with counterparties other than central banks					Other assets (comprising assets encumbered at central banks and unencumbered assets positioned at the central banks)			
	Assets £bn	As a result of covered bonds		As a result of securitisations		Assets £bn	Readily available assets £bn	Available as collateral £bn	Not available as collateral £bn
		bonds £bn	Other £bn	Other £bn	Total £bn				
As at 31 December 2016									
Cash and balances at central banks	102.4						102.4		
Trading portfolio assets	80.2			51.2	51.2		29.0		
Financial assets at fair value	78.6			3.2	3.2		1.5	10.7	
Derivative financial instruments	346.6								
Loans and advances banks <sup>a</sup>	20.2						10.1	9.0	1.1
Loans and advances customers <sup>a</sup>	325.7	16.5	6.2	8.0	30.7	63.0	23.8	208.2	
Cash collateral	68.8			68.8	68.8				
Settlement balances	21.3								21.3
Financial investments	63.3			13.6	13.6		49.3	0.4	
Reverse repurchase agreements	13.5								



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Non-current assets held for sale	6.4					1.2	3.1	2.0
Other Financial Assets	21.0							21.0
<b>Total on-balance sheet</b>	<b>1,148.0</b>	<b>16.5</b>	<b>6.2</b>	<b>144.8</b>	<b>167.5</b>	<b>63.0</b>	<b>217.3</b>	<b>45.0</b>

**Off-balance sheet**

	<b>Collateral received £bn</b>	<b>Collateral received of which on-pledged £bn</b>	<b>Readily available assets £bn</b>	<b>Available as collateral £bn</b>	<b>Not available as collateral £bn</b>
Fair value of securities accepted as collateral	466.2	405.5	59.7		1.0
<b>Total unencumbered collateral</b>			<b>277.0</b>	<b>231.4</b>	<b>46.6</b>

Notes

aExcluding cash collateral and settlement balances.

bIncludes both encumbered and unencumbered assets. Assets within this category that have been encumbered are disclosed as assets pledged in Note 40 to the financial statements page 301.

**Asset encumbrance**

	Assets encumbered as a result of transactions with counterparties other than central banks					Other assets (comprising assets encumbered at banks and unencumbered assets) Assets not positioned at the central banks				
	Assets £bn	As a result of covered bonds £bn	As a result of securitis- ations £bn	Other £bn	Total £bn	Assets positioned at the central banks <sup>b</sup> £bn	Readily available assets £bn	Available as collateral £bn	Not available as collateral £bn	
<b>On-balance sheet</b>										
<b>As at 31 December 2015</b>										
Cash and balances at central banks	47.9						47.9			
Trading portfolio assets	74.8			49.1	49.1		25.7			
Financial assets at fair value	72.5			2.5	2.5		3.2	17.7	1.3	
Derivative financial instruments	325.5									
Loans and advances banks <sup>a</sup>	19.6						7.9	10.2	1.5	
Loans and advances customers <sup>a</sup>	307.3	16.4	5.9	8.0	30.3	86.4	14.8	175.8		
Cash collateral	62.6			62.6	62.6					
Settlement balances	20.4								20.4	
Financial investments	87.0			12.2	12.2		72.2	1.0	1.6	
Reverse repurchase	28.2									

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agreements									
Non-current assets held for sale	7.3					1.9	1.2	3.2	1.0
Other Financial Assets	19.9								19.9
<b>Total on-balance sheet</b>	1,073.0	16.4	5.9	134.4	156.7	88.3	172.9	207.9	45.7

**Off-balance sheet**

	Collateral received	Collateral received of which on-pledged	Readily available assets	Available as collateral	Not available as collateral
	£bn	£bn	£bn	£bn	£bn
Fair value of securities accepted as collateral	305.9	265.4	39.0		1.5
<b>Total unencumbered collateral</b>			211.9	207.9	47.2

Notes

aExcluding cash collateral and settlement balances.

bIncludes both encumbered and unencumbered assets. Assets within this category that have been encumbered are disclosed as assets pledged in Note 40 to the financial statements page 301.

## Risk review

## Risk performance

## Funding risk liquidity

## Repurchase agreements and reverse repurchase agreements

Barclays enters into repurchase and other similar secured borrowing agreements to finance its trading portfolio assets. The majority of reverse repurchase agreements are matched by offsetting repurchase agreements entered into to facilitate client activity. The remainder are used to settle trading portfolio liabilities.

Due to the high quality of collateral provided against secured financing transactions, the liquidity risk associated with this activity is significantly lower than unsecured financing transactions. Nonetheless, Barclays manages to gross and net secured mismatch limits to limit refinancing risk under a severe stress scenario and a portion of the Group's liquidity pool is held against stress outflows on these positions. The Group secured mismatch limits are calibrated based on market capacity, liquidity characteristics of the collateral and risk appetite.

The cash value of repurchase and reverse repurchase transactions will typically differ from the market value of the collateral against which these transactions are secured by an amount referred to as a haircut (or over-collateralisation). Typical haircut levels vary depending on the quality of the collateral that underlies these transactions. For transactions secured against extremely liquid fixed income collateral, lenders demand relatively small haircuts (typically ranging from 0-2%). For transactions secured against less liquid collateral, haircuts vary by asset class (typically ranging from 5-10% for corporate bonds and other less liquid collateral).

As at 31 December 2016, the significant majority of repurchase activity related to matched-book activity. The Group may face refinancing risk on the net maturity mismatch for matched-book activity.

Net matched-book activity<sup>a,b</sup>

	Less than one month £bn	One month to three months £bn	Over three months £bn
Negative number represents the cash value of the net repurchase agreement (net liability)			
<b>As at 31 December 2016</b>			
Extremely Liquid Fixed Income <sup>c</sup>	(21.8)	11.6	10.7
Liquid Fixed Income	(0.4)	0.8	(0.7)
Equities	6.1	(0.5)	(9.6)
Less liquid Fixed Income	0.6	(0.2)	(1.3)
<b>Total</b>	<b>(15.5)</b>	<b>11.7</b>	<b>(0.9)</b>
<b>As at 31 December 2015</b>			
Extremely Liquid Fixed Income	(12.9)	7.3	5.6
Liquid Fixed Income	0.3	0.6	(0.9)
Equities	7.0	(1.5)	(5.5)
Less liquid Fixed Income	1.6	(0.4)	(1.2)

**Total** (4.0) 6.0 (2.0)

The residual repurchase agreement activity is the firm-financing component and reflects Barclays funding of a portion of its trading portfolio assets. The primary risk related to firm-financing activity is the inability to roll-over transactions as they mature. However, 44% (2015: 50%) of firm-financing activity was secured against extremely liquid fixed income assets.

### Firm financing repurchase agreements<sup>a,b</sup>

	Less than one month £bn	One month to three months £bn	Over three months £bn	Total £bn
<b>As at 31st December 2016</b>				
Extremely Liquid Fixed Income <sup>c</sup>	28.3	7.1	1.1	36.5
Liquid Fixed Income	2.8	0.8	1.2	4.8
Highly liquid	13.2	8.9	14.0	36.1
Less liquid	1.9	0.8	2.6	5.3
<b>Total</b>	<b>46.2</b>	<b>17.6</b>	<b>18.9</b>	<b>82.7</b>
<b>As at 31st December 2015</b>				
Extremely Liquid Fixed Income	28.8	8.3	0.3	37.4
Liquid Fixed Income	2.0	0.6	1.1	3.7
Highly liquid	10.9	6.3	10.2	27.4
Less liquid	2.7	1.1	1.9	5.7
<b>Total</b>	<b>44.4</b>	<b>16.3</b>	<b>13.5</b>	<b>74.2</b>

#### Notes

aIncludes collateral swaps.

bIncludes financing positions for prime brokerage clients which are reported as customer payables/receivables on balance sheet.

cExtremely liquid fixed income is defined as very highly rated sovereigns and agencies, typically rated AA+ or better. It excludes liquid fixed income, equities and other less liquid collateral.

## Credit ratings

In addition to monitoring and managing key metrics related to the financial strength of the Group, Barclays solicits independent credit ratings by Standard & Poor's (S&P), Moody's and Fitch, as well as Rating and Investment Information (R&I). These ratings assess the creditworthiness of the Group, its subsidiaries and branches and are based on reviews of a broad range of business and financial attributes including risk management processes and procedures, capital strength, earnings, funding, asset quality, liquidity, accounting and governance.

### Credit ratings

As at 31 December 2016

	Standard & Poor's	Moody's	Fitch
<b>Barclays Bank PLC</b>			
Long-term	A- (Negative)	A1 (Negative)	A (Stable)
Short-term	A-2	P-1	F1
Stand-alone rating <sup>a</sup>	bbb+	Baa2	a
<b>Barclays PLC</b>			
Long-term	BBB (Negative)	Baa2 (Negative)	A (Stable)
Short-term	A-2	P-3	F1

During the year, Barclays' ratings outlooks for Moody's and S&P were changed to Negative from Stable following the outcome of the EU referendum in June 2016. The rating actions were part of a wider set of actions which saw the two agencies place several UK banks on negative outlooks whilst affirming the ratings. The ratings continue to carry a stable outlook with Fitch.

In December 2016 Moody's upgraded senior long-term ratings for both Barclays Bank PLC and Barclays PLC by one notch reflecting the continued build-up of loss absorbing capacity at Barclays PLC which would provide additional protection for Barclays Bank PLC's depositors and senior unsecured creditors, and Barclays PLC's senior unsecured creditors in a failure scenario. The negative outlooks assigned in June remained in place as the rating agency's assessment of Barclays' stand-alone credit strength was unaffected by the rating action.

S&P and Fitch affirmed Barclays' ratings in July and December 2016 respectively as part of their periodic reviews.

Barclays also solicits issuer ratings from R&I for local issuance purposes in Japan and the ratings of A- for Barclays PLC and A for Barclays Bank PLC were affirmed in July 2016 with stable outlooks.

### Contractual credit rating downgrade exposure (incremental cash outflow)

Incremental cash outflow

	One-notch downgrade £bn	Two-notch downgrade £bn
<b>As at 31 December 2016</b>		
Securitisation derivatives	(2)	(1)
Contingent liabilities		
Derivatives margining	(1)	
Liquidity facilities	(1)	
<b>Total contractual funding or margin requirements</b>	<b>(4)</b>	<b>(1)</b>
<b>As at 31 December 2015</b>		
Securitisation derivatives	(2)	(1)
Contingent liabilities	(1)	
Derivatives margining		
Liquidity facilities	(1)	(1)
<b>Total contractual funding or margin requirements</b>	<b>(4)</b>	<b>(2)</b>

## Note

aRefers to Standard & Poor's Stand-Alone Credit Profile (SACP), Moody's Baseline Credit Assessment (BCA) and Fitch's Viability Rating (VR).

Risk review

Risk performance

**Funding risk**   **liquidity**

### **Liquidity management at BAGL Group (audited)**

Liquidity risk is managed separately at BAGL Group due to local currency, funding and regulatory requirements.

In addition to the Group liquidity pool, as at 31 December 2016, BAGL Group held £10.6bn (2015: £6.0bn) of liquidity pool assets against BAGL-specific anticipated stressed outflows. The liquidity pool consists of central bank deposits, government bonds, treasury bills and notes, and coins. Absa Bank successfully applied for a Committed Liquidity Facility from the South African Reserve Bank, which is included in the liquidity pool from January 2016.

The BAGL loan to deposit ratio as at 31 December 2016 was 107% (2015: 102%).

Additional information on liquidity management at BAGL can be found in the Barclays Africa Group Annual Report.

### **Contractual maturity of financial assets and liabilities (audited)**

The table below provides detail on the contractual maturity of all financial instruments and other assets and liabilities. Derivatives (other than those designated in a hedging relationship) and trading portfolio assets and liabilities are included in the on demand column at their fair value. Liquidity risk on these items is not managed on the basis of contractual maturity since they are not held for settlement according to such maturity and will frequently be settled before contractual maturity at fair value. Derivatives designated in a hedging relationship are included according to their contractual maturity.

Financial assets designated at fair value in respect of linked liabilities to customers under investment contracts have been included in other assets and other liabilities as the Group is not exposed to liquidity risk arising from them; any request for funds from creditors would be met by simultaneously liquidating or transferring the related investment.



## Contractual maturity of financial assets and liabilities (including BAGL) (audited)

As at	On demand	Not more than three months	Over three months but not more than six months	Over six months but not more than nine months	Over nine months but not more than one year	Over one year but not more than two years	Over two years but not more than three years	Over three years but not more than four years
31 December 2016	£m	£m	£m	£m	£m	£m	£m	£m
<b>Assets</b>								
Cash and balances at central banks	102,031	322						
Items in the course of collection from other banks	1,467							
Trading portfolio assets	80,240							
Financial assets designated at fair value	15,558	43,270	5,518	2,376	2,081	686	90	
Derivative financial instruments	345,625	5	400	5	2	14	168	
Loans and advances to banks	4,858	34,346	2,753	480	133	412	236	
Loans and advances to customers	26,929	85,993	7,522	6,310	8,245	29,326	25,602	4,000
Reverse repurchase agreements and other similar secured lending	7,043	3,678	892	144	905	792		
Available for sale financial investments	40	1,015	3,064	741	2,666	10,127	9,031	1,000
Other financial assets		1,128				77		
<b>Total financial assets</b>	<b>583,791</b>	<b>169,757</b>	<b>20,149</b>	<b>10,056</b>	<b>14,032</b>	<b>41,434</b>	<b>35,127</b>	<b>6,000</b>

<b>Other assets<sup>a</sup></b>								
<b>Total assets</b>								
<b>Liabilities</b>								
Deposits from banks	5,906	39,610	1,120	672	351	193	13	
Items in the course of collection due to other banks	636							
Customer accounts	317,963	86,081	5,305	3,023	4,528	2,836	1,262	
Repurchase agreements and other similar secured borrowing	5,480	9,235	1,934	917	1,326	311		
Trading portfolio liabilities	34,687							
Financial liabilities designated at fair value	15,285	41,583	3,970	4,112	1,827	7,540	5,762	
Derivative financial instruments	339,646	4			2	10	34	
Debt securities in issue	27	16,731	11,713	5,902	6,867	3,166	8,069	
Subordinated liabilities		8			1,317	3,230	56	
Other financial liabilities		3,198				1,189		
<b>Total financial liabilities</b>	<b>719,630</b>	<b>196,450</b>	<b>24,042</b>	<b>14,626</b>	<b>16,218</b>	<b>18,475</b>	<b>15,196</b>	<b>2</b>
<b>Other liabilities<sup>a</sup></b>								
<b>Total liabilities</b>								
<b>Cumulative liquidity gap</b>	<b>(135,839)</b>	<b>(162,532)</b>	<b>(166,425)</b>	<b>(170,995)</b>	<b>(173,181)</b>	<b>(150,222)</b>	<b>(130,291)</b>	<b>(9)</b>

Note

aAs at 31 December 2016, other assets includes balances of £71,454m (2015: £7,364m) and other liabilities includes balances of £65,292m (2015: £5,997m) relating to amounts held for sale. Please refer to Note 44 for details.

Risk review

Risk performance

Funding risk liquidity

**Contractual maturity of financial assets and liabilities (including BAGL) (audited)**

As at	On demand £m	Not more than three months £m	Over three months	Over six months	Over nine months	Over one year but not more than two years £m	Over two years but not more than three years £m	Over three years but not more than five years £m	Over five years but not more than ten years £m
			but not more than six months £m	but not more than nine months £m	but not more than one year £m				
<b>31 December 2015</b>									
<b>Assets</b>									
Cash and balances at central banks	49,580	131							
Items in the course of collection from other banks	631	380							
Trading portfolio assets	77,348								
Financial assets designated at fair value <sup>a</sup>	30,667	21,966	1,722	1,372	583	1,021	587	424	
Derivative financial instruments	326,772	28	3	1	53	328	61	257	
Loans and advances to banks	5,354	31,539	1,954	366	468	588	991	43	
Loans and advances to customers	29,117	76,337	13,935	7,084	12,332	27,616	27,318	48,707	
Reverse repurchase agreements and other	12,171	12,089	3,296	292	205	74	35	1	

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similar secured lending <sup>a</sup>								
Available for sale financial investments	467	2,396	1,792	4,936	2,088	11,537	14,659	17,898
Other financial assets		1,304				100		
<b>Total financial assets</b>	532,107	146,170	22,702	14,051	15,729	41,264	43,651	67,330
<b>Other assets</b>								
<b>Total assets</b>								
<b>Liabilities</b>								
Deposits from banks	5,717	38,720	1,355	540	335	97	9	67
Items in the course of collection due to other banks	1,013							
Customer accounts	312,921	80,114	7,605	4,253	5,304	2,845	912	1,654
Repurchase agreements and other similar secured borrowing <sup>a</sup>	5,729	11,683	3,479	1,975	876	843	52	
Trading portfolio liabilities	33,967							
Financial liabilities designated at fair value <sup>a</sup>	20,051	32,453	3,152	3,470	2,317	6,093	5,458	7,446
Derivative financial instruments	323,786	80	92	49	49	42	13	57
Debt securities in issue	50	14,270	5,615	4,322	4,469	10,164	4,797	13,037
Subordinated liabilities	2			9	28	1,254	2,994	2,194
Other financial liabilities		2,685				1,075		
<b>Total financial liabilities</b>	703,236	180,005	21,298	14,618	13,378	22,413	14,235	24,455

**Other  
liabilities**

**Total  
liabilities**

**Cumulative**

**liquidity gap** (171,129) (204,964) (203,560) (204,127) (201,776) (182,925) (153,509) (110,634)

Expected maturity dates do not differ significantly from the contract dates, except for:

§ trading portfolio assets and liabilities and derivative financial instruments, which may not be held to maturity as part of the Group's trading strategies

§ retail deposits, which are included within customer accounts, are repayable on demand or at short notice on a contractual basis. In practice, these instruments form a stable base for the Group's operations and liquidity needs because of the broad base of customers – both numerically and by depositor type (see Behavioural maturity profile on page 166; and

§ financial assets designated at fair value held in respect of linked liabilities, which are managed with the associated liabilities.

Note

aThe On demand and Not more than three months categories for 2015 have been adjusted by £37bn for financial assets and £25bn for financial liabilities to better reflect the contractual maturity of both Reverse repurchase agreements and Repurchase agreements measured at amortised cost and fair value.

**Contractual maturity of financial liabilities on an undiscounted basis (audited)**

The table below presents the cash flows payable by the Group under financial liabilities by remaining contractual maturities at the balance sheet date. The amounts disclosed in the table are the contractual undiscounted cash flows of all financial liabilities (i.e. nominal values).

The balances in the below table do not agree directly to the balances in the consolidated balance sheet as the table incorporates all cash flows, on an undiscounted basis, related to both principal as well as those associated with all future coupon payments.

Derivative financial instruments held for trading and trading portfolio liabilities are included in the on demand column at their fair value.

Financial liabilities designated at fair value in respect of linked liabilities under investment contracts have been excluded from this analysis as the Group is not exposed to liquidity risk arising from them.

**Contractual maturity of financial liabilities undiscounted (including BAGL) (audited)**

	On demand £m	Not more than three months £m	Over three months but not more than six months £m	Over six months but not more than one year £m	Over one year but not more than three years £m	Over three years but not more than five years £m	Over five years but not more than ten years £m	Over ten years £m
<b>As at 31 December 2016</b>								
Deposits from banks	5,906	39,617	1,122	1,025	207	328	21	
Items in the course of collection due to other banks	636							
Customer accounts	317,963	86,101	5,325	7,565	4,266	1,120	1,403	1,013
Repurchase agreements and other	5,480	9,249	1,939	2,253	312	83	474	

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similar secured lending								
Trading portfolio liabilities	34,687							
Financial liabilities designated at fair value	15,285	41,599	3,986	5,979	13,445	5,899	3,900	8,443
Derivative financial instruments	339,646	4		2	44	48	84	1,086
Debt securities in issue	27	17,126	11,894	13,285	12,915	10,505	12,282	6,054
Subordinated liabilities		398	680	3,117	7,089	9,324	7,842	4,866
Other financial liabilities		3,198			1,189			
<b>Total financial liabilities</b>	<b>719,630</b>	<b>197,292</b>	<b>24,946</b>	<b>33,226</b>	<b>39,467</b>	<b>27,307</b>	<b>26,006</b>	<b>21,462</b>

**As at 31 December 2015**

Deposits from banks	5,717	38,721	1,357	877	108	70	239	10
Items in the course of collection due to other banks	1,013							
Customer accounts	312,921	80,142	7,640	9,655	3,858	1,854	744	3,087
Repurchase agreements and other similar secured lending <sup>b</sup>	5,729	11,686	3,482	2,853	898		491	
Trading portfolio liabilities	33,967							
Financial liabilities designated at fair value <sup>b</sup>	20,051	32,470	3,165	5,830	11,851	7,840	4,690	8,694
Derivative financial	323,786	81	94	102	57	59	80	16

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instruments								
Debt								
securities in								
issue	50	14,352	5,845	9,277	16,777	14,175	11,276	4,547
Subordinated								
liabilities	2	253	403	344	6,057	3,737	9,969	6,313
Other								
financial								
liabilities		2,685			1,075			
<b>Total</b>								
<b>financial</b>								
<b>liabilities</b>	703,236	180,390	21,986	28,938	40,681	27,735	27,489	22,667

Note

a Financial liabilities on an undiscounted basis for 2016 exclude BAGL balances now held for sale but are included for 2015.

b The On demand and Not more than three months categories for 2015 have been adjusted by £25bn for financial liabilities to better reflect the contractual maturity of Repurchase agreements measured at amortised cost and fair value.



Risk review

Risk performance

Funding risk liquidity

**Maturity of off-balance sheet commitments received and given (audited)**

The table below presents the maturity split of the Group off-balance sheet commitments received and given at the balance sheet date. The amounts disclosed in the table are the undiscounted cash flows (i.e. nominal values) on the basis of earliest opportunity at which they are available.

**Maturity analysis of off-balance sheet commitments received**

	On demand £m	Not more than three months £m	Over three months but not more than six months £m	Over six months but not more than nine months £m	Over nine months but not more than one year £m	Over one year but not more than two years £m	Over two years but not more than three years £m	Over three years but not more than five years £m
<b>As at 31 December 2016</b>								
Guarantees, letters of credit and credit insurance	6,044	18	1	410	2	23	1	3
Forward starting repurchase agreements	102	246		1			18	
<b>Total off-balance sheet commitments received<sup>a</sup></b>	<b>6,146</b>	<b>264</b>	<b>1</b>	<b>411</b>	<b>2</b>	<b>23</b>	<b>19</b>	<b>3</b>
<b>As at 31 December 2015</b>								
Guarantees, letters of credit and credit	6,329	138	4	5	32	84	12	97

insurance  
Forward  
starting  
repurchase  
agreements

392 73

**Total  
off-balance  
sheet  
commitments  
received<sup>a</sup>**

6,329 530 4 78 32 84 12 97

**Maturity analysis of off-balance sheet commitments given (audited)**

	On demand £m	Not more than three months £m	Over three months but not more than six months £m	Over six months but not more than nine months £m	Over nine months but not more than one year £m	Over one year but not more than two years £m	Over two years but not more than three years £m	Over three years but not more than five years £m
<b>As at 31 December 2016</b>								
Contingent liabilities	17,111	425	845	233	285	355	187	88
Documentary credits and other short-term trade related transactions	987	10	8					
Forward Starting reverse repurchase agreements		24						
Standby facilities, credit lines and other commitments	300,043	455	415	604	818	55	47	150
<b>Total off-balance sheet commitments given<sup>a</sup></b>	<b>318,141</b>	<b>914</b>	<b>1,268</b>	<b>837</b>	<b>1,103</b>	<b>410</b>	<b>234</b>	<b>238</b>
<b>As at 31 December 2015</b>								
Contingent liabilities	17,421	933	493	140	590	423	158	161

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Documentary credits and other short-term trade related transactions	617	30	10		61	119		8
Forward Starting reverse repurchase agreements		93						
Standby facilities, credit lines and other commitments	274,020	1,152	1,564	1,116	1,071	873	554	906
<b>Total off-balance sheet commitments given<sup>a</sup></b>	292,058	2,208	2,067	1,256	1,722	1,415	712	1,075

Note

a Amounts for 2016 exclude BAGL balances now held for sale but are included for 2015.

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Risk review

Risk performance

**Operational risk**

### **Analysis of operational risk**

This section provides an analysis of the Group's operational risk profile, including events which have had a significant impact in 2016.

### **Key metrics**

**A small reduction in the number of recorded incidents occurring during the period**

91%

of the Group's net reportable operational risk events had a loss value of £50,000 or less

65%

of events by number are due to External Fraud

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Risk review

Risk performance

**Operational risk**

## **Operational risk**

Operational risk is 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

All disclosures in this section are unaudited unless otherwise stated.

### **Overview**

Operational risks are inherent in the Group's business activities and it is not always cost effective or possible to attempt to eliminate all operational risks. The operational risk management framework is therefore focused on ensuring operational risks are identified, assessed and mitigated within the Group's approved risk appetite. More material losses are less frequent and the Group seeks to reduce the likelihood of these in accordance with its risk appetite.

The Operational principal risk comprises the following risks: financial reporting, fraud, information, payments process, people, premises and security, supplier, tax, technology (including cyber) and transaction operations. In 2016 legal risk and financial crime risk were managed as part of operational risk.

For definitions of these risks see page 109. In order to ensure complete coverage of the potential adverse impacts on the Group arising from operational risk, the operational risk taxonomy extends beyond the operational risks listed above to cover areas included within conduct and legal risk.

This section provides an analysis of the Group's operational risk profile, including events, those which are above the Bank's reportable threshold, which have had a financial impact in 2016.

For more information on conduct risk events please see page 181.

### **Summary of performance in the period**

During 2016, total operational risk losses decreased to £225.9m (2015: £283.5m) with a 4% reduction in the number of recorded events compared to prior year. The loss for the year was primarily driven by a limited number of events in execution, delivery and process management categories and external fraud.

### **Operational risk profile**

Within operational risk, a high proportion of risk events have a low associated financial cost and a very small proportion of operational risk events will have a material impact on the financial results of the Group. In 2016, 90.8% of the Group's net reportable operational risk events had a value of £50,000 or less (2015: 88.1%) and accounted for 23.2% (2015: 14.5%) of the Group's total net loss impact.

The analysis below presents the Group's operational risk events by Basel event category:

§ Execution, delivery and process management impacts increased to £124.4m (2015: £111.8m) and accounted for 55.0% (2015: 39.4%) of overall 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. The increases in impacts were largely driven by limited number of events with higher loss values.

§ External fraud (65.2%) is the category with the highest frequency of events where high volume, low value events are also consistent with industry experience, driven by debit and credit card fraud. This accounted for 25.8% of overall operational risk losses in the year from 22.2% last year.

The Group's operational risk profile is informed by bottom-up risk assessments undertaken by each business unit and top-down qualitative review from the operational risk management for each risk type. External Fraud and technology are highlighted as key operational risk exposures. The operational risk profile is also informed by a number of risk themes: change, resilience and cyber security. These represent material risk to the bank but have scope which sits across multiple risk types, and therefore require a risk management approach which is integrated within relevant risk and control frameworks.

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

For further information see Operational Risk Management section on pages 109 to 110.

### **Operational risk events by risk category**

% of total risk events by count

### **Operational risk events by risk category**

% of total risk events by value

Note

aThe data disclosed include operational risk losses for reportable events (excluding Africa) having impact of > £10,000 and exclude events that are conduct risk, aggregate and boundary events. A boundary event is an operational risk event that results in a credit risk impact. Legal risk events are also included. Due to the nature of risk events that keep evolving, prior year losses are updated.





Risk review

Risk performance

**Conduct risk**

### **Analysis of conduct risk**

This section details Barclays' conduct risk profile and provides information on key 2016 risk events and risk mitigation actions Barclays has taken.

### **Key metrics**

5.4/10

### **Balanced Scorecard**

The Conduct Reputation Balanced Scorecard Measure has been sustained mainly by our focus on:

- § Operating openly and transparently
- § Having high quality products and services
- § Delivering value for money for customers and clients

Risk review

Risk performance

**Conduct risk**

**Conduct risk**

Conduct risk is 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 conduct

All disclosures in this section are unaudited unless otherwise stated.

**Conduct Risk**

Barclays strives to create and maintain mutually beneficial long-term relationships with our customers and clients. This means taking personal accountability for understanding their needs and providing them with products and services that meet those needs appropriately and help them manage their financial affairs.

As a transatlantic consumer, corporate and investment bank, Barclays also plays a critical role in promoting fair, open and transparent markets, as well as fostering shared growth for all. This means abiding by standards that in many cases are higher than those set by the laws and regulations that apply to our business.

**Summary of performance in the period**

In 2016, Barclays remained focused on the continuous improvements being made to manage risk effectively, with an emphasis on enhancing governance and management information to help ensure forward-looking risks are identified at earlier stages.

The cornerstone of our efforts is the Strengthening Personal Accountability programme, which is designed to strengthen our culture and embed our values throughout the organisation. The programme includes implementation of the UK Senior Manager, Certification and Conduct Rules, in addition to similar regulatory requirements and expectations in other jurisdictions.

The Group introduced dashboards on conduct, culture, complaints and citizenship to help the Board and senior management oversee and measure change across the organisation and take action where necessary to address issues and encourage progress. The dashboard data reflects a downward trend in conduct issues and complaints alongside an upward trend in confidence with respect to speaking up about potential conduct risks and issues.

Barclays proactively undertook Lessons Learned assessments on issues identified in enforcement matters across the industry, including the use of performance metrics and formulaic incentives in remuneration and performance management. The Group also enhanced the role and impact of conduct issues in the remuneration process at both the individual and business level.

Businesses have continued to assess the potential customer, client and market impacts of strategic change and structural reform. As part of the 2016 Medium-Term Planning Process, material conduct risks associated with strategic and financial plans were assessed. Divestment of Non-Core assets and businesses remains subject to a governance framework that considers the impacts on customer and client choice, market access, liquidity and other conduct risks.

The Group also continually assesses the impact of economic and geopolitical events on customers, clients and markets. In anticipation of the EU Referendum, Barclays successfully applied incident management techniques to prepare for and respond to customer and client needs and provide market liquidity.

Throughout 2016 conduct risks were raised by businesses for consideration by the Board Reputation Committee. The Board Reputation Committee reviewed the risks raised and whether management's proposed actions were appropriate to manage the risks effectively. In addition to structural reform, strategic change, the EU Referendum and lessons learned assessments, the Board Reputation Committee reviewed

issues related to data security, cyber risk and technology resilience.

While there has been significant progress, a need for continued focus remains. Barclays must drive cultural change through all levels of the organisation and evidence consistent consideration of conduct risks in long-term, medium-term and day-to-day strategic decisions. The Group must continue to refine its conduct governance structure, particularly with respect to forward-looking management information to drive proactive decision making and address issues that persist around the general control environment and infrastructure.

The Group continued to incur significant costs in relation to litigation and conduct matters, please refer to Note 29 Legal, competition and regulatory matters and Note 27 Provisions for further detail. Costs include customer redress and remediation, as well as fines and settlements. Resolution of these matters remains a necessary and important part of delivering the Group's strategy and an ongoing commitment to improve oversight of culture and conduct.

Reputation Risk has been managed as a Key Risk under Conduct Risk, prior to being re-designated as a Principal Risk with effect from 2017. Barclays association with sensitive sectors is often an area of concern for stakeholders and the following topics were of particular interest during the year:

§ Climate change and the management of climate risks is an increasingly important issue for the banking sector. There has been an increase in the level of interest in our response to climate change from a number of different stakeholder groups, largely driven by the ratification of COP21 requirements and publication of draft recommendations by the Financial Stability Board's Taskforce on Climate-related Financial Disclosures for annual reports. We are undertaking a review of our global energy sector client portfolio, in order to develop a strategic approach that is sustainable in the long term. We expect credit appetite to fossil fuels more broadly to decrease over time due to regulatory requirements, political appetite and moves towards development of cleaner energy sources, with particular short-term focus on coal. In the meantime, we are actively pursuing opportunities in the green energy and renewable sectors. Please refer to [home.barclays/citizenship/our-reporting.html](http://home.barclays/citizenship/our-reporting.html) for further information.

§ Supporting the manufacture and export of military and riot control goods and services is a reputation risk for the financial services sector. Political and public concern in particular relates to the use of weapons against civilians in conflict situations and to support unjustified external aggression. Our Defence Policy mandates our relationship with clients in this sector and includes a number of restrictions regarding client activities. For example, it is our policy not to finance trade in, or manufacture of, nuclear, chemical, biological or other weapons of mass destruction. A formal governance structure is in place to review high risk defence relationships and trade

transactions on a case by case basis, taking into account the client, types of goods, end user and country risk.

§ The banking sector has come under increased scrutiny for its perceived indirect involvement in human rights abuses committed by clients and customers. Barclays Group Statement on Human Rights outlines how we manage our impacts across four key areas: employees, local communities, suppliers and clients/customers, taking into account the UN Framework and Guiding Principles on business and human rights and other internationally recognised human rights standards. The UK Modern Slavery Act which came into force in October 2015 has helped raise awareness of the role business plays in managing human rights impacts. We are committed to combatting the risk of modern slavery or human trafficking in our supply chain or in any part of our business and Barclays Group Statement on Modern Slavery is available on

[home.barclays/content/dam/barclayspublic/docs/Citizenship/Policy-Positions/MSA2016.pdf](http://home.barclays/content/dam/barclayspublic/docs/Citizenship/Policy-Positions/MSA2016.pdf)

Reputation Risk may also arise as a result of issues and incidents relevant to other Principal Risks, in particular other non-financial risks e.g. Conduct or Operational Risk.

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Risk review

## Supervision and regulation

### Supervision of the Group

The Group's operations, including its overseas offices, subsidiaries and associates, are subject to a significant body of rules and regulations that are a condition for authorisation to conduct banking and financial services business. These apply to business operations, impact financial returns and include reserve and reporting requirements and prudential and conduct of business regulations. These requirements are set by the relevant central banks and regulatory authorities that authorise, regulate and supervise the Group in the jurisdictions in which it operates. The requirements generally reflect global standards developed by, amongst others, the Basel Committee on Banking Supervision (BCBS), the International Organization of Securities Commissions (IOSCO) and the Financial Stability Board (FSB). They also reflect requirements imposed directly by, or derived from, EU legislation. Various bodies, such as central banks, also create voluntary Codes of Conduct which affect the way the Group does business.

Regulatory developments impact the Group globally. We focus particularly on EU, UK and US regulation due to the location of Barclays' principal areas of business. Regulations elsewhere will affect Barclays due to the location of its branches, subsidiaries and, in some cases, clients.

The Group and certain of its members are subject to supervisory stress testing exercises in a number of jurisdictions. These exercises currently include the programmes of the Bank of England (BoE), the European Banking Authority (EBA), the Federal Deposit Insurance Corporation (FDIC), the Board of Governors of the Federal Reserve System (FRB) and the South African Reserve Bank (SARB). These exercises are designed to assess the resilience of banks to adverse economic or financial developments and ensure that they have robust, forward-looking capital planning processes that account for the risks associated with their business profile. Assessment by regulators is on both a quantitative and qualitative basis, the latter focusing on the Group's data provision, stress testing capability and internal management processes and controls. Failure to meet requirements of regulatory stress tests, or the failure by regulators to approve the stress test results and capital plans of the Group or its members subject to these exercises, could result in the Group or certain of its members being required to enhance its capital position or limit capital distributions, to any external holders of its equity or capital or within the Group. In 2016 Barclays and certain of its subsidiaries completed stress testing pursuant to the requirements of the BoE, EBA and SARB. Barclays was not required to submit revised plans as a result of these tests. Further details of Barclays capital requirements are set out below under Prudential Developments .

### Supervision in the EU

Financial regulation in the UK is to a significant degree shaped and influenced by EU legislation. This provides the structure of the European Single Market, an important feature of which is the framework for the regulation of authorised firms in the EU. This framework is designed to enable a credit institution or investment firm authorised in one EU member state to conduct banking or investment business in another member state through the establishment of branches or by the provision of services on a cross-border basis without the need for local authorisation. Barclays operations in Europe are authorised and regulated by a combination of both home and host regulators. The impact of the UK's departure from the EU in this respect and, more broadly, its impact on the UK domestic regulatory

framework, is yet to be determined. See the Risk Factor entitled "EU referendum", which discusses the potential impact of the UK's departure from the EU in more detail.

In the UK, the BoE has responsibility for monitoring the UK financial system as a whole. The day-to-day regulation and supervision of the Group is divided between the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA).

In addition, the Financial Policy Committee (FPC) of the BoE has influence on the prudential requirements that may be imposed on the banking system through its powers of direction and recommendation.

Barclays Bank PLC is authorised and subject to solo and consolidated prudential supervision by the PRA and subject to conduct regulation and supervision by the FCA. Barclays Bank PLC's Italian and French branches are also subject to direct supervision by the European Central Bank (ECB).

In its role as supervisor, the PRA seeks to maintain the safety and soundness of financial institutions with the aim of strengthening, but not guaranteeing, the protection of customers and the financial system. The PRA's continuing supervision of financial institutions is conducted through a variety of regulatory tools, including the collection of information by way of prudential returns, reports obtained from skilled persons, visits to firms and regular meetings with management to discuss issues such as performance, risk management, conduct and culture and strategy.

The regulation and supervision of market conduct matters is the responsibility of the FCA. The FCA's regulation of the UK firms in the Group is carried out through a combination of continuous assessment, regular thematic and project work based on the FCA's sector assessments, which analyse the different areas of the market and the risks that may lie ahead.

Both the PRA and the FCA have continued to develop and apply a more assertive approach to supervision and the application of existing standards. This may include application of standards that either anticipate or go beyond requirements established by global or EU standards, whether in relation to capital, leverage and liquidity, resolvability and resolution or matters of conduct.

The FCA has retained an approach to enforcement based on credible deterrence that has seen significant growth in the size of regulatory fines. The approach appears to be trending towards a more US model of enforcement including the use of Deferred Prosecution Agreements, vigorous enforcement of criminal and regulatory breaches, heightened fines and proposed measures related to increased corporate criminal liability and the failure to prevent the facilitation of tax evasion.

The FCA has focused strongly on conduct risk and on customer outcomes and will continue to do so. This has included a focus on the design and operation of products, the behaviour of customers and the operation of markets. This may affect both the incidence of conduct costs and increase the cost of remediation. The FCA has also increasingly focused on individual accountability within firms, as illustrated by the Senior Managers' Regime and Certification Regime detailed below.

### **Supervision in the US**

The supervisory framework of Barclays within the US is set out below in the section entitled "Regulation in the United States".

### **Supervision in South Africa**

In South Africa, BAGLs operations are supervised and regulated by the South African Reserve Bank (SARB), the Financial Services Board (SAFSB) as well as ancillary regulators including, amongst others, the Financial Intelligence

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Centre. SARB oversees the banking industry and follows a risk-based approach to supervision, whilst the SAFSB oversees non-banking financial services such as insurance and investment businesses. The National Credit Regulator regulates consumer credit and the National Consumer Commission is responsible for other aspects of consumer protection not regulated under the jurisdiction of the SAFSB. It is intended that regulatory responsibilities in South Africa will in future be divided between the SARB, which will be responsible for prudential regulation, and the SAFSB, which will be responsible for matters of market conduct. The proposed 'twin peaks' legislation is currently going through the consultation phase of the Parliamentary process to enact the legislation. Barclays' and BAGL's operations in other African countries are primarily supervised and regulated by the central banks in the jurisdictions where Barclays or BAGL (as relevant) has a banking presence. In some African countries, the conduct of Barclays' and BAGL's operations and their non-banking activities are also regulated by financial market authorities.

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Supervision and regulation

**Supervision in Asia Pacific**

Barclays' operations in Asia Pacific are supervised and regulated by a broad range of national regulators including: the Japan Financial Services Agency, the Bank of Japan, the Hong Kong Monetary Authority, the Hong Kong Securities and Futures Commission, the Monetary Authority of Singapore, the Reserve Bank of India, the Securities and Exchange Board of India and the People's Bank of China, China's State Administration of Foreign Exchange and the China Banking Regulatory Commission. Such supervision and regulation extends to activities conducted through branches of Barclays Bank PLC in the Asia Pacific region as well as subsidiaries of the Group.

**Global regulatory developments**

Regulatory change continues to affect all large financial institutions. Such change emanates from: global institutions such as the G20, FSB, IOSCO and BCBS; the European Union regionally; and national regulators, especially in the UK and US. 2016 gave rise to significant political changes in these markets, which have increased the level of regulatory and supervisory uncertainty faced by the Group and the financial markets more broadly. For more information, please see the Risk Factor entitled "Business conditions, general economy and geopolitical issues".

Further changes to financial services regulations impacting Barclays may affect the Group's planned activities and could increase costs and contribute to adverse impacts on the Group's earnings.

The programme of reform of the global regulatory framework previously agreed by G20 Heads of Government in April 2009 has continued to be taken forward throughout 2016. The G20 continues to monitor emerging risks and vulnerabilities in the financial system and has stated that it will take action to address them if necessary.

The FSB has been designated by the G20 as the body responsible for co-ordinating the delivery of the global reform programme in relation to the financial services industry. It has focused particularly on the risks posed by systemically important financial institutions. In 2011, G20 Heads of Government adopted FSB proposals to reform the regulation of global systemically important financial institutions (G-SIFIs), including global systemically important banks (G-SIBs), such as Barclays.

Regulatory developments in the financial services industry can broadly be categorised as follows: (a) prudential developments; (b) recovery and resolution developments, a key aspect of which is to ensure that G-SIFIs are capable of being resolved without recourse to taxpayer support; (c) structural reform developments; (d) market infrastructure developments, aimed at enhancing client protection, financial stability and market integrity; and (e) conduct, culture and consumer protection developments.

**Regulation in the EU and the UK**

**(a) Prudential developments**

The Basel III capital and liquidity standards, defined by BCBS, are implemented in EU law through CRD IV. The provisions of CRD IV either applied from, or had to be implemented in EU Member States by, 1 January 2014. In



addition, the PRA has expected Barclays, in common with other major UK banks and building societies, to meet a 7% CET1 ratio at the level of the consolidated group since 1 January 2016.

G-SIBs are subject to a number of additional prudential requirements, including the requirement to hold additional loss absorbing capacity and additional capital buffers above the level required by Basel III standards. The level of G-SIB buffer is set by the FSB according to a bank's systemic importance and can range from 1% to 3.5% of risk-weighted assets. The G-SIB buffer must be met with common equity.

In November 2016, the FSB published an update to its list of G-SIBs, reducing the G-SIB buffer that Barclays is required to hold from 2% to 1.5%, effective from January 2018. The additional G-SIB buffer began to be phased in from January 2016, from when G-SIBs were required to meet 25% of their designated buffer. This will increase to 50% in 2017, 75% in 2018 and 100% in January 2019. G-SIBs have also been required to meet higher supervisory expectations for data aggregation capabilities since 1 January 2016. Barclays is also subject to, among other buffers, a countercyclical capital buffer (CCyB) based on rates determined by the regulatory authorities in each jurisdiction in which

Barclays maintains exposures. These rates may vary in either direction – for example, in July 2016, the FPC published a policy statement directing the PRA to reduce the UK CCyB rate from 0.5% to 0% of banks' UK exposures with immediate effect, which was subsequently adopted by the PRA. In November 2016, the FPC reaffirmed that it expects to maintain a UK CCyB rate at 0% until at least June 2017, absent any material change in the economic outlook. The systemic risk buffer is expected to be set by the PRA for the first time in early 2019.

The BCBS maintains a number of active workstreams that will affect the Group. In January 2016, the BCBS endorsed a new market risk framework, including rules made as a result of its fundamental review of the trading book, to take effect in 2019. The BCBS also continues to focus on the consistency of risk weighting of assets and on reducing the variations of approaches to risk weightings between banks. This includes revisions to the standardised rules for credit risk, CVA volatility risk and operational risk. The BCBS is also considering whether to limit the use of internal models in certain areas (for example, removing the Advanced Measurement Approach for operational risk) and to apply capital floors based on the standardised approaches. The BCBS has also recently published final standards on the Basel III securitisation framework, interest rate risk in the banking book and minimum capital requirements for market risk. 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 V) to begin the legislative process for introducing these standards within the EU, with legislation expected to be finalised in late 2017 or early 2018. These proposals, if implemented in their current form would, among other things, overhaul 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, strengthen requirements relating to leverage and large exposures and introduce a net stable funding ratio, requiring banks to ensure that they hold reliable sources of funds in excess of their required amount of stable funding over a one year period. CRD V also proposes to require that non-EU parent undertakings with two or more subsidiary firms established in the EU establish an intermediate parent undertaking, authorised and established in, and subject to the supervision of, an EU Member State. This requirement would apply to non-EU groups that have been identified as non-EU Globally Systemically Important Institutions (G-SIIs) under CRD IV (as amended) and to groups with entities in the EU with total assets of at least €30bn. If implemented as proposed, Barclays could be required to establish such a holding company in respect of its EU operations following the UK's departure from the EU.

In January 2017, the BCBS announced that its finalisation of reforms to Basel III had been delayed. The BCBS is now expected to issue updated standards on the calculation of operational risk, the standardised framework for credit risk, restrictions on the use of internal models (including the application of RWA floors based on standardised approaches), the leverage ratio (including a leverage ratio buffer for G-SIBs) and an output floor based on a standardised approach, later in 2017. As these measures will require EU and domestic legislation to be implemented, it is not clear when they will become effective.

IFRS9 will be implemented in the European Union from 1 January 2018. In October 2016, the Basel Committee issued two documents on the treatment of accounting provisions in the regulatory framework, to take account of the future move to expected credit loss provisioning under IFRS and Financial Accounting Standards Board (FASB) standards. One paper considered transitional arrangements to phase-in the immediate capital impact of the new provisioning standards, while the other discussed more fundamental changes to the recognition of provisions in regulatory capital and changes to the risk weighting framework. The European Commission's CRR2 proposal also proposed transitional arrangements. The regulatory capital impact of IFRS9 on the group will depend on the timing and final form of all these initiatives.

**(b) Recovery and Resolution developments**

An important component of the EU legislative framework is the 2014 Bank Recovery and Resolution Directive (BRRD) which establishes a framework for the recovery and resolution of EU credit institutions and investment firms. The UK implemented the BRRD through the Financial

Services (Banking Reform) Act 2013 (the Banking Reform Act), which amended the Banking Act 2009.

Pursuant to the Banking Act, UK resolution authorities are empowered to intervene in and resolve a UK financial institution that is no longer viable. Pursuant to these laws, the BoE (in consultation with the PRA and HM Treasury as appropriate) has several stabilisation options where a banking institution is failing or likely to fail: (i) transfer some or all of the securities of the bank to a commercial purchaser; (ii) transfer some or all of the property, rights and liabilities of the bank to a bridge bank wholly owned by the BoE or to a commercial purchaser; (iii) transfer the impaired or problem assets to an asset management vehicle to allow them to be managed over time; (iv) cancel or reduce certain liabilities of the institution or convert liabilities to equity to absorb losses and recapitalise the institution and (v) in the case of a holding company, transfer the banking institution into temporary public ownership. In addition, the BoE may apply for a court insolvency order in order to wind up or liquidate the institution or to put the institution into special administration. When exercising any of its stabilisation powers, the BoE must generally provide that shareholders bear first losses, followed by creditors in accordance with the priority of their claims under normal insolvency proceedings.

In order to enable the exercise of its stabilisation powers, the BoE may impose a temporary stay on the rights of creditors to terminate, accelerate or close out contracts, and in some cases to override events of default or termination rights that might otherwise be invoked as a result of a resolution action. In addition, the Banking Act gives the BoE the power to override, vary, or impose conditions or contractual obligations between a UK bank, its holding company and its group undertakings, in order to enable any transferee or successor bank to operate effectively after any of the resolution tools have been applied. There is also power for HM Treasury to amend the law (excluding provisions made by or under the Banking Act) for the purpose of enabling it to use the regime powers effectively, potentially with retrospective effect. The Banking Act powers apply regardless of any contractual restrictions and compensation that may be payable. In July 2016 the PRA issued final rules on ensuring operational continuity in resolution. The rules will apply from 1 January 2019 and will require banks to ensure that their operational structures facilitate effective recovery and resolution planning and the continued provision of functions critical to the economy in a resolution scenario.

In July 2016 the PRA issued final rules on ensuring operational continuity in resolution. The rules will apply from 1 January 2019 and will require banks to ensure that their operational structures facilitate effective recovery and resolution planning and the continued provision of functions critical to the economy in a resolution scenario.

The BRRD requires EU member states to establish pre-funded resolution funds of 1% of covered deposits to be built up by 31 December 2024. The UK government uses the Bank Levy to meet this ex ante funding requirements, as well as the ex post contributions that would be required were the ex-ante contributions not to cover costs or other expenses incurred by use of the resolution funds.

Separately, Financial Services Compensation Scheme (FSCS), a deposit guarantee scheme established under the EU Deposit Guarantee Schemes Directive and Investor Schemes Directive, is funded through fees levied on participant firms, including Barclays. The FSCS operates when an authorised firm is unable or is likely to be unable to meet

claims made against it by its customers because of its financial circumstances. Most insured deposits made with branches of Barclays Bank PLC within the EEA are covered by the FSCS. Most claims made in respect of investment business will also be protected claims if the business was carried on from the UK or from a branch of the bank or investment firm in question in another EEA member state. Deposits covered by the FSCS are preferred in an insolvency of the bank.

In the event that the HM Treasury significantly increases the Bank Levy applicable to Barclays, or the FSCS significantly increases the fees levied on Barclays by virtue of its participation in the FSCS, the associated costs to the Group may have a material impact on the Group's results.

The BRRD also requires competent authorities to impose a Minimum Requirement for own funds and Eligible Liabilities (MREL) on financial institutions to facilitate the effective exercise of the in-tool referred to above. The EU proposes that for G-SIBs, such as Barclays, MREL should be set in accordance with the FSB Total Loss Absorbing Capital (TLAC) standard, discussed further below.

In November 2015 the FSB finalised its proposals to enhance the loss-absorbing capacity of G-SIBs to ensure that there is sufficient loss-absorbing and recapitalisation capacity available in resolution to implement an orderly resolution which minimises the impact on financial stability, ensures the continuity of critical functions and avoids exposing taxpayers to losses. To this end, the FSB has set a new minimum requirement for total loss absorbing capacity (TLAC). The EU has proposed to implement the TLAC standard via the MREL requirement and the European Commission has proposed amendments in its CRD V proposal to achieve this. As the proposals remain in draft it is uncertain what the final requirements and timing will be. The statement of policy confirmed that the BoE will set MREL for UK G-SIBs as necessary to implement the TLAC standard and that institution or group-specific MREL requirements will depend on the preferred resolution strategy for that institution or group. The MREL will be phased in from 1 January 2019 and will be fully implemented by 1 January 2022, at which time G-SIBs with resolution entities incorporated in the UK, including Barclays, will be required to meet a MREL equivalent to the higher of (i) two times the sum of its Pillar 1 and Pillar 2A requirements or (ii) the higher of two times its leverage ratio or 6.75% of leverage exposures. However, the PRA will review the MREL calibration by the end of 2020, including assessing the proposal for Pillar 2A recapitalisation which may drive a different 1 January 2022 MREL requirement than currently proposed. In addition, it is proposed that CET1 capital cannot be counted towards both MREL and the combined buffer requirement (CBR), meaning that the CBR will effectively be applied above both the Pillar 1 and Pillar 2A requirements relating to own funds and MREL, such that a failure to maintain sufficient other MREL resources could result in a breach of the CBR.

In October 2016, the BCBS also published its final standard on the prudential treatment of banks' investments in TLAC instruments issued by other institutions, confirming that internationally active banks (both G-SIBs and non-G-SIBs) must deduct their holdings of TLAC instruments that do not otherwise qualify as regulatory capital from their own Tier 2 capital. Where the investing bank owns less than 10% of the issuing bank's common shares, TLAC holdings are to be deducted from Tier 2 capital only to the extent that they exceed 10% of the investing bank's common equity (or 5% for non-regulatory capital TLAC holdings); below this threshold, holdings would instead be subjected to risk-weighting. G-SIBs may only apply risk-weighting to non-regulatory capital TLAC holdings by the 5% threshold where those holdings are in the trading book and are sold within 20 business days.

In addition to the amendments proposed to align MREL for G-SIBs with the TLAC standard, in November 2016 the European Commission proposed a package of amendments to the BRRD, including to harmonise the priority ranking of unsecured debt instruments under national insolvency proceedings and to enhance the stabilisation tools by including a moratorium tool.

The PRA has made rules that require authorised firms to draw up recovery plans and resolution packs, as required by the BRRD. Recovery plans are designed to outline credible recovery actions that authorised firms could implement in the event of severe stress in order to restore their business to a stable and sustainable condition. The resolution pack

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contains detailed information on the authorised firm in question which will be used to develop resolution strategies for that firm, assess its current level of resolvability against the strategy, and to inform work on identifying barriers to the implementation of operational resolution plans. In the UK, Recovery and Resolution Planning (RRP) work is considered part of continuing supervision. Removal of potential impediments to an orderly resolution of the Group or one or more of its subsidiaries is considered as part of the BoE's and PRA's supervisory strategy for each firm, and the PRA can require firms to make significant changes in order to enhance resolvability. Barclays currently provides the PRA with a Recovery Plan annually and with a Resolution Pack every other year.

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## Supervision and regulation

The BoE's preferred approach for the resolution of the Group is a bail-in strategy with a single point of entry through Barclays PLC. Under such a strategy, Barclays PLC's subsidiaries would remain operational while Barclays PLC's eligible liabilities would be written down or converted to equity in order to recapitalise the Group and allow for the continued provision of services and operations throughout the resolution. This strategy relies on Barclays PLC having issued sufficient loss-absorbing capacity to effect bail-in and recapitalise the Group should the need arise. As a result the Group is focusing on transitioning eligible loss absorbing capital from subsidiary level to Barclays PLC level.

**(c) Structural reform developments**

Recent developments in banking law and regulation in the UK have included legislation designed to ring-fence the retail and smaller deposit-taking businesses of large banks. The Banking Reform Act 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 rules have been published by the PRA further determining how ring-fenced banks will be permitted to operate. Further rules published by the FCA set out the disclosures that non-ring-fenced banks are required to make to prospective customers that are individuals.

In relation to ring-fencing in the UK, FSMA, as amended by the Banking Reform Act, requires, amongst other things, the separation of the retail and smaller-business deposit-taking activities of UK banks in the UK and branches of UK banks 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 (so called ring-fencing). UK ring-fenced banks and large UK building societies will be required to hold CET1 capital in excess of that required under CRD IV from 2019. This requirement will be applied by the PRA on an institution specific basis according to a framework set out by the FPC. The implications of these requirements on Barclays are discussed in more detail in the Risk Factor entitled "Structural Reform".

At European level, the European Commission issued proposals recommending the mandatory separation of proprietary trading and other high-risk trading activities from banking activities in January 2014.

These proposals would apply to institutions that have been identified as G-SIIs under CRD IV and envisage, amongst other things: (i) a ban on proprietary trading in financial instruments and commodities; and (ii) rules on the economic, legal, governance, and operational links between the trading entities and other banking group entities. The legislative proposal includes a derogation in respect of the separation of trading activities (but not the ban on proprietary trading) for Member States which had adopted similar measures before the date of its publication. The legislative proposal remains under consideration by the European Parliament and the Council of the EU.

**(d) Market Infrastructure developments**

The European Market Infrastructure Regulation (EMIR) has introduced requirements designed to improve transparency and reduce the risks associated with the derivatives market, some of which are still to be fully implemented. EMIR requires that certain entities that enter into derivative contracts: report such transactions; clear

certain over the counter (OTC) transactions where mandated to do so; and implement risk mitigation standards in respect of uncleared OTC trades. The obligation to clear derivatives only applies to certain counterparties and specified types of derivative. In October 2016 the European Commission adopted a delegated regulation relating to the exchange of collateral, one of the risk mitigation techniques under EMIR. Provisions relating to initial margin will be phased in from 6 February 2017 until 1 September 2020. Provisions relating to variation margin applied on a phased basis from 4 February 2017. EMIR has potential operational and financial impacts on the Group, including by imposing collateral requirements.

CRD IV aims to complement EMIR by applying higher capital requirements for bilateral, uncleared over-the-counter derivative trades. Lower capital requirements for cleared derivatives trades are only available if the central counterparty through which the trade is cleared is recognised as a qualifying central counterparty (QCCP) which has been authorised or recognised under EMIR (in accordance with binding technical standards). Higher capital requirements may apply to the Group following the UK's departure from the EU if UK CCPs are not

regarded as QCCPs.

The amended Markets in Financial Instruments Directive and Markets in Financial Instruments Regulation (collectively referred to as MiFID II) is expected to apply from 3 January 2018. MiFID II will affect many of the investment markets in which the Group operates, the instruments in which it trades and the way it transacts with market counterparties and other customers. Changes introduced by MiFID II include: the introduction of a new type of trading venue (the organised trading facility), capturing non-equity trading that falls outside the current regime; and the expansion of the concept of, and requirements applicable to, firms which systematically trade against proprietary capital (systematic internalisers).

MiFID II also strengthens investor protections and imposes new curbs on high frequency and commodity trading. It also increases pre-and post-trade transparency and introduces a new regime for third country firms. MiFID II also includes new requirements relating to non-discriminatory access to trading venues, central counterparties and benchmarks, and harmonised supervisory powers and sanctions across the EU.

The EU Benchmarks Regulation came into force in June 2016, with the majority of provisions intended to apply from January 2018. This Regulation applies to the administration, contribution of data to and use of benchmarks within the EU. Financial institutions within the EU will be prohibited from using benchmarks unless their administrators are authorised, registered or otherwise recognised in the EU. This may impact the ability of Barclays to use certain benchmarks.

In 2015 the European Commission launched work on establishing a Capital Markets Union (CMU) within the EU. The CMU aims to increase the availability of non-bank financing in the EU, deepen the single market for financial services and promote growth and financial stability. The Commission's work on the CMU includes the development of a regulatory framework in order to enhance efficiencies in the cross-border environment for capital markets, as well as a review of existing legislation to determine instances in which such legislation should be modified. This work is likely to continue through 2017 and beyond and may result in changes to the EU regulatory framework in which the Group operates.

#### **(e) Conduct, Culture and Consumer Protection developments**

On 7 March 2016 the PRA and FCA introduced measures to increase the individual accountability of senior managers and other covered individuals in the banking sector. The new regime comprises the Senior Managers Regime, which applies to a limited number of individuals with senior management responsibilities within a firm, the Certification Regime, which is intended to assess and monitor the fitness and propriety of a wider range of employees who could pose a risk of significant harm to the firm or its customers and conduct rules that individuals subject to either regime must comply with. From March 2017, the conduct rules will apply more widely to other staff of firms within scope of



the regime.

The Financial Services Act 2010, amongst other things, requires the UK regulators to make rules about remuneration and to require regulated firms to have a remuneration policy that is consistent with effective risk management. The Banking Act also amended FSMA to allow the FCA to make rules requiring firms to operate a collective consumer redress scheme to deal with cases of widespread failure by regulated firms to meet regulatory requirements, that may have created consumer detriment.

Barclays has to comply with national data protection laws, governing the collection, use, and disclosure of personal data, in a majority of the countries in which it operates. From 25 May 2018 data protection laws throughout the EU will be replaced by a single General Data Protection Regulation (GDPR); the UK government has confirmed the UK will adopt and apply the GDPR from May 2018. The impact across Barclays will be significant, affecting not only Group entities operating and processing personal data within the EU but also those outside the EU offering goods or services to, or monitoring individuals within the EU. The GDPR contains significant penalties for data protection breaches and non-compliance, up to 4% of Group global turnover.



A number of recent developments have indicated a clear political and regulatory desire to make customer transactional account information more easily accessible to customers and parties providing services to them. One such example is the revised Payment Services Directive (PSD2), which came into force on 12 January 2016 and must be implemented by 13 January 2018. Shortly after the finalisation of PSD2, the Open Banking Working Group, a body established at the request of HM Treasury, issued a report outlining how an ecosystem allowing the sharing of bank and customer information could be established, operated and governed. The resulting *Open Banking Standard* is intended to allow for the provision of access to public data and secure access to private data.

In August 2016, the UK Competition and Markets Authority (CMA) published the results of its market investigation into retail banking, identifying features of the market that were having an adverse effect on competition and setting out a number of measures to remedy the shortcomings. One of these remedies requires Barclays, among other banks, to help establish and fund an entity to govern open access to information about bank services, provision and service quality. Barclays expects to be required to make public information available through open application programming interfaces (APIs) through the course of 2017, with transactional information being available through an open API by January 2018 to align with the PSD2 timeframes.

EU regulation and governments have been increasingly focused on cyber security risk management for banking organisations and have proposed laws that would impose a variety of requirements on regulated Barclays entities. These requirements include minimum required security measures, enhanced reporting requirements and a variety of other cyber and information risk governance measures. When implemented, the proposals may increase technology and compliance costs for Barclays.

The UK Bribery Act 2010 introduced a new form of corporate criminal liability focussed on a company's failure to prevent bribery on its behalf. The legislation has broad application and in certain circumstances may have extraterritorial impact as to entities, persons or activities located outside the UK, including Barclays PLC and its subsidiaries. In practice, the legislation requires Barclays to have adequate procedures to prevent bribery which, due to the extraterritorial nature of the status, makes this both complex and costly.

## **Regulation in the United States**

### **Supervision in the US**

Barclays' US activities and operations are subject to umbrella supervision by the Board of Governors of the Federal Reserve System (FRB), as well as additional supervision, requirements and restrictions imposed by other federal and state regulators. Barclays PLC, Barclays Bank PLC and their US branches and subsidiaries are subject to a comprehensive regulatory framework involving numerous statutes, rules and regulations, including the International Banking Act of 1978, the Bank Holding Company Act of 1956 (BHC Act), the USA PATRIOT Act of 2001 and the Dodd Frank Wall Street Reform and Consumer Protection Act of 2010 (DFA). In some cases, US requirements may impose restrictions on Barclays' global activities in addition to its activities in the US.

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In July 2016, Barclays established a US intermediate holding company, Barclays US LLC (BUSL), which holds substantially all of Barclays' US subsidiaries and assets (including Barclays Capital Inc. and Barclays Bank Delaware), other than Barclays' US branches and certain other assets and subsidiaries. BUSL, Barclays PLC and Barclays Bank PLC are regulated as bank holding companies (BHCs) by the FRB, which exercises umbrella supervisory authority over and imposes a wide variety of requirements and restrictions on Barclays' US operations, including with respect to safety and soundness. As Barclays top-tier US bank holding company, BUSL is or will become subject to the enhanced prudential supervision requirements applicable to US bank holding companies of comparable size, including: (i) regulatory capital requirements and leverage limits; (ii) mandatory annual supervisory and annual and semi-annual company-run stress testing of capital levels, and annual submission of a capital plan in connection with the FRB's annual Comprehensive Capital Analysis and Review (CCAR), resulting in an FRB objection or non-objection to the capital plan; (iii) FRB non-objection to any proposed capital distributions by BUSL, including to Barclays Bank PLC; (iv) additional substantive liquidity requirements,

including requirements to conduct monthly internal liquidity stress tests for BUSL (and also, separately, for Barclays Bank PLC's US branch network), and to maintain a 30-day buffer of highly liquid assets; (v) other liquidity risk management requirements, including compliance with liquidity risk management standards established by the FRB, and maintenance of an independent function to review and evaluate regularly the adequacy and effectiveness of the liquidity risk management practices of Barclays' combined US operations; and (vi) overall risk management requirements, including a US risk committee and a US chief risk officer. BUSL will become subject to the FRB's capital planning requirements in 2017.

The BHC Act generally restricts the activities of BHCs to banking and activities closely related to banking. In order to engage in a broader range of activities, Barclays PLC and Barclays Bank PLC have also elected to be treated as financial holding companies under the BHC Act. Financial holding companies may engage in a range of financial and related activities, directly or through subsidiaries, including underwriting, dealing and making markets in securities. In order to maintain its status as a financial holding company, a financial holding company is required to meet or exceed certain regulatory capital ratios and other requirements and be deemed "well capitalised" and "well managed". In addition, the financial holding company status requires Barclays Bank Delaware to maintain at least a "satisfactory" rating under the Community Reinvestment Act of 1977 (CRA). Entities ceasing to meet any of these requirements are required to enter into an agreement to correct the deficiency and are allotted a period of time in which to restore capital levels or management ratings. The non-compliant entity will be subject to limitations on activities during any period of non-compliance. If the capital level or rating is not restored, the non-compliant entity would be subjected to increasingly stringent penalties and could ultimately be closed or required to cease certain activities in the US.

In addition to general oversight by the FRB, certain of Barclays' branches and subsidiaries are regulated by additional authorities based on the location or activities of those entities. The deposits of Barclays Bank Delaware are insured by the FDIC, which also exercises supervisory authority over the bank's operations. Under the Federal Deposit Insurance Act Barclays PLC, Barclays Bank PLC and BUSL are required to act as a source of financial strength for Barclays Bank Delaware. This could, among other things, require these entities to inject capital into Barclays Bank Delaware if it fails to meet applicable regulatory capital requirements. The New York and Florida branches of Barclays Bank PLC are subject to extensive supervision and regulation by, as applicable, the New York State Department of Financial Services (NYSDFS) and the Florida Office of Financial Regulation. Barclays Bank Delaware, a Delaware chartered commercial bank, is subject to supervision and regulation by the Delaware Office of the State Bank Commissioner.

Barclays' US securities broker/dealer, investment advisory and investment banking operations are also subject to ongoing supervision and regulation by the Securities and Exchange Commission (SEC), the Financial Industry Regulatory Authority (FINRA) and other government agencies and self-regulatory organisations (SROs) as part of a comprehensive scheme of regulation of all aspects of the securities and commodities business under US federal and state securities laws.

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Similarly, Barclays US commodity futures, commodity options and swaps-related operations are subject to ongoing supervision and regulation by the Commodity Futures Trading Commission (CFTC), the National Futures Association and other SROs.

Barclays US retail and consumer activities, including the US credit card operations of Barclays Bank Delaware, are subject to direct supervision and regulation by the Consumer Financial Protection Bureau (CFPB), which was established by the DFA. The CFPB has the authority to examine and take enforcement action related to compliance with federal laws and regulations regarding the provision of consumer financial services and the prohibition of unfair, deceptive or abusive acts and practices .

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The Volcker Rule, a provision of the DFA that came into effect in July 2015, prohibits banking entities from undertaking certain proprietary trading activities and limits the sponsorship of, and investment in, private equity funds (including non-conforming real estate and credit funds) and hedge funds, in each case broadly defined, by such entities. These restrictions are subject to certain exemptions, including for underwriting, market-making and risk-mitigating hedging activities as well as for transactions and investments occurring solely outside of the US. As required by the rule, Barclays has developed and implemented an extensive compliance and monitoring programme (both inside and outside of the US) addressing proprietary trading and covered fund activities. These efforts are expected to continue as the FRB and the other relevant US regulatory agencies further implement and monitor these requirements and Barclays may incur additional costs in relation to such efforts. The Volcker Rule is highly complex and its full impact will not be known with certainty until market practices and structures further develop under it.

The Bank Secrecy Act, USA PATRIOT Act 2001 and regulations thereunder contain numerous anti-money laundering and anti-terrorist financing requirements for financial institutions. In addition, Barclays is subject to the US Foreign Corrupt Practices Act, which prohibits certain payments to foreign officials, as well as rules and regulations relating to economic sanctions and embargo programs administered by the US Office of Foreign Assets Control which restrict certain business activities with certain individuals, entities, groups, countries and territories. In some cases, these regulations may impact entities, persons or activities located outside the US, including Barclays PLC and its subsidiaries. The enforcement of these regulations has been a major focus of US government policy relating to financial institutions in recent years, and failure of a financial institution to ensure compliance could have serious legal, financial and reputational consequences for the institution.

The US regulators have enhanced their focus on the promotion of cultural values as a key area for banks. The regulators view the responsibility for reforming culture as primarily sitting with the industry. In this regard regulators have increasingly focused on areas such as incentive compensation, promotion processes and measurements of success.

Title II of the DFA established the Orderly Liquidation Authority, a new regime for orderly liquidation of systemically important financial institutions, which could apply to BUSL. Specifically, when a systemically important financial institution is in default or danger of default, the FDIC may be appointed receiver under the orderly liquidation authority instead of the institution being resolved through a voluntary or involuntary proceeding under the US Bankruptcy Code. In addition, the licensing authorities of each US branch of Barclays Bank PLC and of Barclays Bank Delaware have the authority, in certain circumstances, to take possession of the business and property of the applicable Barclays entity they license or to revoke or suspend such licence. Such circumstances include violations of law, unsafe business practices and insolvency.

Under the DFA, Barclays must submit annually to the FRB and the FDIC a plan for its rapid and orderly resolution in the event of material financial distress or failure. As required, Barclays submitted its most recent annual US resolution plan to the US regulators on 1 July 2015. Barclays' next submission will be due on 1 July 2017 in view of the FDIC's and FRB's joint determination that certain foreign banking organisations' 2016 annual resolution plan filing requirements would be satisfied by the 2017 submission.

In addition, on 3 February 2017, the President of the US issued an executive order identifying core principles for the administration's financial services regulatory policy and directing the US Secretary of Treasury, in consultation with the heads of other US financial regulatory agencies, to evaluate and issue a report within 120 days examining how the current regulatory framework promotes or inhibits the principles and what actions have been and are being taken to promote the principles.

### **Regulatory developments in the US**

The DFA's ultimate impact on the Group continues to remain uncertain and some rules are not yet fully implemented. In addition, market practices and structures may change in response to the requirements of the DFA in ways that are difficult to predict but that could impact Barclays' business. Nonetheless, certain proposed or final regulations are particularly likely to have a significant effect on the Group, including:

#### **(a) Regulation of derivatives markets**

The DFA also established a regulatory scheme with respect to over-the-counter swaps and other derivatives, which has resulted in substantial changes in the markets for such instruments and will result in additional regulatory requirements. Among the changes mandated by the DFA is a requirement that many types of derivatives that used to be traded in the over the counter markets be traded on an exchange or swap execution facility and centrally cleared through a regulated clearing house. At present, most interest rate swaps and certain credit default swaps are subject to these requirements, but other categories of swaps will become subject to the requirements in the future. The DFA also mandates that swaps and security-based swaps entered into within the jurisdiction of U.S. regulators be reported to central data repositories and that certain of that information be made available to the public on an anonymous basis. In addition, certain participants in these markets are required to register with the CFTC as swap dealers or major swap participants and/or, following the compliance date for relevant SEC rules, with the SEC as security-based swap dealers or major security-based swap participants. Such registrants are or will be subject to CFTC and SEC regulation and oversight. SEC finalised the rules governing security based swap dealer registration in 2015 but clarified that registration timing is contingent upon the finalisation of certain additional rules under Title VII of DFA, several of which are still pending. Additional SEC rules governing security-based swap transactions, including security-based swap reporting, will become effective after the security-based swap dealer registration date. Barclays Bank PLC has provisionally registered with the CFTC as a swap dealer. Entities required to register are subject to business conduct and record-keeping and reporting requirements and will be subject to capital and margin requirements in connection with transactions with certain US and non-US counterparties. Barclays Bank PLC is also prudentially regulated as a swaps dealer so is subject to the FRB swaps rules.

The CFTC has approved certain comparability determinations that would permit substituted compliance with non-US regulatory regimes for certain swap regulations related to business conduct requirements. The CFTC had previously stated that its transaction-level rules (such as margin and documentation requirements) would apply to certain transactions entered into between a non-US swap dealer and a non-US counterparty but has delayed the compliance date for this requirement a number of times. The most recent extension of this relief expires on 30 September 2017. In addition, the CFTC has proposed to apply transaction-level rules to certain cross-border transactions with a U.S. nexus. It is unclear whether further changes will be made to these proposed rules or when they will become effective.

In this regard, the US prudential regulators and the CFTC have imposed rules requiring the exchange of collateral in respect of OTC derivative transactions, in a similar manner to the European Commission as set out above in the section entitled 'Market Infrastructure Developments'.

#### **(b) Prudential developments**

The FRB has proposed a number of prudential rules to implement DFA requirements, as well as its own versions of a number of international regulatory standards, including Basel large exposure rules (or single counterparty credit

limits, proposed in March 2016) and temporary resolution stays for qualified financial contracts (proposed in May 2016).

In December 2016, the FRB issued final regulations for TLAC which will apply to BUSL. The FRB's final TLAC rule, while generally following the FSB termsheet, contains a number of provisions that are more restrictive. For example, the FRB's TLAC rule includes provisions that require BUSL (the Barclays IHC) to have (i) a specified outstanding amount of eligible long-term debt, (ii) a specified outstanding amount of TLAC (consisting of common and preferred equity regulatory capital plus long term debt), and (iii) a specified common equity buffer. In addition, the FRB's TLAC rule would prohibit BUSL, for so long as the Group's overall resolution plan treats BUSL as a non-resolution entity, from issuing TLAC to entities other than the Group and its non-US subsidiaries.

In addition, the FRB has issued proposed regulations for net stable funding ratio (NSFR) implementation. The NSFR is one of the two Basel III-based liquidity measures, along with the LCR, and as proposed by the FRB, would apply to US bank holding companies with more than \$250bn in total assets or \$10bn or more in on-balance sheet foreign exposures, including BUSL, and consolidated depository institution subsidiaries of such banking organisations with more than \$10bn in assets, including Barclays Bank Delaware. Under the proposed rule, such entities would be required to maintain a minimum level of available stable funding that equals or exceeds the amount of required stable funding over a one-year period. The proposal provides for an effective date of 1 January 2018, subject to finalisation of the rules.

If finally adopted as currently proposed, the NSFR requirement could impact Barclays liquidity and increase the funding and compliance costs for BUSL.

### **(c) Cybersecurity**

US regulators, including the FRB, FDIC and NYSDFS, have been increasingly focused on cybersecurity risk management for banking organisations and have issued proposals for, or requested comment on, regulations that would impose a variety of new requirements on regulated Barclays entities. These requirements include, among others,

the adoption of cybersecurity policies and procedures meeting specified criteria, a set of minimum required security measures, new reporting and compliance certification requirements and a variety of other cyber and information risk governance measures. If finally implemented, the proposals may increase technology and compliance costs for Barclays.

## **Structural Reform**

### **Overview**

Barclays announced in March 2016 that it will be organised as two clearly defined divisions, Barclays UK and Barclays International, to simplify the Group and prepare early for UK ring-fencing requirements.

Barclays intends to achieve ring-fencing separation by setting up an operational legal entity, which will constitute the ring-fenced bank (RFB) and will be separate from Barclays Bank PLC. The Barclays UK division of Barclays Bank PLC will be transferred to RFB. Barclays Bank PLC will continue to house the Barclays International division. The two legal entities, RFB (including Barclays UK) and BBPLC (including Barclays International) will operate alongside one another together with the Group Service Company, Barclays Services Limited (BSerl), as subsidiaries of Barclays PLC within the Barclays Group.

In order to achieve this target-state structure, Barclays will need to undertake a number of legal transfers, including the transfer of customer and non-customer assets, liabilities and contractual arrangements.

Barclays intends to use a court approved statutory ring-fence transfer scheme process as defined in Financial Services and Markets Act 2000 part VII section 106B (RFTS) to conduct the majority of these transfers to the RFB, as well as certain other items to BSerL. In addition to the transfers conducted through the RFTS, certain items will be transferred via alternative arrangements.

Between now and 1 January 2019, Barclays will complete the transition from the former divisional constructs to the legal entity constructs described above.



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## Timeline

Barclays Structural Reform timeline, including progress to date and indicative future milestones is as follows:

### § 2015:

The legal entity which will become the RFB was incorporated.

### § 2016:

Barclays US intermediate holding company was established.

RFB banking authorisation application was submitted to the regulators.

BSerL, which will become the Group Service Company, was transferred to be a direct subsidiary of BPLC.

### § 2017:

Various legal entities connected with the future Barclays UK business will be transferred to be subsidiaries of the entity which will become the RFB.

Certain assets, liabilities, and other items connected with service provision will be transferred from Barclays Bank PLC to BSerL to establish the entity as the Group Service Company.

RFTS court process will be initiated during Q4 2017 with the submission of an application to the high court followed by the directions court hearing.

### § 2018:

Final court hearing will be held in respect of the RFTS.

Barclays UK businesses and related items will be transferred to the RFB through the RFTS and via alternative arrangements, taking effect in H1 2018.

Additional items connected with service provision will be transferred to BSerL, also via the RFTS in H1 2018.

Immediately following completion of the RFTS, the equity ownership in the RFB will be transferred, establishing the RFB as a direct subsidiary of Barclays PLC, alongside Barclays Bank PLC and BSerL.

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Financial review

**A review of the performance of Barclays,**

**including the key performance indicators, and the contribution of each of our businesses to the overall performance of the Group.**

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**Financial review**

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## Financial review

## Key performance indicators

In assessing the financial performance of the Group, management uses a range of Key Performance Indicators (KPIs) which focus on the Group's financial strength, the delivery of sustainable returns and cost management.

## Non-IFRS performance measures

Barclays management believes that the non-IFRS performance measures included in this document provide valuable information to the readers of the financial statements as they enable the reader to identify a more consistent basis for comparing the business performance between financial periods, and provide more detail concerning the elements of performance which the managers of these businesses are most directly able to influence or are relevant for an assessment of the Group. They also reflect an important aspect of the way in which operating targets are defined and performance is monitored by Barclays' management. However, any non-IFRS performance measures in this document are not a substitute for IFRS measures and readers should consider the IFRS measures as well. Refer to pages i to x and pages 212 to 215 for further information, reconciliations and calculations of non-IFRS performance measures included throughout this document, and the most directly comparable IFRS measures.

## Definition

## Why is it important and how the Group performed

**CRD IV fully loaded CET1 ratio**

Capital requirements are part of the regulatory framework governing how banks and depository institutions are supervised. Capital ratios express a bank's capital as a percentage of its RWAs as defined by the PRA.

In the context of CRD IV, the fully loaded CET1 ratio is a measure of capital that is

The Group's capital management objective is to maximise shareholder value by prudently managing the level and mix of its capital to: ensure the Group and all of its subsidiaries are appropriately capitalised relative to their minimum regulatory and stressed capital requirement support the Group risk appetite, growth and strategic option wide seeking to maintain a robust credit proposition for the Group and its subsidiaries.

The Group's CRD IV fully loaded CET1 ratio increased to 12.4% (2015: 11.4%) due to an increase in CET1 capital to £45.2bn (2015: £40.7bn), partially offset by an increase in RWAs to £366bn (2015: £358bn). The 100 bps increase reflected the Group's ability to grow capital through profit generation.

12.4%

**CRD IV fully loaded CET1 ratio**

2015: 11.4%

2014: 10.3%

predominantly common equity as defined by the Capital Requirements Regulation.

Group target: Revised end-state CET1 capital ratio target of 150-200bps above the minimum regulatory level providing 400-450bps buffer to the Bank of England stress test systemic reference point.

3.0%

### Return on equity

RoE is calculated as profit after tax attributable to ordinary shareholders, including an adjustment for the tax credit recorded in reserves in respect of other equity instruments, as a proportion of average shareholders equity excluding non-controlling interests and other equity instruments.

This measure indicates the return generated by the management of the business based on shareholders equity. Achieving a target RoE demonstrates the organisation's ability to execute its strategy and align management's interests with the shareholders.

### Group RoE

2015: (0.6%)

2014: (0.2%)

RoE for the Group increased to 3.0% (2015: (0.6%)) reflecting an increase in Group attributable profit to £1,623m (2015: loss of £394m) and increased shareholders equity of £57.4bn (2015: £55.9bn).

3.6%

### Return on average tangible shareholders equity

RoTE is calculated as profit after tax attributable to ordinary shareholders, including an adjustment for the tax credit recorded in reserves in respect of other equity instruments, as a proportion of average shareholders equity excluding non-controlling interests and other equity instruments adjusted for the deduction of intangible assets and

This measure indicates the return generated by the management of the business based on shareholders tangible equity. Achieving a target RoTE demonstrates the organisation's ability to execute its strategy and align management's interests with the shareholders. RoTE lies at the heart of the Group's capital allocation and performance management process.

### Group RoTE

2015: (0.7%)

2014: (0.3%)

8.4%

### Core RoTE

2015: 4.8%

2014: 7.0%

RoTE for the Group increased to 3.6% (2015: (0.7%)) reflecting an increase in Group attributable profit to £1,623m (2015: loss of £394m) and increased average tangible shareholders equity of £49bn (2015: £48bn).

Core RoTE increased to 8.4% (2015: 4.8%) reflecting a 95% increase in attributable profit to

goodwill.

£3,350m and a £4bn increase in average allocated tangible equity to £41bn, as capital was returned from Non-Core. Core RoTE excluding notable items reduced to 9.4% (2015: 11.2%) with a 4% increase in profit before tax to £6,436m and an 8% reduction in attributable profit to £3,781m primarily reflecting an increase in tax, due to the introduction of a new surcharge of 8% that applies to banks UK profits with effect from 1 January 2016.

Group target: Group RoTE will converge with Core RoTE.

9.4%

**Core RoTE excluding notable items**

2015: 11.2%

2014: 11.2%

## Definition

## Why is it important and how the Group performed

**Leverage ratio**

The ratio is calculated as fully loaded tier 1 capital divided by leverage exposure.

The leverage ratio is non-risk based and is intended to act as a supplementary measure to the risk-based capital metrics such as the CET1 ratio.

The leverage ratio increased to 4.6% (2015: 4.5%), reflecting an increase in tier 1 capital to £52.0bn (2015: £46.2bn) and an increase in leverage exposure of £97bn to £1,125bn. Tier 1 capital included £6.8bn (2015: £5.4bn) of AT1 securities.

Group target: maintaining the leverage ratio above future minimum requirements

4.6%

**Leverage ratio**

2015: 4.5%

2014: 3.7%

**Cost: income ratio**

Total operating expenses divided by total income

This is a measure management uses to assess the productivity of the business operations. Restructuring the cost base is a key execution priority for management and includes a review of all categories of discretionary spending and an analysis of how we can run the business to ensure that costs increase at a slower rate than income.

The Group cost: income ratio reduced to 76% (2015: 84%) driven by a 12% reduction in operating expenses, partially offset by a 3% reduction in income.

The reduction in operating expenses included a £3,024m reduction in litigation and conduct

76%

**Cost: income ratio**

2015: 84%

2014: 84%

charges in 2016 to £1,363m.

The Core cost: income ratio reduced to 64% (2015: 75%) reflecting the reduction in litigation and conduct charges. Excluding notable items, the Core cost: income ratio reduced to 61% in 2016 (2015: 62%).

Group target: cost: income ratio of less than 60% over time

**Operating expenses**

Total operating expenses

Barclays views operating expenses as a key strategic area for banks; those who actively manage costs and control them effectively will gain a strong competitive advantage.

£16,338m

**Group statutory**

Operating expenses for the Group were £16,338m (2015: £18,536m). This reflected lower litigation and conduct charges, increased structural reform implementation costs and the strengthening in average USD and EUR against GBP. Q416 included the impact of a decision for 2016 compensation awards, to more closely align income statement recognition with performance awards and to harmonise deferral structures across the Group. These changes resulted in a £395m income statement charge in Q416, of which £390m was in Core, resulting in Core costs being above guidance by that amount.

2015: £18,536m

2014: £18,184m

£14,975m

**Group total operating expenses, excluding conduct and litigation charges, and other notable items**

Refer to pages vi to viii for a reconciliation of total operating expenses excluding conduct and litigation charges, and other notable items.

2015: £14,479m

2014: £15,377m

£14,507m



**Core statutory**

2015: £15,990m

2014: £15,170m

£13,390m

**Core total operating expenses, excluding conduct and litigation charges, and other notable items**

2015: £12,532m

2014: £12,664m

£32bn

**Non-Core RWAs**

RWAs are a risk adjusted measure of assets. Risk weightings are established in accordance with the Basel Capital Accord as implemented by the PRA.

Barclays Non-Core was established as a separate unit in 2014 and groups together businesses and assets which do not fit with the strategic objectives of the Group. Reducing Non-Core RWAs will rebalance the Group to deliver higher and more sustainable returns.

Non-Core RWAs reduced by £22bn to £32bn in 2016. The 41% reduction in the year reflects strong progress in the rundown, driven by a £10bn reduction in Derivatives, a £3bn reduction in Securities and loans, a £4bn reduction in Businesses RWAs, and a £4bn reallocation to Head Office of operational risk RWAs associated with exited businesses and assets.

Target: Non-Core RWAs of c.£25bn as at 30 June 2017.

**Non-Core**

2015: £54bn

2014: £89bn

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## Financial review

## Consolidated summary income statement

	2016	2015	2014	2013	2012
	£m	£m	£m	£m	£m
<b>For the year ended 31 December<sup>a</sup></b>					
<b>Continuing operations<sup>b</sup></b>					
Net interest income	10,537	10,608	10,086	9,457	9,442
Non-interest income	10,914	11,432	11,677	14,587	11,399
<b>Total income</b>	<b>21,451</b>	22,040	21,763	24,044	20,841
<b>Credit impairment charges and other provisions</b>	<b>(2,373)</b>	(1,762)	(1,821)	(2,601)	(2,659)
Operating expenses	(14,565)	(13,723)	(14,959)	(16,628)	(15,256)
UK bank levy	(410)	(426)	(418)	(462)	(311)
Litigation and conduct	(1,363)	(4,387)	(2,807)	(2,442)	(2,912)
<b>Total operating expenses</b>	<b>(16,338)</b>	(18,536)	(18,184)	(19,532)	(18,479)
<b>Other net income/(expenses)</b>	<b>490</b>	(596)	(445)	(32)	122
<b>Profit/(loss) before tax</b>	<b>3,230</b>	1,146	1,313	1,879	(175)
Tax charge	(993)	(1,149)	(1,121)	(1,251)	(326)
<b>Profit/(loss) after tax in respect of continuing operations</b>	<b>2,237</b>	(3)	192	628	(502)
Profit after tax in respect of discontinued operation <sup>b</sup>	591	626	653	669	683
Non-controlling interests in respect of continuing operations	(346)	(348)	(449)	(414)	(467)
Non-controlling interests in respect of discontinued operation <sup>b</sup>	(402)	(324)	(320)	(343)	(339)
Other equity holders	(457)	(345)	(250)		
<b>Attributable profit/(loss)</b>	<b>1,623</b>	(394)	(174)	540	(624)
<b>Selected financial statistics</b>					
Basic earnings/(loss) per share <sup>c</sup>	10.4p	(1.9p)	(0.7p)	3.8p	(4.8p)
Diluted earnings/(loss) per share <sup>c</sup>	10.3p	(1.9p)	(0.7p)	3.7p	(4.8p)
Dividends per ordinary share	4.5p	6.5p	6.5p	6.5p	6.5p
Dividend payout ratio	23%	39%	38%	41%	18%
Return on equity	3.0%	(0.6%)	(0.2%)	1.0%	(1.2%)
Return on average tangible shareholders' equity	3.6%	(0.7%)	(0.3%)	1.2%	(1.4%)

The financial information above is extracted from the published accounts. This information should be read together with the information included in the accompanying consolidated financial statements.

Notes

aComparatives have been restated to reflect the implementation of the Group business reorganisation. These restatements were detailed in our announcement on 14 April 2016, accessible at [home.barclays/results](http://home.barclays/results).

bRefer to page 210 for further information on the Africa Banking discontinued operation.

cThe profit after tax attributable to other equity holders of £457m (2015: £345m) is offset by a tax credit recorded in reserves of £128m (2015: £70m). The net amount of £329m (2015: £275m), along with NCI is deducted from profit after tax in order to calculate earnings per share and return on average tangible shareholders' equity.

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Income statement commentary

**2016 compared to 2015**

Profit before tax increased to £3,230m (2015: £1,146m). The Group performance reflected good operational performance in Barclays UK and Barclays International whilst being impacted by the Non-Core loss before tax of £2,786m (2015: £2,603m) driven by the accelerated rundown of Non-Core and provisions for UK customer redress of £1,000m (2015: £2,772m). The appreciation of average USD and EUR against GBP positively impacted income and adversely affected impairment and operating expenses.

Total income decreased 3% to £21,451m as Non-Core income reduced £1,776m to a net expense of £1,164m due to the acceleration of the Non-Core rundown, while Core income increased 6% to £22,615m. Within Core, Barclays International income increased 9% to £14,995m, with growth in both CIB and Consumer, Cards and Payments, and Barclays UK income increased 2% to £7,517m.

Total income included a £615m (2015: £nil) gain on disposal of Barclays share of Visa Europe Limited and an own credit loss of £35m (2015: gain of £430m).

Credit impairment charges increased £611m to £2,373m including a £320m charge in Q316 following the management review of the UK and US cards portfolio impairment modelling and balance growth primarily within Consumer, Cards and Payments. This was partially offset by a reduction in credit impairment charges of 9% to £122m in Non-Core due to lower impairment charges in European businesses. This resulted in a 11bps increase in the loan loss rate to 53bps.

Total operating expenses reduced 12% to £16,338m reflecting lower litigation and conduct charges. This was partially offset by the non-recurrence of the prior year gain of £429m on the valuation of a component of the defined retirement benefit liability and increased structural reform implementation costs. Operating expenses also included a £395m additional charge in Q416 relating to 2016 compensation awards reflecting a decision to more closely align income statement recognition with performance awards and to harmonise deferral structures across the Group.

Total operating expenses included provisions for UK customer redress of £1,000m (2015: £2,772m).

The cost: income ratio improved to 76% (2015: 84%).

Other net income of £490m (2015: expense of £596m) included gains on the sale of Barclays Risk Analytics and Index Solutions, the Asia wealth and investment management business and the Southern European cards business, partly offset by the loss on sale of the French retail business of £455m.

The effective tax rate on profit before tax decreased to 30.7% (2015: 100.3%) principally as a result of a reduction in non-deductible charges.

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Profit after tax in respect of continuing operations increased to £2,237m (2015: loss of £3m). Profit after tax in relation to the Africa Banking discontinued operation decreased 6% to £591m as increased credit impairment charges and operating expenses were partially offset by income growth.

Return on shareholders' equity was 3.0% (2015: (0.6)%).

Return on average tangible shareholders' equity was 3.6% (2015: (0.7%)) and basic earnings per share was 10.4p (2015: (1.9p)).

### 2015 compared to 2014

Profit before tax decreased to £1,146m (2014: £1,313m).

Total income increased 1% to £22,040m as Core income increased 4% to £21,428m, reflecting a 6% increase to £13,747m in Barclays International and a 22% increase in Head Office to £338m, which was partially offset by a 1% decrease to £7,343m in Barclays UK. Non-Core income reduced 46% to £612m, following assets and securities rundown, business sales including the impact of the sales of the Spanish and UAE retail businesses, and fair value losses on the ESHLA portfolio of £359m (2014: £156m).

Total income included a £496m (2014: £461m) gain on the US Lehman acquisition assets and an own credit gain of £430m (2014: £34m). 2014 total income included a loss of £935m (2015: £nil) relating to a revision to the ESHLA valuation methodology.

Credit impairment charges improved 3% to £1,762m, with a loan loss rate of 42bps (2014: 42bps). This reflected lower impairments in Barclays UK due to the benign economic environment in the UK resulting in lower default rates and charges and higher recoveries in European businesses in Non-Core. This was partially offset by increased impairment charges in Consumer, Cards and Payments primarily driven by asset growth and updates to impairment model methodologies, and increased impairment charges in CIB due to impairment of a number of single name exposures.

Total operating expenses increased 2% to £18,536m due to an increase in litigation and conduct charges, and costs associated with the implementation of structural reform. This was partially offset by savings from the strategic cost programme, in addition to the continued rundown of Non-Core.

Total operating expenses included additional provisions for UK customer redress of £2,772m (2014: £1,110m), additional provisions for ongoing investigations and litigation including Foreign Exchange of £1,237m (2014: £1,250m), a £429m (2014: £nil) gain on valuation of a component of the defined retirement benefit liability and £96m (2014: £nil) of impairment of goodwill and other assets relating to businesses being disposed.

The cost: income ratio remained stable at 84% (2014: 84%).

Other net expenses increased to £596m (2014: £445m) primarily relating to losses on sale relating to the Spanish, Portuguese and Italian businesses of £577m (2014: £446m).

The tax charge of £1,149m (2014: £1,121m) on profit before tax of £1,146m (2014: £1,313m) represented an effective tax rate of 100.3% (2014: 85.4%), impacted by non-deductible items.

Profit after tax in respect of continuing operations decreased to a loss of £3m (2014: profit of £192m). Profit after tax in relation to the Africa Banking discontinued operation decreased 4% to £626m driven by a reduction in total income and an increase in credit impairment charges, partially offset by a reduction in operating expenses.

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Return on shareholders' equity was (0.6)% (2014: (0.2)%).

Return on average tangible shareholders' equity was (0.7%) (2014: (0.3%)) and basic loss per share was 1.9p (2014: 0.7p).

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## Financial review

## Consolidated summary balance sheet

	2016	2015	2014	2013	2012
As at 31 December	£m	£m	£m	£m	£m
<b>Assets</b>					
Cash and balances at central banks	102,353	49,711	39,695	45,687	86,191
Items in the course of collection from other banks	1,467	1,011	1,210	1,282	1,473
Trading portfolio assets	80,240	77,348	114,717	133,069	146,352
Financial assets designated at fair value	78,608	76,830	38,300	38,968	46,629
Derivative financial instruments	346,626	327,709	439,909	350,300	485,140
Financial investments	63,317	90,267	86,066	91,756	75,109
Loans and advances to banks	43,251	41,349	42,111	39,422	41,799
Loans and advances to customers	392,784	399,217	427,767	434,237	430,601
Reverse repurchase agreements and other similar secured lending	13,454	28,187	131,753	186,779	176,522
Assets included in disposal groups classified held for sale	71,454	7,364			
Other assets	19,572	21,019	36,378	22,128	22,535
<b>Total assets</b>	<b>1,213,126</b>	<b>1,120,012</b>	<b>1,357,906</b>	<b>1,343,628</b>	<b>1,512,351</b>
<b>Liabilities</b>					
Deposits from banks	48,214	47,080	58,390	55,615	77,345
Items in the course of collection due to other banks	636	1,013	1,177	1,359	1,587
Customer accounts	423,178	418,242	427,704	431,998	390,828
Trading portfolio liabilities	34,687	33,967	45,124	53,464	44,794
Financial liabilities designated at fair value	96,031	91,745	56,972	64,796	78,561
Derivative financial instruments	340,487	324,252	439,320	347,118	480,987
Debt securities in issue <sup>a</sup>	75,932	69,150	86,099	86,693	119,525
Subordinated liabilities	23,383	21,467	21,153	21,695	24,018
Repurchase agreements and other similar secured borrowings	19,760	25,035	124,479	196,748	217,178
Liabilities included in disposal groups classified as held for sale	65,292	5,997			
Other liabilities	14,161	16,200	31,530	20,193	17,542
<b>Total liabilities</b>	<b>1,141,761</b>	<b>1,054,148</b>	<b>1,291,948</b>	<b>1,279,679</b>	<b>1,452,365</b>
<b>Equity</b>					
Called up share capital and share premium	21,842	21,586	20,809	19,887	12,477
Other equity instruments	6,449	5,305	4,322	2,063	
Other reserves	6,051	1,898	2,724	249	3,674
Retained earnings	30,531	31,021	31,712	33,186	34,464
<b>Total equity excluding non-controlling interests</b>	<b>64,873</b>	<b>59,810</b>	<b>59,567</b>	<b>55,385</b>	<b>50,615</b>



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Non-controlling interests	<b>6,492</b>	6,054	6,391	8,564	9,371
<b>Total equity</b>	<b>71,365</b>	65,864	65,958	63,949	59,986
<b>Total liabilities and equity</b>	<b>1,213,126</b>	1,120,012	1,357,906	1,343,628	1,512,351
Net asset value per ordinary share	<b>344p</b>	324p	335p	331p	414p
Tangible net asset value per share	<b>290p</b>	275p	285p	283p	349p
Number of ordinary shares of Barclays PLC (in millions)	<b>16,963</b>	16,805	16,498	16,113	12,243
Year-end US Dollar exchange rate	<b>1.23</b>	1.48	1.56	1.65	1.62
Year-end Euro exchange rate	<b>1.17</b>	1.36	1.28	1.20	1.23
Year-end South African Rand exchange rate	<b>16.78</b>	23.14	18.03	17.37	13.74

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[Balance sheet commentary](#)

### **Total assets**

Total assets increased £93bn to £1,213bn.

Cash and balances at central banks and items in the course of collection from other banks increased £53bn to £102bn, as the cash contribution to the Group liquidity pool was increased.

Trading portfolio assets increased £3bn to £80bn primarily driven by client activity and the appreciation of USD against GBP, partially offset by reduction due to firm strategy.

Financial assets designated at fair value increased by £2bn to £79bn. During the period, reverse repurchase agreements designated at fair value have increased by £14bn as new reverse repurchase agreements in certain businesses have been designated at fair value to better align to the way the business manages the portfolio's risk and performance. Additionally, within financial assets designated at fair value, there was a partial offset by decreases in loans and advances, equity securities, debt securities and assets held in respect of linked liabilities.

Derivative financial instrument assets increased £19bn to £347bn, consistent with the increase in derivative financial instrument liabilities. The increase was primarily due to foreign exchange derivatives mainly driven by an increase in trade volumes and appreciation of all major currencies against GBP.

Financial investments decreased £27bn to £63bn due to a decrease in government bonds held in the liquidity pool.

Total loans and advances decreased by £5bn to £436bn driven by a £31bn decrease due to the reclassification of BAGL balances to held for sale and £9bn from the exit of other assets in Non-Core. This was offset by lending growth of £20bn, a net £9bn increase in settlement and cash collateral balances, and an £8bn increase due to the reclassification of ESHLA loans now recognised at amortised cost.

Reverse repurchase agreements and other similar secured lending decreased £15bn to £13bn mainly due to maturity of trades within amortised cost. New trades are designated as fair value through profit and loss to better align to the way the business manages the portfolio's risk and performance.

Non current assets classified as held for disposal increased £64bn to £71bn mainly due to the reclassification of BAGL to held for sale.

### **Total liabilities**

Total liabilities increased £88bn to £1,142bn.

Customer accounts increased £5bn to £423bn mainly due to deposit growth of £38bn and an increase in settlement and cash collateral balances of £5bn offset by reclassification of £29bn of BAGL balances to held for sale and an £8bn

decrease due to Non-Core disposals.

Repurchase agreements and other similar secured borrowing decreased £5bn to £20bn in line with Reverse repurchase agreements and other similar secured lending described above.

Trading portfolio liabilities increased £1bn to £35bn primarily driven by client demand and the appreciation of the USD against GBP.

Financial liabilities designated at fair value increased by £4bn to £96bn. During the period, repurchase agreements designated at fair value have increased by £5bn and debt securities at fair value by £2bn, which was partially offset due by decreases in liabilities to customer under investment contracts and deposits at fair value.

Derivative financial instrument liabilities increased £16bn to £340bn in line with the increase in derivative financial assets.

Debt Securities in issue increased by £7bn to £76bn driven primarily by an increase in liquidity requirements and currency revaluations partially offset by the reclassification of BAGL balances to held for sale.

Subordinated liabilities increased £2bn to £23bn due to issuances of dated subordinated notes and FX movements due to the appreciation of USD and EUR against GBP. These were partially offset by the redemptions of dated and undated subordinated notes, and the reclassification of BAGL balances to held for sale.

Accruals, deferred income and other liabilities decreased £2bn to £9bn mainly driven by a reduction in insurance contract liabilities.

Liabilities included in disposal groups classified as held for sale increased £59bn to £65bn mainly due to the reclassification of BAGL to held for sale.

### **Shareholders equity**

Total shareholders equity increased by £6bn to £71bn.

Share capital and share premium increased by £0.3bn to £21.8bn due to the issuance of shares under employee share schemes and the Barclays PLC scrip dividend programme.

Other equity instruments increased by £1.1bn to £6.4bn due to issuance of equity accounted AT1 securities to investors.

As at 31 December 2016 there was a debit balance of £0.1bn (2015: £0.3bn credit) in the available for sale reserve. The decrease of £0.4bn (2015: £0.2bn decrease) was due to a £2.2bn gain from changes in fair value on Government Bonds, predominantly held in the liquidity pool which was more than offset by £1.7bn of losses from related hedging and £0.9bn of net gains transferred to net profit, mainly due to £0.6bn purchase of Visa Europe by Visa Inc. A tax charge of £28m was recognised in the period relating to these items.

The cash flow hedging reserve increased £0.8bn to £2.1bn driven by £1.6bn increase in the fair value of interest rate swaps held for hedging purposes as forward interest rates decreased, partially offset by decreases of £0.5bn due to gains recycled to the income statement and £0.3bn tax charge.

The currency translation reserve increased by £3.7bn to £3.1bn due to the appreciation of USD and EUR against GBP.

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Net asset value per share increased to 344p (2015: 324p). Net tangible asset value per share increased to 290p (2015: 275p). This increase was mainly attributable to favourable movements in the currency translation reserve partially offset by pension remeasurement.

### **Capital and indebtedness**

The capital and indebtedness tables with respect to Barclays PLC and Barclays Bank PLC that are exhibited to this Annual Report on Form 20-F as Exhibits 99.1 and 99.2, respectively, are incorporated by reference into this Form 20-F.

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## Financial review

## Analysis of results by business

All disclosures in this section are unaudited unless otherwise stated.

## Segmental analysis (audited)

## Analysis of results by business

	Barclays UK £m	Barclays International £m	Head Office £m	Barclays Core £m	Barclays Non-Core £m	Group results £m
<b>For the year ended 31 December 2016</b>						
Total income	7,517	14,995	103	22,615	(1,164)	21,451
Credit impairment charges and other provisions	(896)	(1,355)		(2,251)	(122)	(2,373)
<b>Net operating income</b>	<b>6,621</b>	<b>13,640</b>	<b>103</b>	<b>20,364</b>	<b>(1,286)</b>	<b>19,078</b>
Operating expenses	(3,792)	(9,129)	(135)	(13,056)	(1,509)	(14,565)
UK bank levy	(48)	(284)	(2)	(334)	(76)	(410)
Litigation and conduct	(1,042)	(48)	(27)	(1,117)	(246)	(1,363)
<b>Total operating expenses</b>	<b>(4,882)</b>	<b>(9,461)</b>	<b>(164)</b>	<b>(14,507)</b>	<b>(1,831)</b>	<b>(16,338)</b>
Other net (expenses)/income <sup>a</sup>	(1)	32	128	159	331	490
<b>Profit/(loss) before tax from continuing operations</b>	<b>1,738</b>	<b>4,211</b>	<b>67</b>	<b>6,016</b>	<b>(2,786)</b>	<b>3,230</b>
Total assets (£bn) <sup>b</sup>	209.6	648.5	75.2	933.4	279.7	1,213.1
<b>For the year ended 31 December 2015</b>						
Total income	7,343	13,747	338	21,428	612	22,040
Credit impairment charges and other provisions	(706)	(922)		(1,628)	(134)	(1,762)
<b>Net operating income</b>	<b>6,637</b>	<b>12,825</b>	<b>338</b>	<b>19,800</b>	<b>478</b>	<b>20,278</b>
Operating expenses	(3,464)	(8,029)	(272)	(11,765)	(1,958)	(13,723)
UK bank levy	(77)	(253)	(8)	(338)	(88)	(426)
Litigation and conduct	(2,511)	(1,310)	(66)	(3,887)	(500)	(4,387)
<b>Total operating expenses</b>	<b>(6,052)</b>	<b>(9,592)</b>	<b>(346)</b>	<b>(15,990)</b>	<b>(2,546)</b>	<b>(18,536)</b>
Other net income/(expenses) <sup>a</sup>		45	(106)	(61)	(535)	(596)
<b>Profit/(loss) before tax from continuing operations</b>	<b>585</b>	<b>3,278</b>	<b>(114)</b>	<b>3,749</b>	<b>(2,603)</b>	<b>1,146</b>
Total assets (£bn) <sup>b</sup>	202.5	532.2	59.4	794.2	325.8	1,120.0

**For the year ended 31 December 2014**

Total income	7,436	12,908	276	20,620	1,143	21,763
Credit impairment charges and other provisions	(901)	(679)		(1,580)	(241)	(1,821)
<b>Net operating income</b>	<b>6,535</b>	<b>12,229</b>	<b>276</b>	<b>19,040</b>	<b>902</b>	<b>19,942</b>
Operating expenses	(4,108)	(8,170)	(70)	(12,348)	(2,611)	(14,959)
UK bank levy	(59)	(248)	(9)	(316)	(102)	(418)
Litigation and conduct	(1,108)	(1,333)	(65)	(2,506)	(301)	(2,807)
<b>Total operating expenses</b>	<b>(5,275)</b>	<b>(9,751)</b>	<b>(144)</b>	<b>(15,170)</b>	<b>(3,014)</b>	<b>(18,184)</b>
Other net income/(expenses) <sup>a</sup>		52	316	368	(813)	(445)
<b>Profit/(loss) before tax from continuing operations</b>	<b>1,260</b>	<b>2,530</b>	<b>448</b>	<b>4,238</b>	<b>(2,925)</b>	<b>1,313</b>
Total assets (£bn) <sup>b</sup>	198.0	596.5	61.0	855.5	502.4	1,357.9

**Notable items<sup>c</sup>**

	<b>2016</b>	<b>2015</b>	<b>2014</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>
<b>For the year ended 31 December</b>			
<b>Total income</b>			
Own credit	(35)	430	34
Gain on disposal of Barclays' share of Visa Europe Limited	615		
Revision of ESHLA valuation methodology			(935)
Gains on US Lehman acquisition assets		496	461
<b>Litigation and conduct</b>			
Provisions for UK customer redress	(1,000)	(2,772)	(1,110)
Provisions for ongoing investigations and litigation including Foreign Exchange		(1,237)	(1,250)
<b>Operating expenses</b>			
Gain on valuation of a component of the defined retirement benefit liability		429	
Impairment of goodwill and other assets relating to businesses being disposed		(96)	
<b>Other net expenses</b>			
Losses on sale relating to the Spanish, Portuguese and Italian businesses		(580)	(446)
<b>Total notable items</b>	<b>(420)</b>	<b>(3,330)</b>	<b>(3,246)</b>

## Notes

aOther net (expenses)/income represents the share of post-tax results of associates and joint ventures, profit (or loss) on disposal of subsidiaries, associates and joint ventures, and gains on acquisitions.

bAfrica Banking assets held for sale are reported in Head Office within Core.

cRefer to pages i to x and pages 212 to 215 for further information, reconciliations and calculations of non-IFRS performance measures included throughout this document.

**Income by geographic region (audited)**

	<b>2016</b>	2015	2014
	<b>£m</b>	£m	£m
<b>For the year ended 31 December</b>			
<b>Continuing operations</b>			
UK	<b>11,096</b>	12,160	11,456
Europe	<b>2,087</b>	2,245	2,896
Americas	<b>7,278</b>	6,610	6,008
Africa and Middle East	<b>419</b>	387	627
Asia	<b>571</b>	638	776
<b>Total</b>	<b>21,451</b>	22,040	21,763

**Income from individual countries which represent more than 5% of total income (audited)<sup>a</sup>**

	<b>2016</b>	2015	2014
	<b>£m</b>	£m	£m
<b>For the year ended 31 December</b>			
<b>Continuing operations</b>			
UK	<b>11,096</b>	12,160	11,456
US	<b>6,876</b>	6,228	5,866

## Note

<sup>a</sup>Total income based on counterparty location. Income from each single external customer does not amount to 10% or greater of the Group's total income.

## Financial review

## Analysis of results by business

## Barclays Core

	2016	2015	2014
	£m	£m	£m
<b>Income statement information<sup>a</sup></b>			
Total income	22,615	21,428	20,620
Credit impairment charges and other provisions	(2,251)	(1,628)	(1,580)
<b>Net operating income</b>	<b>20,364</b>	19,800	19,040
Operating expenses	(13,056)	(11,765)	(12,348)
UK bank levy	(334)	(338)	(316)
Litigation and conduct	(1,117)	(3,887)	(2,506)
<b>Total operating expenses</b>	<b>(14,507)</b>	(15,990)	(15,170)
Other net income/(expenses)	159	(61)	368
<b>Profit before tax</b>	<b>6,016</b>	3,749	4,238
Tax charge	(1,975)	(1,479)	(1,590)
<b>Profit after tax</b>	<b>4,041</b>	2,270	2,648
Non-controlling interests	(297)	(266)	(303)
Other equity interests	(394)	(282)	(193)
<b>Attributable profit<sup>b</sup></b>	<b>3,350</b>	1,722	2,152
<b>Balance sheet information</b>			
Total assets <sup>b</sup>	£933.4bn	£794.2bn	£855.5bn
Risk weighted assets <sup>b</sup>	£333.5bn	£304.1bn	£312.8bn
Leverage exposure <sup>b</sup>	£1,024.0bn	£879.1bn	£917.1bn
<b>Key facts</b>			
Number of employees (full time equivalent)	73,000	78,000	75,000
<b>Performance measures</b>			
Return on equity	7.0%	4.0%	5.6%
Average equity	£49.6bn	£44.7bn	£38.9bn
Return on average allocated tangible equity	8.4%	4.8%	7.0%
Average allocated tangible equity <sup>b</sup>	£41.0bn	£36.8bn	£31.4bn



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Cost: income ratio	<b>64%</b>	75%	74%
Loan loss rate (bps)	<b>58</b>	45	43
Basic earnings per share contribution	<b>20.5p</b>	10.7p	13.4p
<b>Notable items</b>			
<b>Total income</b>			
Own credit	<b>(35)</b>	430	34
Gain on disposal of Barclays' share of Visa Europe Limited	<b>615</b>		
Gains on US Lehman acquisition assets		496	461
<b>Litigation and conduct</b>			
Provisions for UK customer redress	<b>(1,000)</b>	(2,649)	(1,035)
Provisions for ongoing investigations and litigation including Foreign Exchange		(1,036)	(1,250)
Operating expenses			
Gain on valuation of a component of the defined retirement benefit liability		429	
<b>Other net expenses</b>			
Losses on sale relating to the Spanish, Portuguese and Italian businesses		(112)	315
<b>Total notable items</b>	<b>(420)</b>	(2,442)	(1,475)

Excluding notable items, the Core return on average allocated tangible equity was 9.4% (2015: 11.2%) and the Core basic earnings per share was 23.1p (2015: 24.9p).

Notes

a Refer to pages i to x and pages 212 to 215 for further information, reconciliations and calculations of non-IFRS performance measures included throughout this document.

b Attributable profit in respect of the Africa Banking discontinued operation is reported at the Group level only. Assets held for sale, risk weighted assets, leverage exposure and allocated tangible equity are reported in Head Office within Core.

## Barclays UK

	2016	2015	2014
	£m	£m	£m
<b>Income statement information<sup>a</sup></b>			
Net interest income	6,048	5,973	5,839
Net fee, commission and other income	1,469	1,370	1,597
<b>Total income</b>	<b>7,517</b>	<b>7,343</b>	<b>7,436</b>
Credit impairment charges and other provisions	(896)	(706)	(901)
<b>Net operating income</b>	<b>6,621</b>	<b>6,637</b>	<b>6,535</b>
Operating expenses	(3,792)	(3,464)	(4,108)
UK bank levy	(48)	(77)	(59)
Litigation and conduct	(1,042)	(2,511)	(1,108)
<b>Total operating expenses</b>	<b>(4,882)</b>	<b>(6,052)</b>	<b>(5,275)</b>
Other net expenses	(1)		
<b>Profit before tax</b>	<b>1,738</b>	<b>585</b>	<b>1,260</b>
Attributable profit/(loss)	828	(47)	852
<b>Balance sheet information</b>			
Loans and advances to customers at amortised cost	£166.4bn	£166.1bn	£165.3bn
Total assets	£209.6bn	£202.5bn	£198.0bn
Customer deposits	£189.0bn	£176.8bn	£168.3bn
Risk weighted assets	£67.5bn	£69.5bn	£69.3bn
<b>Key facts</b>			
Average LTV of mortgage portfolio <sup>b</sup>	48%	49%	52%
Average LTV of new mortgage lending <sup>b</sup>	63%	64%	65%
Number of branches	1,305	1,362	1,488
Barclays mobile banking customers	5.7m	4.7m	3.6m
30 day arrears rate Barclaycard Consumer UK	1.9%	2.3%	2.5%
Number of employees (full time equivalent)	36,000	38,800	38,300
<b>Performance measures</b>			
Return on equity	6.4%	(0.2)%	6.6%
Average equity	£13.4bn	£13.7bn	£13.1bn

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Return on average allocated tangible equity <sup>a</sup>	<b>9.6%</b>	(0.3%)	9.5%
Average allocated tangible equity <sup>a</sup>	<b>£8.9bn</b>	£9.3bn	£9.1bn
Cost: income ratio	<b>65%</b>	82%	71%
Loan loss rate (bps)	<b>52</b>	42	53
Loan: deposit ratio	<b>88%</b>	94%	98%
Net interest margin	<b>3.62%</b>	3.56%	n/a

**Notable Items**

**Total income**

Gain on disposal of Barclays' share of Visa Europe Limited

**151**

**Litigation and conduct**

Provisions for UK customer redress

**(1,000)**

(2,431)

(1,067)

**Operating expenses**

Gain on valuation of a component of the defined retirement benefit liability

296

**Total notable items**

**(849)**

(2,135)

(1,067)

Excluding notable items, the Barclays UK return on average allocated tangible equity was 19.3% (2015: 21.1%).

Notes

a Refer to pages i to x and pages 212 to 215 for further information, reconciliations and calculations of non-IFRS performance measures included throughout this document.

b Average LTV of mortgage portfolio and new mortgage lending calculated on the balance weighted basis.

## Financial review

## Analysis of results by business

	2016	2015	2014
	£m	£m	£m
<b>Analysis of Barclays UK</b>			
<b>Analysis of total income</b>			
Personal Banking	3,891	3,714	3,788
Barclaycard Consumer UK	2,022	2,065	2,078
Wealth, Entrepreneurs & Business Banking	1,604	1,564	1,570
<b>Total income</b>	<b>7,517</b>	<b>7,343</b>	<b>7,436</b>
<b>Analysis of credit impairment charges and other provisions</b>			
Personal Banking	(183)	(194)	(211)
Barclaycard Consumer UK	(683)	(488)	(592)
Wealth, Entrepreneurs & Business Banking	(30)	(24)	(98)
<b>Total credit impairment charges and other provisions</b>	<b>(896)</b>	<b>(706)</b>	<b>(901)</b>
<b>Analysis of loans and advances to customers at amortised cost</b>			
Personal Banking	£135.0bn	£134.0bn	£133.8bn
Barclaycard Consumer UK	£16.5bn	£16.2bn	£15.8bn
Wealth, Entrepreneurs & Business Banking	£14.9bn	£15.9bn	£15.7bn
<b>Total loans and advances to customers at amortised cost</b>	<b>£166.4bn</b>	<b>£166.1bn</b>	<b>£165.3bn</b>
<b>Analysis of customer deposits</b>			
Personal Banking	£139.3bn	£131.0bn	£124.5bn
Barclaycard Consumer UK			
Wealth, Entrepreneurs & Business Banking	£49.7bn	£45.8bn	£43.8bn
<b>Total customer deposits</b>	<b>£189.0bn</b>	<b>£176.8bn</b>	<b>£168.3bn</b>

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## 2016 compared to 2015

Profit before tax increased £1,153m to £1,738m reflecting lower provisions for UK customer redress. Profit before tax excluding notable items<sup>a</sup> decreased 5% to £2,587m driven by an increase in credit impairment charges following the management review of the cards portfolio impairment modelling, partially offset by a reduction in total operating expenses.

Total income, including a gain on disposal of Barclays' share of Visa Europe Limited recognised in Personal Banking and Wealth, Entrepreneurs & Business Banking (WEBB), increased 2% to £7,517m.

Total income excluding notable items was broadly in line at £7,366m (2015: £7,343m). Personal Banking income increased 1% to £3,762m driven by improved deposit margins and balance growth, partially offset by lower mortgage margins. Barclaycard Consumer UK income decreased 2% to £2,022m primarily as a result of the European Interchange Fee Regulation, which came into full effect from December 2015, offset by balance growth and gains from debt sales. WEBB income increased 1% to £1,582m reflecting improved margins and deposit growth, partially offset by reduced transactional fee income. Net interest income increased 1% to £6,048m due to balance growth and deposit pricing initiatives, partially offset by lower mortgage margins.

Net interest margin increased 6bps to 3.62% reflecting higher margins on deposits, partially offset by lower mortgage margins. Net fee, commission and other income decreased 4% to £1,318m due to the impact of the European Interchange Fee Regulation in Barclaycard Consumer UK, which came into full effect from December 2015, and reduced fee and commission income in WEBB.

Credit impairment charges increased 27% to £896m due to a £200m charge in Q316 following the management review of the cards portfolio impairment modelling. The 30 day and 90 day arrears rates on the cards portfolio improved year-on-year to 1.9% (2015: 2.3%) and 0.9% (2015: 1.2%) respectively.

Total operating expenses, including provisions for UK customer redress of £1,000m (2015: £2,431m), reduced 19% to £4,882m. Total operating expenses excluding notable items reduced 1% to £3,882m reflecting savings realised from strategic cost programmes, relating to restructuring of the branch network and technology improvements, offset by structural reform programme implementation costs.

The cost: income ratio was 65% (2015: 82%), RoE was 6.4% (2015: (0.2%)) and RoTE was 9.6% (2015: (0.3%))

The cost: income ratio excluding notable items was 53% (2015: 53%) and RoTE excluding notable items was 19.3% (2015: 21.1%).

Loans and advances to customers were stable at £166.4bn (December 2015: £166.1bn).

Total assets increased £7.1bn to £209.6bn primarily reflecting an increase in the allocated liquidity pool.

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Customer deposits increased 7% to £189.0bn primarily driven by higher balances in Personal Banking and WEBB.

RWAs reduced £2.0bn to £67.5bn primarily driven by changes in the mortgages credit risk model.

### 2015 compared to 2014

Profit before tax decreased 54% to £585m. Profit before tax excluding notable items increased 17% to £2,720m driven by the continued reduction in operating expenses and lower credit impairment charges. The reduction in operating expenses was delivered through strategic cost programmes including the restructure of the branch network and technology improvements to increase automation.

Total income reduced 1% to £7,343m.

Personal Banking income decreased 2% to £3,714m due to a reduction in fee income and mortgage margin pressure, partially offset by improved deposit margins and balance growth.

Barclaycard Consumer UK income decreased 1% to £2,065m primarily due to the impact of the European Interchange Fee Regulation, partially offset by balance growth.

WEBB income remained broadly flat at £1,564m (2014: £1,570m) as balance growth was offset by margin pressure.

Net interest income increased 2% to £5,973m due to balance growth, deposit pricing initiatives and the impact of changes in the overdraft proposition in June 2014, partially offset by mortgage margin pressure. Net fee, commission and other income decreased 14% to £1,370m due to the change in the overdraft proposition and the impact of the European Interchange Fee Regulation.

Credit impairment charges decreased 22% to £706m primarily due to the benign economic environment in the UK resulting in lower default rates and charges across all businesses. The loan loss rate reduced 11bps to 42bps.

Total operating expenses increased 15% to £6,052m, including provisions for UK customer redress of £2,431m (2014: £1,067m). Total operating expenses excluding notable items reduced 7% to £3,917m reflecting savings realised from strategic cost programmes including the restructure of the branch network and technology improvements.

Loans and advances to customers remained broadly flat at £166.1bn (2014: £165.3bn).

Total assets increased 2% to £202.5bn.

Customer deposits increased 5% to £176.8bn driven by higher balances in Personal Banking and WEBB.

RWAs were broadly flat at £69.5bn (2014: £69.3bn).

### Note

aRefer to pages i to x and pages 212 to 215 for further information, reconciliations and calculations of non-IFRS performance measures included throughout this document.



## Financial review

## Analysis of results by business

## Barclays International

	2016	2015	2014
	£m	£m	£m
<b>Income statement information</b>			
Net interest income	4,512	4,324	3,874
Net trading income	4,580	3,782	3,533
Net fee, commission and other income	5,903	5,641	5,501
<b>Total income</b>	<b>14,995</b>	13,747	12,908
Credit impairment charges and other provisions	(1,355)	(922)	(679)
<b>Net operating income</b>	<b>13,640</b>	12,825	12,229
Operating expenses	(9,129)	(8,029)	(8,170)
UK bank levy	(284)	(253)	(248)
Litigation and conduct	(48)	(1,310)	(1,333)
<b>Total operating expenses</b>	<b>(9,461)</b>	(9,592)	(9,751)
Other net income	32	45	52
<b>Profit before tax</b>	<b>4,211</b>	3,278	2,530
Attributable profit	2,412	1,758	926
<b>Balance sheet information</b>			
Loans and advances to banks and customers at amortised cost <sup>b</sup>	£211.3bn	£184.1bn	£193.6bn
Trading portfolio assets	£73.2bn	£61.9bn	£87.3bn
Derivative financial instrument assets	£156.2bn	£111.5bn	£149.6bn
Derivative financial instrument liabilities	£160.6bn	£119.0bn	£157.3bn
Reverse repurchase agreements and other similar secured lending	£13.4bn	£24.7bn	£62.9bn
Financial assets designated at fair value	£62.3bn	£46.8bn	£5.7bn
Total assets	£648.5bn	£532.2bn	£596.5bn
Customer deposits <sup>c</sup>	£216.2bn	£185.6bn	£188.2bn
Risk weighted assets	£212.7bn	£194.8bn	£201.7bn
<b>Key facts</b>			
Number of employees (full time equivalent)	36,900	39,100	36,600



**Performance measures**

Return on equity	8.8%	6.6%	3.5%
Average equity	£28.2bn	£27.1bn	£27.1bn
Return on average allocated tangible equity <sup>a</sup>	9.8%	7.2%	3.8%
Average allocated tangible equity <sup>a</sup>	£25.5bn	£24.9bn	£25.0bn
Cost: income ratio	63%	70%	76%
Loan loss rate (bps)	63	49	35
Loan: deposit ratio	86%	88%	90%
Net interest margin <sup>d</sup>	3.98%	3.80%	n/a

**Notable items****Total income**

Gains on US Lehman acquisition assets		496	461
Gain on disposal of Barclays share of Visa Europe Limited	464		

**Litigation and conduct**

Provisions for UK customer redress		(218)	32
Provisions for ongoing investigations and litigation including Foreign Exchange		(984)	(1,250)

**Operating expenses**

Gain on valuation of a component of the defined retirement benefit liability		133	
<b>Total notable items</b>	<b>464</b>	<b>(573)</b>	<b>(757)</b>

Excluding notable items, the Barclays International return on average allocated tangible equity was 8.0% (2015: 9.5%).

## Notes

aRefer to pages i to x and pages 212 to 215 for further information, reconciliations and calculations of non-IFRS performance measures included throughout this document.

bAs at 31 December 2016 loans and advances included £185.9bn (December 2015: £162.6bn) of loans and advances to customers (including settlement balances of £19.5bn (December 2015: £18.5bn) and cash collateral of £30.1bn (December 2015: £24.8bn)), and £25.4bn (December 2015: £21.5bn) of loans and advances to banks (including settlement balances of £1.7bn (December 2015: £1.6bn) and cash collateral of £6.3bn (December 2015: £5.7bn)). Loans and advances to banks and customers in respect of Consumer, Cards and Payments were £39.7bn (December 2015: £32.1bn).

cAs at 31 December 2016 customer deposits included settlement balances of £16.6bn (December 2015: £16.3bn) and cash collateral of £20.8bn (December 2015: £15.9bn).

dBarclays International margins have been restated to include interest earning lending within the investment banking business.

	2016	2015	2014
	£m	£m	£m
<b>Analysis of Barclays International</b>			
<b>Corporate and Investment Bank</b>			
<b>Income statement information</b>			
<b>Analysis of total income</b>			
Credit	1,185	824	792
Equities	1,790	1,912	1,956
Macro	2,304	2,108	1,950
<b>Markets</b>	<b>5,279</b>	<b>4,844</b>	<b>4,698</b>
Banking fees	2,397	2,087	2,115
Corporate lending	1,195	1,361	1,268
Transactional banking	1,657	1,663	1,594
<b>Banking</b>	<b>5,249</b>	<b>5,111</b>	<b>4,977</b>
Other	5	495	476
<b>Total income</b>	<b>10,533</b>	<b>10,450</b>	<b>10,151</b>
Credit impairment charges and other provisions	(260)	(199)	(87)
Total operating expenses	(7,624)	(7,929)	(8,279)
<b>Profit before tax</b>	<b>2,650</b>	<b>2,322</b>	<b>1,787</b>
<b>Balance sheet information</b>			
Risk weighted assets	£178.6bn	£167.3bn	£175.1bn
<b>Performance measures</b>			
Return on equity	5.8%	5.1%	1.8%
Average equity	£23.2bn	£23.1bn	£23.1bn
Return on average allocated tangible equity <sup>a</sup>	6.1%	5.4%	1.9%
Average allocated tangible equity <sup>a</sup>	£21.9bn	£21.9bn	£22.0bn
	<b>2016</b>	<b>2015</b>	<b>2014</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>
<b>Consumer, Cards and Payments</b>			
<b>Income statement information</b>			
<b>Total income</b>	<b>4,462</b>	<b>3,297</b>	<b>2,757</b>
Credit impairment charges and other provisions	(1,095)	(723)	(592)
Total operating expenses	(1,837)	(1,663)	(1,472)
<b>Profit before tax</b>	<b>1,561</b>	<b>956</b>	<b>743</b>

**Balance sheet information**

Loans and advances to banks and customers at amortised cost	<b>£39.7bn</b>	£32.1bn	£29.7bn
Customer deposits	<b>£50.0bn</b>	£41.8bn	£37.9bn
Risk weighted assets	<b>£34.1bn</b>	£27.5bn	£26.6bn

**Key facts**

30 day arrears rates - Barclaycard US	<b>2.6%</b>	2.2%	2.1%
Total number of Barclaycard business clients	<b>355,000</b>	341,000	340,000
Value of payments processed	<b>£296bn</b>	£271bn	£236bn

**Performance measures**

Return on equity	<b>23.1%</b>	15.3%	13.2%
Average equity	<b>£5.0bn</b>	£4.0bn	£4.0bn
Return on average allocated tangible equity <sup>a</sup>	<b>31.4%</b>	20.2%	17.8%
Average allocated tangible equity <sup>a</sup>	<b>£3.6bn</b>	£3.0bn	£3.0bn
Notes			

<sup>a</sup>Refer to pages i to x and pages 212 to 215 for further information, reconciliations and calculations of non-IFRS performance measured included throughout this document.

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Financial review

Analysis of results by business

**2016 compared to 2015**

Profit before tax increased 28% to £4,211m, including the gain on disposal of Barclays' share of Visa Europe Limited. Profit before tax excluding notable items<sup>a</sup> decreased 3% to £3,747m driven by an 11% increase in total operating expenses, and a 47% increase in impairment, partially offset by a 10% increase in total income.

Total income increased 9% to £14,995m including the gain on disposal of Barclays' share of Visa Europe Limited, as well as the factors outlined below.

Total income excluding notable items increased 10% to £14,531m, including the appreciation of average USD and EUR against GBP, with Consumer, Cards and Payments income increasing 21% to £3,998m and Corporate and Investment Bank (CIB) income increasing 6% to £10,533m.

Markets income increased 9% to £5,279m. Credit income increased 44% to £1,185m driven by strong performance in fixed income flow credit, which benefitted from increased market volatility and client demand. Equities income decreased 6% to £1,790m with lower client activity in Asia and the simplification of the EMEA business, partially offset by improved performance in cash, derivatives and financing in H216. Macro income increased 9% to £2,304m driven by increased activity post the EU referendum decision and US elections.

Banking income increased 3% to £5,249m. Banking fees income increased 15% to £2,397m driven by higher debt underwriting and advisory fees, partially offset by lower equity underwriting fees. Corporate lending reduced 12% to £1,195m due to losses on fair value hedges and the non-recurrence of one-off work-out gains recognised in Q215. Transactional banking was broadly flat at £1,657m (2015: £1,663m) as income from higher deposit balances was offset by margin compression.

Consumer, Cards and Payments income increased 35% to £4,462m driven by growth the gain on disposal of Barclays' share of Visa Europe Limited, across all key businesses and the appreciation of average USD and EUR against GBP.

Credit impairment charges increased 47% to £1,355m including the appreciation of average USD and EUR against GBP. CIB credit impairment charges increased 31% to £260m driven by the impairment of a number of single name exposures. Consumer, Cards and Payments credit impairment charges increased 51% to £1,095m primarily driven by balance growth, a change in portfolio mix and a £120m charge in Q316 following a management review of the cards portfolio impairment modelling.

Total operating expenses decreased 1% to £9,461m, resulting from lower litigation and conduct charges. This decrease was mostly offset by the appreciation of average USD against GBP, an additional charge in Q416 relating to the 2016 compensation awards, higher restructuring costs, £150m of which related to reducing the real estate footprint in Q316, and higher structural reform programme implementation costs including those relating to the incorporation of the US Intermediate Holding Company (IHC) on 1 July 2016.

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The cost: income ratio was 63% (2015: 70%), RoE was 8.8% (2015: 6.6%) and RoTE was 9.8% (2015: 7.2%).

The cost: income ratio excluding notable items was 65% (2015: 64%) and RoTE excluding notable items was 8.0% (2015: 9.5%).

Loans and advances to banks and customers at amortised cost increased £27.2bn to £211.3bn with CIB increasing £19.7bn to £171.7bn due to increased lending and cash collateral and the appreciation of USD and EUR against GBP. Consumer, Cards and Payments increased £7.6bn to £39.7bn driven by appreciation of USD and EUR against GBP and growth in Barclaycard US, including the acquisition of the JetBlue credit card portfolio.

Trading portfolio assets increased £11.3bn to £73.2bn due to an increase in client activity and appreciation of major currencies against GBP.

Derivative financial instrument assets and liabilities increased £44.7bn to £156.2bn and £41.6bn to £160.6bn respectively, due to the appreciation of USD and EUR against GBP and decreases in forward interest rates.

Financial assets designated at fair value increased £15.5bn to £62.3bn and reverse repurchase agreements and other similar lending decreased £11.3bn to £13.4bn. Since 2015, new reverse repurchase agreements in certain businesses have been designated at fair value to better align to the way the business manages the portfolio's risk and performance. On a net basis reverse repos have increased by £4.2bn as a result of increased matched book trading.

Customer deposits increased £30.6bn to £216.2bn, with CIB increasing £22.6bn to £166.3bn primarily driven by increases in deposits cash collateral and the appreciation of USD and EUR against GBP. Consumer, Cards and Payments increased £8.2bn to £50.0bn driven by balance growth in Barclaycard US and Private Banking, and the appreciation of USD and EUR against GBP.

RWAs increased £17.9bn to £212.7bn, due to the appreciation of USD against GBP, and business growth, including the acquisition of the JetBlue credit card portfolio in Consumer, Cards and Payments.

Note

aRefer to pages i to x and pages 212 to 215 for further information, reconciliations and calculations of non-IFRS performance measures included throughout this document.

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## 2015 compared to 2014

Profit before tax increased 30% to £3,278m. Profit before tax excluding notable items<sup>a</sup> increased 17% to £3,851m driven by a 6% increase in income, including the appreciation of average USD and EUR against GBP, with Consumer, Cards and Payments income increasing 20% to £3,297m and CIB income increasing 3% to £9,954m.

Markets income increased 3% to £4,844m. Credit income increased 4% to £824m driven by a higher contribution from credit flow trading and financing businesses. Equities income decreased 2% to £1,912m driven by lower client activity in EMEA equity derivatives, partially offset by higher performance in cash equities. Macro income increased 8% to £2,108m due to higher income in rates and currency products reflecting increased market volatility and client activity.

Banking income increased 3% to £5,111m. Banking fee income reduced 1% to £2,087m driven by lower equity underwriting fees, partially offset by higher financial advisory and debt underwriting fees. Corporate lending increased 7% to £1,361m driven by lower fair value losses on hedges and increased asset balances. Transactional banking income increased 4% to £1,663m primarily due to cash management income driven by higher balances with improved margins.

Consumer, Cards and Payments income increased 20% to £3,297m, driven by business growth in Barclaycard US and the appreciation of average USD against GBP.

Credit impairment charges increased to £922m (2014: £679m). Consumer, Cards and Payments credit impairment charges increased £131m to £723m primarily reflecting asset growth and updates to impairment model methodologies. CIB credit impairment charges increased £112m to £199m driven by a number of single name exposures.

Total operating expenses decreased 2% to £9,592m, resulting from a reduction in restructuring costs. Further cost savings were achieved from strategic cost programmes, including business restructuring, operational streamlining and real estate rationalisation, partially offset by the appreciation of average USD against GBP.

The cost: income ratio was 70% (2014: 76%), RoE was 6.6% (2014: 3.5%) and RoTE was 7.2% (2014: 3.8%)

Cost: income ratio excluding notable items was 64% (2014: 69%) and RoTE excluding notable items was 9.5% (2014: 7.0%).

Loans and advances to banks and customers decreased £9.5bn to £184.1bn as CIB decreased £11.8bn to £152.0bn due to a decrease in settlement and cash collateral balances, partially offset by an increase of £2.4bn in Consumer, Cards and Payments to £32.1bn reflecting growth in Barclaycard US.

Derivative financial instrument assets and liabilities decreased £38.1bn to £111.5bn and £38.3bn to £119.0bn respectively, due to net trade reduction and increases in major interest forward curves.

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Trading portfolio assets decreased £25.4bn to £61.9bn driven by balance sheet deleveraging, resulting in lower securities positions.

Financial assets designated at fair value increased £41.1bn to £46.8bn and reverse repurchase agreements and other similar lending decreased £38.2bn to £24.7bn. Since 2015, new reverse repurchase agreements in certain businesses have been designated at fair value to better align to the way the business manages the portfolio's risk and performance. On a net basis reverse repos have increased by £0.2bn as a result of increased matched book trading.

Customer deposits decreased £2.6bn to £185.6bn, with CIB decreasing £6.6bn to £143.7bn primarily driven by decreases in settlement and cash collateral balances, partially offset by an increase of £3.9bn to £41.8bn in Consumer, Cards and Payments, driven by the deposits funding strategy in Barclaycard US.

RWAs decreased £6.9bn to £194.8bn, within which CIB RWAs decreased £7.8bn to £167.3bn primarily due to a reduction in securities and derivatives, and improved RWA efficiency. This was partially offset by an increase of £0.9bn to £27.5bn in Consumer, Cards and Payments, primarily driven by the growth in the US cards business.

### Note

a Refer to pages i to x and pages 212 to 215 for further information, reconciliations and calculations of non-IFRS performance measures included throughout this document.

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## Financial review

## Analysis of results by business

## Head Office

	2016	2015	2014
	£m	£m	£m
<b>Income statement information</b>			
Net interest income	(183)	(305)	(216)
Net fee, commission and other income	286	643	492
<b>Net operating income</b>	<b>103</b>	338	276
Operating expenses	(135)	(272)	(70)
UK bank levy	(2)	(8)	(9)
Litigation and conduct	(27)	(66)	(65)
<b>Total operating expenses</b>	<b>(164)</b>	(346)	(144)
Other net income/(expenses)	128	(106)	316
<b>Profit/(loss) before tax</b>	<b>67</b>	(114)	448
Attributable profit	110	11	374
<b>Balance sheet information</b>			
Total assets <sup>b</sup>	£75.2bn	£59.4bn	£61.0bn
Risk weighted assets <sup>b</sup>	£53.3bn	£39.7bn	£41.8bn
<b>Key facts</b>			
Number of employees (full time equivalent)	100	100	100
<b>Performance measures<sup>a</sup></b>			
Average allocated tangible equity	£6.5bn	£2.6bn	£(2.7bn)
<b>Notable items</b>			
Total income			
Own credit	(35)	430	34
<b>Litigation and conduct</b>			
Provisions for ongoing investigations and litigation including Foreign Exchange		(52)	
<b>Other net expenses</b>			
Losses on sale relating to the Spanish business		(112)	315
<b>Total notable items</b>	<b>(35)</b>	266	349



## 2016 compared to 2015

Profit before tax was £67m (2015: loss of £114m). Profit before tax excluding notable items<sup>a</sup> improved from a loss of £380m to a profit of £102m.

Net operating income decreased to £103m (2015: £338m) reflecting a reduction in own credit.

Net operating income excluding notable items increased to £138m (2015: loss of £92m) primarily due to changes in net income from treasury operations.

Total operating expenses reduced to £164m (2015: £346m) reflecting reduced litigation and conduct charges and a reduction in structural reform implementation costs now allocated to the businesses.

Other net income increased to £128m (2015: (£106m)) due to the non recurrence of notable items and the recycling of the currency translation reserve on the disposal of the Southern European cards business.

Total assets increased £15.8bn to £75.2bn primarily driven by the appreciation of ZAR against GBP.

RWAs increased £13.6bn to £53.3bn primarily driven by the appreciation of ZAR against GBP and the reallocation of operational risk RWAs from Non-Core associated with exited businesses and assets.

## 2015 compared to 2014

Profit before tax reduced £562m to a loss of £114m. Profit before tax excluding the impact of notable items moved from a profit of £99m in 2014 to a loss of £380m in 2015.

Net operating income increased to £338m (2015: £276m) due to an increase in own credit, partially offset by the factors outlined below.

Net operating income excluding notable items reduced to a loss of £92m (2014: income of £242m) primarily reflecting the net expense from Treasury operations and the non-recurrence of gains in 2014, including net gains from foreign exchange recycling arising from the restructure of Group subsidiaries.

Total operating expenses excluding notable items increased £202m to £346m primarily due to costs relating to the implementation of the structural reform programme.

Total assets decreased £1.6bn to £59.4bn and RWAs decreased £2.1bn to £39.7bn primarily due to the depreciation of ZAR against GBP.

## Notes

<sup>a</sup>Refer to pages i to x and pages 212 to 215 for further information, reconciliations and calculations of non-IFRS performance measures included throughout this document.

<sup>b</sup>Includes Africa Banking assets held for sale of £65.1bn (December 2015: £47.9bn) and risk weighted assets of £42.3bn (December 2015: £31.7bn).



## Barclays Non-Core

	2016	2015	2014
	£m	£m	£m
<b>Income statement information</b>			
Net interest income	160	615	590
Net trading income	(1,703)	(706)	(590)
Net fee, commission and other income	379	703	1,143
<b>Total income</b>	<b>(1,164)</b>	612	1,143
Credit impairment charges and other provisions	(122)	(134)	(241)
<b>Net operating income</b>	<b>(1,286)</b>	478	902
Operating expenses	(1,509)	(1,958)	(2,611)
UK bank levy	(76)	(88)	(102)
Litigation and conduct	(246)	(500)	(301)
<b>Total operating expenses</b>	<b>(1,831)</b>	(2,546)	(3,014)
Other net income/(expenses)	331	(535)	(813)
<b>Loss before tax</b>	<b>(2,786)</b>	(2,603)	(2,925)
Attributable loss	(1,916)	(2,418)	(2,659)
<b>Balance sheet information</b>			
Loans and advances to banks and customers at amortised cost <sup>b</sup>	£51.1bn	£51.8bn	£70.7bn
Derivative financial instrument assets	£188.7bn	£213.7bn	£288.9bn
Derivative financial instrument liabilities	£178.6bn	£202.1bn	£280.6bn
Reverse repurchase agreements and other similar secured lending	£0.1bn	£3.1bn	£50.7bn
Financial assets designated at fair value	£14.5bn	£21.4bn	£25.5bn
Total assets	£279.7bn	£325.8bn	£502.4bn
Customer deposits <sup>c</sup>	£12.5bn	£20.9bn	£30.8bn
Risk weighted assets	£32.1bn	£54.3bn	£89.1bn
Leverage exposure	£101.5bn	£148.7bn	£316.4bn

## Key facts

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Number of employees (full time equivalent)	5,500	9,900	15,000
<b>Performance measures</b>			
Average equity	£7.8bn	£11.2 bn	£16.0bn
Average allocated tangible equity <sup>a</sup>	£7.8bn	£10.9bn	£15.6bn
Loan loss rate (bps)	22	23	39
<b>Notable items</b>			
<b>Total income</b>			
Revision of ESHLA valuation methodology			(935)
<b>Litigation and conduct</b>			
Provisions for UK customer redress		(123)	(75)
Provisions for ongoing investigations and litigation including Foreign Exchange		(201)	
<b>Operating expenses</b>			
Impairment of goodwill and other assets relating to businesses being disposed		(96)	
<b>Other net expenses</b>			
Losses on sale relating to the Spanish business		(468)	(761)
<b>Total notable items</b>		(888)	(1,771)
<b>Analysis of total income</b>			
Businesses	485	1,139	1,503
Securities and loans	(638)	(350)	(318)
Derivatives	(1,011)	(177)	(42)
<b>Total income</b>	<b>(1,164)</b>	612	1,143

Notes

a Refer to pages i to x and pages 212 to 215 for further information, reconciliations and calculations of non-IFRS performance measures included throughout this document.

b As at 31 December 2016 loans and advances included £38.5bn (December 2015: £40.4bn) of loans and advances to customers (including settlement balances of £0.1bn (December 2015: £0.3bn) and cash collateral of £17.3bn (December 2015: £19.0bn)), and £12.6bn (December 2015: £11.4bn) of loans and advances to banks (including settlement balances of £0.1bn (December 2015: £nil) and cash collateral of £12.1bn (December 2015: £10.1bn)).

c As at 31 December 2016 customer deposits included settlement balances of £0.1bn (December 2015: £0.2bn) and cash collateral of £11.9bn (December 2015: £12.3bn).

Financial review

Analysis of results by business

**2016 compared to 2015**

Loss before tax increased to £2,786m (2015: £2,603m). Loss before tax excluding notable items<sup>a</sup> increased to £2,786m (2015: £1,715m) driven by reduced income and increased losses resulting from continued progress on the rundown of Derivatives, Businesses and Securities and loans, partially offset by lower operating expenses and higher other net income primarily from business and country exits.

Total income reduced £1,776m to a net expense of £1,164m.

Businesses income reduced £654m to £485m due to the impact of lower income following the completion of the sale of a number of income generating businesses and fees paid to Head Office relating to the termination of internal hedging and funding positions no longer required.

Securities and loans income decreased £288m to a net expense of £638m primarily driven by the impact of restructuring the ESHLA portfolio, the non-recurrence of a £91m provision release relating to a litigation matter in Q115 and portfolio rundown. Fair value losses on the ESHLA portfolio were £393m (2015: £359m).

Derivatives income reduced £834m to a net expense of £1,011m principally reflecting the costs of running down the portfolio.

Credit impairment charges improved 9% to £122m due to lower impairment charges in European businesses.

Total operating expenses improved 28% to £1,831m reflecting the non recurrence of notable items and the factors outlined below.

Total operating expenses excluding notable items improved 14% to £1,831m reflecting cost savings from ceasing certain investment banking activities in a number of countries and the completion of the sale of a number of businesses, partially offset by a c.£200m increase in restructuring charges, which totalled c.£400m.

Other net income of £331m (2015: net expense £535m) included gains on the sale of Barclays Risk Analytics and Index Solutions, the Asia wealth and investment management business and the Southern European cards business, partially offset by the loss on sale of the French retail, business of £455m.

Loans and advances to banks and customers at amortised cost decreased £0.7bn to £51.1bn due to the sale of the Asia wealth and investment management business, and the rundown and exit of historical investment bank assets, partially offset by the recognition of £8bn of ESHLA loans at amortised cost, following the restructure of LOBO loan terms.

Total assets decreased £46.1bn to £279.7bn due to lower derivative financial instrument assets which decreased £25.0bn to £188.7bn whilst derivative financial instrument liabilities decreased £23.5bn to £178.6bn mainly on continued rundown of the derivative back book.

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Leverage exposure decreased £47bn to £101bn due to reduced potential future exposure on derivatives and trading portfolio assets.

RWAs reduced £22.2bn to £32.1bn despite the appreciation of USD and EUR against GBP, including a £10bn reduction in Derivatives, a £3bn reduction in Securities and loans, a £4bn reduction in Businesses RWAs, and a £4bn reallocation of operational risk RWAs to Head Office associated with business disposals and exits.

### 2015 compared to 2014

Loss before tax decreased to £2,603m (2014: £2,925m). Loss before tax decreased excluding notable items £561m to £1,715m driven by continued progress in the exit of Businesses, Securities and loans, and Derivative assets. RWAs reduced £34.8bn to £54.3bn including a £13bn reduction in Securities and loans, £11bn reduction in Derivatives, and Businesses reductions driven by the completion of the sales of the Spanish and UK Secured Lending businesses.

Total income reduced £531m to £612m due to the non recurrence of notable items, partially offset by the reduction in income outlined below.

Total income excluding notable items reduced £1,466m to £612m. Businesses income reduced 24% to £1,139m driven by the impact of lower income following the completion of the sale of businesses including the Spanish business, Barclays Wealth Americas and UK Secured Lending. Securities and loans income decreased 10% to a net expense of £350m primarily driven by fair value losses of £359m (2014: £156m) on the ESHLA portfolio, and the sale of businesses and portfolio rundown. Derivative income reduced £135m to an expense of £177m due to the active rundown of the portfolios.

Credit impairment charges improved 44% to £134m due to higher recoveries in Europe and the sale of the Spanish business.

Total operating expenses improved 16% to £2,546m reflecting savings from the sales of the Spanish business, Barclays Wealth Americas, and several principal investment businesses.

Loans and advances to banks and customers at amortised cost decreased 27% to £51.8bn due to the reclassification of assets on the announced sale of the Portuguese and Italian businesses to assets held for sale, and the rundown and exit of historical investment bank assets.

Derivative financial instrument assets and liabilities decreased 26% to £213.7bn and 28% to £202.1bn respectively, largely as a result of trade reduction.

Total assets decreased £176.6bn to £325.8bn due to reduced reverse repurchase agreements and other similar secured lending, and lower derivative financial instrument assets.

Leverage exposure decreased £167.7bn to £148.7bn primarily in reverse repurchase agreements, potential future exposure on derivatives and trading portfolio assets.

RWAs reduced £34.8bn to £54.3bn driven by the sale of the Spanish business, the active rundown of legacy structured and credit products, and derivative trade unwinds.

Note

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aRefer to pages i to x and pages 212 to 215 for further information, reconciliations and calculations of non-IFRS performance measures included throughout this document.

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### Discontinued Operation: Africa Banking

On 1 March 2016, Barclays announced its intention to sell down the Group's interest in BAGL. This sell down is intended to be to a level which will permit deconsolidation from an accounting and regulatory perspective, subject to shareholder and regulatory approvals as required. On 5 May 2016 Barclays executed the first tranche of the sell down of the Group's interest in BAGL with the sale of 12.2% of BAGL's issued share capital. Following completion of the sale, Barclays' holding represents 50.1% of BAGL's issued share capital.

The terms of the transitional services arrangements and related separation payments have been agreed with BAGL and submitted to relevant regulators as part of a request for approval for Barclays to sell down to below a 50% holding. These proposed separation terms include contributions totalling £765m, of which £27.5m was paid in 2016, with the remainder to be paid over the period through to completion of any initial sale of Barclays' stake in BAGL to below 50%. The majority of these funds would be used by BAGL to separate from the Barclays group, including termination of the existing Master Services Agreement, making investments in branding, operations and technology, and covering separation related expenses. In addition, Barclays will contribute an amount equivalent to 1.5% of BAGL's market capitalisation to a new Broad-Based Black Economic Empowerment scheme, equating to approximately £130m at

the 31 December 2016 share price and ZAR exchange rate, and expects to incur some additional operating expenses in respect of delivering the separation of the businesses under the transitional services arrangements.

These proposed contributions have been taken into account in assessing whether any impairment of the BAGL disposal group was required in the Group's balance sheet. No impairment of the BAGL disposal group was required at 31 December 2016, as the market value of BAGL less estimated costs to sell at the year-end share price and ZAR exchange rate was £8.4bn which was greater than the carrying asset value of BAGL at that date of £7.3bn, plus the proposed costs of separation referred to above.

The Africa Banking business meets the requirements for presentation as a discontinued operation. As such, these results have been presented as two lines on the face of the Group income statement, representing the profit after tax and non-controlling interest in respect of the discontinued operation. Were the fair value of BAGL, based on its quoted share price, less estimated costs to sell, to fall below the carrying amount of the net assets of BAGL including goodwill on acquisition, a resulting impairment to Barclays' stake in BAGL would also be recognised through these lines.



	2016	2015	2014
	£m	£m	£m
<b>Income statement information</b>			
Net interest income	2,169	1,950	1,994
Net fee, commission and other income	1,577	1,464	1,532
<b>Total income</b>	<b>3,746</b>	3,414	3,526
Credit impairment charges and other provisions	(445)	(353)	(347)
<b>Net operating income</b>	<b>3,301</b>	3,061	3,179
Operating expenses	(2,345)	(2,091)	(2,199)
UK bank levy	(65)	(50)	(44)
Litigation and conduct			(2)
<b>Total operating expenses</b>	<b>(2,410)</b>	(2,141)	(2,245)
Other net income	6	7	10
<b>Profit before tax</b>	<b>897</b>	927	944
Profit after tax	591	626	653
Attributable profit	189	302	334
<b>Balance sheet information</b>			
	£bn	£bn	£bn
Total assets <sup>a</sup>	65.1	47.9	53.7
Risk weighted assets <sup>a</sup>	42.3	31.7	36.7
<b>Key facts</b>			
Period end ZAR/GBP	16.78	23.14	18.03
Average ZAR/GBP	20.04	19.57	17.84
Barclays Africa Group Limited share price (ZAR)	168.69	143.49	182.00
Barclays Africa Group Limited number of shares (m)	848	848	848
Number of employees (full time equivalent)	40,800	41,500	42,300

## Notes

aAfrica Banking assets held for sale and RWAs are reported in Head Office within Core.

bThe average rate is derived from daily spot rates during the year.

## Financial review

## Analysis of results by business

## Margins analysis

Total Barclays UK and Barclays International net interest income increased 5% to £10.3bn due to an increase in average customer assets to £274.6bn (2015: £268.8bn) with growth in Barclays International, while Barclays UK remained stable. Net interest margin increased 11bps to 3.76% primarily due to growth in interest earning lending within the cards portfolio of Barclays International and higher margins on deposits in Barclays UK.

Group net interest income decreased to £10.5bn (2015: £10.6bn) including net structural hedge contributions of £1.5bn (2015: £1.4bn).

Net interest margin by business reflects movements in the Group's internal funding rates which are based on the cost to the Group of alternative funding in wholesale markets. The internal funding rate prices intra-group funding and liquidity to appropriately give credit to businesses with net surplus liquidity and to charge those businesses in need of alternative funding at a rate that is driven by prevailing market rates and includes a term premium.

	Year ended 31 December 2016			Year ended 31 December 2015		
	Net interest income	Average customer assets	Net interest margin	Net interest income	Average customer assets	Net interest margin
	£m	£m	£m	£m	£m	£m
Barclays UK	6,048	167,233	3.62	5,973	167,599	3.56
Barclays International <sup>a</sup>	4,275	107,333	3.98	3,841	101,164	3.80
<b>Total Barclays UK and Barclays International</b>	<b>10,323</b>	<b>274,566</b>	<b>3.76</b>	<b>9,814</b>	<b>268,763</b>	<b>3.65</b>
Other <sup>b</sup>	214			794		
<b>Total net interest income</b>	<b>10,537</b>			<b>10,608</b>		

Notes

a

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Barclays International margins have been restated to include interest earning lending within the investment banking business.

bOther includes Head Office, Barclays Non-Core and non-lending related investment banking balances.

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## Non-IFRS performance measures

Barclays management believes that the non-IFRS performance measures included in this document provide valuable information to the readers of the financial statements as they enable the reader to identify a more consistent basis for comparing the business performance between financial periods, and provide more detail concerning the elements of performance which the managers of these businesses are most directly able to influence or are relevant for an assessment of Barclays PLC and its subsidiaries (the Group). They also reflect an important aspect of the way in which operating targets are defined and performance is monitored by Barclays management.

Non-IFRS and IFRS performance measures may also be presented on an excluding notable items basis. Notable items are considered to be significant items impacting comparability of performance.

Any non-IFRS performance measures in this document are not a substitute for IFRS measures and readers should consider the IFRS measures as well.

## Non-IFRS performance measures glossary

<b>Measure</b>	<b>Definition</b>
<b>Barclays Core</b>	Barclays Core includes Barclays UK, Barclays International and Head Office. A reconciliation of Core statutory results and results excluding notable items is included on pages vi to viii.
<b>Return on average tangible shareholders equity</b>	Statutory profit after tax attributable to ordinary shareholders, including an adjustment for the tax credit in reserves in respect of other equity instruments, as a proportion of average shareholders equity excluding non-controlling interests and other equity instruments adjusted for the deduction of intangible assets and goodwill. The components of the calculation have been included on page 213.
<b>Return on average allocated tangible shareholders equity</b>	Statutory profit after tax attributable to ordinary shareholders, including an adjustment for the tax credit in reserves in respect of other equity instruments, as a proportion of average allocated tangible equity. The components of the calculation have been included on page 213.

<b>Average tangible shareholders equity</b>	Calculated as the average of the monthly period end tangible shareholders equity during the period.
<b>Average allocated tangible shareholders equity</b>	Calculated as the average of the monthly period end allocated tangible shareholders equity during the period.
<b>Cost: income ratio</b>	Total operating expenses divided by total income.
<b>Basic earnings/(loss) per share contribution (Barclays Core and Non-Core)</b>	The calculation is consistent with the IFRS measure and applied to the Barclays Core and Non-Core: statutory profit after tax attributable to ordinary shareholders, including an adjustment for the tax credit in reserves in respect of other equity instruments, divided by the Group basic weighted average number of shares. The components of the calculation have been included on page 215.
<b>Loan loss rate</b>	Is quoted in basis points and represents total loan impairment divided by gross loans and advances to customers and banks held at amortised cost at the balance sheet date.
<b>Loan: deposit ratio</b>	Loans and advances divided by customer accounts calculated for Barclays UK, Barclays International and Non-Core, excluding investment banking businesses. This excludes particular liabilities issued by the retail businesses that have characteristics comparable to retail deposits (for example structured Certificates of Deposit and retail bonds), which are included within debt securities in issue.
<b>Notable items</b>	Notable items are considered to be significant items impacting comparability of performance and are shown for each of the business segments. A reconciliation between statutory results and results excluding notable items is included on pages vi to viii including relevant performance measures.
<b>Net interest margin</b>	

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Net interest income divided by the sum of average customer assets. The components of the calculation have been included on page 211.

**Tangible net asset value per share** Calculated by dividing shareholders equity, excluding non-controlling interests and other equity instruments, less goodwill and intangible assets, by the number of issued ordinary shares. The components of the calculation have been included on page 215.

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## Returns

Return on average allocated tangible equity is calculated as profit for the period attributable to ordinary equity holders of the parent (adjusted for the tax credit recorded in reserves in respect of interest payments on other equity instruments) divided by average allocated tangible equity for the period as appropriate, excluding non-controlling and other equity interests for businesses. Allocated tangible equity has been calculated as 11.5% of CRD IV fully loaded risk weighted assets for each business, adjusted for CRD IV fully loaded capital deductions, excluding goodwill and intangible assets, reflecting the assumptions the Group uses for capital planning purposes. Head Office average tangible equity represents the difference between the Group's average tangible equity and the amounts allocated to businesses.

	Year ended 31.12.16 £m	Year ended 31.12.15 £m	Year ended 31.12.14 £m
<b>Attributable profit</b>			
Barclays UK	828	(47)	852
Barclays International	2,412	1,758	926
Head Office	110	11	374
<b>Barclays Core</b>	<b>3,350</b>	<b>1,722</b>	<b>2,152</b>
Barclays Non-Core	(1,916)	(2,418)	(2,659)
Africa Banking discontinued operation	189	302	334
<b>Barclays Group</b>	<b>1,623</b>	<b>(394)</b>	<b>(174)</b>
<b>Tax credit in respect of interest payments on other equity instruments</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Barclays UK	29	14	17
Barclays International	83	42	23
Head Office	(1)		(1)
<b>Barclays Core</b>	<b>111</b>	<b>56</b>	<b>39</b>
Barclays Non-Core	17	14	14
Africa Banking discontinued operation			
<b>Barclays Group</b>	<b>128</b>	<b>70</b>	<b>54</b>
<b>Profit/(loss) attributable to ordinary equity holders of the parent</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Barclays UK	857	(33)	869
Barclays International	2,495	1,800	949
Head Office	109	11	373
<b>Barclays Core</b>	<b>3,461</b>	<b>1,778</b>	<b>2,191</b>
Barclays Non-Core	(1,899)	(2,405)	(2,645)
Africa Banking discontinued operation	189	302	334
<b>Barclays Group</b>	<b>1,751</b>	<b>(324)</b>	<b>(120)</b>
<b>Average allocated tangible equity<sup>a</sup></b>	<b>£bn</b>	<b>£bn</b>	<b>£bn</b>
Barclays UK	8.9	9.3	9.1

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Barclays International Head Office <sup>b</sup>	<b>25.5</b> <b>6.5</b>	24.9 2.6	25.0 (2.7)
<b>Barclays Core</b>	<b>41.0</b>	36.8	31.4
Barclays Non-Core	<b>7.8</b>	10.9	15.6
<b>Barclays Group</b>	<b>48.7</b>	47.7	47.0
<b>Return on average allocated tangible equity<sup>a</sup></b>	<b>%</b>	<b>%</b>	<b>%</b>
Barclays UK	<b>9.6%</b>	(0.3%)	9.5%
Barclays International	<b>9.8%</b>	7.2%	3.8%
<b>Barclays Core</b>	<b>8.4%</b>	4.8%	7.0%
<b>Barclays Group</b>	<b>3.6%</b>	(0.7%)	(0.3%)
Note			

aRefer to pages i to x and pages 212 to 215 for further information, reconciliations and calculations of non-IFRS performance measures included throughout this document.

bIncludes the Africa Banking discontinued operation.

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## Financial review

## Non-IFRS performance measures

## Returns excluding notable items

	Year ended 31.12.16 £m	Year ended 31.12.15 £m	Year ended 31.12.14 £m
<b>Attributable profit excluding notable items</b>			
Barclays UK	1,685	1,961	1,707
Barclays International	1,961	2,320	1,734
Head Office	135	(176)	114
<b>Barclays Core</b>	<b>3,781</b>	<b>4,105</b>	<b>3,555</b>
Barclays Non-Core	(1,916)	(1,711)	(1,109)
Africa Banking discontinued operation	189	302	334
<b>Barclays Group</b>	<b>2,054</b>	<b>2,696</b>	<b>2,780</b>
<b>Tax credit in respect of interest payments on other equity instruments</b>			
Barclays UK	29	14	17
Barclays International	83	42	23
Head Office	(1)		(1)
<b>Barclays Core</b>	<b>111</b>	<b>56</b>	<b>39</b>
Barclays Non-Core	17	14	14
Africa Banking discontinued operation			
<b>Barclays Group</b>	<b>128</b>	<b>70</b>	<b>54</b>
<b>Profit/(loss) attributable to ordinary equity holders of the parent excluding notable items</b>			
Barclays UK	1,714	1,975	1,724
Barclays International	2,044	2,362	1,757
Head Office	133	(176)	126
<b>Barclays Core</b>	<b>3,891</b>	<b>4,161</b>	<b>3,594</b>
Barclays Non-Core	(1,899)	(1,697)	(1,095)
Africa Banking discontinued operation	189	302	334
<b>Barclays Group</b>	<b>2,182</b>	<b>2,766</b>	<b>2,834</b>
<b>Average allocated tangible equity excluding notable items<sup>a</sup></b>	<b>£bn</b>	<b>£bn</b>	<b>£bn</b>
Barclays UK	8.9	9.3	9.1
Barclays International	25.5	24.9	25.0
Head Office <sup>b,c</sup>	6.8	2.9	(1.9)
<b>Barclays Core</b>	<b>41.3</b>	<b>37.2</b>	<b>32.2</b>
Barclays Non-Core	7.8	10.9	15.6
<b>Barclays Group</b>	<b>49.0</b>	<b>48.1</b>	<b>47.8</b>

**Return on average allocated tangible equity excluding notable items<sup>a</sup>**

	%	%	%
Barclays UK	<b>19.3%</b>	21.1%	18.9%
Barclays International	<b>8.0%</b>	9.5%	7.0%
<b>Barclays Core</b>	<b>9.4%</b>	11.2%	11.2%
<b>Barclays Group</b>	<b>4.4%</b>	5.8%	5.9%

Notes

aRefer to pages i to x and pages 212 to 215 for further information reconciliations and calculations of non-IFRS performance measures included throughout this document.

bIncludes the Africa Banking discontinued operation.

cExcludes the cumulative post-tax impact of own credit.

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## Non-IFRS performance measures

## Earnings per share

	Year ended 31.12.16 £m	Year ended 31.12.15 £m	Year ended 31.12.14 £m
<b>Profit/(loss) attributable to ordinary equity holders of the parent<sup>a</sup></b>			
Barclays Core	3,461	1,778	2,191
Barclays Non-Core	(1,899)	(2,405)	(2,645)
Africa Banking discontinued operation	189	302	334
<b>Barclays Group<sup>b</sup></b>	<b>1,751</b>	<b>(324)</b>	<b>(120)</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>
<b>Basic weighted average number of shares</b>	<b>16,860</b>	16,683	16,329
<b>Basic earnings per ordinary share<sup>a,b</sup></b>	<b>p</b>	<b>p</b>	<b>p</b>
Barclays Core contribution	20.5	10.7	13.4
Barclays Non-Core contribution	(11.3)	(14.4)	(16.2)
<b>Barclays Group</b>	<b>10.4</b>	<b>(1.9)</b>	<b>(0.7)</b>
<b>Profit/(loss) attributable to ordinary equity holders of the parent excluding notable items<sup>a</sup></b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Barclays Core	3,891	4,161	3,594
Barclays Non-Core	(1,899)	(1,697)	(1,095)
Africa Banking discontinued operation	189	302	334
<b>Barclays Group<sup>b</sup></b>	<b>2,182</b>	<b>2,766</b>	<b>2,834</b>
<b>Basic earnings per ordinary share excluding notable items<sup>a,b</sup></b>	<b>p</b>	<b>p</b>	<b>p</b>
Barclays Core contribution	23.1	24.9	22.0
Barclays Non-Core contribution	(11.3)	(10.2)	(6.7)
<b>Barclays Group</b>	<b>12.9</b>	<b>16.6</b>	<b>17.3</b>
<b>Tangible net asset value</b>			
	Year ended 31.12.16 £m	Year ended 31.12.15 £m	Year ended 31.12.14 £m
Total equity excluding non-controlling interests	64,873	59,810	59,567
Other equity instruments	(6,449)	(5,305)	(4,322)
<b>Shareholders equity excluding non-controlling interests attributable to ordinary shareholders of the parent</b>	<b>58,424</b>	<b>54,505</b>	<b>55,245</b>
Goodwill and intangibles <sup>c</sup>	(9,245)	(8,222)	(8,180)
<b>Tangible shareholders equity excluding non-controlling interests attributable to ordinary shareholders of the parent</b>	<b>49,179</b>	<b>46,283</b>	<b>47,023</b>

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	£m	£m	£m
<b>Shares in issue</b>	<b>16,963</b>	16,805	16,498
	<b>p</b>	<b>p</b>	<b>p</b>
<b>Net asset value per share</b>	<b>344</b>	324	335
<b>Tangible net asset value per share</b>	<b>290</b>	275	285

Notes

aProfit for the period attributable to ordinary equity holders of the parent includes the tax credit recorded in reserves in respect of interest payments on other equity instruments. The tax credit of £128m (2015: £70m) is allocated to businesses in proportion to the allocation of the payments in relation to the other equity instruments.

bIncludes the Africa Banking discontinued operation

c2016 includes goodwill and intangibles in relation to Africa Banking of £1,519m.

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Financial statements

**Detailed analysis of our statutory accounts, independently audited and providing in-depth disclosure on the financial performance of the Group.**

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	§ Consolidated income statement	219	n/a
	§ Consolidated statement of comprehensive income	220	n/a
	§ Consolidated balance sheet	221	n/a
	§ Consolidated statement of changes in equity	222	n/a
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Presentation of information

### **Barclays approach to disclosures**

The Group aims to continually enhance its disclosures and their usefulness to the readers of the financial statements in light of developing market practice and areas of focus. Consequently Barclays disclosures go beyond the minimum standards required by accounting standards and other regulatory requirements.

Barclays continue to support the recommendations and guidance made by the Enhanced Disclosure Taskforce (EDTF). The EDTF was formed by the Financial Stability Board with a remit to broaden and deepen the risk disclosures of global banks in a number of areas, including liquidity and funding, credit risk and market risk. Barclays has adopted the recommendations across the Annual Report and Pillar 3 Report.

In line with the Financial Reporting Council's guidance on Clear and Concise reporting, Barclays has focused reporting on material items and sought to reorganise information to aid users' understanding.

It is Barclays' view that best in class disclosures will continue to evolve in light of ongoing market and stakeholder engagement with the banking sector. Barclays is committed to engaging with a published Code for Financial Reporting Disclosure (the Code). The Code sets out five disclosure principles together with supporting guidance which states that UK banks will:

§ provide high quality, meaningful and decision-useful disclosures

§ review and enhance their financial instrument disclosures for key areas of interest

§ assess the applicability and relevance of good practice recommendations to their disclosures acknowledging the importance of such guidance

§ seek to enhance the comparability of financial statement disclosures across the UK banking sector and

§ clearly differentiate in their annual reports between information that is audited and information that is unaudited.

### **British Bankers' Association (BBA) Code for Financial Reporting Disclosure**

Barclays has adopted the BBA Code for Financial Reporting Disclosure and has prepared the 2016 Annual Report and Accounts in compliance with the Code.

### **Statutory Accounts**

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The consolidated accounts of Barclays PLC and its subsidiaries are set out on pages 219 to 223 along with the accounts of Barclays PLC itself on pages 224 to 225. The accounting policies on pages 226 to 230 and the notes commencing on page 231 apply equally to both sets of accounts unless otherwise stated.

The financial statements have been prepared on a going concern basis, in accordance with The Companies Act 2006 as applicable to companies using IFRS.

On 1 March 2016, Barclays announced its intention to sell down the Group's interest in BAGL. This sell down is intended to be to a level which will permit deconsolidation from an accounting and regulatory perspective, subject to shareholder and regulatory approvals as required. As the Africa Banking Business meets requirements for presentation as a discontinued operation, these results have been presented as two lines on the face of the Group income statement, representing the profit after tax and non-controlling interest in respect of the discontinued operation.

### **Capital Requirements Country-by-Country Reporting**

HM Treasury has transposed the requirements set out under CRD IV and issued the Capital Requirements Country-by-Country Reporting Regulations 2013. The legislation requires Barclays PLC to publish additional information in respect of the year ended 31 December 2016. This information is available on the Barclays website: [barclays.com/citizenship/reports-and-publications/country-snapshot.html](http://barclays.com/citizenship/reports-and-publications/country-snapshot.html)

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Independent Registered Public Accounting Firm's report

## Report of Independent Registered Public Accounting Firm

### To The Board of Directors and Shareholders of Barclays PLC

In our opinion, the accompanying consolidated balance sheets and the related consolidated income statements, consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated cash flow statements present fairly, in all material respects, the financial position of Barclays PLC and its subsidiaries at 31 December 2016 and 31 December 2015, and the results of their operations and their cash flows for each of the three years in the period ended 31 December 2016 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of 31 December 2016, based on criteria established in *Internal Control - Integrated Framework 2013* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in management's report on internal control over financial reporting included in the Directors' Report appearing on page 40 of the Annual Report to Shareholders. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (US). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

**/s/ PricewaterhouseCoopers LLP**

London, United Kingdom

22 February 2017

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## Consolidated financial statements

## Consolidated income statement

		2016	2015	2014
	Note	£m	£m	£m
<b>For the year ended 31 December</b>				
<b>Continuing operations</b>				
Interest income	3	14,541	13,953	14,194
Interest expense	3	(4,004)	(3,345)	(4,108)
<b>Net interest income</b>		<b>10,537</b>	<b>10,608</b>	<b>10,086</b>
Fee and commission income	4	8,570	8,470	8,622
Fee and commission expense	4	(1,802)	(1,611)	(1,500)
<b>Net fee and commission income</b>		<b>6,768</b>	<b>6,859</b>	<b>7,122</b>
Net trading income	5	2,768	3,426	3,086
Net investment income	6	1,324	1,097	1,309
Other income		54	50	160
<b>Total income</b>		<b>21,451</b>	<b>22,040</b>	<b>21,763</b>
Credit impairment charges and other provisions	7	(2,373)	(1,762)	(1,821)
<b>Net operating income</b>		<b>19,078</b>	<b>20,278</b>	<b>19,942</b>
Staff costs	8	(9,423)	(8,853)	(9,860)
Infrastructure costs	8	(2,998)	(2,691)	(2,895)
Administration and general expenses	8	(2,917)	(2,983)	(3,069)
Provision for UK customer redress		(1,000)	(2,772)	(1,110)
Provision for ongoing investigations and litigation relating to Foreign Exchange			(1,237)	(1,250)
<b>Operating expenses</b>	8	<b>(16,338)</b>	<b>(18,536)</b>	<b>(18,184)</b>
Share of post-tax results of associates and joint ventures		70	41	28
Profit/(loss) on disposal of subsidiaries, associates and joint ventures	9	420	(637)	(473)
<b>Profit before tax</b>		<b>3,230</b>	<b>1,146</b>	<b>1,313</b>
Taxation	10	(993)	(1,149)	(1,121)
Profit/(loss) after tax in respect of continuing operations		2,237	(3)	192
Profit after tax in respect of discontinued operation		591	626	653
<b>Profit after tax</b>		<b>2,828</b>	<b>623</b>	<b>845</b>
<b>Attributable to:</b>				
Equity holders of the parent		1,623	(394)	(174)
Other equity holders <sup>a</sup>		457	345	250
Total equity holders of the parent		2,080	(49)	76
Non-controlling interests in respect of continuing operations	33	346	348	449
Non-controlling interests in respect of discontinued operation	33	402	324	320
<b>Profit after tax</b>		<b>2,828</b>	<b>623</b>	<b>845</b>
<b>Earnings per share</b>				

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Basic earnings/(loss) per ordinary share	11	<b>10.4</b>	(1.9)	(0.7)
Basic earnings/(loss) per ordinary share in respect of continuing operations		<b>9.3</b>	(3.7)	(2.7)
Basic earnings per ordinary share in respect of discontinued operation		<b>1.1</b>	1.8	2.0
Diluted earnings/(loss) per share	11	<b>10.3</b>	(1.9)	(0.7)

Note

aThe profit after tax attributable to other equity holders of £457m (2015: £345m) is offset by a tax credit recorded in reserves of £128m (2015: £70m). The net amount of £329m (2015: £275m), along with NCI, is deducted from profit after tax in order to calculate earnings per share.

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## Consolidated financial statements

## Consolidated statement of comprehensive income

	2016 £m	2015 £m	2014 £m
<b>For the year ended 31 December</b>			
<b>Profit after tax</b>	<b>2,828</b>	623	845
Profit/(loss) after tax in respect of continuing operations	2,237	(3)	192
Profit after tax in respect of discontinued operation	591	626	653
<b>Other comprehensive income that may be recycled to profit or loss from continuing operations:</b>			
<b>Currency translation reserve</b>			
Currency translation differences	3,024	748	774
<b>Available for sale reserve</b>			
Net gains from changes in fair value	2,147	64	5,339
Net losses transferred to net profit on disposal	(912)	(374)	(619)
Net losses/(gains) transferred to net profit due to impairment	20	17	(31)
Net (gains) transferred to net profit due to fair value hedging	(1,677)	(148)	(4,074)
Changes in insurance liabilities	53	86	(94)
Tax	(18)	126	(103)
<b>Cash flow hedging reserve</b>			
Net gains/(losses) from changes in fair value	1,455	(312)	2,650
Net losses transferred to net profit	(365)	(238)	(713)
Tax	(292)	57	(384)
<b>Other</b>	<b>13</b>	20	(42)
<b>Other comprehensive income that may be recycled to profit or loss</b>	<b>3,448</b>	46	2,703
<b>Other comprehensive (loss)/income not recycled to profit or loss:</b>			
Retirement benefit remeasurements	(1,309)	1,176	268
Tax	329	(260)	(63)
<b>Other comprehensive income for the period</b>	<b>2,468</b>	962	2,908
<b>Total comprehensive income for the year, net of tax from continuing operations</b>	<b>4,705</b>	959	3,100
<b>Total comprehensive income/(loss) for the year, net of tax from discontinued operation</b>	<b>2,111</b>	(722)	346
<b>Total comprehensive income for the year</b>	<b>6,816</b>	237	3,446
<b>Attributable to:</b>			
Equity holders of the parent	5,233	45	2,755
Non-controlling interests	1,583	192	691
<b>Total comprehensive income for the year</b>	<b>6,816</b>	237	3,446



## Consolidated financial statements

## Consolidated balance sheet

		2016	2015	2014
As at 31 December	Notes	£m	£m	£m
<b>Assets</b>				
Cash and balances at central banks		102,353	49,711	39,695
Items in the course of collection from other banks		1,467	1,011	1,210
Trading portfolio assets	13	80,240	77,348	114,717
Financial assets designated at fair value	14	78,608	76,830	38,300
Derivative financial instruments	15	346,626	327,709	439,909
Financial investments	16	63,317	90,267	86,066
Loans and advances to banks	20	43,251	41,349	42,111
Loans and advances to customers	20	392,784	399,217	427,767
Reverse repurchase agreements and other similar secured lending	22	13,454	28,187	131,753
Prepayments, accrued income and other assets		2,893	3,010	3,607
Investments in associates and joint ventures	38	684	573	711
Property, plant and equipment	23	2,825	3,468	3,786
Goodwill and intangible assets	24	7,726	8,222	8,180
Current tax assets	10	561	415	334
Deferred tax assets	10	4,869	4,495	4,130
Retirement benefit assets	35	14	836	56
Assets included in disposal groups classified as held for sale	44	71,454	7,364	15,574
<b>Total assets</b>		<b>1,213,126</b>	<b>1,120,012</b>	<b>1,357,906</b>
<b>Liabilities</b>				
Deposits from banks		48,214	47,080	58,390
Items in the course of collection due to other banks		636	1,013	1,177
Customer accounts		423,178	418,242	427,704
Repurchase agreements and other similar secured borrowing	22	19,760	25,035	124,479
Trading portfolio liabilities	13	34,687	33,967	45,124
Financial liabilities designated at fair value	17	96,031	91,745	56,972
Derivative financial instruments	15	340,487	324,252	439,320
Debt securities in issue		75,932	69,150	86,099
Subordinated liabilities	30	23,383	21,467	21,153
Accruals, deferred income and other liabilities	26	8,871	10,610	11,423
Provisions	27	4,134	4,142	4,135
Current tax liabilities	10	737	903	1,021
Deferred tax liabilities	10	29	122	262
Retirement benefit liabilities	35	390	423	1,574
Liabilities included in disposal groups classified as held for sale	44	65,292	5,997	13,115
<b>Total liabilities</b>		<b>1,141,761</b>	<b>1,054,148</b>	<b>1,291,948</b>
<b>Total equity</b>				
Called up share capital and share premium	31	21,842	21,586	20,809

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Other equity instruments	31	6,449	5,305	4,322
Other reserves	32	6,051	1,898	2,724
Retained earnings		30,531	31,021	31,712
Total equity excluding non-controlling interests		64,873	59,810	59,567
Non-controlling interests	33	6,492	6,054	6,391
<b>Total equity</b>		<b>71,365</b>	65,864	65,958
<b>Total liabilities and equity</b>		<b>1,213,126</b>	1,120,012	1,357,906

The Board of Directors approved the financial statements on pages 219 to 316 on 22 February 2017.

**John McFarlane**

Group Chairman

**James E Staley**

Group Chief Executive

**Tushar Morzaria**

Group Finance Director

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## Consolidated financial statements

## Consolidated statement of changes in equity

	Called up share capital and share premium £m	Other equity instruments £m	Available for sale reserve £m	Cash flow hedging reserve £m	Currency translation reserve £m	Other reserves and treasury shares £m	Retained earnings £m	Total equity excluding non- controlling interests £m
<b>Balance as at 1 January 2016</b>	<b>21,586</b>	<b>5,305</b>	<b>317</b>	<b>1,261</b>	<b>(623)</b>	<b>943</b>	<b>31,021</b>	<b>59,810</b>
Profit after tax		457					1,434	1,891
Currency translation movements					3,022			3,022
Available for sale investments			(387)					(387)
Cash flow hedges				798				798
Pension remeasurement							(980)	(980)
Other							12	12
<b>Total comprehensive income net of tax from continuing operations</b>		<b>457</b>	<b>(387)</b>	<b>798</b>	<b>3,022</b>		<b>466</b>	<b>4,356</b>
<b>Total comprehensive income net of tax from discontinued operation</b>			<b>(4)</b>	<b>46</b>	<b>652</b>		<b>183</b>	<b>877</b>
<b>Total comprehensive (loss)/income for the year</b>		<b>457</b>	<b>(391)</b>	<b>844</b>	<b>3,674</b>		<b>649</b>	<b>5,233</b>
Issue of new ordinary shares	68							68

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Issue of shares under employee share schemes	188						668	856
Issue and exchange of other equity instruments		1,132						1,132
Other equity instruments coupons paid		(457)					128	(329)
Redemption of preference shares							(417)	(417)
Increase in treasury shares						(140)		(140)
Vesting of shares under employee share schemes						166	(415)	(249)
Dividends paid							(757)	(757)
Net equity impact of partial BAGL disposal							(349)	(349)
Other reserve movements		12					3	15
<b>Balance as at 31 December 2016</b>	<b>21,842</b>	<b>6,449</b>	<b>(74)</b>	<b>2,105</b>	<b>3,051</b>	<b>969</b>	<b>30,531</b>	<b>64,873</b>
<b>Balance as at 1 January 2015</b>	20,809	4,322	562	1,817	(582)	927	31,712	59,567
Profit after tax		345					(696)	(351)
Currency translation movements					747			747
Available for sale investments			(229)					(229)
Cash flow hedges				(493)				(493)
Pension remeasurement							916	916
Other							20	20
Total comprehensive income net of tax from continuing operations		345	(229)	(493)	747		240	610
Total comprehensive			(16)	(63)	(788)		302	(565)

income net of tax from discontinued operation								
<b>Total comprehensive (loss)/income for the year</b>		345	(245)	(556)	(41)		542	45
Issue of new ordinary shares	137							137
Issue of shares under employee share schemes	640						571	1,211
Issue and exchange of other equity instruments		995						995
Other equity instruments coupons paid		(345)					70	(275)
Redemption of preference shares								
Increase in treasury shares						(602)		(602)
Vesting of shares under employee share schemes						618	(755)	(137)
Dividends paid							(1,081)	(1,081)
Other reserve movements		(12)					(38)	(50)
<b>Balance as at 31 December 2015</b>	21,586	5,305	317	1,261	(623)	943	31,021	59,810
<b>Balance as at 1 January 2014</b>	19,887	2,063	148	273	(1,142)	970	33,186	55,385
Profit after tax		250					(507)	(257)
Currency translation movements					773			773
Available for sale investments			418					418
Cash flow hedges				1,554				1,554
Pension remeasurement							205	205
Other		250	418	1,554	773		(43)	(43)
							(345)	2,650

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Total comprehensive income net of tax from continuing operations								
Total comprehensive income net of tax from discontinued operation			(4)	(10)	(213)		333	106
<b>Total comprehensive (loss)/income for the year</b>		250	414	1,544	560		(12)	2,756
Issue of new ordinary shares	150							150
Issue of shares under employee share schemes	772						693	1,465
Issue and exchange of other equity instruments		2,263					(155)	2,108
Other equity instruments coupons paid		(250)					54	(196)
Redemption of preference shares							(104)	(104)
Increase in treasury shares						(909)		(909)
Vesting of shares under employee share schemes						866	(866)	
Dividends paid							(1,057)	(1,057)
Other reserve movements		(4)					(27)	(31)
<b>Balance as at 31 December 2014</b>	20,809	4,322	562	1,817	(582)	927	31,712	59,567

## Consolidated financial statements

## Consolidated cash flow statement

	2016	2015	2014
	£m	£m	£m
<b>For the year ended 31 December</b>			
<b>Continuing operations</b>			
<b>Reconciliation of profit before tax to net cash flows from operating activities:</b>			
<b>Profit before tax</b>	<b>3,230</b>	1,146	1,312
<b>Adjustment for non-cash items:</b>			
Allowance for impairment	2,357	1,752	1,816
Depreciation, amortisation and impairment of property, plant, equipment and intangibles	1,261	1,215	1,108
Other provisions, including pensions	1,964	4,241	3,487
Net profit on disposal of investments and property, plant and equipment	(912)	(374)	(619)
Other non-cash movements including exchange rate movements	(20,025)	226	(595)
<b>Changes in operating assets and liabilities</b>			
Net (increase)/decrease in loans and advances to banks and customers	(25,385)	22,641	4,079
Net decrease in reverse repurchase agreements and other similar lending	14,733	103,471	54,380
Net increase/(decrease) in deposits and debt securities in issue	49,064	(33,120)	(2,319)
Net (decrease) in repurchase agreements and other similar borrowing	(4,852)	(99,602)	(72,107)
Net (increase)/decrease in derivative financial instruments	(2,318)	(3,315)	2,961
Net (increase)/decrease in trading assets	(5,577)	37,091	18,651
Net increase/(decrease) in trading liabilities	880	(10,877)	(8,565)
Net decrease/(increase) in financial investments	807	(3,064)	(5,882)
Net (increase) in other assets	(2,629)	(2,661)	(14,642)
Net (increase)/decrease in other liabilities	(532)	(1,766)	8,092
Corporate income tax paid	(780)	(1,670)	(1,552)
<b>Net cash from operating activities</b>	<b>11,286</b>	15,334	(10,395)
Purchase of available for sale investments	(65,086)	(120,061)	(109,296)
Proceeds from sale or redemption of available for sale investments	102,515	114,529	119,129
Purchase of property, plant and equipment and intangibles	(1,707)	(1,928)	(691)
Proceeds from sale of property, plant and equipment and intangibles	358	393	335
Proceeds from part disposal of investment in BAGL	595		
Other cash flows associated with investing activities	32	516	(48)
<b>Net cash from investing activities</b>	<b>36,707</b>	(6,551)	8,429
Dividends paid	(1,304)	(1,496)	(1,688)
Issuance of subordinated debt	1,457	879	848
Redemption of subordinated debt	(1,143)	(556)	(869)
Net issue of shares and other equity instruments	1,400	1,278	559
Repurchase of shares and other equity instruments	(1,587)		(104)
Net purchase of treasury shares	(140)	(679)	(909)

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Net redemption of shares issued to non-controlling interests			(746)
<b>Net cash from financing activities</b>	<b>(1,317)</b>	(574)	(2,805)
<b>Net cash from discontinued operations</b>	<b>405</b>	(1,821)	1,809
<b>Effect of exchange rates on cash and cash equivalents</b>	<b>10,473</b>	1,689	(313)
<b>Net increase/(decrease) in cash and cash equivalents</b>	<b>57,554</b>	8,077	(3,275)
Cash and cash equivalents at beginning of year	<b>86,556</b>	78,479	81,754
<b>Cash and cash equivalents at end of year</b>	<b>144,110</b>	86,556	78,479
<b>Cash and cash equivalents comprise:</b>			
Cash and balances at central banks	<b>102,353</b>	49,711	39,695
Loans and advances to banks with original maturity less than three months	<b>38,252</b>	35,876	36,282
Available for sale treasury and other eligible bills with original maturity less than three months	<b>356</b>	816	2,322
Trading portfolio assets with original maturity less than three months		153	180
Cash and cash equivalents held for sale	<b>3,149</b>		
	<b>144,110</b>	86,556	78,479

Interest received was £22,099m (2015: £20,376m; 2014: £21,372m) and interest paid was £8,850m (2015: £7,534m; 2014: £8,566m).

The Group is required to maintain balances with central banks and other regulatory authorities and these amounted to £4,254m (2015: £4,369m; 2014: £4,448m).

For the purposes of the cash flow statement, cash comprises cash on hand and demand deposits and cash equivalents comprise highly liquid investments that are convertible into cash with an insignificant risk of changes in value with original maturities of three months or less. Repurchase and reverse repurchase agreements are not considered to be part of cash equivalents.

## Financial statements of Barclays PLC

## Parent company accounts

## Income statement

	Notes	2016 £m	2015 £m	2014 £m
<b>For the year ended 31 December</b>				
Dividends received from subsidiary		621	876	821
Net interest income/(expense)		5	(7)	(6)
Other income	45	334	227	275
Operating expenses		(26)	(6)	(6)
<b>Profit before tax</b>		<b>934</b>	1,090	1,084
Tax		(60)	(43)	(57)
<b>Profit after tax</b>		<b>874</b>	1,047	1,027
Attributable to				
<b>Ordinary equity holders</b>		<b>417</b>	702	777
<b>Other equity holders</b>		<b>457</b>	345	250

Profit after tax and total comprehensive income for the year was £874m (2015: £1,047m). There were no other components of total comprehensive income other than the profit after tax.

The Company has seven members of staff (2015: nil).

## Balance sheet

	Notes	2016 £m	2015 £m
<b>As at 31 December</b>			
<b>Assets</b>			
Investment in subsidiaries	45	36,553	35,303
Loans and advances to subsidiaries	45	19,421	7,990
Financial investments	45	1,218	
Derivative financial instruments	45	268	210
Other assets		105	133
<b>Total assets</b>		<b>57,565</b>	43,636
<b>Liabilities</b>			
Deposits from banks		547	494
Subordinated liabilities	45	3,789	1,766
Debt securities in issue	45	16,893	6,224
Other liabilities		14	
<b>Total liabilities</b>		<b>21,243</b>	8,484
<b>Equity</b>			
Called up share capital	31	4,241	4,201

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Share premium account	31	<b>17,601</b>	17,385
Other equity instruments	31	<b>6,453</b>	5,321
Capital redemption reserve		<b>420</b>	394
Retained earnings		<b>7,607</b>	7,851
<b>Total equity</b>		<b>36,322</b>	35,152
<b>Total liabilities and equity</b>		<b>57,565</b>	43,636

The financial statements on pages 224 to 225 and the accompanying note on page 307 were approved by the Board of Directors on 22 February 2017 and signed on its behalf by:

**John McFarlane**

Group Chairman

**James E Staley**

Group Chief Executive

**Tushar Morzaria**

Group Finance Director

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## Statement of changes in equity

	Notes	Called up share capital and share premium £m	Other equity instruments £m	Capital redemption reserve £m	Available for sale reserve £m	Retained earnings £m	Total equity £m
<b>Balance as at 1 January 2016</b>		21,586	5,321	394		7,851	35,152
Profit after tax and total comprehensive income			457			417	874
Issue of new ordinary shares		68					68
Issue of shares under employee share schemes		188					188
Issue of other equity instruments			1,132				1,132
Dividends	12					(757)	(757)
Other equity instruments coupons paid			(457)			91	(366)
Other					26	5	31
<b>Balance as at 31 December 2016</b>		<b>21,842</b>	<b>6,453</b>	<b>394</b>	<b>26</b>	<b>7,607</b>	<b>36,322</b>
<b>Balance as at 1 January 2015</b>		20,809	4,326	394		8,163	33,692
Profit after tax and total comprehensive income			345			702	1,047
Issue of new ordinary shares		137					137
Issue of shares under employee share schemes		640					640
Issue of other equity instruments			995				995

Dividends	12				(1,081)	(1,081)
Other equity instruments coupons paid			(345)		70	(275)
Other					(3)	(3)
<b>Balance as at 31 December 2015</b>		21,586	5,321	394	7,851	35,152
<b>Balance as at 1 January 2014</b>		19,887	2,063	394	8,398	30,742
Profit after tax and total comprehensive income			250		777	1,027
Issue of new ordinary shares		150				150
Issue of shares under employee share schemes		772				772
Issue of other equity instruments			2,263			2,263
Dividends	12				(1,057)	(1,057)
Other equity instruments coupons paid			(250)		54	(196)
Other					(9)	(9)
<b>Balance as at 31 December 2014</b>		20,809	4,326	394	8,163	33,692

### Cash flow statement

		2016	2015	2014
		£m	£m	£m
<b>For the year ended 31 December</b>				
<b>Reconciliation of profit before tax to net cash flows from operating activities:</b>				
Profit before tax		934	1,090	1,081
Changes in operating assets and liabilities		37	100	73
Other non-cash movements		62	52	(4)
Corporate income tax (paid)/received			(27)	3
<b>Net cash generated from operating activities</b>		<b>1,033</b>	1,215	1,813
Capital contribution to subsidiary		(1,250)	(1,560)	(3,687)
<b>Net cash used in investing activities</b>		<b>(1,250)</b>	(1,560)	(3,687)

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Issue of shares and other equity instruments	1,388	1,771	3,18
Net (increase) in loans and advances to bank subsidiaries of the Parent	(10,942)	(4,973)	(2,86
Net increase in deposits and debt securities in issue	9,314	4,052	2,05
Proceeds of borrowings and issuance of subordinated debt	1,671	921	80
Dividends paid	(757)	(1,081)	(1,05
Coupons paid on AT1 instruments	(457)	(345)	(25
<b>Net cash generated from financing activities</b>	<b>217</b>	<b>345</b>	<b>1,87</b>
<b>Net increase/(decrease) in cash and cash equivalents</b>			
Cash and cash equivalents at beginning of year			
<b>Cash and cash equivalents at end of year</b>			
<b>Net cash generated from operating activities includes:</b>			
Dividends received	621	876	82
Interest received/(paid)	5	(7)	(

The Parent Company's principal activity is to hold the investment in its wholly-owned subsidiaries, Barclays Bank PLC and Group Service Company. Dividends received are treated as operating income.

The Company was not exposed at 31 December 2016 or 2015 to significant risks arising from the financial instruments it holds, which comprised loans and advances and other assets which had no market risk or material credit risk.

Notes to the financial statements

For the year ended 31 December 2016

This section describes Barclays' significant policies and critical accounting estimates that relate to the financial statements and notes as a whole. If an accounting policy or a critical accounting estimate relates to a particular note, the accounting policy and/or critical accounting estimate is contained with the relevant note.

## 1 Significant accounting policies

### 1. Reporting entity

These financial statements are prepared for Barclays PLC and its subsidiaries (the Barclays PLC Group or the Group) under Section 399 of the Companies Act 2006. The Group is a major global financial services provider engaged in retail banking, credit cards, wholesale banking, investment banking, wealth management and investment management services. In addition, individual financial statements have been presented for the holding company.

### 2. Compliance with International Financial Reporting Standards

The consolidated financial statements of the Group, and the individual financial statements of Barclays PLC, have been prepared in accordance with International Financial Reporting Standards (IFRS) and interpretations (IFRICs) issued by the Interpretations Committee, as published by the International Accounting Standards Board (IASB). They are also in accordance with IFRS and IFRIC interpretations endorsed by the European Union. The principal accounting policies applied in the preparation of the consolidated and individual financial statements are set out below, and in the relevant notes to the financial statements. These policies have been consistently applied.

### 3. Basis of preparation

The consolidated and individual financial statements have been prepared under the historical cost convention modified to include the fair valuation of investment property, and particular financial instruments, to the extent required or permitted under IFRS as set out in the relevant accounting policies. They are stated in millions of pounds Sterling (£m), the functional currency of Barclays PLC.

#### 4. Accounting policies

Barclays prepares financial statements in accordance with IFRS. The Group's significant accounting policies relating to specific financial statement items, together with a description of the accounting estimates and judgements that were critical to preparing them, are set out under the relevant notes. Accounting policies that affect the financial statements as a whole are set out below.

##### *(i) Consolidation*

Barclays applies IFRS 10 *Consolidated Financial Statements*.

The consolidated financial statements combine the financial statements of Barclays PLC and all its subsidiaries. Subsidiaries are entities over which Barclays PLC has control. The Group has control over another entity when the Group has all of the following:

- 1) power over the relevant activities of the investee, for example through voting or other rights;
- 2) exposure to, or rights to, variable returns from its involvement with the investee; and
- 3) the ability to affect those returns through its power over the investee.

The assessment of control is based on the consideration of all facts and circumstances. The Group reassesses whether it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control.

Intra-group transactions and balances are eliminated on consolidation and consistent accounting policies are used throughout the Group for the purposes of the consolidation.

Changes in ownership interests in subsidiaries are accounted for as equity transactions if they occur after control has already been obtained and they do not result in loss of control.

As the consolidated financial statements include partnerships where the Group member is a partner, advantage has been taken of the exemption under Regulation 7 of the Partnership (Accounts) Regulations 2008 with regard to

preparing and filing of individual partnership financial statements.

Details of the principal subsidiaries are given in Note 36, and a complete list of all subsidiaries is presented in Note 46.

*(ii) Foreign currency translation*

The Group applies IAS 21 *The Effects of Changes in Foreign Exchange Rates*. Transactions and balances in foreign currencies are translated into Sterling at the rate ruling on the date of the transaction. Foreign currency balances are translated into Sterling at the period end exchange rates. Exchange gains and losses on such balances are taken to the income statement.

The Group's foreign operations (including subsidiaries, joint ventures, associates and branches) based mainly outside the UK may have different functional currencies. The functional currency of an operation is the currency of the main economy to which it is exposed.

Prior to consolidation (or equity accounting) the assets and liabilities of non-Sterling operations are translated at the closing rate and items of income, expense and other comprehensive income are translated into Sterling at the rate on the date of the transactions. Exchange differences arising on the translation of foreign operations are included in currency translation reserves within equity. These are transferred to the income statement when the Group loses control, joint control or significant influence over the foreign operation or on partial disposal of the operation.

*(iii) Financial assets and liabilities*

The Group applies IAS 39 *Financial Instruments: Recognition and Measurement* to the recognition, classification and measurement, and derecognition of financial assets and financial liabilities, the impairment of financial assets, and hedge accounting.

## 1 Significant accounting policies continued

### *Recognition*

The Group recognises financial assets and liabilities when it becomes a party to the terms of the contract, which is the trade date or the settlement date.

### *Classification and measurement*

Financial assets and liabilities are initially recognised at fair value and may be held at fair value or amortised cost depending on the Group's intention toward the assets and the nature of the assets and liabilities, mainly determined by their contractual terms.

The accounting policy for each type of financial asset or liability is included within the relevant note for the item. The Group's policies for determining the fair values of the assets and liabilities are set out in Note 18.

### *Derecognition*

The Group derecognises a financial asset, or a portion of a financial asset, from its balance sheet where the contractual rights to cash flows from the asset have expired, or have been transferred, usually by sale, and with them either substantially all the risks and rewards of the asset or significant risks and rewards, along with the unconditional ability to sell or pledge the asset.

Financial liabilities are derecognised when the liability has been settled, has expired or has been extinguished. An exchange of an existing financial liability for a new liability with the same lender on substantially different terms generally a difference of 10% in the present value of the cash flows or a substantive qualitative amendment is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability.

*Critical accounting estimates and judgements*

Transactions in which the Group transfers assets and liabilities, portions of them, or financial risks associated with them can be complex and it may not be obvious whether substantially all of the risks and rewards have been transferred. It is often necessary to perform a quantitative analysis. Such an analysis compares the Group's exposure to variability in asset cash flows before the transfer with its retained exposure after the transfer.

A cash flow analysis of this nature may require judgement. In particular, it is necessary to estimate the asset's expected future cash flows as well as potential variability around this expectation. The method of estimating expected future cash flows depends on the nature of the asset, with market and market-implied data used to the greatest extent possible. The potential variability around this expectation is typically determined by stressing underlying parameters to create reasonable alternative upside and downside scenarios. Probabilities are then assigned to each scenario. Stressed parameters may include default rates, loss severity, or prepayment rates.

*(iv) Issued debt and equity instruments*

The Group applies IAS 32 *Financial Instruments: Presentation*, to determine whether funding is either a financial liability (debt) or equity.

Issued financial instruments or their components are classified as liabilities if the contractual arrangement results in the Group having a present obligation to either deliver cash or another financial asset, or a variable number of equity shares, to the holder of the instrument. If this is not the case, the instrument is generally an equity instrument and the proceeds included in equity, net of transaction costs. Dividends and other returns to equity holders are recognised when paid or declared by the members at the AGM and treated as a deduction from equity.

Where issued financial instruments contain both liability and equity components, these are accounted for separately. The fair value of the debt is estimated first and the balance of the proceeds is included within equity.

**New and amended standards and interpretations**

The accounting policies adopted are consistent with those of the previous financial year. There were no new or amended standards or interpretations that resulted in a change in accounting policy.



## Future accounting developments

There have been and are expected to be a number of significant changes to the Group's financial reporting after 2016 as a result of amended or new accounting standards that have been or will be issued by the IASB. The most significant of these are as follows:

### IFRS 9 Financial instruments

IFRS 9 Financial Instruments which will replace IAS 39 Financial Instruments: Recognition and Measurement is effective for periods beginning on or after 1 January 2018 and was endorsed by the EU in November 2016. IFRS 9, in particular the impairment requirements, will lead to significant changes in the accounting for financial instruments. Barclays does not expect to restate comparatives on initial application of IFRS 9 on 1 January 2018 but will provide detailed transitional disclosures in accordance with the amended requirements of IFRS 7.

### *Impairment*

IFRS 9 introduces a revised impairment model which will require entities to recognise expected credit losses based on unbiased forward-looking information. This replaces the existing IAS 39 incurred loss model which only recognises impairment if there is objective evidence that a loss is already incurred and would measure the loss at the most probable outcome. The IFRS 9 impairment model will be applicable to all financial assets at amortised cost, lease receivables, debt financial assets at fair value through other comprehensive income, loan commitments and financial guarantee contracts. This contrasts to the IAS 39 impairment model which is not applicable to loan commitments and financial guarantee contracts (these were covered by IAS 37). In addition, IAS 39 requires the impairment of available for sale debt to be based on the fair value loss rather than estimated future cashflows as for amortised cost assets. Intercompany exposures, including loan commitments and financial guarantee contracts, are also in scope in the stand alone reporting entity accounts.

Notes to the financial statements

For the year ended 31 December 2016

**1 Significant accounting policies** continued

The measurement of expected loss will involve increased complexity and judgement including estimation of probabilities of defaults, loss given default, a range of unbiased future economic scenarios, estimation of expected lives, estimation of exposures at default and assessing increases in credit risk.

It is expected to have a material financial impact and impairment charges will tend to be more volatile. Impairment will also be recognised earlier and the amounts will be higher. Unsecured products with longer expected lives, such as revolving credit cards, are expected to be most impacted. It will not be practical to disclose reliable financial impact estimates until the implementation programme and validation and testing is further advanced, which will be no later than the Barclays PLC Annual Report 2017.

Based on the current requirements of CRD IV, the expected increase in the accounting impairment provision would reduce CET1 capital but the impact would be partially mitigated by the excess of expected losses over impairment included in the CET1 calculation as discussed on page 156. However, the Basel Committee on Banking Supervision (BCBS) is currently considering amending the capital rules as a result of IFRS 9 and is considering transitional rules which may mitigate or spread capital impacts from 1 January 2018 as well as permanent changes to the capital requirements. In addition, as part of its review of the Capital Requirements Regulation (CRR) the European Commission has proposed that the capital impact of IFRS 9 is phased-in over a five-year period. IFRS 9 is considered in the Group capital planning.

*Key concepts and management judgements*

The impairment requirements are complex and require management judgements, estimates and assumptions. Key concepts and management judgements will continue to be refined during the 2017 parallel run and as any further authoritative guidance is issued, and include:

*Determining a significant increase in credit risk since initial recognition*

IFRS 9 requires the recognition of 12 month expected credit losses (the expected credit losses from default events that are expected within 12 months of reporting date) if credit risk has not significantly increased since initial recognition (stage 1), and lifetime expected credit losses for financial instruments for which the credit risk has increased significantly since initial recognition or which are credit impaired. Barclays expects to estimate when a significant increase in credit risk has occurred based on quantitative and qualitative assessments. Quantitative assessments will be based on changes in and/or absolute thresholds for weighted average cumulative lifetime probabilities of default, determined for each portfolio. Qualitative drivers of a significant increase in credit risk are expected to include exposures determined to be higher risk (by credit risk) and subject to closer credit risk monitoring. Exposures which are more than 30 days past due will be used as a backstop rather than a primary driver. Exposures will move back to stage 1 once they no longer meet the criteria for a significant increase in credit risk and when any cure criteria used for credit risk management are met. This is subject to a minimum of 12 months full performance including timely receipt of all payments over that period, for exposures that have been restructured or granted forbearance or concessions. Barclays does not expect to rely primarily on the low credit risk exemption which would assume facilities of investment grade are not significantly deteriorated. Determining the probability of default at initial recognition is expected to require management estimates, in particular for exposures issued before the effective date of IFRS 9. For certain revolving facilities such as credit cards and overdrafts, this is expected to be when the facility was first entered into which could have been significantly in the past. Exposures modified due to financial difficulty do not generally result in a substantial modification or derecognition and therefore the probability of default at initial recognition is not reset for these exposures.

#### *Forward-looking information*

Credit losses are the expected cash shortfalls from what is contractually due over the expected life of the financial instrument, discounted at the original effective interest rate. Expected credit losses are the unbiased probability-weighted credit losses determined by evaluating a range of possible outcomes and considering future economic conditions. When there is a non-linear relationship between forward-looking economic scenarios and their associated credit losses, a range of forward-looking economic scenarios, currently expected to be a minimum of five, will be considered to ensure a sufficient unbiased representative sample of the complete distribution is included in determining the expected loss. Stress testing methodologies will be leveraged for forecasting economic scenarios for IFRS 9 purposes.

#### *Definition of default and credit impaired assets*

The definition of default for the purpose of determining expected credit losses is expected to be aligned to the Regulatory Capital CRR Article 178 definition of default, which considers indicators that the debtor is unlikely to pay, includes exposures in forbearance and is no later than when the exposure is more than 90 days past due or 180 days past due in the case of UK mortgages. When exposures are identified as credit impaired or purchased or originated as such, IFRS 9 requires separate disclosure and interest income to be presented on a net basis rather than gross.

Credit impairment is expected to occur when the exposure has defaulted which is also anticipated to align to when an exposure is identified as individually impaired under the incurred loss model of IAS 39. Write-off policies are not expected to change from IAS 39.

#### *Expected life*

Lifetime expected credit losses must be measured over the expected life. This is restricted to the maximum contractual life and takes into account expected prepayment, extension, call and similar options, except for certain revolver financial instruments that include both a drawn and an undrawn component where the entity's contractual ability to demand repayment and cancel the undrawn commitment does not limit the entity's exposure to credit losses to the contractual notice period, such as credit cards and overdrafts. The expected life for these revolver facilities is expected to be behavioral life. Potential future modifications of contracts are not taken into account when determining the expected life or exposure at default until they occur.

#### *Modelling techniques*

Expected credit losses (ECL) are calculated by multiplying three main components, being the probability of default (PD), loss given default (LGD) and the exposure at default (EAD). The Basel ECL calculations are leveraged for IFRS 9 modelling but adjusted for key differences which include:

BCBS requires 12 month through the economic cycle losses whereas IFRS 9 requires 12 month or lifetime point-in-time losses based on conditions at the reporting date and multiple forecasts of the future economic conditions over the expected lives; and

IFRS 9 models do not include some of the conservative BCBS model floors and downturn assessments and require discounting to the reporting date at the original effective interest rate rather than using the cost of capital to the date of default.

Management adjustments will be made to modelled output to account for situations where known or expected risk factors and information have not been considered in the modelling process, for example forecast economic scenarios for uncertain political events.

## 1 Significant accounting policies continued

### *Classification and measurement*

IFRS 9 will require financial assets to be classified on the basis of two criteria:

- 1) The business model within which financial assets are managed, and;
- 2) Their contractual cash flow characteristics (whether the cash flows represent solely payments of principal and interest ).

Financial assets will be measured at amortised cost if they are held within a business model whose objective is to hold financial assets in order to collect contractual cash flows, and their contractual cash flows represent solely payments of principal and interest.

Financial assets will be measured at fair value through other comprehensive income if they are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, and their contractual cash flows represent solely payments of principal and interest.

Other financial assets are measured at fair value through profit and loss. There is an option to make an irrevocable election for non-traded equity investments to be measured at fair value through other comprehensive income, in which case dividends are recognised in profit or loss, but gains or losses are not reclassified to profit or loss upon derecognition, and impairment is not recognised in the income statement.

The accounting for financial liabilities is largely unchanged, except for financial liabilities designated at fair value through profit and loss. Gains and losses on such financial liabilities arising from changes in Barclays' own credit risk will be presented in other comprehensive income rather than in profit and loss. There is no subsequent reclassification of realised gains or losses on own credit to profit and loss statement.

Barclays' Classification and Measurement implementation programme is in progress. An assessment of potential changes to financial assets based on 30 June 2016 balances is being conducted, including an assessment of business models across various portfolios, and a review of contractual cash flow features for material financial assets.

There are some classification changes expected but they are not significant from a Group perspective. The notable potential exception relates to loans with symmetric make whole or fair value prepayment options, which are currently subject to interpretation discussions at IFRS Interpretations Committee (IFRIC) and IASB as to whether their contractual cash flows represent solely payments of principal and interest, or whether they must be measured at fair value through profit or loss in their entirety. Such prepayment features are present in some fixed rate corporate and investment bank loans. The carrying value of such loans is expected to be significant on initial application of IFRS 9. If such loans are concluded to be measured at fair value through profit or loss the potential impact on opening equity and profit or loss would depend on their fair values compared to their carrying amounts, and the future changes in fair value.

Business models are determined on initial application and this may differ from the model at 30 June 2016 for certain portfolios, and contractual cash flow characteristics assessed as at 30 June 2016 may not be representative of the population on transition.

The focus of the project during 2017 will be on finalising processes, governance and controls in preparation for initial application in 2018. IFRS 9 is applied retrospectively, although comparatives are not restated, with adjustments arising from classification and measurement changes recognised in opening equity.

#### *Hedge accounting*

IFRS 9 contains revised requirements on hedge accounting, which are more closely aligned with an entity's risk management strategies and risk management objectives. The new rules would replace the current quantitative effectiveness test with a simpler version, and requires that an economic relationship exist between the hedged item and the hedging instrument. Under the new rules, voluntary hedge de-designations would not be allowed.

Adoption of the IFRS 9 hedge accounting requirements is optional, and certain aspects of IAS 39, being the portfolio fair value hedge for interest rate risk, would continue to be available for entities (while applying IFRS 9 to the remainder of the entity's hedge accounting relationships) until the IASB completes its accounting for dynamic risk management project.

Based on analysis performed, Barclays expects to continue applying IAS 39 hedge accounting, although it will implement the amended IFRS 7 hedge accounting disclosure requirements.

#### *Own credit*

Barclays has applied the option in IFRS 9 to recognise changes in own credit in other comprehensive income from 1 January 2017. This will have no effect on net assets, and any changes due to own credit in prior periods have not been restated. Any realised and unrealised amounts recognised in other comprehensive income will not be reclassified to the income statement in future periods.

Notes to the financial statements

For the year ended 31 December 2016

## 1 Significant accounting policies continued

### IFRS 15 Revenue from Contracts with Customers

In 2014, the IASB issued IFRS 15 *Revenue from Contracts with Customers* which will replace IAS 18 *Revenue* and IAS 11 *Construction Contracts*. It applies to all contracts with customers except leases, financial instruments and insurance contracts. The standard establishes a more systematic approach for revenue measurement and recognition by introducing a five-step model governing revenue recognition. The five-step model includes:

- 1) identifying the contract with the customer;
- 2) identifying each of the performance obligations included in the contract;
- 3) determining the amount of consideration in the contract;
- 4) allocating the consideration to each of the identified performance obligations, and;
- 5) recognising revenue as each performance obligation is satisfied.

In April 2016, the IASB issued clarifying amendments to IFRS 15 which provide additional application guidance but did not change the underlying principles of the standard. The standard was endorsed by the EU in September 2016. Adoption of the standard on 1 January 2018 is not expected to have a significant impact. Current project



implementation efforts are primarily focused on preparing and sourcing information necessary to comply with the enhanced disclosure requirements introduced by IFRS 15.

## IFRS 16 Leases

In January 2016, the IASB issued IFRS 16 Leases, which will replace IAS 17 Leases. IFRS 16 will apply to all leases with the exception of licenses of intellectual property, rights held by licensing agreement within the scope of IAS 38 *Intangible Assets*, service concession arrangements, leases of biological assets within the scope of IAS 41 *Agriculture, and leases of minerals, oil, natural gas and similar non-regenerative resources*. IFRS 16 will not result in a significant change to lessor accounting; however for lessee accounting there will no longer be a distinction between operating and finance leases. Instead lessees will be required to recognise both a right of use asset and lease liability on balance sheet for all leases. As a result Barclays will observe an increase in both assets and liabilities for transactions currently accounted for as operating leases as at 1 January 2019 (the effective date of IFRS 16). A scope exemption will apply to short-term and low-value leases. Current project implementation efforts are focused on preparing and sourcing information necessary to comply with IFRS 16 requirements. The standard has not yet been endorsed by the EU.

## Critical accounting estimates and judgements

The preparation of financial statements in accordance with IFRS requires the use of estimates. It also requires management to exercise judgement in applying the accounting policies. The key areas involving a higher degree of judgement or complexity, or areas where assumptions are significant to the consolidated and individual financial statements are highlighted under the relevant note. Critical accounting estimates and judgements are disclosed in:

	Page		Page
Credit impairment charges and other provisions	233	Fair value of financial instruments	246
Income taxes	236	Provisions	270
Available for sale assets	245	Retirement benefit obligations	288
Derecognition of financial assets	299		

## Other disclosures

To improve transparency and ease of reference, by concentrating related information in one place, and to reduce duplication, certain disclosures required under IFRS have been included within the Risk management section as follows:

Segmental reporting on pages 197 to 210;

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Credit risk management, on pages 101 and 102 including exposures to selected countries;

Market risk, on page 103;

Funding risk liquidity, on pages 105 and 106 ; and

Funding risk capital, on pages 106 and 107.

These are covered by the Audit opinion, where referenced as audited, included on page 218.

The accompanying notes on pages 226 to 316 form an integral part of these financial statements.

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Notes to the financial statements

Performance/return

The notes included in this section focus on the results and performance of the Group. Information on the income generated, expenditure incurred, segmental performance, tax, earnings per share and dividends are included here.

**2 Segmental reporting**

**Presentation of segmental reporting**

The Group's segmental reporting is presented in accordance with IFRS 8 *Operating Segments*. Operating segments are reported in a manner consistent with the internal reporting provided to the Executive Committee, which is responsible for allocating resources and assessing performance of the operating segments, and has been identified as the chief operating decision maker. All transactions between business segments are conducted on an arm's length basis, with intra-segment revenue and costs being eliminated in Head Office. Segmental income and expense excludes BAGL as it meets the requirement of a discontinued operation. Income and expenses directly associated with each segment are included in determining business segment performance.

During 2016 the Group's activities have been re-segmented into Barclays UK and Barclays International in preparation for regulatory ring fencing requirements. In addition Barclays' interest in Barclays Africa Group Limited was re-classified as a discontinued operation and the Non-Core segment has been enlarged. Comparatives have been updated to reflect the re-segmentation.

An analysis of the Group's performance by business segment and income by geographic segment is included on pages 197 and 198. Further details on each of the segments are provided on pages 199 to 210.

**3 Net interest income**

**Accounting for interest income and expense**

The Group applies IAS 39 *Financial Instruments: Recognition and Measurement*. Interest income on loans and advances at amortised cost, financial investments debt securities, and interest expense on financial liabilities held at amortised cost, are calculated using the effective interest method which allocates interest, and direct and incremental fees and costs, over the expected lives of the assets and liabilities.

The effective interest method requires the Group to estimate future cash flows, in some cases based on its experience of customers' behaviour, considering all contractual terms of the financial instrument, as well as the expected lives of the assets and liabilities.

Barclays incurs certain costs to originate credit card balances with the most significant being co-brand partner fees. To the extent these costs are attributed to revolving customer balances they are capitalised and subsequently included within the calculation of the effective interest rate. They are amortised to interest income over the period of expected repayment of the originated balance. Costs attributed to transacting customer balances are recorded within fee and commission expense when incurred. There are no other individual estimates involved in the calculation of effective interest rates that are material to the results or financial position.

	2016	2015	2014
	£m	£m	£m
Cash and balances with central banks	186	157	186
Financial investments	740	698	803
Loans and advances to banks	600	487	376
Loans and advances to customers	12,958	12,512	12,768
Other	57	99	61
<b>Interest income<sup>a</sup></b>	<b>14,541</b>	<b>13,953</b>	<b>14,194</b>
Deposits from banks	(265)	(128)	(133)
Customer accounts	(1,514)	(1,406)	(2,205)
Debt securities in issue	(990)	(553)	(691)
Subordinated liabilities	(1,104)	(1,015)	(1,006)
Other	(131)	(243)	(73)
<b>Interest expense<sup>a</sup></b>	<b>(4,004)</b>	<b>(3,345)</b>	<b>(4,108)</b>
<b>Net interest income</b>	<b>10,537</b>	<b>10,608</b>	<b>10,086</b>

Costs to originate credit card balances of £480m (2015: £368m) have been amortised to interest during the period.

Interest income includes £75m (2015: £91m; 2014: £117m) accrued on impaired loans.

Other interest income principally includes interest income relating to reverse repurchase agreements. Similarly, other interest expense principally includes interest expense relating to repurchase agreements.

Included in net interest income is hedge ineffectiveness as detailed in Note 15.

## 2016

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Net interest income remained stable at £10,537m (2015: £10,608m), driven by increased expenses from debt securities in issue partially offset by volume growth and margin improvement within Barclays International cards portfolio.

### 2015

Net interest income increased by £522m (5%) to £10,608m, primarily driven by lower interest expense from customer accounts.

#### Note

<sup>a</sup>Both interest income and interest expense for 2015 and 2014 have been adjusted by £442m and £605m respectively in order to better align the effect of hedge accounting relationships with the related hedged items. The following categories were restated: financial investments by £(545)m (2014: £(637)m), loans and advances to customers by £987m (2014: £1,242m). Customer accounts by £(1,783)m (2014: £(2,016)m), debt securities in issue by £784m (2014: £859m) and subordinated liabilities by £557m (2014: £552m).

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## Notes to the financial statements

## Performance/return

## 4 Net fee and commission income

## Accounting for net fee and commission income

The Group applies IAS 18 *Revenue*. Fees and commissions charged for services provided or received by the Group are recognised as the services are provided, for example on completion of the underlying transaction.

	2016	2015	2014
	£m	£m	£m
<b>Fee and commission income</b>			
Banking, investment management and credit related fees and commissions	8,452	8,340	8,483
Foreign exchange commission	118	130	139
<b>Fee and commission income</b>	<b>8,570</b>	8,470	8,622
<b>Fee and commission expense</b>	<b>(1,802)</b>	(1,611)	(1,500)
<b>Net fee and commission income</b>	<b>6,768</b>	6,859	7,122

Net fee and commission income decreased £91m to £6,768m. This was primarily driven by an increase in expenses in Barclays International due to higher customer reward costs and lower fees income in Non-Core due to the sale of the US and Asia wealth businesses and the closure of the equities traded securities business as well as a decrease within Barclays UK due to lower interchange fees on account of EU Interchange regulation. These movements were partially offset by an increase in income in Barclays International driven by growth in the cards portfolio and an increase in investment banking business due to higher fees income from the US loans/bonds and investment grade products coupled with higher financial advisory fees.

## 2015

Net fee and commission income decreased £263m to £6,859m. This was primarily driven by lower income in Non-Core due to the sale of the US Wealth and Spanish retail business and the Barclays UK business due to the launch of the revised overdraft proposition in mid 2014, which recognises the majority of the overdraft income as net interest income as opposed to fee income. The decrease in Barclays International is driven by lower equity underwriting fees partially offset by higher financial advisory and debt underwriting fees and increase in Barclaycard

International, driven by growth in payment volumes.

## 5 Net trading income

### Accounting for net trading income

In accordance with IAS 39, trading positions are held at fair value, and the resulting gains and losses are included in the income statement, together with interest and dividends arising from long and short positions and funding costs relating to trading activities.

Income arises from both the sale and purchase of trading positions, margins which are achieved through market-making and customer business and from changes in fair value caused by movements in interest and exchange rates, equity prices and other market variables.

Own credit gains/losses arise from the fair valuation of financial liabilities designated at fair value through profit or loss. See Note 17 Financial liabilities designated at fair value.

	<b>2016</b>	2015	2014
	<b>£m</b>	£m	£m
Trading income	<b>2,803</b>	2,996	3,052
Own credit (losses)/gains	<b>(35)</b>	430	34
<b>Net trading income</b>	<b>2,768</b>	3,426	3,086

Included within net trading income were gains of £31m (2015: £992m gain; 2014: £1,051m loss) on financial assets designated at fair value and gains of £346m (2015: £187m loss; 2014: £65m loss) on financial liabilities designated at fair value.

### 2016

Net trading income decreased by 19% to £2,768m, primarily reflecting a £465m movement in own credit as the credit spreads on Barclays issued debt were relatively flat as compared to prior year. Trading income decreased by £193m, mainly driven by the continued disposal and running down of certain businesses and fair value reduction on the ESHLA portfolio within Non-Core. This was partially offset by higher contributions from Fixed Income businesses that benefited from market volatility and higher client volumes during the year.

### 2015

Net trading income increased by 11% to £3,426m, primarily reflecting a £396m favourable variance in own credit due to widening of credit spreads on Barclays issued debt. Trading income decreased by £56m, mainly driven by the

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continued disposal and running down of certain businesses and fair value movements on the ESHLA portfolio within Non-Core. This was partially offset by increases in various investment banking businesses within Barclays International driven by higher volatility and trading activity during the year.

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## 6 Net investment income

### Accounting for net investment income

Dividends are recognised when the right to receive the dividend has been established. Other accounting policies relating to net investment income are set out in Note 14 Financial assets designated at fair value and Note 16 Financial Investments.

	2016 £m	2015 £m	2014 £m
Net gain from disposal of available for sale investments	912	385	622
Dividend income	8	8	9
Net gain from financial instruments designated at fair value	158	193	203
Other investment income	246	511	475
<b>Net investment income</b>	<b>1,324</b>	<b>1,097</b>	<b>1,309</b>

Net investment income increased by 21% to £1,324m. This was largely driven by a gain of £615m on disposal of Barclays' share of Visa Europe Limited and gains on buy-back of senior and subordinated debt issuances. These increases were partially offset by non-repeat of gains of £496m recognised in 2015 in other investment income due to the final and full legal settlement in respect of US Lehman acquisition assets.

### 2015

Net investment income decreased by 16% to £1,097m. This was largely driven by lower gains and fewer disposals of available for sale investments due to unfavourable market conditions. During the year a gain of £496m (2014: £461m) was recognised in other investment income due to the final and full legal settlement in respect of US Lehman acquisition assets.

## 7 Credit impairment charges and other provisions

## Accounting for the impairment of financial assets

### *Loans and other assets held at amortised cost*

In accordance with IAS 39, the Group assesses at each balance sheet date whether there is objective evidence that loan assets or available for sale financial investments (debt or equity) will not be recovered in full and, wherever necessary, recognises an impairment loss in the income statement.

An impairment loss is recognised if there is objective evidence of impairment as a result of events that have occurred and these have adversely impacted the estimated future cash flows from the assets. These events include:

becoming aware of significant financial difficulty of the issuer or obligor

a breach of contract, such as a default or delinquency in interest or principal payments

the Group, for economic or legal reasons relating to the borrower's financial difficulty, grants a concession that it would not otherwise consider

it becomes probable that the borrower will enter bankruptcy or other financial reorganisation

the disappearance of an active market for that financial asset because of financial difficulties and

observable data at a portfolio level indicating that there is a measurable decrease in the estimated future cash flows, although the decrease cannot yet be ascribed to individual financial assets in the portfolio – such as adverse changes in the payment status of borrowers in the portfolio or national or local economic conditions that correlate with defaults on the assets in the portfolio.

Impairment assessments are conducted individually for significant assets, which comprise all wholesale customer loans and larger retail business loans and collectively for smaller loans and for portfolio level risks, such as country or sectoral risks. For the purposes of the assessment, loans with similar credit risk characteristics are grouped together – generally on the basis of their product type, industry, geographical location, collateral type, past due status and other factors relevant to the evaluation of expected future cash flows.

The impairment assessment includes estimating the expected future cash flows from the asset or the group of assets, which are then discounted using the original effective interest rate calculated for the asset. If this is lower than the carrying value of the asset or the portfolio, an impairment allowance is raised.

If, in a subsequent period, the amount of the impairment loss decreases, and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed by adjusting the allowance account. The amount of the reversal is recognised in the income statement.

Following impairment, interest income continues to be recognised at the original effective interest rate on the restated carrying amount, representing the unwind of the discount of the expected cash flows, including the principal due on non-accrual loans.

Uncollectable loans are written off against the related allowance for loan impairment on completion of the Group's internal processes when all reasonably expected recoverable amounts have been collected. Subsequent recoveries of amounts previously written off are credited to the income statement.

Notes to the financial statements

Performance/return

## 7 Credit impairment charges and other provisions continued

### *Available for sale financial assets*

#### *Impairment of available for sale debt instruments*

Debt instruments are assessed for impairment in the same way as loans. If impairment is deemed to have occurred, the cumulative decline in the fair value of the instrument that has previously been recognised in the available for sale reserve is removed from reserves and recognised in the income statement. This may be reversed if there is evidence that the circumstances of the issuer have improved.

#### *Impairment of available for sale equity instruments*

Where there has been a prolonged or significant decline in the fair value of an equity instrument below its acquisition cost, it is deemed to be impaired. The cumulative net loss that has been previously recognised directly in the available for sale reserve is removed from reserves and recognised in the income statement.

Increases in the fair value of equity instruments after impairment are recognised directly in other comprehensive income. Further declines in the fair value of equity instruments after impairment are recognised in the income statement.

### *Critical accounting estimates and judgements*

The calculation of impairment involves the use of judgement, based on the Group's experience of managing credit risk.

Within the retail and small businesses portfolios, which comprise large numbers of small homogeneous assets with similar risk characteristics where credit scoring techniques are generally used, statistical techniques are used to calculate impairment allowances on a portfolio basis, based on historical recovery rates and assumed emergence periods. These statistical analyses use as primary inputs the extent to which accounts in the portfolio are in arrears

and historical information on the eventual losses encountered from such delinquent portfolios. There are many such models in use, each tailored to a product, line of business or customer category. Judgement and knowledge is needed in selecting the statistical methods to use when the models are developed or revised. The impairment allowance reflected in the financial statements for these portfolios is therefore considered to be reasonable and supportable. The impairment charge reflected in the income statement for retail portfolios is £2,053m (2015: £1,535m; 2014: £1,549m) and amounts to 87% (2015: 88%; 2014: 83%) of the total impairment charge on loans and advances.

For individually significant assets, impairment allowances are calculated on an individual basis and all relevant considerations that have a bearing on the expected future cash flows are taken into account (for example, the business prospects for the customer, the realisable value of collateral, the Group's position relative to other claimants, the reliability of customer information and the likely cost and duration of the work-out process). The level of the impairment allowance is the difference between the value of the discounted expected future cash flows (discounted at the loan's original effective interest rate), and its carrying amount. Subjective judgements are made in the calculation of future cash flows. Furthermore, judgements change with time as new information becomes available or as work-out strategies evolve, resulting in frequent revisions to the impairment allowance as individual decisions are taken. Changes in these estimates would result in a change in the allowances and have a direct impact on the impairment charge. The impairment charge reflected in the financial statements in relation to wholesale portfolios is £299m (2015: £209m; 2014: £308m) and amounts to 13% (2015: 12%; 2014: 17%) of the total impairment charge on loans and advances. Further information on impairment allowances and related credit information is set out within the Risk review.

	2016 £m	2015 £m	2014 £m
New and increased impairment allowances	3,259	2,641	2,809
Releases	(551)	(535)	(791)
Recoveries	(365)	(350)	(166)
<b>Impairment charges on loans and advances</b>	<b>2,343</b>	<b>1,756</b>	<b>1,852</b>
Provision charges/(releases) for undrawn contractually committed facilities and guarantees provided	9	(12)	5
<b>Loan impairment</b>	<b>2,352</b>	<b>1,744</b>	<b>1,857</b>
Available for sale investment	21	18	(31)
Reverse repurchase agreements			(5)
<b>Credit impairment charges and other provisions</b>	<b>2,373</b>	<b>1,762</b>	<b>1,821</b>

## 2016

Loan impairment increased by 35% to £2,352m, primarily due to increased charges following the management review of impairment modelling for UK and US cards portfolios and the impairment of a number of single name exposures.

## 2015

Loan impairment decreased by 6% to £1,744m, reflecting lower impairment in Barclays UK and Non-Core, partially offset by increased charges in Barclays International.



## 8 Operating expenses

### Accounting for staff costs

The Group applies IAS 19 *Employee benefits* in its accounting for most of the components of staff costs.

*Short-term employee benefits* salaries, accrued performance costs and social security are recognised over the period in which the employees provide the services to which the payments relate.

*Performance costs* recognised to the extent that the Group has a present obligation to its employees that can be measured reliably and are recognised over the period of service that employees are required to work to qualify for the services.

Deferred cash and share awards are made to employees to incentivise performance over the period employees provide services. To receive payment under an award, employees must provide service over the vesting period. The period over which the expense for deferred cash and share awards is recognised is based upon the period employees consider their services contribute to the awards. For past awards, the Group considers that it is appropriate to recognise the awards over the period from the date of grant to the date that the awards vest. In relation to awards granted in 2017, the Group, taking into account the changing employee understanding surrounding those awards, considered it appropriate for expense to be recognised over four years including the financial year prior to the grant date. The impact in 2016 of the 2017 grant is an expense of £150m including social security costs.

The accounting policies for share-based payments, and pensions and other post-retirement benefits are included in Note 34 and Note 35 respectively.

	2016	2015	2014
	£m	£m	£m
<b>Infrastructure costs</b>			
Property and equipment	1,180	1,082	1,281
Depreciation of property, plant and equipment	492	475	495
Operating lease rentals	561	411	512
Amortisation of intangible assets	670	570	454
Impairment of property, equipment and intangible assets	95	150	153
Gain on property disposals		3	
<b>Total infrastructure costs</b>	<b>2,998</b>	2,691	2,895
<b>Administration and general costs</b>			
Consultancy, legal and professional fees	1,105	1,078	997
Subscriptions, publications, stationery and communications	644	678	756
Marketing, advertising and sponsorship	435	451	470
Travel and accommodation	136	188	185
UK bank levy	410	425	418
Goodwill impairment		102	
Other administration and general expenses	187	61	243
<b>Total administration and general costs</b>	<b>2,917</b>	2,983	3,069
<b>Staff costs</b>	<b>9,423</b>	8,853	9,860
<b>Provision for UK customer redress</b>	<b>1,000</b>	2,772	1,110
<b>Provision for ongoing investigations and litigation including Foreign Exchange</b>		1,237	1,250
<b>Operating expenses</b>	<b>16,338</b>	18,536	18,184

## 2016

Operating expenses decreased by 12% to £16,338m (2015: £18,536m) primarily due to lower PPI provisions and lower litigation provisions in 2016. This is partially offset by an increase in staff costs primarily due to £395m of additional charges relating to 2016 compensation costs.

## 2015

Operating expenses increased by 2% to £18,536m attributable to an increase in provisions for UK customer redress including PPI and an increase in impairment of goodwill partially offset by a decrease in staff costs (includes a gain on retirement benefits, refer to Note 35, of £429m) and infrastructure costs reflecting savings from strategic cost programmes.

## 9 Profit/(loss) on disposal of subsidiaries, associates and joint ventures

During the year, the gain on disposal of subsidiaries, associates and joint ventures was £420m (2015: loss of £637m; 2014: loss of £473m), principally relating to the sale of Barclays Risk Analytics and Index Solutions, the disposal of the Southern European card business and the sale of the private banking and wealth management services conducted through the Hong Kong and Singapore branches. These gains were partially offset with the IFRS 5 charge on an impending disposal of the French business. Please refer to Note 44 Non-current assets held for sale and associated liabilities for further detail.



## Notes to the financial statements

## Performance/return

**10 Tax****Accounting for income taxes**

Barclays applies IAS 12 *Income Taxes* in accounting for taxes on income. Income tax payable on taxable profits (Current Tax) is recognised as an expense in the period in which the profits arise. Withholding taxes are also treated as income taxes. Income tax recoverable on tax allowable losses is recognised as a current tax asset only to the extent that it is regarded as recoverable by offset against taxable profits arising in the current or prior period. Current tax is measured using tax rates and tax laws that have been enacted or substantively enacted at the balance sheet date.

Deferred tax is provided in full, using the liability method, on temporary differences arising from the differences between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax is determined using tax rates and legislation enacted or substantively enacted by the balance sheet date which are expected to apply when the deferred tax asset is realised or the deferred tax liability is settled. Deferred tax assets and liabilities are only offset when there is both a legal right to set-off and an intention to settle on a net basis.

The Group considers an uncertain tax position to exist when it considers that ultimately, in the future, the amount of profit subject to tax may be greater than the amount initially reflected in the Group's tax returns. The Group accounts for provisions in respect of uncertain tax positions in two different ways.

A current tax provision is recognised when it is considered probable that the outcome of a review by a tax authority of an uncertain tax position will alter the amount of cash tax due to, or from, a tax authority in the future. From recognition, the current tax provision is then measured at the amount the Group ultimately expects to pay the tax authority to resolve the position.

Deferred tax provisions are adjustments made to the carrying value of deferred tax assets in respect of uncertain tax positions. A deferred tax provision is recognised when it is considered probable that the outcome of a review by a tax authority of an uncertain tax position will result in a reduction in the carrying value of the deferred tax asset. From recognition of a provision, measurement of the underlying deferred tax asset is adjusted to take into account the expected impact of resolving the uncertain tax position on the loss or temporary difference giving rise to the deferred tax asset.

The approach taken to measurement takes account of whether the uncertain tax position is a discrete position that will be reviewed by the tax authority in isolation from any other position, or one of a number of issues which are expected to be reviewed together concurrently and resolved simultaneously with a tax authority. Barclays measurement of provisions is based upon its best estimate of the additional profit that will become subject to tax. For a discrete position, consideration is given only to the merits of that position. Where a number of issues are expected to be reviewed and resolved together, Barclays will take into account not only the merits of its position in respect of each particular issue but also the overall level of provision relative to the aggregate of the uncertain tax positions across all the issues that are expected to be resolved at the same time. In addition, in assessing provision levels, it is assumed that tax authorities will review uncertain tax positions and that all facts will be fully and transparently disclosed.

	2016	2015	2014
	£m	£m	£m
<b>Current tax charge/(credit)</b>			
Current year	896	1,605	1,131
Adjustments in respect of prior years	(361)	(188)	(19)
	<b>535</b>	1,417	1,112
<b>Deferred tax charge/(credit)</b>			
Current year	393	(346)	75
Adjustments in respect of prior years	65	78	(66)
	<b>458</b>	(268)	9
<b>Tax charge</b>	<b>993</b>	1,149	1,121

**10 Tax continued**

The table below shows the reconciliation between the actual tax charge and the tax charge that would result from applying the standard UK corporation tax rate to the Group's profit before tax.

	<b>2016</b>	<b>2016</b>		<b>2015</b>		<b>2014</b>
	<b>£m</b>	<b>%</b>		<b>£m</b>	<b>%</b>	<b>£m</b>
<b>Profit before tax from continuing operations</b>	<b>3,230</b>		1,146			1,313
Tax charge based on the standard UK corporation tax rate of 20% (2015: 20.25%, 2014: 21.50%)	<b>646</b>	<b>20.0%</b>	232	20.25%		282
Impact of profits/losses earned in territories with different statutory rates to the UK (weighted average tax rate is 32.8% (2015: 33.4%, 2014: 29.3%))	<b>415</b>	<b>12.8%</b>	151	13.2%		103
Recurring items:						
Non-creditable taxes including withholding taxes	<b>277</b>	<b>8.6%</b>	309	27.0%		329
Non-deductible expenses	<b>114</b>	<b>3.5%</b>	67	5.8%		146
Impact of UK bank levy being non-deductible	<b>82</b>	<b>2.5%</b>	96	8.4%		99
Other items	<b>58</b>	<b>1.9%</b>	(14)	(1.1%)		42
Tax adjustments in respect of share-based payments	<b>34</b>	<b>1.1%</b>	30	2.6%		21
Impact of change in tax rates	<b>30</b>	<b>0.9%</b>	158	13.8%		9
Adjustments in respect of prior years	<b>(296)</b>	<b>(9.2%)</b>	(110)	(9.6%)		(85)
Non-taxable gains and income	<b>(199)</b>	<b>(6.2%)</b>	(197)	(17.2%)		(212)
Changes in recognition of deferred tax and effect of unrecognised tax losses	<b>(178)</b>	<b>(5.5%)</b>	(71)	(6.2%)		(115)
Impact of Barclays Bank PLC's overseas branches being taxed both locally and in the UK	<b>(128)</b>	<b>(4.0%)</b>	(35)	(3.1%)		(68)
Non-recurring items:						

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Non-deductible provisions for UK customer redress	203	6.3%	283	24.7%		
Non-deductible impairments and losses on divestments	67	2.1%	39	3.4%	234	17.8%
Non-deductible provisions for investigations and litigation	48	1.5%	261	22.8%	387	29.5%
Non-taxable gains and income on divestments	(180)	(5.6%)	(50)	(4.4%)	(51)	(3.9%)
<b>Total tax charge</b>	<b>993</b>	<b>30.7%</b>	1,149	100.3%	1,121	85.4%

### Factors driving the effective tax rate

The effective tax rate of 30.7% is higher than the UK corporation tax rate of 20% primarily due to profits earned outside the UK being taxed at higher local statutory tax rates. In addition the effective tax rate is affected by provisions for UK customer redress being non-deductible for tax purposes, non-creditable taxes and non-deductible expenses including UK bank levy. These factors, which have each increased the effective tax rate, are partially offset by the impact of non-taxable gains and income, including those arising from divestments, and reductions in expected liabilities in respect of a range of issues related to a number of prior years.

Relative to the prior year, the effective tax rate on profit before tax decreased to 30.7% (2015: 100.3%). This was principally a result of a lower level of non-deductible provisions for investigations and litigation in 2016, as well as gains arising in 2016 on the divestment of businesses and assets, as the Group has pursued its strategy to run-down Non-Core, that were taxed at low rates.

The Group's future tax charge will be sensitive to the geographic mix of profits earned and the tax rates in force in the jurisdictions in which we operate. In the UK, legislation to reduce the corporation tax rate to 19% from 1 April 2017 and to 17% from 1 April 2020 has been enacted. In the US, proposed tax reform measures include a reduction in the US corporate income tax rate to as low as 15%. The US rate change is a proposal only at this stage and developments are being closely monitored. In the long term, a reduction in the tax rate would enhance the returns generated by the Group's US business. However, if enacted, such a change would have a substantial up-front negative impact on the measurement of the Group's US deferred tax assets, although this would reverse over time and result in a lower effective tax rate as these assets are utilised.

### Tax in the consolidated statement of comprehensive income

The most significant tax charge in the consolidated statement of comprehensive income relates to cash flow hedging reserve. The majority of this tax charge is on income brought into charge in the UK in 2016 and this reflects the new surcharge of 8%, that applies to banks' UK profits, as well as the standard UK corporation tax rate of 20%. Additionally included within the 'Other' line is a tax credit of £21m (2015: £21m credit) relating to share-based payments.

### Tax in respect of discontinued operation

Tax relating to the discontinued operation can be found in the BAGL disposal group income statement (see Note 44). The tax charge of £306m (2015: £301m) relates entirely to the profit from the ordinary activities of the discontinued operation.

## Notes to the financial statements

## Performance/return

## 10 Tax continued

## Current tax assets and liabilities

Movements on current tax assets and liabilities were as follows:

	2016 £m	2015 £m
Assets	415	334
Liabilities	(903)	(1,021)
<b>As at 1 January</b>	<b>(488)</b>	<b>(687)</b>
Income statement from continuing operations	(535)	(1,417)
Income statement in relation to BAGL disposal group		(301)
Other comprehensive income	23	6
Corporate income tax paid	780	1,670
Other movements	44	241
	<b>(176)</b>	<b>(488)</b>
Assets	561	415
Liabilities	(737)	(903)
<b>As at 31 December</b>	<b>(176)</b>	<b>(488)</b>

## Deferred tax assets and liabilities

The deferred tax amounts on the balance sheet were as follows:

	2016 £m	2015 £m
Intermediate Holding Company (IHC) US tax group	2,207	2,049
Barclays Bank PLC (US Branch) US tax group	1,766	1,569
Barclays PLC UK tax group	575	411
Other	321	466
<b>Deferred tax asset</b>	<b>4,869</b>	<b>4,495</b>
<b>Deferred tax liability</b>	<b>(29)</b>	<b>(122)</b>
<b>Net deferred tax</b>	<b>4,840</b>	<b>4,373</b>

## US deferred tax assets in the IHC and the US Branch

The deferred tax asset in the IHC of £2,207m (2015: £2,049m) includes £321m (2015: £503m) relating to tax losses and the deferred tax asset in the US Branch of £1,766m (2015: £1,569m) includes £142m (2015: £244m) relating to

tax losses. Under US tax rules, losses can be carried forward and offset against profits for a period of 20 years. The losses first arose in 2011 in the IHC and 2008 in the US Branch and therefore any unused amounts may begin to expire in 2031 and 2028 respectively. The remaining US deferred tax assets relate to temporary differences for which there is no time limit on recovery. The deferred tax assets for the IHC tax losses and the US Branch losses are projected to be fully utilised by 2018.

The measurement of the US branch deferred tax assets takes into account both US and UK tax. This is because Barclays Bank PLC is subject to UK tax on its worldwide profits, including the profits of its overseas branches. The US branch deferred tax assets are valued at the difference between the US and UK tax rates.

#### **UK tax group deferred tax asset**

The deferred tax asset in the UK tax group of £575m (2015: £411m) relates entirely to temporary differences.

#### **Other deferred tax assets**

The deferred tax asset of £321m (2015: £466m) in other entities within the Group includes £40m (2015: £155m) relating to tax losses carried forward. These deferred tax assets relate to a number of different territories and their recognition is based on profit forecasts or local country law which indicate that it is probable that the losses and temporary differences will be utilised.

Of the deferred tax asset of £321m (2015: £466m), an amount of £267m (2015: £106m) relates to entities which have suffered a loss in either the current or prior year. This has been taken into account in reaching the above conclusion that these deferred tax assets will be fully recovered in the future.

**10 Tax continued**

The table below shows movements on deferred tax assets and liabilities during the year. The amounts are different from those disclosed on the balance sheet and in the preceding table as they are presented before offsetting asset and liability balances where there is a legal right to set-off and an intention to settle on a net basis.

	Fixed asset timing differences £m	Available for sale investments £m	Cash flow hedges £m	Retirement benefit obligations £m	Loan impairment allowance £m	Other provisions £m	Tax losses carried forward £m
Assets	2,008	28	5	95	157	261	902
Liabilities	(194)	(70)	(239)	(144)			
<b>At 1 January 2016</b>	<b>1,814</b>	<b>(42)</b>	<b>(234)</b>	<b>(49)</b>	<b>157</b>	<b>261</b>	<b>902</b>
Income statement	(358)	9	(7)	(8)	52	17	(522)
Other comprehensive income		49	(61)	132			
Other movements	253	26	(31)	16	(58)	(27)	123
	<b>1,709</b>	<b>42</b>	<b>(333)</b>	<b>91</b>	<b>151</b>	<b>251</b>	<b>503</b>
Assets	1,801	183		91	151	251	503
Liabilities	(92)	(141)	(333)				
<b>At 31 December 2016</b>	<b>1,709</b>	<b>42</b>	<b>(333)</b>	<b>91</b>	<b>151</b>	<b>251</b>	<b>503</b>
Assets	1,542	18	5	321	176	233	1,315
Liabilities	(555)	(35)	(464)				
<b>At 1 January 2015</b>	<b>987</b>	<b>(17)</b>	<b>(459)</b>	<b>321</b>	<b>176</b>	<b>233</b>	<b>1,315</b>
Income statement	779	(13)	1	(119)	(14)	21	(540)

Other comprehensive income		(14)	221	(261)			122
Other movements	48	2	3	10	(5)	7	5
	1,814	(42)	(234)	(49)	157	261	902
Assets	2,008	28	5	95	157	261	902
Liabilities	(194)	(70)	(239)	(144)			
<b>At 31 December 2015</b>	1,814	(42)	(234)	(49)	157	261	902

Other movements include the impact of changes in foreign exchange rates as well as deferred tax amounts relating to acquisitions, disposals and transfers to held for sale.

The amount of deferred tax liability expected to be settled after more than 12 months is £273m (2015: £675m). The amount of deferred tax assets expected to be recovered after more than 12 months is £5,066m (2015: £4,838m). These amounts are before offsetting asset and liability balances where there is a legal right to set-off and an intention to settle on a net basis.

## Unrecognised deferred tax

### *Tax losses and temporary differences*

Deferred tax assets have not been recognised in respect of gross deductible temporary differences of £64m (2015: £51m) and gross tax losses of £16,820m (2015: £13,456m). The increase in these losses in 2016 is largely a result of the weakening of sterling against the overseas currencies these losses are denominated in. The tax losses include capital losses of £3,138m (2015: £3,838m) and unused tax credits of £514m (2015: £452m). Of these tax losses, £394m (2015: £389m) expire within five years, £57m (2015: £13m) expire within six to ten years, £358m (2015: £124m) expire within 11 to 20 years and £16,011m (2015: £12,930m) can be carried forward indefinitely. Deferred tax assets have not been recognised in respect of these items because it is not probable that future taxable profits and gains will be available against which they can be utilised.

### *Group investments in subsidiaries, branches and associates*

Deferred tax is not recognised in respect of the value of Group's investments in subsidiaries, branches and associates where the Group is able to control the timing of the reversal of the temporary differences and it is probable that such differences will not reverse in the foreseeable future. The aggregate amount of these temporary differences for which deferred tax liabilities have not been recognised is £2bn (2015: £2bn).

## Critical accounting estimates and judgements

The Group does not consider there to be a significant risk of a material adjustment to the carrying amount of current and deferred tax balances, including provisions for uncertain tax positions, in the next financial year. The provisions for uncertain tax positions cover a diverse range of issues and reflect legal advice from external counsel where relevant. It should be noted that only a proportion of the total uncertain tax positions will be under audit at any point in time, and could therefore be subject to challenge by a tax authority over the next year.

Deferred tax assets have been recognised based on business profit forecasts. Further detail on the recognition of deferred tax assets is provided in the deferred tax assets and liabilities section of this tax note.





## Notes to the financial statements

## Performance/return

## 11 Earnings per share

	2016 £m	2015 £m	2014 £m
Profit/(loss) attributable to ordinary equity holders of the parent from continuing and discontinued operations	1,623	(394)	(174)
Tax credit on profit after tax attributable to other equity holders	128	70	54
Total Profit/(loss) attributable to ordinary equity holders of the parent from continuing and discontinued operations	1,751	(324)	(120)
<b>Continuing operations</b>			
Profit/(loss) attributable to ordinary equity holders of the parent from continuing operations	1,434	(696)	(508)
Tax credit on profit after tax attributable to other equity holders	128	70	54
Profit/(loss) attributable to equity holders of the parent from continuing operations	1,562	(626)	(454)
<b>Discontinued operations</b>			
Profit attributable to ordinary equity holders of the parent from discontinued operations	189	302	334
Dilutive impact of convertible options from discontinued operations	(1)		
Profit attributable to equity holders of the parent from discontinued operations including dilutive impact on convertible options	188	302	334
<b>Profit/(loss) attributable to equity holders of the parent from continuing and discontinued operations including dilutive impact on convertible options</b>	<b>1,750</b>	<b>(324)</b>	<b>(120)</b>
	2016 million	2015 million	2014 million
<b>Basic weighted average number of shares in issue</b>	<b>16,860</b>	16,687	16,329
Number of potential ordinary shares	184	367	296
<b>Diluted weighted average number of shares</b>	<b>17,044</b>	17,054	16,625

## Basic earnings per share

2016	2015	2014
p	p	p

Diluted earnings per share<sup>a</sup>

2016	2015	2014
p	p	p

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Basic earnings/(loss) per ordinary share	<b>10.4</b>	(1.9)	(0.7)	<b>10.3</b>	(1.9)	(0.7)
Basic earnings/(loss) per ordinary share from continuing operations	<b>9.3</b>	(3.7)	(2.7)	<b>9.2</b>	(3.7)	(2.7)
Basic earnings per ordinary share from discontinued operations	<b>1.1</b>	1.8	2.0	<b>1.1</b>	1.8	2.0

The calculation of basic earnings per share is based on the profit attributable to equity holders of the parent and the basic weighted average number of shares excluding treasury shares held in employee benefit trusts or held for trading. When calculating the diluted earnings per share, the weighted average number of shares in issue is adjusted for the effects of all dilutive potential ordinary shares held in respect of Barclays PLC, totalling 184m (2015: 367m) shares. In addition, the profit attributable to equity holders of the parent is adjusted for the dilutive impact of the potential conversion of outstanding options held in respect of BAGL. The decrease in the number of potential ordinary shares is due to the average share price of £1.74 (2015: £2.52) being lower than the average strike price of £1.88 (2015: £2.11). During the year the total number of share options granted under employee share schemes was 584m (2015: 533m). The schemes have strike prices ranging from £1.20 to £2.49.

Of the total number of employee share options and share awards at 31 December 2016, 93m (2015: 23m) were anti-dilutive.

The 173m increase in the basic weighted average number of shares since 31 December 2015 to 16,860m is primarily due to shares issued under employee share schemes and the Scrip Dividend Programme.

### 12 Dividends on ordinary shares

The Directors have approved a final dividend in respect of 2016 of 2.0p per ordinary share of 25p each which will be paid on 5 April 2017 to shareholders on the Share Register on 3 March 2017. On 31 December 2016, there were 16,963m ordinary shares in issue. The financial statements for the year ended 31 December 2016 do not reflect this dividend, which will be accounted for in shareholders' equity as an appropriation of retained profits in the year ending 31 December 2017. The 2016 financial statements include the 2016 interim dividends of £169m (2015: £503m) and final dividend declared in relation to 2015 of £588m (2015: £578m).

Note

aPotential ordinary shares shall be treated as dilutive when, and only when, their conversion to ordinary shares would increase loss per share.

## Notes to the financial statements

## Assets and liabilities held at fair value

The notes included in this section focus on assets and liabilities the Group holds and recognises at fair value. Fair value refers to the price that would be received to sell an asset or the price that would be paid to transfer a liability in an arms-length transaction with a willing counterparty, which may be an observable market price or, where there is no quoted price for the instrument, may be an estimate based on available market data. Detail regarding the Group's approach to managing market risk can be found on page 103.

## 13 Trading portfolio

## Accounting for trading portfolio assets and liabilities

In accordance with IAS 39, all assets and liabilities held for trading purposes are held at fair value with gains and losses in the changes in fair value taken to the income statement in net trading income (Note 5).

	Trading portfolio assets		Trading portfolio liabilities	
	2016	2015	2016	2015
	£m	£m	£m	£m
Debt securities and other eligible bills	38,789	45,576	(26,842)	(24,985)
Equity securities	38,329	29,055	(7,831)	(8,982)
Traded loans	2,975	2,474		
Commodities	147	243	(14)	
<b>Trading portfolio assets/(liabilities)</b>	<b>80,240</b>	<b>77,348</b>	<b>(34,687)</b>	<b>(33,967)</b>

## 14 Financial assets designated at fair value

## Accounting for financial assets designated at fair value

In accordance with IAS 39, financial assets may be designated at fair value, with gains and losses taken to the income statement within net trading income (Note 5) and net investment income (Note 6). The Group has the ability to make the fair value designation when holding the instruments at fair value reduces an accounting mismatch

(caused by an offsetting liability or asset being held at fair value), or is managed by the Group on the basis of its fair value, or includes terms that have substantive derivative characteristics described in Note 15 Derivative financial instruments.

The details on how the fair value amounts are derived for financial assets designated at fair value are described in Note 18 Fair value of assets and liabilities.

	2016	2015
	£m	£m
Loans and advances	10,519	17,913
Debt securities	70	1,383
Equity securities	4,558	6,197
Reverse repurchase agreements	63,162	49,513
Customers' assets held under investment contracts	37	1,449
Other financial assets	262	375
<b>Financial assets designated at fair value</b>	<b>78,608</b>	<b>76,830</b>

#### Credit risk of loans and advances designated at fair value and related credit derivatives

The following table shows the maximum exposure to credit risk, the changes in fair value attributable to changes in credit risk, and the cumulative changes in fair value since initial recognition together with the amount by which related credit derivatives mitigate this risk:

	Maximum exposure at		Changes in fair value during		Cumulative changes in fair	
	31 December		the year ended		value from inception	
	2016	2015	2016	2015	2016	2015
	£m	£m	£m	£m	£m	£m
Loans and advances designated at fair value, attributable to credit risk	10,519	17,913	(42)	69	(42)	(629)
Value mitigated by related credit derivatives	339	417	(2)	26	(13)	42

Notes to the financial statements

Assets and liabilities held at fair value

## 15 Derivative financial instruments

### Accounting for derivatives

Derivative instruments are contracts whose value is derived from one or more underlying financial instruments or indices defined in the contract. They include swaps, forward-rate agreements, futures, options and combinations of these instruments and primarily affect the Group's net interest income, net trading income and derivative assets and liabilities. Notional amounts of the contracts are not recorded on the balance sheet.

The Group applies IAS 39. All derivative instruments are held at fair value through profit or loss. Derivatives are classified as assets when their fair value is positive or as liabilities when their fair value is negative. This includes terms included in a contract or other financial asset or liability (the host), which, had it been a stand-alone contract, would have met the definition of a derivative. If these are separated from the host i.e. when the economic characteristics of the embedded derivative are not closely related with those of the host contract and the combined instrument is not measured at fair value through profit or loss then they are accounted for in the same way as derivatives.

### Hedge accounting

The Group applies hedge accounting to represent, to the maximum possible extent permitted under accounting standards, the economic effects of its interest and currency risk management strategies. Derivatives are used to hedge interest rate, exchange rate, commodity, and equity exposures and exposures to certain indices such as house price indices and retail price indices related to non-trading positions. Where derivatives are held for risk management purposes, and when transactions meet the required criteria for documentation and hedge effectiveness, the Group applies fair value hedge accounting, cash flow hedge accounting, or hedging of a net investment in a foreign operation, as appropriate to the risks being hedged.

### *Fair value hedge accounting*

Changes in fair value of derivatives that qualify and are designated as fair value hedges are recorded in the income statement, together with changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The fair value changes adjust the carrying value of the hedged asset or liability held at amortised cost.

If hedge relationships no longer meet the criteria for hedge accounting, hedge accounting is discontinued. For fair value hedges of interest rate risk, the fair value adjustment to the hedged item is amortised to the income statement over the period to maturity of the previously designated hedge relationship using the effective interest method. If the hedged item is sold or repaid, the unamortised fair value adjustment is recognised immediately in the income statement.

*Cash flow hedge accounting*

For qualifying cash flow hedges, the fair value gain or loss associated with the effective portion of the cash flow hedge is recognised initially in other comprehensive income, and then recycled to the income statement in the periods when the hedged item will affect profit or loss. Any ineffective portion of the gain or loss on the hedging instrument is recognised in the income statement immediately.

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

*Hedges of net investments*

The Group's net investments in foreign operations, including monetary items accounted for as part of the net investment, are hedged for foreign currency risks using both derivatives and foreign currency borrowings. Hedges of net investments are accounted for similarly to cash flow hedges; the effective portion of the gain or loss on the hedging instrument is being recognised directly in other comprehensive income and the ineffective portion being recognised immediately in the income statement. The cumulative gain or loss recognised in other comprehensive income is recognised in the income statement on the disposal or partial disposal of the foreign operation, or other reductions in the Group's investment in the operation.

**Total derivatives**

	Notional contract amount £m	2016 Fair value		Notional contract amount £m	2015 Fair value	
		Assets £m	Liabilities £m		Assets £m	Liabilities £m
Total derivative assets/(liabilities) held for trading	36,185,820	345,624	(339,646)	29,437,102	326,772	(323,788)
Total derivative assets/(liabilities) held for risk management	336,524	1,002	(841)	316,605	937	(464)
<b>Derivative assets/(liabilities)</b>	<b>36,522,344</b>	<b>346,626</b>	<b>(340,487)</b>	<b>29,753,707</b>	<b>327,709</b>	<b>(324,252)</b>

The fair value of derivative assets increased by 6% to £347bn. This was mainly in foreign exchange derivatives largely due to increase in trade volumes and appreciation of all major currencies against GBP. Information on further netting of derivative financial instruments is included within Note 19 Offsetting financial assets and financial liabilities.

Trading derivatives are managed within the Group's market risk management policies, which are outlined on page 103.

The Group's exposure to credit risk arising from derivative contracts are outlined in the Credit risk section on page 139 and 140.

**15 Derivative financial instruments** continued

The fair values and notional amounts of derivative instruments held for trading are set out in the following table:

Derivatives held for trading	2016			2015		
	Notional contract	Fair value		Notional contract	Fair value	
	amount	Assets	Liabilities	amount	Assets	Liabilities
	£m	£m	£m	£m	£m	£m
<b>Foreign exchange derivatives</b>						
Forward foreign exchange	2,308,922	32,442	(30,907)	1,277,863	17,613	(19,433)
Currency swaps	1,086,552	40,083	(40,164)	1,006,640	30,703	(32,449)
OTC options bought and sold	772,031	6,338	(6,762)	924,832	6,436	(6,771)
OTC derivatives	4,167,505	78,863	(77,833)	3,209,335	54,752	(58,653)
Foreign exchange derivatives cleared by central counterparty	43,478	366	(388)	9,308	33	(44)
Exchange traded futures and options bought and sold	18,813	31	(27)	6,071	13	(12)
<b>Foreign exchange derivatives</b>	<b>4,229,796</b>	<b>79,260</b>	<b>(78,248)</b>	<b>3,224,714</b>	<b>54,798</b>	<b>(58,709)</b>
<b>Interest rate derivatives</b>						
Interest rate swaps	4,799,897	153,822	(143,059)	4,600,472	159,040	(148,475)
Forward-rate agreements	296,559	999	(968)	371,510	440	(390)
OTC options bought and sold	2,522,430	42,412	(43,373)	2,634,527	48,995	(49,001)
OTC derivatives	7,618,886	197,233	(187,400)	7,606,509	208,475	(197,866)
Interest rate derivatives cleared by central counterparty <sup>a</sup>	14,439,407	30,503	(31,528)	11,407,745	21,871	(22,603)
Exchange traded futures and options bought and sold	7,952,733	397	(370)	5,470,872	281	(263)
<b>Interest rate derivatives</b>	<b>30,011,026</b>	<b>228,133</b>	<b>(219,298)</b>	<b>24,485,126</b>	<b>230,627</b>	<b>(220,732)</b>
<b>Credit derivatives</b>						
OTC swaps	615,057	11,811	(10,513)	671,389	14,087	(12,693)
Credit derivatives cleared by central counterparty <sup>a</sup>	332,743	4,462	(4,572)	277,257	4,094	(3,931)
<b>Credit derivatives</b>	<b>947,800</b>	<b>16,273</b>	<b>(15,085)</b>	<b>948,646</b>	<b>18,181</b>	<b>(16,624)</b>
<b>Equity and stock index derivatives</b>						
OTC options bought and sold	102,545	6,766	(8,837)	53,645	5,507	(7,746)



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Equity swaps and forwards	105,120	2,253	(4,435)	98,264	1,794	(3,855)
OTC derivatives	207,665	9,019	(13,272)	151,909	7,301	(11,601)
Exchange traded futures and options bought and sold	585,620	8,070	(8,600)	429,592	6,498	(6,851)
<b>Equity and stock index derivatives</b>	<b>793,285</b>	<b>17,089</b>	<b>(21,872)</b>	<b>581,501</b>	<b>13,799</b>	<b>(18,452)</b>
<b>Commodity derivatives</b>						
OTC options bought and sold	14,053	395	(461)	21,959	1,402	(1,408)
Commodity swaps and forwards	16,086	1,528	(1,821)	29,161	3,645	(3,397)
OTC derivatives	30,139	1,923	(2,282)	51,120	5,047	(4,805)
Exchange traded futures and options bought and sold	173,774	2,946	(2,861)	145,995	4,320	(4,466)
<b>Commodity derivatives</b>	<b>203,913</b>	<b>4,869</b>	<b>(5,143)</b>	<b>197,115</b>	<b>9,367</b>	<b>(9,271)</b>
<b>Derivative assets/(liabilities) held for trading</b>	<b>36,185,820</b>	<b>345,624</b>	<b>(339,646)</b>	<b>29,437,102</b>	<b>326,772</b>	<b>(323,788)</b>
<b>Total OTC derivatives held for trading</b>	<b>12,639,252</b>	<b>298,849</b>	<b>(291,300)</b>	<b>11,690,262</b>	<b>289,662</b>	<b>(285,618)</b>
<b>Total derivatives cleared by central counterparty held for trading</b>	<b>14,815,628</b>	<b>35,331</b>	<b>(36,488)</b>	<b>11,694,310</b>	<b>25,998</b>	<b>(26,578)</b>
<b>Total exchange traded derivatives held for trading</b>	<b>8,730,940</b>	<b>11,444</b>	<b>(11,858)</b>	<b>6,052,530</b>	<b>11,112</b>	<b>(11,592)</b>
<b>Derivative assets/(liabilities) held for trading</b>	<b>36,185,820</b>	<b>345,624</b>	<b>(339,646)</b>	<b>29,437,102</b>	<b>326,772</b>	<b>(323,788)</b>

Note

aThe Chicago Mercantile Exchange (CME) changed its rulebook with effective date 3 January 2017. Under the new rules, OTC positions cleared will be settled daily by cash payments and not collateralised by these payments (known currently as variation margin). For reporting periods following the effective date, the fair value of derivatives will reflect the settlement which will reduce the fair value of the recognised derivative assets and liabilities and there will be no separate cash collateral recognised for the daily variation margin. As of 31 December 2016, the fair value of impacted derivatives assets was £20.4bn and derivative liabilities £21.5bn.

## Notes to the financial statements

## Assets and liabilities held at fair value

## 15 Derivative financial instruments continued

The fair values and notional amounts of derivative instruments held for risk management are set out in the following table:

## Derivatives held for risk management

	Notional contract amount £m	2016 Fair value		Notional contract amount £m	2015 Fair value	
		Assets £m	Liabilities £m		Assets £m	Liabilities £m
<b>Derivatives designated as cash flow hedges</b>						
<b>Currency swaps</b>	1,357	453		1,357	133	
Interest rate swaps	5,965	154	(6)	14,198	162	(115)
Forward foreign exchange				759	5	
Interest rate derivatives cleared by central counterparty	181,541	62	(27)	147,072		
<b>Derivatives designated as cash flow hedges</b>	<b>188,863</b>	<b>669</b>	<b>(33)</b>	<b>163,386</b>	<b>300</b>	<b>(115)</b>
<b>Derivatives designated as fair value hedges</b>						
Interest rate swaps	10,733	301	(744)	13,798	637	(264)
Forward foreign exchange				2,527		(32)
Interest rate derivatives cleared by central counterparty	130,842			134,939		
<b>Derivatives designated as fair value hedges</b>	<b>141,575</b>	<b>301</b>	<b>(744)</b>	<b>151,264</b>	<b>637</b>	<b>(296)</b>
<b>Derivatives designated as hedges of net investments</b>						
Forward foreign exchange	6,086	32	(64)	1,955		(53)
<b>Derivatives designated as hedges of net investments</b>	<b>6,086</b>	<b>32</b>	<b>(64)</b>	<b>1,955</b>		<b>(53)</b>

<b>Derivative assets/(liabilities) held for risk management</b>	<b>336,524</b>	<b>1,002</b>	<b>(841)</b>	316,605	937	(464)
Total OTC derivatives held for risk management	<b>24,141</b>	<b>940</b>	<b>(814)</b>	34,594	937	(464)
Total derivatives cleared by central counterparty held for risk management	<b>312,383</b>	<b>62</b>	<b>(27)</b>	282,011		
<b>Derivative assets/(liabilities) held for risk management</b>	<b>336,524</b>	<b>1,002</b>	<b>(841)</b>	316,605	937	(464)

The Group has hedged the following forecast cash flows, which primarily vary with interest rates. These cash flows are expected to impact the income statement in the following periods, excluding any hedge adjustments that may be applied:

	<b>Total £m</b>	<b>Up to one year £m</b>	<b>One to two years £m</b>	<b>Two to three years £m</b>	<b>Three to four years £m</b>	<b>Four to five years £m</b>	<b>More than five years £m</b>
<b>2016</b>							
Forecast receivable cash flows	<b>2,616</b>	<b>455</b>	<b>531</b>	<b>511</b>	<b>411</b>	<b>327</b>	<b>381</b>
Forecast payable cash flows	<b>52</b>	<b>15</b>	<b>16</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>3</b>
<b>2015</b>							
Forecast receivable cash flows	4,952	555	816	875	813	633	1,260
Forecast payable cash flows	872	769	35	31	22	11	4

The maximum length of time over which the Group hedges exposure to the variability in future cash flows for forecast transactions, excluding those forecast transactions related to the payment of variable interest on existing financial instruments is 10 years (2015: 10 years).

	<b>2016 £m</b>	<b>2015 £m</b>
<b>Amounts recognised in net interest income</b>		
Gains on the hedged items attributable to the hedged risk	<b>1,787</b>	552
Losses on the hedging instruments	<b>(1,741)</b>	(485)
Fair value ineffectiveness	<b>46</b>	67
Cash flow hedging ineffectiveness	<b>28</b>	16
		<b>635</b>

Net investment hedging  
ineffectiveness

(3)

(2)

Gains and losses transferred from the cash flow hedging reserve to the income statement included a £17m gain (2015: £36m gain) transferred to interest income; a £491m gain (2015: £267m gain) to interest expense; nil (2015: £4m loss) to net trading income; a £17m gain (2015: £17m gain) to administration and general expenses; and a £75m loss (2015: £69m loss) to taxation.

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## 16 Financial investments

### Accounting for financial investments

Available for sale financial assets are held at fair value with gains and losses being included in other comprehensive income. The Group uses this classification for assets that are not derivatives and are not held for trading purposes or otherwise designated at fair value through profit or loss, or at amortised cost. Dividends and interest (calculated using the effective interest method) are recognised in the income statement in net interest income (Note 3) or, net investment income (Note 6). On disposal, the cumulative gain or loss recognised in other comprehensive income is also included in net investment income.

Held to maturity assets are held at amortised cost. The Group uses this classification when there is an intent and ability to hold the asset to maturity. Interest on the investments are recognised in the income statement within Net interest income (Note 3).

	2016 £m	2015 £m
Available for sale debt securities and other eligible bills	57,703	89,278
Available for sale equity securities	438	989
Held to maturity debt securities	5,176	
<b>Financial investments</b>	<b>63,317</b>	90,267

In June 2016 UK Gilts previously classified as available for sale investments, were reclassified to held to maturity in order to reflect the intention with these assets. Any previous fair value gain or loss on the asset that has been accumulated within the available for sale reserve (Note 32) is amortised to profit or loss over the remaining life of the financial asset using the effective interest method.

## 17 Financial liabilities designated at fair value

### Accounting for liabilities designated at fair value through profit and loss

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In accordance with IAS 39, financial liabilities may be designated at fair value, with gains and losses taken to the income statement within net trading income (Note 5) and net investment income (Note 6). The Group has the ability to make the fair value designation when holding the instruments at fair value reduces an accounting mismatch (caused by an offsetting liability or asset being held at fair value), or is managed by the Group on the basis of its fair value, or includes terms that have substantive derivative characteristics (Note 15 Derivative financial instruments).

The details on how the fair value amounts are derived for financial liabilities designated at fair value are described in Note 18 Fair value of assets and liabilities.

	2016		2015	
	Fair value	Contractual amount due on maturity	Fair value	Contractual amount due on maturity
	£m	£m	£m	£m
Debt securities	34,985	37,034	33,177	36,097
Deposits	5,269	5,303	6,029	6,324
Liabilities to customers under investment contracts	37		1,633	
Repurchase agreements	55,710	55,760	50,838	50,873
Other financial liabilities	30	30	68	68
<b>Financial liabilities designated at fair value</b>	<b>96,031</b>	<b>98,127</b>	<b>91,745</b>	<b>93,362</b>

The cumulative own credit net loss recognised is £239m (2015: £226m).

Notes to the financial statements

Assets and liabilities held at fair value

## 18 Fair value of financial instruments

### Accounting for financial assets and liabilities – fair values

The Group applies IAS 39. All financial instruments are initially recognised at fair value on the date of initial recognition and, depending on the classification of the asset or liability, may continue to be held at fair value either through profit or loss or other comprehensive income. The fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Wherever possible, fair value is determined by reference to a quoted market price for that instrument. For many of the Group's financial assets and liabilities, especially derivatives, quoted prices are not available and valuation models are used to estimate fair value. The models calculate the expected cash flows under the terms of each specific contract and then discount these values back to a present value. These models use as their basis independently-sourced market parameters including, for example, interest rate yield curves, equities and commodities prices, option volatilities and currency rates.

For financial liabilities measured at fair value, the carrying amount reflects the effect on fair value of changes in own credit spreads calibrated to observable market data such as in primary issuance and redemption activity for structured notes. Own credit spreads for instruments issued out of Barclays Bank PLC were previously derived from Barclays Bank PLC issued vanilla debt in the secondary market but, due to extensive bond buy-back programmes, observations of Barclays Bank PLC secondary market bond prices have significantly decreased and no longer provide a reliable estimation for the fair value measurement.

On initial recognition, it is presumed that the transaction price is the fair value unless there is observable information available in an active market to the contrary. The best evidence of an instrument's fair value on initial recognition is typically the transaction price. However, if fair value can be evidenced by comparison with other observable current market transactions in the same instrument, or is based on a valuation technique whose inputs include only data from observable markets, then the instrument should be recognised at the fair value derived from such observable market data.

For valuations that have made use of unobservable inputs, the difference between the model valuation and the initial transaction price ( Day One profit ) is recognised in profit or loss either: on a straight-line basis over the term of the transaction; or where appropriate over the period until all model inputs will become observable or released in full when previously unobservable inputs become observable.

Various factors influence the availability of observable inputs and these may vary from product to product and change over time. Factors include the depth of activity in the relevant market, the type of product, whether the product is new and not widely traded in the marketplace, the maturity of market modelling and the nature of the transaction (bespoke or generic). To the extent that valuation is based on models or inputs that are not observable in the market, the determination of fair value can be more subjective, depending on the significance of the unobservable input to the overall valuation. Unobservable inputs are determined based on the best information available, for example by reference to similar assets, similar maturities or other analytical techniques.

The sensitivity of valuations used in the financial statements to possible changes in significant unobservable inputs is shown on page 256.

### Critical accounting estimates and judgements

The valuation of financial instruments often involves a significant degree of judgement and complexity, in particular where valuation models make use of unobservable inputs ( Level 3 assets and liabilities). This note provides information on these instruments, including the related unrealised gains and losses recognised in the period, a description of significant valuation techniques and unobservable inputs, and a sensitivity analysis.

### Valuation

IFRS 13 *Fair Value Measurement* requires an entity to classify its assets and liabilities according to a hierarchy that reflects the observability of significant market inputs. The three levels of the fair value hierarchy are defined below.

#### *Quoted market prices Level 1*

Assets and liabilities are classified as Level 1 if their value is observable in an active market. Such instruments are valued by reference to unadjusted quoted prices for identical assets or liabilities in active markets where the quoted price is readily available, and the price represents actual and regularly occurring market transactions. An active market is one in which transactions occur with sufficient volume and frequency to provide pricing information on an ongoing basis.

#### *Valuation technique using observable inputs Level 2*

Assets and liabilities classified as Level 2 have been valued using models whose inputs are observable either directly or indirectly. Valuations based on observable inputs include assets and liabilities such as swaps and forwards which are valued using market standard pricing techniques, and options that are commonly traded in markets where all the inputs to the market standard pricing models are observable.



*Valuation technique using significant unobservable inputs Level 3*

Assets and liabilities are classified as Level 3 if their valuation incorporates significant inputs that are not based on observable market data (unobservable inputs). A valuation input is considered observable if it can be directly observed from transactions in an active market, or if there is compelling external evidence demonstrating an executable exit price. Unobservable input levels are generally determined via reference to observable inputs, historical observations or using other analytical techniques.

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**18 Fair value of financial instruments** continued

The following table shows the Groups' assets and liabilities that are held at fair value disaggregated by valuation technique (fair value hierarchy) and balance sheet classification:

**Assets and liabilities held at fair value**

	<b>Quoted market prices (Level 1) £m</b>	<b>Valuation technique using Observable inputs (Level 2) £m</b>	<b>Significant unobservable inputs (Level 3) £m</b>	<b>Total £m</b>
<b>As at 31 December 2016</b>				
Trading portfolio assets	41,550	36,625	2,065	80,240
Financial assets designated at fair value	4,031	64,630	9,947	78,608
Derivative financial assets	5,261	332,819	8,546	346,626
Available for sale investments	21,218	36,551	372	58,141
Investment property			81	81
Assets included in disposal groups classified as held for sale <sup>a</sup>	6,754	8,511	6,009	21,274
<b>Total assets</b>	<b>78,814</b>	<b>479,136</b>	<b>27,020</b>	<b>584,970</b>
Trading portfolio liabilities	(20,205)	(14,475)	(7)	(34,687)
Financial liabilities designated at fair value	(70)	(95,121)	(840)	(96,031)
Derivative financial liabilities	(5,051)	(328,265)	(7,171)	(340,487)
Liabilities included in disposal groups classified as held for sale <sup>a</sup>	(397)	(5,224)	(6,201)	(11,822)
<b>Total liabilities</b>	<b>(25,723)</b>	<b>(443,085)</b>	<b>(14,219)</b>	<b>(483,027)</b>
<b>As at 31 December 2015</b>				
Trading portfolio assets	36,676	35,725	4,947	77,348
Financial assets designated at fair value	6,163	52,909	17,758	76,830
Derivative financial assets	6,342	315,949	5,418	327,709
Available for sale investments	42,552	46,693	1,022	90,267
Investment property			140	140
Assets included in disposal groups classified as held for	26	8	7,330	7,364

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sale <sup>a</sup>				
<b>Total assets</b>	91,759	451,284	36,615	579,658
Trading portfolio liabilities	(23,978)	(9,989)		(33,967)
Financial liabilities designated at fair value	(240)	(90,203)	(1,302)	(91,745)
Derivative financial liabilities	(5,450)	(314,033)	(4,769)	(324,252)
Liabilities included in disposal groups classified as held for sale <sup>a</sup>	(1,024)	(802)	(4,171)	(5,997)
<b>Total liabilities</b>	(30,692)	(415,027)	(10,242)	(455,961)

Note

aDisposal groups held for sale and measured at fair value less cost to sell are included in the fair value table. For disposal groups measured at carrying amount, the underlying financial assets and liabilities measured at fair value are included in the fair value disclosures on pages 247 to 260 and items measured at amortised cost are included on page 261. Non-financial assets (£6.6bn) and liabilities (£1.7bn) within disposal groups measured at carrying amount are excluded from these disclosures.

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## Notes to the financial statements

## Assets and liabilities held at fair value

## 18 Fair value of financial instruments continued

The following table shows the Group's assets and liabilities that are held at fair value disaggregated by valuation technique (fair value hierarchy) and product type.

## Assets and liabilities held at fair value by product type

	Assets			Liabilities		
	Valuation technique using	Valuation technique using	Valuation technique using	Valuation technique using	Valuation technique using	Valuation technique using
	Quoted	Significant	Significant	Quoted	Significant	Significant
	market	Observable	unobservable	market	Observable	unobservable
	prices	inputs	inputs	prices	inputs	inputs
	(Level 1)	(Level 2)	(Level 3)	(Level 1)	(Level 2)	(Level 3)
	£m	£m	£m	£m	£m	£m
<b>As at 31 December 2016</b>						
Interest rate derivatives		222,892	5,759		(215,213)	(4,860)
Foreign exchange derivatives		79,612	132		(78,263)	(51)
Credit derivatives		14,662	1,611		(14,844)	(241)
Equity derivatives	4,210	11,842	1,037	(4,058)	(15,808)	(2,007)
Commodity derivatives	1,052	3,809	8	(991)	(4,138)	(13)
Government and government sponsored debt	31,203	49,834	3	(12,761)	(11,454)	
Corporate debt	46	11,921	969	(27)	(1,907)	(5)
Certificates of deposit, commercial paper and other money market instruments		994			(6,936)	(319)
Reverse repurchase and repurchase agreements		63,162			(55,710)	
Non-asset backed loans		2,888	8,767			

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Asset backed securities		1,956	515		(256)	
Commercial real estate loans			442			
Issued debt					(31,973)	(298)
Equity cash products	35,399	6,478	150	(7,416)	(934)	(2)
Funds and fund linked products	53	137	273		(170)	(37)
Private equity investments	23	110	856		(18)	(12)
Assets and liabilities held for sale	6,754	8,511	6,009	(397)	(5,224)	(6,201)
Other <sup>a</sup>	74	328	489	(73)	(237)	(173)
<b>Total</b>	<b>78,814</b>	<b>479,136</b>	<b>27,020</b>	<b>(25,723)</b>	<b>(443,085)</b>	<b>(14,219)</b>

**As at 31 December 2015**

Interest rate derivatives		228,751	2,675		(218,864)	(2,247)
Foreign exchange derivatives	2	54,839	95	(4)	(58,594)	(196)
Credit derivatives		16,279	1,902		(16,405)	(219)
Equity derivatives	3,830	9,279	690	(2,870)	(14,037)	(1,545)
Commodity derivatives	2,510	6,801	56	(2,576)	(6,133)	(562)
Government and government sponsored debt	55,150	52,967	419	(15,036)	(5,474)	(1)
Corporate debt	352	11,598	2,895	(234)	(4,558)	(15)
Certificates of deposit, commercial paper and other money market instruments	82	503		(5)	(6,955)	(382)
Reverse repurchase and repurchase agreements		49,513			(50,838)	
Non-asset backed loans		1,931	16,828			
Asset backed securities		12,009	770		(384)	(37)
Commercial real estate loans			551			
Issued debt					(29,695)	(546)
Equity cash products	29,704	4,038	171	(8,943)	(221)	
Funds and fund linked products		1,649	378		(1,601)	(148)
Private equity investments	7	283	1,388			
Assets and liabilities held for sale	26	8	7,330	(1,024)	(802)	(4,171)
Other <sup>a</sup>	96	836	467		(466)	(173)
<b>Total</b>	<b>91,759</b>	<b>451,284</b>	<b>36,615</b>	<b>(30,692)</b>	<b>(415,027)</b>	<b>(10,242)</b>

Note

<sup>a</sup>Other includes asset backed loans, physical commodities and investment property.

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## 18 Fair value of financial instruments continued

### Valuation techniques and sensitivity analysis

Sensitivity analysis is performed on products with significant unobservable inputs (Level 3) to generate a range of reasonably possible alternative valuations. The sensitivity methodologies applied take account of the nature of the valuation techniques used, as well as the availability and reliability of observable proxy and historical data and the impact of using alternative models.

Sensitivities are dynamically calculated on a monthly basis. The calculation is based on range or spread data of a reliable reference source or a scenario based on relevant market analysis alongside the impact of using alternative models. Sensitivities are calculated without reflecting the impact of any diversification in the portfolio.

The valuation techniques used for the material products within Levels 2 and 3, and observability and sensitivity analysis for products within Level 3, are described below.

#### *Interest rate derivatives*

*Description:* These are derivatives linked to interest rates or inflation indices. This category includes futures, interest rate and inflation swaps, swaptions, caps, floors, inflation options, balance guaranteed swaps and other exotic interest rate derivatives.

*Valuation:* Interest rate derivative cash flows are valued using interest rate yield curves whereby market data is used to construct the term structure of forward rates. This is then used to project and discount future cash flows based on the parameters of the trade. Instruments with optionality are valued using volatilities implied from market inputs. Exotic interest rate derivatives are valued using industry standard and bespoke models based on observable and unobservable market parameter inputs. Input parameters include interest rates, volatilities, correlations and others as appropriate. Inflation forward curves and interest rate yield curves may be extrapolated beyond observable tenors.

Balance guaranteed swaps are valued using cash flow models that calculate fair value based on loss projections, prepayment, recovery and discount rates. These parameters are determined by reference to underlying asset performance.

*Observability:* In general, input parameters are deemed observable up to liquid maturities which are determined separately for each parameter and underlying. Certain correlation, convexity, long dated forwards and volatility exposures are unobservable beyond liquid maturities. Unobservable market data and model inputs are set by referencing liquid market instruments and applying extrapolation techniques or inferred via another reasonable method.

*Level 3 sensitivity:* Sensitivity relating to unobservable valuation inputs is based on the dispersion of consensus data services where available, otherwise stress scenarios or historic data are used.

### *Foreign exchange derivatives*

*Description:* These are derivatives linked to the foreign exchange (FX) market. This category includes FX forward contracts, FX swaps and FX options. The vast majority are traded as over the counter (OTC) derivatives.

*Valuation:* Exotic and non-exotic derivatives are valued using industry standard and bespoke models. Input parameters include FX rates, interest rates, FX volatilities, interest rate volatilities, FX interest rate correlations and others as appropriate. Unobservable model inputs are set by referencing liquid market instruments and applying extrapolation techniques to match the appropriate risk profile.

*Observability:* Certain correlations, long dated forwards and volatilities are unobservable beyond liquid maturities.

*Level 3 sensitivity:* Sensitivity relating to unobservable valuation inputs is primarily based on the dispersion of consensus data services.

### *Credit derivatives*

*Description:* These are derivatives linked to the credit spread of a referenced entity, index or basket of referenced entities or a pool of referenced assets via securitisation. This category includes single name and index credit default swaps (CDS), asset backed CDS, synthetic CDOs and Nth-to-default basket swaps.

*Valuation:* CDS are valued using a market standard model that incorporates the credit curve as its principal input. Credit spreads are observed directly from broker data, third-party vendors or priced to proxies. Where credit spreads are unobservable, they are determined with reference to recent transactions or proxied from bond spreads on observable trades of the same issuer or other similar entities. Synthetic CDOs are valued using a model that calculates fair value based on credit spreads, recovery rates, correlations and interest rates, and is calibrated to the index tranche market.

*Observability:* CDS contracts referencing entities that are not actively traded are considered unobservable. The correlation input to synthetic CDO valuation is considered unobservable as it is proxied from the observable index tranche market. Where an asset backed credit derivative does not have an observable market price and the valuation is determined using a model, an instrument is considered unobservable.

*Level 3 sensitivity:* The sensitivity of valuations of the illiquid CDS portfolio is determined by applying a shift to each spread curve. The shift is based on the average range of pricing observed in the market for similar CDS. Synthetic CDO sensitivity is calculated using correlation levels derived from the range of contributors to a consensus bespoke service.

### *Equity derivatives*

*Description:* These are derivatives linked to equity indices and single names. This category includes exchange traded and OTC equity derivatives including vanilla and exotic options.

*Valuation:* The valuations of OTC equity derivatives are determined using industry standard models. Input parameters include stock prices, dividends, volatilities, interest rates, equity repo curves and, for multi-asset products, correlations. Unobservable model inputs are determined by reference to liquid market instruments and applying extrapolation techniques to match the appropriate risk profile.



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*Observability:* In general, input parameters are deemed observable up to liquid maturities which are determined separately for each parameter and underlying.

*Level 3 sensitivity:* Sensitivity is estimated based on the dispersion of consensus data services either directly or through proxies.

### *Commodity derivatives*

*Description:* These products are exchange traded and OTC derivatives based on underlying commodities such as metals, crude oil and refined products, agricultural, power and natural gas.

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Notes to the financial statements

Assets and liabilities held at fair value

**18 Fair value of financial instruments** continued

*Valuation:* The valuations of commodity swaps and options are determined using models incorporating discounting of cash flows and other industry standard modelling techniques. Valuation inputs include forward curves, volatilities implied from market observable inputs and correlations. Unobservable inputs are set with reference to similar observable products or by applying extrapolation techniques from the observable market.

*Observability:* Certain correlations, forward curves and volatilities for longer dated exposures are unobservable.

*Level 3 sensitivity:* Sensitivity is determined primarily by measuring historical variability over two years. Where historical data is unavailable or uncertainty is due to volumetric risk, sensitivity is measured by applying appropriate stress scenarios or using proxy bid-offer spread levels.

*Complex derivative instruments*

Valuation estimates made by counterparties with respect to complex derivative instruments, for the purpose of determining the amount of collateral to be posted, often differ, sometimes significantly, from Barclays' own estimates. In almost all cases, Barclays has been able to successfully resolve such differences or otherwise reach an accommodation with respect to collateral posting levels, including in certain cases by entering into compromise collateral arrangements. Due to the ongoing nature of collateral calls, Barclays will often be engaged in discussion with one or more counterparties in respect of such differences at any given time. Valuation estimates made by counterparties for collateral purposes are considered, like any other third-party valuation, when determining Barclays' fair value estimates.

*Government and government sponsored debt*

*Description:* These are government bonds, supra sovereign bonds and agency bonds.

*Valuation:* Liquid government bonds actively traded through an exchange or clearing house are marked to the closing levels observed in these markets. Less liquid bonds are valued using observable market prices which are sourced from broker quotes, inter-dealer prices or other reliable pricing services. Where there are no observable market prices, fair value is determined by reference to yields on other bonds from the same issuer.

*Observability:* Where an observable market price is not available the bond is considered Level 3.

*Level 3 sensitivity:* Sensitivity is calculated by using the range of observable proxy prices.

*Corporate debt*

*Description:* This primarily contains corporate bonds.

*Valuation:* Corporate bonds are valued using observable market prices which are sourced from broker quotes, inter-dealer prices or other reliable pricing services. Where there are no observable market prices, fair value is determined by reference to either issuances or CDS spreads of the same issuer as proxy inputs to obtain discounted cash flow amounts. In the absence of observable bond or CDS spreads for the respective issuer, similar reference assets or sector averages are applied as a proxy (the appropriateness of proxies being assessed based on issuer, coupon, maturity and industry).

*Observability:* Where an observable market price is not available the security is considered Level 3.

*Level 3 sensitivity:* The sensitivity of the corporate bonds portfolio is determined by applying a shift to each underlying position driven by average ranges of external levels observed in the market for similar bonds.

#### *Certificates of Deposit, Commercial Paper and other money market instruments*

*Description:* These are certificates of deposit, commercial paper and other money market instruments.

*Valuation:* Certificates of deposit and commercial paper are valued using observable market prices which are sourced from broker quotes inter-dealer prices or other reliable pricing services. Where there are no observable market prices, fair value is determined by reference to either issuances or CDS spreads of the same issuer as proxy inputs to obtain discounted cash flow amounts. In the absence of observable bond or CDS spreads for the respective issuer, similar reference assets or sector averages are applied as a proxy (the appropriateness of proxies being assessed based on issuer, coupon, maturity and industry).

*Observability:* Where an observable market price is not available the instrument is considered Level 3.

*Level 3 sensitivity:* Sensitivity is calculated by using the range of observable proxy prices.

#### *Reverse repurchase and repurchase agreements*

*Description:* These include securities purchased under resale agreements, securities sold under repurchase agreements, and other similar secured lending agreements.

*Valuation:* Reverse repurchase and repurchase agreements are valued by discounting the expected future cash flows. The inputs to the valuation include interest rates and repo rates, which are determined based on the specific parameters of the transaction.

*Observability:* In general, input parameters are deemed observable up to liquid maturities, as determined based on the specific parameters of the transaction. Unobservable market data and model inputs are set by referencing liquid market instruments and applying extrapolation techniques or inferred via another reasonable method.

*Level 3 sensitivity:* Sensitivity relating to unobservable valuation inputs is based on the dispersion of consensus data services where available, otherwise stress scenarios or historic data are used. In general, the sensitivity of unobservable inputs is insignificant to the overall balance sheet valuation given the predominantly short-term nature of the agreements.

#### *Non-asset backed loans*

*Description:* This category is largely made up of fixed rate loans, primarily the ESHLA portfolio, which are valued using models that discount expected future cash flows.

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*Valuation:* Fixed rate loans are valued using models that calculate fair value based on observable interest rates and unobservable loan spreads. Unobservable loan spreads incorporate funding costs, the level of comparable assets such as gilts, issuer credit quality and other factors.

*Observability:* Within this population, the unobservable input is the loan spread.

*Level 3 sensitivity:* The sensitivity of fixed rate loans is calculated by applying a shift to loan spreads.

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## 18 Fair value of financial instruments continued

### *Asset backed securities*

*Description:* These are securities that are linked to the cash flows of a pool of referenced assets via securitisation. This category includes residential mortgage backed securities, commercial mortgage backed securities, CDOs, collateralised loan obligations (CLOs) and other asset backed securities.

*Valuation:* Where available, valuations are based on observable market prices which are sourced from broker quotes and inter-dealer prices. Otherwise, valuations are determined using industry standard discounted cash flow analysis that calculates the fair value based on valuation inputs such as constant default rate, conditional prepayment rate, loss given default and yield. These inputs are determined by reference to a number of sources including proxying to observed transactions, market indices or market research, and by assessing underlying collateral performance.

Proxying to observed transactions, indices or research requires an assessment and comparison of the relevant securities underlying attributes including collateral, tranche, vintage, underlying asset composition (historical losses, borrower characteristics and loan attributes such as loan-to-value ratio and geographic concentration) and credit ratings (original and current).

*Observability:* Where an asset backed product does not have an observable market price and the valuation is determined using a discounted cash flow analysis, the instrument is considered unobservable.

*Level 3 sensitivity:* The sensitivity analysis for asset backed products is based on externally sourced pricing dispersion or by stressing the inputs of discount cash flow analysis.

### *Commercial real estate loans*

*Description:* This portfolio includes loans that are secured by a range of commercial property types including retail, hotel, office, multi-family and industrial properties.

*Valuation:* Performing loans are valued using discounted cash flow analysis which considers the characteristics of the loan such as property type, geographic location, credit quality and property performance reviews in order to determine an appropriate credit spread. Where there is significant uncertainty regarding loan performance, valuation is based on independent third-party appraisals or bids for the underlying properties. Independent third party appraisals are determined by discounted cash flow analysis. The key valuation inputs are yield and loss given default.

*Observability:* Since each commercial real estate loan is unique in nature and the secondary loan market is relatively illiquid, valuation inputs are generally considered unobservable.

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*Level 3 sensitivity:* For performing loans, sensitivity is determined by stressing the credit spread for each loan. For loans which have significant uncertainty regarding loan performance, sensitivity is determined by either a range of bids or by stressing the inputs to independent third party appraisals.

### *Issued debt*

*Description:* This category contains Barclays issued notes.

*Valuation:* Fair valued Barclays issued notes are valued using discounted cash flow techniques and industry standard models incorporating various input parameters observed for each parameter or instrument.

*Observability:* Barclays issued notes are generally observable. Structured notes are debt instruments containing embedded derivatives. Where either an input to the embedded derivative or the debt instrument is deemed unobservable and significant to the overall valuation of the note, the structured note is classified as Level 3.

*Level 3 sensitivity:* Sensitivity to the unobservable input in the embedded derivative is calculated in line with the method used for the derivative instrument concerned.

### *Equity cash products*

*Description:* This category includes listed equities, Exchange Traded Funds (ETF) and preference shares.

*Valuation:* Valuation of equity cash products is primarily determined through market observable prices.

*Observability:* Prices are generally observed in the market. Where a price for an equity security is not available, the instrument is considered unobservable.

*Level 3 sensitivity:* Sensitivity is calculated based on a stressed valuation on the underlying asset.

### *Funds and fund linked products*

*Description:* This category includes holdings in hedge funds and funds of funds.

*Valuation:* In general, fund holdings are valued based on the latest available valuation received from the fund administrator. In the case of illiquid fund holdings the valuation will take account of all available information in relation to the underlying fund or collection of funds and may be adjusted relative to the performance of relevant index benchmarks.

*Observability:* Funds are deemed unobservable where the fund is either suspended, in wind-down, has a redemption restriction that severely affects liquidity, or where the latest net asset value from the fund administrators is older than the frequency dictated by the fund offering documents.

*Level 3 sensitivity:* Sensitivity is calculated on an individual fund basis using a loss-based scenario approach which factors in the underlying assets of the specific fund and assumed recovery rates.

Notes to the financial statements

Assets and liabilities held at fair value

**18 Fair value of financial instruments** continued

*Private equity investments*

*Description:* This category includes private equity investments.

*Valuation:* Private equity investments are valued in accordance with the International Private Equity and Venture Capital Valuation Guidelines . These require the use of a number of individual pricing benchmarks such as the prices of recent transactions in the same or similar entities, discounted cash flow analysis and comparison with the earnings multiples of listed comparative companies. Full valuations are generally performed at least bi-annually, with the positions reviewed periodically for material events that might impact upon fair value. The valuation of unquoted equity instruments is subjective by nature. However, the relevant methodologies are commonly applied by other market participants and have been consistently applied over time.

*Observability:* Unobservable inputs include earnings estimates, multiples of comparative companies, marketability discounts and discount rates.

*Level 3 sensitivity:* The relevant valuation models are each sensitive to a number of key assumptions, such as projected future earnings, comparator multiples, marketability discounts and discount rates. Valuation sensitivity is estimated by flexing such assumptions to reasonable alternative levels and determining the impact on the resulting valuation.

*Assets and liabilities held for sale*

*Description:* Assets and liabilities held for sale materially consist of the intention to dispose of BAGL, France, Egypt, BVP and Zimbabwe.

*Valuation:* Assets and liabilities held for sale are valued at the lower of carrying value and fair value less cost to sell.

*Level 3 sensitivity:* The disposal groups that are measured at fair value less cost to sell are valued at the agreed price less costs to sell and are not expected to display significant sensitivity. The sensitivity of the assets and liabilities measured at carrying value is explained within the relevant product descriptions.

*Other*

*Description:* Other includes asset-backed loans, physical commodities and investment property.

**Assets and liabilities reclassified between Level 1 and Level 2**

There were transfers of £2,340m of government bond assets during the period from Level 2 to Level 1 to reflect the market observability of these product types (2015: £537m assets and £801m liabilities of equity and foreign exchange derivatives transferred from Level 1 to Level 2).

### Level 3 movement analysis

The following table summarises the movements in the Level 3 balances during the period. The table shows gains and losses and includes amounts for all financial assets and liabilities that are held at fair value transferred to, and from, Level 3 during the period. Transfers have been reflected as if they had taken place at the beginning of the year.

Assets and liabilities included in disposal groups classified as held for sale and measured at fair value less cost to sell are not included as these are measured at fair value on a non-recurring basis.

Asset and liability transfers between Level 2 and Level 3 are primarily due to i) an increase or decrease in observable market activity related to an input or ii) a change in the significance of the unobservable input, with assets and liabilities classified as Level 3 if an unobservable input is deemed significant.

During the year:

£2.1bn corporate bonds were transferred from Level 3 to Level 2 to reflect the market observability of the products;

£8.6bn of non-asset backed loans were derecognised due to a substantial modification of terms on the ESHLA loans. The new restructured loans are measured on an amortised cost basis; and

Market moves in the interest rate and inflation markets have resulted in an increase in the value of the Level 3 assets being reported, the gains have largely been offset through Level 2 hedges.



## 18 Fair value of financial instruments continued

## Analysis of movements in Level 3 assets and liabilities

	As at 1 January 2016 <sup>a</sup> £m	Purchases £m	Sales £m	Issues £m	Settle- ments £m	Total gains and losses in the period recognised in the income statement Trading income £m	Other income £m	Total gains or losses re- cognised in OCI £m	Transf In £m
Government and government sponsored debt	320		(317)						
Corporate debt	2,843	38	(48)		(5)	206			32
Non-asset backed loans	507	173	(498)		(4)	(38)			18
Asset backed securities	743	129	(295)		(171)	111			1
Funds and fund linked products	340		(77)			23			1
Other	155	59	(16)		(1)	(8)			
<b>Trading portfolio assets</b>	<b>4,908</b>	<b>399</b>	<b>(1,251)</b>		<b>(181)</b>	<b>294</b>			<b>52</b>
Non-asset backed loans	15,963				(8,602)	1,155	100		
Asset backed loans	256	48	(225)		(20)	30			112
Commercial real estate loans	543	2,658	(2,755)		(12)	56			
Private equity investments	457	38	(51)		(3)	16	120		6
Other	78				(21)	(19)	85		41
<b>Financial assets</b>	<b>17,297</b>	<b>2,744</b>	<b>(3,031)</b>		<b>(8,658)</b>	<b>1,238</b>	<b>305</b>		<b>159</b>

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**designated at fair value**

Private equity investments  
Other

877	15	(254)		(407)			63	
44	53	(14)		(16)		4	7	1

**Available for sale investments**

921	68	(268)		(423)		4	70	1
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**Investment property**

82		(3)				2		
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**Trading portfolio liabilities**

		(9)				(1)		
--	--	-----	--	--	--	-----	--	--

Certificates of deposit, commercial paper and other money market instruments

(272)			(19)	48	2	(7)		(301)
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Issued debt

(538)				231		9		
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Other

(244)				83	(48)	(2)		(50)
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**Financial liabilities designated at fair value**

(1,054)			(19)	362	(46)			(351)
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Interest rate derivatives

418	45	3		(6)	228			294
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Foreign exchange derivatives

(104)		30	2	40	6			55
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Credit derivatives

1,685	2	(306)		(119)	111			3
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Equity derivatives

(857)	196	7	(83)	(34)	(98)			(15)
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Commodity derivatives

(506)				91	(3)			
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**Net derivative financial instruments<sup>b</sup>**

636	243	(266)	(81)	(28)	244			337
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**Assets and liabilities held for sale**

424	126	(166)	(116)	85		172		
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**Total**

23,214	3,580	(4,994)	(216)	(8,843)	1,729	483	70	198
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**Net liabilities  
held for sale  
measured at  
fair value on  
non-recurring  
basis**

**Total**

23,214

3,580

(4,994)

(216)

(8,843)

1,729

483

70

198

Notes

aThe Level 3 opening balances have been amended to exclude the asset and liabilities held for sale.

bThe derivative financial instruments are represented on a net basis. On a gross basis, derivative financial assets are £8,546m (2015: £5,418m) and derivative financial liabilities are £7,171m (2015: £4,769m).

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## Notes to the financial statements

## Assets and liabilities held at fair value

## 18 Fair value of financial instruments continued

## Analysis of movements in Level 3 assets and liabilities

	As at 1 January 2015	Purchases	Sales	Issues	Settlements	Total gains and losses in the period recognised in the income statement		Total gains or losses recognised in OCI	Transf In
						Trading income	Other income		
	£m	£m	£m	£m	£m	£m	£m	£m	£m
Government and government sponsored debt	685	27	(119)		(109)	(6)			2
Corporate debt	3,026	62	(64)		(20)	(47)			5
Non-asset backed loans	273	520	(251)		(3)	(42)			11
Asset backed securities	1,610	1,365	(1,565)		(711)	58			5
Funds and fund linked products	589		(174)		(56)	(27)			12
Other	144	23	(19)		(9)	(14)			53
<b>Trading portfolio assets</b>	<b>6,327</b>	<b>1,997</b>	<b>(2,192)</b>		<b>(908)</b>	<b>(78)</b>			<b>88</b>
Non-asset backed loans	17,471	192	(114)		(756)	(531)	(6)		
Asset backed loans	393	1,098	(1,260)		2	8			15
Commercial real estate loans	1,179	3,540	(3,878)		(342)	49	1		
Private equity investments	701	94	(200)		(3)	8	38		4
Other	161	66	(31)		(3)	(11)	5		26
<b>Financial assets designated at</b>	<b>19,905</b>	<b>4,990</b>	<b>(5,483)</b>		<b>(1,102)</b>	<b>(477)</b>	<b>38</b>		<b>45</b>

**fair value**

Government and government sponsored debt	327	14	(36)					1	
Private equity investments	425	29	(89)			471		22	
Other	561	36	(2)		(1,026)	78		397	27
<b>Available for sale investments</b>	1,313	79	(127)		(1,026)	549		420	27
<b>Investment property</b>	207	27	(89)			(5)			
<b>Trading portfolio liabilities</b>	(349)								
Certificates of deposit, commercial paper and other money market instruments	(666)			(216)	261		17		
Issued debt	(748)			(16)	245	(4)	(8)		(38)
Other	(402)				(19)	(18)	75		
<b>Financial liabilities designated at fair value</b>	(1,816)			(232)	487	(22)	84		(38)
Interest rate derivatives	(105)	1	218		(247)	203			243
Foreign exchange derivatives	(30)	14	(1)	(7)	9	(14)			(73)
Credit derivatives	1,557	273	(12)		(6)	(123)			(11)
Equity derivatives	(845)	111	(2)	(290)	103	34			(21)
Commodity derivatives	(152)				(66)	(6)			(388)
<b>Net derivative financial instruments<sup>a</sup></b>	425	399	203	(297)	(207)	94			(250)
<b>Total</b>	26,012	7,492	(7,688)	(529)	(2,756)	(483)	666	420	(128)

**Net assets  
held for sale  
measured at  
fair value on  
non-recurring  
basis**

<b>Total</b>	26,012	7,492	(7,688)	(529)	(2,756)	(483)	666	420	(128)
Note									

aThe derivative financial instruments are represented on a net basis. On a gross basis, derivative financial assets are £8,546m (2015: £5,418m) and derivative financial liabilities are £7,171m (2015: £4,769m).

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## 18 Fair value of financial instruments continued

## Unrealised gains and losses on Level 3 financial assets and liabilities

The following table discloses the unrealised gains and losses recognised in the year arising on Level 3 financial assets and liabilities held at year end.

## Unrealised gains and losses recognised during the period on Level 3 assets and liabilities held at period end

	2016				2015			
	Income statement		Other comprehensive income £m	Total <sup>a</sup> £m	Income statement		Other comprehensive income £m	Total £m
Trading income £m	Other income £m	Trading income £m			Other income £m			
<b>As at 31 December</b>								
Trading portfolio assets	243			243	(125)			(125)
Financial assets designated at fair value	227	271		498	(562)	(17)		(579)
Available for sale investments		6	70	76		(20)	488	468
Investment property		2		2		(22)		(22)
Trading portfolio liabilities	(1)			(1)	(1)			(1)
Financial liabilities designated at fair value	96	(6)		90	(24)	76		52
Net derivative financial instruments	175			175	123			123
Assets and liabilities held for sale		128		128				
<b>Total</b>	<b>740</b>	<b>401</b>	<b>70</b>	<b>1,211</b>	<b>(589)</b>	<b>17</b>	<b>488</b>	<b>(84)</b>

<sup>a</sup>The £1.2bn unrealised gain on Level 3 assets (2015: £84m loss) is largely offset by losses on related Level 2 and Level 1 portfolio hedges.

## Notes to the financial statements

## Assets and liabilities held at fair value

**18 Fair value of financial instruments**

continued

**Sensitivity analysis of valuations using unobservable inputs**

	Fair value		Favourable changes		Unfavourable changes	
	Total assets	Total liabilities	Income statement	Equity	Income statement	Equity
	£m	£m	£m	£m	£m	£m
<b>As at 31 December 2016</b>						
Interest rate derivatives	5,759	(4,860)	209		(249)	
Foreign exchange derivatives	132	(51)	15		(15)	
Credit derivatives	1,611	(241)	127		(133)	
Equity derivatives	1,037	(2,007)	163		(164)	
Commodity derivatives	8	(13)	5		(5)	
Government and government sponsored debt	3					
Corporate debt	969	(5)	7		(2)	
Certificates of deposit, commercial paper and other money market instruments		(319)			(1)	
Reverse repurchase and repurchase agreements						
Non asset backed loans	8,767		462		(597)	
Asset backed securities	515		1		(1)	
Commercial real estate loans	442		2		(2)	
Issued debt		(298)				
Equity cash products	150	(2)	12	26	(11)	(26)
Funds and fund linked products	273	(37)	6		(6)	
Private equity investments	856	(12)	104	18	(104)	(21)
Assets and liabilities held for sale	699	(125)	3		(3)	
Other <sup>a</sup>	489	(173)	147		(105)	
<b>Total</b>	<b>21,710</b>	<b>(8,143)</b>	<b>1,263</b>	<b>44</b>	<b>(1,398)</b>	<b>(47)</b>
<b>As at 31 December 2015</b>						
Interest rate derivatives	2,675	(2,247)	93		(103)	
Foreign exchange derivatives	95	(196)	17		(17)	
Credit derivatives	1,902	(219)	66		(96)	
Equity derivatives	690	(1,545)	167		(185)	
Commodity derivatives	56	(562)	13		(13)	
Government and government sponsored debt	419	(1)	4		(4)	
Corporate debt	2,895	(15)	10	1	(5)	(1)
		(382)				



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Certificates of deposit, commercial paper  
and other money market instruments

Reverse repurchase and repurchase  
agreements

Non asset backed loans	16,828		1,581		(1,564)	
Asset backed securities	770	(37)	1		(1)	
Commercial real estate loans	551		24		(1)	
Issued debt		(546)				
Equity cash products	171			17		(17)
Funds and fund linked products	378	(148)	1		(1)	
Private equity investments	1,388		149	318	(149)	(53)
Other <sup>a</sup>	467	(173)	5		(23)	
<b>Total</b>	<b>29,285</b>	<b>(6,071)</b>	<b>2,131</b>	<b>336</b>	<b>(2,162)</b>	<b>(71)</b>

The effect of stressing unobservable inputs to a range of reasonably possible alternatives, alongside considering the impact of using alternative models, would be to increase fair values by up to £1.3bn (2015: £2.1bn) or to decrease fair values by up to £1.4bn (2015: £2.2bn) with substantially all the potential effect impacting profit and loss rather than reserves.

Note

aOther includes asset backed loans, physical commodities and investment property.

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## 18 Fair value of financial instruments continued

## Significant unobservable inputs

The following table discloses the valuation techniques and significant unobservable inputs for assets and liabilities recognised at fair value and classified as Level 3 along with the range of values used for those significant unobservable inputs:

	Total assets	Total liabilities	Valuation technique(s)	Significant unobservable inputs	2016		2015		Units <sup>a</sup>
	£m	£m			Range		Range		
Derivative financial instruments <sup>b</sup>					Min	Max	Min	Max	
Interest rate derivatives	5,759	(4,860)	Discounted cash flows	Inflation forwards	(1)	8		8	%
				Credit spread	25	1,669	25	1,563	bps
			Option model	Inflation volatility	35	207	36	197	bp vol
				IR IR correlation	(26)	98	(55)	100	%
				FX IR correlation	(15)	81	(20)	30	%
Credit derivatives	1,611	(241)	Discounted cash flows	Interest rate volatility	9	295	5	249	bp vol
				Credit spread	133	274	140	413	bps
			Correlation model	Credit correlation	25	43	26	41	%
				Credit spread	13	2,317	10	9,923	bps
Equity derivatives	1,037	(2,007)	Comparable pricing Option model	Price	84	100	80	102	points
				Equity volatility	1	150		318	%
				Equity equity correlation	(90)	100	(54)	100	%
					(80)	25	(100)	40	%

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			Equity	FX					
			correlation						
<b>Non-derivative financial instruments</b>									
Corporate debt	969	(5)	Discounted cash flows	Credit spread	145	190	120	529	bps
			Comparable pricing	Price		121	1	114	points
Non-asset backed loans	8,767		Discounted cash flows	Loan spread	30	1,495	3	994	bps
			Comparable pricing	Price		99		100	points
				Price		100		101	points
				Conditional					
Asset backed securities	515		Discounted cash flows	prepayment rate				25	%
				Constant default rate				2	%
				Loss given default			30	100	%
				Yield			5	58	%
				Credit spread	70	150	157	1,416	bps
Commercial real estate loans	442		Discounted cash flows	Loss given default		100		100	%
				Credit spread	179	408	230	801	bps
Private equity investments	856	(12)	Discounted cash flows	Loss given default				94	%
			EBITDA multiple	EBITDA multiple	5	17		12	multiple
Other <sup>c</sup>	1,754	(1,018)							
<b>Total</b>	<b>21,710</b>	<b>(8,143)</b>							

Notes

aThe units used to disclose ranges for significant unobservable inputs are percentages, points and basis points. Points are a percentage of par; for example, 100 points equals 100% of par. A basis point equals 1/100th of 1%; for example, 150 basis points equals 1.5%.

bCertain derivative instruments are classified as Level 3 due to a significant unobservable credit spread input into the calculation of the Credit Valuation Adjustment for the instruments. The range of significant unobservable credit spreads is between 65-874bps (2015: 67-1,175bps).

cOther includes the remaining Level 3 assets and liabilities.



Notes to the financial statements

Assets and liabilities held at fair value

**18 Fair value of financial instruments** continued

The following section describes the significant unobservable inputs identified in the table above, and the sensitivity of fair value measurement of the instruments categorised as Level 3 assets or liabilities to increases in significant unobservable inputs. Where sensitivities are described, the inverse relationship will also generally apply.

Where reliable inter-relationships can be identified between significant unobservable inputs used in fair value measurement, a description of those inter-relationships is included below.

*Forwards*

A price or rate that is applicable to a financial transaction that will take place in the future. A forward is generally based on the spot price or rate, adjusted for the cost of carry, and defines the price or rate that will be used to deliver a currency, bond, commodity or some other underlying instrument at a point in the future. A forward may also refer to the rate fixed for a future financial obligation, such as the interest rate on a loan payment. In general, a significant increase in a forward in isolation will result in a movement in fair value that is favourable for the contracted receiver of the underlying (currency, bond, commodity, etc.), but the sensitivity is dependent on the specific terms of the instrument.

*Credit spread*

Credit spreads typically represent the difference in yield between an instrument and a benchmark security or reference rate. Credit spreads reflect the additional yield that a market participant would demand for taking exposure to the credit risk of an instrument and form part of the yield used in a discounted cash flow calculation.

In general, a significant increase in credit spread in isolation will result in a movement in fair value that is unfavourable for the holder of a cash asset.

For a derivative instrument, a significant increase in credit spread in isolation can result in a movement in fair value that is favourable or unfavourable depending on the specific terms of the instrument.

*Volatility*

Volatility is a key input in the valuation of derivative products containing optionality. Volatility is a measure of the variability or uncertainty in returns for a given derivative underlying. It represents an estimate of how much a particular underlying instrument, parameter or index will change in value over time. In general, volatilities will be implied from observed option prices. For unobservable options the implied volatility may reflect additional assumptions about the nature of the underlying risk, as well as reflecting the given strike/maturity profile of a specific option contract.

In general a significant increase in volatility in isolation will result in a movement in fair value that is favourable for the holder of a simple option, but the sensitivity is dependent on the specific terms of the instrument.

There may be inter-relationships between unobservable volatilities and other unobservable inputs that can be implied from observation, e.g. when equity prices fall, implied equity volatilities generally rise but these are specific to individual markets and may vary over time.

### *Correlation*

Correlation is a measure of the relationship between the movements of two variables i.e. how the change in one variable influences a change in the other variable. Correlation is a key input into valuation of derivative contracts with more than one underlying instrument. For example, where an option contract is written on a basket of underlying names, the volatility of the basket, and hence the fair value of the option, will depend on the correlation between the basket's components. Credit correlation generally refers to the correlation between default processes for the separate names that make up the reference pool of a collateralised debt obligation structure.

A significant increase in correlation in isolation can result in a movement in fair value that is favourable or unfavourable depending on the specific terms of the instrument.

### *Comparable price*

Comparable instrument prices are used in valuation by calculating an implied yield (or spread over a liquid benchmark) from the price of a comparable observable bond, then adjusting that yield (or spread) to derive a value for the unobservable bond. The adjustment to yield (or spread) should account for relevant differences in the bonds such as maturity or credit quality. Alternatively, a price-to-price basis can be assumed between the comparable instrument and bond being valued in order to establish the value of the bond.

In general, a significant increase in comparable price in isolation will result in a movement in fair value that is favourable for the holder of a cash instrument.

For a derivative instrument, a significant increase in an input derived from a comparable price in isolation can result in a movement in fair value that is favourable or unfavourable depending on the specific terms of the instrument.

### *Loan spread*

Loan spreads typically represent the difference in yield between an instrument and a benchmark security or reference rate. Loan spreads typically reflect funding costs, credit quality, the level of comparable assets such as gilts, and other factors, and form part of the yield used in a discounted cash flow calculation.

The ESHLA portfolio primarily consists of long dated fixed rate loans extended to counterparties in the UK Education, Social Housing and Local Authority sectors. The loans are categorised as Level 3 in the fair value hierarchy due to their illiquid nature and the significance of unobservable loan spreads to the valuation. Valuation uncertainty arises from the long dated nature of the portfolio, the lack of a secondary market in the loans and the lack of observable loan spreads. The majority of ESHLA loans are to borrowers in heavily regulated sectors that are considered extremely low credit risk, and have a history of zero defaults since inception. While the overall loan spread range is from 30bps to 1,495bps (2015: 3bps to 994bps), the vast majority of spreads are concentrated towards the bottom end of this range, with 99% of the loan notional being valued with spreads less than 200bps consistently for both years.

In general, a significant increase in loan spreads in isolation will result in a movement in fair value that is unfavourable for the holder of a loan.

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## 18 Fair value of financial instruments continued

### *Conditional prepayment rate*

Conditional prepayment rate is the proportion of voluntary, unscheduled repayments of loan principal by a borrower. Prepayment rates affect the weighted average life of securities by altering the timing of future projected cash flows.

A significant increase in a conditional prepayment rate in isolation can result in a movement in fair value that is favourable or unfavourable depending on the specific terms of the instrument.

Conditional prepayment rates are typically inversely correlated to credit spread, i.e. securities with high borrower credit spread typically experience lower prepayment rates and also tend to experience higher default rates.

### *Constant default rate*

The constant default rate represents an annualised rate of default of the loan principal by the borrower.

A significant increase in a constant default rate in isolation can result in a movement in fair value that is favourable or unfavourable depending on the specific terms of the instrument.

Constant default rate and conditional prepayment rates are typically inversely correlated; fewer defaults on loans will typically mean higher credit quality and therefore more prepayments.

### *Loss given default (LGD)*

Loss given default represents the expected loss upon liquidation of the collateral as a percentage of the balance outstanding.

In general, a significant increase in the LGD in isolation will translate to lower recovery and lower projected cash flows to pay to the securitisation, resulting in a movement in fair value that is unfavourable for the holder of the securitised product.

### *Yield*

The rate used to discount projected cash flows in a discounted future cash flow analysis.

In general, a significant increase in yield in isolation will result in a movement in fair value that is unfavourable for the holder of a cash instrument.

### *EBITDA Multiple*

EBITDA multiple is the ratio of the valuation of the investment to the earnings before interest, taxes, depreciation and amortisation.



In general an increase in the multiple is favourable to the holder of the investment.

### Fair value adjustments

Key balance sheet valuation adjustments are quantified below:

	2016 £m	2015 £m
Exit price adjustments derived from market bid-offer spreads	(475)	(509)
Uncollateralised derivative funding	(82)	(72)
<b>Derivative credit valuation adjustments:</b>		
Monolines		(9)
Other derivative credit valuation adjustments	(237)	(318)
Derivative debit valuation adjustments	242	189
<i>Exit price adjustments derived from market bid-offer spreads</i>		

The Group uses mid-market pricing where it is a market maker and has the ability to transact at, or better than, mid price (which is the case for certain equity, bond and vanilla derivative markets). For other financial assets and liabilities, bid-offer adjustments are recorded to reflect the exit level for the expected close out strategy. The methodology for determining the bid-offer adjustment for a derivative portfolio involves calculating the net risk exposure by offsetting long and short positions by strike and term in accordance with the risk management and hedging strategy.

Bid-offer levels are generally derived from market quotes such as broker data. Less liquid instruments may not have a directly observable bid-offer level. In such instances, an exit adjustment may be derived from an observable bid-offer level for a comparable liquid instrument, determined by calibrating to derivative prices, or by scenario or historical analysis.

Exit price adjustments have reduced by £34m to £475m as a result of risk reduction and spread tightening.

Note

aDerivative exposure to monoline insurers was exited in 2016.

## Notes to the financial statements

## Assets and liabilities held at fair value

**18 Fair value of financial instruments** continued*Discounting approaches for derivative instruments**Collateralised*

In line with market practice, the methodology for discounting collateralised derivatives takes into account the nature and currency of the collateral that can be posted within the relevant credit support annex (CSA). This CSA-aware discounting approach recognises the cheapest to deliver option that reflects the ability of the party posting collateral to change the currency of the collateral.

For counterparties in dispute regarding the settlement of collateral interest, where the relevant rate is currently negative, an additional fair value adjustment of £24m is held to account for the potential impact of resolving the dispute.

*Uncollateralised*

A fair value adjustment of £82m is applied to account for the impact of incorporating the cost of funding into the valuation of uncollateralised and partially collateralised derivative portfolios and collateralised derivatives where the terms of the agreement do not allow the rehypothecation of collateral received. This adjustment is referred to as the Funding Fair Value Adjustment (FFVA). FFVA has increased by £10m to £82m mainly as a result of material trade unwinds.

FFVA is determined by calculating the net expected exposure at a counterparty level and applying a funding rate to these exposures that reflects the market cost of funding. Barclays' internal Treasury rates are used as an input to the calculation. The approach takes into account the probability of default of each counterparty, as well as any mandatory break clauses.

FFVA incorporates a scaling factor which is an estimate of the extent to which the cost of funding is incorporated into observed traded levels. On calibrating the scaling factor, it is with the assumption that Credit Valuation Adjustments (CVA) and Debit Valuation Adjustments (DVA) are retained as valuation components incorporated into such levels. The effect of incorporating this scaling factor at 31 December 2016 was to reduce FFVA by £246m (2015: £216m).

Uncollateralised derivative trading activity is used to determine this scaling factor. The trading history analysed includes new trades, terminations, trade restructures and novations. The FFVA balance and movement is driven by Barclays' own cost of funding spread over LIBOR, counterparty default probabilities and recovery rates, as well as the market value of the underlying derivatives. Movements in the market value of the portfolio in scope for FFVA are mainly driven by interest rates, inflation rates and foreign exchange levels.

Barclays continues to monitor market practices and activity to ensure the approach to uncollateralised derivative valuation remains appropriate. The above approach has been in use since 2012 with no significant changes.

### *Derivative credit and debit valuation adjustments*

CVAs and DVAs are incorporated into derivative valuations to reflect the impact on fair value of counterparty credit risk and Barclays' own credit quality respectively. These adjustments are calculated for uncollateralised and partially collateralised derivatives across all asset classes. CVA and DVA are calculated using estimates of exposure at default, probability of default and recovery rates, at a counterparty level. Counterparties include (but are not limited to) corporates, sovereigns and sovereign agencies, supranationals and special purpose vehicles.

Exposure at default is generally based on expected exposure, estimated through the simulation of underlying risk factors. For some complex products, where this approach is not feasible, simplifying assumptions are made, either through approximating with a more vanilla structure, or using current or scenario-based mark to market as an estimate of future exposure. Where a strong CSA exists to mitigate counterparty credit risk, the exposure at default is set to zero.

Probability of default and recovery rate information is generally sourced from the CDS markets. For counterparties where this information is not available, or considered unreliable due to the nature of the exposure, alternative approaches are taken based on mapping internal counterparty ratings onto historical or market-based default and recovery information. In particular, this applies to sovereign-related names where the effect of using the recovery assumptions implied in CDS levels would imply a £95m (2015: £56m) increase in CVA.

Correlation between counterparty credit and underlying derivative risk factors may lead to a systematic bias in the valuation of counterparty credit risk, termed 'wrong-way', 'right-way', risk. This is not systematically incorporated into the CVA calculation but is adjusted where the underlying exposure is directly related to the counterparty.

CVA decreased by £90m to £237m, primarily due to reductions in the average maturity of the portfolio driven by trade unwinds, including a reduction in monoline CVA of £9m. DVA increased by £53m to £242m, primarily as a result of Barclays' credit spreads widening.

### *Portfolio exemptions*

The Group uses the portfolio exemption in IFRS 13 Fair Value Measurement to measure the fair value of groups of financial assets and liabilities.

Instruments are measured using the price that would be received to sell a net long position, i.e. an asset, for a particular risk exposure or to transfer a net short position, i.e. a liability, for a particular risk exposure in an orderly transaction between market participants at the balance sheet date under current market conditions. Accordingly, the Group measures the fair value of the group of financial assets and liabilities consistently with how market participants would price the net risk exposure at the measurement date.

### **Unrecognised gains as a result of the use of valuation models using unobservable inputs**

The amount that has yet to be recognised in income that relates to the difference between the transaction price (the fair value at initial recognition) and the amount that would have arisen had valuation models using unobservable inputs been used on initial recognition, less amounts subsequently recognised, is £179m (2015: £187m). There are additions of £29m (2015: £42m) and £37m (2015: £51m) of amortisation and releases.

### **Third party credit enhancements**

Structured and brokered certificates of deposit issued by Barclays are insured up to \$250,000 per depositor by the Federal Deposit Insurance

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Corporation (FDIC) in the US. The FDIC is funded by premiums that Barclays and other banks pay for deposit insurance coverage. The carrying value of these issued certificates of deposit that are designated under the IAS 39 fair value option includes this third party credit enhancement. The on-balance sheet value of these brokered certificates of deposit amounted to £3,905m (2015: £3,729m).

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**18 Fair value of financial instruments** continued*Comparison of carrying amounts and fair values for assets and liabilities not held at fair value*

The following table summarises the fair value of financial assets and liabilities measured at amortised cost on the Group's balance sheet:

	Carrying amount	Fair value	Quoted market prices (Level 1)	Observable inputs (Level 2)	Significant unobservable inputs (Level 3)
	£m	£m	£m	£m	£m
<b>As at 31 December 2016</b>					
<b>Financial assets</b>					
Held to maturity <sup>a</sup>	5,176	5,347	5,347		
Loans and advances to banks	43,251	43,228	7,256	34,987	985
Loans and advances to customers:					
Home loans	144,765	141,155			141,155
Credit cards, unsecured and other retail lending	57,808	57,699	737	42	56,920
Finance lease receivables	1,602	1,598			
Corporate loans	188,609	186,715		126,979	59,736
Reverse repurchase agreements and other similar secured lending	13,454	13,454		13,454	
Assets included in disposal groups classified as held for sale <sup>c</sup>	43,593	44,838	1,070	4,614	39,154
<b>Financial liabilities</b>					
Deposits from banks	(48,214)	(48,212)	(5,256)	(42,895)	(61)
Customer accounts:					
Current and demand accounts	(138,204)	(138,197)	(127,258)	(10,921)	(18)
Savings accounts	(133,344)	(133,370)	(120,471)	(12,891)	(8)
Other time deposits	(151,630)	(151,632)	(48,853)	(96,240)	(6,539)
Debt securities in issue	(75,932)	(76,971)	(196)	(74,712)	(2,063)
	(19,760)	(19,760)		(19,760)	

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Repurchase agreements and other similar secured borrowing					
Subordinated liabilities	(23,383)	(24,547)		(24,547)	
Liabilities included in disposal groups classified as held for sale <sup>c</sup>	(51,775)	(51,788)	(22,264)	(28,998)	(526)
<b>As at 31 December 2015</b>					
<b>Financial assets</b>					
Loans and advances to banks	41,349	41,301	5,933	34,125	1,243
Loans and advances to customers:					
Home loans	155,863	151,431			151,431
Credit cards, unsecured and other retail lending	67,840	67,805	1,148	284	66,373
Finance lease receivables	4,776	4,730			
Corporate loans	170,738	169,697	585	129,847	39,265
Reverse repurchase agreements and other similar secured lending	28,187	28,187		28,187	
<b>Financial liabilities</b>					
Deposits from banks	(47,080)	(47,080)	(4,428)	(42,652)	
Customer accounts:					
Current and demand accounts	(147,122)	(147,121)	(130,439)	(16,537)	(145)
Savings accounts	(135,567)	(135,600)	(122,029)	(13,537)	(34)
Other time deposits	(135,553)	(135,796)	(43,025)	(84,868)	(7,903)
Debt securities in issue	(69,150)	(69,863)	(190)	(69,122)	(551)
Repurchase agreements and other similar secured borrowing	(25,035)	(25,035)		(25,035)	
Subordinated liabilities	(21,467)	(22,907)		(22,907)	
Notes					

a In June 2016 UK Gilts previously classified as available for sale were reclassified to held to maturity in order to reflect the intention with these assets.

b The fair value hierarchy for finance lease receivables is not required as part of the standard.

c Disposal groups held for sale and measured at fair value less cost to sell are included in the fair value table. For disposal groups measured at carrying amount, the underlying financial assets and liabilities measured at fair value are included in the fair value disclosures on pages 247 to 260 and items measured at amortised cost are included on page 261. Non financial assets (£6.6bn) and liabilities (£1.7bn) within disposal groups measured at carrying amount are excluded from these disclosures.

Notes to the financial statements

Assets and liabilities held at fair value

**18 Fair value of financial instruments** continued

The fair value is an estimate of the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As a wide range of valuation techniques are available, it may not be appropriate to directly compare this fair value information to independent market sources or other financial institutions. Different valuation methodologies and assumptions can have a significant impact on fair values which are based on unobservable inputs.

*Financial assets*

The carrying value of financial assets held at amortised cost (including loans and advances to banks and customers, and other lending such as reverse repurchase agreements and cash collateral on securities borrowed) is determined in accordance with the relevant accounting policy in Note 20.

*Loans and advances to banks*

The fair value of loans and advances, for the purpose of this disclosure, is derived from discounting expected cash flows in a way that reflects the current market price for lending to issuers of similar credit quality. Where market data or credit information on the underlying borrowers is unavailable, a number of proxy/extrapolation techniques are employed to determine the appropriate discount rates.

There is minimal difference between the fair value and carrying amount due to the short-term nature of the lending, i.e. predominantly overnight deposits, and the high credit quality of counterparties.

*Loans and advances to customers*

The fair value of loans and advances to customers, for the purpose of this disclosure, is derived from discounting expected cash flows in a way that reflects the current market price for lending to issuers of similar credit quality.

For retail lending, i.e. Home loans and credit cards, tailored discounted cash flow models are used to estimate the fair value of different product types. For example, for home loans different models are used to estimate fair values of tracker, offset and fixed rate mortgage products. Key inputs to these models are the differentials between historic and current product margins and estimated prepayment rates.

The discount of fair value to carrying amount for home loans has reduced to 2.5% (2015: 2.8%) due to changes in product mix across the loan portfolio and movements in product margins.

The fair value of corporate loans is calculated by the use of discounted cash flow techniques where the gross loan values are discounted at a rate of difference between contractual margins and hurdle rates or spreads where Barclays charges a margin over LIBOR depending on credit quality and loss given default and years to maturity. The discount

between the carrying and fair value has increased to 1.0% (2015: 0.6%).

#### *Reverse repurchase agreements*

The fair value of reverse repurchase agreements approximates carrying amount as these balances are generally short dated and fully collateralised.

#### *Financial liabilities*

The carrying value of financial liabilities held at amortised cost (including customer accounts, other deposits, repurchase agreements and cash collateral on securities lent, debt securities in issue and subordinated liabilities) is determined in accordance with the accounting policy in Note 22.

#### *Deposits from banks and customer accounts*

In many cases, the fair value disclosed approximates carrying value because the instruments are short term in nature or have interest rates that reprice frequently, such as customer accounts and other deposits and short-term debt securities.

The fair value for deposits with longer-term maturities such as time deposits, are estimated using discounted cash flows applying either market rates or current rates for deposits of similar remaining maturities. Consequently the fair value discount is minimal.

#### *Debt securities in issue*

Fair values of other debt securities in issue are based on quoted prices where available, or where the instruments are short dated, carrying amount approximates fair value. The fair value difference has increased to 1.4% (2015: 1.0%).

#### *Repurchase agreements*

The fair value of repurchase agreements approximates carrying amounts as these balances are generally short dated.

#### *Subordinated liabilities*

Fair values for dated and undated convertible and non-convertible loan capital are based on quoted market rates for the issuer concerned or issuers with similar terms and conditions.



## 19 Offsetting financial assets and financial liabilities

In accordance with IAS 32 Financial Instruments: Presentation, the Group reports financial assets and financial liabilities on a net basis on the balance sheet only if there is a legally enforceable right to set-off the recognised amounts and there is intention to settle on a net basis, or to realise the asset and settle the liability simultaneously. The following table shows the impact of netting arrangements on:

all financial assets and liabilities that are reported net on the balance sheet

all derivative financial instruments and reverse repurchase and repurchase agreements and other similar secured lending and borrowing agreements that are subject to enforceable master netting arrangements or similar agreements, but do not qualify for balance sheet netting.

The table identifies the amounts that have been offset in the balance sheet and also those amounts that are covered by enforceable netting arrangements (offsetting arrangements and financial collateral) but do not qualify for netting under the requirements of IAS 32 described above.

The Net amounts presented below are not intended to represent the Group's actual exposure to credit risk, as a variety of credit mitigation strategies are employed in addition to netting and collateral arrangements.

As at 31 December 2016	Amounts subject to enforceable netting arrangements			Effects of offsetting on-balance sheet		Related amounts not offset <sup>a</sup>		Amounts not subject to enforceable netting arrangements <sup>c</sup>
	Gross amounts £m	Amounts offset <sup>b</sup> £m	Net amounts reported on the balance sheet £m	Financial instruments £m	Financial collateral £m	Net amount £m	£m	
Derivative financial assets	353,078	(11,934)	341,144	(273,602)	(49,923)	17,619	5,482	
Reverse repurchase agreements	257,430	(187,262)	70,168	(69,932)		236	6,448	

and other  
similar  
secured  
lending<sup>e</sup>

**Total assets**

**610,508 (199,196) 411,312 (273,602) (119,855) 17,855 11,930**

Derivative  
financial  
liabilities

**(345,752) 10,962 (334,790) 273,602 47,383 (13,805) (5,697)**

Repurchase  
agreements  
and other  
similar

secured  
borrowing<sup>e</sup>

**(257,854) 187,262 (70,592) 68,897 (1,695) (4,878)**

**Total  
liabilities**

**(603,606) 198,224 (405,382) 273,602 116,280 (15,500) (10,575)**

**As at  
31 December  
2015**

Derivative  
financial  
assets

328,692 (7,685) 321,007 (259,582) (42,402) 19,023 6,702

Reverse  
repurchase  
agreements  
and other

similar  
secured

lending

169,597 (102,888) 66,709 (66,400) 309 10,991

**Total assets**

**498,289 (110,573) 387,716 (259,582) (108,802) 19,332 17,693**

Derivative  
financial  
liabilities

(325,984) 7,645 (318,339) 259,582 40,124 (18,633) (5,913)

Repurchase  
agreements  
and other

similar  
secured

borrowing

(171,651) 102,888 (68,763) 68,202 (561) (7,110)

**Total  
liabilities**

**(497,635) 110,533 (387,102) 259,582 108,326 (19,194) (13,023)**

*Derivative assets and liabilities*

The Financial instruments column identifies financial assets and liabilities that are subject to set-off under netting agreements, such as the ISDA

Master Agreement or derivative exchange or clearing counterparty agreements, whereby all outstanding transactions with the same counterparty can be offset and close-out netting applied across all outstanding transactions covered by the agreements if an event of default or other predetermined events occur.

Financial collateral refers to cash and non-cash collateral obtained, typically daily or weekly, to cover the net exposure between counterparties by enabling the collateral to be realised in an event of default or if other predetermined events occur.

*Repurchase and reverse repurchase agreements and other similar secured lending and borrowing*

The Amounts offset column identifies financial assets and liabilities that are subject to set off under netting agreements, such as Global Master Repurchase Agreements and Global Master Securities Lending Agreements, whereby all outstanding transactions with the same counterparty can be offset and close-out netting applied across all outstanding transactions covered by the agreements if an event of default or other predetermined events occur.

Financial collateral typically comprises highly liquid securities which are legally transferred and can be liquidated in the event of counterparty default.

These offsetting and collateral arrangements and other credit risk mitigation strategies used by the Group are further explained in the Credit risk mitigation section on page 102.

Notes

a Financial collateral of £49,923m (2015: £42,402m) was received in respect of derivative assets, including £41,641m (2015: £34,918m) of cash collateral and £8,282m (2015: £7,484m) of non-cash collateral. Financial collateral of £47,383m (2015: £40,124m) was placed in respect of derivative liabilities, including £43,763m (2015: £35,464m) of cash collateral and £3,620m (2015: £4,660m) of non-cash collateral. The collateral amounts are limited to net balance sheet exposure so as to not include over-collateralisation. Of the £41,641m (2015: £34,918m) cash collateral held, £26,834m (2015: £27,732m) was included in deposits from banks and £14,807m (2015: £7,186m), was included in customer accounts. Of the £43,763m (2015: £35,464m) cash collateral placed, £17,587m (2015: £13,238m) was included in loans and advances to banks and £26,176m (2015: £22,226m) was included in loans and advances to customers.

b Amounts offset for Derivative financial assets include cash collateral netted of £972m (2015: £572m). Amounts offset for Derivative liabilities did not include any cash collateral netted for December 2016 (2015: £532m). Settlements assets and liabilities have been offset amounting to £10,486m (2015: £8,886m). No other significant recognised financial assets and liabilities were offset in the balance sheet. Therefore, the only balance sheet categories necessary for inclusion in the table are those shown above.

c This column includes contractual rights of set-off that are subject to uncertainty under the laws of the relevant jurisdiction.

d The balance sheet total is the sum of Net amounts reported on the balance sheet that are subject to enforceable netting arrangements and Amounts not subject to enforceable netting arrangements .

e Repurchase and Reverse Repurchase agreements include instruments at amortised cost and instruments designated at fair value through profit and loss. Reverse Repurchase agreements and other similar secured lending of £76,616m (December 2015: £77,700m) is split by fair value £63,162m (December 2015: £49,513m) and amortised cost £13,454m (December 2015: £28,187m). Repurchase agreements and other similar secured borrowing of £75,470m (December 2015: £75,873m) is split by fair value £55,710m (December 2015: £50,838m) and amortised cost £19,760m (December 2015: £25,035m).

## Notes to the financial statements

## Financial instruments held at amortised cost

The notes included in this section focus on assets that are held at amortised cost arising from the Group's retail and wholesale lending including loans and advances, finance leases, repurchase and reverse repurchase agreements and similar secured lending. Detail regarding the Group's capital and liquidity position can be found on pages 152 to 177.

**20 Loans and advances to banks and customers****Accounting for financial instruments held at amortised cost**

Loans and advances to customers and banks, customer accounts, debt securities and most financial liabilities, are held at amortised cost. That is, the initial fair value (which is normally the amount advanced or borrowed) is adjusted for repayments and the amortisation of coupon, fees and expenses to represent the effective interest rate of the asset or liability.

In accordance with IAS 39, where the Group no longer intends to trade in financial assets it may transfer them out of the held for trading classification and measure them at amortised cost if they meet the definition of a loan. The initial value used for the purposes of establishing amortised cost is fair value on the date of the transfer.

	2016	2015
	£m	£m
<b>As at 31 December</b>		
Gross loans and advances to banks	43,251	41,349
Less: allowance for impairment		
<b>Loans and advances to banks</b>	<b>43,251</b>	41,349
Gross loans and advances to customers	<b>397,404</b>	404,138

Less: allowance for impairment	(4,620)	(4,921)
<b>Loans and advances to customers</b>	<b>392,784</b>	<b>399,217</b>

Included within the carrying value of gross loans and advances to customers are effective interest rate adjustments of £1,028m (2015: £917m). Of the total balance deferred, £649m (2015: £424m) relate to costs, such as co-brand partner fees, incurred to originate credit card balances.

## 21 Finance leases

### Accounting for finance leases

The Group applies IAS 17 Leases in accounting for finance leases, both where it is the lessor or the lessee. A finance lease is a lease which confers substantially all the risks and rewards of the leased assets on the lessee. Where the Group is the lessor, the leased asset is not held on the balance sheet; instead a finance lease receivable is recognised representing the minimum lease payments receivable under the terms of the lease, discounted at the rate of interest implicit in the lease. Where the Group is the lessee, the leased asset is recognised in property, plant and equipment and a finance lease liability is recognised, representing the minimum lease payments payable under the lease, discounted at the rate of interest implicit in the lease.

Interest income or expense is recognised in interest receivable or payable, allocated to accounting periods to reflect a constant periodic rate of return.

### Finance lease receivables

Finance lease receivables are included within loans and advances to customers. The Group specialises in asset-based lending and works with a broad range of international technology, industrial equipment and commercial companies to provide customised finance programmes to assist manufacturers, dealers and distributors of assets.

	2016				2015			
	Gross investment in finance lease receivables	Future finance income	Present value of minimum lease payments receivable	Un-guaranteed residual values	Gross investment in finance lease receivables	Future finance income	Present value of minimum lease payments receivable	Un-guaranteed residual values
	£m	£m	£m	£m	£m	£m	£m	£m
Not more than one year	646	(37)	609	60	1,826	(230)	1,596	117
Over one year	986	(57)	929	132	3,569	(555)	3,014	275

year  
but not  
more  
than  
five  
years  
Over  
five  
years

	<b>73</b>	<b>(4)</b>	<b>69</b>	<b>19</b>	224	(32)	192	21
<b>Total</b>	<b>1,705</b>	<b>(98)</b>	<b>1,607</b>	<b>211</b>	5,619	(817)	4,802	413

The decrease in finance lease receivables is primarily driven by BAGL balances now being classified as held for sale.

The impairment allowance for uncollectable finance lease receivables amounted to £6m (2015: £56m).

### Finance lease liabilities

The Group leases items of property, plant and equipment on terms that meet the definition of finance leases. Finance lease liabilities are included within Note 26 Accruals, deferred income and other liabilities.

As at 31 December 2016, the total future minimum payments under finance leases were £15m (2015: nil). The carrying amount of assets held under finance leases was £15m (2015: nil).

## 22 Reverse repurchase and repurchase agreements including other similar lending and borrowing

Reverse repurchase agreements (and stock borrowing or similar transactions) are a form of secured lending whereby the Group provides a loan or cash collateral in exchange for the transfer of collateral, generally in the form of marketable securities subject to an agreement to transfer the securities back at a fixed price in the future. Repurchase agreements are where the Group obtains such loans or cash collateral, in exchange for the transfer of collateral.

### Accounting for reverse repurchase and repurchase agreements including other similar lending and borrowing

The Group purchases (a reverse repurchase agreement) or borrows securities subject to a commitment to resell or return them. The securities are not included in the balance sheet as the Group does not acquire the risks and rewards of ownership. Consideration paid (or cash collateral provided) is accounted for as a loan asset at amortised cost, unless it is designated at fair value through profit and loss.

The Group may also sell (a repurchase agreement) or lend securities subject to a commitment to repurchase or redeem them. The securities are retained on the balance sheet as the Group retains substantially all the risks and rewards of ownership. Consideration received (or cash collateral provided) is accounted for as a financial liability at amortised cost, unless it is designated at fair value through profit and loss.

	2016 £m	2015 £m
<b>Assets</b>		
Banks	2,769	8,954
Customers	10,685	19,233
<b>Reverse repurchase agreements and other similar secured lending at amortised cost<sup>a</sup></b>	<b>13,454</b>	<b>28,187</b>
<b>Liabilities</b>		
Banks	12,820	13,951
Customers	6,940	11,084
<b>Repurchase agreements and other similar secured borrowing at amortised cost<sup>a</sup></b>	<b>19,760</b>	<b>25,035</b>

Note

aNew reverse repurchase and repurchase agreements including other similar lending and borrowing in certain businesses have been designated at fair value following a change in accounting treatment implemented in 2015 to better align to the way the business manages the portfolio's risk and performance (see Notes 14 and 17 for further detail).

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## Notes to the financial statements

## Non-current assets and other investments

The notes included in this section focus on the Group's non-current tangible and intangible assets and property, plant and equipment, which provide long-term future economic benefits.

## 23 Property, plant and equipment

### Accounting for property, plant and equipment

The Group applies IAS 16 *Property Plant and Equipment* and IAS 40 *Investment Properties*.

Property, plant and equipment is stated at cost, which includes direct and incremental acquisition costs less accumulated depreciation and provisions for impairment, if required. Subsequent costs are capitalised if these result in the enhancement to the asset.

Depreciation is provided on the depreciable amount of items of property, plant and equipment on a straight-line basis over their estimated useful economic lives. Depreciation rates, methods and the residual values underlying the calculation of depreciation of items of property, plant and equipment are kept under review to take account of any change in circumstances. The Group uses the following annual rates in calculating depreciation:

Annual rates in calculating depreciation	Depreciation rate
Freehold land	Not depreciated
Freehold buildings and long-leasehold property (more than 50 years to run)	2-3.3%
Leasehold property (less than 50 years to run)	Over the remaining life of the lease
Costs of adaptation of freehold and leasehold property	6-10%
Equipment installed in freehold and leasehold property	6-10%
Computers and similar equipment	17-33%
Fixtures and fittings and other equipment	9-20%

Where leasehold property has a remaining useful life of less than 17 years, costs of adaptation and installed equipment are depreciated over the remaining life of the lease.

**Investment property**

The Group initially recognises investment property at cost, and subsequently at fair value at each balance sheet date, reflecting market conditions at the reporting date. Gains and losses on remeasurement are included in the income statement.

	Investment property £m	Property £m	Equipment £m	Leased assets £m	Total £m
<b>Cost</b>					
<b>As at 1 January 2016</b>	140	3,919	4,259	62	8,380
Additions		167	370		537
Disposals <sup>a</sup>	(6)	(761)	(631)		(1,398)
Change in fair value of investment properties					
Exchange and other movements <sup>b</sup>	(53)	104	(158)	(52)	(159)
<b>As at 31 December 2016</b>	81	3,429	3,840	10	7,360
<b>Accumulated depreciation and impairment</b>					
<b>As at 1 January 2016</b>		(1,697)	(3,177)	(38)	(4,912)
Depreciation charge		(185)	(325)		(510)
Disposals <sup>a</sup>		635	405		1,040
Exchange and other movements <sup>b</sup>		(236)	54	29	(153)
<b>As at 31 December 2016</b>		(1,483)	(3,043)	(9)	(4,535)
<b>Net book value</b>	81	1,946	797	1	2,825
<b>Cost</b>					
<b>As at 1 January 2015</b>	207	4,054	4,350	10	8,621
Additions	13	385	405	49	852
Disposals	(84)	(363)	(232)		(679)
Change in fair value of investment properties	10				10
Exchange and other movements	(6)	(157)	(264)	3	(424)
<b>As at 31 December 2015</b>	140	3,919	4,259	62	8,380
<b>Accumulated depreciation and impairment</b>					
<b>As at 1 January 2015</b>		(1,669)	(3,157)	(9)	(4,835)
Depreciation charge		(181)	(373)		(554)
Disposals		144	159		303
Exchange and other movements		9	194	(29)	174
<b>As at 31 December 2015</b>		(1,697)	(3,177)	(38)	(4,912)
<b>Net book value</b>	140	2,222	1,082	24	3,468
Notes					

aCost and depreciation disposals include £0.9bn relating to fully depreciated assets that are no longer in use. There is no impact on the net book value.

bIncludes property, plant and equipment relating to BAGL of £627m (cost of £1,066m less accumulated depreciation of £439m) which was reclassified to held for sale.

## 23 Property, plant and equipment continued

Property rentals of £7m (2015: £9m) and £6m (2015: £9m) have been included in net investment income and other income respectively. Impairment of £19m (2015: £38m) was charged in the period.

The fair value of investment property is determined by reference to current market prices for similar properties, adjusted as necessary for condition and location, or by reference to recent transactions updated to reflect current economic conditions. Discounted cash flow techniques may be employed to calculate fair value where there have been no recent transactions, using current external market inputs such as market rents and interest rates. Valuations are carried out by management with the support of appropriately qualified independent valuers. Refer to Note 18 Fair value of financial instruments for further details.

## 24 Goodwill and intangible assets

### Accounting for goodwill and other intangible assets

#### *Goodwill*

The carrying value of goodwill is determined in accordance with IFRS 3 *Business Combinations* and IAS 36 *Impairment of Assets*.

Goodwill arises on the acquisition of subsidiaries, associates and joint ventures. It represents the excess of the fair value of the purchase consideration over the fair value of the Group's share of the assets acquired and the liabilities and contingent liabilities assumed on the date of the acquisition.

Goodwill is reviewed annually for impairment, or more frequently when there are indications that impairment may have occurred. The test involves comparing the carrying value of goodwill with the present value of the pre-tax cash flows, discounted at a rate of interest that reflects the inherent risks of the cash generating unit (CGU) to which the goodwill relates, or the CGU's fair value if this is higher.

*Intangible assets*

Intangible assets other than goodwill are accounted for in accordance with IAS 38 *Intangible Assets*.

Intangible assets include brands, customer lists, internally generated software, other software, licences and other contracts and core deposit intangibles. They are initially recognised when they are separable or arise from contractual or other legal rights, the cost can be measured reliably and, in the case of intangible assets not acquired in a business combination, where it is probable that future economic benefits attributable to the assets will flow from their use.

Intangible assets are stated at cost (which is, in the case of assets acquired in a business combination, the acquisition date fair value) less accumulated amortisation and provisions for impairment, if any, and are amortised over their useful lives in a manner that reflects the pattern to which they contribute to future cash flows, generally using the amortisation periods set out below:

**Annual rates in calculating amortisation**

Goodwill

Internally generated software<sup>a</sup>

Other software

Core deposits intangibles

Brands

Customer lists

Licences and other

**Amortisation period**

Not amortised

12 months to 6 years

12 months to 6 years

12 months to 25 years

12 months to 25 years

12 months to 25 years

12 months to 25 years

Intangible assets are reviewed for impairment when there are indications that impairment may have occurred.

## Note

<sup>a</sup>Exceptions to the stated rate relate to useful lives of certain core banking platforms that are assessed individually and, if appropriate, amortised over longer periods ranging from 10 to 15 years.

## Notes to the financial statements

## Non-current assets and other investments

## 24 Goodwill and intangible assets continued

	Goodwill £m	Internally generated software £m	Other software £m	Core deposit intangibles £m	Brands £m	Customer lists £m	Licences and other £m	Total £m
<b>2016</b>								
<b>Cost</b>								
<b>As at</b>								
<b>1 January</b>								
<b>2016</b>	5,603	4,112	542	146	86	1,665	471	12,625
Additions and disposals	(77)	955	2			59	78	1,017
Exchange and other movements <sup>a</sup>	(679)	(140)	(340)	(140)	(86)	(16)	(4)	(1,405)
<b>As at</b>								
<b>31 December</b>								
<b>2016</b>	4,847	4,927	204	6		1,708	545	12,237
<b>Accumulated amortisation and impairment</b>								
<b>As at</b>								
<b>1 January</b>								
<b>2016</b>	(998)	(1,634)	(212)	(75)	(86)	(1,081)	(317)	(4,403)
Disposals	77	46	1			14	12	150
Amortisation charge		(480)	(36)			(129)	(29)	(674)
Impairment charge		(73)	(1)				(1)	(75)
Exchange and other movements <sup>a</sup>	(9)	277	105	69	86	(35)	(2)	491
<b>As at</b>								
<b>31 December</b>								
<b>2016</b>	(930)	(1,864)	(143)	(6)		(1,231)	(337)	(4,511)
<b>Net book value</b>								
<b>2015</b>	3,917	3,063	61			477	208	7,726
<b>Cost</b>								

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<b>As at 1 January 2015</b>	6,329	3,240	482	186	112	1,721	447	12,517
Additions and disposals	(515)	998	75				18	576
Exchange and other movements	(211)	(126)	(15)	(40)	(26)	(56)	6	(468)
<b>As at 31 December 2015</b>	5,603	4,112	542	146	86	1,665	471	12,625
<b>Accumulated amortisation and impairment</b>								
<b>As at 1 January 2015</b>	(1,442)	(1,257)	(194)	(88)	(111)	(962)	(283)	(4,337)
Disposals	518	128	2				3	651
Amortisation charge		(421)	(17)	(6)		(143)	(30)	(617)
Impairment charge	(102)	(101)	(1)	(1)		(12)		(217)
Exchange and other movements	28	17	(2)	20	25	36	(7)	117
<b>As at 31 December 2015</b>	(998)	(1,634)	(212)	(75)	(86)	(1,081)	(317)	(4,403)
<b>Net book value</b>	4,605	2,478	330	71		584	154	8,222
<b>Goodwill</b>								

Goodwill is allocated to business operations according to business segments as follows:

	<b>2016</b>	<b>2015</b>
	<b>£m</b>	<b>£m</b>
Barclays UK	<b>3,556</b>	3,621
Barclays International	<b>361</b>	258
Africa Banking		703
Barclays Non-Core		23
Total net book value of goodwill	<b>3,917</b>	4,605

**Critical accounting estimates and judgements**

*Goodwill*

Testing goodwill for impairment involves a significant amount of judgement. This includes the identification of independent CGUs and the allocation of goodwill to these units based on which units are expected to benefit from the acquisition. The allocation is reviewed following business reorganisations. Cash flow projections necessarily take into

account changes in the market in which a business operates including the level of growth, competitive activity, and the impacts of regulatory change. Determining both the expected pre-tax cash flows and the risk-adjusted interest rate appropriate to the operating unit requires the exercise of judgement. The estimation of pre-tax cash flows is sensitive to the periods for which detailed forecasts are available and to assumptions regarding long-term sustainable cash flows.

*Other intangible assets*

Determining the estimated useful lives of intangible assets (such as those arising from contractual relationships) requires an analysis of circumstances. The assessment of whether an asset is exhibiting indicators of impairment as well as the calculation of impairment, which requires the estimate of future cash flows and fair values less costs to sell, also requires the preparation of cash flow forecasts and fair values for assets that may not be regularly bought and sold.

Note

aIncludes goodwill and intangibles relating to BAGL of £1.1bn which was reclassified to held for sale.

## 24 Goodwill and intangible assets continued

### Impairment testing of goodwill

During 2016, the Group recognised an impairment charge of nil (2015: £102m). The impairment charge of £102m recognised in 2015 related to Non-Core and the withdrawal of the Bespoke product in Barclays International which was as a result of the recoverable amount of the goodwill relating to these businesses not being supported based on the value in use calculations.

### Key assumptions

The key assumptions used for impairment testing are set out below for each significant goodwill balance. Other goodwill of £787m (2015: £1,475m) was allocated to multiple CGUs which are not considered individually significant.

#### *Barclays UK*

Goodwill relating to Woolwich in Personal Banking and Business Banking was £3,130m (2015: £3,130m) of the total Barclays UK balance. The carrying value of the CGU has been determined by using net asset value. The recoverable amount of the CGU has been determined using cash flow predictions based on financial budgets approved by management and covering a five-year period, with a terminal growth rate of 2.0% (2015: 2.4%) applied thereafter. The forecast cash flows have been discounted at a pre-tax rate of 14.6% (2015: 11.4%). Based on these assumptions, the recoverable amount exceeded the carrying amount including goodwill by £4,130m (2015: £14,097m). A one percentage point change in the discount rate or terminal growth rate would increase or decrease the recoverable amount by £988m (2015: £2,775m) and £615m (2015: £2,109m) respectively. A reduction in the forecast cash flows of 10% per annum would reduce the recoverable amount by £1,293m (2015: £2,789m).

The headroom reflects the changes made to the cash generating unit (CGU) in Barclays UK as part of the business reorganisation in 2016. The reduction in headroom in 2016 reflects changes in discount rate and future cash flow projections.

## 25 Operating leases

### Accounting for operating leases



The Group applies IAS 17 *Leases*, for operating leases. An operating lease is a lease where substantially all of the risks and rewards of the leased assets remain with the lessor. Where the Group is the lessor, lease income is recognised on a straight-line basis over the period of the lease unless another systematic basis is more appropriate. The Group holds the leased assets on balance sheet within property, plant and equipment.

Where the Group is the lessee, rentals payable are recognised as an expense in the income statement on a straight-line basis over the lease term unless another systematic basis is more appropriate.

### Operating lease receivables

The Group acts as lessor, whereby items of plant and equipment are purchased and then leased to third parties under arrangements qualifying as operating leases. The future minimum lease payments expected to be received under non-cancellable operating leases was nil (2015: £1m).

### Operating lease commitments

The Group leases various offices, branches and other premises under non-cancellable operating lease arrangements. With such operating lease arrangements, the asset is kept on the lessor's balance sheet and the Group reports the future minimum lease payments as an expense over the lease term. The leases have various terms, escalation and renewal rights. There are no contingent rents payable.

Operating lease rentals of £560m (2015: £411m) have been included in administration and general expenses.

The future minimum lease payments by the Group under non-cancellable operating leases are as follows:

	2016		2015	
	Property £m	Equipment £m	Property £m	Equipment £m
Not more than one year	364		376	1
Over one year but not more than five years	974	23	1,127	11
Over five years	1,520		1,874	
<b>Total</b>	<b>2,858</b>	<b>23</b>	<b>3,377</b>	<b>12</b>

Total future minimum sublease payments to be received under non-cancellable subleases was £2m (2015: £1m).

## Notes to the financial statements

## Accruals, provisions, contingent liabilities and legal proceedings

The notes included in this section focus on the Group's accruals, provisions and contingent liabilities. Provisions are recognised for present obligations arising as consequences of past events where it is probable that a transfer of economic benefit will be necessary to settle the obligation, and it can be reliably estimated. Contingent liabilities reflect potential liabilities that are not recognised on the balance sheet.

**26 Accruals, deferred income and other liabilities****Accounting for insurance contracts**

The Group applies IFRS 4 *Insurance Contracts* to its insurance contracts. An insurance contract is a contract that compensates a third party against a loss from non-financial risk. Some wealth management and other products, such as life assurance contracts, combine investment and insurance features; these are treated as insurance contracts when they pay benefits that are at least 5% more than they would pay if the insured event does not occur.

Insurance liabilities include current best estimates of future contractual cash flows, claims handling, and administration costs in respect of claims. Liability adequacy tests are performed at each balance sheet date to ensure the adequacy of contract liabilities. Where a deficiency is highlighted by the tests, insurance liabilities are increased with any deficiency being recognised in the income statement.

Insurance premium revenue is recognised in the income statement in the period earned, net of reinsurance premiums payable, in net premiums from insurance contracts. Increases and decreases in insurance liabilities are recognised in the income statement in net claims and benefits on insurance contracts.

2016	2015
£m	£m
	698

Accruals and deferred income	4,422	4,271
Other creditors	4,382	3,770
Obligations under finance leases (see Note 21)	15	
Insurance contract liabilities, including unit-linked liabilities	52	2,569
<b>Accruals, deferred income and other liabilities</b>	<b>8,871</b>	<b>10,610</b>

Accruals and deferred income increased by 4% to £4.4bn mainly driven by accruals towards staff costs and administrative and general costs as at 31 December 2016.

Insurance Liabilities relating to the Group's long-term business have decreased by £2.5bn primarily driven by Non-Core entities being classified as held for sale. Insurance contract liabilities associated with the Group's short-term business are £52m (2015: £115m). The maximum amounts payable under all of the Group's insurance products, ignoring the probability of insured events occurring and the contribution from investments backing the insurance policies, were £0.4bn (2015: £65bn) or £0.2bn (2015: £49bn) after reinsurance. The decrease in the maximum amounts payable is primarily due to BAGL which has been classified as held for sale in 2016.

The impact to the income statement and equity under a reasonably possible change in the assumptions used to calculate the insurance liabilities would be £2m (2015: £1m).

## 27 Provisions

### Accounting for provisions

The Group applies IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* in accounting for non-financial liabilities.

Provisions are recognised for present obligations arising as consequences of past events where it is more likely than not that a transfer of economic benefit will be necessary to settle the obligation, which can be reliably estimated. Provision is made for the anticipated cost of restructuring, including redundancy costs when an obligation exists; for example, when the Group has a detailed formal plan for restructuring a business and has raised valid expectations in those affected by the restructuring by announcing its main features or starting to implement the plan. Provision is made for undrawn loan commitments if it is probable that the facility will be drawn and result in the recognition of an asset at an amount less than the amount advanced.

Onerous contracts	Redundancy and restructuring	Undrawn contractually committed facilities and guarantees	Customer Redress			Legal, competition and regulatory matters	Sundry provisions
			Payment Protection Insurance	Other customer redress			
£m	£m	£m	£m	£m	£m	£m	£m
141	186	60	2,106	896		489	264

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As at 1 January 2016							
Additions	<b>328</b>	<b>336</b>	<b>52</b>	<b>1,000</b>	<b>297</b>	<b>212</b>	<b>206</b>
Amounts utilised	<b>(39)</b>	<b>(274)</b>	<b>(1)</b>	<b>(1,127)</b>	<b>(396)</b>	<b>(254)</b>	<b>(84)</b>
Unused amounts reversed	<b>(53)</b>	<b>(60)</b>	<b>(44)</b>		<b>(93)</b>	<b>(27)</b>	<b>(36)</b>
Exchange and other movements	<b>8</b>	<b>18</b>			<b>8</b>	<b>35</b>	<b>(20)</b>
As at 31 December 2016	<b>385</b>	<b>206</b>	<b>67</b>	<b>1,979</b>	<b>712</b>	<b>455</b>	<b>330</b>

Provisions expected to be recovered or settled within no more than 12 months after 31 December 2016 were £2,045m (2015: £2,113m).

## 27 Provisions continued

### Onerous contracts

Onerous contract provisions comprise an estimate of the costs involved with fulfilling the terms and conditions of contracts where the liability is higher than the amount of economic benefit to be received.

### Redundancy and restructuring

These provisions comprise the estimated cost of restructuring, including redundancy costs where an obligation exists. Additions made during the year relate to formal restructuring plans and have either been utilised, or reversed, where total costs are now expected to be lower than the original provision amount.

### Undrawn contractually committed facilities and guarantees

Provisions are made if it is probable that a facility will be drawn and the resulting asset is expected to have a realisable value that is less than the amount advanced.

### Customer redress

Customer redress provisions comprise the estimated cost of making redress payments to customers, clients and counterparties for losses or damages associated with inappropriate judgement in the execution of our business activities. Provisions for other customer redress include £264m (2015: £290m) in respect of historic pricing practices associated with Foreign Exchange transactions for certain customers between 2005 and 2012, and smaller provisions across the retail and corporate businesses which are likely to be utilised in the next 12 months.

### Sundry provisions

This category includes provisions that do not fit into any of the other categories, such as fraud losses and dilapidation provisions.

### Legal, competition and regulatory matters

The Group is engaged in various legal, competition and regulatory matters in the UK and US and a number of other overseas jurisdictions. For further information in relation to legal proceedings and discussion of the associated uncertainties, please see Note 29 Legal, competition and regulatory matters.

### Critical accounting estimates and judgements

#### *Payment Protection Insurance Redress*

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As at 31 December 2016, Barclays had recognised cumulative provisions totalling £8.44bn (31 December 2015: £7.44bn) against the cost of Payment Protection Insurance (PPI) redress and associated processing costs with utilisation of £6.46bn (31 December 2015: £5.33bn), leaving a residual provision of £1.98bn (31 December 2015: £2.11bn).

Through to 31 December 2016, 1.8m (31 December 2015: 1.6m) customer initiated claims had been received and processed. The volume of claims received during 2016 decreased 8% from 2015. This rate of decline was slower than previously recorded but in line with expectations.

The current provision reflects the estimated costs of PPI redress primarily relating to customer initiated complaints and ongoing remediation programmes. This also includes liabilities managed by third parties arising from portfolios previously sold where Barclays remains liable.

As at 31 December 2016, the provision of £2.0bn represents Barclays' best estimate of expected PPI redress. However, it is possible the eventual outcome may differ from the current estimate. We will continue to review the adequacy of provision level in respect of the ongoing level of complaints.

The PPI provision is calculated using a number of key assumptions which continue to involve significant management judgement and modelling:

§ customer initiated claim volumes – claims received but not yet processed plus an estimate of future claims initiated by customers where the volume is anticipated to cease after half year 2019

§ average claim redress – the expected average payment to customers for upheld claims based on the type and age of the policy/policies

§ processing cost per claim – the cost to Barclays of assessing and processing each valid claim.

These assumptions remain subjective, in particular due to the uncertainty associated with future claims levels, which include complaints driven by CMC activity.

The current provision represents Barclays' revised best estimate of all future expected costs of PPI redress.

The following table details actual data through to 31 December 2016, key forecast assumptions used in the provision calculation and a sensitivity analysis illustrating the impact on the provision if the future expected assumptions prove too high or too low.

Assumption	Cumulative actual to 31.12.16	Future expected	Sensitivity analysis	Cumulative actual to 31.12.15
			increase/ decrease in provision	
Customer initiated claims received and processed <sup>a</sup>	1,840k	650k	50k = £100m	1,570k
Average uphold rate per claim <sup>c</sup>	87%	83%	1% = £15m	86%
Average redress per valid claim <sup>d</sup>	£2,137	£1,950	£100 = £74m	£1,808
Processing cost per claim <sup>e</sup>	£410	£350	50k = £17m	£300

Notes

- a Total claims received directly by Barclays to date, including those received via CMCs but excluding those for which no PPI policy exists and excluding responses to proactive mailing.
- b Gross volumes received including no PPI.
- c Average uphold rate per customer initiated claims received directly by Barclays and proactive mailings, excluding those for which no PPI policy exists.
- d Average redress stated on a per policy basis for future customer initiated complaints received directly by Barclays and proactive mailings.
- e Processing cost per claim on an upheld complaints basis, includes direct staff costs and associated overheads.

## Notes to the financial statements

## Accruals, provisions, contingent liabilities and legal proceedings

**28 Contingent liabilities and commitments****Accounting for contingent liabilities**

Contingent liabilities are possible obligations whose existence will be confirmed only by uncertain future events, and present obligations where the transfer of economic resources is uncertain or cannot be reliably measured. Contingent liabilities are not recognised on the balance sheet but are disclosed unless the outflow of economic resources is remote.

The following table summarises the nominal principal amount of contingent liabilities and commitments which are not recorded on balance sheet:

	2016	2015
	£m	£m
<b>Contingent liabilities and commitments excluding BAGL</b>		
Guarantees and letters of credit pledged as collateral security	15,303	16,065
Performance guarantees, acceptances and endorsements	4,636	4,556
<b>Contingent liabilities</b>	<b>19,939</b>	<b>20,621</b>
<b>Documentary credits and other short-term trade related transactions</b>	<b>1,005</b>	<b>845</b>
<b>Forward starting reverse repurchase agreements</b>	<b>24</b>	<b>93</b>
<b>Standby facilities, credit lines and other commitments</b>	<b>302,657</b>	<b>281,369</b>
<b>The Financial Services Compensation Scheme</b>		

The Financial Services Compensation Scheme (the FSCS) is the UK's government-backed compensation scheme for customers of authorised institutions that are unable to pay claims. It provides compensation to depositors in the event that UK licensed deposit-taking institutions are unable to meet their claims. The FSCS raises levies on UK licensed deposit-taking institutions to meet such claims based on their share of UK deposits on 31 December of the specified years preceding the scheme year (which runs from 1 April to 31 March).

Compensation has previously been paid out by the FSCS, funded by loan facilities totalling approximately £18bn provided by HM Treasury to the FSCS in support of FSCS's obligations to the depositors of banks declared in default. The interest rate chargeable on the loan and levied to the industry is subject to a floor equal to the higher of HM Treasury's own cost of borrowing (typically 2024 UK Gilt yield), and GBP LIBOR with 2-month maturity plus 100 basis points. The FSCS recovered £1bn capital shortfall in respect of the legacy facility from industry in three instalments across 2013, 2014 and 2015. A separate shortfall in respect of Dunfermline Building Society was levied



on the industry in 2014, 2015 and fully recovered in 2016. The FSCS liability for the interest levy for 2016/17 has been recognised in 2016. Barclays has included an accrual of £55m in other liabilities as at

31 December 2016 (2015: £56m) in respect of the Barclays portion of the Interest Levy.

Further details on contingent liabilities relating to legal, competition and regulatory matters can be found in Note 29.

## **29 Legal, competition and regulatory matters**

Barclays PLC, Barclays Bank PLC and the Group face legal, competition and regulatory challenges, many of which are beyond our control. The extent of the impact on Barclays PLC, Barclays Bank PLC and the Group of these matters cannot always be predicted but may materially impact our operations, financial results, condition and prospects. Matters arising from a set of similar circumstances can give rise to either a contingent liability or a provision, or both, depending on the relevant facts and circumstances. The Group has not disclosed an estimate of the potential financial effect on the Group of contingent liabilities where it is not currently practicable to do so.

### **Investigations into certain advisory services agreements and civil action**

The United Kingdom (UK) Serious Fraud Office (SFO), the Financial Conduct Authority (FCA), the US Department of Justice (DOJ) and the US Securities and Exchange Commission (SEC) have been conducting investigations into certain advisory services agreements entered into by Barclays Bank PLC.

#### *Background Information*

Barclays Bank PLC entered into two advisory services agreements with Qatar Holding LLC (Qatar Holding) in June and October 2008. The FCA subsequently commenced an investigation into whether these agreements may have related to Barclays PLC's capital raisings in June and November 2008 (the Capital Raisings). The existence of the June 2008 advisory services agreement was disclosed, but the entry into the advisory services agreement in October 2008 and the fees payable under both agreements, which amounted to a total of £322m payable over a period of five years, were not disclosed in the announcements or public documents relating to the Capital Raisings.

In September 2013, the FCA issued warning notices (the Notices) finding that while, Barclays PLC and Barclays Bank PLC believed at the time of the execution of the agreements that there should be at least some unspecified and undetermined value to be derived from them, the primary purpose of the agreements was not to obtain advisory services but to make additional payments, which would not be disclosed, for the Qatari participation in the Capital Raisings. The Notices concluded that Barclays PLC and Barclays Bank PLC were in breach of certain disclosure-related listing rules and Barclays PLC was also in breach of Listing Principle 3 (the requirement to act with integrity towards holders and potential holders of the Company's shares). In this regard, the FCA considers that Barclays PLC and Barclays Bank PLC acted recklessly. The financial penalty provided in the Notices against the Group is £50m. Barclays PLC and Barclays Bank PLC continue to contest the findings.

The SFO has also been conducting an investigation into the agreements, and the Group continues to respond to requests for further information in that investigation, which is at an advanced stage. The FCA action has been stayed pending the resolution of the SFO investigation.

In addition, the DOJ and the SEC have been conducting investigations relating to the agreements.

In January 2016, PCP Capital Partners LLP and PCP International Finance Limited (PCP) served a claim on Barclays Bank PLC seeking damages of £721.4m plus interest and costs for fraudulent misrepresentation and deceit, arising from alleged statements made by Barclays Bank PLC to PCP in relation to the terms on which securities were to be issued to investors, including PCP, in the November 2008 capital raising. Barclays Bank PLC is defending the claim.

*Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period. PCP has made a claim against Barclays Bank PLC totalling £721.4m plus interest and costs. This amount does not necessarily reflect Barclays Bank PLC's potential financial exposure if a ruling were to be made against it.

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## **29 Legal, competition and regulatory matters continued**

### **Investigations into certain business relationships**

The DOJ and SEC are undertaking an investigation into whether the Group's relationships with third parties who assist Barclays PLC to win or retain business are compliant with the US Foreign Corrupt Practices Act. Certain regulators in other jurisdictions have also been briefed on the investigations. Separately, the Group is cooperating with the DOJ and SEC in relation to an investigation into certain of its hiring practices in Asia and elsewhere and is keeping certain regulators in other jurisdictions informed.

#### *Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period.

### **Alternative Trading Systems and High-Frequency Trading**

The SEC, the New York State Attorney General (NYAG) and regulators in certain other jurisdictions have been investigating a range of issues associated with alternative trading systems (ATSs), including dark pools, and the activities of high-frequency traders.

#### *Background Information*

In June 2014, the NYAG filed a complaint (NYAG Complaint) against Barclays PLC and Barclays Capital Inc. (BCI) in the Supreme Court of the State of New York alleging, amongst other things, that Barclays PLC and BCI engaged in fraud and deceptive practices in connection with LX, the Group's SEC-registered ATS. In February 2016, Barclays reached separate settlement agreements with each of the SEC and the NYAG to resolve those agencies' claims against Barclays PLC and BCI relating to the operation of LX for \$35m each.

Barclays PLC and BCI have been named in a purported class action by an institutional investor client under California law based on allegations similar to those in the NYAG Complaint. In October 2016, the federal court in California granted the motion of Barclays PLC and BCI to dismiss the entire complaint and plaintiffs have appealed the court's decision.

Following the filing of the NYAG Complaint, Barclays PLC and BCI were also named in a shareholder securities class action along with certain of its former CEOs, and its current and a former CFO, as well as an employee in Equities Electronic Trading (Shareholder Class Action). The plaintiffs claim that investors suffered damages when their investments in Barclays American Depositary Receipts declined in value as a result of the allegations in the NYAG Complaint. Barclays PLC and BCI filed a motion to dismiss the complaint, which the court granted in part and

denied in part. In February 2016, the court certified the action as a class action, and Barclays has appealed that certification.

### *Claimed Amounts/Financial Impact*

The class actions seek unspecified monetary damages and injunctive relief. It is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect they might have upon the Group's operating results, cash flows or financial position in any particular period.

### **FERC**

The US Federal Energy Regulatory Commission (FERC) has filed a civil action against Barclays Bank PLC and certain of its former traders in the US District Court in California seeking to collect a \$435m civil penalty and the disgorgement of \$34.9m of profits, plus interest, in connection with allegations that Barclays Bank PLC manipulated the electricity markets in and around California. A civil class action complaint was also filed in the US District Court for the Southern District of New York (SDNY) against Barclays Bank PLC asserting antitrust claims based on allegations that mirror those raised in the civil suit filed by FERC.

### *Background Information*

In October 2012, FERC issued an Order to Show Cause and Notice of Proposed Penalties (Order and Notice) against Barclays Bank PLC and four of its former traders in relation to their power trading in the western US. In the Order and Notice, FERC asserted that Barclays Bank PLC and its former traders violated FERC's Anti-Manipulation Rule by manipulating the electricity markets in and around California from November 2006 to December 2008, and proposed civil penalties and profit disgorgement to be paid by Barclays Bank PLC.

In October 2013, FERC filed a civil action against Barclays Bank PLC and its former traders in the US District Court in California seeking to collect the \$435m civil penalty and disgorgement of \$34.9m of profits, plus interest.

In June 2015, a civil class action complaint was filed in the US District Court for the SDNY against Barclays Bank PLC by Merced Irrigation District, a California utility company, asserting antitrust allegations in connection with Barclays Bank PLC's purported manipulation of the electricity markets in and around California. The factual allegations mirror those raised in the civil action filed by FERC against Barclays Bank PLC currently pending in the US District Court in California.

In October 2015, the US District Court in California ordered that it would bifurcate its assessment of liabilities and penalties from its assessment of disgorgement. FERC has filed and Barclays Bank PLC is opposing a brief seeking summary affirmance of the penalty assessment. The court has indicated that it will either affirm the penalty assessment or require further evidence to determine this issue. Oral argument on the motion to affirm the penalty assessment occurred in February 2017.

In December 2015, Barclays Bank PLC filed a motion to dismiss the civil class action for failure to state a claim, which the SDNY in February 2016 granted in part and denied in part.

### *Claimed Amounts/Financial Impact*

FERC has made claims against Barclays Bank PLC totalling \$469.9m, plus interest, for civil penalties and profit disgorgement. The civil class action complaint refers to damages of \$139.3m. These amounts do not necessarily reflect Barclays Bank PLC's potential financial exposure if a ruling were to be made against it in either action.

### **Investigations into LIBOR and other Benchmarks**

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Regulators and law enforcement agencies, including certain competition authorities, from a number of governments have been conducting investigations relating to Barclays Bank PLC's involvement in manipulating certain financial benchmarks, such as LIBOR and EURIBOR. Barclays Bank PLC, Barclays PLC and BCI have reached settlements with the relevant law enforcement agency or regulator in certain of the investigations, but others, including the investigations by the SFO and the prosecutors' office in Trani, Italy remain pending.

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**29 Legal, competition and regulatory matters continued**

*Background Information*

In June 2012, Barclays Bank PLC announced that it had reached settlements with the Financial Services Authority (FSA) (as predecessor to the FCA), the US Commodity Futures Trading Commission (CFTC) and the DOJ Fraud Section (DOJ-FS) in relation to their investigations concerning certain benchmark interest rate submissions, and Barclays Bank PLC agreed to pay total penalties of £290m. The settlement with the DOJ-FS was made by entry into a Non-Prosecution Agreement (NPA) which has now expired. In addition, Barclays Bank PLC was granted conditional leniency from the DOJ Antitrust Division (DOJ-AD) in connection with potential US antitrust law violations with respect to financial instruments that reference EURIBOR. The DOJ granted final leniency to Barclays Bank PLC in May 2016.

*Settlements with the US State Attorneys General and the Swiss Competition Commission*

Following the settlements announced in June 2012, a group of US State Attorneys General (SAGs) commenced its own investigations into LIBOR, EURIBOR and the Tokyo Interbank Offered Rate. In August 2016, Barclays Bank PLC, BCI and 44 SAGs entered into a settlement agreement resolving the claims of those SAGs (and those of any other SAG who joined the settlement within 60 days) with respect to the matters subject to the investigations. Barclays agreed among other things to make payments totalling \$100m to the SAGs in connection with the settlement.

In December 2016, a settlement in the sum of CHF29.8m was reached with the Swiss Competition Commission relating to its investigation into EURIBOR-related conduct.

*Investigation by the SFO*

In July 2012, the SFO announced that it had decided to investigate the LIBOR matter, in respect of which Barclays Bank PLC has received and continues to respond to requests for information. The SFO's investigation, including in respect of Barclays Bank PLC, continues.

For a discussion of civil litigation arising in connection with these investigations see [LIBOR and other Benchmarks Civil Actions](#).

*Claimed Amounts/Financial Impact*

Aside from the settlements discussed above, it is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period.

**[LIBOR and other Benchmark Civil Actions](#)**

Following the settlements of the investigations referred to above in *Investigations into LIBOR and other Benchmarks*, a number of individuals and corporates in a range of jurisdictions have threatened or brought civil actions against the Group in relation to LIBOR and/or other benchmarks. While several of such cases have been dismissed and certain have settled subject to approval from the court (and in the case of class actions, the right of class members to opt-out of the settlement and to seek to file their own claims), other actions remain pending and their ultimate impact is unclear.

### *Background Information*

A number of individuals and corporates in a range of jurisdictions have threatened or brought civil actions against the Group and other banks in relation to manipulation of LIBOR and/or other benchmark rates.

### *USD LIBOR Cases in MDL Court*

The majority of the USD LIBOR cases, which have been filed in various US jurisdictions, have been consolidated for pre-trial purposes before a single judge in the SDNY (MDL Court).

The complaints are substantially similar and allege, amongst other things, that Barclays Bank PLC and the other banks individually and collectively violated provisions of the US Sherman Antitrust Act (Antitrust Act), the Commodity Exchange Act (CEA), the US Racketeer Influenced and Corrupt Organizations Act (RICO) and various state laws by manipulating USD LIBOR rates.

The lawsuits seek unspecified damages with the exception of five lawsuits, in which the plaintiffs are seeking a combined total in excess of \$1.25bn in actual damages against all defendants, including Barclays Bank PLC, plus punitive damages. Some of the lawsuits also seek trebling of damages under the Antitrust Act and RICO.

The proposed class actions purported to be brought on behalf of (amongst others) plaintiffs that (i) engaged in USD LIBOR-linked over-the-counter transactions (OTC Class); (ii) purchased USD LIBOR-linked financial instruments on an exchange (Exchange-Based Class); (iii) purchased USD LIBOR-linked debt securities (Debt Securities Class); (iv) purchased adjustable-rate mortgages linked to USD LIBOR (Homeowner Class); or (v) issued loans linked to USD LIBOR (Lender Class).

In August 2012 the MDL Court stayed all newly filed proposed class actions and individual actions (Stayed Actions). In March 2013, August 2013 and June 2014, the MDL Court issued a series of decisions effectively dismissing the majority of claims against Barclays Bank PLC and other panel bank defendants in the three lead proposed class actions (Lead Class Actions) and three lead individual actions (Lead Individual Actions).

In July 2014, the MDL Court allowed the Stayed Actions to proceed and a number of plaintiffs filed amended complaints. The MDL Court subsequently dismissed a number of Lead Individual Action claims and all Homeowner Class and Lender Class claims. In May 2016, the appeal court reversed the MDL Court's holding that plaintiffs in the Lead Class Actions, including the Debt Securities Class, and Lead Individual Actions had not suffered an injury under the Antitrust Act, and remanded the antitrust claims for the MDL Court's further consideration of those claims and related issues. Following further consideration, the MDL Court dismissed the majority of antitrust claims against foreign defendants, including Barclays Bank PLC, for lack of personal jurisdiction. Certain plaintiffs have sought leave to move the MDL Court to reconsider its decision, and certain defendants, including Barclays Bank PLC, have sought leave to move to dismiss certain of the remaining antitrust claims.

In December 2014, the MDL Court granted preliminary approval for the settlement of the Exchange-Based Class claims for \$20m. Final approval of the settlement is awaiting plaintiff's submission of a plan for allocation of the settlement proceeds acceptable to the MDL Court and will be subject to the right of class members to opt-out of the settlement and to seek to file their own claims.

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In November 2015, the OTC Class claims were settled for \$120m. The settlement was preliminarily approved by the MDL court in December 2016, but remains subject to final court approval and the right of class members to opt-out of the settlement and to seek to file their own claims.

In November 2016, a settlement was agreed with respect to the Debt Securities Class claims. As the plaintiffs have not yet sought court approval of the settlement, the amount (which Barclays does not consider to be material to the Group) has not yet been publicly disclosed.

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## **29 Legal, competition and regulatory matters continued**

### *EURIBOR Case in the SDNY*

In February 2013, a EURIBOR-related class action was filed against Barclays PLC, Barclays Bank PLC, BCI and other EURIBOR panel banks in the SDNY. The plaintiffs asserted antitrust, CEA, RICO, and unjust enrichment claims relating to EURIBOR manipulation. In October 2015, the class action was settled for \$94m subject to court approval. The settlement has been preliminarily approved by the court but remains subject to final approval and the right of class members to opt-out of the settlement and to seek to file their own claims.

### *Additional USD LIBOR Case in the SDNY*

An additional individual action was commenced in February 2013 in the SDNY against Barclays Bank PLC and other panel bank defendants. The plaintiff alleged that the panel bank defendants conspired to increase USD LIBOR, which caused the value of bonds pledged as collateral for a loan to decrease, ultimately resulting in the sale of the bonds at a low point in the market. In April 2015, the court dismissed the action. The plaintiff's motion to file a further amended complaint is pending.

### *Sterling LIBOR Case in SDNY*

In May 2015, a putative class action was commenced in the SDNY against Barclays Bank PLC and other Sterling LIBOR panel banks by a plaintiff involved in exchange-traded and over-the-counter derivatives that were linked to Sterling LIBOR. The complaint alleges, among other things, that Barclays Bank PLC and other panel banks manipulated the Sterling LIBOR rate between 2005 and 2010 and, in so doing, committed CEA, Antitrust Act, and RICO violations. In early 2016, this class action was consolidated with an additional putative class action making similar allegations against Barclays Bank PLC and BCI and other Sterling LIBOR panel banks. Defendants have filed a motion to dismiss.

### *Complaint in the US District Court for the Central District of California*

In July 2012, a putative class action complaint in the US District Court for the Central District of California was amended to include allegations related to USD LIBOR and names Barclays Bank PLC as a defendant. The amended complaint was filed on behalf of a putative class that includes holders of adjustable rate mortgages linked to USD LIBOR. In January 2015, the court granted Barclays Bank PLC's motion for summary judgement and dismissed all of the remaining claims against Barclays Bank PLC. The dismissal was affirmed on appeal in December 2016.

### *Japanese Yen LIBOR Cases in SDNY*

A putative class action was commenced in April 2012 in the SDNY against Barclays Bank PLC and other Japanese Yen LIBOR panel banks by a plaintiff involved in exchange-traded derivatives. The complaint also names members

of the Japanese Bankers Association's Euroyen Tokyo Interbank Offered Rate (Euroyen TIBOR) panel, of which Barclays Bank PLC is not a member. The complaint alleges, amongst other things, manipulation of the Euroyen TIBOR and Yen LIBOR rates and breaches of the CEA and Antitrust Act between 2006 and 2010. In March 2014, the court dismissed the plaintiff's antitrust claims in full, but sustained the plaintiff's CEA claims, which are pending. Plaintiff has amended the pleadings to extend the putative class period, and defendants have filed a partial motion to dismiss claims arising during the extended period.

In July 2015, a second putative class action concerning Yen LIBOR was filed in the SDNY against Barclays PLC, Barclays Bank PLC and BCI. The complaint alleges breaches of the Antitrust Act and RICO between 2006 and 2010 based on factual allegations that are substantially similar to those in the April 2012 class action. Defendants have filed a motion to dismiss.

#### *SIBOR/SOR Case in the SDNY*

A putative class action was commenced in July 2016 in the SDNY against Barclays PLC, Barclays Bank PLC, BCI, and other defendants, alleging manipulation of the Singapore Interbank Offered Rate (SIBOR) and Singapore Swap Offer Rate (SOR). The complaint alleges, amongst other things, manipulation of the SIBOR and SOR rates and breaches of the Antitrust Act and RICO between 2007 and 2011. Defendants filed motions to dismiss.

#### *Non-US Benchmarks Cases*

In addition to US actions, legal proceedings have been brought or threatened against the Group in connection with alleged manipulation of LIBOR and EURIBOR in a number of jurisdictions. The number of such proceedings in non-US jurisdictions, the benchmarks to which they relate, and the jurisdictions in which they may be brought have increased over time.

#### *Claimed Amounts/Financial Impact*

Aside from the settlements discussed above, it is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period.

#### **Foreign Exchange Investigations**

Various regulatory and enforcement authorities have been investigating a range of issues associated with Foreign Exchange sales and trading, including electronic trading. Certain of these investigations involve multiple market participants in various countries. The Group has reached settlements with the CFTC, the DOJ, the New York State Department of Financial Services (NYDFS), the Board of Governors of the Federal Reserve System (Federal Reserve) and the FCA (together, the 2015 Resolving Authorities) and the Administrative Council for Economic Defence in Brazil with respect to certain of these investigations as further described below. The South African Competition Commission (SACC) has initiated proceedings before the South African Competition Tribunal (Tribunal). Investigations by the European Commission (Commission) and the DOJ, amongst others, remain pending.

#### *Background Information*

In 2015, the Group reached settlements with the 2015 Resolving Authorities in relation to investigations into certain sales and trading practices in the Foreign Exchange market. In connection with these settlements, the Group agreed to pay total penalties of approximately \$2.38bn, and to undertake certain remedial actions.

Under the plea agreement with the DOJ, in addition to a criminal fine, Barclays PLC agreed to a term of probation of three years during which Barclays PLC must, amongst other things, (i) commit no crime whatsoever in violation of

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the federal laws of the US, (ii) implement and continue to implement a compliance program designed to prevent and detect the conduct that gave rise to the plea agreement and (iii) strengthen its compliance and internal controls as required by relevant regulatory or enforcement agencies. In January 2017, the US District Court for the District of Connecticut accepted the plea agreement and in accordance with the agreement sentenced Barclays PLC to pay \$650m as a fine and \$60m for violating the NPA (which amounts are part of the \$2.38bn referred to above) and to serve three years of probation from the date of the sentencing order. The Group also continues to provide relevant information to certain of the 2015 Resolving Authorities.

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**29 Legal, competition and regulatory matters continued**

The full text of the DOJ plea agreement, the orders of the CFTC, NYDFS and Federal Reserve, and the Final Notice issued by the FCA related to the settlements referred to above are publicly available on the 2015 Resolving Authorities' respective websites.

In December 2016 the Group reached a settlement with the Administrative Council for Economic Defence in Brazil regarding its investigation into certain Foreign Exchange trading conduct. The Group agreed to a penalty of approximately £4.9m as part of the settlement agreement.

An investigation by the FCA into historic pricing practices by Barclays Bank PLC associated with certain Foreign Exchange transactions was discontinued in December 2016. Barclays Bank PLC has initiated a customer remediation program and is keeping the FCA informed on its progress.

The DOJ is also conducting an investigation into conduct relating to certain trading activities in connection with certain transactions during 2011 and 2012. Barclays is providing information to the DOJ and other relevant authorities reviewing this conduct.

In February 2017 the SACC referred Barclays Bank PLC, BCI and Absa Bank Limited, a subsidiary of Barclays Africa Group Limited, among other banks, to the Tribunal to be prosecuted for breaches of South African antitrust law related to Foreign Exchange trading of South African Rand. The SACC found from its investigation that, from at least 2007, the banks had engaged in various forms of collusive behaviour. Barclays was the first to bring the conduct to the attention of the SACC under its leniency programme and has cooperated with, and will continue to cooperate with, the SACC in relation to this matter. The SACC is therefore not seeking an order from the Tribunal to impose any fine on Barclays Bank PLC, BCI or Absa Bank Limited.

For a discussion of civil litigation arising in connection with these investigations see [Civil Actions in respect of Foreign Exchange](#) below.

*[Claimed Amounts/Financial Impact](#)*

The provision for the customer remediation program relating to historic pricing practices by Barclays Bank PLC associated with certain Foreign Exchange transactions referred to above was £264m as of 31 December 2016 (see Provisions Note 27). Aside from the settlements discussed above it is not currently practicable to provide an estimate of any further financial impact of the actions described on the Group or what effect they might have on the Group's operating results, cash flows or financial position in any particular period.

**[Civil Actions in respect of Foreign Exchange](#)**

*[Background Information](#)*

A number of individuals and corporates in a range of jurisdictions have threatened or brought civil actions against the Group and other banks in relation to Foreign Exchange or may do so in future. Certain of these cases have been dismissed or have been settled subject to approval from the relevant court (and in the case of class actions, the right of class members to opt-out of the settlement and to seek to file their own claims).

#### *Consolidated FX Action*

Beginning in November 2013, a number of civil actions were filed in the SDNY on behalf of proposed classes of plaintiffs alleging manipulation of Foreign Exchange markets under the Antitrust Act and New York state law and naming several international banks as defendants, including Barclays Bank PLC. In February 2014, the SDNY combined all then-pending actions alleging a class of US persons in a single consolidated action (Consolidated FX Action). In September 2015, Barclays Bank PLC and BCI settled the Consolidated FX Action for \$384m. The settlement itself is subject to final court approval and the right of class members to opt-out of the settlement and to seek to file their own claims.

#### *ERISA FX Action*

Since February 2015, several other civil actions have been filed in the SDNY on behalf of proposed classes of plaintiffs purporting to allege different legal theories of injury (other than those alleged in the Consolidated FX Action) related to alleged manipulation of Foreign Exchange rates and naming several international banks as defendants, including Barclays PLC, Barclays Bank PLC and BCI. One such consolidated action asserts claims under the US Employee Retirement Income Security Act (ERISA) statute (ERISA Claims) and includes allegations of conduct that are duplicative of allegations in the other cases, as well as additional allegations about ERISA plans. The Court has ruled that the ERISA allegations concerning collusive manipulation of FX rates are covered by the settlement agreement in the Consolidated FX Action, but has not ruled on whether allegations characterised by the ERISA plaintiffs as non-collusive manipulation of FX rates are likewise covered by the agreement. In September 2016, the Court dismissed all claims (based on both alleged collusive and non-collusive conduct) in the ERISA Claims against Barclays and all other defendants as a matter of law. The ERISA plaintiffs have appealed this decision.

#### *Retail Basis Action*

Another action was filed in the Northern District of California (and subsequently transferred to the SDNY) against several international banks, including Barclays PLC and BCI, on behalf of a putative class of individuals that exchanged currencies on a retail basis at bank branches (Retail Basis Claims). The Court has ruled that the Retail Basis Claims are not covered by the settlement agreement in the Consolidated FX Action. Barclays has moved to dismiss the Retail Basis Claims as a matter of law.

#### *Last Look Actions*

In addition, in November 2015 and December 2015, two additional civil actions were filed in the SDNY on behalf of proposed classes of plaintiffs alleging injuries based on Barclays' purported improper rejection of customer trades through Barclays Last Look system. In February 2016, Barclays Bank PLC and BCI settled one of the actions for \$50m on a class-wide basis. (The other action was voluntarily dismissed.) Class members have the right to opt-out of the settlement and to seek to file their own claims.

#### *ETF FX Action*

In September 2016, another action was filed in the SDNY under federal, New York and California law on behalf of proposed classes of stockholders of Exchange Traded Funds and others who supposedly were indirect investors in FX Instruments. Barclays will move to dismiss this action as a matter of law or, alternatively, to enjoin the claims as covered by the settlement agreement in the Consolidated FX Action.

*Canadian FX Action*

Similar civil actions to the Consolidated FX Action have been filed in Canadian courts on behalf of proposed classes of plaintiffs containing similar factual allegations of manipulation of Foreign Exchange rates as in the US actions and of damages resulting from such manipulation in violation of Canadian law.

*Claimed Amounts/Financial Impact*

Aside from the settlements discussed above, the financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period is currently uncertain.

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## **29 Legal, competition and regulatory matters continued**

### **Civil Actions in respect of ISDAFIX**

Beginning in September 2014, a number of ISDAFIX related civil actions were filed in the SDNY on behalf of a proposed class of plaintiffs, alleging that Barclays Bank PLC, a number of other banks and one broker, violated the Antitrust Act and several state laws by engaging in a conspiracy to manipulate the USD ISDAFIX. Those actions, which were consolidated in February 2015, arose in connection with certain regulatory and law enforcement agencies investigations into historical practices with respect to ISDAFIX.

In April 2016, Barclays Bank PLC and BCI entered into a settlement agreement with plaintiffs to resolve the consolidated action for \$30m, fully resolving all ISDAFIX-related claims that were or could have been brought by the class. In May 2016, the court preliminarily approved the settlement, which remains subject to final approval and to the right of class members to opt-out of the settlement and to seek to file their own claims.

#### *Claimed Amounts/Financial Impact*

Aside from the settlements discussed above, it is not currently practicable to provide an estimate of any further financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period.

### **Precious Metals Investigation**

Barclays Bank PLC has been providing information to the DOJ, the CFTC and other authorities in connection with investigations into precious metals and precious metals-based financial instruments.

For a discussion of civil litigation arising in connection with these investigations see [Civil Actions in respect of the Gold Fix](#) below.

#### *Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period.

### **Civil Actions in respect of the Gold Fix**

Since March 2014, a number of civil complaints have been filed in US Federal Courts, each on behalf of a proposed class of plaintiffs, alleging that Barclays Bank PLC and other members of The London Gold Market Fixing Ltd. manipulated the prices of gold and gold derivative contracts in violation of the CEA, the Antitrust Act, and state

antitrust and consumer protection laws. All of the complaints have been transferred to the SDNY and consolidated for pretrial purposes.

A similar civil action has been filed in Canadian courts on behalf of a proposed class of plaintiffs containing similar factual allegations of the manipulation of the prices of gold in violation of Canadian law.

#### *Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period.

#### **US Residential and Commercial Mortgage-related Activity and Litigation**

The Group's activities within the US residential mortgage sector during the period from 2005 through 2008 included:

§ sponsoring and underwriting of approximately \$39bn of private-label securitisations;

§ economic underwriting exposure of approximately \$34bn for other private-label securitisations;

§ sales of approximately \$0.2bn of loans to government sponsored enterprises (GSEs);

§ sales of approximately \$3bn of loans to others; and

§ sales of approximately \$19.4bn of loans (net of approximately \$500m of loans sold during this period and subsequently repurchased) that were originated and sold to third parties by mortgage originator affiliates of an entity that the Group acquired in 2007 (Acquired Subsidiary).

Throughout this time period affiliates of the Group engaged in secondary market trading of US residential mortgage-backed securities (RMBS) and US commercial mortgage-backed securities (CMBS), and such trading activity continues today.

In connection with its loan sales and certain private-label securitisations, on 31 December 2016, the Group had unresolved repurchase requests relating to loans with a principal balance of approximately \$2.2bn at the time they were sold, and civil actions have been commenced by various parties alleging that the Group must repurchase a substantial number of such loans.

In addition, the Group is party to a lawsuit filed by a purchaser of RMBS asserting statutory and/or common law claims. The current outstanding face amount of RMBS related to these pending claims against the Group as of 31 December 2016 was approximately \$0.1bn.

Regulatory and governmental authorities, including amongst others, the DOJ, SEC, Special Inspector General for the US Troubled Asset Relief Program (SIGTARP), the US Attorney's Office for the District of Connecticut and the US Attorney's Office for the Eastern District of New York (EDNY) have been conducting wide-ranging investigations into market practices involving mortgage-backed securities, and the Group is cooperating with those investigations. In December 2016, the DOJ filed a civil complaint against Barclays in the US District Court for the EDNY containing a



number of allegations, including mail and wire fraud, relating to mortgage-backed securities sold between 2005 and 2007. The complaint seeks, amongst other relief, unspecified monetary penalties. Barclays is defending the complaint.

*RMBS Repurchase Requests*

*Background Information*

The Group was the sole provider of various loan-level representations and warranties (R&Ws) with respect to:

§ approximately \$5bn of Group sponsored securitisations;

§ approximately \$0.2bn of sales of loans to GSEs; and

§ approximately \$3bn of loans sold to others.

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[Accruals, provisions, contingent liabilities and legal proceedings](#)

**29 Legal, competition and regulatory matters** continued

In addition, the Acquired Subsidiary provided R&Ws on all of the \$19.4bn of loans it sold to third parties.

R&Ws on the remaining Group sponsored securitisations were primarily provided by third-party originators directly to the securitisation trusts with a Group subsidiary, such as the depositor for the securitisation, providing more limited R&Ws. There are no stated expiration provisions applicable to most R&Ws made by the Group, the Acquired Subsidiary or these third parties.

Under certain circumstances, the Group and/or the Acquired Subsidiary may be required to repurchase the related loans or make other payments related to such loans if the R&Ws are breached.

The unresolved repurchase requests received on or before 31 December 2016 associated with all R&Ws made by the Group or the Acquired Subsidiary on loans sold to GSEs and others and private-label activities had an original unpaid principal balance of approximately \$2.2bn at the time of such sale.

The unresolved repurchase requests discussed above relate to civil actions that have been commenced by the trustees for certain RMBS securitisations in which the trustees allege that the Group and/or the Acquired Subsidiary must repurchase loans that violated the operative R&Ws. Such trustees and other parties making repurchase requests have also alleged that the operative R&Ws may have been violated with respect to a greater (but unspecified) amount of loans than the amount of loans previously stated in specific repurchase requests made by such trustees. Cumulative realised losses reported at 31 December 2016 on loans covered by R&Ws made by the Group or the Acquired Subsidiary are approximately \$1.3bn. All of the litigation involving repurchase requests remain at early stages.

In addition, the Acquired Subsidiary is subject to a more advanced civil action seeking, among other things, indemnification for losses allegedly suffered by a loan purchaser as a result of alleged breaches of R&Ws provided by the Acquired Subsidiary in connection with loan sales to the purchaser during the period 1997 to 2007. This litigation is ongoing.

*Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period.

*RMBS Securities Claims*

*Background Information*

As a result of some of the RMBS activities described above, the Group has been party to a number of lawsuits filed by purchasers of RMBS sponsored and/or underwritten by the Group between 2005 and 2008. As a general matter, these lawsuits alleged, among other things, that the RMBS offering materials allegedly relied on by such purchasers contained materially false and misleading statements and/or omissions and generally demanded rescission and recovery of the consideration paid for the RMBS and recovery of monetary losses arising out of their ownership. The Group has resolved a number of these claims, and only one action currently remains pending.

#### *Claimed Amounts/Financial Impact*

Approximately \$0.1bn of the original face amount of RMBS related to the remaining pending action was outstanding as at 31 December 2016. There were virtually no cumulative realised losses reported on these RMBS as at 31 December 2016. The Group does not expect that, if it were to lose the remaining pending action, any such loss to be material.

#### *Mortgage-related actions*

Numerous governmental authorities have been investigating various aspects of the mortgage-related business. The Group has responded to requests from the DOJ relating to the RMBS Working Group of the Financial Fraud Enforcement Task Force (RMBS Working Group), which was formed to investigate pre-financial crisis mortgage-related misconduct. In connection with several of the investigations by members of the RMBS Working Group, a number of financial institutions have entered into settlements involving substantial monetary payments resolving claims related to the underwriting, securitisation and sale of residential mortgage-backed securities. In December 2016, the DOJ filed a civil complaint against Barclays in the US District Court in the EDNY containing a number of allegations, including mail and wire fraud, relating to mortgage-backed securities sold between 2005 and 2007. The complaint seeks, amongst other relief, unspecified monetary penalties. Barclays is defending the complaint.

The Group has also received requests for information and subpoenas from the SEC, the US Attorney's Office for the District of Connecticut and SIGTARP related to trading practices in the secondary market for both RMBS and CMBS. The investigation by the SEC is at an advanced stage.

#### *Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period. The cost of resolving these actions could individually or in aggregate prove to be substantial.

#### **American Depositary Shares**

Barclays PLC, Barclays Bank PLC and various former members of Barclays PLC's Board of Directors have been named as defendants in a securities class action consolidated in the SDNY alleging misstatements and omissions in offering documents for certain American Depositary Shares issued by Barclays Bank PLC in April 2008 with an original face amount of approximately \$2.5 billion (the April 2008 Offering).

#### *Background Information*

The plaintiffs have asserted claims under the Securities Act of 1933, alleging that the offering documents for the April 2008 Offering contained misstatements and omissions concerning (amongst other things) Barclays Bank PLC's portfolio of mortgage-related (including US subprime-related) securities, Barclays Bank PLC's exposure to mortgage and credit market risk, and Barclays Bank PLC's financial condition. The plaintiffs have not specifically alleged the amount of their damages. In June 2016, the SDNY certified the action as a class action. Barclays has moved for summary judgement.

*Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the action described on the Group or what effect that it might have upon the Group's operating results, cash flows or financial position in any particular period.

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## **29 Legal, competition and regulatory matters continued**

### **BDC Finance L.L.C.**

BDC Finance L.L.C. (BDC) filed a complaint against Barclays Bank PLC in the NY Supreme Court alleging breach of contract in connection with a portfolio of total return swaps governed by an ISDA Master Agreement (collectively, the Agreement). Parties related to BDC have also sued Barclays Bank PLC and BCI in Connecticut State Court in connection with Barclays Bank PLC's conduct relating to the Agreement.

#### *Background Information*

In October 2008, BDC filed a complaint in the NY Supreme Court alleging that Barclays Bank PLC breached the Agreement when it failed to transfer approximately \$40m of alleged excess collateral in response to BDC's October 2008 demand (Demand).

BDC asserts that under the Agreement Barclays Bank PLC was not entitled to dispute the Demand before transferring the alleged excess collateral and that even if the Agreement entitled Barclays Bank PLC to dispute the Demand before making the transfer, Barclays Bank PLC failed to dispute the Demand. BDC demands damages totalling \$298m plus attorneys' fees, expenses, and pre-judgement interest. Proceedings are currently pending and a trial on liability issues is currently scheduled to occur in 2017.

In September 2011, BDC's investment advisor, BDCM Fund Adviser, L.L.C. and its parent company, Black Diamond Capital Holdings, L.L.C. also sued Barclays Bank PLC and BCI in Connecticut State Court for unspecified damages allegedly resulting from Barclays Bank PLC's conduct relating to the Agreement, asserting claims for violation of the Connecticut Unfair Trade Practices Act and tortious interference with business and prospective business relations. The parties agreed to stay this case.

#### *Claimed Amounts/Financial Impact*

BDC has made claims against the Group totalling \$298m plus attorneys' fees, expenses, and pre-judgement interest. This amount does not necessarily reflect the Group's potential financial exposure if a ruling were to be made against it.

### **Civil Actions in respect of the US Anti-Terrorism Act**

In April 2015, an amended civil complaint was filed in the US Federal Court in the EDNY by a group of approximately 250 plaintiffs, alleging that Barclays Bank PLC and a number of other banks engaged in a conspiracy and violated the US Anti-Terrorism Act (ATA) by facilitating US Dollar denominated transactions for the Government of Iran and various Iranian banks, which in turn funded Hezbollah and other attacks that injured or killed the plaintiffs' family members. Plaintiffs seek to recover for pain, suffering and mental anguish pursuant to the provisions of the ATA, which allows for the tripling of any proven damages and attorneys' fees. Plaintiffs filed a

second amended complaint in July 2016, which, among other things, added various plaintiffs, bringing the total number of plaintiffs to approximately 350. In November 2016, defendants filed a motion to dismiss.

In November 2016, a separate civil complaint was filed in the US Federal Court in the Southern District of Illinois by a group of approximately 90 plaintiffs, alleging claims under the ATA against Barclays Bank PLC and a number of other banks. The allegations against Barclays Bank PLC are substantially similar to those in the second amended complaint in the US Federal Court in the EDNY action. Plaintiffs filed an amended complaint in January 2017, which, among other things, added various plaintiffs, bringing the total number of plaintiffs to approximately 200.

#### *Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period.

#### **Interest Rate Swap US Civil Action**

Barclays PLC, Barclays Bank PLC, and BCI, together with other financial institutions that act as market makers for interest rate swaps (IRS), Trade Web, and ICAP, are named as defendants in several antitrust class actions consolidated in the SDNY. The complaints allege defendants conspired to prevent the development of exchanges for IRS and demand unspecified money damages, treble damages and legal fees. Plaintiffs include certain swap execution facilities, as well as buy-side investors. The buy-side investors claim to represent a class that transacted in fixed-for-floating IRS with defendants in the US from 1 January 2008 to the present, including, for example, US retirement and pension funds, municipalities, university endowments, corporations, insurance companies and investment funds. Defendants filed motion to dismiss.

#### *Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect it have upon the Group's operating results, cash flows or financial position in any particular period.

#### **Treasury Auction Securities Civil Actions**

Numerous putative class action complaints have been filed in US Federal Courts against BCI and other financial institutions that have served as primary dealers in US Treasury securities. The complaints have been consolidated in the US Federal Court in New York. The complaints generally allege that defendants conspired to manipulate the US Treasury securities market in violation of US federal antitrust laws, the CEA and state common law. Some complaints also allege that defendants engaged in illegal spoofing of the US Treasury market.

Certain governmental authorities have been conducting investigations into activities relating to the trading of government securities in various markets and Barclays has been providing information to various authorities on an ongoing basis.

#### *Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period.

#### **Investigation into Americas Wealth & Investment Management Advisory Business**

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The SEC is investigating certain practices in Barclays' former Wealth Americas investment advisory business relating to certain due diligence failures, fee and billing practices and mutual fund fee waivers and related disclosures. Barclays has been cooperating with the investigation, which is at an advanced stage.

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## Accruals, provisions, contingent liabilities and legal proceedings

### **29 Legal, competition and regulatory matters continued**

#### *Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the action described on the Group or what effect that it might have upon the Group's operating results, cash flows or financial position in any particular period.

#### **Retail Structured Products Investigation**

The Group is cooperating with an enforcement investigation commenced by the FCA in connection with structured products provided to UK customers from November 2009 to the present.

#### *Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the action described on the Group or what effect that it might have upon the Group's operating results, cash flows or financial position in any particular period.

#### **Investigation into suspected money laundering related to foreign exchange transactions in South African operation**

Absa Bank Limited, a subsidiary of Barclays Africa Group Limited, has identified potentially fraudulent activity by certain of its customers using advance payments for imports in 2014 and 2015 to effect foreign exchange transfers from South Africa to beneficiary accounts located in East Asia, UK, Europe and the US. As a result, the Group has been conducting a review of relevant activity, processes, systems and controls. The Group is keeping relevant authorities informed as to the status of this matter and is providing information to these authorities as part of its ongoing cooperation.

#### *Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period.

#### **Portuguese Competition Authority Investigation**

The Portuguese Competition Authority is investigating whether competition law was infringed by the exchange of information about retail credit products amongst 15 banks in Portugal, including the Group, over a period of 11 years with particular reference to mortgages, consumer lending and lending to small and medium enterprises. The Group is



cooperating with the investigation.

#### *Claimed Amounts/Financial Impact*

It is not currently practicable to provide an estimate of the financial impact of the action described or what effect it might have upon operating results, cash flows or the Group's financial position in any particular period.

#### **Credit Default Swap (CDS) Antitrust Investigations and Civil Actions**

The Commission and the DOJ-AD commenced investigations into the CDS market in 2011 and 2009, respectively. In December 2015 the Commission announced its decision to close its investigations in respect of Barclays Bank PLC and 12 other banks. In July 2016 the Commission announced its decision to accept legally binding commitments relating to licensing of inputs for CDS exchange trading from each of the remaining entities subject to the investigation, ISDA and Markit Ltd., and close its investigation. The DOJ-AD has also closed its investigation.

A related civil class action in the SDNY involving similar claims against Barclays Bank PLC, other financial institutions, Markit Ltd., and ISDA was settled for a total of US\$1.864bn (including a payment of US \$170m from Barclays Bank PLC). The settlement received final approval in April 2016 subject to the right of class members to opt-out of the settlement and to seek to file their own claims.

#### *Claimed Amounts/Financial Impact*

Aside from the settlement discussed above, it is not currently practicable to provide an estimate of the financial impact of the actions described on the Group or what effect that they might have upon the Group's operating results, cash flows or financial position in any particular period.

#### **General**

The Group is engaged in various other legal, competition and regulatory matters in the UK and US and a number of other overseas jurisdictions. It is subject to legal proceedings by and against the Group which arise in the ordinary course of business from time to time, including (but not limited to) disputes in relation to contracts, securities, debt collection, consumer credit, fraud, trusts, client assets, competition, data protection, money laundering, financial crime, employment, environmental and other statutory and common law issues.

The Group is also subject to enquiries and examinations, requests for information, audits, investigations and legal and other proceedings by regulators, governmental and other public bodies in connection with (but not limited to) consumer protection measures, compliance with legislation and regulation, wholesale trading activity and other areas of banking and business activities in which the Group is or has been engaged. The Group is keeping all relevant agencies briefed as appropriate in relation to these matters and others described in this Note on an ongoing basis.

At the present time, the Group does not expect the ultimate resolution of any of these other matters to have a material adverse effect on its financial position. However, in light of the uncertainties involved in such matters and the matters specifically described in this note, there can be no assurance that the outcome of a particular matter or matters will not be material to the Group's results of operations or cash flow for a particular period, depending on, amongst other things, the amount of the loss resulting from the matter(s) and the amount of income otherwise reported for the reporting period.

## Notes to the financial statements

## Capital instruments, equity and reserves

The notes included in this section focus on the Group's loan capital and shareholders equity including issued share capital, retained earnings, other equity balances and interests of minority shareholders in our subsidiary entities (non-controlling interests). For more information on capital management and how the Group maintains sufficient capital to meet our regulatory requirements see pages 152 to 158.

**30 Subordinated liabilities****Accounting for subordinated debt**

Subordinated debt is measured at amortised cost using the effective interest method under IAS 39.

Subordinated liabilities include accrued interest and comprise undated and dated loan capital as follows:

	2016	2015
	£m	£m
Undated subordinated liabilities	4,495	5,248
Dated subordinated liabilities	18,888	16,219
<b>Total subordinated liabilities</b>	<b>23,383</b>	<b>21,467</b>

None of the Group's loan capital is secured.

**Undated subordinated liabilities**

	Subordinated liabilities per balance sheet	
	2016	2015
Initial call date	£m	£m
<b>Barclays Bank PLC issued</b>		
<b>Tier One Notes (TONs)</b>		
6% Callable Perpetual Core Tier One Notes	2032 17	16
6.86% Callable Perpetual Core Tier One Notes (USD 179m)	2032 232	626

<b>Reserve Capital Instruments (RCIs)</b>		
5.926% Step-up Callable Perpetual Reserve Capital Instruments	2016	113
7.434% Step-up Callable Perpetual Reserve Capital Instruments (USD 117m)	2017	100
6.3688% Step-up Callable Perpetual Reserve Capital Instruments	2019	37
14% Step-up Callable Perpetual Reserve Capital Instruments	2019	3,124
5.3304% Step-up Callable Perpetual Reserve Capital Instruments	2036	54
<b>Undated Notes</b>		
6.375% Undated Subordinated Notes	2017	140
7.7% Undated Subordinated Notes (USD 99m)	2018	84
8.25% Undated Subordinated Notes	2018	148
7.125% Undated Subordinated Notes	2020	193
6.125% Undated Subordinated Notes	2027	45
Junior Undated Floating Rate Notes (USD 38m)	Any interest payment date	31
Undated Floating Rate Primary Capital Notes Series 3	Any interest payment date	21
<b>Bonds</b>		
9.25% Perpetual Subordinated Bonds (ex-Woolwich Plc)	2021	91
9% Permanent Interest Bearing Capital Bonds	At any time	47
<b>Loans</b>		
5.03% Reverse Dual Currency Undated Subordinated Loan (JPY 8,000m)	2028	54
5% Reverse Dual Currency Undated Subordinated Loan (JPY 12,000m)	2028	77
<b>Total undated subordinated liabilities</b>		<b>4,495</b>
<b>Undated loan capital</b>		<b>5,248</b>

Undated loan capital is issued by the Bank and its subsidiaries for the development and expansion of the business and to strengthen the capital bases. The principal terms of the undated loan capital are described below:

#### *Subordination*

All undated loan capital ranks behind the claims against the bank of depositors and other unsecured unsubordinated creditors and holders of dated loan capital in the following order: Junior Undated Floating Rate Notes; other issues of Undated Notes, Bonds and Loans ranking pari passu with each other; followed by TONs and RCIs ranking pari passu with each other.

#### *Interest*

All undated loan capital bears a fixed rate of interest until the initial call date, with the exception of the 9% Bonds which are fixed for the life of the issue, and the Junior and Series 3 Undated Notes which are floating rate.

After the initial call date, in the event that they are not redeemed, the 6.375%, 7.125%, 6.125% Undated Notes and the 9.25% Bonds will bear interest at rates fixed periodically in advance for five-year periods based on market rates. All other undated loan capital except the two floating rate Undated Notes will bear interest, and the two floating rate Undated Notes currently bear interest, at rates fixed periodically in advance based on London interbank rates.



## Notes to the financial statements

## Capital instruments, equity and reserves

**30 Subordinated liabilities** continued*Payment of interest*

The Bank is not obliged to make a payment of interest on its Undated Notes, Bonds and Loans excluding the 7.7% Undated Notes, 8.25% Undated Notes and 9.25% Bonds if, in the preceding six months, a dividend has not been declared or paid on any class of shares of Barclays PLC or, in certain cases, any class of preference shares of the Bank. The Bank is not obliged to make a payment of interest on its 9.25% Perpetual Subordinated Bonds if, in the immediately preceding 12 months interest period, a dividend has not been paid on any class of its share capital. Interest not so paid becomes payable in each case if such a dividend is subsequently paid or in certain other circumstances. During the year, the Bank declared and paid dividends on its ordinary shares and on all classes of preference shares.

No payment of principal or any interest may be made unless the Bank satisfies a specified solvency test.

The Bank may elect to defer any payment of interest on the 7.7% Undated Notes and 8.25% Undated Notes. Until such time as any deferred interest has been paid in full, neither the Bank nor Barclays PLC may declare or pay a dividend, subject to certain exceptions, on any of its ordinary shares, preference shares, or other share capital or satisfy any payments of interest or coupons on certain other junior obligations.

The Bank may elect to defer any payment of interest on the RCIs. Any such deferred payment of interest must be paid on the earlier of: (i) the date of redemption of the RCIs, (ii) the coupon payment date falling on or nearest to the tenth anniversary of the date of deferral of such payment, and (iii) in respect of the 14% RCIs only, substitution. Whilst such deferral is continuing, neither the Bank nor Barclays PLC may declare or pay a dividend, subject to certain exceptions, on any of its ordinary shares or preference shares.

The Bank may elect to defer any payment of interest on the TONs if it determines that it is, or such payment would result in it being, in non-compliance with capital adequacy requirements and policies of the PRA. Any such deferred payment of interest will only be payable on a redemption of the TONs. Until such time as the Bank next makes a payment of interest on the TONs, neither the Bank nor Barclays PLC may (i) declare or pay a dividend, subject to certain exceptions, on any of their respective ordinary shares or Preference Shares, or make payments of interest in respect of the Bank's Reserve Capital Instruments and (ii) certain restrictions on the redemption, purchase or reduction of their respective share capital and certain other securities also apply.

*Repayment*

All undated loan capital is repayable at the option of the Bank, generally in whole, at the initial call date and on any subsequent coupon or interest payment date or in the case of the 6.375%, 7.125%, 6.125% Undated Notes and the 9.25% Bonds on any fifth anniversary after the initial call date. In addition, each issue of undated loan capital is repayable, at the option of the Bank in whole in the event of certain changes in the tax treatment of the notes, either at

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any time, or on an interest payment date. There are no events of default except non-payment of principal or mandatory interest. Any repayments require the prior approval of the PRA.

### *Other*

All issues of undated subordinated liabilities are non-convertible.

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**30 Subordinated liabilities** continued**Dated subordinated liabilities**

	Initial call date	Maturity date	Subordinated liabilities per	
			balance sheet 2016	2015
			£m	£m
<b>Barclays PLC issued</b>				
2.625% Fixed Rate Subordinated Callable Notes (EUR 1,250m)	2020	2025	1,084	918
4.375% Fixed Rate Subordinated Notes (USD 1,250m)		2024	1,054	883
5.20% Fixed Rate Subordinated Notes (USD 2,050m)		2026	1,590	
<b>Barclays Bank PLC issued</b>				
6.05% Fixed Rate Subordinated Notes (USD 1,556m)		2017	1,316	1,124
Floating Rate Subordinated Notes (EUR 40m)		2018	34	29
6% Fixed Rate Subordinated Notes (EUR 1,750m)		2018	1,590	1,377
CMS-Linked Subordinated Notes (EUR 100m)		2018	90	77
CMS-Linked Subordinated Notes (EUR 135m)		2018	120	103
Fixed/Floating Rate Subordinated Callable Notes	2018	2023	548	555
7.75% Contingent Capital Notes (USD 1,000m)	2018	2023	822	679
Floating Rate Subordinated Notes (EUR 50m)		2019	42	36
5.14% Lower Tier 2 Notes (USD 1,094m)		2020	956	808
6% Fixed Rate Subordinated Notes (EUR 1,500m)		2021	1,444	1,252
9.5% Subordinated Bonds (ex-Woolwich Plc)		2021	286	293
Subordinated Floating Rate Notes (EUR 100m)		2021	85	73
10% Fixed Rate Subordinated Notes		2021	2,345	2,317
10.179% Fixed Rate Subordinated Notes (USD 1,521m)		2021	1,285	1,083
Subordinated Floating Rate Notes (EUR 50m)		2022	43	37
6.625% Fixed Rate Subordinated Notes (EUR 1,000m)		2022	1,042	891
7.625% Contingent Capital Notes (USD 3,000m)		2022	2,390	1,984
Subordinated Floating Rate Notes (EUR 50m)		2023	43	37
5.75% Fixed Rate Subordinated Notes		2026	384	802
5.4% Reverse Dual Currency Subordinated Loan (JPY 15,000m)		2027	103	80
6.33% Subordinated Notes		2032	64	60
Subordinated Floating Rate Notes (EUR 68m)		2040	58	74
<b>Absa Bank Limited issued<sup>a</sup></b>				
10.28% Subordinated Callable Notes (ZAR 600m)	2017	2022		26
Subordinated Callable Notes (ZAR 400m)	2017	2022		18

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Subordinated Callable Notes (ZAR 1,805m)	2017	2022		79
Subordinated Callable Notes (ZAR 2,007m)	2018	2023		88
8.295% Subordinated Callable Notes (ZAR 1,188m)	2018	2023		42
5.50% CPI-linked Subordinated Callable Notes (ZAR 1,500m)	2023	2028		86
<b>Barclays Africa Group Limited Issued<sup>a</sup></b>				
Subordinated Callable Notes (ZAR 370m)	2019	2024		16
10.835% Subordinated Callable Notes (ZAR 130m)	2019	2024		6
Subordinated Callable Notes (ZAR 1,693m)	2020	2025		74
10.05% Subordinated Callable Notes (ZAR 807m)	2020	2025		36
11.4% Subordinated Callable Notes (ZAR 288m)	2020	2025		13
11.365% Subordinated Callable Notes (ZAR 508m)	2020	2025		23
Subordinated Callable Notes (ZAR 437m)	2020	2025		19
11.81% Subordinated Callable Notes (ZAR 737m)	2022	2027		33
Subordinated Callable Notes (ZAR 30m)	2022	2027		1
<b>Other capital issued by Barclays Africa<sup>a</sup></b>		2019		3
<b>Capital issued by other subsidiaries</b>		2017-2019	<b>70</b>	84
<b>Total dated subordinated liabilities</b>			<b>18,888</b>	16,219
<b>Dated loan capital</b>				

Dated loan capital is issued by the Company, the Bank and respective subsidiaries for the development and expansion of their business and to strengthen their respective capital bases. The principal terms of the dated loan capital are described below:

*Subordination*

Dated loan capital issued by the Company ranks behind the claims against the Company of unsecured unsubordinated creditors but before the claims of the holders of its equity.

All dated loan capital issued by the Bank ranks behind the claims against the Bank of depositors and other unsecured unsubordinated creditors but before the claims of the undated loan capital and the holders of its equity. The dated loan capital issued by other subsidiaries is similarly subordinated.

Notes

a Instruments forming part of the BAGL group have been reclassified to Liabilities included in disposal groups classified as held for sale. For more information refer to Note 44 on page 305.



## Notes to the financial statements

## Capital instruments, equity and reserves

**30 Subordinated liabilities** continued*Interest*

Interest on the Floating Rate Notes is fixed periodically in advance, based on the related interbank or local central bank rates.

Interest on the 7.75% Contingent Capital Notes and the 2.625% Fixed Rate Subordinated Callable Notes are fixed until the call date. After the respective call dates, in the event that they are not redeemed, the interest rates will be re-set and fixed until maturity based on a market rate.

*Repayment*

Those Notes with a call date are repayable at the option of the issuer, on conditions governing the respective debt obligations, some in whole or in part, and some only in whole. The remaining dated loan capital outstanding at 31 December 2016 is redeemable only on maturity, subject in particular cases to provisions allowing an early redemption in the event of certain changes in tax law, or to certain changes in legislation or regulations.

Any repayments prior to maturity require, in the case of the Company and the Bank, the prior approval of the PRA, or in the case of the overseas issues, the approval of the local regulator for that jurisdiction and of the PRA in certain circumstances.

There are no committed facilities in existence at the balance sheet date which permit the refinancing of debt beyond the date of maturity.

*Other*

The 7.625% Contingent Capital Notes will be automatically transferred from investors to Barclays PLC (or another entity within the Group) for nil consideration in the event the Barclays PLC consolidated CRD IV Common Equity Tier 1 (CET1) ratio (FSA October 2012 transitional statement) falls below 7.0%.

The 7.75% Contingent Capital Notes will be automatically written-down and investors will lose their entire investment in the notes in the event the Barclays PLC consolidated CRD IV Common Equity Tier 1 (CET1) ratio (FSA October 2012 transitional statement) falls below 7.0%.

**31 Ordinary shares, share premium, and other equity****Called up share capital, allotted and fully paid**

Number of shares	Ordinary shares	Share premium	Total share capital and	Other equity
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	m	£m	£m	share premium	instruments £m
<b>As at 1 January 2016</b>	<b>16,805</b>	<b>4,201</b>	<b>17,385</b>	<b>21,586</b>	<b>5,305</b>
Issued to staff under share incentive plans	116	30	158	188	
Issuances relating to Scrip Dividend Programme	42	10	58	68	
AT1 securities issuance					1,132
Other movements					12
<b>As at 31 December 2016</b>	<b>16,963</b>	<b>4,241</b>	<b>17,601</b>	<b>21,842</b>	<b>6,449</b>
<b>As at 1 January 2015</b>	16,498	4,125	16,684	20,809	4,322
Issued to staff under share incentive plans	253	63	577	640	
Issuances relating to Scrip Dividend Programme	54	13	124	137	
AT1 securities issuance					995
Other movements					(12)
<b>As at 31 December 2015</b>	<b>16,805</b>	<b>4,201</b>	<b>17,385</b>	<b>21,586</b>	<b>5,305</b>

**Called up share capital**

Called up share capital comprises 16,963m (2015: 16,805m) ordinary shares of 25p each. The increase was due to the issuance of 116m (2015: 253m) shares under employee share schemes and a further 42m (2015: 54m) issued as part of the Barclays PLC Scrip Dividend Programme.

**Share repurchase**

At the 2016 AGM on 28 April 2016, Barclays PLC was authorised to purchase up to an aggregate of 1,681m of its ordinary shares of 25p. The authorisation is effective until the AGM in 2017 or the close of business on 30 June 2017, whichever is the earlier. No share repurchases were made during either 2016 or 2015.

**Other equity instruments**

Other equity instruments of £6,449m (2015: £5,305m) include AT1 securities issued by Barclays PLC. In 2016, there was one issuance of Fixed Rate Resetting Perpetual Subordinated Contingent Convertible Securities, with a principal amount of £1.1bn. In 2015, there was one issuance of Fixed Rate Resetting Perpetual Subordinated Contingent Convertible Securities, with a principal amount of £1.0bn.

The AT1 securities are perpetual securities with no fixed maturity and are structured to qualify as AT1 instruments under CRD IV.

The principal terms of the AT1 securities are described below:

§ AT1 securities rank behind the claims against Barclays PLC of (i) unsubordinated creditors; (ii) claims which are expressed to be subordinated to the claims of unsubordinated creditors of Barclays PLC but not further or otherwise; or (iii) claims which are, or are expressed to be, junior to the claims of other creditors of Barclays PLC, whether subordinated or unsubordinated, other than claims which rank, or are expressed to rank, pari passu with, or junior to, the claims of holders of the AT1 securities.

§ AT1 securities bear a fixed rate of interest until the initial call date. After the initial call date, in the event that they are not redeemed, the AT1 securities will bear interest at rates fixed periodically in advance for five-year periods based on market rates.

§ Interest on the AT1 securities will be due and payable only at the sole discretion of Barclays PLC, and Barclays PLC has sole and absolute discretion at all times and for any reason to cancel (in whole or in part) any interest payment that would otherwise be payable on any interest payment date.

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### **31 Ordinary shares, share premium, and other equity** continued

§ AT1 securities are undated and are repayable, at the option of Barclays PLC, in whole at the initial call date, or on any fifth anniversary after the initial call date. In addition, the AT1 securities are repayable, at the option of Barclays PLC, in whole in the event of certain changes in the tax or regulatory treatment of the securities. Any repayments require the prior consent of the PRA.

All AT1 securities will be converted into ordinary shares of Barclays PLC, at a pre determined price, should the fully loaded CET1 ratio of the Barclays PLC Group fall below 7.0%.

### **32 Reserves**

#### **Currency translation reserve**

The currency translation reserve represents the cumulative gains and losses on the retranslation of the Group's net investment in foreign operations, net of the effects of hedging.

As at 31 December 2016, there was a credit balance of £3,051m (2015: £623m debit) in the currency translation reserve. The increase in the credit balance of £3,674m (2015: £41m debit) principally reflected the strengthening of all major currencies against GBP. The currency translation reserve movement associated with non-controlling interests was a £801m credit (2015: £435m debit) reflecting the strengthening of ZAR against GBP.

During the year a £101m net gain (2015: £65m net loss) from recycling of the currency translation reserve was recognised in the income statement.

#### **Available for sale reserve**

The available for sale reserve represents the unrealised change in the fair value of available for sale investments since initial recognition.

As at 31 December 2016 there was a debit balance of £74m (2015: £317m credit) in the available for sale reserve. The decrease of £391m (2015: £245m decrease) was primarily due to a £2,192m gain from changes in fair value on Government Bonds, predominantly held in the liquidity pool which was more than offset by £1,677m of losses from related hedging and £912m of net gains transferred to net profit, mainly due to £615m gain on disposal of Barclays share of Visa Europe Limited. A tax charge of £28m was recognised in the period relating to these items.

#### **Cash flow hedging reserve**

The cash flow hedging reserve represents the cumulative gains and losses on effective cash flow hedging instruments that will be recycled to the income statement when the hedged transactions affect profit or loss.

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As at 31 December 2016, there was a credit balance of £2,105m (2015: £1,261m credit) in the cash flow hedging reserve. The increase of £844m (2015: £556m decrease) principally reflected a £1,595m increase in the fair value of interest rate swaps held for hedging purposes as interest rate forward curves decreased, partially offset by £450m gains recycled to the income statement in line with when the hedged item affects profit or loss and tax charge of £326m. The tax charge on cash flow hedge movements represented an effective rate of tax of 27.9% (2015: 10.6%). This tax charge reflects the introduction of the new surcharge of 8%, that applies to bank's UK profits with effect from January 2016, in addition to the standard UK corporation tax rate of 20%.

### Other reserves and treasury shares

As at 31 December 2016, there was a credit balance of £969m (2015: £943m credit) in other reserves and treasury shares.

A credit balance of £1,011m (2015: £1,011m credit) related to the excess repurchase price paid over nominal of redeemed ordinary and preference shares issues by the Group.

The treasury shares relate to Barclays PLC shares held in relation to the Group's various share schemes. These schemes are described in Note 34 Share-based payments.

Treasury shares are deducted from shareholders' equity within other reserves. A transfer is made to retained earnings in line with the vesting of treasury shares held for the purposes of share-based payments.

As at 31 December 2016, there was a debit balance of £42m (2015: £68m debit) in other reserves relating to treasury shares. The decrease principally reflected £166m (2015: £618m) transferred from treasury shares reflecting the vesting of deferred share-based payments, partially offset by £140m (2015: £602m) net purchases of treasury shares held for the purposes of employee share schemes.

### 33 Non-controlling interests

	Profit attributable to non-controlling interests		Equity attributable to non-controlling interests		Dividends paid to non-controlling interest	
	2016 £m	2015 £m	2016 £m	2015 £m	2016 £m	2015 £m
Barclays Bank PLC issued:						
Preference shares	340	343	2,698	3,654	340	343
Upper Tier 2 instruments	3	2	272	486		
Barclays Africa Group Limited	402	324	3,507	1,902	235	209
Other non-controlling interests	3	3	15	12		
<b>Total</b>	<b>748</b>	<b>672</b>	<b>6,492</b>	<b>6,054</b>	<b>575</b>	<b>552</b>

Subsidiaries of the Group that give rise to significant non-controlling interests are Barclays Bank PLC and Barclays Africa Group Limited.

### Barclays Bank PLC

Barclays PLC holds 100% of the voting rights of Barclays Bank PLC. As at 31 December 2016, Barclays Bank PLC has in issue preference shares and Upper Tier 2 instruments, representing 11% (2015: 11%) of its equity. Preference share dividends and redemption are typically at the discretion of Barclays Bank PLC. The payment of Upper Tier 2 instrument coupons and principal are typically at the discretion of Barclays Bank PLC, except for coupon payments that become compulsory where Barclays PLC has declared or paid a dividend on ordinary shares in the preceding six-month period. Preference share and Upper Tier 2 instrument holders typically only have rights to redeem in the

event of insolvency.

## Notes to the financial statements

## Capital instruments, equity and reserves

## 33 Non-controlling interests continued

	2016	2015
<b>Instrument</b>	<b>£m</b>	<b>£m</b>
<b>Preference Shares:</b>		
6.00% non cumulative callable preference shares	203	203
6.278% non cumulative callable preference shares	318	318
4.75% non cumulative callable preference shares	211	211
6.625% non cumulative callable preference shares		406
7.1% non cumulative callable preference shares	657	657
7.75% non cumulative callable preference shares		550
8.125% non cumulative callable preference shares	1,309	1,309
<b>Total Barclays Bank PLC Preference Shares</b>	<b>2,698</b>	<b>3,654</b>
Barclays Africa Group Limited	277	201
<b>Total</b>	<b>2,975</b>	<b>3,855</b>
<b>Upper Tier 2 Instruments:</b>		
Undated Floating Rate Primary Capital Notes Series 1	93	222
Undated Floating Rate Primary Capital Notes Series 2	179	264
<b>Total Upper Tier 2 Instruments</b>	<b>272</b>	<b>486</b>

**Protective rights of non-controlling interests***Barclays Africa Group Limited*

Barclays owns 50.2% (50.1% including treasury shares) of the share capital of Barclays Africa Group Limited. Barclays PLC's rights to access the assets of Barclays Africa and its group companies are restricted by virtue of the South African Companies Act which requires 75% shareholder approval to dispose of all or the greater part of Barclays Africa Group Limited's assets or to complete the voluntary winding up of the entity.

*Barclays Bank PLC*

Barclays Bank PLC also has in issue preference shares which are non-controlling interests to the Group. Under the terms of these instruments, Barclays PLC may not pay dividends on ordinary shares until a dividend is next paid on these instruments or the instruments are redeemed or purchased by Barclays Bank PLC. There are no restrictions on Barclays Bank PLC's ability to remit capital to the Parent as a result of these issued instruments.





Notes to the financial statements

Employee benefits

The notes included in this section focus on the costs and commitments associated with employing our staff.

**34 Share-based payments**

**Accounting for share-based payments**

The Group applies IFRS 2 Share-Based Payments in accounting for employee remuneration in the form of shares.

Employee incentives include awards in the form of shares and share options, as well as offering employees the opportunity to purchase shares on favourable terms. The cost of the employee services received in respect of the shares or share options granted is recognised in the income statement over the period that employees provide services, generally the period in which the award is granted or notified and the vesting date of the shares or options. The overall cost of the award is calculated using the number of shares and options expected to vest and the fair value of the shares or options at the date of grant.

The number of shares and options expected to vest takes into account the likelihood that performance and service conditions included in the terms of the awards will be met. Failure to meet the non-vesting condition is treated as a cancellation, resulting in an acceleration of recognition of the cost of the employee services.

The fair value of shares is the market price ruling on the grant date, in some cases adjusted to reflect restrictions on transferability. The fair value of options granted is determined using option pricing models to estimate the numbers of shares likely to vest. These take into account the exercise price of the option, the current share price, the risk-free interest rate, the expected volatility of the share price over the life of the option and other relevant factors. Market conditions that must be met in order for the award to vest are also reflected in the fair value of the award, as are any other non-vesting conditions such as continuing to make payments into a share based savings scheme.

The charge for the year arising from share-based payment schemes was as follows:

	Charge for the year		
	2016 £m	2015 £m	2014 £m
Share Value Plan	473	442	575
Others	192	86	82
Total equity settled	665	528	657
Cash settled	1	4	5
<b>Total share based payments</b>	<b>666</b>	<b>532</b>	<b>662</b>

The terms of the main current plans are as follows:

### Share Value Plan (SVP)

The SVP was introduced in March 2010 and approved by shareholders (for Executive Director participation and use of new issue shares) at the AGM in April 2011. SVP awards are granted to participants in the form of a conditional right to receive Barclays PLC shares or provisional allocations of Barclays PLC shares which vest or are considered for release over a period of three years in equal annual tranches. Participants do not pay to receive an award or to receive a release of shares. The grantor may also make a dividend equivalent payment to participants on release of a SVP award. SVP awards are also made to eligible employees for recruitment purposes. All awards are subject to potential forfeiture in certain leaver scenarios. See also Note 8 for additional detail on share awards granted under SVP.

### Other schemes

In addition to the SVP, the Group operates a number of other schemes including schemes operated by, and settled in, the shares of subsidiary undertakings, none of which is individually or in aggregate material in relation to the charge for the year or the dilutive effect of outstanding share options. Included within other schemes are Sharesave (both UK and overseas), the Barclays Long Term Incentive Plan, the Share Incentive Award and the Executive Share Award Scheme.

### Share option and award plans

The weighted average fair value per award granted and weighted average share price at the date of exercise/release of shares during the year was:

Weighted average fair value per award granted in year		Weighted average share price at exercise/ release during year	
2016	2015	2016	2015
£	£	£	£

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SVP <sup>a</sup>	<b>1.66</b>	2.54	<b>1.66</b>	2.53
Others <sup>a</sup>	<b>0.61-1.67</b>	0.49-2.54	<b>1.65-1.88</b>	2.37-2.67

SVP are nil cost awards on which the performance conditions are substantially completed at the date of grant. Consequently the fair value of these awards is based on the market value at that date.

Notes

aOptions/award granted over Barclays PLC shares.

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## Notes to the financial statements

## Employee benefits

## 34 Share based payments continued

## Movements in options and awards

The movement in the number of options and awards for the major schemes and the weighted average exercise price of options was:

	SVP <sup>a,b</sup>		Others <sup>a,c</sup>		Weighted average	
	Number (000s)		Number (000s)		ex. price (£)	
	2016	2015	2016	2015	2016	2015
<b>Outstanding at beginning of</b>						
<b>year/acquisition date</b>	<b>386,470</b>	480,042	<b>166,975</b>	185,599	<b>1.75</b>	1.61
Granted in the year	<b>229,371</b>	186,397	<b>154,069</b>	55,982	<b>1.20</b>	2.27
Exercised/released in the year	<b>(191,623)</b>	(252,031)	<b>(60,912)</b>	(50,538)	<b>1.39</b>	1.41
Less: forfeited in the year	<b>(18,202)</b>	(27,938)	<b>(47,342)</b>	(20,811)	<b>1.95</b>	1.76
Less: expired in the year			<b>(7,661)</b>	(3,257)	<b>1.83</b>	2.39
<b>Outstanding at end of year</b>	<b>406,016</b>	386,470	<b>205,129</b>	166,975	<b>1.38</b>	1.75
<b>Of which exercisable:</b>		30	<b>24,435</b>	26,058	<b>1.78</b>	1.48

Certain of the Group's share option plans enable certain Directors and employees to subscribe for new ordinary shares of Barclays PLC. For accounting for treasury shares see Note 32 Reserves.

The weighted average contractual remaining life and number of options and awards outstanding (including those exercisable) at the balance sheet date are as follows:

	2016		2015	
	Weighted average remaining	Number of options/awards	Weighted average remaining	Number of options/awards

	<b>contractual life in years</b>	<b>outstanding (000s)</b>	<b>contractual life in years</b>	<b>outstanding (000s)</b>
SVP <sup>a,b</sup>	<b>1</b>	<b>406,016</b>	1	386,470
Others <sup>a</sup>	<b>0-3</b>	<b>205,129</b>	0-2	166,975

There were no significant modifications to the share based payments arrangements in 2016 and 2015.

As at 31 December 2016, the total liability arising from cash-settled share based payments transactions was nil (2015: £13m).

### Holdings of Barclays PLC shares

Various employee benefit trusts established by the Group hold shares in Barclays PLC to meet obligations under the Barclays share based payment schemes. The total number of Barclays shares held in these employee benefit trusts at 31 December 2016 was 6.6 million (2015: 5.1 million). Dividend rights have been waived on all these shares. The total market value of the shares held in trust based on the year end share price of £2.23 (2015: £2.19) was £14.7m (2015: £11.2m).

### 35 Pensions and post retirement benefits

#### Accounting for pensions and post retirement benefits

The Group operates a number of pension schemes and post-employment benefit schemes.

*Defined contribution schemes* – the Group recognises contributions due in respect of the accounting period in the income statement. Any contributions unpaid at the balance sheet date are included as a liability.

*Defined benefit schemes* – the Group recognises its obligations to members of each scheme at the period end, less the fair value of the scheme assets after applying the asset ceiling test. The clarifications contained in the proposed amendments to IFRIC 14 as to when an entity has an unconditional right to benefit from a scheme surplus are not expected to have a material impact on the Group. The Trustee board do not have a substantive right to augment benefits in the UKRF, nor do they have the right to wind up the plan except in the dissolution of the Bank or termination of contributions by the Bank.

Each scheme's obligations are calculated using the projected unit credit method. Scheme assets are stated at fair value as at the period end.

Changes in pension scheme liabilities or assets (remeasurements) that do not arise from regular pension cost, net interest on net defined benefit liabilities or assets, past service costs, settlements or contributions to the scheme, are recognised in other comprehensive income. Remeasurements comprise experience adjustments (differences between

previous actuarial assumptions and what has actually occurred), the effects of changes in actuarial assumptions, return on scheme assets (excluding amounts included in the interest on the assets) and any changes in the effect of the asset ceiling restriction (excluding amounts included in the interest on the restriction).

*Post-employment benefit schemes* the cost of providing health care benefits to retired employees is accrued as a liability in the financial statements over the period that the employees provide services to the Group, using a methodology similar to that for defined benefit pension schemes.

#### Notes

a Options/award granted over Barclays PLC shares.

b Nil cost award and therefore the weighted average exercise price was nil.

c The number of awards within Others at the end of the year principally relates to Sharesave (number of awards exercisable at end of year was 10,584,072). The weighted average exercise price relates to Sharesave.

## 35 Pensions and post retirement benefits continued

### Pension schemes

#### *UK Retirement Fund (UKRF)*

The UKRF is the Group's main scheme, representing 96% of the Group's total retirement benefit obligations. The UKRF was closed to new entrants on 1 October 2012, and comprises 10 sections, the two most significant of which are:

§ Afterwork, which comprises a contributory cash balance defined benefit element, and a voluntary defined contribution element. The cash balance element is accrued each year and revalued until Normal Retirement Age in line with the increase in Retail Price Index (RPI) (up to a maximum of 5% p.a.). An investment related increase of up to 2% a year may also be added at Barclays' discretion. Between 1 October 2003 and 1 October 2012 the majority of new employees outside of the investment banking business within Barclays International were eligible to join this section. The costs of ill-health retirements and death in service benefits for Afterwork members are borne by the UKRF. The main risks that Barclays runs in relation to Afterwork are limited although additional contributions are required if pre-retirement investment returns are not sufficient to provide for the benefits.

§ The 1964 Pension Scheme. Most employees recruited before July 1997 built up benefits in this non-contributory defined benefit scheme in respect of service up to 31 March 2010. Pensions were calculated by reference to service and pensionable salary. From 1 April 2010, members became eligible to accrue future service benefits in either Afterwork or the Pension Investment Plan (PIP), a historic defined contribution section which is now closed to future contributions. The risks that Barclays runs in relation to the 1964 section are typical of final salary pension schemes, principally that investment returns fall short of expectations, that inflation exceeds expectations, and that retirees live longer than expected.

#### *Barclays Pension Savings Plan (BPSP)*

§ From 1 October 2012, a new UK pension scheme, the BPSP, was established to satisfy Auto Enrolment legislation. The BPSP is a defined contribution scheme (Group Personal Pension) providing benefits for all new Barclays UK hires from 1 October 2012, investment banking business within Barclays International employees who were in PIP as at 1 October 2012, and also all UK employees who were not members of a pension scheme at that date. As a defined contribution scheme, BPSP is not subject to the same investment return, inflation or life expectancy risks for Barclays that defined benefit schemes are. Members' benefits reflect contributions paid and the level of investment returns achieved.

Apart from the UKRF and the BPSP, Barclays operates a number of smaller pension and long-term employee benefits and post-retirement health care plans globally, the largest of which are the US defined benefit schemes. Many of the

schemes are funded, with assets backing the obligations held in separate legal vehicles such as trusts. Others are operated on an unfunded basis. The benefits provided, the approach to funding, and the legal basis of the schemes, reflect local environments.

## Governance

The UKRF operates under trust law and is managed and administered on behalf of the members in accordance with the terms of the Trust Deed and Rules and all relevant legislation. The Corporate Trustee is Barclays Pension Funds Trustees Limited, a private limited company and a wholly owned subsidiary of Barclays Bank PLC. The Trustee is the legal owner of the assets of the UKRF which are held separately from the assets of the Group.

The Trustee Board comprises six Management Directors selected by Barclays, of whom three are independent Directors with no relationship with Barclays or the UKRF, plus three Member Nominated Directors selected from eligible active staff and pensioner members who apply for the role.

The BPSP is a Group Personal Pension arrangement which operates as a collection of personal pension plans. Each personal pension plan is a direct contract between the employee and the BPSP provider (Legal & General Assurance Society Limited), and is regulated by the FCA.

Similar principles of pension governance apply to the Group's other pension schemes, depending on local legislation.



## Notes to the financial statements

## Employee benefits

**35 Pensions and post retirement benefits** continued**Amounts recognised**

The following tables include amounts recognised in the income statement and an analysis of benefit obligations and scheme assets for all Group defined benefit schemes. The net position is reconciled to the assets and liabilities recognised on the balance sheet. The tables include funded and unfunded post-retirement benefits.

**Income statement charge<sup>a</sup>**

	<b>2016</b>	<b>2015</b>	<b>2014</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>
Current service cost	243	255	279
Net finance cost	(32)	41	69
Past service cost		(432)	(1)
Other movements	2	1	(15)
<b>Total</b>	<b>213</b>	<b>(135)</b>	<b>332</b>

Past service costs includes a nil (2015: £429m; 2014: nil) gain on valuation of a component of the defined retirement benefit liability.

**Balance sheet reconciliation<sup>a</sup>**

	<b>2016</b>		<b>2015</b>	
	<b>Total</b>	<b>Of which</b>	<b>Total</b>	<b>Of which</b>
	<b>£m</b>	<b>relates to</b>	<b>£m</b>	<b>relates to</b>
		<b>UKRF</b>		<b>UKRF</b>
		<b>£m</b>		<b>£m</b>
Benefit obligation at beginning of the year	(28,279)	(26,027)	(30,392)	(27,931)
Current service cost	(243)	(220)	(303)	(234)
Interest costs on scheme liabilities	(1,016)	(980)	(1,147)	(1,010)
Past service cost			434	429
Remeasurement (loss)/gain financial	(7,214)	(7,170)	1,161	1,121
Remeasurement gain/(loss) demographic	413	390	(159)	(160)
Remeasurement gain experience	525	490	609	611
Employee contributions	(4)	(1)	(36)	(2)
Benefits paid	1,852	1,800	1,172	1,021
Exchange and other movements	933	(129)	382	128
Benefit obligation at end of the year	<b>(33,033)</b>	<b>(31,847)</b>	<b>(28,279)</b>	<b>(26,027)</b>

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Fair value of scheme assets at beginning of the year	28,752	26,829	28,874	26,827
Interest income on scheme assets	1,048	1,023	1,105	979
Employer contribution	720	634	689	586
Remeasurement return on scheme assets greater/(less) than discount rate	5,009	5,002	(476)	(446)
Employee contributions	4	1	36	2
Benefits paid	(1,852)	(1,800)	(1,172)	(1,021)
Exchange and other movements	(1,024)	131	(304)	(98)
Fair value of scheme assets at the end of the year	32,657	31,820	28,752	26,829
Net (deficit)/surplus	(376)	(27)	473	802
Irrecoverable surplus (effect of asset ceiling)			(60)	
Net recognised (liabilities)/assets	(376)	(27)	413	802
Retirement benefit assets	14		836	802
Retirement benefit liabilities	(390)	(27)	(423)	
Net retirement benefit (liabilities)/assets	(376)	(27)	413	802

Included within the benefit obligation was £979m (2015: £2,050m) relating to overseas pensions and £207m (2015: £202m) relating to other post-employment benefits.

As at 31 December 2016, the UKRF's scheme assets were in deficit versus IAS 19 obligations by £27m (2015: surplus of £802m). The movement for the UKRF is mainly due to a decrease in discount rate to 2.62% (2015: 3.82%), and an increase in inflation rate to 3.35% (2015: 3.05%) partially offset by deficit contributions, updated mortality assumptions based on scheme experience, and higher than assumed returns on plan assets. The UKRF benefits paid of £1,800m (2015: £1,021m) included transfers out of the fund and contribution refunds of £1,029m (2015: £270m).

Where a scheme's assets exceed its obligation, an asset is recognised to the extent that it does not exceed the present value of future contribution holidays or refunds of contributions (the asset ceiling). In the case of the UKRF the asset ceiling is not applied as, in certain specified circumstances such as wind-up, Barclays expects to be able to recover any surplus. The application of the asset ceiling to other plans is considered on an individual plan basis.

### Critical accounting estimates and judgements

Actuarial valuation of the schemes' obligation is dependent upon a series of assumptions, below is a summary of the main financial and demographic assumptions adopted for the UKRF.

Key UKRF financial assumptions	2016 % p.a.	2015 % p.a.
Discount rate	2.62	3.82
Inflation rate (RPI)	3.35	3.05
Note		

a Comparative information for the income statement charge has been restated to exclude discontinued operations, while balance sheet information has not been restated. Please see page 217 for more details.

**35 Pensions and post retirement benefits** continued

The UKRF discount rate assumption for 2016 was based on a variant of the standard Willis Towers Watson RATE Link model. This variant includes all bonds rated AA by at least one of the four major ratings agencies, and assumes that yields after year 30 are flat. The RPI inflation assumption for 2016 was set by reference to the Bank of England's implied inflation spot curve, assuming the spot curve remains flat after the published 25 years. The inflation assumption incorporates a deduction of 20 basis points as an allowance for an inflation risk premium. The methodology used to derive the discount rate and price inflation assumption is consistent with that used at the prior year end.

The UKRF's post-retirement mortality assumptions are based on a best estimate assumption derived from an analysis in 2016 of Barclays own post-retirement mortality experience, and taking account of recent evidence from published mortality surveys. An allowance has been made for future mortality improvements based on the 2015 core projection model published by the Continuous Mortality Investigation Bureau subject to a long-term trend of 1.25% per annum in future improvements. The table below shows how the assumed life expectancy at 60, for members of the UKRF, has varied over the past three years:

<b>Assumed life expectancy</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>Life expectancy at 60 for current pensioners (years)</b>			
Males	27.9	28.4	28.3
Females	29.7	30.0	29.9
<b>Life expectancy at 60 for future pensioners currently aged 40 (years)</b>			
Males	29.7	30.2	30.1
Females	31.7	32.0	31.9

**Sensitivity analysis on actuarial assumptions**

The sensitivity analysis has been calculated by valuing the UKRF liabilities using the amended assumptions shown in the table below and keeping the remaining assumptions as disclosed in the table above the same, except in the case of the inflation sensitivity where other assumptions that depend on assumed inflation have also been amended. The difference between the recalculated liability figure and that stated in the balance sheet reconciliation table above is the figure shown. The selection of these movements to illustrate the sensitivity of the defined benefit obligation to key assumptions should not be interpreted as Barclays expressing any specific view of the probability of such movements happening.

**Change in key assumptions**

**2016**                      **2015**

	(Decrease)/ Increase in UKRF defined benefit obligation £bn	(Decrease)/ Increase in UKRF defined benefit obligation £bn
<b>Discount rate</b>		
0.5% p.a. increase	(2.8)	(2.1)
0.25% p.a. increase	(1.4)	(1.1)
0.25% p.a. decrease	1.5	1.2
0.5% p.a. decrease	3.2	2.4
<b>Assumed RPI</b>		
0.5% p.a. increase	1.9	1.4
0.25% p.a. increase	0.9	0.7
0.25% p.a. decrease	(0.9)	(0.7)
0.5% p.a. decrease	(2.0)	(1.3)
<b>Life expectancy at 60</b>		
One year increase	1.1	0.9
One year decrease	(1.1)	(0.9)

The weighted average duration of the benefit payments reflected in the defined benefit obligation for the UKRF is 20 years.

### Assets

A long-term investment strategy has been set for the UKRF, with its asset allocation comprising a mixture of equities, bonds, property and other appropriate assets. This recognises that different asset classes are likely to produce different long-term returns and some asset classes may be more volatile than others. The long-term investment strategy ensures, among other aims, that investments are adequately diversified. Asset managers are permitted some flexibility to vary the asset allocation from the long-term investment strategy within control ranges agreed with the Trustee from time to time.

The UKRF also employs derivative instruments, where appropriate, to achieve a desired exposure or return, or to match assets more closely to liabilities. The value of assets shown reflects the assets held by the scheme, with any derivative holdings reflected on a fair value basis.

## Notes to the financial statements

## Employee benefits

**35 Pensions and post retirement benefits** continued

The value of the assets of the schemes and their percentage in relation to total scheme assets were as follows:

## Analysis of scheme assets

	Total		Of which relates to UKRF	
	% of total fair value of scheme assets		% of total fair value of scheme assets	
	Value £m	%	Value £m	%
<b>As at 31 December 2016</b>				
Equities quoted	8,123	24.9	7,840	24.6
Equities non-quoted	2,043	6.3	2,042	6.4
Bonds fixed government	1,330	4.1	1,072	3.4
Bonds index-linked government	13,173	40.3	13,165	41.4
Bonds corporate and other	5,222	16.0	5,054	15.9
Property commercial	1,630	5.0	1,622	5.1
Derivatives <sup>b</sup>	870	2.7	870	2.7
Other <sup>b</sup>	266	0.7	155	0.5
<b>Fair value of scheme assets</b>	<b>32,657</b>	<b>100.0</b>	<b>31,820</b>	<b>100.0</b>
<b>As at 31 December 2015</b>				
Equities quoted	7,764	27.0	6,947	25.9
Equities non-quoted	1,757	6.1	1,750	6.5
Bonds fixed government	1,105	3.8	577	2.2
Bonds index-linked government	9,677	33.7	9,670	36.0
Bonds corporate and other	5,856	20.4	5,680	21.2
Property commercial	1,602	5.6	1,581	5.9
Derivatives <sup>b</sup>	183	0.6	183	0.7
Other <sup>b</sup>	808	2.8	441	1.6
<b>Fair value of scheme assets</b>	<b>28,752</b>	<b>100.0</b>	<b>26,829</b>	<b>100.0</b>

Included within the fair value of scheme assets were: £0.2m (2015: £5m) relating to shares in Barclays PLC, £0.1m (2015: £23m) relating to bonds issued by the Barclays PLC, nil (2015: £6m) relating to property occupied by Group companies, and nil (2015: £7m) relating to other investments. The UKRF also invests in pooled investment vehicles which may hold shares or debt issued by Barclays PLC.

The UKRF scheme assets also include £32m (2015: £36m) relating to UK private equity investments and £2,009m (2015: £1,714m) relating to overseas private equity investments. These are disclosed above within Equities non-quoted.

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Approximately 40% of the UKRF assets are invested in liability-driven investment strategies; primarily UK gilts as well as interest rate and inflation swaps. These are used to better match the assets to liabilities. The swaps are used to reduce the scheme's inflation and duration risks against liabilities.

### Notes

a Assets held are predominately quoted.

b Assets held are predominantly non-quoted.

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**35 Pensions and post retirement benefits** continued**Funding**

The triennial funding valuation of the UKRF is currently underway with an effective date of 30 September 2016. Contribution requirements, including any deficit recovery plans, must be agreed by 31 December 2017, and are expected to be agreed between the Bank and Trustee well in advance of this statutory deadline. In these discussions, the Bank and the Trustee are taking into account the impact of the Structural Reform Programme.

The previous triennial funding valuation at 30 September 2013 showed a deficit of £3.6bn and a funding level of 87.4%. The Bank and Trustee agreed a scheme-specific funding target, statement of funding principles, a schedule of contributions and a recovery plan to eliminate the deficit relative to the funding target. The main differences between the funding and IAS 19 assumptions are a more prudent discount rate and longevity assumptions for funding.

The recovery plan agreed as part of the 2013 actuarial valuation provided for the Bank to pay deficit contributions to the UKRF until 2021. Deficit contributions of £300m were paid in 2015 and in 2016. Under the existing recovery plan, further deficit contributions of £740m per annum are payable during 2017 to 2021, and up to £500m of the 2021 deficit contribution is payable in 2017 depending on the deficit level at that time. These deficit contributions are in addition to the regular contributions to meet the Group's share of the cost of benefits accruing over each year.

In non-valuation years, the Scheme Actuary prepares an annual update of the funding position. The latest annual update was carried out as at 30 September 2015 and showed a deficit of £6.0bn and a funding level of 82.7%. The contributions paid to the UKRF are agreed between Barclays and the Trustee every three years.

Defined benefit contributions paid with respect to the UKRF were as follows:

**Contributions paid**

	<b>£m</b>
<b>2016</b>	<b>634</b>
2015	586
2014	241

Included within the Group's contributions paid were £112m (2015: nil; 2014: nil) Section 75 contributions.

The Group's expected contribution to the UKRF in respect of defined benefits in 2017 is £1,585m (2016: £634m) including £167m Section 75 contributions. In addition, the expected contributions to UK defined contribution schemes in 2017 is £36m (2016: £49m) to the UKRF and £124m (2016: £126m) to the BPSP.





Notes to the financial statements

Scope of consolidation

The section presents information on the Group's investments in subsidiaries, joint ventures and associates and its interests in structured entities. Detail is also given on securitisation transactions the Group has entered into and arrangements that are held off balance sheet.

**36 Principal subsidiaries**

Barclays applies IFRS 10 Consolidated Financial Statements. The consolidated financial statements combine the financial statements of Barclays PLC and all its subsidiaries. Subsidiaries are entities over which the Group has control. Under IFRS 10, this is when the Group is exposed or has rights to variable returns from its involvement in the entity and has the ability to affect those returns through its power over the entity.

The Group reassesses whether it controls an entity if facts and circumstances indicate that there have been changes to its power, its rights to variable returns or its ability to use its power to affect the amount of its returns.

Intra-group transactions and balances are eliminated on consolidation and consistent accounting policies are used throughout the Group for the purposes of the consolidation. Changes in ownership interests in subsidiaries are accounted for as equity transactions if they occur after control has been obtained and they do not result in loss of control.

The significant judgements used in applying this policy are set out below.

**Accounting for investment in subsidiaries**

In the individual financial statements of Barclays PLC, investments in subsidiaries are stated at cost less impairment.

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Principal subsidiaries for the Group are set out below. This includes those subsidiaries that are most significant in the context of the Group's business, results or financial position.

<b>Company Name</b>	<b>Principal place of business or incorporation</b>	<b>Nature of business</b>	<b>Percentage of voting rights held</b>	<b>Non-controlling interests proportion of ownership interests</b>	<b>Non-controlling interests proportion of voting interests</b>
			%	%	%
Barclays Bank PLC	England	Banking, holding company	100	11	
Barclays Capital Securities Limited	England	Securities dealing	100		
Barclays Securities Japan Limited	Japan	Securities dealing	100		
Barclays Africa Group Limited	South Africa	Banking	50.1	49.9	49.9
Barclays Capital Inc	US	Securities dealing	100		
Barclays Bank Delaware	US	Credit card issuer	100		

The country of registration or incorporation is also the principal area of operation of each of the above subsidiaries.

Ownership interests are in some cases different to voting interests due to the existence of non-voting equity interests, such as preference shares. See Note 33 Non-controlling interests for more information.

Barclays Private Clients International Limited was considered a principal subsidiary in 2015. Barclays Private Clients International Limited transferred all associated assets and liabilities to Barclays Bank PLC in October 2016.

### **Significant judgements and assumptions used to determine the scope of the consolidation**

Determining whether the Group has control of an entity is generally straightforward based on ownership of the majority of the voting capital. However, in certain instances, this determination will involve significant judgement, particularly in the case of structured entities where voting rights are often not the determining factor in decisions over the relevant activities. This judgement may involve assessing the purpose and design of the entity. It will also often be necessary to consider whether the Group, or another involved party with power over the relevant activities, is acting as a principal in its own right or as an agent on behalf of others.

There is also often considerable judgement involved in the ongoing assessment of control over structured entities. In this regard, where market conditions have deteriorated such that the other investors' exposures to the structure's variable returns have been substantively eliminated, the Group may conclude that the managers of the structured entity

are acting as its agent and therefore will consolidate the structured entity.

An interest in equity voting rights exceeding 50% would typically indicate that the Group has control of an entity. However, certain entities, as set out below, are excluded from consolidation because the Group does not have exposure to their variable returns.

Country of registration or incorporation	Company name	Percentage of voting	Equity shareholder	Retained profit for
		rights held (%)	funds (£m)	the year (£m)
UK	Fitzroy Finance Limited	100		
Cayman Islands	Palomino Limited	100	2	1

These entities are managed by external counterparties and consequently are not controlled by the Group. Where appropriate, interests relating to these entities are included in Note 37 Structured entities.

### Significant restrictions

As is typical for a Group of its size and international scope, there are restrictions on the ability of Barclays PLC to obtain distributions of capital, access the assets or repay the liabilities of members of its Group due to the statutory, regulatory and contractual requirements of its subsidiaries and due to the protective rights of non-controlling interests. These are considered on the next page.

### 36 Principal subsidiaries continued

#### *Regulatory requirements*

Barclays' principal subsidiary companies have assets and liabilities before intercompany eliminations of £1,553bn (2015: £1,468bn) and £1,480bn (2015: £1,398bn) respectively. The assets and liabilities are subject to prudential regulation and regulatory capital requirements in the countries in which they are regulated. These require entities to maintain minimum capital levels which cannot be returned to the parent company, Barclays PLC on a going concern basis.

In order to meet capital requirements, subsidiaries may hold certain equity-accounted and debt-accounted issued financial instruments and non-equity instruments such as Tier 1 and Tier 2 capital instruments and other forms of subordinated liabilities. See Note 28 Contingent liabilities and commitments, Note 30 Subordinated liabilities and Note 33 Non-controlling interests for particulars of these instruments. These instruments may be subject to cancellation clauses or preference share restrictions that would limit the ability of the entity to repatriate the capital on a timely basis.

#### *Liquidity requirements*

Regulated subsidiaries of the Group are required to maintain liquidity pools to meet PRA and local regulatory requirements. The main subsidiaries affected are Barclays Bank PLC, Barclays Africa Group Limited and Barclays Capital Inc which must maintain daily compliance with the regulatory minimum. See pages 159 to 177 for further details of liquidity requirements, including those of our significant subsidiaries.

#### *Statutory requirements*

The Group's subsidiaries are subject to statutory requirements not to make distributions of capital and unrealised profits and generally to maintain solvency. These requirements restrict the ability of subsidiaries to make remittances of dividends to Barclays PLC, the ultimate parent, except in the event of a legal capital reduction or liquidation. In most cases, the regulatory restrictions referred to above exceed the statutory restrictions.

#### **Contractual requirements**

##### *Asset encumbrance*

The Group uses its financial assets to raise finance in the form of securitisations and through the liquidity schemes of central banks. Once encumbered, the assets are not available for transfer around the Group. The assets typically affected are disclosed in Note 40 Assets Pledged.

##### *Assets held by consolidated structured entities*

£99m (2015: £80m) of assets included in the Group's balance sheet relate to consolidated investment funds and are held to pay return and principal to the holders of units in the funds. The assets held in these funds cannot be transferred to other members of the Group.

##### *Other restrictions*

The Group is required to maintain balances with central banks and other regulatory authorities, and these amounted to £4,254m (2015: £4,369m).

Barclays Africa Group Limited assets are subject to exchange control regulation determined by the South African Reserve Bank (SARB). Special dividends and loans in lieu of dividends cannot be transferred without SARB approval.

### **37 Structured entities**

A structured entity is an entity in which voting or similar rights are not the dominant factor in deciding control. Structured entities are generally created to achieve a narrow and well defined objective with restrictions around their ongoing activities.

Depending on the Group's power over the activities of the entity and its exposure to and ability to influence its own returns, it may consolidate the entity. In other cases, it may sponsor or have exposure to such an entity but not consolidate it.

#### **Consolidated structured entities**

The Group has contractual arrangements which may require it to provide financial support to the following types of consolidated structured entities:

##### *Securitisation vehicles*

The Group uses securitisation as a source of financing and a means of risk transfer. Refer to Note 39 Securitisations for further detail.

The Group provides liquidity facilities to certain securitisation vehicles. At 31 December 2016, there were outstanding loan commitments to these entities totalling £152m (2015: £135m).

##### *Commercial paper (CP) and medium-term note conduits*

The Group provided £9bn (2015: £8.5bn) in undrawn contractual backstop liquidity facilities to CP conduits.

##### *Fund management entities*

Barclays has contractually guaranteed the performance of certain cash investments in a number of managed investment funds which have resulted in their consolidation. As at 31 December 2016, the notional value of the guarantee was £99m (2015: £257m). The decrease is primarily due to the closure of a number of European wealth funds during the year, as well as a reduction in fund assets.

##### *Employee benefit and other trusts*

The Group provides capital contributions to employee share trusts to enable them to meet their obligations to employees under share-based payment plans. During 2016, the Group provided undrawn liquidity facilities of £0.4bn (2015: £0.8bn) to certain trusts.

#### **Unconsolidated Structured Entities in which the Group has an interest**

An interest in a structured entity is any form of contractual or non-contractual involvement which creates variability in returns arising from the performance of the entity for the Group. Such interests include holdings of debt or equity

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securities, derivatives that transfer financial risks from the entity to the Group, lending, loan commitments, financial guarantees and investment management agreements.

Interest rate swaps, foreign exchange derivatives that are not complex and which expose the Group to insignificant credit risk by being senior in the payment waterfall of a securitisation and derivatives that are determined to introduce risk or variability to a structured entity are not considered to be an interest in an entity and have been excluded from the disclosures below.

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## Notes to the financial statements

## Scope of consolidation

## 37 Structured entities continued

The nature and extent of the Group's interests in structured entities is summarised below:

## Summary of interests in unconsolidated structured entities

	Secured financing £m	Short-term traded interests £m	Traded derivatives £m	Other interests £m	Total £m
<b>As at 31 December 2016</b>					
<b>Assets</b>					
Trading portfolio assets		8,436		516	8,952
Financial assets designated at fair value	22,706			367	23,073
Derivative financial instruments			4,731	2,130	6,861
Available for sale investments				894	894
Loans and advances to banks				4,915	4,915
Loans and advances to customers				24,142	24,142
Reverse repurchase agreements and other similar secured lending	6,338				6,338
Other assets				25	25
<b>Total assets</b>	<b>29,044</b>	<b>8,436</b>	<b>4,731</b>	<b>32,989</b>	<b>75,200</b>
<b>Liabilities</b>					
Derivative financial instruments			3,567	2,130	5,697
<b>As at 31 December 2015</b>					
<b>Assets</b>					
Trading portfolio assets		8,949		1,648	10,597
Financial assets designated at fair value	12,382			353	12,735
Derivative financial instruments			4,427	1,926	6,353
Available for sale investments				1,060	1,060
Loans and advances to banks				4,067	4,067
Loans and advances to customers				27,700	27,700
Reverse repurchase agreements and other similar secured lending	7,117				7,117
Other assets				31	31
<b>Total assets</b>	<b>19,499</b>	<b>8,949</b>	<b>4,427</b>	<b>36,785</b>	<b>69,660</b>
<b>Liabilities</b>					
Derivative financial instruments			2,761	1,926	4,687

Secured financing arrangements, short term traded interests and traded derivatives are typically managed under market risk management policies described on page 143 which includes an indication of the change of risk measures compared to last year. For this reason, the total assets of these entities are not considered meaningful for the purposes of understanding the related risks and so have not been presented. Other interests include a portfolio held within Non-Core which is being managed down, conduits and corporate lending where the interest is driven by normal customer demand.

### *Secured financing*

The Group routinely enters into reverse repurchase contracts, stock borrowing and similar arrangements on normal commercial terms where the counterparty to the arrangement is a structured entity. Due to the nature of these arrangements, especially the transfer of collateral and ongoing margining, the Group has minimal exposure to the performance of the structured entity counterparty. A description of these transactions is included in Note 22 Reverse repurchase and repurchase agreements including other similar lending and borrowing.

### *Short-term traded interests*

The Group buys and sells interests in structured entities as part of its trading activities, for example, retail mortgage-backed securities, collateralised debt obligations and similar interests. Such interests are typically held individually or as part of a larger portfolio for no more than 90 days. In such cases, the Group typically has no other involvement with the structured entity other than the securities it holds as part of trading activities and its maximum exposure to loss is restricted to the carrying value of the asset.

As at 31 December 2016, £6,568m (2015: £7,443m) of the Group's £8,436m (2015: £8,949m) short-term traded interests were comprised of debt securities issued by asset securitisation vehicles.

### *Traded derivatives*

The Group enters into a variety of derivative contracts with structured entities which reference market risk variables such as interest rates, foreign exchange rates and credit indices amongst other things. The main derivative types which are considered interests in structured entities include index-based and entity specific credit default swaps, balance guaranteed swaps, total return swaps, commodities swaps, and equity swaps. A description of the types of derivatives and the risk management practices are detailed in Note 15 Derivative financial instruments. The risk of loss may be mitigated through ongoing margining requirements as well as a right to cash flows from the structured entity which are senior in the payment waterfall. Such margining requirements are consistent with market practice for many derivative arrangements and in line with the Group's normal credit policies.

Derivative transactions require the counterparty to provide cash or other collateral under margining agreements to mitigate counterparty credit risk. The Group is exposed to settlement risk only on these derivatives which is mitigated through daily margining. Total notionals amounted to £1,183,215m (2015: £1,117,642m).



**37 Structured entities** continued

Except for credit default swaps where the maximum exposure to loss is the swap notional amount, it is not possible to estimate the maximum exposure to loss in respect of derivative positions as the fair value of derivatives is subject to changes in market rates of interest, exchange rates and credit indices which by their nature are uncertain. In addition, the Group's losses would be subject to mitigating action under its traded market risk and credit risk policies that require the counterparty to provide collateral in cash or other assets on a daily basis in most cases.

*Other interests in unconsolidated structured entities*

The Group's interests in structured entities not held for the purposes of short-term trading activities are set out below, summarised by the purpose of the entities and limited to significant categories, based on maximum exposure to loss.

**Nature of interest**

	Structured credit portfolio £m	Multi-seller conduit programmes £m	Lending £m	Mortgage-backed securities £m	Investment funds and trusts £m	Others £m	Total £m
<b>As at 31 December 2016</b>							
<b>Trading portfolio assets</b>							
Debt securities	441						441
Equity securities						75	75
<b>Financial assets designated at fair value</b>							
Loans and advances to customers			260			4	264
Debt securities			50			48	98
Equity securities						5	5
<b>Derivative financial instruments</b>						2,130	2,130
<b>Available for sale investments</b>							
Debt securities	535			357		2	894
<b>Loans and advances to banks</b>			4,890			25	4,915
<b>Loans and advances to customers</b>	637	6,016	16,754			735	24,142

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<b>Other assets</b>		5	7		13		25
<b>Total on balance sheet exposures</b>	1,613	6,021	21,961	357	13	3,024	32,989
Total off balance sheet notional amounts	681	2,734	9,873			1,058	14,346
<b>Maximum exposure to loss</b>	2,294	8,755	31,834	357	13	4,082	47,335
<b>Total assets of the entity</b>	22,508	75,535	492,950	12,213	18,550	4,621	626,377
<b>As at 31 December 2015</b>							
<b>Trading portfolio assets</b>							
Debt securities	1,545					40	1,585
Equity securities						63	63
<b>Financial assets designated at fair value</b>							
Loans and advances to customers			247			6	253
Debt securities			41			57	98
Equity securities						2	2
<b>Derivative financial instruments</b>						1,926	1,926
<b>Available for sale investments</b>							
Debt securities	537			515		8	1,060
<b>Loans and advances to banks</b>			4,051			16	4,067
<b>Loans and advances to customers</b>	1,599	5,029	20,571			501	27,700
<b>Other assets</b>		4	7		20		31
<b>Total on balance sheet exposures</b>	3,681	5,033	24,917	515	20	2,619	36,785
Total off balance sheet notional amounts	708	3,042	10,225			1,409	15,384
<b>Maximum exposure to loss</b>	4,389	8,075	35,142	515	20	4,028	52,169
<b>Total assets of the entity</b>	36,290	81,355	376,296	115,351	21,766	5,084	636,142

*Maximum exposure to loss*

Unless specified otherwise below, the Group's maximum exposure to loss is the total of its on balance sheet positions and its off balance sheet arrangements, being loan commitments and financial guarantees. Exposure to loss is mitigated through collateral, financial guarantees, the availability of netting and credit protection held.

*Structured Credit Portfolio*

This comprises interests in debt securities issued by securitisation vehicles, mainly Collateralised Loan Obligations (CLOs), Collateralised Debt Obligations (CDOs), Residential and Commercial Mortgage-Backed Securitisation structures (RMBSs and CMBSs), and drawn and undrawn loan facilities to these entities. The entities are wholly debt financed through the issuance of tranches of debt securities or through direct funding, such as the loan facilities provided by the Group. As the underlying assets of the entities amortise and pay down, the debt securities issued by the entities are repaid in order of seniority. Where the entities experience significant credit deterioration, debt securities may be written off or cancelled in reverse order of seniority.

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As at 31 December 2016, the £1,613m (2015: £3,681m) Group's funded exposures comprised of £441m (2015: £1,545m) debt securities at fair value and £637m (2015: £1,599m) amortised cost loans and advances. Of which £645m (2015: £2,783m) were within investment grade, and the remainder either non-investment grade or not rated. The Group also had £681m (2015: £708m) of unfunded exposures in the form of undrawn liquidity commitments. Of the £2,294m (2015: £4,389m) of funded and unfunded exposures, £2,294m (2015: £4,387m) is senior in the capital structure of the entity.

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## Notes to the financial statements

**Scope of consolidation****37 Structured entities** continued

Though the Group's funded exposures are primarily investment grade and senior in the capital structure, there are cases where the interests that are subordinate to the Group's senior and mezzanine interests have minimal or no value, due to decreases in the fair value of the underlying collateral held by the entity.

The Group's income from these entities comprises trading income (largely gains and losses on changes in the fair value and interest earned on bonds) on items classified as held for trading and interest income on interests classified as loans and receivables.

During 2016, the Group recorded a fair value gain of £78m (2015: £4m loss) on debt securities, impairment losses recorded on loans and advances were immaterial in both the current and prior year.

*Multi-seller conduit programme*

The multi-seller conduit engages in providing financing to various clients and hold whole or partial interests in pools of receivables or similar obligations. These instruments are protected from loss through over-collateralisation, seller guarantees, or other credit enhancements provided to the conduit. The Group's off balance sheet exposure included in the table above represents liquidity facilities that are provided to the conduit for the benefit of the holders of the commercial paper issued by the conduit and will only be drawn where the conduit is unable to access the commercial paper market. If these liquidity facilities are drawn, the Group is protected from loss through over-collateralisation, seller guarantees, or other credit enhancements provided to the conduit. The Group also has overlapping exposure to the conduit that arises from the letter of credit and the programme loan. The letter of credit is an unfunded commitment that is only funded to cover credit losses up to 10% of total commitments. The programme loan, which allows the conduit to comply with US risk retention rules, is a funded exposure that is positioned pari passu with the interests of commercial paper holders. The Group earns income from fees received on the liquidity facility and letter of credit provided to the conduit, as well as from management fees. There were no impairment losses on this lending in either of the current year or the prior year.

*Lending*

The portfolio includes lending provided by the Group to unconsolidated structured entities in the normal course of its lending business to earn income in the form of interest and lending fees and includes loans to structured entities that are generally collateralised by property, equipment or other assets. All loans are subject to the Group's credit sanctioning process. Collateral arrangements are specific to the circumstances of each loan with additional guarantees and collateral sought from the sponsor of the structured entity for certain arrangements. During the period the Group incurred an impairment of £24m (2015: £35m) against such facilities. The main types of lending are £2bn (2015: £3bn) of funding loans to bankruptcy remote structured entities to either invest or develop properties, £3bn (2015: £4bn) of loans to structured entities which have been created by an individual to hold one or more assets, £2bn (2015: £2bn) to entities whose operations are limited to financing or funding the acquisition of specific assets such as

schools, hospitals, roads and renewable energy projects under the Private Finance Initiative (PFI), and £1bn (2015: £1bn) of funding loans to bankruptcy remote structured entities to enable them to purchase capital equipment for parent companies and are supported by government export guarantees.

#### *Mortgage-backed securities*

This represents a portfolio of floating rate notes used as an accounting hedge of interest rate risk under the Group's structural hedging programme. All notes are investment grade. The portfolio has decreased owing to a reduced requirement for hedge accounting capacity in Sterling.

#### *Investment funds and trusts*

In the course of its fund management activities, the Group establishes pooled investment funds that comprise investments of various kinds, tailored to meet certain investors' requirements. The Group's interest in funds is generally restricted to a fund management fee, the value of which is typically based on the performance of the fund.

The Group acts as trustee to a number of trusts established by or on behalf of its clients. The purpose of the trusts, which meet the definition of structured entities, is to hold assets on behalf of beneficiaries. The Group's interest in trusts is generally restricted to unpaid fees which, depending on the trust, may be fixed or based on the value of the trust assets. Barclays has no other risk exposure to the trusts.

#### *Other*

This includes £2,130m (2015: £1,926m) of derivative transactions with structured entities where the market risk is materially hedged with corresponding derivative contracts.

#### *Assets transferred to sponsored unconsolidated structured entities*

Assets transferred to sponsored unconsolidated structured entities were immaterial.

### **38 Investments in associates and joint ventures**

#### **Accounting for associates and joint ventures**

Barclays applies IAS 28 Investments in Associates and IFRS 11 Joint Arrangements. Associates are entities in which the Group has significant influence, but not control, over the operating and financial policies. Generally the Group holds more than 20%, but less than 50%, of their voting shares. Joint ventures are arrangements where the Group has joint control and rights to the net assets of the entity.

The Group's investments in associates and joint ventures are initially recorded at cost and increased (or decreased) each year by the Group's share of the post acquisition profit/(loss). The Group ceases to recognise its share of the losses of equity accounted associates when its share of the net assets and amounts due from the entity have been written off in full, unless it has a contractual or constructive obligation to make good its share of the losses. In some cases, investments in these entities may be held at fair value through profit or loss, for example, those held by private equity businesses.



**38 Investments in associates and joint ventures** continued

There are no individually significant investments in joint ventures or associates held by Barclays.

	2016			2015		
	Associates	Joint ventures	Total	Associates	Joint ventures	Total
	£m	£m	£m	£m	£m	£m
Equity accounted	321	363	684	217	356	573
Held at fair value through profit or loss		484	484	77	475	552
<b>Total</b>	<b>321</b>	<b>847</b>	<b>1,168</b>	<b>294</b>	<b>831</b>	<b>1,125</b>

Summarised financial information for the Group's equity accounted associates and joint ventures is set out below. The amounts shown are the net income of the investees, not just the Group's share for the year ended 31 December 2016, with the exception of certain undertakings for which the amounts are based on accounts made up to dates not earlier than three months before the balance sheet date.

	Associates		Joint ventures	
	2016	2015	2016	2015
	£m	£m	£m	£m
Profit from continuing operations	33	5	64	73
Other comprehensive expense			19	(24)
<b>Total comprehensive income from continuing operations</b>	<b>33</b>	<b>5</b>	<b>83</b>	<b>49</b>

Unrecognised shares of the losses of individually immaterial associates and joint ventures were nil (2015: nil).

The Group's associates and joint ventures are subject to statutory requirements such that they cannot make remittances of dividends or make loan repayments to Barclays PLC without agreement from the external parties.

The Group's share of commitments and contingencies of its associates and joint ventures comprised unutilised credit facilities provided to customers of £1,755m (2015: £1,450m). In addition, the Group has made commitments to finance or otherwise provide resources to its joint ventures and associates of £263m (2015: £177m).

## 39 Securitisations

### Accounting for securitisations

The Group uses securitisations as a source of finance and a means of risk transfer. Such transactions generally result in the transfer of contractual cash flows from portfolios of financial assets to holders of issued debt securities.

Securitisations may, depending on the individual arrangement, result in continued recognition of the securitised assets and the recognition of the debt securities issued in the transaction; lead to partial continued recognition of the assets to the extent of the Group's continuing involvement in those assets or result in full derecognition of the assets and the separate recognition, as assets or liabilities, of any rights and obligations created or retained in the transfer. Full derecognition occurs when the Group transfers both its contractual right to receive cash flows from the financial assets, or retains the contractual rights to receive the cash flows, but assumes a contractual obligation to pay the cash flows to another party without material delay or reinvestment, and also transfers substantially all the risks and rewards of ownership, including credit risk, prepayment risk and interest rate risk.

In the course of its normal banking activities, the Group makes transfers of financial assets, either legally (where legal rights to the cash flows from the asset are passed to the counterparty) or beneficially (where the Group retains the rights to the cash flows but assumes a responsibility to transfer them to the counterparty). Depending on the nature of the transaction, this may result in derecognition of the assets in their entirety, partial derecognition or no derecognition of the assets subject to the transfer.

A summary of the main transactions, and the assets and liabilities and the financial risks arising from these transactions, is set out below:

### Transfers of financial assets that do not result in derecognition

#### *Securitisations*

The Group was party to securitisation transactions involving its residential mortgage loans, business loans and credit card balances.

In these transactions, the assets, interests in the assets, or beneficial interests in the cash flows arising from the assets, are transferred to a special purpose entity, which then issues interest bearing debt securities to third party investors.

Securitisations may, depending on the individual arrangement, result in continued recognition of the securitised assets and the recognition of the debt securities issued in the transaction. Partial continued recognition of the assets to the extent of the Group's continuing involvement in those assets can also occur or derecognition of the assets and the separate recognition, as assets or liabilities, of any rights and obligations created or retained in the transfer.



## Notes to the financial statements

## Scope of consolidation

**39 Securitisations** continued

The following table shows the carrying amount of securitised assets that have not resulted in full derecognition, together with the associated liabilities, for each category of asset on the balance sheet:

	2016				2015			
	Assets		Liabilities		Assets		Liabilities	
	Carrying	Fair Value	Carrying	Fair Value	Carrying	Fair Value	Carrying	Fair Value
	amount	Fair Value	amount	Fair Value	amount	Fair Value	amount	Fair Value
	£m	£m	£m	£m	£m	£m	£m	£m
<b>Loans and advances to customers</b>								
Residential mortgage loans	125	120	(107)	(107)	376	362	(168)	(170)
Credit cards, unsecured and other retail lending	5,094	5,084	(4,926)	(4,931)	5,433	5,472	(4,604)	(4,606)
Corporate loans <sup>a</sup>					8	8	(8)	(8)
<b>Total</b>	<b>5,219</b>	<b>5,204</b>	<b>(5,033)</b>	<b>(5,038)</b>	<b>5,817</b>	<b>5,842</b>	<b>(4,780)</b>	<b>(4,784)</b>
<b>Loans and advances to customers</b>								
Retained interests in corporate loans <sup>a</sup>					42	42	n/a	n/a

Balances included within loans and advances to customers represent securitisations where substantially all the risks and rewards of the asset have been retained by the Group.

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The relationship between the transferred assets and the associated liabilities is that holders of notes may only look to cash flows from the securitised assets for payments of principal and interest due to them under the terms of their notes, although the contractual terms of their notes may be different to the maturity and interest of the transferred assets.

Retained interests in transfers of financial assets that resulted in partial derecognition are securities which represent a continuing exposure to the prepayment and credit risk in the underlying securitised assets. For the Group only, the carrying amount of the loans before transfer was nil (2015: £78m). The retained interest is initially recorded as an allocation of the original carrying amount based on the relative fair values of the portion derecognised and the portion retained.

For transfers of assets in relation to repurchase agreements, see Note 22 Reverse repurchase and repurchase agreements including other similar lending and borrowing and Note 40 Assets pledged.

**Continuing involvement in financial assets that have been derecognised**

In some cases, the Group may have transferred a financial asset in its entirety but may have continuing involvement in it. This arises in asset securitisations where loans and asset backed securities were derecognised as a result of the Group's continuing involvement, mainly within Non-Core, with CLOs, CDOs, RMBS and CMBS. Continuing involvement largely arises from providing financing into these structures in the form of retained notes, which do not bear first losses.

The table below shows the potential financial implications of such continuing involvement:

	Continuing involvement as at			Gain/(loss) from continuing	
	31 December 2016			involvement	
	Carrying amount	Fair value	Maximum exposure to loss	For the year	Cumulative
				ended 31 December 2016	to 31 December 2016
£m	£m	£m	£m	£m	
CLO and other assets	10	10	10		(3)
US sub-prime and Alt-A					(95)
<b>Total</b>	<b>10</b>	<b>10</b>	<b>10</b>		<b>(98)</b>

Type of transfer	Continuing involvement as at			Gain/(loss) from continuing	
	31 December 2015			involvement	
	Carrying amount	Fair value	Maximum exposure to loss	For the year	Cumulative
				ended 31 December 2015	to 31 December 2015
£m	£m	£m	£m	£m	

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				£m	£m
CLO and other assets	686	684	686	7	(36)
US sub-prime and Alt-A	38	37	38		(426)
<b>Total</b>	724	721	724	7	(462)

Note

aCorporate loans and retained interest in corporate loans balances as at December 2015 were attributable to BAGL which is classified as held for sale in 2016.

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**39 Securitisations** continued

Assets which represent the Group's continuing involvement in derecognised assets are recorded in the following line items:

Type of transfer	Loans and	Trading	Total
	advances	portfolio assets	
	£m	£m	£m
<b>As at 31 December 2016</b>			
CLO and other assets		10	10
US sub-prime and Alt-A			
<b>Total</b>		10	10
<b>As at 31 December 2015</b>			
CLO and other assets	327	359	686
US sub-prime and Alt-A	38		38
<b>Total</b>	365	359	724

**40 Assets pledged**

Assets are pledged as collateral to secure liabilities under repurchase agreements, securitisations and stock lending agreements or as security deposits relating to derivatives. Assets pledged as collateral include all assets categorised as encumbered in the disclosure on page 168, other than those held in commercial paper conduits. In these transactions, Barclays will be required to step in to provide financing itself under a liquidity facility if the vehicle cannot access the commercial paper market. The following table summarises the nature and carrying amount of the assets pledged as security against these liabilities:

	2016	2015
	£m	£m
Trading portfolio assets	51,241	49,308
Financial assets at fair value	3,195	2,534
Loans and advances to customers	30,414	51,038
Cash collateral	68,797	62,599

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Financial Investments	<b>13,053</b>	11,666
Non current assets held for sale	<b>117</b>	1,930
<b>Assets pledged</b>	<b>166,817</b>	179,075

Barclays has an additional £14bn (2015: £13bn) of loans and advances within its asset backed funding programmes that can readily be used to raise additional secured funding and are available to support future issuance.

**Collateral held as security for assets**

Under certain transactions, including reverse repurchase agreements and stock borrowing transactions, the Group is allowed to resell or re-pledge the collateral held. The fair value at the balance sheet date of collateral accepted and re-pledged to others was as follows:

	<b>2016</b>	<b>2015</b>
	<b>£m</b>	<b>£m</b>
Fair value of securities accepted as collateral	<b>466,975</b>	308,162
Of which fair value of securities re-pledged/transferred to others	<b>405,582</b>	266,015

The full disclosure as per IFRS 7 has been included in collateral and other credit enhancements see pages 119 to 120.

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## Notes to the financial statements

## Other disclosure matters

The notes included in this section focuses on related party transactions, Auditors' remuneration and directors remuneration. Related parties include any subsidiaries, associates, joint ventures, entities under common directorships and Key Management Personnel.

**41 Related party transactions and Directors' remuneration****Related party transactions**

Parties are considered to be related if one party has the ability to control the other party or exercise significant influence over the other party in making financial or operational decisions, or one other party controls both. The definition includes subsidiaries, associates, joint ventures and the Group's pension schemes.

**Subsidiaries**

Transactions between Barclays PLC and its subsidiaries also meet the definition of related party transactions. Where these are eliminated on consolidation, they are not disclosed in the Group Financial Statements. Transactions between Barclays PLC and its subsidiary, Barclays Bank PLC are fully disclosed in Barclays PLC's balance sheet and income statement. A list of the Group's principal subsidiaries is shown in Note 36.

**Associates, joint ventures and other entities**

The Group provides banking services to its associates, joint ventures, the Group pension funds (principally the UK Retirement Fund) and to entities under common directorships, providing loans, overdrafts, interest and non-interest bearing deposits and current accounts to these entities as well as other services. Group companies also provide investment management and custodian services to the Group pension schemes. The Group also provides banking services for unit trusts and investment funds managed by Group companies, which are not individually material. All of these transactions are conducted on the same terms as third-party transactions. Summarised financial information for the Group's investments in associates and joint ventures is set out in Note 38.

Amounts included in the Group's financial statements, in aggregate, by category of related party entity are as follows:

<b>Associates</b>	<b>Joint</b>	<b>Pension</b>
<b>£m</b>	<b>ventures</b>	<b>funds, unit</b>
	<b>£m</b>	<b>trusts and</b>

investment

funds

£m

**For the year ended and as at 31 December 2016**

Income	(20)	7	4
Impairment	(13)		
Total assets	72	2,244	
Total liabilities	94	95	260

**For the year ended and as at 31 December 2015**

Income	(19)	40	4
Impairment	(4)	(2)	
Total assets	36	1,578	
Total liabilities	158	133	184

**For the year ended and as at 31 December 2014**

Income	(5)	9	4
Impairment		(1)	
Total assets	130	1,558	
Total liabilities	264	188	149

Guarantees, pledges or commitments given in respect of these transactions in the year were £940m (2015: £881m) predominantly relating to joint ventures. No guarantees, pledges or commitments were received in the year. Derivatives transacted on behalf of the pensions funds, unit trusts and investment funds were £3m (2015: £13m).

**Key Management Personnel**

The Group's Key Management Personnel, and persons connected with them, are also considered to be related parties for disclosure purposes. Key Management Personnel are defined as those persons having authority and responsibility for planning, directing and controlling the activities of Barclays PLC (directly or indirectly) and comprise the Directors of Barclays PLC and the Officers of the Group, certain direct reports of the Group Chief Executive and the heads of major business units and functions.

There were no material related party transactions with entities under common directorship where a Director or other member of Key Management Personnel (or any connected person) is also a Director or other member of Key Management Personnel (or any connected person) of Barclays.

**41 Related party transactions and Directors remuneration** continued

The Group provides banking services to Directors and other Key Management Personnel and persons connected to them. Transactions during the year and the balances outstanding were as follows:

**Loans outstanding**

	<b>2016</b>	<b>2015</b>
	<b>£m</b>	<b>£m</b>
<b>As at 1 January</b>	<b>9.8</b>	11.4
Loans issued during the year	<b>0.6</b>	1.1
Loan repayments during the year/change of key management personnel	<b>(1.2)</b>	(2.7)
<b>As at 31 December</b>	<b>9.2</b>	9.8

No allowances for impairment were recognised in respect of loans to Directors or other members of Key Management Personnel (or any connected person).

**Deposits outstanding**

	<b>2016</b>	<b>2015</b>
	<b>£m</b>	<b>£m</b>
<b>As at 1 January</b>	<b>116.5</b>	103.0
Deposits received during the year	<b>18.9</b>	44.8
Deposits repaid during the year/change of key management personnel	<b>(128.1)</b>	(31.3)
<b>As at 31 December</b>	<b>7.3</b>	116.5

**Total commitments outstanding**

Total commitments outstanding refers to the total of any undrawn amounts on credit cards and/or overdraft facilities provided to Key Management Personnel. Total commitments outstanding as at 31 December 2016 were £0.2m (2015: £0.5m).

All loans to Directors and other Key Management Personnel (and persons connected to them), (a) were made in the ordinary course of business, (b) were made on substantially the same terms, including interest rates and collateral, as those prevailing at the same time for comparable transactions with other persons and (c) did not involve more than a normal risk of collectability or present other unfavourable features.



## Remuneration of Directors and other Key Management Personnel

Total remuneration awarded to Directors and other Key Management Personnel below represents the awards made to individuals that have been approved by the Board Remuneration Committee as part of the latest remuneration decisions, and is consistent with the approach adopted for disclosures set out on pages 51 to 85. Costs recognised in the income statement reflect the accounting charge for the year and are included within operating expenses. The difference between the values awarded and the recognised income statement charge principally relates to the recognition of deferred costs for prior year awards. Figures are provided for the period that individuals met the definition of Directors and other Key Management Personnel.

	2016 £m	2015 £m
Salaries and other short-term benefits	31.9	31.3
Pension costs	0.2	0.3
Other long-term benefits	11.0	4.7
Share-based payments	21.9	11.0
Employer social security charges on emoluments	6.2	5.2
<b>Costs recognised for accounting purposes</b>	<b>71.2</b>	<b>52.5</b>
Employer social security charges on emoluments	(6.2)	(5.2)
Other long-term benefits – difference between awards granted and costs recognised	(2.5)	2.5
Share-based payments – difference between awards granted and costs recognised	(8.9)	(2.3)
<b>Total remuneration awarded</b>	<b>53.6</b>	<b>47.5</b>

## Disclosure required by the Companies Act 2006

The following information regarding Directors is presented in accordance with the Companies Act 2006:

	2016 £m	2015 £m
Aggregate emoluments <sup>a</sup>	8.1	7.0
Amounts paid under LTIPs <sup>b</sup>		2.2
	8.1	9.2

There were no pension contributions paid to defined contribution schemes on behalf of Directors (2015: £nil). There were no notional pension contributions to defined contribution schemes.

As at 31 December 2016, there were no Directors accruing benefits under a defined benefit scheme (2015: nil).

### Notes

<sup>a</sup>The aggregate emoluments include amounts paid for the 2016 year. In addition, a deferred share award for 2016 will be made to James E Staley and Tushar Morzaria which will only vest subject to meeting certain conditions. The total of the deferred share awards is £1.4m for 2016 (£0.7m for 2015).

<sup>b</sup>The figure of nil is shown for 2016 in Amounts paid under LTIPs because neither executive Director held an LTIP award that was released in 2016. The LTIP amount in the single total figure table for executive Directors 2016 remuneration in the Directors Remuneration report relates to the award that is scheduled to be released in 2017 in respect of the 2014-2016 LTIP cycle.



## Notes to the financial statements

## Other disclosure matters

**41 Related party transactions and Directors remuneration continued****Directors and Officers shareholdings and options**

The beneficial ownership of ordinary share capital of Barclays PLC by all Directors and Officers of Barclays PLC (involving 24 persons) at 31 December 2016 amounted to 11,464,580 (2015: 10,586,812) ordinary shares of 25p each (0.07% of the ordinary share capital outstanding).

At 31 December 2016, executive Directors and officers of Barclays PLC (involving 13 persons) held options to purchase a total of 22,527 (2015: 17,206) Barclays PLC ordinary shares of 25p each at prices ranging from 120p to 178p under Sharesave.

**Advances and credit to Directors and guarantees on behalf of Directors**

In accordance with Section 413 of the Companies Act 2006, the total amount of advances and credits made available in 2016 to persons who served as Directors during the year was £0.2m (2015: £0.3m). The total value of guarantees entered into on behalf of Directors during 2016 was £nil (2015:£nil).

**42 Auditors remuneration**

Auditors remuneration is included within consultancy, legal and professional fees in administration and general expenses and comprises:

	Audit £m	Audit related £m	Taxation services £m	Other services £m	Total £m
<b>2016</b>					
<b>Audit of the Group's annual accounts</b>	14				14
<b>Other services:</b>					
Fees payable for the Company's associates	27				27
Other services supplied <sup>b</sup>		3			3
Other services relating to taxation compliance services advisory services					
Other		1		4	5
<b>Total Auditors remuneration</b>	<b>41</b>	<b>4</b>		<b>4</b>	<b>49</b>

**2015**

<b>Audit of the Group's annual accounts</b>	13				13
<b>Other services:</b>					
Fees payable for the Company's associates	21				21
Other services supplied <sup>b</sup>		3			3
Other services relating to taxation					
compliance services			1		1
advisory services					
Other		4		1	5
<b>Total Auditors' remuneration</b>	<b>34</b>	<b>7</b>	<b>1</b>	<b>1</b>	<b>43</b>
<b>2014</b>					
<b>Audit of the Group's annual accounts</b>	11				11
<b>Other services:</b>					
Fees payable for the Company's associates	24				24
Other services supplied <sup>b</sup>		4			4
Other services relating to taxation					
compliance services			1		1
advisory services					
Other		3		1	4
<b>Total Auditors' remuneration</b>	<b>35</b>	<b>7</b>	<b>1</b>	<b>1</b>	<b>44</b>

The figures shown in the above table relate to fees paid to PricewaterhouseCoopers LLP and its associates, of which the fees paid in relation to discontinued operations were £12m (2015: £10m, 2014: £10m).

Fees paid to other auditors not associated with PricewaterhouseCoopers LLP in respect of the audit of discontinued operations were £5m (2015: £4m, 2014: £4m).

### 43 Financial risks, liquidity and capital management

To improve transparency and ease of reference, by concentrating related information in one place, and to reduce duplication, disclosures required under IFRS relating to financial risks and capital resources have been included within the Risk management and governance section as follows:

§ Credit risk, on pages 116 to 140;

§ Market risk, on pages 141 to 151;

§ Capital resources, on pages 152 to 158; and

§ Liquidity risk, on pages 159 to 177.

Notes

aComprises the fees for the statutory audit of the subsidiaries both inside and outside UK and fees for the work performed by associates of PricewaterhouseCoopers LLP in respect of the consolidated financial statements of the Company.

bComprises services in relation to statutory and regulatory filings. These include audit services for the review of the interim financial information under the Listing Rules of the UK listing authority.

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cIncludes consultation on tax matters, tax advice relating to transactions and other tax planning and advice.

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#### 44 Assets included in disposal groups classified as held for sale and associated liabilities

##### Accounting for non-current assets held for sale and associated liabilities

The group applies IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*.

Non-current assets (or disposal groups) are classified as held for sale when their carrying amount is to be recovered principally through a sale transaction rather than continuing use. In order to be classified as held for sale, the asset must be available for immediate sale in its present condition subject only to terms that are usual and customary and the sale must be highly probable. Non-current assets (or disposal groups) held for sale are measured at the lower of carrying amount and fair value less cost to sell.

On 1 March 2016, Barclays announced its intention to reduce the Group's 62.3% interest in BAGL. This reduction is intended to be to a level which will permit deconsolidation from an accounting and regulatory perspective for which approval was granted by shareholders at the Group's general meeting held on 28 April 2016. On 5 May 2016 Barclays sold 12.2% of the Group's interest in BAGL resulting in a transfer to non-controlling interests of £601m. Following this sale, Barclays' interest represents 50.1% of BAGL's share capital. The BAGL disposal group includes all assets and liabilities of BAGL and its subsidiaries as well as Group balances associated with BAGL and expected contributions that will form part of the sale.

No impairment for BAGL has been recognised under IFRS 5 as at 31 December 2016. Impairment under IFRS 5 is calculated as the difference between fair value less disposal costs and the carrying value of the disposal group. The fair value is determined by reference to the quoted market price for BAGL and the foreign exchange rate for ZAR/GBP as at 31 December 2016, less the expected contributions. The fair value less disposal costs and the expected contribution exceeds the net asset value as at 31 December 2016.

Barclays continues to explore a sale through the disposal of its shares in BAGL during the course of 2017.

##### Assets included in disposal groups classified as held for sale

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	BAGL 2016	Other 2016	Total 2016	Total 2015
	£m	£m	£m	£m
Cash and balances at central banks	2,689	241	2,930	21
Items in the course of collection from other banks	549	21	570	24
Trading portfolio assets	3,044	40	3,084	
Financial assets designated at fair value	5,546	1,438	6,984	696
Derivative financial instruments	1,992		1,992	
Financial investments	4,995	2,742	7,737	1,230
Loans and advances to banks	1,184	482	1,666	74
Loans and advances to customers	41,793	1,711	43,504	5,513
Prepayments, accrued income and other assets	637	59	696	47
Investments in associates and joint ventures	63	24	87	10
Property, plant and equipment	902	52	954	128
Goodwill	965	32	997	
Intangible assets	554	16	570	43
Current and deferred tax assets	124	25	149	22
Retirement benefit assets	33		33	
<b>Total</b>	65,070	6,883	71,953	7,808
Balance of impairment unallocated under IFRS 5		(499)	(499)	(444)
<b>Total assets classified as held for sale</b>	65,070	6,384	71,454	7,364

**Liabilities included in disposal groups classified as held for sale**

	BAGL 2016	Other 2016	Total 2016	Total 2015
	£m	£m	£m	£m
Deposits from banks	2,113	36	2,149	
Items in the course of collection due to banks	350	23	373	74
Customer accounts	39,331	3,100	42,431	4,000
Repurchase agreements and other similar secured borrowing	597		597	
Trading portfolio liabilities	388		388	
Financial liabilities designated at fair value	3,748	3,577	7,325	346
Derivative financial instruments	1,610	1	1,611	3
Debt securities in issue	7,997		7,997	1,474
Subordinated liabilities	934		934	
Accruals, deferred income and other liabilities	1,061	119	1,180	39
Provisions	52	51	103	34
Current and deferred tax liabilities	154	8	162	(6)
Retirement benefit liabilities	26	16	42	33
<b>Total liabilities classified as held for sale</b>	58,361	6,931	65,292	5,997
<b>Net assets/(liabilities) classified as held for sale<sup>a</sup></b>	6,709	(547)	6,162	1,367
Expected BAGL separation payments and costs <sup>b,c</sup>	866		866	
<b>Disposal group post contribution</b>	7,575	(547)	7,028	1,367

Notes

<sup>a</sup>The carrying value of the disposal group is stated after the elimination of internal balances between Barclays and BAGL of £595m. Internal balances have been considered in determining the carrying value of BAGL (of £7.3bn before the planned contributions in respect of BAGL) for the purposes of measuring the disposal group at the lower

of carrying amount and fair value less costs to sell.

bIn December 2016, Barclays finalised proposals regarding planned contributions to the BAGL group relating to the reimbursement of certain expenses as well as contributions for investment to support separation activities. The cash and cash equivalents to make these planned contributions is included within the perimeter of the disposal group, also for the purposes of measuring the disposal group at the lower of carrying amount and fair value less costs to sell. The planned contributions are reported within Cash and balances at central banks in the Group's consolidated balance sheet.

cIn December 2016, Barclays reimbursed BAGL for expenses incurred for an amount of £28m. This amount is excluded from the proposed overall potential reimbursement and contribution figure of £866m.



## Notes to the financial statements

## Other disclosure matters

**44 Assets included in disposal groups classified as held for sale and associated liabilities** continued

The BAGL disposal group meets the requirements for presentation as a discontinued operation. As such, the results, which have been presented as the profit after tax and non-controlling interest in respect of the discontinued operation on the face of the Group income statement, are analysed in the income statement below.

**BAGL group income statement**

	<b>2016</b>	<b>2015</b>
	<b>£m</b>	<b>£m</b>
<b>For the year ended 31 December</b>		
Net interest income	2,169	1,950
Net fee and commission income	1,072	1,033
Net trading income	281	197
Net investment income	45	41
Other income	179	193
<b>Total income</b>	<b>3,746</b>	<b>3,414</b>
Credit impairment charges and other provisions	(445)	(353)
<b>Net operating income</b>	<b>3,301</b>	<b>3,061</b>
Staff costs	(1,186)	(1,107)
Administration and general expenses	(653)	(545)
Depreciation of property, plant and equipment	(513)	(442)
Amortisation of intangible assets	(58)	(47)
<b>Operating expenses</b>	<b>(2,410)</b>	<b>(2,141)</b>
Share of post-tax results of associates and joint ventures	6	7
<b>Profit before tax</b>	<b>897</b>	<b>927</b>
Taxation	(306)	(301)
<b>Profit after tax</b>	<b>591</b>	<b>626</b>
<b>Attributable to:</b>		
Equity holders of the parent	189	302
Non-controlling interests	402	324
<b>Profit after tax</b>	<b>591</b>	<b>626</b>

Other comprehensive income relating to discontinued operations is as follows:

	<b>2016</b>	<b>2015</b>
	<b>£m</b>	<b>£m</b>
<b>For the year ended 31 December</b>		

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Available for sale assets	(9)	(22)
Currency translation reserves	1,451	(1,223)
Cash flow hedge reserves	89	(101)
<b>Other comprehensive income, net of tax from discontinued operations</b>	<b>1,531</b>	<b>(1,346)</b>

The cash flows attributed to the discontinued operations are as follows:

	2016	2015
	£m	£m
<b>For the year ended 31 December</b>		
Net cash flows from operating activities	1,164	794
Net cash flows from investing activities	(691)	(1,883)
Net cash flows from financing activities	(105)	133
Effect of exchange rates on cash and cash equivalents	37	(865)
<b>Net increase/(decrease) in cash and cash equivalents</b>	<b>405</b>	<b>(1,821)</b>

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#### **44 Assets included in disposal groups classified as held for sale and associated liabilities continued**

##### **Other held for sale assets**

###### *Sale of the French retail business*

The disposal group includes the total assets and liabilities in the French retail business with assets of £4bn. An impairment of £456m has been recognised in expectation of the loss on sale, with the sale expected to be completed in 2017.

###### *Sale of the Egypt banking business*

The disposal group includes the total assets and liabilities in Barclays Bank Egypt, with assets of £1bn. Subject to regulatory approvals, the sale is expected to be completed in Q1 2017.

###### *Sale of Barclays Vida Y Pensiones*

The majority of the disposal group have been sold during 2016. The sale of the remaining Spanish Life Insurance business, with assets of £657m, is expected to complete in 2017.

###### *Sale of the Zimbabwe business*

The disposal group includes the total assets and liabilities in the Zimbabwe business, with assets of £362m. The sale is expected to be completed in Q4 2017.

###### *Sale of other businesses*

Other disposals include £379m of assets, mainly comprised of the Italian business, with assets of £258m. The sale is expected to be completed in 2017. The remaining businesses mainly comprise of the Irish Insurance business, UK Trust and Vocalink, all of which are expected to be completed in 2017.

During the year, a number of disposal groups of held for sale assets have been disposed of. The sale of the Asia Wealth business took place in November 2016. A gain on sale of £164m has been recognised in the income statement within (loss)/profit on disposal of subsidiaries, associates and joint ventures. The sales of Barclays Risk Analytics and Index Solutions Ltd in August 2016, the Spanish and Portuguese credit card businesses in November 2016, Italian insurance business in June 2016, Italian retail banking in August 2016, Portuguese retail and insurance businesses in April 2016, the Offshore Trust business in January 2016, the sale of the designated Market Maker business in April 2016 and part of the Spanish Insurance business in November 2016 also took place this year.

#### **45 Barclays PLC (the Parent Company)**

## Other income

Other income of £334m (2015: £227m) includes £457m (2015: £345m) of income received from gross coupon payments on Barclays Bank PLC issued AT1 securities.

## Non-Current Assets and Liabilities

### *Investment in subsidiaries*

The investment in subsidiary of £36,553m (2015: £35,303m) represents investments made in Barclays Bank PLC, including £6,486m (2015: £5,350m) of AT1 securities. The increase of £1,250m during the year was mainly driven by a \$1.5bn AT1 issuance during the third quarter.

### *Loans and advances to subsidiaries, subordinated liabilities and debt securities in issue*

During the period, Barclays PLC issued \$2.1bn of Fixed Rate Subordinated Notes included within the subordinated liabilities balance of £3,789m (2015: £1,766m), \$6.7bn of Fixed Rate Senior Notes, Yen 20bn of Fixed Rate Senior Notes, 2.7bn Fixed and Floating Rate Senior Notes, £1.3bn of Fixed Rate Senior Notes and AUD 0.2bn of Fixed Rate Senior Notes included within the debt securities in issue balance of £16,893m (2015: £6,224m). The proceeds raised through these transactions were used to invest in subsidiaries of Barclays Bank PLC accounted for as loans and advances to subsidiaries of £19,421m (2015: £7,990m).

Barclays PLC retains the discretion to manage the nature of its internal investments in subsidiaries according to their regulatory and business needs. As we implement our structural reform programme, Barclays PLC will invest capital and funding to Barclays Bank PLC and other group subsidiaries such as the Group Service Company, the US IHC and the UK ring-fenced bank.

### *Financial investments*

The financial investment assets relate to loans made to subsidiaries of the Group. These instruments include a feature that allows for the loan to be written down in whole or in part by the borrower only in the event that the liabilities of the subsidiary would otherwise exceed its assets.

### *Derivative financial instrument*

The derivative financial instrument of £268m (2015: £210m) held by the Parent Company represents Barclays PLC's right to receive a Capital Note for no additional consideration, in the event the Barclays PLC consolidated CRD IV Common Equity Tier 1 (CET1) ratio (FSA October 2012 transitional statement) falls below 7% at which point the notes are automatically assigned by the holders to Barclays PLC.

### *Total equity*

Called up share capital and share premium of Barclays PLC was £21,842m (2015: £21,586m). Other equity instruments of £6,453m (2015: £5,321m) comprises of AT1 securities. For further details please refer to Note 31 Ordinary share, share premium and other equity.

## Notes to the financial statements

**46 Related undertakings**

The Group's corporate structure consists of a number of related undertakings, comprising subsidiaries, joint ventures, associates and significant other interests. A full list of these undertakings, the country of incorporation and the ownership of each share class is set out below. The information is provided as at 31 December 2016.

The entities are grouped by the countries in which they are incorporated. The profits earned by the activities of these entities are in some cases taxed in countries other than the country of incorporation. Barclays' 2016 Country Snapshot provides details of where the Group carries on its business, where its profits are subject to tax and the taxes it pays in each country it operates in.

**Wholly owned subsidiaries**

Unless otherwise stated the undertakings below are wholly owned and consolidated by Barclays and the share capital disclosed comprises ordinary or common shares which are held by Group subsidiaries.

**Wholly owned subsidiaries**

Note

**United Kingdom****1 Churchill Place, London, E14 5HP**

Aequor Investments Limited	
Ardencroft Investments Limited	
B D & B Investments Limited	
B.P.B. (Holdings) Limited	
Barafor Limited	
Barclay Leasing Limited	
Barclays (Security Realisation) Limited	
Barclays Aegis Trust	D
Barclays Africa Group Holdings Limited	J, K
Barclays Aldersgate Investments Limited	
Barclays Asset Management Limited	
Barclays Bank PLC	A, F, I
Barclays BCL FI Trust	D
Barclays Bedivere Trust	D
Barclays BR Investments Trust	D
Barclays Cantal Investments Trust	D
Barclays Capital Asia Holdings Limited	
Barclays Capital Finance Limited	
Barclays Capital Japan Securities Holdings Limited	

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Barclays Capital Luxembourg S.à.r.l. Trust	D
Barclays Capital Margin Financing Limited	
Barclays Capital Nominees (No.2) Limited	
Barclays Capital Nominees (No.3) Limited	
Barclays Capital Nominees Limited	
Barclays Capital Principal Investments Limited	
Barclays Capital Securities Client Nominee Limited	
Barclays Capital Securities Limited	F, I
Barclays Capital Services Limited	A
Barclays CCP Funding LLP	B
Barclays Converted Investments (No.2) Limited	
Barclays Converted Investments Limited	
Barclays Direct Investing Nominees Limited	
Barclays Directors Limited	
Barclays Equity Index Investments Bare Trust	D
Barclays Executive Schemes Trustees Limited	
Barclays Fiduciary Services (UK) Limited	
Barclays Financial Planning Nominee Company Limited	
Barclays Funds Investments Limited	
Barclays Global Shareplans Nominee Limited	
Barclays Group Holdings Limited	
Barclays Group Operations Limited	
Barclays Industrial Development Limited	
Barclays Industrial Investments Limited	
Barclays Insurance Services Company Limited	
Barclays Investment Management Limited	
Barclays Lamorak Trust	D
Barclays Leasing (No.9) Limited	
Barclays Long Island Limited	
Barclays Luxembourg GBP Holdings Trust	D
Barclays Luxembourg USD Holdings Trust	D
Barclays Marlist Limited	
Barclays Mercantile Business Finance Limited	
Barclays Mercantile Limited	
Barclays Nominees (Branches) Limited	
Barclays Nominees (George Yard) Limited	
Barclays Nominees (K.W.S.) Limited	
Barclays Nominees (Monument) Limited	
Barclays Nominees (Provincial) Limited	
Barclays Pelleas Trust	D
Barclays Pension Funds Trustees Limited	
<a href="#">Wholly owned subsidiaries</a>	Note
Barclays Private Bank	
Barclays Private Banking Services Limited	
Barclays Private Trust	
Barclays SAMS Limited	
Barclays Services (Japan) Limited	
Barclays Sharedealing	
Barclays Shea Limited	
Barclays Singapore Global Shareplans Nominee Limited	
Barclays Stockbrokers (Holdings) Limited	

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Barclays Stockbrokers Limited	
Barclays Trust Company Limited	I, P
Barclays UK and Europe PLC	
Barclays Unquoted Investments Limited	
Barclays Unquoted Property Investments Limited	
Barclays USD Funding LLP	B
Barclays Wealth Nominees Limited	
Barclayshare Nominees Limited	
Barcosec Limited	
Barley Investments Limited	I, J, K
Barometers Limited	
Barsec Nominees Limited	
BB Client Nominees Limited	
BCLI GP Trust	D
BMBF (Bluewater Investments) Limited	
BMBF (No.12) Limited	
BMBF (No.21) Limited	
BMBF (No.24) Limited	
BMBF (No.3) Limited	
BMBF (No.6) Limited	
BMBF (No.9) Limited	
BMBF USD NO 1 Limited	
BMI (No.9) Limited	
BNRI ENG 2013 Limited Partnership	B
BNRI ENG 2014 Limited Partnership	B
BNRI ENG GP LLP	B
BNRI England 2010 Limited Partnership	B
BNRI England 2011 Limited Partnership	B
BNRI England 2012 Limited Partnership	B
Boudeuse Limited	
Capel Cure Sharp Limited	
Carnegie Holdings Limited	I, J, K
Chapelcrest Investments Limited	
Clydesdale Financial Services Limited	
Cobalt Investments Limited	
Condor No.1 Limited Partnership	B
Condor No.2 Limited Partnership	B
CP Flower Guaranteeco (UK) Limited	E
CP Propco 1 Limited	
CP Propco 2 Limited	
CP Topco Limited	J, K
CPIA England 2008 Limited Partnership	B
CPIA England 2009 Limited Partnership	B
CPIA England No.2 Limited Partnership	B
Denham Investments Limited	
DMW Realty Limited	
Durlacher Nominees Limited	
Eagle Financial and Leasing Services (UK) Limited	
Equity Value Investments Limited Liability Partnership	B
Equity Value Investments No.1 Limited	
Equity Value Investments No.2 Limited	F, I

Exshelfco (DZBC)  
Finpart Nominees Limited

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**46 Related undertakings** continued**Wholly owned subsidiaries**

Note

**1 Churchill Place, London, E14 5HP (continued)**

FIRSTPLUS Financial Group PLC	
Fitzroy Finance Limited	Z
Foltus Investments Limited	
Gerrard (OMH) Limited	
Gerrard Financial Planning Limited	
Gerrard Investment Management Limited	
Gerrard Management Services Limited	
Gerrard Nominees Limited	
Global Dynasty Natural Resource Private Equity Limited Partnership	B
Globe Nominees Limited	
GM Computers Limited	
Greig Middleton Holdings Limited	
Greig Middleton Nominees Limited	
Hawkins Funding Limited	
Heraldglen Limited	G, H, I
Investors In Infrastructure Limited	
J.V. Estates Limited	
Keeper Investments	
Kirsche Investments Limited	
Lindley Developments Limited	U
Lombard Street Nominees Limited	
Long Island Assets Limited	
Maloney Investments Limited	
Menlo Investments Limited	
Mercantile Credit Company Limited	
Mercantile Leasing Company (No.132) Limited	
MK Opportunities LP	B
Murray House Investment Management Limited	
Naxos Investments Limited	
North Colonnade Investments Limited	
Northwharf Investments Limited	I, X
Northwharf Nominees Limited	
PIA England No.2 Limited Partnership	B

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Real Estate Participation Management Limited	
Real Estate Participation Services Limited	
Relative Value Investments UK Limited Liability Partnership	B
Relative Value Trading Limited	
Roder Investments No. 1 Limited	I, Y
Roder Investments No. 2 Limited	I, Y
Ruthenium Investments Limited	
RVT CLO Investments LLP	B
Scotlife Home Loans (No.3) Limited	
Sharelink Nominees Limited	
Solution Personal Finance Limited	
Surety Trust Limited	
Swan Lane Investments Limited	F, I
US Real Estate Holdings No.1 Limited	
US Real Estate Holdings No. 2 Limited	
US Real Estate Holdings No.3 Limited	
W.D. Pension Fund Limited	
Wedd Jefferson (Nominees) Limited	
Westferry Investments Limited	
Woolwich Assured Homes Limited	
Woolwich Homes (1987) Limited	E
Woolwich Homes Limited	
Woolwich Limited	
Woolwich Plan Managers Limited	
Woolwich Qualifying Employee Share Ownership Trustee Limited	
Woolwich Surveying Services Limited	
Zeban Nominees Limited	
Barclays Financial Planning (Entered Liquidation 26 January 2017)	
<b>Hill House, 1 Little New Street, London, EC4A 3TR</b>	
54 Lombard Street Investments (In Liquidation)	
Barclays Global Investors Finance Limited (in Liquidation)	
Barclays Global Investors UK Holdings Limited (in Liquidation)	J, K
Barclays Mercantile Highland Finance Limited (in Liquidation)	
Barclays Physical Trading Limited (In Liquidation)	
Eldfell Investments Limited (in Liquidation)	
Fair and Square Limited (in Liquidation)	
Mercers Debt Collections Limited (In Liquidation)	
Pendle Shipping Limited (In Liquidation)	
<a href="#">Wholly owned subsidiaries</a>	Note
Reflex Nominees Limited (In Liquidation)	
<b>5 The North Colonnade, Canary Wharf, London, E14 4BB</b>	
Barclays Bayard Investments Trust	D
BBR Holdings Trust	D
Barclays Capital Trading Luxembourg Trust	D
Barclays Luxembourg EUR Holdings Trust	D
Barclays Luxembourg Finance Index Trust	D
CPIA Canada Holdings	B

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Leonis Investments LLP B  
Preferred Liquidity Limited Partnership B  
**Aurora Building, 120 Bothwell Street, Glasgow, G2 7JS**

Barclays SLCSM (No.1) Limited (In Liquidation)  
R.C. Grieg Nominees Limited  
**50 Lothian Road, Festival Square, Edinburgh, EH3 9WJ**

BNRI PIA Scot GP Limited  
BNRI Scots GP, LLP B  
Pecan Aggregator LP B  
**Logic House, Waterfront Business Park, Fleet Road, GU1 3SB**

The Logic Group Holdings Limited J  
The Logic Group Enterprises Limited  
**Argentina**  
**855 Leandro N.Alem Avenue, 8th Floor, Buenos Aires**

Compañía Sudamerica S.A.  
**Marval, O Farrell & Mairal, Av. Leandro N. Alem 882, Buenos Aires, C1001AAQ**

Compañia Regional del Sur S.A.  
**Brazil**  
**Av. Brigadeiro Faria Lima, No. 4.440, 12th Floor, Bairro Itaim Bibi, Sao Paulo, CEP04538-132**

Banco Barclays S.A.

**Canada**  
**333 Bay Street, Suite 4910, Toronto ON M5H 2R2**

Barclays Capital Canada Inc  
**Stikeman Elliott LLP, 199 Bay Street, 5300 Commerce Court West, Toronto ON M5L 1B9**

Barclays Corporation Limited

**Cayman Islands**  
**Maples Corporate Services Limited, PO Box 309GT, Uglund House, South Church Street, Grand Cayman, KY1-1104**

Alymere Investments Limited G, H, I  
Alymere Investments Two Limited (In Liquidation)  
Analytical Trade UK Limited

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Aquitaine Investments Limited (In Liquidation)	
Barclays Capital (Cayman) Limited	
Braven Investments No.1 Limited	
Capton Investments Limited	
Claudas Investments Limited	G, H, I
Claudas Investments Two Limited	
CPIA Investments No.1 Limited	V
CPIA Investments No.2 Limited	F, I
Cureton Investments No. 1 Limited (In Liquidation)	
Cuth Investments Limited	F, I, T
Furbridge Investments Limited	
Hamar Investments Limited	
Hurley Investments No.1 Limited	
Iris Investments 1 Limited	G, H, I
Mintaka Investments No. 4 Limited	
OGP Leasing Limited	
Pelleas Investments Limited	
Pelleas Investments Two Limited	
Pippin Island Investments Limited	
Razzoli Investments Limited	F, I
RVH Limited	F, I
Zanonne Investments Limited (In Liquidation)	
Zumboorok Investments Limited	
<b>PO Box 1093, Queensgate House, Grand Cayman KY1-1102</b>	

Blaytell Limited  
Coskwo Limited  
Godler Limited  
Harflane Limited

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**46 Related undertakings** continued

**Wholly owned subsidiaries**

Note

**PO Box 1093, Queensgate House, Grand Cayman KY1-1102** continued

Hentock Limited

Hollygrice Limited

Pilkbull Limited

Strickyard Limited

Winhall Limited

**190 Elgin Avenue, George Town, Grand Cayman KY1-9005**

Calthorpe Investments Limited

Gallen Investments Limited

JV Assets Limited

Palomino Limited

Raglan Investments Limited

Wessex Investments Limited

**Walkers Corporate Limited, Cayman Corporate Centre,  
27 Hospital Road, George Town, KY1 9008**

L  
Z

Long Island Holding B Limited

**China**

**Room 213, Building 1, No. 1000 Chenhui Road,  
Zhangjiang Hi-Tech Park, Shanghai**

Barclays Technology Centre (Shanghai) Company Limited

**Egypt**

**Star Capital AI Tower, City Stars Project, 2 Ali Rashed Street,  
Nasr City, Cairo**

Barclays Bank Egypt SAE

**France**

**183 avenue Daumesnil, Paris, 75012**

Barclays Courtage SAS  
Barclays Diversification  
Barclays Patrimoine S.C.S.  
Barclays Vie SA  
BBAIL SAS

**32 avenue George V, Paris, 75008**

Barclays France SA  
Barclays Wealth Managers France SA

**Germany**

**Bockenheimer Landstrasse 38-40, D-60323 Frankfurt Am Main**

Barclays Capital Effekten GmbH  
Sulm Investments GmbH (In Liquidation)  
c/o SFM Deutschland GmbH, Grunenburgweg 58-62, 60322,  
**Frankfurt am Main**

Baubecon Holding 1 GmbH (In Liquidation)  
Opal 110. GmbH (In Liquidation)  
**Gasstrasse 4c, 22761, Hamburg, Germany**

Baban Mantel AG (In Liquidation)

**Gibraltar**

**Suite 1, Burns House, 19 Town Range**

Frankland Properties Limited  
Norfolk LP  
Ringmer Properties Limited  
Saveway Properties Limited  
Stowmarket Investments Limited  
Townmead Properties Limited  
Trefield Holdings Limited

B

**Guernsey**

**P.O. Box 33, Maison Trinity, Trinity Square, St. Peter Port, GY1 4AT**

Barclays Insurance Guernsey PCC Limited  
**PO BOX 41, Floor 2, Le Marchant House, Le Truchot, St Peter Port,  
GY1 3BE**

Q

Barclays Nominees (Guernsey) Limited

**Hong Kong**

**42nd floor Citibank Tower, Citibank Plaza, 3 Garden Road**

Barclays Bank (Hong Kong Nominees) Limited (In Liquidation)

Barclays Capital Asia Nominees Limited (In Liquidation)

**Level 41, Cheung Kong Center, 2 Queen s Road Central**

Barclays Asia Limited

Barclays Capital Asia Limited

[Wholly owned subsidiaries](#)

Note

**India**

**208 Ceejay House, Shivsagar Estate, Dr A Beasant Road, Worli, Mumbai, 400 018**

Barclays Securities (India) Private Limited

Barclays Wealth Trustees (India) Private Limited

**67, Maker Tower F 6th Floor, Cuffe Parade, Mumbai, 400 005**

Barclays Holdings India Private Limited (In Liquidation)

**DLF IT Park 8th Floor, Building 9A and B, 1/124 Shivaji Gardens, Mount Poonamallee Road, Manapakkam, Chennai, 600089**

Barclays Shared Services Private Limited

**Ground to Fourth Floor, Wing 3 Cluster A, Eon Free Zone, MIDC Knowledge Park, Pune, 411014**

Barclays Technology Centre India Private Limited

**Level 10, Block B6, Nirlon Knowledge Park, Off Western Express Highway, Goregaon (East), Mumbai, 40063**

Barclays Investments & Loans (India) Limited

F, I

**Indonesia**

**Barclays House, 12th Floor, Jl. Jend Sudirman Kav22-23, Jakarta, 12920**

PT Bank Barclays Indonesia (In Liquidation)

**Plaza Lippo, 10th Floor, Jalan Jend, Sudirman Kav 25, Jakarta, 12920**

PT Bhadra Buana Persada (In Liquidation)

**Ireland**

**Two Park Place, Hatch Street, Dublin 2**

Barclaycard International Payments Limited  
Barclays Assurance (Dublin) Designated Activity Company  
Barclays Bank Ireland Public Limited Company  
Barclays Insurance (Dublin) Designated Activity Company  
Barclays Ireland Nominees Limited (In Liquidation)

**Isle of Man**

**Barclays House, Victoria Street, Douglas, IM1 2LE**

Barclays Nominees (Manx) Limited  
Barclays Portfolio (IoM GP) No.2 Limited  
Barclays Private Clients International Limited  
**2nd Floor, St Georges Court, Upper Church Street, Douglas, IM1 1EE**

J, K

Barclays Holdings (Isle of Man) Limited

**Italy**

**Milano, Via della Moscova 18**

Barclays Private Equity S.p.A. (In Liquidation)

**Japan**

**10-1, Roppongi 6-chome, Minato-ku, Tokyo**

Barclays Funds and Advisory Japan Limited  
Barclays Securities Japan Limited  
Barclays Wealth Services Limited

**Jersey**

**Third Floor, 37 Esplanade, St. Helier, JE2 3QA**

CP Newco 1 Limited  
CP Newco2 Limited  
CP Newco3 Limited  
**La Motte Chambers, St Helier, JE1 1BJ**

J, K

Barclays Services Jersey Limited  
**39-41 Broad Street, St Helier, JE2 3RR**

Barclays Wealth Management Jersey Limited  
BIFML PTC Limited  
**13 Castle Street, St. Helier, JE4 5UT**



Barclays Index Finance Trust  
**Lime Grove House, Green Street, St Helier, JE1 2ST**

S

Barbridge Limited  
**13 Library Place, St Helier, JE4 8NE**

Barclays Nominees (Jersey) Limited  
Barclaytrust Channel Islands Limited  
**Appleby Trust (Jersey) Limited, PO Box 20713-14**

Esplanade, St Helier, JE1 1BD  
MK Opportunities GP Ltd

**Korea, Republic of**  
**A-1705 Yeouido Park Centre, 28-3 Yeouido-dong,**  
**Yeongdeungpo-gu, Seoul**

Barclays Korea GP Limited

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**46 Related undertakings** continued**Wholly owned subsidiaries**

Note

**Luxembourg****9, allée Scheffer, L-2520**

Barclays Aegis Investments S.à r.l.

Barclays Alzin Investments S.à r.l.

Barclays Bayard Investments S.à r.l.

Barclays BCL Fixed Income S.à r.l.

J, K

**9, allée Scheffer, L-2520 (continued)**

Barclays BCLI no.1 S.à r.l.

Barclays BCLI no.2 S.à r.l.

Barclays Bedivere Investments S.à r.l.

Barclays Bordang Investments S.à r.l.

Barclays BR Holdings S.à r.l.

Barclays BR Investments S.à r.l.

Barclays Cantal Investments S.à r.l.

Barclays Capital Luxembourg S.à r.l.

Barclays Capital Trading Luxembourg S.à r.l.

Barclays Claudas Investments Partnership

Barclays Equity Index Investments S.à r.l.

Barclays Lamorak Investments S.à r.l.

Barclays Leto Investments S.à r.l.

Barclays Luxembourg EUR Holdings S.à r.l.

Barclays Luxembourg Finance S.à r.l.

Barclays Luxembourg GBP Holdings S.à r.l.

Barclays Luxembourg Holdings S.à r.l.

Barclays Luxembourg Holdings SSC

Barclays Luxembourg USD Holdings S.à r.l.

Barclays Pelleas Investments Partnership

Barclays Pelleas Investments S.à r.l.

Barclays US Investments S.à r.l.

J

J, K

B

I, AA

B

J, K

B

G, I

J, K

Blossom Finance General Partnership  
**68-70 Boulevard de la Petrusse, L-2320**

B

Adler Toy Holding Sarl

**Malaysia**

**Unit 80-01, Level 30, Tower A, Vertical Business Suite, Avenue 3,  
Bangsar South, No.8, Jalan Kerinchi, Kuala Lumpur, 59200**

Barclays Capital Markets Malaysia Sdn Bhd. (In Liquidation)

F, I

**Mauritius**

**C/O Rogers Capital Corporate Services, St. Louis Business Centre,  
Cnr Desroches & St. Louis Streets, Port Louis**

Barclays Capital Mauritius Limited

Barclays Capital Securities Mauritius Limited

**Fifth Floor, Ebene Esplanade, 24 Cybercity, Ebene**

Barclays (H&B) Mauritius Limited

Barclays Mauritius Overseas Holdings Limited

**Mexico**

**Paseo de la Reforma 505, 41 Floor, Torre Mayor, Col.  
Cuauhtemoc, CP 06500**

Barclays Bank Mexico, S.A.

K, M

Barclays Capital Casa de Bolsa, S.A. de C.V.

K, M

Grupo Financiero Barclays Mexico, S.A. de C.V.

K, M

Servicios Barclays, S.A. de C.V.

**Monaco**

**31 Avenue de la Costa, BP 339**

Barclays Wealth Asset Management (Monaco) S.A.M

**Netherlands**

**Strawinskylaan 3105, 1077 ZX, Amsterdam**

Barclays SLCSM Funding B.V.

**De Boelelaan 7, 1083 HJ Amsterdam**

Chewdef BidCo BV. (In Liquidation)

**Nigeria**

**Southgate House, Udi Street, Osborne Estate, Ikoyi, Lagos**

Barclays Group Representative Office (NIG) Limited

**Philippines**

**21/F, Philamlife Tower, 8767 Paseo de Roxas, Makati City, 1226**

Meridian (SPV-AMC) Corporation

[Wholly owned subsidiaries](#)

Note

**Russian Federation**

**Four Winds Plaza, 1st Tverskaya-Yamskaya Str , Moscow 21, 125047**

Limited Liability Company Barclays Capital (In Liquidation)

**Saudi Arabia**

**18th Floor Al Faisaliah Tower , Riyadh, 11311**

Barclays Saudi Arabia (In Liquidation)

**Singapore**

**10 Marina Boulevard #24-01 Marina Bay Financial Centre, Tower 2,  
018983**

Barclays Bank (Singapore Nominees) Pte Ltd

Barclays Bank (South East Asia) Nominees Pte Ltd

Barclays Capital Futures (Singapore) Private Limited

Barclays Capital Holdings (Singapore) Private Limited

Barclays Merchant Bank (Singapore) Ltd.

**Spain**

**Plaza De Colon 1, 28046, Madrid**

Barclays Tenedora De Inmuebles SL.

Barclays Vida Y Pensiones, Compania De Seguros, S.A

The Logic Group Enterprises S.L

Z

**Switzerland**

**Chemin de Grange Canal 18-20, PO Box 3941, 1211, Geneva**

Barclays Bank (Suisse) S.A.

BPB Holdings SA

**Taiwan**

**11/F, 106 Kin-Yi Road, Sec. 5, Taipei 110**

Barclays Capital Securities Taiwan Limited (In Liquidation)

**Thailand**

**87, M Thai Tower All Seasons Place, 23rd Floor, Wireless Road,  
Lumpini, Phatumwan, Bangkok, 10330**

Barclays Capital (Thailand) Ltd. (In Liquidation)

**United States**

**Corporation Trust Company, Corporation Trust Center,  
1209 Orange Street, Wilmington DE 19801**

Archstone Equity Holdings Inc	
Barclays BWA, Inc.	
Barclays Capital Commodities Corporation	
Barclays Capital Derivatives Funding LLC	C
Barclays Capital Energy Inc.	
Barclays Capital Real Estate Finance Inc.	
Barclays Capital Real Estate Holdings Inc.	
Barclays Capital Real Estate Inc.	
Barclays Commercial Mortgage Securities LLC	C
Barclays Delaware Holdings LLC	F, I
Barclays Electronic Commerce Holdings Inc.	
Barclays Financial LLC	C
Barclays Group US Inc.	
Barclays Investment Holdings LLC	
Barclays Oversight Management Inc.	
Barclays Receivables LLC	C
Barclays Services Corporation	
Barclays US CCP Funding LLC	C
Barclays US Funding LLC	C
Barclays US LLC	G, I
BCAP LLC	C
BNRI Acquisition No.4 LLC	C
BNRI Acquisition No.5, LP	B
CPIA Acquisition No.3 LLC	C
CPIA Equity No. 1 Inc.	
Crescent Real Estate Member LLC	C
Gracechurch Services Corporation	
Long Island Holding A LLC	C
LTDL Holdings LLC	C
Marbury Holdings LLC	
Persica Holdings LLC	C
Persica Lease LLC	C
Persica LL LLC	C
Persica Property LLC	C

## Notes to the financial statements

**46 Related undertakings** continued**Wholly owned subsidiaries****Note****Corporation Trust Company, Corporation Trust Center,  
1209 Orange Street, Wilmington DE 19801 (continued)**

Protium Finance I LLC	C
Protium Master Mortgage LP	B
Protium REO I LP	B
RB Special Assets, L.L.C.	C
Securitized Asset Backed Receivables LLC	C
Sutton Funding LLC	C
TPLL LLC	C
TPProperty LLC	C
TPWorks LLC	C
US Secured Investments LLC	C
Vail 09 LLC	C
Vail Residential 09 LLC	C
Vail SC LLC	C
<b>1201 North Market Street, P.O. Box 1347 Wilmington, DE19801</b>	

Barclays Bank Delaware	F, I
Procella Investments LLC	C
Procella Investments No.1 LLC	C
Procella Investments No.2 LLC	C
Procella Investments No.3 LLC	C
Procella Swaps LLC	C
Verain Investments LLC	
<b>2711 Centerville Road, Suite 400, Wilmington DE 19808</b>	

Analog Analytics Inc	
Barclays Capital Equities Trading GP	B
Barclays Capital Holdings Inc.	G, I
Lagalla Investments LLC	
Protium Master Grantor Trust	D
Relative Value Holdings, LLC	

**745 Seventh Avenue, New York NY 10019**

Alynore Investments Limited Partnership B  
Curve Investments GP B  
Preferred Liquidity, LLC J  
**CT Corporation System, One Corporate Center, Floor 11, Hartford CT  
06103-3220**

Barclays Capital Inc.  
**c/o RL&F Service Corp, One Rodney Square, 10th Floor, Tenth and  
King Streets, Wilmington DE 19801**

Analytical Trade Holdings LLC  
Analytical Trade Investments LLC BB  
**100 South West Street, Wilmington DE 19801**

Barclays Dryrock Funding LLC C  
Wilmington Riverfront Receivables LLC J, K  
**100 South Wacker Drive, Suite 2000, Chicago IL 60606**

BTXS Inc.  
**15 East North Street, Dover DE DE 19801**

Barclays Services LLC C  
**200 Park Avenue, New York, New York, 10166**

HYMF, Inc.  
**CT Corporation System, 225 Hillsborough Street, Raleigh, NC 27603**

Barclays US GPF Inc.  
**CT Corporation System, 350 North St. Paul Street, Dallas TX 75201**

La Torretta Beverages LLC C  
La Torretta Hospitality LLC C  
La Torretta Operations LLC C  
**Aon Insurance Managers (USA) Inc., 199 Water Street, New York  
NY 10038**

Barclays Insurance U.S. Inc.  
**Suite 1100, 50 W. Liberty St., Reno, Nev 89501**

CPIA FX Investments Inc.  
**500 Forest Point Circle, Charlotte, North Carolina 28273**

Equifirst Corporation (In Liquidation)

**Zimbabwe**  
**2 Premium Close, Mount Pleasant Business Park,**  
**Mount Pleasant, Harare**

Branchcall Computers (Pvt) Limited  
**2nd Floor, Barclays House, Corner Jason Moyo**  
**Avenue/First Street, Harare**

Afcarme Zimbabwe Holdings (Pvt) Limited

### Other Related Undertakings

Unless otherwise stated, the undertakings below are consolidated and the share capital disclosed comprises ordinary or common shares which are held by subsidiaries of the Group. The Group's overall ownership percentage is provided for each undertaking.

Other related undertakings	Percentage	Note
<b>United Kingdom</b>		
<b>1 Churchill Place, London, E14 5HP</b>		
Barclays Africa Limited	50.10%	
Barclaycard Funding PLC	75.00%	J
Claas Finance Limited	51.00%	K
PSA Credit Company Limited (in liquidation)	50.00%	J, L
Barclays Covered Bond Funding LLP <b>1 Angel Lane, London, EC4R 3AB</b>	50.00%	B
Vocalink Holdings Limited <b>1 Poultry, London, England, EC2R 8EJ</b>	15.18%	Z
Igloo Regeneration (General Partner) Limited <b>1 Robeson Way, Sharston Green Business Park,</b> <b>Manchester, M22 4SW</b>	25.00%	L, Z
KDC Holdings Limited	37.41%	EE, Z



**3-5 London Road, Rainham, Kent, ME8 7RG**

Trade Ideas Limited <b>Derby Training Centre, Ascot Drive, Derby, DE24 8GW</b>	20.00%	Z
Develop Training Group Limited <b>50 Lothian Road, Festival Square, Edinburgh, EH3 9BY</b>	70.01%	CC, Z
Equistone Founder Partner II L.P.	20.00%	B, Z
Equistone Founder Partner III L.P. <b>Building 6 Chiswick Park, 566 Chiswick High Road, London W4 5HR</b>	35.00%	B, Z
Intelligent Processing Solutions Limited <b>13 Frensham Road, Sweet Briar Industrial Estate, Norwich, NR3 2BT</b>	19.50%	Z
Warehouse Express Group Limited <b>Oak House, Ellesmere Port, Cheshire, CH65 9HQ</b>	62.88%	DD, Z
Elan Homes Holdings Limited <b>16 Palace Street, London, SW1E 5JD</b>	59.94%	J, L, Z
Barclays Alma Mater Management Limited Partnership <b>20-22 Bedford Row, London, WC1R 4JS</b>	30.00%	B, Z
Cyber Defence Alliance Limited <b>30 Gresham Street, London, EC2V 7PG</b>	25.00%	E, Z
Gresham Leasing March (3) Limited <b>80 New Bond Street, London, W1S 1SB</b>	30.00%	Z
GN Tower Limited	50.00%	Z
GW City Ventures Limited <b>Basepoint Business Centre70-72 The Havens Ransomes Europ, IP3 9SJ, Ipswich</b>	50.00%	K, Z
Equity Estates Basingstoke Limited <b>5th Floor, 70 Gracechurch Street, London, EC3V 0XL</b>	25.05%	J, Z

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Camperdown UK Limited <b>5 North Colonnade, Canary Wharf, London, E14 4BB</b>	50.00%	J, Z
BEIF Management Limited Partnership Imalivest LP <b>Blake House, Schooner Court, Crossways Business Park, Dartford, DA2 6QQ</b>	30.00% 66.71%	B, Z J, K, Z
Lakeview Computers Group Limited <b>Queens House, 8 Queen Street, London EC4N 1SP</b>	57.83%	J, Z
BIE Topco Limited <b>No.1 Dorset Street, Southampton, Hampshire, SO15 2DP</b>	44.80%	J, Z
MCC (15) GH Limited <b>2nd Floor, 110 Cannon Street, London, EC4N 6EU</b>	72.25%	J, Z
Vectorcommand Limited (in Liquidation) <b>55 Baker Street, London, W1U 7EU</b>	30.39%	J, K, Z
Formerly H Limited (In Liquidation) <b>Countryside House, The Warley Hill Business Park, The Drive, Brentwood, Essex, CM13 3AT</b>	70.32%	J, Z
Woolwich Countryside Limited <b>Haberfield Old Moor Road, Wennington, Lancaster, LA2 8PD</b>	50.00%	O, Z
Full House Holdings Limited <b>6th Floor 60 Gracechurch Street, London, EC3V 0HR</b>	67.43%	J, Z
BMC (UK) Limited <b>Central House, 124 High Street, Hampton Hill, Middlesex TW12 1NS</b>	40.57%	F, J, Z
Rio Laranja Holdings Limited <b>13-15 York Buildings, London, WC2N 6JU</b>	45.00%	J, Z
Business Growth Fund PLC	24.18%	Z

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**46 Related undertakings** continued

Other related undertakings	Percentage	Note
<b>Botswana</b>		
<b>5th Floor, Prime Plaza, Plot 74358, Central Business District, Gaborone</b>		
Barclays Bank of Botswana Limited	33.98%	
<b>Deloitte &amp; Touche House, Lot 50664 , Gaborone</b>		
Barclays Insurance Services (Pty) Limited	33.98%	
<b>Khama Crescent, Plot 17938, Government Enclave</b>		
Barclays Life Botswana Proprietary Limited	50.10%	
<b>Canada</b>		
<b>15th Floor, Bankers Court, 850 2nd Street, Calgary AB T2P 0R8</b>		
Clearbrook Resources Inc	21.62%	Z
<b>Cayman Islands</b>		
<b>Maples Corporate Services Limited, PO Box 309GT, Ugland House, South Church Street, Grand Cayman, KY1-1104</b>		
Chrysaor Holdings Limited	39.60%	F, J, Z
Cupric Canyon Capital LP	40.03%	FF, Z
Southern Peaks Mining LP	56.17%	FF, Z
Third Energy Holdings Limited	77.82%	F, J, K, Z
<b>Germany</b>		
<b>SchopenhauerstraBe 10D-90409, Nurnberg</b>		

Eschenbach Holding GmbH	21.70%	Z
<b>Ghana</b>		
Barclays House, High Street, Accra		
Barclays Bank of Ghana Limited	50.10%	
<b>Hong Kong</b>		
6/F, Kiu Fu Commercial Building, 300-306 Lockhart Road		
CR Spa Club at Sea (HK) Limited	53.86%	Z
<b>Indonesia</b>		
Wisma GKBI 39th Floor, Suite 3906, Jl. Jend. Sudirman No.28, Jakarta, 10210		
PT Barclays Capital Securities Indonesia (In Liquidation)	99.00%	
<b>Isle of Man</b>		
3rd Floor, St George's Court, Upper Church Street, Douglas, IM1 1EE		
Absa Manx Holdings Limited	50.10%	
Absa Manx Insurance Company Limited	50.10%	
<b>Kenya</b>		
5th Floor, IKM Place, 5th Ngong Avenue, Nairobi		
Barclays Life Assurance Kenya Limited	31.99%	
The West End Building, Waiyaki Way, Nairobi		
Barclays (Kenya) Nominees Limited	34.32%	
Barclays Bank Insurance Agency Limited	34.32%	
Barclays Bank of Kenya Limited	34.32%	
Barclays Deposit-Taking Microfinance Limited	34.32%	
Barclays Financial Services Limited	34.32%	
Barclays Pension Services Limited	31.20%	Z
9th Floor, Williamson House, 4th Ngong Avenue, Nairobi		
First Assurance Company Limited	31.99%	
First Assurance Holdings Limited	50.10%	
<b>Korea, Republic of</b>		
18th Floor, Daishin Finance Centre, 343, Samil-daero, Jung-go, Seoul		

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Woori BC Pegasus Securitization Specialty Co., Limited	70.00%	W
<b>Luxembourg</b>		
9, allée Scheffer, L-2520		
BNRI Limehouse No.1 Sarl	96.30%	R
Partnership Investments S.à r.l.	33.40%	
Preferred Funding S.à r.l.	33.33%	H
Preferred Investments S.à r.l.	33.33%	H, I
<b>Malta</b>		
RS2 Buildings, Fort Road, Mosta MST 1859		
RS2 Software PLC	18.25%	Z
Other related undertakings	Percentage	Note
<b>Mauritius</b>		
Barclays House, 68 Cyber City, Ebène		
Barclays Bank Mauritius Limited	50.10%	G, H, J, K
<b>Monaco</b>		
31 Avenue de la Costa, Monte Carlo		
Societe Civile Immobiliere 31 Avenue de la Costa	75.00%	
<b>Mozambique</b>		
Avenida 25 de Setembro, No 1184, 15 Andar, Maputo		
Barclays Bank Mocambique SA	49.50%	
Rua da Imprensa, 183 R/C, Maputo		
Global Alliance Seguros, S.A.	50.10%	
<b>Namibia</b>		
Bougain Villas, 78 Sam Nujoma Drive, Windhoek		
EFS Namibia Proprietary Limited	50.10%	
Unit 6, Ausspann Plaza, Dr Agostinho Nero Road, Ausspannplatz, Windhoek		
Absa Namibia Proprietary Limited	50.10%	
<b>Netherlands</b>		
Alexanderstraat 18, 2514 JM, The Hague		

Tulip Oil Holding BV	30.45%	J, L,Z
<b>Nigeria</b>		
<b>Plot 6, Block XII, Osborne Estate, Ikoyi, Lagos</b>		
Absa Capital Representative Office Nigeria Limited	50.10%	
<b>Norway</b>		
<b>Postbox 6783, ST Olavs plass, 0130 Oslo</b>		
EnterCard Norge AS	40.00%	Z
<b>Skansegata 2, Stavanger, 4006, Rogland</b>		
Origo Exploration Holding AS	28.32%	F, I, Z
<b>Seychelles</b>		
<b>Capital City, Room1-01, 1st Floor, Independence Avenue, Victoria, Mahe</b>		
Barclays Bank (Seychelles) Limited	49.98%	
<b>South Africa</b>		
<b>Barclays Towers West, 15 Troye Street, Johannesburg, 2001</b>		
1900 Summerstrand Share Block Limited	50.10%	
Absa Alternative Asset Management Proprietary Limited	50.10%	
Absa Asset Management Proprietary Limited	50.05%	
Absa Bank Limited	50.10%	I, J
Absa Capital Securities Proprietary Limited	50.10%	
Absa Consultants and Actuaries Proprietary Limited	50.10%	
Absa Development Company Holdings Proprietary Limited	50.10%	F, I
Absa Estate Agency Proprietary Limited	50.10%	
Absa Financial Services Africa Holdings Proprietary Limited	50.10%	
Absa Financial Services Limited	50.10%	
Absa Fleet Services Proprietary Limited	50.10%	
Absa Fund Managers Limited	50.10%	
Absa idirect Limited	50.10%	
Absa Insurance and Financial Advisers Proprietary Limited	50.10%	
Absa Insurance Company Limited	50.10%	
Absa Insurance Risk Management Services Limited	50.10%	
Absa Investment Management Services Proprietary Limited	50.10%	
Absa Life Limited	50.10%	F, I
Absa Mortgage Fund Managers Proprietary Limited	50.10%	
Absa Nominees Proprietary Limited	50.10%	
Absa Ontwikkelingsmaatskappy Eiendoms Beperk	50.10%	
Absa Outsource Competency Centre Proprietary Limited	50.10%	

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Absa Portfolio Managers Proprietary Limited	50.10%
Absa Property Development Proprietary Limited	50.10%
Absa Secretarial Services Proprietary Limited	50.10%
Absa Stockbrokers and Portfolio Management Proprietary Limited	50.10%
Absa Technology Finance Solutions Proprietary Limited	50.10%
Absa Trading and Investment Solutions Holdings Proprietary Limited	50.10%
Absa Trading and Investment Solutions Proprietary Limited	50.10%
Absa Trust (Natal) Limited	50.10%

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## Notes to the financial statements

**46 Related undertakings** continued

Other related undertakings	Percentage	Note
<b>Barclays Towers West, 15 Troye Street, Johannesburg, 2001 (continued)</b>		
Absa Trust Limited	50.10%	I, J
Absa Vehicle Management Proprietary Limited	50.10%	
Absa Vehicle Management Solutions Proprietary Limited	50.10%	
ABSAN Proprietary Limited	50.10%	
ACS Nominees Proprietary Limited	50.10%	
AIMS Nominees (RF) Proprietary Limited	50.10%	
Alberton Industrial Properties Proprietary Limited	50.10%	
Allied Development Company Proprietary Limited	50.10%	
Allied Grinaker Properties Proprietary Limited (In Liquidation)	25.55%	
Allpay Consolidated Investment Holdings Proprietary Limited	50.10%	
Allpay Eastern Cape Proprietary Limited (In Liquidation)	33.07%	
Allpay Free State Proprietary Limited (In Liquidation)	30.06%	
Allpay Gauteng Proprietary Limited (In Liquidation)	30.06%	
Allpay Mpumalanga Proprietary Limited	50.10%	
Allpay Western Cape Proprietary Limited (In Liquidation)	33.07%	
Bankorptrust Limited	50.10%	
Barclays Africa Group Limited	50.10%	
Barclays Africa Regional Office Proprietary Limited	50.10%	
Cedar Lakes Country Estates Proprietary Limited (Liquidated on 19 January 2017)	50.10%	
Combined Mortgage Nominees Proprietary Limited	50.10%	
Compro Holdings Proprietary Limited	50.10%	
Draaikloof Properties Proprietary Limited (In Liquidation)	40.08%	
FFS Finance South Africa (RF) Proprietary Limited	25.05%	
Fradey Nominees (RF) Proprietary Limited	50.10%	
Goldreef Village Share Block Limited	50.10%	
Instant Life Proprietary Limited	37.57%	
iSentials Proprietary Limited	25.05%	
MAN Financial Services (SA) (RF) Proprietary Limited	25.05%	
Marmanet Retirement Village Proprietary Limited	50.10%	
Kempwest Proprietary Limited	25.05%	
Lekkerleef Eiendoms Beperk	50.10%	
MB Acquired Operations Limited (In Liquidation)	50.10%	
Meeg Asset Finance Proprietary Limited (In Liquidation)	50.10%	
Merfin Proprietary Limited	50.10%	
Nation-Wide Recovery Services Proprietary Limited	25.05%	

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NewFunds (RF) Proprietary Limited	50.10%	
Newgold Issuer (RF) Limited	50.10%	Z
Newgold Managers Proprietary Limited	24.55%	
Olieven Properties Proprietary Limited (Liquidated on 19 January 2017)	50.10%	
Ottawa Development Trust Proprietary Limited	50.10%	
Palmietfontein Investments Proprietary Limited (Liquidated on 19 January 2017)	50.10%	
Roodekop Townships Proprietary Limited	50.10%	
UBS Trust Limited	50.10%	
United Development Corporation Proprietary Limited	50.10%	
United Towers Proprietary Limited	50.10%	
Volkskas Eiendomsdienste Eiendoms Beperk	50.10%	I, J
Volkstraust Beperk	50.10%	I, J
Woodbook Finance Proprietary Limited	50.10%	
Woolworths Financial Services Proprietary Limited <b>Absa Capital, 15 Alice Lane, Sandton, Gauteng</b>	25.05%	
Barrie Island Property Investments Proprietary Limited	50.10%	
Blue Age Properties 60 Proprietary Limited	50.10%	
Culemborg Investment Properties Proprietary Limited	28.69%	J, K
Diluculo Investments Proprietary Limited	50.10%	
Diluculo Properties Proprietary Limited	50.10%	
Diluculo Property Trading Proprietary Limited	50.10%	
Ngwenya River Estate Proprietary Limited	50.10%	
Nkwe Rosslyn Properties Proprietary Limited	50.10%	
Pienaarsrivier Properties Proprietary Limited <b>18 Bompas Road, Dunkeld West</b>	50.10%	
African Spirit Trading 309 Proprietary Limited <b>52 Grosvenor Road, Bryanston, 2021</b>	25.05%	Z
Campus on Rigel Proprietary Limited (In Liquidation) <b>9th Floor, Standard Bank Centre, 5 Simmonds Street, Johannesburg</b>	16.70%	Z
Integrated Processing Solutions Proprietary Limited <b>Abcon House, Fairway Office Park, Bryanston</b>	25.05%	
Somerset West Autopark Proprietary Limited <b>Corner Ian Halle, P O Box 44845, Claremont, 7735</b>	16.70%	Z
Northern Lights Trading 197 Proprietary Limited	25.05%	Z
Pacific Heights Investments 196 Proprietary Limited	25.05%	Z
<a href="#">Other related undertakings</a>	<a href="#">Percentage</a>	<a href="#">Note</a>

**Sweden****c/o ForeningsSparbanken AB, 105 34 Stockholm**

EnterCard Holding AB	40.00%	K, Z
EnterCard Sverige AB	40.00%	Z

**Tanzania, United Republic of****Azali Certified Public Secretaries, Hillside Apartments,  
First Floor, Suite #04, Ragati Road Upperhill, Nairobi**

First Assurance Company Limited (Tanzania) Barclays House, P O Box 5137, Ohio Street, Dar es Salaam	16.79%	
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Barclays Bank Tanzania Limited Mezzanine Floor, NBC House, Sokoine Drive, Dar Es Salaam	50.10%	G, I
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National Bank of Commerce Limited	27.55%	
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**Turkey****Bahcelievier Mah., Kaldirim Cad. No. 34/1,  
Cengelkoy-Uskudar, Istanbul**

CRKK RESORT OTEL ISLETMECILGI LIMITED SIRKETI	54.40%	Z
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**Uganda****16 Kampala Road, Kampala**

Barclays Bank of Uganda Limited	50.10%	
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**United States****777 Main Street, Fort Worth TX 76102**

CR Lenox Residences, LLC	54.40%	C, Z
CR Management, LLC	54.40%	C, Z
CRE Diversified Holdings LLC	80.00%	C, Z
Crescent Crown Greenway Plaza SPV LLC	80.00%	C, Z
Crescent Crown Land Holding SPV LLC	80.00%	C, Z
Crescent Plaza Hotel Owner GP, LLC	80.00%	C, Z
Crescent Plaza Hotel Owner, L.P.	80.00%	B, Z
Crescent Plaza Residential LP, LLC	80.00%	C, Z
Crescent Plaza Residential, L.P.	80.00%	B, Z
Crescent Plaza Residential, LLC	80.00%	C, Z
Crescent Plaza Restaurant GP, LLC	80.00%	C, Z
Crescent Property Services LLC	80.00%	C, Z

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Crescent Real Estate Equities Limited Partnership	80.00%	B, Z
Crescent Real Estate Equities, LLC	80.00%	C, Z
Crescent Real Estate Holdings LLC	80.00%	C, Z
Crescent Resort Development LLC	80.00%	C, Z
Crescent Tower Residences GP, LLC	80.00%	C, Z
Crescent Tower Residences, L.P.	80.00%	B, Z
Crescent TRS Holdings LLC	80.00%	C, Z
Crescent-Fearing, L.P.	40.00%	B, Z
CREW Tahoe Holdings LLC	80.00%	C, Z
DBL Texas Holdings LLC	80.00%	C, Z
Desert Mountain Development LLC	80.00%	C, Z
Desert Mountain Properties Limited Partnership	74.40%	B, Z
East West Resort Development VII LLC	80.00%	C, Z
Mira Vista Development LLC	78.40%	C, Z
Moon Acquisition Holdings LLC	80.00%	C, Z
Moon Acquisition LLC	80.00%	C, Z
Mountainside Partners LLC	80.00%	C, Z
Sonoma Golf Club, LLC	64.00%	C, Z
Sonoma Golf, LLC	64.00%	C, Z
Sonoma National, LLC	80.00%	C, Z
<b>8600 E. Rockcliff Road, Tuscon AZ 85750</b>		

Canyon Ranch Enterprises, LLC	54.40%	C, Z
CR Employment, Inc.	54.40%	Z
CR Las Vegas, LLC	54.40%	C, Z
CR License, LLC	54.40%	C, Z
CR Miami Employment, LLC	54.40%	C, Z
CR Miami, LLC	54.40%	C, Z
CR Operating, LLC	54.40%	C, Z
CR Orlando, LLC	54.40%	C, Z
CR Products, LLC	54.40%	C, Z
CR Resorts, LLC	54.40%	C, Z
CR SpaClub at Sea, LLC	54.40%	C, Z
Spa Project Advisors, LLC	54.40%	C, Z
Tucson/Lenox Special Manager, Inc.	54.40%	Z
Tucson/Lenox, LLC	54.40%	C, Z

**46 Related undertakings** continued

Other related undertakings	Percentage	Note
<b>126 Riverfront Lane , 5th Floor, Drawer 2770, Avon CO 81620</b>		
Blue River Land Company, LLC	39.55%	C, Z
East West Resort Development IV, L.P., L.L.L.P.	71.11%	B, Z
East West Resort Development VI, L.P., L.L.L.P.	35.86%	B, Z
East West Resort Development VIII, L.P., L.L.L.P.	71.11%	B, Z
East West Resort Development XIV, L.P., L.L.L.P.	33.52%	B, Z
EW Deer Valley, LLC	29.28%	C, Z
EWRD Perry Holding, L.P., L.L.L.P.	67.61%	B, Z
EWRD Perry-Riverbend, LLC	54.31%	C, Z
EWRD Summit Holding, L.P., L.L.L.P.	79.57%	B, Z
EWRD Summit, LLC	79.10%	C, Z
MV Penthouses, LLC	51.20%	C, Z
Water House on Main Street LLC <b>3001 Northstar Drive, C200, Truckee CA 96161</b>	35.26%	C, Z
CREW Tahoe LLC	60.80%	C, Z
East West Resort Development V, L.P., L.L.L.P.	74.75%	B, Z
Gray s Station, LLC	56.96%	C, Z
Home Run Tahoe, LLC	60.82%	C, Z
Northstar Mountain Properties, LLC	60.82%	C, Z
Northstar Trailside Townhomes, LLC	60.82%	C, Z
Northstar Village Townhomes, LLC	56.93%	C, Z
Old Greenwood Realty, Inc.	60.80%	Z
Old Greenwood, LLC	60.80%	C, Z
Tahoe Club Company, LLC	60.80%	C, Z
Tahoe Mountain Resorts, LLC	60.82%	C, Z
The Glades Tahoe, LLC	60.82%	C, Z
<b>Corporation Service Company, 2711 Centreville Road, Suite 400, Wilmington DE 19808</b>		

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CR SPE1, LLC	54.40%	C, Z
Crescent CR Holdings LLC	80.00%	C, Z
Crescent Fresh Series B Hold Co.	80.00%	Z
Crescent McKinney Olive Holdings GP LLC	80.00%	C, Z
MVWP Development LLC	30.40%	C, Z
MVWP Investors LLC	60.80%	C, Z
Stellar Residences, LLC	60.82%	C, Z
Stellar Townhomes, LLC	60.82%	C, Z
<b>1701 Wynkoop Street, Suite 140, Box 47, Denver CO 80202</b>		
Parkside Townhomes, LLC	47.63%	C, Z
St. Charles Place, LLC	47.63%	C, Z
The Park at One Riverfront, LLC	47.63%	C, Z
Central Platte Valley Management, LLC	51.78%	C, Z
Union Center LLC	51.78%	C, Z
<b>Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington DE 19801</b>		
DG Solar Lessee II, LLC	50.00%	C, Z
DG Solar Lessee, LLC	50.00%	C, Z
Cupric Canyon Capital LLC	40.03%	FF, Z
VS BC Solar Lessee I LLC	50.00%	C, Z
<b>East West Partners, Inc., 126 Riverfront Lane, 5th Floor, Avon CO 81620</b>		
Tahoe Club Employee Company	60.80%	Z
<b>200 Renaissance Parkway Suite 20, Atlanta, Georgia 30308</b>		
Overlook at Sugarloaf Inc	50.10%	
<b>C/O Capitol Services Inc., Suite B, 1675 South State Street, Dover DE 19901-5140</b>		
Continental Intermodal Group LP	37.58%	FF, Z
<b>C/O W.J. Harrison &amp; Associates, P.C., 3561 East Sunrise Dr., Ste. 201, Tucson AZ 85718</b>		
CR Bodrum Management, LLC	54.40%	C, Z
<b>6600 Mira Vista Blvd., Fort Worth TX 76132</b>		
Mira Vista Golf Club, L.C.	76.83%	Z
<b>c/o National Corporate Research Ltd. 615 DuPont</b>		

**Highway, Dover, Kent County, DE 19901**

Surrey Funding Corporation	99.45%	
Sussex Purchasing Corporation	99.45%	
<a href="#">Other related undertakings</a>	<a href="#">Percentage</a>	<a href="#">Note</a>
<b>Zambia</b>		
<b>3rd Floor, Mpile Park, 74 Independence Avenue, Lusaka</b>		
Barclays Life Zambia Limited	50.10%	
<b>Stand No. 4643 and 4644, Elunda Office Park, Addis Ababa Roundabout, Lusaka</b>		
Barclays Bank Zambia PLC	50.10%	
<b>Kafue House, Cairo Road, Lusaka, 10101</b>		
Kafue House Limited	50.10%	
<b>Zimbabwe</b>		
<b>2nd Floor, Barclay House, Corner First Street, Jason Moyo Avenue, PO Box 1279, Harare</b>		
Barclays Bank of Zimbabwe Limited	67.68%	
Barclays Merchant Bank of Zimbabwe Limited (In Liquidation)	67.68%	
Barclays Zimbabwe Nominees (Pvt) Limited	67.68%	
Fincor Finance Corporation Limited	67.68%	
<b>2 Premium Close, Mount Pleasant Business Park, Mount Pleasant , Harare</b>		
BRAINS Computer Processing (Pvt) Limited (In Liquidation)	78.45%	F, I
<b>Subsidiaries by virtue of control</b>		

The related undertakings below are subsidiaries in accordance with s.1162 Companies Act 2006 as Barclays can exercise dominant influence or control over them. The entities are owned by The Barclays Bank UK Retirement Fund.

<a href="#">Subsidiaries by virtue of control</a>	<a href="#">Percentage</a>	<a href="#">Note</a>
<b>United Kingdom</b>		
<b>1 Churchill Place, London, E14 5HP</b>		
Oak Pension Asset Management Limited	0.00%	Z
Water Street Investments Limited	0.00%	Z

**Cayman Islands**

**PO Box 309GT, Uglan House, South Church Street,  
Grand Cayman, KY1-1104**

Hornbeam Limited	0.00%	Z
<b>Joint Ventures</b>		

The related undertakings below are Joint Ventures in accordance with s. 18, Schedule 4, The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 and are proportionally consolidated.

Joint Ventures	Percentage	Joint management factors
<b>United Kingdom</b>		
<b>21 Garlick Hill, London,</b>	50.00%	
<b>EC4V 2AU</b>		The Joint Venture Board comprises two Barclays representative directors, two JV partner directors and three non-JV partner directors. The Board is responsible for setting the company strategy and budgets.
Vaultex UK Limited		

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## Notes to the financial statements

**46 Related undertakings** continued

## Notes

<b>A</b>	Directly held by Barclays PLC
<b>B</b>	Partnership Interest
<b>C</b>	Membership Interest
<b>D</b>	Trust Interest
<b>E</b>	Guarantor
<b>F</b>	Preference Shares
<b>G</b>	A Preference Shares
<b>H</b>	B Preference Shares
<b>I</b>	Ordinary/Common Shares in addition to other shares
<b>J</b>	A Ordinary Shares
<b>K</b>	B Ordinary Shares
<b>L</b>	C Ordinary Shares
<b>M</b>	F Ordinary Shares
<b>N</b>	O Ordinary Shares
<b>O</b>	W Ordinary Shares
<b>P</b>	Redeemable Ordinary Shares
<b>Q</b>	Core Shares and Insurance (Classified) Shares
<b>R</b>	B, C, D, E (94.36%), F (94.36%), G (94.36%), H (94.36%), I (94.36%), J (95.23%) and K Class Shares
<b>S</b>	A and B Unit Shares
<b>T</b>	Class A Residual Shares, Class B Residual Shares
<b>U</b>	A Voting Shares and B Non-Voting Shares
<b>V</b>	Class A Ordinary Shares, Class A Preference Shares (48.50%), Class B Ordinary Shares, Class C Ordinary Shares, Class C Preference Shares (92.53%), Class D Ordinary Shares, Class D Preference Shares, Class E Ordinary Shares, Class E Preference Shares, Class F Ordinary Shares, Class F Preference Shares, Class H 2012 Ordinary Shares, Class H 2012 Preference Shares, Class H Ordinary Shares, Class H Preference Shares (79.84%), Class I Preference Shares (50.00%), Class J Ordinary Shares, Class J Preference Shares
<b>W</b>	First Class Common Shares, Second Class Common Shares

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<b>X</b>	PEF Carry Shares
<b>Y</b>	EUR Tracker Shares, GBP Tracker Shares and USD Tracker Shares
<b>Z</b>	Not Consolidated (see Note 37 Structured entities)
<b>AA</b>	USD Linked Ordinary Shares
<b>BB</b>	Redeemable Class B Shares
<b>CC</b>	A Ordinary, Y Ordinary, Z Ordinary
<b>DD</b>	A Ordinary, B Ordinary, ZA Ordinary, ZB Ordinary, D Ordinary
<b>EE</b>	A Ordinary, ZI Ordinary
<b>FF</b>	Class A Units / Interests

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## [Additional shareholder information](#)

### Shareholder information

#### Additional shareholder information

#### Articles of Association

Barclays PLC (the Company) is a public limited company registered in England and Wales under company number 48839. Barclays, originally named Barclay & Company Limited, was incorporated in England and Wales on 20 July 1896 under the Companies Acts 1862 to 1890 as a company limited by shares. The company name was changed to Barclays Bank Limited on 17 February 1917 and it was registered on 15 February 1982 as a public limited company under the Companies Acts 1948 to 1980. On 1 January 1985, the company changed its name to Barclays PLC.

Under the Companies Act 2006 a company's Memorandum of Association now need only contain the names of the subscribers and the number of shares each subscriber has agreed to take. For companies in existence as of 1 October 2009, all other provisions which were contained in the company's Memorandum of Association, including the company's objects, are now deemed to be contained in the company's articles. The Companies Act 2006 also states that a company's objects are unrestricted unless the company's articles provide otherwise.

The Articles of Association were adopted at the Company's Annual General Meeting (AGM) on 30 April 2010 and amended at the AGM of the Company on 25 April 2013.

The following is a summary and explanation of the current Articles of Association, which are available for inspection.

#### Directors

- (i) The minimum number of Directors (excluding alternate Directors) is five. There is no maximum limit. There is no age limit for Directors.
- (ii) Excluding executive remuneration and any other entitlement to remuneration for extra services (including service on board committees) under the Articles, a Director is entitled to a fee at a rate determined by the Board but the aggregate fees paid to all Directors shall not exceed £2,000,000 per annum or such higher amount as may be approved by an ordinary resolution of the Company. Each Director is entitled to reimbursement for all reasonable travelling, hotel and other expenses properly incurred by him/her in or about the performance of his/her duties.
- (iii) No Director may act (either himself/herself or through his/her firm) as an auditor of the Company. A Director may hold any other office of the Company on such terms as the Board shall determine.

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(iv) At each AGM of the Company, one third of the Directors (rounded down) are required under the Articles of Association to retire from office by rotation and may offer themselves for re-election. The Directors so retiring are first, those who wish to retire and not offer themselves for re-election, and, second those who have been longest in office (and in the case of equality of service length are selected by lot). Other than a retiring Director, no person shall (unless recommended by the Board) be eligible for election unless a member notifies the Company Secretary in advance of

his/her intention to propose a person for election. It is Barclays' practice that all Directors offer themselves for re-election annually in accordance with the UK Corporate Governance Code.

(v) The Board has the power to appoint additional Directors or to fill a casual vacancy amongst the Directors. Any Director so appointed holds office until the next AGM, when he/she may offer himself/herself for reappointment. He/she is not taken into account in determining the number of Directors retiring by rotation.

(vi) The Board may appoint any Director to any executive position or employment in the Company on such terms as they determine.

(vii) The Company may by ordinary resolution remove a Director before the expiry of his/her period of office (without prejudice to a claim for damages for breach of contract or otherwise) and may by ordinary resolution appoint another person who is willing to act to be a Director in his/her place.

(viii) A Director may appoint either another Director or some other person approved by the Board to act as his/her alternate with power to attend Board meetings and generally to exercise the functions of the appointing Director in his/her absence (other than the power to appoint an alternate).

(ix) The Board may authorise any matter in relation to which a Director has, or can have, a direct interest that conflicts, or possibly may conflict with, the Company's interests. Only Directors who have no interest in the matter being considered will be able to authorise the relevant matter and they may impose limits or conditions when giving authorisation if they think this is appropriate.

(x) A Director may hold positions with or be interested in other companies and, subject to legislation applicable to the Company and the FCA's requirements, may contract with the Company or any other company in which the Company is interested. A Director may not vote or count towards the quorum on any resolution concerning any proposal in which he/she (or any person connected with him/her) has a material interest (other than by virtue of his/her interest in securities of the Company) or if he/she has a duty which conflicts or may conflict with the interests of the Company, unless the resolution relates to any proposal:

(a) to indemnify a Director or provide him/her with a guarantee or security in respect of money lent by him/her to, or any obligation incurred by him/her or any other person for the benefit of (or at the request of), the Company (or any other member of the Group);

(b) to indemnify or give security or a guarantee to a third party in respect of a debt or obligation of the Company (or any other member of the Group) for which the Director has personally assumed responsibility;

(c) to obtain insurance for the benefit of Directors;

(d) involving the acquisition by a Director of any securities of the Company (or any other member of the Group) pursuant to an offer to existing holders of securities or to the public;

(e) that the Director underwrite any issue of securities of the Company (or any other member of the Group);



## Additional shareholder information

(f) concerning any other company in which the Director is interested as an officer or creditor or Shareholder but, broadly, only if he/she (together with his/her connected persons) is directly or indirectly interested in less than 1% of either any class of the issued equity share capital or of the voting rights of that company; and

(g) concerning any other arrangement for the benefit of employees of the Company (or any other member of the Group) under which the Director benefits or stands to benefit in a similar manner to the employees concerned and which does not give the Director any advantage which the employees to whom the arrangement relates would not receive.

(xi) A Director may not vote or be counted in the quorum on any resolution which concerns his/her own employment or appointment to any office of the Company or any other company in which the Company is interested.

(xii) Subject to applicable legislation, the provisions described in sub-paragraphs (x) and (xi) may be relaxed or suspended by an ordinary resolution of the members of the Company or any applicable governmental or other regulatory body.

(xiii) A Director is required to hold an interest in ordinary shares having a nominal value of at least £500, which currently equates to 2,000 Ordinary Shares unless restricted from acquiring or holding such interest by any applicable law or regulation or any applicable governmental or other regulatory body. A Director may act before acquiring those shares but must acquire the qualification shares within two months from his/her appointment. Where a Director is unable to acquire the requisite number of shares within that time owing to law, regulation or requirement of any governmental or other relevant authority, he/she must acquire the shares as soon as reasonably practicable once the restriction(s) end.

(xiv) The Board may exercise all of the powers of the Company to borrow money, to mortgage or charge its undertaking, property and uncalled capital and to issue debentures and other securities.

### Classes of Shares

The Company only has Ordinary Shares in issue. The Articles of Association also provide for pound sterling preference shares of £100 each, US dollar preference shares of US\$100 each, US dollar preference shares of \$0.25 each, euro preference shares of 100 each and yen preference shares of ¥10,000 each (together, the Preference Shares). In accordance with the authority granted at the AGM on 25 April 2013, Preference Shares may be issued by the Board from time to time in one or more series with such rights and subject to such restrictions and limitations as the Board may determine. No Preference Shares have been issued to date.

### Dividends

Subject to the provisions of the Articles and applicable legislation, the Company in general meeting may declare dividends on the Ordinary Shares by ordinary resolution, but any such dividend may not exceed the amount recommended by the Board. The Board may also pay interim or final dividends if it appears they are justified by the Company's financial position.

Each Preference Share confers the right to a preferential dividend ( Preference Dividend ) payable in such currency at such rates (whether fixed or calculated by reference to or in accordance with a specified procedure or mechanism), on such dates and on such

other terms as may be determined by the Board prior to allotment thereof.

The Preference Shares rank in regard to payment of dividends in priority to the holders of Ordinary Shares and any other class of shares in the Company ranking junior to the Preference Shares.

Dividends may be paid on the Preference Shares if, in the opinion of the Board, the Company has sufficient distributable profits, after payment in full or the setting aside of a sum to provide for all dividends payable on (or in the case of shares carrying a cumulative right to dividends, before) the relevant dividend payment date on any class of shares in the Company ranking *pari passu* with or in priority to the relevant series of Preference Shares as regards participation in the profits of the Company.

If the Board considers that the distributable profits of the Company available for distribution are insufficient to cover the payment in full of Preference Dividends, Preference Dividends shall be paid to the extent of the distributable profits on a *pro rata* basis.

Notwithstanding the above, the Board may, at its absolute discretion, determine that any Preference Dividend which would otherwise be payable may either not be payable at all or only payable in part.

If any Preference Dividend on a series of Preference Shares is not paid, or is only paid in part, for the reasons described above, holders of Preference Shares will not have a claim in respect of such non-payment.

If any dividend on a series of Preference Shares is not paid in full on the relevant dividend payment date, a dividend restriction shall apply. The dividend restriction means that, subject to certain exceptions, neither the Company nor Barclays Bank may (a) pay a dividend on, or (b) redeem, purchase, reduce or otherwise acquire, any of their respective ordinary shares, other preference shares or other share capital ranking equal or junior to the relevant series of Preference Shares until the earlier of such time as the Company next pays in full a dividend on the relevant series of Preference Shares or the date on which all of the relevant series of Preference Shares are redeemed.

All unclaimed dividends payable in respect of any share may be invested or otherwise made use of by the Board for the benefit of the Company until claimed. If a dividend is not claimed after 12 years of it becoming payable, it is forfeited and reverts to the Company.

The Board may, with the approval of an ordinary resolution of the Company, offer Shareholders the right to choose to receive an allotment of additional fully paid Ordinary Shares instead of cash in respect of all or part of any dividend. The Company currently provides a scrip dividend programme pursuant to an authority granted at the AGM held on 25 April 2013.

### **Redemption and Purchase**

Subject to applicable legislation and the rights of the other shareholders, any share may be issued on terms that it is, at the option of the Company or the holder of such share, redeemable. The Directors are authorised to determine the terms, conditions and manner of redemption of any such shares under the Articles of Association.

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## Additional shareholder information

### **Calls on capital**

The Directors may make calls upon the members in respect of any monies unpaid on their shares. A person upon whom a call is made remains liable even if the shares in respect of which the call is made have been transferred. Interest will be chargeable on any unpaid amount called at a rate determined by the Board (of not more than 20% per annum).

If a member fails to pay any call in full (following notice from the Board that such failure will result in forfeiture of the relevant shares), such shares (including any dividends declared but not paid) may be forfeited by a resolution of the Board, and will become the property of the Company. Forfeiture shall not absolve a previous member for amounts payable by him/her (which may continue to accrue interest).

The Company also has a lien over all partly paid shares of the Company for all monies payable or called on that share and over the debts and liabilities of a member to the Company. If any monies which are the subject of the lien remain unpaid after a notice from the Board demanding payment, the Company may sell such shares.

### **Annual and other general meetings**

The Company is required to hold an AGM in addition to such other general meetings as the Directors think fit. The type of the meeting will be specified in the notice calling it. Under the Companies Act 2006, the AGM must be held within six months of the financial year end. A general meeting may be convened by the Board on requisition in accordance with the applicable legislation.

In the case of an AGM, a minimum of 21 clear days' notice is required. The notice must be in writing and must specify the place, the day and the hour of the meeting, and the general nature of the business to be transacted. A notice convening a meeting to pass a special resolution shall specify the intention to propose the resolution as such. The accidental failure to give notice of a general meeting or the non-receipt of such notice will not invalidate the proceedings at such meeting.

Subject as noted above, all Shareholders are entitled to attend and vote at general meetings. The Articles do, however, provide that arrangements may be made for simultaneous attendance at a satellite meeting place or, if the meeting place is inadequate to accommodate all members and proxies entitled to attend, another meeting place may be arranged to accommodate such persons other than that specified in the notice of meeting, in which case Shareholders may be excluded from the principal place.

Holders of Preference Shares have no right to receive notice of, attend or vote at, any general meetings of the Company as a result of holding Preference Shares.

## Notices

A document or information may be sent by the Company in hard copy form, electronic form, by being made available on a website, or by another means agreed with the recipient, in accordance with the provisions set out in the Companies Act 2006. Accordingly, a document or information may only be sent in electronic form to a person who has agreed to receive it in that form or, in the case of a company, who has been deemed to have so agreed pursuant to

applicable legislation. A document or information may only be sent by being made available on a website if the recipient has agreed to receive it in that form or has been deemed to have so agreed pursuant to applicable legislation, and has not revoked that agreement.

In respect of joint holdings, documents or information shall be sent to the joint holder whose name stands first in the register.

A member who (having no registered address within the UK) has not supplied an address in the UK at which documents or information may be sent in hard copy form, or an address to which notices, documents or information may be sent or supplied by electronic means, is not entitled to have documents or information sent to him/her.

In addition, the Company may cease to send notices to any member who has been sent documents on two consecutive occasions over a period of at least 12 months and when each of those documents is returned undelivered or notification is received that they have not been delivered.

## Capitalisation of profits

The Company may, by ordinary resolution, upon the recommendation of the Board capitalise all or any part of an amount standing to the credit of a reserve or fund to be set free for distribution provided that amounts from the share premium account, capital redemption reserve or any profits not available for distribution should be applied only in paying up unissued shares to be allotted to members credited as fully paid and no unrealised profits shall be applied in paying up debentures of the Company or any amount unpaid on any share in the capital of the Company.

## Indemnity

Subject to applicable legislation, every current and former Director or other officer of the Company (other than any person engaged by the company as auditor) shall be indemnified by the Company against any liability in relation to the Company, other than (broadly) any liability to the Company or a member of the Group, or any criminal or regulatory fine

[Additional shareholder information](#)

<b>Officers of the Group</b>	<b>Date of Appointment as Officer</b>	
<b>Ashok Vaswani</b>	<b>Chief Executive Officer, Barclays UK</b>	<b>2012</b>
<b>Bob Hoyt</b>	<b>Group General Counsel</b>	<b>2013</b>
<b>Tushar Morzaria</b>	<b>Group Finance Director</b>	<b>2013</b>
<b>Michael Roemer</b>	<b>Group Head of Compliance</b>	<b>2014</b>
<b>James E Staley</b>	<b>Group Chief Executive Officer</b>	<b>2015</b>
<b>Tristram Roberts</b>	<b>Group Human Resources Director</b>	<b>2015</b>
<b>Amer Sajed</b>	<b>CEO, Barclaycard International</b>	<b>2015</b>
<b>Paul Compton</b>	<b>Group Chief Operating Officer</b>	<b>2016</b>
<b>CS Venkatakrishnan</b>	<b>Chief Risk Officer</b>	<b>2016</b>
<b>Claire Davies</b>	<b>Company Secretary</b>	<b>2016</b>
<b>Tim Throsby</b>	<b>President, Barclays International</b>	<b>2017</b>
	<b>Chief Executive Officer, Corporate and Investment Bank</b>	

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 Additional shareholder information

**Dividends on the ordinary shares of Barclays PLC**

On 1 March 2016, Barclays announced that it would pay semi-annual dividends going forward. A final dividend for the full year ended 31 December 2015 of 3.5p was paid on 5 April 2016. In respect of the year ended 31 December 2016, one interim dividend of 1p was paid on 19 September 2016 and a final dividend of 2.0p was announced on 23 February 2017 for payment on 5 April 2017.

The dividends declared for each of the last five years were:

## Pence per 25p ordinary share

	2016	2015	2014	2013	2012
Interim	1.00	3.00	3.00	3.00	3.00
Final	2.00	3.50	3.50	3.50	3.50
<b>Total</b>	<b>3.00</b>	<b>6.50</b>	<b>6.50</b>	<b>6.50</b>	<b>6.50</b>

## US Dollars per 25p ordinary share

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	2016	2015	2014	2013	2012
Interim	0.01	0.05	0.05	0.05	0.05
Final	0.02	0.05	0.05	0.05	0.05
<b>Total</b>	<b>0.03</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>

The gross dividends applicable to an American Depositary Share (ADS) representing four ordinary shares, before deduction of withholding tax, are as follows:

US Dollars per American Depositary Share

	2016	2015	2014	2013	2012
Interim	0.05	0.18	0.18	0.18	0.19
Final	0.10	0.20	0.22	0.23	0.22
<b>Total</b>	<b>0.15</b>	<b>0.38</b>	<b>0.40</b>	<b>0.41</b>	<b>0.41</b>



The final dividends shown above are expressed in Dollars translated at the closing spot rate for Pounds Sterling as determined by Bloomberg at 5pm in New York City (the Closing Spot Rate ) on the latest practicable date for inclusion in this report. No representation is made that

Pounds Sterling amounts have been, or could have been, or could be, converted into Dollars at these rates.

### Trading market for ordinary shares of Barclays PLC

The principal trading market for Barclays PLC ordinary shares is the London Stock Exchange. At the close of business on 31 December 2016, 16,963,242,876 ordinary shares were in issue.

Ordinary share listings were also obtained on the New York Stock Exchange (NYSE) with effect from 9 September 1986. Trading on the NYSE is in the form of ADSs under the symbol BCS . Each ADS represents four ordinary shares and is evidenced by an American Depositary Receipt (ADR). The ADR depository is JP Morgan Chase Bank, N.A. Details of trading activity are published in the stock tables of leading daily newspapers in the US.

There were 517 ADR holders and 1,673 recorded holders of ordinary shares with US addresses at 31 December 2016, whose shareholdings represented approximately 4.68% of total outstanding ordinary shares on that date. Since a certain number of the ordinary shares and ADRs were held by brokers or other nominees, the number of recorded holders in the US may not be representative of the number of beneficial holders or of their country of residence.

The following table shows the high and low sales price for the ordinary shares during the periods indicated, based on mid-market prices at close of business on the London Stock Exchange and the high and low sale price for ADSs as reported on the NYSE composite tape.

### Sale prices for ordinary shares

	American			
	25p ordinary shares		Depositary Shares	
	High	Low	High	Low
	p	p	US\$	US\$

2017

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By month:

	239.25	221.35	11.89	11.12
February <sup>1</sup>				
January	236.25	219.45	11.71	11.07

<sup>1</sup> as at 22 February 2017

**2016**

By month:

August	172.25	146.00	9.11	7.84
September	174.75	164.70	9.31	8.39
October	191.30	166.50	9.27	8.16
November	215.95	181.35	10.75	8.91
December	239.00	212.95	11.99	10.70

By Quarter:

First quarter	215.25	147.85	12.85	8.62
Second quarter	186.95	127.20	11.18	7.03
Third quarter	174.75	131.65	9.31	7.06
Fourth quarter	239.00	166.50	11.99	8.16

**2015**

First quarter	266.00	223.55	16.31	13.63
Second quarter	274.45	248.90	17.15	14.94
Third quarter	288.95	239.00	17.98	14.58
Fourth quarter	257.00	209.10	15.81	12.80

2014	296.50	207.90	19.58	13.50
2013	308.39	242.39	18.93	15.69
2012	288.00	148.20	17.47	9.31
2011	333.55	138.85	21.64	8.55
2010	383.20	255.40	24.10	15.40
2009	383.60	51.20	25.40	3.10



## Additional shareholder information

This section incorporates information on the prices at which securities of Barclays PLC have traded. It is emphasised that past performance cannot be relied upon as a guide to future performance.

Shareholdings at 31 December 2016 <sup>a</sup>	Number of shareholders	Percentage of holders	Shares held	Percentage of capital
Classification of shareholders				
Personal Holders	266,012	97.24%	456,102,830	2.69%
Banks and Nominees	2,764	1.01%	14,785,945,892	87.16%
Other Companies	4,787	1.75%	1,721,183,651	10.15%
Insurance Companies	2	0.00%	523	0.00%
Pension Funds	7	0.00%	9,980	0.00%
<b>Total</b>	<b>273,572</b>	<b>100.00%</b>	<b>16,963,242,876</b>	<b>100.00%</b>
Shareholding range				
1 - 100	18,163	6.64%	678,463	0.00%
101 - 250	55,920	20.44%	11,370,607	0.07%
251 - 500	75,447	27.58%	26,331,004	0.16%
501 - 1,000	44,334	16.21%	31,375,347	0.18%
1,001 - 5,000	56,942	20.81%	125,625,032	0.74%
5,001 - 10,000	12,094	4.42%	84,906,729	0.50%
10,001 - 25,000	7,190	2.63%	108,767,678	0.64%
25,001 - 50,000	1,668	0.61%	56,858,249	0.34%
50,001 and over	1,184	0.66%	16,517,329,767	97.37%
<b>Totals</b>	<b>273,572</b>	<b>100.00%</b>	<b>16,963,242,876</b>	<b>100.00%</b>
<b>United States Holdings</b>	<b>1,673</b>	<b>0.61%</b>	<b>4,200,586</b>	<b>0.02%</b>
Note				

a. These figures do not include Barclays Sharestore members.

### Currency of presentation

In this report, unless otherwise specified, all amounts are expressed in Pound Sterling. For the months of September 2016 through to February 2017, the highest and lowest closing spot rates as determined by Bloomberg at 5:00 p.m (New York time) (the Closing Spot Rate), expressed in USD per GBP were:

(US Dollars per Pound Sterling)

	February 2017	January	December	November 2016	October	September
High	1.27	1.26	1.27	1.26	1.28	1.34
Low	1.24	1.20	1.22	1.22	1.21	1.30

(US Dollars per Pound Sterling)

	2016	2015	2014	2013	2012
Average	1.56	1.53	1.65	1.56	1.59

On 22 February 2017, the Closing Spot Rate in Pound Sterling was \$1.25.

No representation is made that Pounds Sterling amounts have been, or could have been, or could be, converted into USD at any of the above rates. For the purpose of presenting financial information in this report, exchange rates other than those shown above may have been used.

## Additional shareholder information

### Taxation of UK holders

The following is a summary of certain UK tax issues which are likely to be material to the holding and disposal of Ordinary Shares of Barclays PLC, Preference Shares of Barclays Bank PLC (the Bank), or ADSs representing such Ordinary Shares or Preference Shares (together the Shares).

It is based on current law and the practice of Her Majesty's Revenue and Customs (HMRC), which may be subject to change, possibly with retrospective effect. It is a general guide for information purposes and should be treated with appropriate caution. It is not intended as tax advice and it does not purport to describe all of the tax considerations that may be relevant to a prospective purchaser, holder or disposer of Shares. In particular, save where expressly stated to the contrary, this summary deals with shareholders who are resident and, in the case of individuals, domiciled in (and only in) the UK for UK tax purposes, who hold their Shares as investments (other than under an individual savings account) and who are the absolute beneficial owners of their Shares and any dividends paid on them.

The statements are not addressed to: (i) shareholders who own (or are deemed to own) 10 per cent. or more of the voting power of Barclays PLC or the Bank; (ii) shareholders who hold Shares as part of hedging transactions; (iii) investors who have (or are deemed to have) acquired their Shares by virtue of an office or employment; and (iv) shareholders who hold Shares in connection with a trade, profession or vocation carried on in the UK (whether through a branch or agency or, in the case of a corporate shareholder, through a permanent establishment, or otherwise). It does not discuss the tax treatment of classes of shareholder subject to special rules, such as dealers in securities.

Persons who are in any doubt as to their tax position should consult their professional advisers. Persons who may be liable to taxation in jurisdictions other than the UK in respect of their acquisition, holding or disposal of Shares are particularly advised to consult their professional advisers as to whether they are so liable.

#### (i) Taxation of dividends

In accordance with UK law, Barclays PLC or the Bank (as the case may be) pays dividends on the Shares without any deduction or withholding tax in respect of any taxes imposed by the UK government or any UK taxing authority.

#### *Dividends paid on or after 6 April 2016*

For dividends paid on or after 6 April 2016, dividends paid to a UK resident individual shareholder in a tax year (the Total Dividend Income) will generally form part of that shareholder's total income for UK income tax purposes. The Total Dividend Income will be regarded as the top slice of the shareholder's total income, and will be subject to UK

income tax at the rates discussed below.

The rate of UK income tax applicable to the Total Dividend Income will depend on the amount of the Total Dividend Income and the UK income tax band(s) that the Total Dividend Income falls within when included as part of the shareholder's total income for UK income tax purposes.

A nil rate of UK income tax applies to the first £5,000 of Total Dividend Income received by an individual shareholder in a tax year (the Nil Rate Amount).

Where the Total Dividend Income received by an individual shareholder in a tax year exceeds the Nil Rate Amount, the excess amount (the Remaining Dividend Income) will be subject to UK income tax at the following rates:

- (a) at the rate of 7.5% on any portion of the Remaining Dividend Income that falls within the basic tax band;
- (b) at the rate of 32.5% on any portion of the Remaining Dividend Income that falls within the higher tax band; and
- (c) at the rate of 38.1% on any portion of the Remaining Dividend Income that falls within the additional tax band.

In determining the tax band the Remaining Dividend Income falls within, the individual shareholder's Dividend Income (along with any other dividends received that are included in the shareholder's total income for UK income tax purposes) for the tax year in question (including the portion comprising the Nil Rate Amount) will be treated as the top slice of the shareholder's total income for UK tax purposes.

Subject to special rules for small companies, UK resident shareholders within the charge to UK corporation tax will be subject to UK corporation tax on the dividends paid on the Shares unless the dividend falls within an exempt class and certain conditions are met.

*Dividends paid between 6 April 2015 and 5 April 2016 (inclusive)*

In respect of dividends paid between 6 April 2015 and 5 April 2016 (inclusive) (the 2015-2016 tax year), a UK resident individual shareholder will be subject to tax under a different UK regime for the taxation of dividends. UK resident individuals receiving a dividend during the 2015-2016 tax year will generally be entitled to a tax credit in respect of such dividend which may be used by certain shareholders to set against any liability they may have to UK income tax on that dividend. The value of the tax credit is equal to one-ninth of the amount of the cash dividend. The cash dividend received plus the related tax credit (together, the gross dividend) will be part of the shareholder's total income for UK income tax purposes for the 2015-2016 tax year. The gross dividend will be regarded as the top slice of the shareholder's income, and will be subject to UK income tax at the rates discussed below.

If the shareholder is a UK resident individual liable to UK income tax solely at the basic rate for the 2015-2016 tax year, then that shareholder will be liable to UK income tax of 10% of the gross dividend. Since the tax credit will fully match this liability, there should be no further tax liability in respect of the dividend received. A UK resident individual shareholder that is a higher or additional rate taxpayer for the 2015-2016 tax year will be liable to UK income tax on the gross dividend at special marginal rates (32.5% or 37.5% respectively) against which the tax credit may be set. In that case, there will be a further liability to UK income tax for the shareholder as the tax credit will not fully match the tax liability.

UK resident shareholders within the charge to UK corporation tax will be subject to UK corporation tax on dividends paid on the Shares in the 2015-2016 tax year in the same way as dividends paid on or



## Additional shareholder information

after 6 April 2016 (see the section (i) Taxation of Dividends-Dividends paid on or after 6 April 2016 above).

UK resident shareholders are not entitled to any repayment of the tax credits attaching to the dividends paid on the Shares in the 2015-2016 tax year. A non-UK resident shareholder will not generally be entitled to any payment from HMRC of a tax credit in respect of a UK dividend paid on the Shares in the 2015-2016 tax year. Some non-UK resident shareholders may be able to recover some of the tax credit in respect of a UK dividend paid on the Shares in the 2015-2016 tax year under an applicable double tax treaty and should consult their own professional advisers as to whether they are so entitled and as to the process for making such a claim.

### **(ii) Taxation of shares under the Dividend Reinvestment Plan**

Where a shareholder elects to purchase shares using their cash dividend as part of the Dividend Reinvestment Plan, such shareholders will generally be liable for UK income tax or corporation tax (as the case may be) on dividends reinvested in the Dividend Reinvestment Plan on the same basis as if they had received the cash and arranged the investment themselves. They should accordingly include the dividend received in their tax return in the normal way.

### **(iii) Taxation of capital gains**

The disposal of Shares may, depending on the shareholder's circumstances, give rise to a liability to tax on chargeable capital gains.

Where Shares are sold, a liability to tax may result if the proceeds from that sale exceed the sum of the base cost of the Shares sold and any other allowable deductions such as share dealing costs and, in certain circumstances, indexation relief. To arrive at the total base cost of any Barclays PLC shares held, in appropriate cases the amount subscribed for rights taken up in 1985, 1988 and 2013 must be added to the cost of all such shares held. For this purpose, current legislation permits the market valuation at 31 March 1982 to be substituted for the original cost of shares purchased before that date. Shareholders other than those within the charge to UK corporation tax should note that, following the Finance Act 2008, no indexation allowance will be available. Shareholders within the charge to UK corporation tax may be eligible for indexation allowance.

Chargeable capital gains may also arise from the gifting of Shares to connected parties such as relatives (although not spouses or civil partners) and family trusts.

The calculations required to compute chargeable capital gains may be complex. Shareholders are advised to consult their personal financial adviser if further information regarding a possible tax liability in respect of their holdings of shares is required.

**(iv) Stamp duty and stamp duty reserve tax**

Dealings in Shares will generally be subject to UK stamp duty or stamp duty reserve tax (although see the comments below as regards ADSs in the section **Taxation of US holders** **UK stamp Duty** ). The transfer on sale of Ordinary Shares and Preference Shares will generally be liable to stamp duty at 0.5% of the consideration paid for that transfer. An unconditional agreement to transfer Ordinary Shares and Preference Shares, or any interest therein, will generally be subject to stamp duty reserve tax at 0.5% of the consideration given. Such liability to stamp duty reserve tax

will be cancelled, or a right to a repayment (generally with interest) in respect of the stamp duty reserve tax liability will arise, if the agreement is completed by a duly stamped transfer within six years of the agreement having become unconditional. Both stamp duty and stamp duty reserve tax are normally the liability of the transferee.

Paperless transfers of Ordinary Shares and Preference Shares within CREST are liable to stamp duty reserve tax rather than stamp duty.

Stamp duty reserve tax on transactions settled within the CREST system or reported through it for regulatory purposes will be collected by CREST.

Special rules apply to certain categories of person, including intermediaries, market makers, brokers, dealers and persons connected with depositary arrangements and clearance services.

**(v) Inheritance tax**

An individual may be liable to inheritance tax on the transfer of Shares. Where an individual is so liable, inheritance tax may be charged on the amount by which the value of his or her estate is reduced as a result of any transfer by way of gift or other gratuitous transaction made by them or treated as made by them.

**Taxation of US holders**

The following is a summary of the principal US federal income tax consequences and certain UK tax consequences for US holders (as defined below) of Ordinary Shares of Barclays PLC, Preference Shares of Barclays Bank PLC (the **Bank** ), or ADSs representing such Ordinary Shares or Preference Shares, who own the shares or ADSs as capital assets for tax purposes. It is not, however, a comprehensive analysis of all the potential US or UK tax consequences for such holders and it does not discuss the tax consequences of members of special classes of holders subject to special rules, including (i) dealers in securities, (ii) traders in securities that elect to use a mark-to-market method of accounting for securities holdings, (iii) tax-exempt organizations, (iv) life insurance companies, (v) holders liable for alternative minimum tax, (vi) holders that actually or constructively own 10 per cent or more of the voting stock of Barclays PLC or the Bank, (vii) holders that hold shares or ADSs as part of a straddle or a hedging or conversion transaction, (viii) holders that purchase or sell shares or ADSs as part of a wash sale, (ix) holders whose functional currency is not the US dollar, or (x) holders who are resident, or (in the case of individuals) ordinarily resident, or who are carrying on a trade, in the UK. The summary also does not address any aspect of US federal taxation other than US federal income taxation (such as the estate and gift tax or the Medicare tax on net investment income). Investors are advised to consult their tax advisers regarding the tax implications of their particular holdings, including the consequences under applicable state and local law, and in particular whether they are eligible for the benefits of the Treaty, as defined below.

This section is also based on the Internal Revenue Code of 1986, as amended (the **Code** ), its legislative history, existing and proposed regulations, published rulings and court decisions, and on the Double Taxation Convention between the UK and the US as entered into force in March 2003 (the **Treaty** ), and, in respect of UK tax, the Estate and Gift Tax Convention between the UK and the US as entered into force on 11 November 1979 (the **Estate and Gift Tax Convention** ), the current UK tax law and the practice of HMRC, all of which are subject to change, possibly on a

retroactive basis. This

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section is based in part upon the representations of the ADR Depositary and the assumption that each obligation of the Deposit Agreement and any related agreement will be performed in accordance with its terms.

A "US holder" is a beneficial owner of shares or ADSs that is, for US federal income tax purposes, (i) a citizen or resident of the US, (ii) a US domestic corporation, (iii) an estate whose income is subject to US federal income tax regardless of its source, or (iv) a trust if a US court can exercise primary supervision over the trust's administration and one or more US persons are authorized to control all substantial decisions of the trust. If a partnership holds the shares or ADSs, the US federal income tax treatment of a partner will generally depend on the status of the partner and the tax treatment of the partnership. A partner in a partnership holding the shares or ADSs should consult its tax adviser with regard to the US federal income tax treatment of an investment in the shares or ADSs.

For the purposes of the Treaty, the Estate and Gift Tax Convention, and the Code, the holders of ADRs evidencing ADSs will be treated as owners of the underlying Ordinary Shares or Preference Shares, as the case may be. Generally, exchanges of shares for ADRs and ADRs for shares will not be subject to US federal income tax or to UK capital gains tax.

**(i) Taxation of dividends**

Subject to the PFIC rules discussed below, a US holder is subject to US federal income taxation on the gross amount of any dividend paid by Barclays PLC or the Bank, as applicable, out of its current or accumulated earnings and profits (as determined for US federal income tax purposes).

Dividends paid by Barclays PLC or the Bank, as applicable, with respect to the Ordinary Shares, Preference Shares or ADSs will generally be qualified dividend income. Dividends paid to a noncorporate US holder that constitute qualified dividend income will be taxable to the holder at preferential rates, provided that the holder has a holding period of the shares or ADSs of more than 60 days during the 121-day period beginning 60 days before the ex-dividend date (or, in the case of Preference Shares or ADSs relating thereto, if the dividend is attributable to a period or periods aggregating over 366 days, provided that the holder holds the shares or ADSs for more than 90 days during the 181-day period beginning 90 days before the ex-dividend date) and meets certain other holding period requirements. A US holder will not be subject to UK withholding tax. Dividends must be included in income when the US holder, in the case of shares, or the Depositary, in the case of ADSs, actually or constructively receives the dividend, and will not be eligible for the dividends-received deduction generally allowed to US corporations in respect of dividends received from other US corporations. For foreign tax credit purposes, dividends will generally be income from sources outside the US and will, depending on a US holder's circumstances, be either passive or general income for purposes of computing the foreign tax credit allowable to a US holder.

The amount of the dividend distribution includable in income will be the US Dollar value of the Pound Sterling payments made, determined at the spot Pound Sterling/US Dollar rate on the date the dividend distribution is includable in income, regardless of whether the payment is in fact converted into US Dollars. Generally, any gain or loss resulting from currency exchange fluctuations

during the period from the date the dividend payment is includable in income to the date the payment is converted into US Dollars will be treated as ordinary income or loss and, for foreign tax credit limitation purposes, from sources within the US, and will not be eligible for the special tax rates applicable to qualified dividend income.

Distributions in excess of current or accumulated earnings and profits, as determined for US federal income tax purposes, will be treated as a return of capital to the extent of the US holder's basis in the shares or ADSs and thereafter as capital gain. Because Barclays PLC and the Bank do not currently maintain calculations of earnings and profits for US federal income tax purposes, it is expected that distributions with respect to the shares and ADSs will generally be reported to US holders as dividends.

#### **(ii) Taxation of capital gains**

Subject to the PFIC rules discussed below, generally, US holders will not be subject to UK tax, but will be subject to US tax on capital gains realised on the sale or other disposition of Ordinary Shares, Preference Shares or ADSs. Generally, a US holder will recognise capital gain or loss for US federal income tax purposes equal to the difference between the US Dollar value of the amount realised and a US holder's tax basis, determined in US Dollars, in its shares or ADSs. Capital gain of a noncorporate US holder is generally taxed at preferential rates where the holder has a holding period of greater than one year. The gain or loss will generally be income or loss from sources within the US for foreign tax credit limitation purposes.

#### **(iii) Taxation of premium on redemption or purchase of shares**

No refund of tax will be available under the Treaty in respect of any premium paid on a redemption of Preference Shares by the Bank or on a purchase of Ordinary Shares by Barclays PLC. For US tax purposes, redemption premium generally will be treated as an additional amount realised in the calculation of a US holder's gain or loss.

#### **(iv) Taxation of passive foreign investment companies (PFICs)**

Barclays PLC and the Bank believe that their respective shares and ADSs should not be treated as stock of a PFIC for US federal income tax purposes, but this conclusion is a factual determination that is made annually and thus may be subject to change. If Barclays PLC or the Bank were to be treated as a PFIC, then the gain realised on the sale or other disposition of the shares or ADSs would in general not be treated as capital gain. Instead, unless a US holder elects to be taxed annually on a mark-to-market basis with respect to its shares or ADSs, such gain and certain excess distributions would be treated as having been realised ratably over a US holder's holding period for the shares or ADSs and generally would be taxed at the highest tax rate in effect for each such year to which the gain was allocated, together with an interest charge in respect of the tax attributable to each such year. With certain exceptions, a US holder's shares or ADSs will be treated as stock in a PFIC if Barclays PLC or the Bank, as applicable, was a PFIC at any time during such holder's holding period in its shares or ADSs. Dividends that a US holder receives will not be eligible for the special tax rates applicable to qualified dividend income if Barclays PLC or the Bank is treated as a PFIC with respect to such US holder either in the taxable year of the distribution or the preceding taxable year, but instead will be taxable at rates applicable to ordinary income.



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**(v) Certain Reporting Requirements**

US holders should consult their tax advisers regarding any tax reporting or filing requirements that may apply to receiving payments on or with respect to, acquiring, owning, or disposing of the shares or ADSs. Failure to comply with certain reporting obligations could result in the imposition of substantial penalties.

**(vi) UK stamp duty and stamp duty reserve tax**

No obligation to pay UK stamp duty will arise on the transfer on sale of an ADS, provided that any instrument of transfer is not executed in, and remains at all times outside, the UK. No UK stamp duty reserve tax is payable in respect of an agreement to transfer an ADS. For the UK stamp duty and stamp duty reserve tax implications of dealings in shares, see the section [Taxation of UK holders](#) (iv) [Stamp duty and stamp duty reserve tax](#) above.

**(vii) UK estate and gift tax**

Under the Estate and Gift Tax Convention, a US holder generally is not subject to UK inheritance tax.

**FATCA Risk Factor**

In certain circumstances, shares or ADSs may be subject to US [passthru](#) withholding tax starting in 2019. The US has enacted rules, commonly referred to as [FATCA](#), that generally impose a new reporting and withholding regime with respect to certain US source payments (including dividends and interest), gross proceeds from the disposition of property that can produce US source interest and dividends, and certain payments made by, and financial accounts held with, entities that are classified as financial institutions under FATCA. The US has entered into an intergovernmental agreement regarding the implementation of FATCA with the UK (the [UK IGA](#)). Under the UK IGA, as currently drafted, it is not expected that either Barclays PLC or the Bank will be required to withhold tax under FATCA on payments made with respect to the shares or ADSs. However, significant aspects of when and how FATCA will apply remain unclear, and no assurance can be given that withholding under FATCA will not become relevant with respect to payments

made on or with respect to the shares or ADS in the future. Investors should consult their own tax advisers regarding the potential impact of FATCA.

The Barclays Group has registered with the Internal Revenue Service ( [IRS](#) ) for FATCA. The Global Intermediary Identification Number (GIIN) for the Bank in the United Kingdom is E1QAZN.00001.ME.826 and it is a Reporting Model 1 FFI. The GIINs for other parts of the Barclays Group or Barclays branches outside of the UK may be

obtained from your usual Barclays contact on request. The IRS list of registered Foreign Financial Institutions is publicly available at <https://apps.irs.gov/app/fatcaFfilist/flu.jsf>.

### **Exchange controls and other limitations affecting security holders**

Other than certain economic sanctions which may be in force from time to time, there are currently no UK laws, decrees or regulations which would affect the transfer of capital or remittance of dividends, interest and other payments to holders of Barclays securities who are not residents of the UK. There are also no restrictions under the Articles of Association of either Barclays PLC or Barclays Bank PLC, or (subject to the effect of any such economic sanctions) under current UK laws, which relate only to non-residents of the UK, and which limit the right of such non-residents to hold Barclays securities or, when entitled to vote, to do so.

### **Documents on display**

It is possible to read and copy documents that have been filed by Barclays PLC and Barclays Bank PLC with the US Securities and Exchange Commission at the US Securities and Exchange Commission's office of Investor Education and Advocacy located at 100 F Street, NE Washington DC 20549. Please call the US Securities and Exchange Commission at 1-800-SEC-0330 for further information on the public reference rooms and their copy charges. Filings with the US Securities and Exchange Commission are also available to the public from commercial document retrieval services, and from the website maintained by the US Securities and Exchange Commission at [www.sec.gov](http://www.sec.gov).

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 Additional shareholder information

**Fees and Charges Payable by a Holder of ADSs**

The ADR depositary collects fees for delivery and surrender of ADSs directly from investors depositing ordinary shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them.

The charges of the ADR depositary payable by investors are as follows:

Type of Service	ADR Depositary Actions	Fee
ADR depositary or substituting the underlying shares	Issuance of ADSs against the deposit of ordinary shares, including deposits and issuances in respect of:  Share distributions, stock splits, rights issues, mergers  Exchange of securities or other transactions or event or other distribution affecting the ADSs or deposited securities	\$5.00 or less per 100 ADSs (or portion thereof) evidenced by the new ADSs delivered
Receiving or distributing cash dividends	Distribution of cash dividends	\$0.04 or less per ADS*

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Selling or exercising rights	Distribution or sale of securities, the fee being in an amount equal to the fee for the execution and delivery of ADSs which would have been charged as a result of the deposit of such securities	\$5.00 or less per each 100 ADSs (or portion thereof)
Withdrawing an underlying ordinary share	Acceptance of ADSs surrendered for withdrawal of deposited ordinary shares	\$5.00 or less for each 100 ADSs (or portion thereof)
General depositary services, particularly those charged on an annual basis	Other services performed by the ADR depositary in administering the ADS program	No fee currently payable
Expenses of the ADR depositary	<p>Expenses incurred on behalf of Holders in connection with:</p> <ul style="list-style-type: none"> <li>- Expenses of the ADR depositary in connection with the conversion of foreign currency into US dollars (which are paid out of such foreign currency)</li> <li>Taxes and other governmental charges</li> <li>Cable, telex and facsimile transmission/delivery</li> <li>Transfer or registration fees, if applicable, for the registration of transfers or underlying ordinary shares</li> <li>Any other charge payable by ADR depositary or its agents</li> </ul>	<p>Expenses payable at the sole discretion of the ADR depositary by billing Holders or by deducting charges from one or more cash dividends or other cash distributions</p>

\* The fee in relation to the distribution of cash dividends was \$0.0064 per ADS in respect of dividends paid in the year ended 31 December 2016.





## Additional shareholder information

### Fees and Payments made by the ADR depositary to Barclays

The ADR depositary has agreed to provide Barclays with an amount based on the cash dividend fee charged on each ADS during each twelve-month period running from August 11 of the relevant year to August 10 of the following year (a Contract Year) for expenses incurred by Barclays in connection with the ADS program (such amount being the Contribution for the relevant Contract Year). The Contributions are paid to Barclays in two instalments each Contract Year, both of which are scheduled to be paid in the Barclays fiscal year in which the relevant Contract Year ends.

The table below sets out the Contribution for the 2015/2016 Contract Year and thus the total amount received in the year ended 31 December 2016:

Cash Dividend Fee Amount Collected during 2015/2016  Contract Year	Amount provided in Contributions from the ADR depositary  for the year ended 31 December 2016
US\$0.0084 per ADS**	\$1,500,000
<b>Total</b>	\$1,500,000

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\*\* On 1 March 2016, Barclays announced its decision to pay dividends on a bi-annual rather than quarterly basis. As a result, the fees in relation to the 2015/16 Contract Year covering the September and December 2015 and April 2016 dividends amounted to \$0.0084 per ADS.

Under certain circumstances, including non-routine corporate actions, removal of the ADR depository or termination of the ADS program by Barclays, Barclays may be charged by the ADR depository certain fees (including in connection with depository services, certain expenses paid on behalf of Barclays, an administrative fee, fees for non-routine services and corporate actions and any other reasonable fees/expenses incurred by the ADR depository).

The ADR depository has agreed to waive certain of its fees chargeable to Barclays with respect to standard costs associated with the administration of the ADS program.

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## Additional Information

### External auditor objectivity and independence: Non-Audit Services

Our policy on the provision of services by the Group's statutory Auditor (the Policy) sets out the circumstances in which the auditor may be permitted to undertake non-audit work for the Group.

The Board Audit Committee oversees compliance with the Policy and considers and, if appropriate, approves requests to use the Auditor for non-audit work. Allowable services are pre-approved up to but not including £100,000 or £25,000 in the case of certain taxation services. The Group Finance Director and the Company Secretary and their teams deal with day to day administration of the Policy, facilitating requests for approval.

Details of the services that are prohibited and allowed under the Policy are set out below:

Services that are prohibited include:

Bookkeeping;

design and implementation of financial information systems;

design or implementation of internal controls or risk management services related to financial information

\*appraisal or valuation services;

fairness opinions or contribution-in-kind reports;

\*actuarial services;

internal audit;

management and Human Resources functions;

broker or dealer, investment advisor or investment banking services;

legal, expert and certain \*tax services or personal services to persons in a financial reporting role; and

transaction-related and restructuring services.

\*these may be permissible subject to compliance with certain requirements

Allowable services that the Board Audit Committee considers for approval include:

statutory audit and audit related services and regulatory non-audit services;

other attest and assurance services;

training, surveys and software;

risk management and controls advice;

transaction support;

taxation services;

business support and recoveries; and

translation services.

## [Additional information](#)

### **NYSE Corporate Governance**

#### **[NYSE Corporate Governance Statement](#)**

As our main listing is on the London Stock Exchange, we follow the UK Corporate Governance Code. However, as Barclays also has American Depositary Receipts listed on the New York Stock Exchange (NYSE), we are also subject to the NYSE's Corporate Governance Rules (NYSE Rules). We are exempt from most of the NYSE Rules, which US domestic companies must follow, because we are a non-US company listed on the NYSE. However, we are required to provide an Annual Written Affirmation to the NYSE of our compliance with the applicable NYSE Rules and must also disclose any significant differences between our corporate governance practices and those followed by domestic US companies listed on the NYSE. Key differences between the Code and NYSE Rules are set out here:

#### **Director Independence**

NYSE Rules require the majority of the Board to be independent. The Code requires at least half of the Board (excluding the Chairman) to be independent. The NYSE Rules contain different tests from the Code for determining whether a Director is independent. We follow the Code's recommendations as well as developing best practices among other UK public companies. The independence of our non-executive Directors is reviewed by the Board on an annual basis and it takes into account the guidance in the Code and the criteria we have established for determining independence, which are described on page 37.

#### **Board Committees**

We have a Board Nominations Committee and a Board Remuneration Committee, both of which are broadly similar in purpose and constitution to the Committees required by the NYSE Rules and whose terms of reference comply with the Code's requirements. The NYSE Rules state that both Committees must be composed entirely of independent Directors. As the Group Chairman was independent on appointment, the Code permits him to chair the Board Nominations Committee. Except for this appointment, both Committees are composed solely of non-executive Directors, whom the Board has determined to be independent. We comply with the NYSE Rules requirement that we have a Board Audit Committee comprised solely of independent non-executive Directors. However, we follow the Code recommendations, rather than the NYSE Rules, regarding the responsibilities of the Board Audit Committee (except for applicable mandatory responsibilities under the Sarbanes-Oxley Act), although both are broadly comparable. Although the NYSE Rules state that the Board Audit Committee is to take responsibility for risk oversight, Barclays has additional Board Committees which address different areas of risk management. To enhance Board governance of risk, Barclays has two risk committees; the Board Risk Committee and the Board Reputation Committee. A full description of each Board Committee can be found in the governance section.

#### **Corporate Governance Guidelines**

The NYSE Rules require domestic US companies to adopt and disclose corporate governance guidelines. There is no equivalent recommendation in the Code but the Board Nominations Committee has developed corporate governance guidelines, *Corporate Governance in Barclays*, which have been approved and adopted by the Board.

### **Code of Ethics**

The NYSE Rules require that domestic US companies adopt and disclose a code of business conduct and ethics for Directors, officers and employees. *The Barclays Way* was introduced in 2013; this is a Code of Conduct which outlines the Values and Behaviours which govern our way of working across our business globally. *The Barclays Way* has been adopted on a Group wide basis by all Directors, Officers and employees. *The Barclays Way* is available to view on the Barclays website at [home.barclays/about-barclays/barclays-values](http://home.barclays/about-barclays/barclays-values).

### **Shareholder Approval of Equity-compensation Plans**

The NYSE listing standards require that shareholders must be given the opportunity to vote on all equity-compensation plans and material revisions to those plans. We comply with UK requirements, which are similar to the NYSE standards. However, the Board does not explicitly take into consideration the NYSE's detailed definition of what are considered material revisions.

## Additional information

### Substantial shareholders

As at 20 February 2017 the Company had been notified under Rule 5 of the Disclosure and Transparency Rules of the UKLA of the following holdings of voting rights in its shares:

#### 2016

Holder	Number of Barclays Shares	% of total voting rights attached to issued share capital <sup>a</sup>	Number of warrants	% of total voting rights attached to issued share capital <sup>a</sup>
The Capital Group Companies Inc <sup>b</sup>	1,172,090,125	6.98	-	-
Qatar Holding LLC <sup>c</sup>	1,017,455,690	5.99	-	-
BlackRock, Inc <sup>d</sup>	922,509,972	5.45	-	-

a The percentage of voting rights detailed above were as calculated at the time of the relevant disclosures made in accordance with Rule 5 of the DTR.

b. The Capital Group Companies Inc (CG) holds its shares via CG Management companies and funds. Part of the CG holding is held as American Depositary Receipts.

c. Qatar Holding LLC is wholly-owned by Qatar Investment Authority.

d Total shown includes 3,860,531 contracts for difference to which voting rights are attached. Part of the holding is held as American Depositary receipts. On 19 January 2017, BlackRock, Inc. disclosed by way of a Schedule 13G filed with the SEC, beneficial ownership of 1,054,988,420 ordinary shares of the Company as of 31 December 2016, representing 6.2% of that class of shares.

On 23 January 2017 the Company was notified that Norges Bank now holds 508,175,594 Barclays shares, representing 2.996% of the total voting rights attached to the issued share capital. The relevant threshold for UK disclosure is 3%, so Norges Bank will make no further notifications to the Company unless they again exceed 3% of the total voting rights attached to the issued share capital.

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As at 29 February 2016 the Company had been notified under Rule 5 of the Disclosure and Transparency Rules of the UKLA of the following holdings of voting rights in its shares:

### 2015

Holder	Number of Barclays Shares	% of total voting rights attached to issued share capital <sup>a</sup>	Number of warrants	% of total voting rights attached to issued share capital <sup>a</sup>
Qatar Holding LLC <sup>b</sup>	813,964,552	6.65	-	-
BlackRock, Inc <sup>c</sup>	822,938,075	5.02	-	-
The Capital Group Companies Inc <sup>d</sup>	1,172,090,125	6.98	-	-
Norges Bank	506,870,056	3.02	-	-

a The percentage of voting rights detailed above were as calculated at the time of the relevant disclosures made in accordance with Rule 5 of the DTR.

b Qatar Holding LLC is wholly-owned by Qatar Investment Authority.

c Total shown includes 1,408,618 contracts for difference to which voting rights are attached. On 25 January 2016, BlackRock, Inc. disclosed, by way of a Schedule 13G filed with the SEC, beneficial ownership of 1,109,026,156 ordinary shares of Barclays PLC as of 31 December 2015, representing 6.6% of that class of shares.

d The Capital Group Companies Inc (CG) holds its shares via CG Management companies and funds. Part of the CG holding is held as American Depositary Receipts (ADRs) with a ratio of 1 share to every 4 ADRs.

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## Additional information

As at 27 February 2015 the Company had been notified under Rule 5 of the Disclosure and Transparency Rules of the UKLA of the following holdings of voting rights in its shares:

### 2014

Holder	Number of Barclays Shares	% of total voting rights attached to issued share capital <sup>a</sup>	Number of warrants	% of total voting rights attached to issued share capital
Qatar Holding LLC <sup>b</sup>	813,964,552	6.65	-	-
BlackRock, Inc <sup>c</sup>	822,938,075	5.02	-	-
The Capital Group Companies Inc <sup>d</sup>	861,142,569	5.22	-	-

<sup>a</sup> The percentage of voting rights detailed above were as calculated at the time of the relevant disclosures made in accordance with Rule 5 of the DTR.

<sup>b</sup> Qatar Holding LLC is wholly-owned by Qatar Investment Authority.

<sup>c</sup> Total shown includes 1,408,618 contracts for difference to which voting rights are attached. On 12 January 2015 BlackRock, Inc disclosed, by way of a Schedule 13G filed with the SEC, beneficial ownership of 1,032,843,875 ordinary shares of Barclays PLC as of 31 December 2014, representing 6.3% of that class of shares.

<sup>d</sup> The Capital Group Companies Inc (CG) holds its shares via CG Management companies and funds. Part of the CG holding is held as American Depositary Receipts (ADRs) with a ratio of 1 share to every 4 ADRs.

### Disclosure controls and procedures

The Chief Executive, James E Staley, and the Group Finance Director, Tushar Morzaria, conducted with Group Management an evaluation of the effectiveness of the design and operation of the Group's disclosure controls and procedures of each of Barclays PLC and Barclays Bank PLC as at 31 December 2016, which are defined as those controls and procedures designed to ensure that information required to be disclosed in reports filed or submitted under the US Securities Exchange Act of 1934 is recorded, processed, summarised and reported within the time periods specified in the US Securities and Exchange Commission's rules and forms. As of the date of the evaluation, the Chief Executive and Group Finance Director concluded that the design and operation of these disclosure controls

and procedures were effective.

## Board of Directors

### **John McFarlane, Chairman**

John McFarlane is a senior figure in global banking and financial services circles and is in his 42<sup>nd</sup> year in the sector (including 22 years as a main-board director, 10 years as CEO and six years as chairman). John is Chairman of Barclays PLC and Barclays Bank PLC. He is also a non-executive director of Westfield Corporation and Old Oak Holdings Limited. He is chairman of TheCityUK and a member of the Financial Services Trade and Investment Board and the European Financial Roundtable. John was formerly chairman of Aviva plc, where he oversaw a transformation of the company and for a brief period he was also chairman of FirstGroup plc. He was also a non-executive director of the Royal Bank of Scotland plc, joining at the time of the UK government rescue. Prior to that, for 10 years he was Chief Executive officer of Australia and New Zealand Banking Group Ltd, Group Executive Director of Standard Chartered plc and head of Citibank in the UK.

### **Jes Staley, Chief Executive, Executive Director**

Jes Staley joined Barclays as Group Chief Executive on 1 December 2015. Jes has nearly four decades of extensive experience in banking and financial services. He worked for more than 30 years at JP Morgan, initially training as a commercial banker, and later advancing to the leadership of major businesses involving equities, private banking and asset management, and ultimately heading the company's Global Investment Bank. Most recently, Jes served as Managing Partner at BlueMountain Capital.

### **Sir Gerry Grimstone, Deputy Chairman and Senior Independent Director, Non-executive Director**

Sir Gerry Grimstone is Deputy Chairman and Senior Independent Director of Barclays and chairs the Board Reputation Committee. He is also chairman of Standard Life plc, one of the UK's largest savings and investments businesses. He is an independent non-executive board member of Deloitte LLP where he represents the public interest. Within the UK public sector, he is the lead non-executive on the board of the Ministry of Defence and is a member of HM Treasury's Financial Services Trade and Investment Board. From 2012-2015, Gerry served as the chairman of TheCityUK, the representative body for the financial and professional services industry in the UK. Gerry has held a number of board appointments in the public and private sectors and has served as one of the UK's Business Ambassadors. He was previously a senior investment banker at Schroders and ran businesses in London, New York and Asia Pacific. He specialised in mergers and acquisitions and capital-raising for major companies worldwide. Prior to that, he was an official in HM Treasury where he was responsible for privatisation and policy towards state-owned enterprises.

### **Mike Ashley, Non-executive Director**

Mike joined the Board as a non-executive Director in September 2013. He was formerly head of quality and risk management for KPMG Europe LLP (ELLP), which forms part of the KPMG global network, where his responsibilities included the management of professional risks and quality control.

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He was a member of the ELLP Board and was also KPMG UK's designated Ethics Partner. Mike has over 20 years experience as an audit partner, during which he was the lead audit partner for several large financial services groups, most recently HSBC Holdings PLC and Standard Chartered PLC, and also for the Bank of England. Mike has an in depth understanding of auditing and the associated regulatory issues, with specific experience of large, global banks. Mike's other current principal external appointments are Institute of Chartered Accountants in England and Wales Ethics Standards Committee (member), Charity Commission (board member), Government Internal Audit Agency (chairman) and International Ethics Standards Board for Accountants (member).

**Tim Breedon, Non-executive Director**

Tim was appointed to the Board as a non-executive Director in November 2012. Tim held a number of roles at Legal & General Group plc (L&G) before joining its board as Group Director (Investments) and becoming Group Chief Executive, a position he held from January 2006 to June 2012. Tim was a director of the Association of British Insurers (ABI), and also served as its chairman. He was also chairman of the UK Government's non-bank lending taskforce, an industry-led taskforce that looked at the structural and behavioural barriers to the development of alternative debt markets in the UK. Tim was a director of the Financial Reporting Council and was on the board of the Investment Management Association. Tim has over 25 years of experience in financial services and has extensive knowledge and experience of regulatory and government relationships. He brings to the Board the experience and knowledge of leading a financial services company, combined with an understanding of the UK and EU regulatory environment and risk management. His customer focus and understanding of investor issues, gained both at L&G and the ABI, is of particular relevance to Barclays. Tim's other current principal external appointments are as chairman of Apax Global Alpha Limited and chairman of The Northview Group.

**Mary Francis, CBE, Non-executive Director**

Mary Francis CBE was appointed to the Board as a non-executive Director in October 2016. Mary has extensive board-level experience across a range of industries and is currently serving on the boards of Swiss Re Group and Enscopl. She has previously served as Senior Independent Director on the board of Centrica and as a non-executive director of Aviva, Cable & Wireless Communications, the Bank of England and Alliance & Leicester. In her executive career, Mary was a senior civil servant in HM Treasury for twelve years, before serving as Private Secretary to the Prime Minister, Deputy Private Secretary to the Queen and as Director General of the Association of British Insurers.

**Crawford Gillies, Non-executive Director**

Crawford joined the Board as a non-executive Director in May 2014. Crawford has over three decades of business and management experience, initially with Bain & Company, a firm of international management consultants, where he was managing director Europe from 2001 to 2005. While at Bain he worked with major companies in the UK, Continental Europe and North America across multiple sectors. From 2007-2016 Crawford was on the board of Standard Life plc, where he has chaired the remuneration committee. He was chairman of the law firm Hammonds, now Squire Sanders (2006 - 2009), has chaired Control Risks International since 2007 and chaired Touch Bionics (2006 - 2011), an innovative medical device company. Crawford was also on the board of MITIE Group PLC from 2012 to July 2015. He has also held public sector posts in England and Scotland. He was an independent member of the Department of Trade and Industry (2002 - 2007) and chaired its Audit and Risk Committee (2003 - 2007). He is former chairman of Scottish Enterprise and of the Confederation of British Industry in London. Crawford's other current principal external appointments are as a non-executive director of SSE plc and The Edrington Group Limited.

**Reuben Jeffery III, Non-executive Director**

Reuben joined the Board in July 2009 as a non-executive Director. He is currently CEO, president and a director of Rockefeller & Co Inc. and Rockefeller Financial Services Inc. Reuben served in the US government as under secretary of State for Economic, Energy and Agricultural Affairs, as chairman of the Commodity Futures Trading Commission and as a special assistant to the President on the staff of the National Security Council. Before his government service, Reuben spent 18 years at Goldman, Sachs & Co where he was managing partner of Goldman Sachs in Paris and led the firm's European financial institutions group in London. Prior to joining Goldman Sachs, Reuben was a corporate attorney with Davis Polk & Wardwell. Reuben has a broad range of financial services experience, particularly investment banking, and in addition brings extensive insight into the US political and regulatory environment. Reuben's other current principal external appointments are Advisory Board of Towerbrook Capital Partners LP (member), Financial Services Volunteer Corps (director), Advisory Board of J. Rothschild Capital Management Limited (member) and The Asia Foundation (trustee).

**Tushar Morzaria, Group Finance Director, Executive Director**

Tushar joined the Board and Group Executive Committee of Barclays in October 2013 as Group Finance Director. Prior to this, he was CFO, corporate and investment bank at JP Morgan, a role he held on the merger of the investment bank and the wholesale treasury/security services business at JP Morgan. Prior to the merger, he was CFO of the investment bank and held other various roles during his career at JP Morgan. Tushar qualified as an accountant at Coopers and Lybrand Deloitte and for most of his career he has worked in investment banking, having held various roles at SG Warburg, JP Morgan and Credit Suisse. Tushar has over 20 years of strategic financial management experience, which prove invaluable in his role as Group Finance Director.

**Dambisa Moyo, Non-executive Director**

Dambisa joined the Board in May 2010 as a non-executive Director. She is an international economist and commentator on the global economy, with a background in financial services. After completing a PhD in Economics, she worked for Goldman Sachs in the debt capital markets, hedge funds coverage and global macroeconomics teams. Dambisa has also worked for the World Bank and formerly served as a non-executive director of Lundin Petroleum AB (publ) and SABMiller PLC. Dambisa's background as an economist, in particular her knowledge and understanding of global macroeconomic issues and African economic, political and social issues, provides an important contribution to the Board's discussion of Barclays' business and citizenship strategy. Dambisa's other current principal external appointments are as non-executive director of Barrick Gold Corporation and Seagate Technology plc and Chevron Corporation.



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### **Diane de Saint Victor, Non-executive Director**

Diane was appointed as a non-executive Director in March 2013. She is currently general counsel and company secretary and a member of the group executive committee of ABB Limited, a pioneering technology leader in electrification products, robotics and motion, industrial automation and power grids. The company is headquartered in Switzerland. She is a member of the board of directors of the American Chamber of Commerce in France. At ABB her responsibilities include Head of Legal and Integrity Group. She was formerly senior vice president and general counsel of The Airbus Group, formerly EADS Group, the European aerospace and defence company. Diane's legal experience and her knowledge of regulatory and compliance matters allows her to provide a unique perspective to the Board and its Committees.

### **Diane Schueneman, Non-executive Director**

Diane was appointed to the Board as a non-executive Director in June 2015. Diane has extensive experience in managing global, cross-discipline business operations, client services and technology in the financial services industry. She spent 37 years with Merrill Lynch and held senior roles with responsibility for banking, brokerage services and technology provided to the company's retail and middle market clients, and latterly for IT, operations and client services worldwide as senior vice president & head of global infrastructure solutions. As a consultant at McKinsey & Company she advised the IRS Commissioner in the US and has held a number of non-executive directorships.

### **Steve Thieke, Non-executive Director**

Steve was appointed to the Board as a non-executive Director in January 2014. He has four decades of experience in financial services, both in regulation and investment banking. Steve worked for the Federal Reserve Bank of New York for 20 years, where he held several senior positions in credit and capital market operations and banking supervision and later he became a non-executive director at the FSA. He has also held senior roles in investment banking and risk management with JP Morgan, where he spent ten years. He was head of the fixed income division, co-head of global markets, president and chairman of JP Morgan Securities, Inc. and head of the corporate risk management group, retiring from JP Morgan in 1999. He has significant board level experience, both in executive and non-executive roles, including spending seven years as a director of Risk Metrics Group, where latterly he served as chairman of the board, and nine years on the board of PNC Financial Services Group, Corp.

## Group Executive Committee

### **Jes Staley, Group Chief Executive, Executive Director**

See above for full biography.

**Tushar Morzaria, Group Finance Director, Executive Director**

See above for full biography.

**Paul Compton, Group Chief Operating Officer**

Paul joined Barclays as Group Chief Operating Officer in May 2016. In this role, Paul is responsible for leading the global Operations & Technology functions, driving the implementation of the structural reform and cost transformation programmes, and for the delivery of other major bank-wide projects. Prior to joining Barclays, Paul was the Chief Administrative Officer of JPMorgan Chase, and was accountable for overseeing global technology, operations, real estate and general services. Before being appointed in this role in 2013, Paul served as Co-Chief Administrative Officer for the Corporate & Investment Bank, Deputy Head of Operations for JPMorgan Chase, and head of the JPMorgan Chase Global Service Centre in India. Paul started his career at JPMorgan in 1997, and first led the overhaul of the wholesale bank's credit risk infrastructure, before taking on the role as Chief Financial Officer for the Investment Bank. Previous to JP Morgan, Paul spent 10 years as Principal at Ernst & Young in the Brisbane and New York offices. He has previously been a

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member of the Board of Directors of the Depository Trust and Clearing Corporation (DTCC) American Australian Association and the American Red Cross of Greater New York.

**Bob Hoyt, Group General Counsel**

Bob joined Barclays in October 2013 and is responsible for all legal and regulatory matters across Barclays as Group General Counsel. Previously, Bob was at PNC Financial Services Group, where he was General Counsel and Chief Regulatory Affairs Officer, having previously served as Deputy General Counsel since 2009. Between 2006 and 2009, Bob served as General Counsel of the US Department of the Treasury, where he was the Chief Legal Officer of the department and a senior policy advisor to Secretary Henry M. Paulson, Jr. Prior to that Bob served at the White House where he was Special Assistant and Associate Counsel to President George W. Bush. Earlier in his career, Bob was a partner in the Securities, Litigation and Corporate departments of the law firm of Wilmer Cutler Pickering Hale and Dorr (WilmerHale).

**Tristram Roberts, Group Human Resources Director**

Tristram is the Group Human Resources Director. Tristram joined Barclays in July 2013 as HR Director for the Investment Bank. His remit was expanded in May 2014 to include HR responsibilities for Barclays Non-Core, and became the Group HR Director in December 2015. Prior to Barclays, Tristram was Head of Human Resources for Global Functions and Operations & Technology at HSBC Holdings PLC, as well as group head of performance and reward. Previously, he was group reward and policy director for Vodafone Group Plc. Tristram began his career in consulting. He became a partner with Arthur Andersen in 2001 and was subsequently a partner with both Deloitte and KPMG.

**Michael Roemer, Group Head of Compliance**

Mike joined Barclays in January 2011 as the Head of Internal Audit. Mike joined Barclays from CIT Group where he was the chief auditor, reporting directly to the board audit committee and having global responsibility for CIT Group's internal audit function. Mike has 27 years' experience in internal audit, with 23 years of that time spent at JP Morgan. Mike currently serves on the advisory board of the Make-A-Wish Foundation of Metro New York where he is audit committee chair. He also serves on the board of Ronald McDonald House of New York, Inc. where he is also audit committee chair. In 2016, the LGBT Agenda (Lesbian, Gay, Bisexual and Transgender) announced Mike's appointment as the new ExCo sponsor.

**Amer Sajed, CEO, Barclaycard International**



Amer Sajed was appointed Chief Executive Officer for Barclaycard, the global consumer payments business of the Barclays Banking Group, in May 2015. Barclaycard is a leading payments company with more than 15,000 employees, £40bn in net loans and advances and 28m customers and clients. In 2015, Barclaycard enabled payments globally with a value of more than £293bn and contributed 30% of Barclays PBT. Prior to his appointment as CEO for Barclaycard Amer served as Chief Executive Officer for Barclaycard US, the payments arm of Barclays in the United States. During his five years leading the US business it doubled in size to rank as one of the top ten credit card companies locally. Amer joined Barclaycard in August of 2006. Before assuming the US post, he was Chief Executive Officer for UK Cards. From 2010 to 2012, Amer also oversaw Barclays South African cards issuing and acquiring businesses. Before coming to Barclaycard, Amer worked at Citigroup for 20 years in various roles most recently overseeing the travel and affluent segment. Previously, he served in senior finance roles. Amer served on the Board of Visa Europe from July 2015 to June 2016.

**Tim Throsby, President, Barclays International and Chief Executive Officer, Corporate and Investment Bank**

Tim Throsby is President of Barclays International and Chief Executive Officer of the Corporate and Investment Bank at Barclays. Based in London, he is a member of the Group Executive Committee. Prior to joining Barclays in January 2017, Tim worked for JP Morgan where he held a variety of senior management roles, most recently serving as Global Head of Equities. Tim has had an extensive career in banking and asset management, working initially for Credit Suisse and Macquarie, before joining Goldman Sachs in 1995 as a Managing Director and Co-Head of Equity Derivatives for Asia. In 2002, he joined Lehman Brothers to lead the Asia Equities Division, before relocating to New York in 2004 to run the global Equity Derivatives business as well as risk arbitrage. In

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2005, he became President of Citadel Asia where he oversaw the investment firm's Asia business. He serves on the board of Human Dignity Trust, and is a school governor at the Ark Oval Primary Academy.

**CS Venkatakrishnan, Chief Risk Officer**

Venkat joined as Chief Risk Officer in March 2016. Venkat is responsible for helping to define, set and manage the risk profile of Barclays. He has over 20 years of financial market and risk management expertise. Venkat worked at JP Morgan from 1994, most recently as Head of Model Risk and Development and Operational Risk. Prior to this, he worked in fixed income structuring at the JP Morgan Investment Bank. This followed upon 14 years in JP Morgan Asset Management where he held senior positions in the Global Fixed Income business.

**Ashok Vaswani, CEO, Barclays UK**

Ashok joined Barclays in 2010, managing the credit card business across the UK, Europe and the Nordics, becoming chairman of Entercard. He went on to manage Barclays in Africa, Barclays Retail Business Bank globally and Barclays Personal and Corporate Banking. Ashok represents Barclays as a Non-Executive director on the Board of Barclays Africa Group Limited and is a member of the Board of Directors of Telenor ASA and a member of the Trustee Board at Citizens Advice. He also sits on the advisory boards of a number of institutions such as Rutberg & Co and is Founder Director of Lend-a-Hand, a non-profit organisation focused on rural education in India. Ashok has previously served on the advisory boards of SP Jain Institute of Management, Insead Singapore and Visa Asia Pacific. Prior to Barclays, Ashok was a partner with a J P Morgan Chase funded private equity firm - Brysam Global Partners, which focused on building retail financial service businesses in emerging markets. Ashok also spent 20 years with Citigroup where his last position was as CEO, Asia Pacific. He was also a member of the Citigroup Operating Committee, the Citigroup Management Committee and the Global Consumer Planning Group.

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**Section 13(r) to the US Securities Exchange Act of 1934 (Iran sanctions and related disclosure)**

Section 13(r) of the US Securities Exchange Act of 1934, as amended (the Exchange Act ) requires each SEC reporting issuer to disclose in its annual and, if applicable, quarterly reports whether it or any of its affiliates have knowingly engaged in certain activities, transactions or dealings relating to Iran or with the Government of Iran or certain designated natural persons or entities involved in terrorism or the proliferation of weapons of mass destruction during the period covered by the report. The requirement includes disclosure of activities not prohibited by US or other law even if conducted outside the US by non-US companies or affiliates in compliance with local law. Pursuant to Section 13(r) of the Exchange Act we note the following in relation to activity occurring in 2016, the period covered by this annual report, or in relation to activity we became aware of in 2016 relating to disclosable activity prior to the reporting period. Barclays earned total revenue of less than £30,000 in 2016 from the activities disclosed below.

**Legacy guarantees**

Barclays entered into several guarantees for the benefit of Iranian banks between 1993 and 2006 in connection with the supply of goods and services by Barclays' customers to Iranian buyers. These were counter guarantees issued to the Iranian banks to support guarantees issued by these banks to the Iranian buyers. The Iranian banks and a number of the Iranian buyers were then designated as Specially Designated Nationals ( SDNs ) by the U.S. Treasury Department's Office of Foreign Assets Control ( OFAC ). In addition, Barclays entered into similar guarantees between 1993 and 2005 for the benefit of a Syrian bank that is now an SDN. Some of the underlying buyers related to the Syrian guarantees have also been designated as SDNs.

The guarantees have been issued either on:

- (i) an extend or pay basis, which means that, although the guarantee is of limited duration on its face, until there is full performance under the contract to provide goods and services, the terms of the guarantee require Barclays to either maintain the guarantee or pay the beneficiary bank the full amount of the guarantee, or
- (ii) the basis that Barclays obligations can only be discharged with the consent of the beneficiary counter party.

Barclays is not able to exit its obligations under the guarantees unilaterally, and thus maintains a limited legacy portfolio of these guarantees. The guarantees were in compliance with applicable laws and regulations at the time at which they were entered into. Revenue in the amount of less than £11,000 was received in the year ended 31 December 2016.

Since the implementation of the Joint Comprehensive Plan of Action ( JCPOA ) on 16 January 2016, Barclays has terminated a number of these Iran-related legacy guarantees and intends to terminate the remainder where agreement can be reached with the counterparty, in accordance with applicable law. All payments made in connection with termination of the guarantees have been made in compliance with applicable laws and regulations.

### **Lease payments**

Barclays is party to a long-term lease, entered into in 1979, with the National Iranian Oil Company ( NIOC ), pursuant to which Barclays rents part of NIOC House in London to house a Barclays bank branch. NIOC is the custodian trustee for the NIOC Pension Fund. The lease is for 60 years, contains no early termination clause and has 23 years remaining. Barclays makes quarterly lease payments to Naft Trading and Technology Ltd, a wholly-owned subsidiary of the NIOC Pension Fund in respect of this lease. NIOC is wholly owned by the Iranian Government and was an SDN until it was delisted by OFAC and EU in January 2016 following implementation of sanctions relief under the Joint Comprehensive Plan of Action (JCPOA) with Iran. In December 2012, NIOC Pension Fund was sanctioned in the UK, by HM Treasury. As a result of the listing, lease payments were made to a frozen account at Turkiye Is Bankasi in line with UK regulations. However, in 2014, Turkiye Is Bankasi refused to accept any further payments into the frozen account, preventing Barclays from making further lease payments. Barclays accrued the ongoing rental payments on its books until November 2016, when Turkiye Is Bankasi confirmed they would accept payments again into the frozen

## Additional information

account. At this time the accrued lease payments were made and quarterly lease payments have restarted. Sanctions on NIOC Pension Fund were lifted on 18 January 2017. Barclays attributed no revenue in 2016 in relation to this activity.

### Local Clearing System

Banks in the United Arab Emirates ( UAE ), including certain of the Iranian banks that are or were SDNs, participate in the various banking payment and settlement systems used in the UAE (the UAE Clearing Systems ). Barclays, by virtue of its banking activities in the UAE, participates in the UAE Clearing Systems, and its participation in the UAE Clearing Systems is in compliance with applicable laws and regulations. However, in order to help mitigate the risk of participating in transactions in which participant Iranian SDN banks may be involved, Barclays has implemented restrictions relating to its participation in the UAE Image Cheque Clearance System (ICCS), the UAE Funds Transfer System (FTS), the Direct Debit System (DDS) Automated Teller Machine (ATM) / Cheque Deposit Machine (CDM) activity as well as restricting activity via the Wages Protection Scheme (WPS). Barclays attributed no revenue in 2016 from the SDN banks in relation to its participation in the UAE Clearing Systems.

### Commercial Mortgage

On 24 May 2013, a Barclays customer and its director were designated by OFAC under the Non-Proliferation of Weapons of Mass Destruction ( NPWMD ) regime. Both the customer and the director were listed in mid-January 2016 as a result of the implementation of the JCPOA. The customer continues to hold a commercial mortgage with Barclays. The terms and conditions of the commercial mortgage do not allow for an early exit and Barclays is legally required to maintain the loan until the maturity date or until the customer defaults on payments. Repayments of the mortgage by the customer are being made in accordance with applicable laws and regulations. Revenues earned by Barclays throughout 2016 were less than £18,000.

### New OFAC Designees

On 31 March 2016, a Barclays retail customer was designated under the Specially Designated Global Terrorist ( SDGT ) regime by OFAC. The customer's GBP account was opened in 2000, subsequently became dormant, and was closed in July 2003. Upon designation, the account balance was moved to an internal dormant account preventing funds from being paid outside of Barclays. No revenue was earned from the relationship in 2016.

In March 2016, a company which was a Barclays retail customer was designated under the Specially Designated Global Terrorist ( SDGT ) regime by OFAC, in addition to the company director and one of the company officials who also had accounts with Barclays. The accounts were closed wherever possible with the remaining balances being moved to a sundry account in accordance with applicable laws. One GBP credit card remains open but blocked to

prevent spending. Repayments by the customer are being made in accordance with applicable laws and regulations. Barclays earned less than £850 in revenue from the three relationships in 2016.

### **Payments notified**

Barclays Zimbabwe held an account for a relief, rescue, and medical aid organisation owned and controlled from within Iran and funded by the Government of Iran. The account was opened for the purpose of providing free-of-charge medical services via a voluntary medical centre established through a memorandum of understanding (MOU) between the Government of Zimbabwe and the organisation. Neither the organisation nor its officials are designated by OFAC. The relationship was exited at the customer's request on 30 June 2016. Barclays earned less than £150 in revenue throughout its relationship with the customer.

Barclays UK holds an account for a UK-based humanitarian organisation, which opened its office in Democratic People's Republic of Korea in 2003 and implemented a small project. Barclays has processed non-USD payments to fund the office in North Korea and the projects that are run out of the office, which work to improve the lives of children in North Korea. The beneficiary bank is listed under the NPWMD regime. Barclays earned £70 in revenue from the activity.

Barclays holds a relationship with HMRC, a government agency which received funds from an OFAC SDN on the SDGT list in relation to the settlement of tax liabilities with the UK Government. The payment was received by Barclays and credited to the HMRC account. The payment activity was covered by licenses issued by OFAC and HM Treasury. Barclays earned £40 in revenue from the activity.

Barclays processed a payment of £106.13 from a UK resident customer, which was ultimately remitted to the Iranian Embassy in Russia. The funds relating to the original transaction were settled by a non-Barclays related merchant acquirer, which was subsequently reimbursed by Barclays. No direct monies were paid to the Iranian Government by Barclays. Revenues earned by Barclays in 2016 were negligible.

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 Additional Information

**Summary of Barclays Group share and cash plans and long-term incentive plans**

Barclays operates a number of share, cash and long-term incentive plans. The principal plans used for awards made in or, in respect of, the 2016 performance year are shown in the table below. Awards are granted by the Board Remuneration Committee, and are subject to the applicable plan rules. Barclays has a number of employee benefit trusts which operate with these plans. In some cases the trustee purchases shares in the market to satisfy awards; in others, new issue or treasury shares may be used to satisfy awards where the appropriate shareholder approval has been obtained. Maria Ramos, Chief Executive of Barclays Africa Group Limited, also participates in share and cash plans and long-term incentive plans of Barclays Africa Group Limited.

**Summary of principal share and cash plans and long-term incentive plans**

Name of plan	Eligible employees	Executive		Delivery	Design details
		Directors	eligible		
<b>Deferred Share Value Plan (DSVP)</b>	All employees (excluding Directors)	No		Deferred share bonus typically released in annual instalments over a three, five or seven year period, dependent on future service and subject to	Plan typically used for mandatory deferral of a proportion of bonus into Barclays shares where bonus is above a threshold (set annually by the Committee)  This plan typically works in tandem with the CVP

malus provisions

Deferred share bonus vests over three, five or seven years in equal annual instalments dependent on future service

Vesting is subject to malus, and suspension provisions and the other provisions of the rules of the plan

Dividend equivalents may be released based on the number of shares under award that are released

On cessation of employment, eligible leavers normally remain eligible for release (on the scheduled release dates) subject to the Committee and/or trustee discretion. For other leavers, awards will normally lapse

On change of control, awards may vest at the Committee's and/or trustee's discretion

For SVP awards made in respect of 2016 to Material Risk Takers ( MRTs ), a holding period of 6 months will apply to shares (after tax) on release



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 Additional information

<b>Share Value Plan (SVP)</b>	All employees (including executive Directors)	Yes	Deferred share bonus typically released in annual instalments over a three, five or seven year period, dependent on future service and subject to malus provisions	<p>The SVP is in all material respects the same as the DSVP described above. The principle differences are that executive Directors may only participate in the SVP and under the DSVP, if a MRT whose award is deferred over five or seven years resigns after the third anniversary of grant, they will be treated as an eligible leaver in respect of any unvested tranches of that award.</p>
<b>Cash Value Plan (CVP)</b>	All employees (excluding Directors)	No	Deferred cash bonus paid in annual instalments over a three, five or seven year period, dependent on future service and subject to malus provisions	<p>Plan typically used for mandatory deferral of a proportion of bonus where bonus is above a threshold (set annually by the Committee)</p> <p>This plan typically works in tandem with the DSVP</p> <p>Deferred cash bonus vests over three years in equal annual instalments dependent on future service</p> <p>Vesting is subject to malus, suspension provisions and the other provisions of the rules of the plan</p>

Participants may be awarded a service credit of 10% of the initial value of the award on the third anniversary of a grant

Change of control and leaver provisions are as for SVP

**Barclays  
LTIP**

Selected employees (including executive Directors) Yes

Awards over Barclays shares or over other capital instruments, subject to risk-adjusted performance conditions and malus provisions

Awarded on a discretionary basis with participation reviewed by the Committee

Awards only vest if the risk-adjusted performance conditions are satisfied over a three year period

Vesting is subject to malus, suspension provisions and the other provisions of the rules of the plan

Any Barclays shares released under the Barclays LTIP award (after payment of tax) will be subject to an additional holder period of no less than the minimum regulatory requirements (currently 6 months).

On cessation of employment, eligible leavers normally remain eligible for release (on the scheduled release dates) pro-rated for time and performance. For other leavers, awards will normally lapse

On change of control, awards may vest at the Committee's discretion



Additional information

<b>Sharesave</b>	All employees in the UK and Ireland	Yes	Options over Barclays shares at a discount of 20%, with shares or cash value of savings delivered after three to five years	HMRC tax advantaged plan in the UK and approved by the Revenue Commissioners in Ireland
				Opportunity to purchase Barclays shares at a discount price (currently a 20% discount) set on award date with savings made over three, five or seven year term
				Maximum individual savings of £250 per month ( 315 in Ireland)
				On cessation of employment, eligible leavers may exercise options and acquire shares to the extent of their savings for six months
				On change of control, participants may exercise options and acquire shares to the extent of their savings for six months
<b>Sharepurchase</b>	All employees in the UK	Yes	Barclays shares and dividend/matching shares held in trust for three to five	HMRC tax advantaged plan

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years

Participants may purchase up to £1,800 of Barclays shares each tax year

Barclays matches the first £600 of shares purchased by employees on a one for one basis for each tax year

Dividends received are awarded as additional shares

Purchased shares may be withdrawn at any time (though if removed prior to three years from award, the corresponding matching shares are forfeited).

On cessation of employment, participants must withdraw shares

Depending on reason for and timing of leaving, matching shares may be forfeited

On change of control, participants are able to instruct the Sharepurchase trustee how to act or vote on their behalf

**Global Sharepurchase**

Employees in certain non-UK jurisdictions

Yes

Barclays shares and dividend/matching shares held in trust for three to five years

Global Sharepurchase is an extension of the Sharepurchase plan offered in the UK

Operates in substantially the same way as Sharepurchase (see above)

Barclays approach to managing risks

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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. It contains information on how risk management functions are organised, how they ensure their independence and foster a sound risk culture throughout the organisation.

§ A discussion of how our risk management strategy is designed to foster a strong risk culture is contained on pages 347 to 348

§ A governance structure, encompassing the organisation of the function as well as executive and Board committees, supports the continued application of the Enterprise Risk Management Framework (ERMF). This is discussed in pages 345 to 346

§ The ERMF sets out the tools, techniques and organisational arrangements to ensure all material risks are identified and understood (see page 344)

§ Pages 348 to 351 describe group-wide risk management tools that support risk management, 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

### Introduction

Barclays engages in activities which entail risk taking, every day, throughout its business. This section introduces these risks, and outlines key governance arrangements for managing them. These include roles and responsibilities, frameworks, policies and standards, assurance and lessons learned processes. The Group's approach to fostering a strong Risk Culture is also described.

### Enterprise Risk Management Framework (ERMF)

The Group has clear risk management objectives and a strategy to deliver them through core risk management processes. The ERMF sets the strategic direction by defining clear standards, objectives and responsibilities for all areas of Barclays. It supports the CEO and CRO in embedding effective risk management and a strong Risk Culture.

The ERMF sets out:

§ Principal Risks faced by the group

§ Risk Appetite requirements

§ Roles and responsibilities for risk management

§ Risk Committee structure.

A revised ERMF was approved by the Board in December 2016. This includes a revised risk taxonomy comprising eight Principal Risks. Credit, market, funding, operational and conduct Risk have been aligned to this new taxonomy and the management of these risks has not materially changed. Model Risk, Reputation Risk and Legal Risk are newly classified as Principal Risks in the latest version of the ERMF, reflecting the heightened importance of these risk types in the current environment. In 2016, Model Risk was managed in accordance with dedicated policies linked to the ERMF. These policies supplemented the key risk control frameworks underlying the financial risk types and applied to all businesses and functions in which financial risks were incurred or managed. Reputation Risk was considered as part of Conduct Risk and Legal Risk was included as a sub-risk type under Operational Risk. In this Annual Report, the Risk Management sections (page 344 to 403) follows the new Principal Risk taxonomy of eight risks, reflecting our current approach to risk management. The Risk Performance sections follow the Principal Risk taxonomy (of five risks) which prevailed during 2016. Information on Reputation Risk Performance in 2016 is included as part of the Conduct Risk section (page 180), information on Legal Risk performance in 2016 can be found in the Material existing and emerging risks section (page 88), the Supervision and regulation section (page 182) and Note 29 to the



Financial Statements (page 272). The definition of the Three Lines of Defence and associated responsibilities were also revised. The ERMF also contains a revised governance structure, including new Group and Business Risk committees, with representation from the First and Second Lines of Defence.

## Principal Risks

The ERMF identifies Principal Risks and sets out responsibilities and risk management standards. Note that Legal, Reputation and Model risks are Principal Risks from January 2017 following Board approval in December 2016.

### 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: This comprises:

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

§ 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

§ Conduct risk: 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

§ 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

## **Risk Appetite for the Principal Risks**

Risk Appetite is defined as the level of risk which the firm is prepared to accept in the conduct of its activities. The Risk Appetite of the firm:

§ specifies the level of risk we are willing to take and why, to enable specific risk taking activities

§ considers all Principal Risks individually and, where appropriate, in aggregate

§ communicates the acceptable level of risk for different risk types; this may be expressed in financial or non-financial terms, and is measured and effectively monitored

§ describes agreed parameters for the firm's performance under varying levels of financial stress with respect to profitability

§ is considered in key decision-making processes, including business planning, mergers and acquisitions, new product approvals and business change initiatives.

Risk Appetite is approved and disseminated across legal entities and businesses, including by use of Mandate and Scale limits to enable and control specific activities that have material concentration risk implications for the firm. These limits also help reduce the likelihood and size of one-off losses. The Risk Appetite must be formally reviewed on at least an annual frequency in conjunction with the Medium Term Planning (MTP) process and approved by the Board.

Barclays approach to managing risks

[Risk management strategy, governance and risk culture](#)

## **Roles and responsibilities in the management of risk – the Three Lines of Defence**

All colleagues have a responsibility to contribute to the risk management of the group. These responsibilities are set out in the [Three Lines of Defence](#) . In 2016 these definitions were simplified. Regardless of their function, all teams who manage processes in the firm are responsible for designing, implementing, remediating, monitoring and testing the controls for those processes.

### **First Line of Defence:**

The First Line comprises all employees engaged in the revenue generating and client facing areas of the firm and all associated support functions, including Finance, Treasury, Technology and Operations, Human Resources etc. Employees in the first line are responsible for:

§ identifying all the risks in the activities in which they are engaged, and developing appropriate policies, standards and controls to govern their activities

§ operating within any and all limits which the Risk and Compliance functions establish in connection with the Risk Appetite of the firm

§ escalating risk events to senior managers and Risk and Compliance.

Internal controls are critical to running a cost-effective and stable business. To ensure these controls remain strong, sustainable, and efficient the new strategic position of Chief Controls Officer has been created. The Chief Controls Office will help to maintain and enhance an effective and consistent control framework across the organisation.

The first line must establish their own policies and controls (subject to the Controls Framework of the firm), particularly with respect to operational activities, and require their colleagues to manage all controls to specified tolerances. These control-related activities are also considered First Line and are permitted so long as they are within any applicable limits established by Risk or Compliance. All activities in the first line are subject to oversight from the relevant parts of the second and third lines.

### **Second Line of Defence:**

Employees of Risk and Compliance comprise the Second Line of Defence. The role of the Second Line is to establish the limits, rules and constraints under which first line activities shall be performed, consistent with the Risk Appetite of the firm, and to monitor the performance of the First Line against these limits and constraints.

The Second Line may not establish limits for all First Line activities, especially those related to Operational Risk. The controls for these will ordinarily be established by Controls Officers operating within the Controls Framework of the firm, under the oversight of the Second Line.

The Second Line can also undertake certain additional activities if, in the judgement of the Group CRO, this will reduce the firm's exposure to risk.

### **Third Line of Defence:**

Employees of Internal Audit comprise the Third Line of Defence. They provide independent assurance to the Board and Executive Management over the effectiveness of governance, risk management and control over current, systemic and evolving risks.

The Legal department does not sit in any of the three lines, but supports them all. The Legal department is, however, subject to oversight from Risk and Compliance, with respect to Operational and Conduct Risks.

### **Roles and responsibilities in the management of risk – risk committees**

Business Risk Committees consider Risk matters relevant to their business, and escalate as required to the Group Risk Committee (GRC), whose Chairman in turn escalates to Board Committees and the Board.

There are five Board-level fora which review and monitor risk across the Group. These are: The main Board, the Board Risk Committee, the Board Audit Committee, the Board Reputation Committee and the Board Remuneration Committee.

The Chairman of each Committee prepares a statement each year on the committee's activities, which is included in the governance section.

## **The Board**

One of the Board's (Board of Directors of Barclays PLC) responsibilities is the approval of Risk Appetite (see the Risk Management and Strategy section on page 348), which is the level of risk the Group chooses to take in pursuit of its business objectives. The Group CRO (GCRO) 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. It oversees the management of the most significant risks through regular review of risk exposures. Executive management responsibilities relating to this are set out in the ERMF.

### **The Board Risk Committee (BRC)**

The BRC monitors the Group's risk profile against the agreed financial appetite. Where actual performance differs from expectations, the actions taken by management are reviewed to ensure 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 executive directors. The Group Finance Director (GFD) and the GCRO attend each meeting as a matter

of course.

The BRC also considers the Group's risk appetite statement for operational risk and evaluates the Group's operational risk profile and operational risk monitoring.

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Barclays approach to managing risks

## Risk management strategy, governance and risk culture

The BRC receives regular and comprehensive reports on risk methodologies, the effectiveness of the risk management framework, and the Group's risk profile, including the key 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 CRO or senior risk managers in the businesses.

### **The Board Reputation Committee (RepCo)**

The RepCo reviews management's recommendations on conduct and reputational risk and the effectiveness of the processes by which the Group identifies and manages these risks. It also reviews and monitors the effectiveness of Barclays' Citizenship strategy, including the management of Barclays' economic, social and environmental contribution.

In addition, the Board Audit and Board Remuneration Committees receive regular risk reports to assist them in the undertaking of their duties.

### **The 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 quarterly review of the adequacy of impairment allowances, which it reviews relative to the risk inherent in the portfolios, the business environment, the Group's policies and methodologies and the performance trends of peer banks. The Chairman of the BAC also sits on the BRC.

### **The Board Remuneration Committee (RemCo)**

The RemCo receives a detailed report on risk management performance from the BRC, regular updates on the risk profile and proposals on an ex-ante and ex-post risk adjustments to variable remuneration. These inputs are considered in the setting of performance incentives.

### **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:

§ Financial and Operational risk profile

§ Risk perspective on medium-term plans and strategy

§ Risk Appetite

§ Results of stress tests, including CCAR

§ Risk inputs into remuneration decisions

§ Other technical topics, e.g. Model risk.

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 firm.

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 ensuring the processes for creating reports include appropriate controls and that these 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.

#### **Group CEO Officer (CEO)**

The CEO is accountable for leading the development of Barclays' strategy and business plans that align to our Goal, Purpose and Values within the approved Risk Appetite, and for managing and organising executive management to ensure these are executed. 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 Chief Risk Officer, Chief Compliance Officer and Group General Counsel, and all Chief Executive officers of business units. He must work with them to embed a strong Risk Culture within the firm, with particular regard to the identification, escalation and management of risk matters.

#### **Group Chief Risk Officer (CRO)**

The Group CRO leads the Risk Function across Barclays. His responsibilities include developing and maintaining the ERMF and to clearly articulate Risk Culture objectives. Specific accountabilities include:

- § preparing and recommending the firm's Risk Appetite to the Board Risk Committees
- § developing, operating and maintaining a comprehensive risk management framework for Barclays to monitor and manage the risk profile of the firm against the approved Risk Appetite
- § providing accurate, transparent and timely reporting to the Board that compares the Risk Appetite set for Barclays and the businesses (by risk type and in aggregate where appropriate), against the actual Risk Profile of the firm under normal and stressed scenarios
- § defining the risk taxonomy (Principal Risks) and ensuring it remains relevant and comprehensive
- § bringing a risk perspective to compensation decisions
- § reporting to the Group Wide Risk Committee, the Group Executive Committee, the Board and its relevant committees including the Board Risk Committee, regulators and other stakeholders on Barclays' risk positions, adherence to Risk Appetite and enterprise wide risk and control.

**Chief Compliance Officer**

The Chief Compliance Officer is accountable to the Group CEO for the oversight of regulated activities undertaken by the Group, and leads the Compliance Function across Barclays. Specific accountabilities include:

- § ensuring the Group's Conduct and Reputation Risks are effectively managed and escalated to the Board where appropriate
- § setting minimum standards through compliance policies applicable globally and monitoring breaches, specially 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
- § ensuring there is a robust whistleblowing process in place on an enterprise wide basis and for ensuring it is effectively managed
- § using mandate to access any part of the organisation and any information, 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 of that could materially violate approved Risk Appetite guidelines.





Barclays approach to managing risks

[Risk management strategy, governance and risk culture](#)

## **Group General Counsel**

The Group General Counsel is required to:

§ Develop and maintain the Legal Risk Framework

§ Define the Legal Risk Policies

§ Develop the Group-wide and Business Risk Appetite for Legal Risk.

## **Senior Managers Regime**

A number of Members of the Board, the majority of the 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:

1. take reasonable steps to ensure that the business of the firm for which they are responsible is controlled effectively
2. take reasonable steps to ensure that the business of the firm for which they are responsible complies with relevant regulatory requirements and standards of the regulatory system
3. take reasonable steps to ensure that any delegation of their responsibilities is to an appropriate individual and that they oversee the discharge of the delegated responsibilities effectively

4. disclose appropriately any information to the FCA or PRA, which they would reasonably expect notice. The SMR applies to specific legal entities. Within Barclays, the legal entities which are subject to the SMR are Barclays Bank PLC, Barclays Capital Securities Limited and Barclays Bank Trust Company Limited and the reference to firm above should be construed accordingly

## **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 firm. Policies describe what must be done

§ Standards set out the key controls that ensure the objectives set out in the Policy are 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. In particular, frameworks, policies and standards associated with the Principal Risks are owned and written by the second line of defence.

The Group CRO is accountable for ensuring that frameworks, policies and associated standards are developed and implemented for each of the Financial Principal Risks, Operational Risk and Model Risk and that they are subject to limits, monitored, reported on and escalated as required. The Chief Compliance Officer is likewise accountable for Conduct Risk and Reputation Risk, and the Group General Counsel for Legal Risk. The Group CRO and Group Chief Compliance Officer have the right to require amendments to any Frameworks, Policies or Standards in the firm, 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, which includes testing specific elements of the control environment documented in standards and checking that control testing activities are reliable, to provide confidence to the Board in the risk and control framework.

The Credit Risk Review Group (CRRG) provides an independent review and monitoring of the quality and condition of all the wholesale loan and derivative portfolios through a review of the overall credit sanctioning process. CRRG has a mandate from the CRO and has direct access to the CRO and to the BRC.

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 Group. The BAC 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 Group.

### **Learning from our mistakes**

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

Barclays has implemented an updated Group Lessons Learnt Standard as part of the ERMF, setting out requirements for completing Lessons Learnt Assessments in response to significant events. The approach to Lessons Learnt has been further enhanced with the implementation of a new process and system of record during 2016 and fulfils the Group's Salz commitments by ensuring a consistent and effective approach applicable to all Principal Risks. The approach is directly aligned to the three lines of defence model (see page 345), with businesses and functions accountable for undertaking lessons learnt assessments; the second line providing input, oversight and challenge; with independent review by Internal Audit.

Core components of the Lessons Learnt approach include:

§ defined triggers for when Lessons Learnt Assessments must be completed

§ requirements and guidance for root cause analysis to identify the causes of events within the Group

§ templates to ensure conclusions are reported consistently throughout management committees

§ a central system to record completed Lessons Learnt Assessments and to facilitate sharing across the Group.

### **Barclays Risk Culture**

Barclays defines Risk Culture as norms, attitudes and behaviours related to risk awareness, risk taking and risk management. At Barclays this is reflected in how we 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 all aspects of colleagues working relationships, specifically (but not exclusively) with other Barclays employees, customers and clients, governments and regulators, business partners, suppliers, competitors and the broader community.

Barclays approach to managing risks

## Risk management strategy, governance and risk culture

### Definition of Risk Culture and its determinants

We review our culture through the lens of four determinants, associated with desired outcomes:

§ **Management and governance:** Consistent tone from the top; responsibilities are clear to enable identification and challenge

§ **Motivation and incentives:** The right behaviours are rewarded and modelled

§ **Competence and effectiveness:** Colleagues are enabled to identify, coordinate, escalate and address risk and control matters

§ **Integrity:** Colleagues are willing to meet their risk management responsibilities; colleagues escalate issues on a timely basis.

The rest of this section sets out key elements of our approach to embedding a strong Risk Culture.

### Management and governance

Leaders must demonstrate through their everyday behaviours the importance of strong risk management and ensure that their teams have sufficient resource and capability to manage the risk environment.

The simplification of the three lines of defence, as well as the reorganisation of business and risk committees with first and second lines of defence representation promote ownership and accountabilities for risk management.

### Motivation and incentives

Barclays seeks to ensure that compensation and promotion decisions take account of risk behaviours.

Management of risk and control is assessed as part of the annual performance appraisal process for all colleagues globally. Positive risk management behaviours will be rewarded and considered as part of promotion decisions, particularly to Managing Director.

### Competence and effectiveness

A risk capability scorecard was developed for the Board Risk Committee to monitor and measure capability, and to identify any areas for improvement. Barclays has also appointed a Chief Risk Officer for Treasury and Capital and a Head of Model Risk Management.

## Integrity

The Being Barclays global induction supports new colleagues in understanding how risk management culture and practices support how the Group does business and the link to Barclays values. The Leadership Curriculum covers building, sustaining and supporting a trustworthy organisation and is offered to colleagues globally.

The continued promotion and reinforcement of Barclays Values, as well as the Barclays Way was reflected in the near-perfect rate of completion of related training by employees. Messages and communications from the Chief Risk Officer emphasise the importance of early escalation of risk issues.

## Group-wide risk management tools

To support the 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 the Group's strategy. The following describes in further detail the group-wide risk management tools used as part of this process.

## Risk Appetite

Risk appetite is defined as the level of risk which the firm 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 the Group's current and evolving risk profile, allowing strategic and financial decisions to be made on an informed basis.

The Risk Appetite Framework is intended to achieve the following objectives:

- § Specify the level of risk we are willing to take and why, to enable specific risk taking activities
- § Consider all Principal Risks individually and in aggregate.
- § Consistently communicate the acceptable level of risk for different risk types; this may be expressed in financial or non-financial terms, and should be measured, as applicable, and effectively monitored
- § Describe agreed parameters for the firm's performance under financial stress with respect to profitability:

Profitability and loss metrics

Capital ratios

§ Be considered in key decision-making processes, including business planning, mergers and acquisitions, and business change initiatives

The risk appetite for financial risks is set by the Board on the basis of adverse stress tests, as it is during periods of macro-economic stress that these losses materialise. In order to articulate the risk appetite for the firm, the Board first defines the deterioration in the firm's performance it is willing to accept under stressed macroeconomic conditions. The acceptable deterioration is defined through a set of financial constraints which are reviewed by the Board on an annual basis. For 2017 these constraints are summarised in the following table.

#### Measure relevant to

##### strategy and risk

Profit after tax

Common Equity Tier 1

(CET1)

##### Link between strategy and risk profile

Fundamental performance of the Bank and underpins the firm's capacity to make capital distributions.

Monitor capital adequacy in relation to capital plan, targets and regulatory hurdle rates.

Barclays businesses run the stress test(s) as a fully integrated part of the annual Medium Term Planning (MTP) process, to ensure that the risk appetite businesses demand is based on the businesses' most recent strategic plans. The deterioration of financial performance as a result of the stress test is subsequently compared to the tolerances agreed by the Board. With Board approval the risk appetite is allocated back to individual businesses and utilisation is monitored regularly and reported to Board on a quarterly basis. This approach ensures that businesses' risk appetite proposals are based on their latest strategic plans and allows the Board to allocate risk appetite such that it fully supports the firm's chosen strategy within acceptable boundaries of risk taking.

#### Mandate and scale

Mandate and scale is a risk management approach that seeks to formally review and control business activities to ensure 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 extensive 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 the Group.

For example, for leveraged finance and commercial property finance portfolios, there are a comprehensive series of limits in place to control exposure within each business and geographic sector. To ensure that limits are aligned 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 Group and individual business mandate

§ ensure activities remain of an appropriate scale relative to the underlying risk and reward

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§ ensure risk-taking is supported by appropriate expertise and capabilities.

The most material mandate and scale limits are designated as A-level (Board level) and B-Level (Group-level). 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 will result in

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## Risk management strategy, governance and risk culture

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 will include:

§ Group Risk Appetite

§ current exposure/MTP forecasts

§ risk return considerations

§ senior risk management judgement.

### **Stress testing**

Group-wide stress tests are an integral part of the MTP process and annual review of risk appetite. They aim to ensure that the Group's financial position and risk profile provide sufficient resilience to withstand the impact of severe economic stress. The 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) submission to the PRA.

The following diagram outlines the key steps in the Group-wide stress testing process, which are described below.

The Group-wide stress testing process begins with a detailed scenario setting process, with the GRC 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 the Group.

Businesses prepare detailed MTP business plans which form the baseline for the stress test assessment. The stress test process is detailed and comprehensive, 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 Principal Risk is provided in the table on page 350. 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.

There is robust governance in place with detailed review of stress testing methodology and results both within businesses (including sign-off by business CROs and CFOs) and by central functions.

The businesses stress test results are consolidated to form a Group view which is used to assess the stress impact on the Group's capital plans. For the latter, capital management actions such as reducing dividends or redeeming certain capital instruments may be considered. The Group also maintains recovery plans which take into consideration actions to facilitate recovery from severe stress or an orderly resolution. These actions are additional to those included in the Group-wide stress testing results.

The overall stress testing results are reviewed and signed off by the Board, following review by the GRC, BRC, Treasury Committee and ExCo.

Barclays approach to managing risks

Risk management strategy, governance and risk culture

## Summary of methodologies for Group-wide stress testing by risk type

### Principal Risk

#### Credit risk

#### Stress testing approach

§ **Credit risk impairment:** For retail portfolios businesses use regression models to establish a relationship between arrears movements and key macroeconomic parameters such as interest rates, inflation and unemployment, incorporating roll-rate analysis to estimate stressed levels of arrears by portfolio. In addition, house price reductions (for mortgages) and increased customer drawdowns (for revolving facilities) lead to higher LGDs 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 such as GDP, inflation and interest rates.

§ **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:** All 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

#### Interest Rate Risk in the Banking Book & Liquidity Risk:

§ The risk of a mismatch between assets and liabilities, leading to funding difficulties, is assessed. Businesses apply scenario variables to forecasts of customer loans and advances and deposits levels, taking into account management actions to mitigate the impact of the stress which may impact business volumes. The Group funding requirement under stress is then estimated and takes into account lower availability of funds in the market.

§ The analysis of funding risk also contributes to the estimate of stressed income and costs:

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 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 key risks (as listed above) into consideration when assessing Barclays' 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 funding 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.

### **Operational risk, and Conduct risk**

§ Operational risk is generally not impacted as there is no direct link to the stress economic scenario. However, it is included as part of the reverse stress testing framework that incorporates assessment of idiosyncratic operational risk events.

In 2016, the internal Group-wide stress testing exercise was run as part of the MTP process, where the Group assessed the impact of an Adverse global recession scenario. This was used for the MTP Risk Review and risk appetite setting process.

The Group-wide stress testing framework also includes reverse stress testing techniques which aim to identify the circumstances under which the Group's business model would no longer be viable, leading to a significant change in business strategy and to identify 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 home loans business, affordability thresholds incorporate stressed estimates of interest rates. In investment banking, 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 Group-wide stress tests, the Group also runs regulatory stress tests.

In 2016, 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 November 2016, and support the BoE's aim for increased transparency as part of its stress testing framework.

Additionally, in 2016, the European Banking Authority ran a stress test across the major European banks. The results were published in July.

The firm is also subject to stress testing run by non UK regulators e.g. the Federal Reserve, which are typically focused at the local legal entity level.

Barclays approach to managing risks

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### **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 the 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 the 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 businesses' plans entail too high a level of risk, management will challenge the plans. This assessment is based on a comparison of 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 the Group.
- § Businesses may be asked to update their business plans to ensure the bottom-up risk appetite is within top-down appetite. There is also a detailed review of the stressed estimates and methodology used to translate the economic scenario to stressed estimates, as well as the management actions included in businesses' results to ensure that these are appropriate and realistic in a stressed environment.
- § Risk review meetings are held with the CEO, CFO, CRO and Treasurer of each business, where they present their business plans to the Group CRO and 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.

The BRC has overall responsibility for reviewing the Group's risk profile and making appropriate recommendations to the Board. The Board is ultimately responsible for approving the MTP and the Group's risk appetite. The risk appetite process ensures that senior management and the Board understand the MTP's sensitivities by risk type, and includes a set of limits to ensure the Group stays within appetite, as described above.



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.

§ Page 353 covers the aspects of the Group's risk management framework specific to credit risk, including committees and the Group reporting structure

§ As 66% of our regulatory capital is for credit risk, we devote pages 360 to 367 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, fully to honour their obligations to the firm, including the whole and timely payment of principal, interest, collateral and other receivables

#### Overview

The granting of credit is one of the Group's major sources of income and, as a Principal Risk, the Group dedicates considerable resources to its control. The credit risk that the Group faces arises mainly from wholesale and retail loans and advances together with the counterparty

credit risk arising from derivative contracts with clients. Other sources of credit risk arise from trading activities, including: debt securities, settlement balances with market counterparties; available for sale assets; and reverse repurchase loans.

Credit risk management objectives are to:

- § maintain a framework of controls to ensure credit risk-taking is based on sound credit risk management principles
- § identify, assess and measure credit risk clearly and accurately across the 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
- § ensure that risk-reward objectives are met

§ More information of the reporting of credit risk can be found on page 354.

## **Board oversight and flow of risk related information**

### **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 larger in number but smaller in value and are, therefore, managed on a homogenous portfolio basis.

Credit risk management responsibilities have been structured so that decisions are taken as close as possible to the business, while ensuring robust review and challenge of performance, risk infrastructure and strategic plans. The credit risk management teams in each business are accountable to the relevant Business CRO who, in turn, reports to the 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 policies 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 review and validation 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 entrusted with 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 the Group Senior Credit Officer (GSCO), the Group's most senior credit risk sanctioner. For exposures in excess of the GSCO's authority, approval by Group CRO is required. 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 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.



Barclays approach to managing risks

## Management of credit risk and the internal ratings-based approach

### Reporting

The Group dedicates considerable resources to gaining a clear and accurate understanding of credit risk across the business and ensuring 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 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.

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 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 guidelines to individual counterparties. Excesses are reported to the BRC.

### Monitoring performance and asset quality

Trends in the quality of the 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 the 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 127.

### **Loan loss rate (bps) Longer-term trends**

Note

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 2015 and 2016 figures exclude Africa

From a full year peak of 156bps at 31 December 2009, the LLR has been on an improving trend. By the end of 2011, the LLR of 77bps had returned to pre-crisis levels and was lower than the long-term average. The LLR fell from 2012 to 2014 and remained at a low level in 2015, increasing slightly in 2016 to 53bps.

### **Coverage ratios**

The impairment allowance is the aggregate of the identified and unidentified impairment (UI) balances. Impairment allowance coverage, or the coverage ratio, is reported at two levels:

§ credit risk loans (CRLs) coverage ratio, calculated as impairment allowances as a percentage of CRL balances

§ potential credit risk loans coverage ratio (impairment allowances as a percentage of total CRL and Potential Problem Loan balances).

§ See identifying potential credit risk loans on page 133 for more information for the criteria for these categories.

### **CRL coverage**

Notes

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a Some Non-core exposures are not reported as CRLs following the introduction of IFRS10, which accounts for these balances at fair value

b All historical figures exclude Africa

Appropriate coverage ratios will vary according to the type of product but can be broadly shown to have typical severity rates based upon historic analysis:

§ secured Retail home loans: 10%-25%

§ credit cards, unsecured and other personal lending products: 65%-85%

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## Management of credit risk and the internal ratings-based approach

§ corporate facilities: 30%-50%.

CRL coverage ratios would therefore be expected to be at or around these levels over a defined period of time.

Higher coverage in Retail unsecured and other is primarily driven by cards portfolio particularly in the UK and US, reflecting higher provisions pending full implementation of newly developed and independently approved models with enhanced methodology, following an impairment policy revision in Q3 2016.

In principle, a number of factors may affect the Group's overall coverage ratios, including:

**The mix of products within total CRL balances:** coverage ratios will tend to be lower when there is a high proportion of secured Retail and corporate balances within total CRLs. This is due to the fact that the recovery outlook on these types of exposures is typically higher than Retail unsecured 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 moved to CRL categories. As such balances attract a lower impairment requirement, the CRL coverage ratio will be lower.

**The balance of PPLs to CRLs:** the impairment requirements for PPLs are lower than for CRLs, so the greater the proportion of PPLs, the lower the PCRL coverage ratio.

**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 PCRL categories 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 127.

### 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<sup>1</sup>

Within the Wholesale portfolios, the Basel definitions of default are used as default indicators which have been aligned to the IAS 39 objective evidence of impairment. A default is triggered if individual identified impairment is recognised. Group definitions of default used are:

§ bank puts the credit obligation on a non-accrued status

§ bank makes a charge-off or account specific identified impairment resulting from a significant perceived decline in credit quality

§ bank sells the credit obligation at a material credit-related economic loss

§ bank consents to a distressed restructuring of the credit obligation where this is likely to result in a diminished financial obligation caused by the material forgiveness or postponement of principal, interest or fees

§ bank triggers a petition for obligor's bankruptcy or similar order

§ bank 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 the banking group

§ bank 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 the Group.

Wholesale accounts that are deemed to contain heightened levels of risk are recorded on graded watchlists (WL) comprising three 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. Should an account become impaired, it will normally, but not necessarily, have passed through each of the three categories, which reflects the need for increasing caution and control. 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

Note

<sup>1</sup> Includes certain Business Banking facilities which are recorded as Retail for management purposes.

Barclays approach to managing risks

## Management of credit risk and the internal ratings-based approach

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 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. The approach is consistent with the Group's policy of raising a collective impairment allowance as soon as objective evidence of impairment is identified. 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 and goes into default when it moves into recovery, normally 180 days. Impairment is considered at all stages of the customer's outstanding obligations.

The probability of default increases with the number of contractual payments missed, thus raising the associated impairment requirement.

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 treated 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.

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 case of customer bankruptcy or insolvency, associated accounts are charged off within 60 days of notification.

### Identifying potential credit risk loans

The Group reports potentially and actually impaired loans as PCRLs. PCRLs comprise two categories of loans: PPLs and CRLs.

PPLs are loans that are currently complying with repayment terms but where serious doubt exists as to the ability of the borrower to continue to comply with such terms in the near future. If the credit quality of a Wholesale loan on a WL deteriorates to the highest category, or a Retail loan deteriorates to delinquency cycle 2, consideration is given to including it within the PPL category.

Should further evidence of deterioration be observed, a loan may move to the CRL category. Events that would trigger the transfer of a loan from the PPL to the CRL category include a missed payment or a breach of covenant. CRLs

comprise three classes of loans:

**Impaired loans:** comprise loans where an individually identified impairment allowance has been raised and also include loans which are fully collateralised or where indebtedness has already been written down to the expected realisable value. This category includes all Retail loans that have been charged off to legal recovery. The category may include loans, which, while impaired, are still performing.

**Accruing past due 90 days or more:** comprises loans that are 90 days or more past due with respect to principal or interest. An impairment allowance will be raised against these loans if the expected cash flows discounted at the effective interest rate are less than the carrying value.

**Impaired and restructured loans:** comprises loans not included above where, for economic or legal reasons related to the debtor's financial difficulties, a concession has been granted to the debtor that would not otherwise be considered. Where the concession results in the expected cash flows discounted at the effective interest rate being less than the loan's carrying value, an impairment allowance will be raised. See Forbearance and other concession programmes below for more detail.

### **Allowances for impairment and other credit provisions**

The Group establishes, through charges against profit, impairment

allowances and other credit provisions for the incurred loss inherent in the lending book. Under IFRS, impairment allowances are recognised where there is objective evidence of impairment as a result of one or more loss events that have occurred after initial recognition, and where these events have had an impact on the estimated future cash flows of the financial asset or portfolio of financial assets. Impairment of loans and receivables is measured as the difference between the carrying amount and the present value of estimated future cash flows discounted at the financial asset's original effective interest rate. If the carrying amount is less than the discounted cash flows, then no further allowance is necessary.

As one of the controls to ensure that adequate impairment allowances are held, movements in impairment to individual names with a total impairment allowance of £10m or more are presented to the GSCO for approval.

### **Individually assessed impairment**

Impairment allowances are measured individually for assets that are individually significant, and collectively where a portfolio comprises homogenous assets and where appropriate statistical techniques are available. In terms of individual assessment, the principal trigger point for impairment is the missing of a contractual payment which is evidence that an account is exhibiting serious financial problems, and where any further deterioration is likely to lead to failure. Details of other trigger points can be found above. Two key inputs to the cash flow calculation are the valuation of all security and collateral, as well as the timing of all asset realisations, after allowing for all attendant costs. This method applies mainly in the Wholesale portfolios.

### **Collectively assessed impairment**

For collective assessment, the principal trigger point for impairment is the missing of a contractual payment, which is the policy consistently adopted across all credit cards, unsecured loans, mortgages and most other Retail lending. The calculation methodology relies on the historical experience of pools of similar assets; hence the impairment allowance is collective. The impairment calculation is typically based on a roll-rate approach, where the percentage of assets that move from the initial delinquency to default is derived from statistical probabilities based on historical experience. Recovery amounts are calculated using a weighted average for the relevant portfolio. This method applies mainly to the Retail portfolios and is consistent with Group policy of raising an allowance as soon as impairment is identified.

Unidentified impairment is also included in collective impairment.

### **Impairment for losses incurred but not specifically identified**

Unidentified impairment allowances are also raised to cover losses which are judged to be incurred but not yet specifically identified in customer exposures at the balance sheet date, and which, therefore, have not been specifically reported. The incurred but not yet reported calculation is based on the asset's probability of moving from the performing portfolio to being specifically identified as impaired within the given emergence period and then on to default within a specified period, termed as the outcome period. This is calculated on the present value of estimated future cash flows discounted at the financial asset's effective interest rate. The emergence and outcome periods vary across products.

### **Wholesale portfolios**

Impairment in the Wholesale portfolios is generally calculated by valuing each impaired asset on a case by case basis, i.e. on an individual assessment basis. A relatively small amount of Wholesale impairment relates to unidentified or collective impairment; in such cases, impairment is calculated using modelled Probability of Default (PD) x Loss Given Default (LGD) x Exposure at Default (EAD) adjusted for an emergence period.

### **Retail portfolios**

For Retail portfolios, the impairment allowance is mainly assessed on a collective basis and is based on the drawn balances adjusted to take into account the likelihood of the customer defaulting at a particular point in time (PD<sub>pit</sub>) and the amount estimated as not recoverable (LGD). The basic calculation is:

Impairment allowance = Total outstandings x PD<sub>pit</sub> x LGD

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The PDpit increases with the number of contractual payments missed thus raising the associated impairment requirement.

In Retail, the current policy also incorporates a high risk segment which is included in the unidentified impairment calculation. High risk segments are those which can be demonstrated to experience higher levels of loss within the performing segment. This segmentation allows for earlier identification of potential loss in a portfolio. Unidentified impairment is also referred to as collective impairment. This is to reflect the impairment that is collectively held against a pool of assets where a loss event has occurred, but has not yet been captured.

### Sensitivity of the impairment to key assumptions

#### Wholesale portfolios

Impairment in the Wholesale portfolios is generally calculated by valuing each impaired asset on a case by case basis, and is not therefore primarily model-driven. As such, the key assumptions that would have the most impact on impairment provisions in the Wholesale portfolios are the valuations placed upon security and collateral held and the timing of asset realisations.

When calculating impairment, estimated future cash flows are discounted at the financial asset's original effective interest rate. At present, in Wholesale portfolios, the impact of discounting is relatively small in itself but would rise with reference rates. In addition, to the extent that a rise in interest rates impacted economic growth and/or serviceability of Wholesale clients and customers, this would be expected to feed through in future impairment numbers.

#### Retail portfolios

For Retail portfolios, impairment is calculated predominantly using models. The models are developed using historical data and include explicit and implicit assumptions such as debt sale estimates, house price valuations and the distribution of accounts. Model monitoring and validation are undertaken regularly, at least annually, to ensure that models are fit for purpose. Further to this, the Group accounts for the impact of changes in the economic environment and lags resulting from the design of the models to ensure overall impairment adequacy. See Management adjustments to Models for Impairment for more information on key management judgements in 2016. See stress testing (page 161) for further information.

#### Emergence and outcome periods

To develop models to calculate the allowance for impairment it is first necessary to estimate the time horizons of these models. These time horizons are called the emergence and outcome periods. Emergence Period relates to the time between a loss event occurring and that event becoming apparent via the account becoming delinquent and attracting identified impairment. Outcome is an analytically derived period taken to capture lifetime defaults associated with the

observed loss event.

This methodology ensures that the Group captures the loss incurred at the correct balance sheet date. These impairment allowances are reviewed and adjusted at least quarterly by an appropriate charge or release of the stock of impairment allowances based on statistical analysis and management judgement. Where appropriate, the accuracy of this analysis is periodically assessed against actual losses. For further detail, see modelling of risk on pages 360 to 367.

### Wholesale portfolios

For Wholesale portfolios in corporate banking and investment bank, the emergence period is portfolio specific and is based on the anticipated length of time from the occurrence of a loss event to identified impairment being incurred. The emergence period in corporate banking is derived from actual case file review. This is periodically benchmarked against the time taken to move between risk grades in internal watchlists, from WL1 or 2 into WL3, which is the level of risk that will attract a collective impairment allowance. Both methodologies produce similar results for the emergence period, which is currently six months. Within corporate banking, post model adjustments can be made to increase the emergence period for certain industry sectors to reflect, for example, a benign environment. The average life of the investment bank portfolio is estimated to be 18 months, during which time Investment Bank is exposed to losses on the portfolio. However, it is expected that incurred losses would become apparent within six months, therefore the

investment bank also uses a six-month emergence period.

### Retail portfolios

During 2016, the Retail Impairment Policy was strengthened and required enhancements to modelling approaches to both emergence and outcome periods across the credit card portfolios, notably UK and US. Emergence periods at a product level, are shown in the table below.

### Emergence periods

Product Type	Emergence period (months)	
	2016	2015
Credit cards	3-3.5	2
Current Accounts	4	4
Unsecured Loans	4	4
Secured Loans	6	6

Businesses undertake regular analysis, at least annually, to validate that the minimum emergence periods above continue to reflect the actual observed time between the occurrence of a loss event and entry to an impaired state, in order to ensure they remain appropriate and provide sufficient coverage of future losses.

Where any shortfalls are identified at a business or portfolio level, the prescribed minimum emergence periods are increased to reflect our most up-to-date experience of customer behaviour.

The final approved emergence periods are incorporated within the rates used as part of the overall UI assessment, which now encompasses total outstanding balances on all accounts that are in order, and for which no identified impairment allowances are held.

Individual evidence based outcome periods are also derived at a business/portfolio level, Businesses are required to capture lifetime defaults allowing consideration to cure rates and future events, subject to a minimum floor of 80%.

Final outcome periods adopted are re-evaluated on an annual basis to ensure they continue to reflect the actual time elapsing from the initial indication of potential default to the default event.

## 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 WL 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 Barclays International 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 (see page 360) has occurred, when the customer is returned to an up-to-date status without having cleared the requisite level of arrears

§ for amortising products, which are performing on a programme of forbearance and meet the following criteria may be returned to the performing book classified as High Risk<sup>1</sup>:

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

#### Note

<sup>1</sup> 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.

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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 the 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. For the majority of products, the standard period for charging off accounts is six missed contractual payments (180 days past due date of contractual obligation) unless a Forbearance programme is agreed. Early points are prescribed for unsecured assets. For example, in case of customer bankruptcy or insolvency, associated accounts are charged off within 60 days of notification. See recovery information included in Analysis of Specific Portfolio and Asset Types section in the 2016 Annual Report.

### Foreclosures in process and properties in possession

Foreclosure is the process where the bank initiates legal action against a customer, with the intention of terminating the loan agreement whereby the bank may repossess the property subject to local law and recover amounts it is owed. This process can be initiated by the bank independent of the impairment treatment and it is therefore possible that the foreclosure process may be initiated while the account is still in collections (delinquent) or in recoveries (post charge-off) where the customer has not agreed a satisfactory repayment schedule with the bank.

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 the bank 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.

Held as other real estate owned (South Africa) refers to properties where the bank has taken legal ownership of the title as a result of purchase at an auction or similar and treated as other real estate owned within other assets on the bank's balance sheet.

### 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 ensure 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 2016, total write-offs of impaired financial assets decreased 12% to £2.0bn (2015: £2.28bn).

#### **Total write-offs of financial assets (£m)<sup>a</sup>**

Note

a 2016 figure excludes Africa

#### **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. The 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, the bank 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 occurs when, for reasons relating to the actual or perceived financial difficulty of an obligor, a concession is granted below the Group's current standard rates (i.e. lending criteria below the Group's current lending terms), that would not otherwise be considered. This includes all troubled debt restructures granted below our standard rates.

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Forbearance would typically be evident where the concession(s) agreed impact the ability to repay debt or avoid recognising a default with a lack of appropriate commercial balance and risk mitigation/structural enhancement of benefit to the Group in return for concession(s).

The following list is not exhaustive but provides some examples of instances that would typically be considered to be evidence of forbearance:

- § a reduction of current contractual interest rate for the sole purpose of maintaining performing debt status, with no other improvement to terms of benefit to the Group
- § non-enforcement of a material covenant breach impacting the counterparty's ability to repay
- § converting a fully or partially amortising facility to a bullet repayment at maturity, with no other improvement to terms of benefit to the Group, for the sole purpose of avoiding a payment default due to customer's inability to meet amortisation
- § extension in maturity date for a project finance facility that gives an effective contractual term longer than the underlying project contract being financed
- § any release of a material security interest without receiving appropriate value by way of repayment/ alternate security offered or other improvement in terms available to the Group commensurate with the value of the security released.

Where a concession is granted that is not a result of financial difficulty and/or is within our current market terms, the concession would not amount to forbearance. For example, a commercially balanced restructure within the Group's current terms which involves the granting concessions and receiving risk mitigation/structural enhancement of benefit to the Group would not be indicative of forbearance.

The following list (not exhaustive) gives some examples of instances

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### Management of credit risk and the internal ratings-based approach

that would not typically be considered to be forbearance:

§ temporary/permanent waivers/resets of covenants agreed in line with our current terms

§ amending contractual maturity to meet current lending terms that results in a previously amortising facility having a bullet repayment as a consequence of shorter maturity date

§ equity/warrants taken to increase return to the Group without compromising contractual interest

§ extension of maturity date where the extension is within the normally granted terms for the type of facility in question

§ release of a material security interest where commensurate value is received by way of repayment/ other security offered.

Cases where a technical default may have occurred, the Group has decided to reserve its position but does not consider the default to be sufficient to impact the counterparty's ability to pay, would not typically be considered forbearance (as the counterparty would continue to meet its payment obligations under existing terms).

The Troubled Assets Policy requires that a permanent record is retained of all individual cases of forbearance, and upon granting forbearance the counterparty is placed on WL. The counterparty then remains on WL and is flagged as being in forbearance for a minimum of 12 months from the date forbearance is applied. Counterparties may be removed from WL status within 12 months in exceptional circumstances, e.g. full repayment of facilities or significant restructuring. Counterparties placed on WL status are subject to increased levels of credit risk oversight.

Counterparties who have been granted forbearance are classified as a Basel 'unlikeliness' to pay default for capital purposes, with PD of 1 throughout the period that they remain classified as being in forbearance. This is on the basis that, without intervention by the Group, the counterparties are unlikely to meet their obligations in full which would lead to default.

Impairment is assessed on an individual basis and recognised where relevant impairment triggers have been reached including where counterparties are in arrears and require renegotiation of terms. Forbearance is considered to be an indicator that impairment may be present and an impairment test is performed for all cases placed in forbearance.

Given that these loans have already been assessed for impairment at the point of being classified as being in forbearance, the Group does not have additional procedures to evaluate the likelihood that these loans would default within the loss emergence and confirmation periods.

A control framework exists along with regular sampling to ensure policies for watchlist and impairment are enforced as defined and to ensure that 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. 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 for the remainder of its term, unless after 12 months it qualifies for reclassification, upon which it will be returned to the up-to-date book and classified as high risk for a further 12 month period. When the Group agrees to a forbearance programme with a customer, the impairment allowance recognises the impact on cash flows of the agreement to receive less than the original contractual payments. The Retail Impairment Policy prescribes the methodology for impairment of forbearance assets, which is measured by comparing the debt outstanding to the revised expected repayment. This results in

higher impairment, in general, than for fully performing assets, reflecting the additional credit risk attached to loans subject to forbearance.

Barclays has continued to assist customers in financial difficulty through the use of forbearance programmes. However, the extent of forbearance offered by the 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.

Please see the credit risk performance section on page 183 for details of principal Retail assets currently in forbearance.

### **Impairment of loans under forbearance**

Loans under forbearance programmes are subject to Group policy. In both Retail and Wholesale portfolios, identified impairment is raised for such accounts, recognising the agreement between the Group and customer to pay less than the original contractual payment and is measured using a future discounted cash flow approach comparing the debt outstanding to the expected repayment on the debt. This results in higher impairment, in general, being held for loans under forbearance than for fully performing assets, reflecting the additional credit risk attached to loans subject to forbearance.

### **Sustainability of loans under forbearance**

The Group monitors the sustainability of loans for which forbearance has been granted.

### **Wholesale portfolios**

In the Wholesale portfolios, counterparties that have been granted forbearance are placed on WL and therefore are subject to increased levels of credit risk oversight. Counterparties then remain on WL and are classified as being in forbearance with a PD of 1 for capital purposes for a minimum of 12 months from the date forbearance is applied until satisfactory performance is evidenced. Forbearance status and the related default treatment for capital can be removed after 12 months from being applied if any of the following criteria is met:

§ the counterparty no longer benefits from a concession below our current market rates or reverts back to their original lending terms (prior to the concession being applied)

§ the counterparty ceases to have any actual or perceived financial stress

§ a significant restructure takes place which leads to a significant improvement in the credit profile of the counterparty.

Counterparties may only be removed from being classified as being in forbearance with a PD of 1 for capital purposes within 12 months in exceptional circumstances, e.g. full repayment of facilities or significant restructuring that materially improves credit quality. Counterparties continuing to benefit from a concession below current market can be removed from WL and no longer be classified as in forbearance provided they do not meet any of the WL criteria and can evidence consistent satisfactory performance throughout the minimum twelve-month period.

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### Retail portfolios

In Retail portfolios, the type of forbearance programme offered should be appropriate to the nature and the expected duration of the customer's financial distress. 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 ensure suitability of the offer. When customers exit forbearance, the accounts are ring-fenced as a High Risk segment within the up-to-date book for a period of at least twelve months.

For disclosure on the Group's accounting policy with respect to impairment, see page 233 and Note 7.

### 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 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 the 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), a fraud 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
- § the account must have been on book at least nine months (i.e. nine months prior to the three-month qualification period)

§ no account should be re-aged more than once within any twelve-month period, or more than twice in a five year period.

Assets are considered to belong to a separate High Risk pool. Under High Risk, the performance of the assets is a risk characteristic and results in a higher probability of default being assigned to them in impairment models which meet the requirement of IAS 39, AG87-88. 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.

### 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 the 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 agreements (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.

Please refer to the maturity analysis for UK CRE and customers with interest-only home loans in the credit risk performance section in the 2016 Annual Report for more information.

### Environmental risk

The Group has a dedicated Environmental Risk Management team, as part of the central Credit Risk Management function, recognising that environment is a mainstream credit risk issue. Environmental issues are required considerations in credit risk assessment, and environmental risk standards are included in the Wholesale Credit Risk Control Framework.

The Group's approach to environmental credit risk management addresses risk under three categories, namely Direct risk and Indirect risk, which are covered below, and Reputation risk, on which more detail may be found on page 400.

**Direct risk** can arise when the Group takes commercial land as collateral. In many jurisdictions, enforcement of a commercial mortgage by the bank, leading to possession, potentially renders the 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, the Group's approach requires commercial land, if being pledged as collateral, to be subject to a screening mechanism. Where required further assessment of the commercial history of a piece of land and its potential for environmental contamination helps ensure any potential environmental degradation is reflected in the value ascribed to that security. It also identifies potential liabilities which may be incurred by the Group, if realisation of the security were to become

a possibility.

**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. The bank 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.

### **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 ,



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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.

### 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 home loans 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 the Group. Barclays now employs a 21-point scale of default probabilities. These are shown in page 121

§ **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 the Group's risk appetite framework. See page 348

§ **impairment calculation:** under IAS 39, many collective impairment estimates incorporate the use of PD and LGD models.

§ **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 report 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, corporates, 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. Barclays has 144 internally approved Wholesale models, of which 38 are used to calculate regulatory capital for credit exposures.

#### **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. 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, the Group adopts specific regulatory rules, methodologies and floors in its estimates to ensure 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 the 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 to ensure 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 client 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. Barclays has 235 internally approved retail models, of which 25 are used to calculate regulatory capital for credit exposures.

### 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.

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### 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 level 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.

### The control mechanisms for the rating system

Model risk has been identified as a risk to be managed under the ERMF. Consequently, the 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 Model Risk Policy cover:

- § model governance is anchored in assigning accountabilities and responsibilities to each of the main stakeholders:
  - model owner – each model must have a model owner who has overall accountability for the model
  - model developers – support the model owner and drive development according to model owner 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

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§ 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 the Group Models Database (GMD), which records model owners and developers

§ model owners must ensure there is 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 Independent Validation Unit (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. The model development teams have separate reporting lines to the Barclays UK and Barclays International Chief Risk Officers, who in turn report to the Barclays Chief Risk Officer.

Under the 3 lines of defence approach stated in ERMF, the actions of all parties with responsibilities under the Group Model Risk Policy are subject to independent audit 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 remediations 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 Independent Validation Unit 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, using conservative parameter assumptions.

To assess model discrimination performance, the IVU compares the rank-ordering of internal ratings with the pattern of defaults, if any, to construct the industry-standard Gini statistic or similar. The ordering of internal ratings is also compared to the ordering of internal and external comparator ratings where these are available.

Mobility metric and population stability index is also routinely calculated to infer relevant aspects of the model performance.

### Wholesale LGD models

To assess model calibration, model outputs are compared to the LGD observed on facilities that entered default in downturn periods, as requested by the regulator. Both internal and external data on observed LGD are examined, but preference is given to internal data, since these reflect Barclays' recovery policies. Comparisons are performed by product seniority and security status and for other breakdowns of the portfolio. Model outputs are also compared to the long-run average of observed LGD. The time-lapse between facility default and the closure of recovery is varied and may be long. In the construction of observed LGD, recoveries are discounted back to the date of default at a conservative interest rate, following regulatory guidance of at least 9%. As noted above, regulatory floors are in place for the LGD used in calculating regulatory capital for exposure types where few default observations are available.

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.

### Wholesale 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.

### Retail PD models

To assess rating philosophy, i.e. whether it is a Point-in-Time system or Through-the-Cycle system, the Independent Validation Unit produces migration indices to investigate relevant grade migration.

To assess model calibration, the Independent Validation Unit 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

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default rate.

To assess model discrimination performance, the IVU compares the rank-ordering of internal ratings with the pattern of defaults, if any, to construct the industry-standard Gini statistic or similar.

To assess model stability, the population distribution, the character distribution and parameter estimates are assessed individually.

A 0.03% regulatory floor is in place for the facility level PD used in calculating regulatory capital.

### 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 ensure 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. In the construction of observed LGD, recoveries are discounted back to the date of default at a conservative interest rate, following regulatory guidance. As noted above, regulatory floors are in place for the LGD used in calculating regulatory capital where appropriate (this includes but not limited to the non-zero LGD floor at account level, the collateral uncertainty consideration, the portfolio level LGD floor and UK property haircut floor).

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 ensure 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.

Table 84 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.

### 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, with their significance in terms of RWAs, model methodology or approach, numbers of years of data used, Basel asset class of the customer or client, and any regulatory thresholds applied. RWAs have been reported with the BUK and BI split. Please note that RWAs reported are as of Sep 16 since complete reconciled information was not published for Dec 16 at the time of reporting.

§ PD models listed in the table account for £106bn of total AIRB approach RWAs

§ LGD models listed in the table account for £119bn of total AIRB approach RWAs

**Table 84 IRB credit risk models – selected features**

Component	Portfolio	Size of associated portfolio (RWAs)		Model description and methodology	Number of years loss data	Basel asset classes measured	Applicable industry-wide regulatory
		BUK (£m)	BI (£m)				
modelled PD	Publicly traded corporate	121	28,104	Statistical model using a Merton-based methodology. It takes quantitative factors as inputs.	> 10 Years	Corporate	PD floor of 0.03%
PD	Customers rated by Moody's and S&P	11	27,009	Rating Agency Equivalent model converts agency ratings into estimated	> 10 Years	Corporate, Financial Institutions and Sovereigns	PD floor of 0.03% for corporate and institutions



PD	Corporate and SME customers with turnover < £20m	4,977	4,548	equivalent PIT default rates using credit cycles based on Moody's data. Statistical models that uses regression techniques to derive relationship between observed default experience and a set of behavioral variables.	6 - 10 Years	Corporate, Corporate SME,	PD floor of 0.03%
PD	Corporate customers with turnover >= £20m	221	10,618	Statistically derived models sourced from an external vendor (Moody's RiskCalc)	6 - 10 Years	Corporate	PD floor of 0.03%
PD	Home Finance	16,043		Statistical scorecards estimated using regression techniques, segmented along arrears status and portfolio type.	6 - 10 Years	Secured By Real Estate (residential and buy-to-let mortgages)	PD floor of 0.03%
PD	Barclaycard UK	15,110		Statistical scorecards estimated using regression techniques, segmented along arrears status and portfolio type.	6 - 10 Years	Qualifying Revolving Retail (QRRE)	PD floor of 0.03%



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## RB credit risk models selected features continued

Portfolio	Size of associated portfolio (RWAs)		Model description and methodology	Number of years loss data	Basel asset classes measured	Applicable industry- or regulatory criteria
	BUK (£m)	BI (£m)				
Corporate and Financial Institutions		53,992	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.	> 10 Years	Corporate, Financial Institutions	LGD floor based on default probability criteria
All business customers (excluding certain specialised sectors)	4,938	29,292	Model is based on a function estimated using actual recoveries experience. It takes account of collateral value and an allowance for non collateral recovery.	> 10 Years	Corporate,	LGD floor
UK Home Finance	16,043		Data driven estimates of loss and probability of possession	6 - 10 Years	Secured By Real Estate (residential and buy-to-let mortgages)	The portfolio average default LGD is floor 10%
Barclaycard UK	15,110		Statistical models combining segmented regression and other forecasting techniques	6 - 10 Years	Qualifying Revolving Retail (QRRE)	

## 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 Group level both for Retail and Wholesale excluding Africa, as the historical Barclays UK and Barclays International split is not available for the Wholesale obligors. The Barclays UK and Barclays International classification has been initiated from 2016 and we intend to report back testing results at Barclays UK and Barclays International level from next year onwards.

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 396.

### 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 is the only CRD IV compliant portfolio for the reporting period, for the remaining portfolios CRD IV compliant models are either 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 15 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 11.

§ 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.

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- § 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.

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**Table 85: 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.

Asset Class

Asset Class	EBA PD Range (%)	External Ratings Equivalent		Weighted Average PD %	Arithmetic Average PD by obligors %	Number of obligors		of which:		Average new historical annual default rate
		Moody's	S&P			As at Nov 15 2014	Defaulted obligors	Defaulted in the year	£m	
Retail	0.00 to <0.15	Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1	AAA, AA+, AA, AA-, A+, A, A-, BBB+	0.02%	0.03%	132	97			0.0
	0.15 to <0.25	Baa1, Baa2	BBB+, BBB	0.18%	0.22%	6	7			0.0
	0.25 to <0.50	Baa3, Ba1	BBB-, BB+	0.36%	0.37%	7	8			0.0
	0.50 to <0.75	Ba1, Ba2	BB+, BB	0.00%	0.65%	3	1			0.0
	0.75 to <2.50	Ba2, Ba3, B1, B2	BB, BB-, B+, B	0.86%	1.39%	11	10			0.0
	2.50 to <10.00	B1, B2, B3	B+, B, B-	0.00%	6.58%	6	7			0.0
	10.00 to <100.00	Caa1, Caa2, Caa3, Ca, C	CCC+, CCC, CCC-, CC, C	0.00%	23.24%	4	4			0.0
	100.00 (default)	D	D	100.00%	100.00%					0.0
Institutions	0.00 to <0.15	Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1	AAA, AA+, AA, AA-, A+, A, A-, BBB+	0.03%	0.03%	7,098	8,661			0.0
	0.15 to <0.25	Baa1, Baa2	BBB+, BBB	0.20%	0.19%	731	880			0.0
	0.25 to <0.50	Baa3, Ba1	BBB-, BB+	0.37%	0.39%	320	386			0.0
	0.50 to <0.75	Ba1, Ba2	BB+, BB	0.61%	0.65%	123	111			0.0
	0.75 to <2.50	Ba2, Ba3, B1, B2	BB, BB-, B+, B	1.53%	1.34%	264	222			0.0
	2.50 to <10.00	B1, B2, B3	B+, B, B-	6.42%	5.26%	191	141			0.0
	10.00 to <100.00	Caa1, Caa2, Caa3, Ca, C	CCC+, CCC, CCC-, CC, C	17.64%	25.21%	98	72	2		0.4
	100.00 (default)	D	D	100.00%	100.00%	47	15			0.0
Corporate	0.00 to <0.15	Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1	AAA, AA+, AA, AA-, A+, A, A-, BBB+	0.04%	0.05%	1525	1383			0.0

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	0.15 to <0.25	Baa1, Baa2	BBB+, BBB	0.20%	0.20%	300	364			0.0
	0.25 to <0.50	Baa3, Ba1	BBB-, BB+	0.36%	0.38%	713	636	4		0.2
	0.50 to <0.75	Ba1, Ba2	BB+, BB	0.61%	0.62%	398	297	2		0.1
	0.75 to <2.50	Ba2, Ba3, B1, B2	BB, BB-, B+, B	1.25%	1.32%	1,109	841	4		0.3
	2.50 to <10.00	B1, B2, B3	B+, B, B-	4.57%	4.78%	845	1,263	29		1.8
	10.00 to <100.00	Caa1, Caa2, Caa3, Ca, C	CCC+, CCC, CCC-, CC, C	23.94%	21.88%	323	247	18		3.9
	100.00 (default)	D	D	100.00%	100.00%	311	276			0.0
Corporate	0.00 to <0.15	Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1	AAA, AA+, AA, AA-, A+, A, A-, BBB+	0.07%	0.08%	964	748			0.0
	0.15 to <0.25	Baa1, Baa2	BBB+, BBB	0.19%	0.19%	1,310	1,508			0.2
	0.25 to <0.50	Baa3, Ba1	BBB-, BB+	0.36%	0.36%	2,826	2,904	4		0.1
	0.50 to <0.75	Ba1, Ba2	BB+, BB	0.64%	0.64%	2,056	2,194	2	1	0.2
	0.75 to <2.50	Ba2, Ba3, B1, B2	BB, BB-, B+, B	1.28%	1.35%	4,146	4,405	19	1	0.5
	2.50 to <10.00	B1, B2, B3	B+, B, B-	5.24%	4.96%	3,698	4,719	72	5	3.6
	10.00 to <100.00	Caa1, Caa2, Caa3, Ca, C	CCC+, CCC, CCC-, CC, C	23.28%	23.01%	732	528	48	1	10.1
	100.00 (default)	D	D	100.00%	100.00%	214	134			0.0
Specialist	0.00 to <0.15	Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1	AAA, AA+, AA, AA-, A+, A, A-, BBB+	0.07%	0.07%	30	29			0.0
Trading	0.15 to <0.25	Baa1, Baa2	BBB+, BBB	0.19%	0.19%	107	35			0.0
	0.25 to <0.50	Baa3, Ba1	BBB-, BB+	0.37%	0.37%	180	145			0.0
	0.50 to <0.75	Ba1, Ba2	BB+, BB	0.61%	0.64%	137	169			0.7
	0.75 to <2.50	Ba2, Ba3, B1, B2	BB, BB-, B+, B	1.18%	1.29%	142	218			0.0
	2.50 to <10.00	B1, B2, B3	B+, B, B-	5.02%	5.09%	152	135	1		2.4
	10.00 to <100.00	Caa1, Caa2, Caa3, Ca, C	CCC+, CCC, CCC-, CC, C	28.12%	25.71%	14	12	1		13.9
	100.00 (default)	D	D	100.00%	100.00%	69	60			0.0

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Analysis of expected performance versus actual results continued

EBA PD Range (%)	External Ratings Equivalent		Arithmetic Average					of which:
	Moody's	S&P	Weighted Average PD %	PD by obligors %	Number of obligors As at Nov 15 £m	Number of obligors As at Nov 16 £m	Defaulted obligors the year £m	new defaulted the year £m
0.00 to <0.15	Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1	AAA, AA+, AA, AA-, A+, A, A-, BBB+	0.04%	0.06%	33,578	34,933	21	1
0.15 to <0.25	Baa1, Baa2	BBB+, BBB	0.20%	0.20%	23,989	25,288	28	1
0.25 to <0.50	Baa3, Ba1	BBB-, BB+	0.37%	0.37%	54,759	57,747	69	4
0.50 to <0.75	Ba1, Ba2	BB+, BB	0.64%	0.64%	43,467	61,414	99	6
0.75 to <2.50	Ba2, Ba3, B1, B2	BB, BB-, B+, B	1.48%	1.54%	210,081	172,631	448	83
2.50 to <10.00	B1, B2, B3	B+, B, B-	4.68%	5.54%	305,063	313,511	1,374	288
100.00 (default)	D	D	100.00%	100.00%	5,606	5,097		
0.00 to <0.15	Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1	AAA, AA+, AA, AA-, A+, A, A-, BBB+	0.09%	0.09%	700,161	745,590	510	
0.15 to <0.25	Baa1, Baa2	BBB+, BBB	0.19%	0.19%	191,114	137,113	314	
0.25 to <0.50	Baa3, Ba1	BBB-, BB+	0.33%	0.33%	105,224	60,859	365	
0.50 to <0.75	Ba1, Ba2	BB+, BB	0.63%	0.62%	17,538	12,575	145	
0.75 to <2.50	Ba2, Ba3, B1, B2	BB, BB-, B+, B	1.23%	1.25%	21,316	18,452	450	
2.50 to <10.00	B1, B2, B3	B+, B, B-	5.12%	5.05%	6,085	5,467	465	
100.00 (default)	D	D	100.00%	100.00%	11,983	11,694		
0.00 to <0.15	Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1	AAA, AA+, AA, AA-, A+, A, A-, BBB+	0.07%	0.05%	10,391,483	10,551,296	3,453	893
0.15 to <0.25	Baa1, Baa2	BBB+, BBB	0.20%	0.20%	1,927,465	1,814,853	3,015	682
0.25 to <0.50	Baa3, Ba1	BBB-, BB+	0.36%	0.36%	2,244,780	2,166,187	6,625	1,038
0.50 to <0.75	Ba1, Ba2	BB+, BB	0.62%	0.61%	1,158,422	1,140,628	6,018	564
0.75 to <2.50	Ba2, Ba3, B1, B2	BB, BB-, B+, B	1.44%	1.38%	2,652,087	2,703,357	31,720	1,293
2.50 to <10.00	B1, B2, B3	B+, B, B-	4.88%	4.81%	1,499,071	1,591,182	71,475	1,470



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1 0 . 0 0 Caa1, Caa2, Caa3, to <100.00	CCC+, CCC, CCC-,	25.47%	28.16%	433,988	494,297	129,694	96
Ca, C	CC, C						
100.00 (default) D	D	100.00%	100.00%	591,116	476,487		
0.00 to <0.15	Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1	AAA, AA+, AA, AA-, A+, A, A-, BBB+	0.13%	0.12%	351	60	2
0.15 to <0.25	Baa1, Baa2	BBB+, BBB	0.21%	0.21%	2,259	1,958	5
0.25 to <0.50	Baa3, Ba1	BBB-, BB+	0.41%	0.40%	19,001	46,054	66
0.50 to <0.75	Ba1, Ba2	BB+, BB	0.64%	0.64%	38,663	87,272	155
0.75 to <2.50	Ba2, Ba3, B1, B2	BB, BB-, B+, B	1.58%	1.54%	326,841	335,910	2,784
2.50 to <10.00	B1, B2, B3	B+, B, B-	3.99%	3.98%	161,800	124,689	6,406
1 0 . 0 0 Caa1, Caa2, Caa3, to <100.00	CCC+, CCC, CCC-,	45.12%	41.24%	18,055	25,917	8,251	
Ca, C	CC, C						
100.00 (default) D	D	100.00%	100.00%	59,108	43,731		

Asset Class

Number of resolved cases over last one year (Dec 15 to Nov 16)

Predicted LGD (Simple Average) %

Actual LGD (Simple Average) %

Wholesale

Investment Bank

19

30%

11%

Corporate Bank

89

42%

22%

Retail

SME

2,116

82%

67%

Secured by Real Estate

4,168

4%

4%

Qualifying Revolving Retail

357,342

74%

72%

Other retail Note

36,968

79%

77%

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a Refer to the notes below for an explanation of data limitations relating to the Retail SME figures presented in this table

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Barclays approach to managing risks

## Management of credit risk and the internal ratings-based approach

### 2016 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 two key LGD models used for the Wholesale IRB exposures. Both the LGD models overestimate (conservative) on a PIT basis.

§ A new set of replacement models are currently under development to comply with CRD IV requirements for the material portfolios, and are scheduled to be submitted to the PRA over 2017-18

#### Retail SME

§ The estimated PDs rank order the actual default experience for the UK SME book, i.e. higher PDs implying higher actual default rates.

§ The estimated PDs and LGD are much higher (conservative) compared to the actual default rates and LGD. The actual PD is low due to the inclusion of immaterial and dormant customers in the denominator. In addition, there was a temporary default identification issue during the reporting period, which has now been rectified, though the retrospective identification was not possible. The LGD model is benchmarked to the Corporate LGD model.

§ A new set of CRD IV compliant models have been approved by the PRA in 2016 and are currently under implementation.

#### Secured by Real Estate

§ This covers mortgage portfolios for UK and Italy. Rank ordering is maintained across PD ranges.

§ For UK Mortgages, the PD model is accurate, slightly conservative at an overall level (0.34% expected vs. 0.31% actual). The portfolio maintains low LGD and the model overestimates (2.2% estimated vs. 1.0% actual). The new CRD IV compliant model suite is awaiting PRA approval.

§ For Italy Mortgages, both the PIT PD and LGD models underestimate (non-conservative) primarily due to a decrease in the House Price Index (HPI). The portfolio has observed significant losses in recovery as a result of the lengthening of the auction process and general collateral devaluation driven by a depressed housing market. In addition, the market at origination when appraisals of the collateral values were carried out was significantly optimistic. A new set of CRD IV compliant models are currently under development, and are due for PRA submission by December 2017. Interim Post Model Adjustments (PMA) are in place to address existing models deficiencies.

#### **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; 1.9% estimated vs. 2.1% actual at an overall level. The LGD model is accurate (69.9% estimated vs. 69.5% actual). The existing CRD IV model suite is currently under recalibration to further improve its accuracy.

§ For Germany Cards, a slight overestimation in the PD estimates is driven by in-order population; 1.5% estimated vs. 1.4% actual at an overall level. The overestimation in the LGD model (84% estimated vs. 75% actual), is primarily driven by debt sale at a better price. New CRD IV models are currently under development, and are due for PRA submission in H1 2017.

§ For UK Current Accounts, PD model overestimates are primarily due to a decrease in actual default rates over the last year (0.73% estimated vs. 0.57% actual). The LGD model is accurate (84% estimated vs. 80% actual). New CRD IV compliant model suites are currently under internal review; to be submitted to the PRA by Q1 2017.

#### **Other Retail**

§ This covers UK Barclayloan portfolio. The PD rank ordering holds except for the low PD ranges, which have a low number of defaults.

§ The current portfolio default rate and estimated PD is lower compared to the historical average default rate due to an improvement in the portfolio quality. However, both PD (3.4% estimated vs. 3.1% actual) and LGD (79% expected vs. 77% actual) models are accurate at an overall level based on a comparison over past one year.

§ New CRD IV compliant capital suite has been submitted to the PRA in Dec 16.

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.

§ A general discussion of credit risk mitigation (covering traditional credit risks) is also included from page 369.

§ 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

The Group employs a range of techniques and strategies to actively mitigate the counterparty credit risks. These can broadly be divided into three types:

§ netting and set-off

§ collateral

§ risk transfer.

The Group has detailed policies in place to ensure that credit risk mitigation is appropriately recognised and recorded. The recognition of credit risk mitigation is subject to a number of considerations, including ensuring legal certainty of enforceability and effectiveness, ensuring the valuation and liquidity of the collateral is adequately monitored, and ensuring 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 the 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 in which the 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, the Group's normal practice is 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**

The 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 repossession 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 the Group or by another party; and finance lease receivables, for which typically the Group retains legal title to the leased asset and has the right to repossess the asset on the default of the borrower

§ **derivatives:** the Group also often seeks to enter into a margin agreement (e.g. Credit Support Annex (CSA)) with counterparties with which the 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. The 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 the 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.

For details of the fair value of collateral held, please refer to maximum exposure table in the credit risk performance section on page 119.

In exposure terms, the main portfolios that the Group takes collateral for are home loans and reverse repurchase agreements with financial institutions.

### **Floating charges over receivables**

The Group may also obtain collateral in the form of floating charges over receivables and inventory of corporate and other business customers. The value of this collateral varies from period to period depending on the level of receivables and inventory. It is impracticable to provide an estimate of the amount (fair value or nominal value) of this collateral. The Group may in some cases obtain collateral and other enhancements at a counterparty level, which are not specific to a particular class of financial instrument. The fair value of the credit enhancement gained has been apportioned across the relevant asset classes.

### **Collateral for derivative contracts**

The collateral obtained for derivatives is predominantly cash or government bonds (G7 and other highly rated governments). Appropriate haircuts may be applied to non-cash collateral, which are agreed when the margin agreement (e.g. CSA) is negotiated.

### **Valuation of collateral and impact of market moves**

Typically, assets other than cash are subject to regular revaluation (for example via physical review, linking to an external index or depreciation of the asset), to ensure they continue to achieve appropriate mitigation of risk. Customer agreements often include requirements for provision of additional collateral, should valuations decline or credit exposure increase, for example due to market moves impacting a derivative exposure.

The carrying value of non-cash collateral reflects the fair value of the physical assets, limited to the carrying value of the asset where the exposure is over-collateralised. In certain cases, where active markets or recent valuations of the assets are not available, estimates are used. For assets collateralised by residential or commercial property (and certain other physical assets), where it is not practicable to assess current market valuations of each underlying property, values reflect historical fair values updated for movements in appropriate external indices. For further information on LTV ratios in principal home loans portfolios, see the Credit Risk review section on page 128 to 129.

Liens over fluctuating assets such as inventory and trade receivables, known as floating charges, over the assets of a borrower are monitored annually. The valuation of this type of collateral takes into account the ability to establish objectively a price or market value, the frequency with which the value can be obtained (including a professional appraisal or valuation), and the volatility or a proxy for the volatility of the value of the collateral.

For assets collateralised by traded financial instruments, values reflect MTM or mark to model values of those assets, applying a haircut where appropriate. 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.

### **Valuation of collateral property**

When property is taken as collateral, it is monitored to establish whether the current value is less than its value at origination. Monitoring is undertaken annually for commercial property or via linking to an external index for residential property. More frequent monitoring may be carried out where the property sector is subject to significant deterioration.



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Barclays approach to managing risks

## Management of credit risk mitigation techniques and counterparty credit risk

Deterioration is monitored principally by geography. Specific exercises to monitor property values may be undertaken where the property sector in a given geography has been subject to significant deterioration and where the Group has a material concentration of property collateral.

Monitoring may be undertaken either at a portfolio level (typically retail) or at an individual level (typically wholesale).

In retail businesses, monitoring on a portfolio level refers to a more frequent process of indexing collateral values on each individual loan, using a regional or national index, and updating LGD values. This monitoring may be a desk top assessment and need not necessarily include physical assessment of properties. In the event of charge-off, an individual valuation of the property is undertaken within 3 months of the charge-off event and subsequently undertaken at least every six months whilst in charge-off.

In wholesale, monitoring is undertaken by individuals who are not part of the sales / relationship part of the business. Where an appropriate local index is not available, property values are monitored on an individual basis as part of the annual review process for the loan. For larger loans, in addition to the regular annual review, the property value is reviewed by an independent valuer at least once every three years. This review is a more detailed assessment than the standard property monitoring review, and may include a fresh professional valuation. In addition, an independent valuer reviews the property valuation where information indicates that the value of the property may have declined materially relative to general market prices. In addition, trigger points are defined under which property values must be reviewed.

### Valuation of collateral distressed assets

The net realisable value from a distressed sale of collateral obtained by the Group upon default or insolvency of counterparty will in some cases be lower than the carrying value recognised. Assets obtained are normally sold, generally at auction, or realised in an orderly manner for the maximum benefit of the Group, the borrower's other creditors and the borrower, in accordance with the relevant insolvency regulations. For business customers, in some circumstances, where excess funds are available after repayment in full of the outstanding loan, they are offered to any other, lower ranked, secured lenders. Any additional funds are returned to the borrower. The Group does not occupy repossessed properties for its business use or use assets obtained in its operations.

Additional revaluations are usually performed when a loan is moved to WL. Exceptions to this may be considered where it is clear a revaluation is not necessary, for instance where there is a very high margin of security or a recent valuation has been undertaken. Conversely, a material reduction in the value of collateral held represents an increase in credit risk and will often cause a loan to be placed on the WL.

Any one of the above events may also trigger a test for impairment, depending on individual circumstances of the loan. When calculating impairment, the difference between an asset's carrying amount and the present value of all estimated cash flows discounted at the original effective interest rate will be recognised as impairment. Such cash

flows include the estimated fair value of the collateral, which reflects the results of the monitoring and review of collateral values as detailed above and valuations undertaken as part of the Group's impairment process.

Whether property values are updated as part of the annual review process, or by indexation of collateral values, the updated collateral values feed into the calculation of risk parameters which, in turn, feed into identified and unidentified impairment calculations at each balance sheet date.

Trends in LLRs incorporate the impact of any decrease in the fair value of collateral held.

### **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 credit worthy 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**

The 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).

The 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 AIRB 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 LGD 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.

### **Managing concentrations within credit risk mitigation**

Credit risk mitigation taken by the 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 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 pages 119 for more information on collateral, valuation and monitoring of concentrations.

### **Counterparty credit risk**

#### **Derivative counterparty credit exposures**

The 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

Barclays approach to managing risks

## Management of credit risk mitigation techniques and counterparty credit risk

with cash or other securities at the exchange, to which the holders look for ultimate settlement.

The 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 the 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 the Group protection in situations where the 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 the 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. Group policy requires all netting arrangements to be legally documented. The ISDA Master Agreement is

the 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 the 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 denominated in the domestic currency of the issuing country, debt issued by supranationals or letters of credit issued by an institution with a long-term unsecured debt rating of A+/A3 or better. Where the 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.

Barclays approach to managing risks

Management of market risk

This section describes the governance structure specific to the management of market risks, as well as a discussion of measurement techniques.

§ The governance structure specific to market risks is discussed on pages 373 to 374.

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

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, the 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.

Market risk in the businesses resides primarily in Barclays International, Group Treasury and Non-Core. These businesses have the mandate to incur market risk.

Market risk oversight and challenge is provided by business committees and Group committees, including the Market Risk Committee.

##### Organisation and structure

##### Roles and responsibilities

The objectives of market risk management are to:

§ understand and control market risk by robust measurement, limit setting, reporting and oversight

§ facilitate business growth within a controlled and transparent risk management framework

§ ensure that market risk in the businesses is controlled according to the allocated appetite

§ support the Non-Core strategy of asset reductions by ensuring that market risk remains within agreed risk appetite. To ensure the above objectives are met, a well established governance structure is in place to manage these risks consistent with the ERMF. See page 344 on risk management strategy, governance and risk culture.

The BRC recommends market risk appetite to the Board for their approval. The Market Risk Principal Risk Officer (MRPRO) is responsible for the Market Risk Control Framework and, under delegated authority

from the CRO, agrees with the BCROs a limit framework within the context of the approved market risk appetite.

Across the Group, market risk oversight and challenge is provided by business committees, Group committees, including the Market Risk Committee.

The Market Risk Committee approves and makes recommendations concerning the Group-wide market risk profile. This includes overseeing the operation of the Market Risk Framework and associated standards and policies; reviewing arising market or regulatory issues, limits and utilisation; and risk appetite levels to the Board. The Committee is chaired by the MRPRO and attendees include the business heads of market risk, business aligned market risk managers and Internal Audit.

The head of each business is accountable for all market risks associated with its activities, while the head of the market risk team covering each business is responsible for implementing the risk control framework for market risk.



Barclays approach to managing risks

## Management of market risk

### 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 ensure the Group remains within the BRC approved risk appetite. The Group runs an annual Group-wide stress testing exercise which aims to simulate the dynamics of exposures across the Group and cover all risk factors. The exercise is also designed to measure the impact to the Group's fundamental business plan, and is used to manage the wider Group's strategy.

See page 351 for more detail on the role of risk in the setting of strategy.

### 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.

See pages 347 to 348 for more detail on risk culture.

### Management of traded market risk, mitigation and hedging policies

The governance structure helps ensure all market risks that the 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.

### Traded market risk measurement – management view

#### Market risk management measures

A range of complementary approaches to measure traded market risk are used which aim to capture the level of losses that the bank is exposed to due to unfavourable changes in asset prices. The primary tools to control the firm's exposures are:

Measure

Description

Management Value at Risk (VaR)	An estimate of the potential loss arising from unfavourable market movements, if the current positions were to be held unchanged for one business day.
Primary stress tests	An estimate of potential losses that might arise from severe market moves or scenarios impacting key liquid market risk exposures.
Secondary stress tests	Modelled losses from unfavourable market movements to illiquid market risk exposures.
Business scenario stresses	Multi asset scenario analysis of severe, but plausible events that may impact the market risk exposures of the investment bank.
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 traded market risks are deemed to exist. The wider scope of Management VaR is what the 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 377) is narrower as it applies only to trading book positions as approved by the PRA	

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 ensure 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:

Risk factor	Description
Interest rate	Changes in the level or shape of interest rate expectations can impact prices of interest rate sensitive assets, such as bonds and derivatives instruments, such as interest rate swaps.
Spread	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.
Foreign exchange	The impact of changes in foreign exchange rates and volatilities.
Equity	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.
Commodity	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.
Inflation	Arises from the impact of changes in inflation rates and volatilities on cash instruments and derivatives. This arises as part of market marking activities,

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	whereby the Group may be exposed to changes in inflation rates, for example, market making syndications for inflation linked securities.
Traded credit	Arises from the uncertainty of credit quality impacting prices of assets, for example positions such as corporate bonds, securitised products and credit based derivative instruments, including credit default swaps.
Basis	The impact of changes in interest rate tenor basis (e.g. the basis between swaps vs 3M LIBOR and swaps vs 6M LIBOR) and cross-currency basis and is primarily generated as a result of market making activities.

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 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.

Barclays approach to managing risks

### Management of market risk

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

§ 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.

### Primary stress tests

§ Key tool used by management to measure liquid market risks from extreme market movements or scenarios in each major trading asset class.

Stress testing provides an estimate of potential significant future losses that might arise from extreme market moves or scenarios. Primary stress tests apply stress moves to key liquid risk factors for each of the major trading asset classes, namely:

§ **interest rates:** shock to the level and structure of interest rates and inflation across currencies

§ **credit:** impact on traded corporate credit exposures and securities structures, including across rating grades, geography, sectors and products

§ **foreign exchange:** impact of unfavourable moves in currency prices and volatility

§ **equity:** shocks to share prices including exposures to specific markets and sectors

§ **commodities:** adverse commodity price changes across both physical and derivative markets.

Primary stresses apply moves to liquid assets incorporating up to 10 days holding period. Shock scenarios are determined by a combination of observed extreme historical moves and forward looking elements as appropriate.

Primary stresses are calculated for each asset class on a standalone basis. Risk managers calculate several stress scenarios and communicate the results to senior managers to highlight concentrations and the level of exposures. Primary stress loss limits are applied across the trading businesses and is a key market risk control.

### Secondary stress tests

§ Key tool used by management to measure illiquid market risks from extreme market movements or scenarios in each major trading asset class.

Secondary stress tests are used in measuring potential losses arising from market risks that are not captured in the primary stress tests. These may relate to financial instruments or risk exposures which are not readily or easily tradable or markets that are naturally sensitive to a rapid deterioration in market conditions.

For each asset class, secondary stresses are 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 the firm 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

§ Key tool 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 impact 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 such as 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, and the impact of a large financial institution collapse, a disorderly exit of quantitative easing programmes, including unexpected rapid and continuous interest rate rises as a result.

**Traded 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

The 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 the 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.

Barclays approach to managing risks

## Management of market risk

### 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 Capital Requirements Regulation (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, future 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 246 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 ensuring compliance with article 105 of the CRR.

### Regulatory measures for traded market risk

There are a number of regulatory measures which the Group has permission to use in calculating regulatory capital (internal models approval). These are listed below:

Measure	Definition
Regulatory Value at Risk (VaR)	An estimate of the potential loss arising from unfavourable market movements calibrated to 99% confidence interval 10-day holding period.
Stressed Value at Risk (SVaR)	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.
Incremental Risk Charge (IRC)	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.
Comprehensive Risk Measure (CRM)	An estimate of all the material market risk, including rating migration and default for the correlation trading portfolio.
<b>Regulatory VaR</b>	

§ Estimates the potential loss arising from unfavourable market movements.

§ Regulatory VaR differs from the management approach in the following respects.

VaR Variable	Regulatory	Management
Confidence interval	99%	95%
Scope	As approved by the regulator (PRA)	Management view of market risk exposures. Includes trading books and banking books exposed to price risk
Look-back period	2 years	2 years
Liquidity Horizon (holding period)	10 days	1 day

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. Regulatory VaR levels contribute to the calculation of the market risk RWAs.

Management VaR allows the bank to supervise the total market risk across the Group, including all trading books and some banking books.

Management VaR is also utilised for internal capital model (economic capital).

Regulatory VaR is fundamentally the same as the Management VaR (see page 374), with the key differences listed above.

The model is complemented with RNIVs, as described on page 379.

### 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 the 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 Stressed VaR ( SVaR ) capital requirement is added to the market risk capital requirement arising from regulatory VaR, the Incremental Risk Charge and the Comprehensive Risk Measure on an undiversified basis.

The SVaR model must be identical to the VaR model used by the Group, with the exception that the SVaR model must be calibrated to a one-year period of significant financial stress ( the SVaR period ). The 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 quarterly 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 the 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.



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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.

The 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.

The 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 movements, and the actual impact is obtained by interpolating or extrapolating the actual spread move from these pre-computed values.

The Group's IRC model assumes that ratings transitions, defaults and any spread increases occur on an instantaneous basis.

Barclays approach to managing risks

## Management of market risk

### Comprehensive Risk Measure (CRM)

§ Captures all market risks affecting the correlation trading portfolio.

Comprehensive Risk Measure 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.

The Group's Comprehensive Risk Measure 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.

### Table 86: Market risk models selected features

Component modelled	Number of significant models and size of associated portfolio (RWAs)	Model description and methodology	Applicable regulatory thresholds
Regulatory VaR	1 model; £3.5bn	Equally-weighted historical simulation of	Regulatory VaR is computed with ten-day

		potential daily P&L arising from market moves	holding period and 99% confidence level
SVaR	1 model; £6.6bn	Same methodology as used for VaR model, but using a different time series	Regulatory SVaR is computed with ten-day holding period and 99% confidence level
IRC	1 model; £2.1bn	Monte Carlo simulation of P&L arising from ratings migrations and defaults	IRC is computed with one-year holding period and 99.9% confidence level
Comprehensive Risk Measure	1 model; £0.4bn	Same approach as IRC, but it incorporates market-driven movements in spreads and correlations for application to correlation trading portfolios.	Comprehensive Risk Measure is computed with one-year holding period and 99.9% confidence level. As required in CRD IV, the Comprehensive Risk Measure charge is subject to a floor set with reference to standard rules charge

### Regulatory back testing

Back testing is the method by which the 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. net trading P&L loss in one trading day is greater than the estimated VaR for the same trading day. The 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 the 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 models that are 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 12-month 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 2016.

Back testing is also performed on management VaR to ensure it remains reasonable and fit for purpose.

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The table below shows the VaR back testing exceptions on legal entities aligned to the Group's business as at 31 December 2016. A back testing exception is generated when a loss is greater than the VaR for a given day. Exceptions are shown by legal entity rather than asset class as in prior disclosures. Model performance at a legal entity level determines regulatory capital within those entities. Legal entity disclosure also reflects the management perspective as Barclays moves forward with structural change, where VaR and model performance of VaR for a legal entity across asset class becomes more relevant than 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 2016.

Legal entity	Actual P&L		Hypo P&L	
	Total Exceptions	Status	Total Exceptions	Status
BBPlc Trading and BCSL	2	G	2	G
BBPlc Trading	1	G	2	G
BSCl	6	A	1	G
BBSA	3	G		G
BCI*	2	G	3	G
IHC		G	1	G

\* BCI back testing has been replaced by IHC back testing from 1 July 2016 (both are included below for their respective periods). Please note that IHC back testing is performed for hypo P&L only as per US regulatory requirements.

RAG status is accurate as of year-end.

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Barclays approach to managing risks

## Management of market risk

The charts below show VaR for the Group's regulatory portfolios aligned to legal entity where at least one exception has occurred during 2016. 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.

Backtesting exceptions are caused when realised volatility exceeds the 99% percentile predicted by VaR. In addition to being driven by market moves in excess of the 99% confidence level, exceptions can be caused

by risks that impact P&L that are not captured directly in the VaR itself but that are separately captured through VaR and nonVaR-type Risks Not in VaR (RNIVs).

Exceptions are reported to internal management and regulators on a regular basis and exceptions are investigated to ensure 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.

Barclays approach to managing risks

## Management of market risk

### Management of risks not fully captured in models, including Risks not in VaR (RNIVs)

The 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 ensure risk coverage, the range of core risks is identified following either market convention, regulatory guidance, or the specific historical experience of the Groups 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, the Group has policies to ensure that add-ons are applied 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 SVaR. 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 18 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 SVaR RNIV, using the same confidence level, capital horizon and observation period as VaR and SVaR respectively and are capitalised using the same multipliers as VaR and SVaR

§

**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 APR 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.

### **Traded 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 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.

Firm-wide limits are reported to the BRC and are termed A-level limits for total management VaR, asset class VaR, primary stress and secondary stresses and business scenarios. These are then cascaded down by risk managers in order to meet the firm-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 Group Market Risk.

Throughout 2016, 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 businesses' conformance with the Market Risk Control Framework and best practices.

### **Traded 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 Group-wide basis, these are sent to Group Market Risk for review and a risk summary is presented at the 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.

Barclays approach to managing risks

Management of securitisation exposures

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 381.

§ A description of the risks incurred in the course of securitisation activities, and how we manage them, is contained on page 382.



Barclays approach to managing risks

## Management of securitisation exposures

This section discloses information about the 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.

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 the Group or on behalf of a client.

Certain transactions undertaken by the Group are not disclosed 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, the 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.

The Group has securitised its own originated assets in order to manage the Group's credit risk position and to generate term funding for the Group balance sheet. The Group also participates in primary securitisations and distributes bonds to the market to facilitate term liquidity for its clients.

The 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, the 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 the Group in securitisations in 2016

The Group adopts the following roles in the securitisation processes in which it is involved:

#### Originator of assets prior to securitisation

The Group originates or purchases commercial mortgage loans for the purpose of securitisation. The securities are then sold to investors through a broker-dealer subsidiary.

The Group securitises assets otherwise originated in the ordinary course of business including corporate loans, consumer loans and commercial mortgage loans. The Group also provides derivative transactions to securitisations sponsored by itself and third parties. These transactions are included in the Group trading book.

### **Providing warehousing facilities collateralised by third party assets prior to securitisation or exit via whole-loan sale**

The 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 collateralized loan obligations (CLO).

### **Executor of securitisation trades including bond marketing and syndication**

The 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). The bank makes secondary market in CLOs and acts as arranger on behalf of clients to structure and place arbitrage CLOs. The bank can also create re-securitisations of real estate mortgage investment conduits (Re-REMICs) of mortgage backed securities.

### **Purchaser of third party securitisations to support client franchise**

The Group may purchase third party securitisations. The Group also funds on its own balance sheet securitisations similar to the ones funded via its sponsored conduits (see below). In such transactions the Group would not be defined as an originator or sponsor for regulatory purposes.

### **Sponsoring conduit vehicles**

The Group acts as managing agent and administrative agent of a multi-seller asset backed commercial paper (ABCP) conduit, Sheffield Receivables Corporation (Sheffield), through which interests in securitisations of third party originated assets are funded via the issuance of ABCP.

From a regulatory perspective, Barclays acts as a sponsor of Sheffield. In relation to such conduit activity, the Group provides all or a portion of the backstop liquidity to the commercial paper, programme-wide credit enhancement and, as appropriate, interest rate and foreign currency hedging facilities. The Group receives fees for the provision of these services.

Sheffield holds securities classified as available for sale, measured at fair value with changes in fair value recognised through other comprehensive income (OCI) and non-securities 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 is consolidated for accounting but not regulatory purposes.

### **Funding transactions to generate term liquidity**

Secured funding forms one of the key components of the Group's diversified funding sources providing access to the secured wholesale market and complementing the diversification of funding by maturity, currency and geography. The Group issues ABS and covered bonds secured primarily by customer loans and advances. In 2016, the Group raised £0.4bn term funding through public securitisation.

While Barclays has a number of outstanding securitisation transactions to provide term or contingent liquidity, the Group currently manages four key, on-balance sheet asset backed funding programmes to obtain term financing for mortgage and credit card lendings. These programmes also support retained issuances for the Group to access central

bank funding. The UK regulated covered bond and the residential mortgage master trust securitisation programmes both utilise assets originated by the Group's UK residential mortgage business. The third programme is a credit card master trust securitisation and uses receivables from the 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**

The Group has entered into synthetic and cash securitizations 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.

Barclays approach to managing risks

## Management of securitisation exposures

### 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 the 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 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 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). Executive responsibility rests with the Regional Heads of Financial Institutions Credit Risk.

#### 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 the 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 is 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, the 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 the 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, we incur potential contingent operational risks related to representations and warranties should we need to foreclose on the line and it be later 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 the Group's activities.

### **Rating methodologies, ECAIs and RWA calculations**

RWAs reported for securitised and re-securitised banking book and trading book assets at 31 December 2016 are calculated in line with CRR and UK PRA rules and guidance. The 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.

The Group employs eligible ratings issued by nominated External Credit Assessment Institutions (ECAIs) 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 internal rating standard which is compliant with both CRR and European Credit Rating Agency regulation. The ECAIs nominated by the Group for this purpose are Standard & Poor's, Moody's, Fitch and DBRS.

As required by CRR, the Group uses credit ratings issued by these ECAIs 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, the Internal Assessment Approach (IAA) framework mirrors the ECAI methodology, which also includes Moody's and Fitch, who rate the Sheffield programme. Under the IAA framework, the securitisation exposure must be internally rated, and the bank's 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 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 the 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. The 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.

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Barclays approach to managing risks

## Management of securitisation exposures

### 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 the Group when the Group has control over the entity. The 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 the 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.

Typically, assets that are awaiting securitisation on the 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 designed at fair value through profit and loss, under the IAS 39 fair value option. However some non-derivative assets held prior to securitisation may qualify as loans and receivables and are measured at amortised cost. When securitised assets have been included on the Group balance sheet it is necessary to consider whether those assets may be removed from the Group balance sheet. Assets which have been transferred to third parties (i.e. an unconsolidated Group entity), will remain on the 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 the 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. Note, however, that the 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 passthrough criteria where the substance of the arrangement is principally that the 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 sale treatment to the extent the Group has no continuing

involvement. Where the Group has continuing involvement the assets will continue to be recognised to the extent of the continuing involvement. 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 the Group's Accounting Policies, as set out in the 2016 Annual Report. 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 analysis of the management of liquidity, capital and Interest rate risk in the banking risk.

§ Liquidity risk, with a focus on how it is managed to ensure that resources are adequate at all times including under stress, is discussed on pages 386 to 387

§ Capital risk, including how the risk of insufficient capital and leverage ratios and pension risk are managed, is discussed on pages 388 to 389

§ The management of Interest rate risk in the banking book is discussed on pages 390 to 391

Barclays approach to managing risks

## Management of Treasury and Capital Risk

### Treasury and capital risk

The risk that the Group may not achieve its business plans because of the availability of planned liquidity, a shortfall in capital or a mismatch in the interest rate exposures of its assets and liabilities. The Treasury and Capital Risk function is an independent risk function with responsibility for oversight of the following risks:

**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 Treasury manages treasury and capital risk on a day-to-day basis with the Treasury Committee acting as the principal management body. To ensure effective oversight and segregation of duties and in line with the ERMF, the Treasury and Capital Risk function is responsible for oversight key capital and liquidity risk management activities.

To ensure effective oversight and segregation of duties and in line with the ERMF, the Treasury and Capital Risk function is responsible for oversight key capital, liquidity, non-traded market risk (NTMR) and pension risk management activities. The following describes the structure and governance associated with the risk types within the Treasury and Capital Risk function.

**Organisation and structure**

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Barclays approach to managing risks

## Management of Treasury and Capital Risk

### Liquidity risk management

#### Overview

The efficient management of liquidity is essential to the Group in retaining the confidence of the financial markets and ensuring that the business is sustainable. There is a control framework in place for managing liquidity risk and this is designed to meet the following objectives:

§ To maintain liquidity resources that are sufficient in amount and quality and a funding profile that is appropriate to meet the liquidity risk appetite as expressed by the Board

§ To maintain market confidence in the Group's name.

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. Treasury has the primary responsibility for managing liquidity risk within the set risk appetite.

#### 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 the Group has implemented to manage liquidity risk within the Liquidity Risk Appetite (LRA) and is subject to annual review.

The Board sets the LRA over Group stress tests and is represented as the level of risk the Group chooses to take in pursuit of its business objectives and in meeting its regulatory obligations. The approved LRA is implemented in line with the control framework and policy for liquidity risk.

#### Control framework

Barclays has a comprehensive control framework for managing the Group's liquidity risk. It is designed to deliver the appropriate term and structure of funding consistent with the LRA set by the Board.

The control framework incorporates a range of ongoing business management tools to monitor, limit and stress test the Group's balance sheet and contingent liabilities and a Contingency Funding 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 the Group's obligations as they fall due.

The stress tests assess the potential contractual and contingent stress outflows under a range of scenarios, which are then used to determine the size of the liquidity pool that is immediately available to meet anticipated outflows if a stress occurs.

The Group maintains a Contingency Funding Plan which details how liquidity stress events of varying severity would be managed. Since the precise nature of any stress event cannot be known in advance, the plans 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. Barclays also maintains Recovery Plans which consider actions to generate additional liquidity in order to facilitate recovery in a severe stress.

### **Risk Appetite and planning**

Barclays has established a LRA over Group stress tests and is represented as the level of liquidity risk the 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 stressed net contractual and contingent 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 Individual Liquidity Adequacy Assessment Process (ILAAP).

Statement of Liquidity Risk Appetite: The Board has approved that the Group will maintain an amount of available liquidity resources to meet modelled and prescribed regulatory liquidity stress outflows over a period of time (minimum buffer duration):

§ 30 days in a Barclays specific stress

§ 90 days in a market wide stress

§ 30 days in a combined stress

§ LCR 30 days minimum ratio 100% (Pillar 1 basis)

§ LCR 30 days minimum ratio 80% (Pillar 2 basis)

§ Long term LRA 80% LCR (Pillar 2).

The stress outflows are used to determine the size of the 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 the 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.

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Barclays approach to managing risks

## Management of Treasury and Capital Risk

### *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 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 the Group's Contingency Funding Plan, which provides a framework for how the liquidity stress would be managed.

### *Contingency funding plan and recovery & resolution planning*

Barclays maintains a Contingency Funding Plan (CFP) which is designed to provide a framework where a liquidity stress could be effectively managed. The CFP is proportionate to the nature, scale and complexity of the business and is tested to ensure that it is operationally robust. The CFP details the circumstances in which the plan could be invoked, including as a result of adverse movements in liquidity early warning indicators. As part of the plan, the Barclays Treasurer has established a Liquidity Management Committee (LMC). On invocation of the CFP by the Executive Committee, the LMC would meet to identify the likely impact of the event on the Group and determine the appropriate response for the nature and severity of the stress.

The CFP provides a communication plan and includes management actions to respond to liquidity stresses of varying severity. This could include monetising the liquidity pool, slowing the extension of credit, increasing the tenor of

funding and securitising or selling assets.

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## 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

### Organisation and structure

The management of capital risk is integral to the 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 the 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 the Group's objectives.

The Board approves the Group capital plan, internal and regulatory stress tests, and the Group recovery plan. The Treasury Committee is responsible for monitoring and managing capital risk in line with the Group's capital management objectives, capital plan and risk frameworks. The Board Risk Committee reviews the risk profile, and annually reviews risk appetite and the impact of stress scenarios on the Group capital plan/forecast in order to agree the Group's projected capital adequacy.

Local management ensures compliance with an entity's minimum regulatory capital requirements by reporting to local Asset and Liability Committees with oversight by the Group's Treasury Committee, as required.

### Roles and responsibilities

Treasury has the primary responsibility for managing and monitoring capital and reports to the Group Finance Director. The Treasury and Capital Risk function contains a Capital Risk Oversight team, and is an independent risk function that reports to the Group CRO and is responsible for oversight of capital risk.

### Capital risk management

The Group's capital management strategy is driven by the strategic aims of the Group and the risk appetite set by the Board. The Group's objectives are achieved through well embedded capital management practices.

### **Capital planning and allocation**

The Group assesses its capital requirements on multiple bases, with the Group's capital plan set in consideration of the Group's risk profile and appetite, strategic and performance objectives, regulatory requirements, 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 of ensuring that the Group maintains an adequate level of capital to support its capital requirements.

The PRA determines the regulatory capital requirements for the consolidated Group. Under these regulatory frameworks, capital requirements are set in consideration of the level of risk that the firm is exposed to and the factors above, and are measured through both risk-based RWAs and leverage-based metrics. An internal assessment of the Bank's capital adequacy is undertaken through the Internal Capital Adequacy Assessment Process (ICAAP) and is used to inform the capital requirements of the firm.

The Group expects to meet the minimum requirements for capital and leverage both during the transition period and upon full implementation, and also holds an internal buffer sized according to the firm's assessment of capital risk.

Through the capital planning process, capital allocations are approved by the Group Executive committee, taking into consideration the risk appetite and strategic aims of the 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 ensure that Barclays' capital plans remain appropriate and that risks to the plans are considered.

Limits are in place to support alignment with the capital plan and adherence to regulatory requirements, and are monitored through appropriately governed forums. Capital risks against firm-specific and macroeconomic early warning indicators are monitored and reported to the Treasury Committee, with clear escalation channels to senior management. 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 the 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.

The 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 the Group capital plan to ensure adequacy of capital under normal and severe, but plausible stressed conditions.

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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, the Group Recovery Plan defines the actions and implementation strategies available to the Group to increase or preserve capital resources in the situation that a stress occurs that is more severe than anticipated.

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Barclays approach to managing risks

## Management of Treasury and Capital Risk

### Regulatory and accounting developments

Further changes to capital requirements are expected due to continued regulatory focus on the risk weighting of assets, including Basel Committee on Banking Supervision (BCBS) proposals on fundamental review of the trading book, revisions to standardised rules for credit risk, counterparty credit risk, CVA volatility risk and operational risk, application of an RWA floor based on the standardised approach to limit the use of internal models in certain areas as well as the impact of IFRS 9 on the firm's capital position.

Additional capital requirements are also expected from other regulatory reforms, including UK, EU and US proposals on bank structural reform and current European Banking Authority (EBA) proposals for Minimum Requirement for own funds and Eligible Liabilities (MREL) under the EU Bank Recovery and Resolution Directive (BRRD). Included within these reforms are the Bank of England final rules on MREL requirements for UK banks which were published on 31 October 2016. The Bank of England has stated that the bank's final MREL requirements will be subject to a review in 2020.

Many of the expected regulatory proposals are still subject to finalisation, with calibration and timing of implementation still to be determined and the potential for the impacts to be different from those originally expected when in final form. For further information see Funding Risk in the Material Risks section and Regulatory Developments in the Supervision and Regulation section.

### Transferability of capital

Surplus capital held in Group entities is required to be repatriated to Barclays Bank PLC 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. Pre and post the implementation of ring-fencing, capital is managed for the Group as a whole as well as its operating subsidiaries to ensure fungibility and redeployment of capital while meeting relevant internal and regulatory targets at entity levels.

### Foreign exchange risk

The Group has capital resources and RWAs 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, the Group's regulatory capital ratios are sensitive to foreign currency movements.

The Group's capital ratio management strategy is to minimise the volatility of the capital ratios caused by foreign exchange rate movements. To achieve this, the Group aims to maintain the ratio of foreign currency CET1, Tier 1 and Total capital resources to foreign currency RWAs the same as the Group's consolidated capital ratios.

The Group's investments in foreign currency subsidiaries and branches, to the extent that they are not hedged for foreign exchange movements, translate into GBP upon consolidation creating CET1 capital resources sensitive to

foreign currency movements. Changes in the GBP value of the investments due to foreign currency movements are captured in the currency translation reserve, resulting in a movement in CET1 capital.

To create foreign currency Tier 1 and Total Capital resources additional to the CET1 capital resources, the Group issues debt capital in non-Sterling currencies, where possible. This is primarily achieved through the issuance of debt capital from Barclays PLC or Barclays Bank PLC in US Dollar and Euro, but can also be achieved by subsidiaries issuing capital in local currencies.

### **Management of pension risk**

The Group maintains a number of defined benefit pension schemes for past and current employees. The ability of the pension fund to meet the projected pension payments is maintained principally through investments.

Pension risk arises because the estimated market value of the pension fund assets might decline; investment returns might reduce; or the estimated value of the pension liabilities might increase as a result of changes to the market process. The Group monitors the market risks arising from its defined benefit pension schemes, and works with the Trustees to address shortfalls. In these circumstances, the Group could be required or might choose to make extra contributions to the pension fund. The Group's main defined benefit scheme was closed to new entrants in 2012.

Many of the 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:

§ Investment strategy including asset allocation and performance of assets.

§ Assessing the level of technical provision required.

§ Ensuring any minimum funding objectives is met.

§ 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 the Bank'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 oversight and workflow management of the group's responsibilities of the pension arrangements operated by Barclays PLC and its subsidiaries globally. 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 pension risk in a wider context as other relevant stakeholders from HR, Legal, Treasury and Finance are also represented at these meetings.

**Key Pension Risk control and governance include:**

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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 the Group's ICAAP for Pension risk.

§ Input into the Group's strategic plan and Stress Test exercise.

§ Provide independent oversight of the Pension risk profiles from the Bank's perspective.

§ Coordinates response to regulatory initiatives, developments and proposals on Pension, which may include inputs from material overseas schemes such as in the US, Europe and Africa.

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Barclays approach to managing risks

## Management of Treasury and Capital Risk

### Interest rate risk in the banking book management

#### Overview

Banking book operations generate non-traded market risk, primarily through interest rate risk arising from the sensitivity of net interest margins to changes in interest rates. To manage interest rate risk within its defined risk appetite, the principal banking businesses engages in internal derivative trades with Treasury. However, the businesses remain susceptible to market risk from six key sources:

- § **direct risk:** the mismatch between the run-off of product balances and the associated interest rate hedge, given that the balance sheet is held static
- § **structural risk:** the impact of the rate shock on the rolling hedge replenishment rate on non-maturity products, given that the balance sheet is held static
- § **prepayment risk:** balance run-off may be faster or slower than expected, due to customer behaviour in response to general economic conditions or interest rates. This can lead to a mismatch between the actual balance of products and the hedges executed with Treasury based on initial expectations
- § **recruitment risk:** the volume of new business may be lower or higher than expected, requiring the business to unwind pre-hedging or execute hedging transactions with Treasury at different rates than expected
- § **residual risk and margin compression:** the business may retain a small element of interest rate risk to facilitate the day to day management of customer business. Additionally, in the current low rate environment, deposits on which the Group sets the interest rate are exposed to margin compression. This is because for any further fall in base rate the Group must absorb an increasing amount of the rate move in its margin
- § **lag risk:** the risk of being unable to re-price products immediately after a change in interest rates due to both mandatory notification periods and operational constraints in large volume mailings. This is highly prevalent in managed rates savings product (e.g. Every Day Saver) where customers must be informed in writing of any planned reduction in their savings rates.

Non-traded market risk also arises from the Liquidity Buffer investment portfolio, which is managed to a defined risk appetite. Investments in the liquidity buffer are generally subject to available for sale accounting rules; changes in the

value of these assets impact capital via the available for sale reserve.

## Roles and responsibilities

### The Treasury Market Risk team:

§ Provides risk management oversight and monitoring of all traded- and non-traded market risk in Treasury, which specifically includes risk management of the liquidity buffer, funding activities, asset and liability management hedging, residual interest rate risk from the hedge accounting solution and foreign exchange translation hedging

§ Sets and monitors risk limits to ensure non-traded market risk taken in Treasury and the customer banking book adheres to agreed risk appetite.

### The IRRBB team:

§ Assesses interest rate risk in the banking book, particularly as it relates to customer banking book and Treasury

§ Acts as review and challenge of the first line's risk management practices and decisions including the hedging activity performed by Treasury on behalf of the business

§ Acts as review and challenge for the behavioural assumptions used in hedging and transfer pricing.

## Management of non-traded market risk, mitigation and hedging policies

Barclays actively seeks to minimise interest risk in the banking book by actively hedging this risk with the use of interest rate products. At the same time Barclays actively manages the potential asset and liability mismatches and changes to interest rates that could reduce the value of our investment portfolios.

## Non-traded risk measurement

Barclays uses a range of complementary technical approaches to measure non-traded market risk.

## Summary of measures for non-traded market risk

Measure	Definition
Annual earnings at risk	Impact on earnings of a parallel (upward or downward) movement in interest rates.
Economic value of equity (EVE)	Change in the present value of the banking book of a parallel (upward or downward) interest rate shock.
Economic capital	Economic Capital (EC) is held to protect against unexpected loss (in excess of expected loss) and calculated over a one-year time horizon.
Value at risk (VaR)	An estimate of the potential loss arising from unfavourable market movements, if the current positions were to be held unchanged for a set period of time.
Stress testing	Scenario based stress testing using a variety of economic parameters to quantify the impact to P&L and the balance sheet under various levels of stress.

The risk in each business is measured and controlled using both an income metric (Annual Earnings at Risk) and value metrics (Economic Value of Equity, Economic Capital and VaR).



### Annual Earnings at Risk (AEaR)

AEaR measures the sensitivity of net interest income over the next one-year period. It is calculated as the difference between the estimated income using the expected base rate forecast and the lowest estimated income following a parallel increase or decrease in interest rates (200bps), subject to a minimum interest rate of 0%. 200bp shocks are consistent with industry best practice and supported by banking regulators.

The main model assumptions are:

§ The balance sheet is kept at the current level, i.e. no growth is assumed

§ Balances are adjusted for an assumed behavioural profile. This includes the treatment of fixed rate loans including mortgages.

AEaR is applied to the entire banking book, including the liquidity buffer and internal trades with the trading book to hedge against interest rate risk in the banking book exposures. The metric provides a measure of how interest rate risk may impact the 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, the Group has implemented additional economic value risk metrics.

Barclays approach to managing risks

## Management of Treasury and Capital Risk

### Economic Value of Equity (EVE)

EVE calculates the change in the present value of the non-traded exposure for a parallel upward and downward interest rate (200bps) shock. This shock is useful for drawing comparisons across portfolios, and is also a regulatory reporting requirement. Note that the EVE calculation measures sensitivity in terms of present value, while AEaR measures income sensitivity.

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 ensuring the risk over the whole life of positions are considered. The main weaknesses of this model stem from its simplicity. In particular, it does not capture the impact of business growth or of management actions, and is based on the balance sheet as at the reporting date.

### Economic Capital (EC, for recruitment, prepayment and residual risk)

EC consistent models, based on DVaR methodologies, are used to measure unexpected losses to a 99.98% confidence interval over a one-year period. Within non-traded risk, this measure aims to capture recruitment risk, prepayment risk and residual risk for banking book products (see definitions on page 108). 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 to reduce any mismatch exposure resulting from the impact of an interest rate shock on customer prepayment levels.

EC is used in the active management of the banking book. Limits are set against EC metrics and breaches trigger mitigating actions to reduce exposure to appropriate levels. EC modelling is typically applied only to fixed rate products and the majority of variable rate and administered rate portfolios are 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 (AEaR only covers income changes over a one-year period; EVE only considers existing business and does not include any dynamic customer behaviour assumptions). The main weaknesses come from necessary simplifying assumptions. In the case of models based on statistical confidence intervals, the choice of the statistical distribution may drive under-prediction of very extreme events (i.e. the real distribution may be fat-tailed). To mitigate this, the Group continues to improve its models using long time series of historical data to capture extreme effects.

### Value at Risk (VaR)

VaR is an estimate of the potential loss arising from unfavourable market movements, if the current positions 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 the 95% confidence level for banking book portfolios covered by the measure. This calculation is a present value sensitivity while AEaR is an income sensitivity.

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 Buffer Investment Portfolio. The calculation uses a five-year historical period, a 95% confidence level and is scaled from daily to quarterly by an approved constant factor.

### **Stress testing**

Stress losses are calculated for the liquidity buffer portfolio, but not subject to controlled limits.

All non-traded market risk positions are subject to the Group's annual stress testing exercise, where scenarios based on economic parameters are used to determine the potential impact of the positions on results and the balance sheet.

### **Non-traded market risk control**

Non-traded market risk is controlled through the use of limits on many of the above risk measures. Limits are set at the total business level and then cascaded down. The total business level limits are owned by the BCROs, while the overall Group AEaR limit is agreed with Group Market Risk and approved by the BRC. Compliance with limits is monitored by the respective business market risk team with oversight provided by Group Market Risk.

Businesses manage their interest rate risk exposures by transferring this risk to Group Treasury, who then mitigate this risk using external markets if appropriate to keep the overall exposure within the agreed risk appetite. Group policy prevents non-trading businesses to run trading books; this is only permitted for the investment bank, Group Treasury, Barclays Non-Core and Africa Banking.

### **Non-traded market risk reporting**

Businesses market risk managers produce a number of detailed and summary market risk reports monthly. Where relevant on a Group-wide basis, these are sent to Group Market Risk for review and a risk summary is presented at the Group Market Risk Committee and the various market risk committees at business level. The overall market risk profile is also presented to BRC on a regular basis.

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 page 393.

§ Governance, management and measurement techniques are covered on pages 159 to 161.

Barclays approach to managing risks

## Management of operational risk

### Operational risks

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.

#### Overview

The management of operational risk has two key objectives:

§ minimise the impact of losses suffered, both in the normal course of business (small losses) and from extreme events (large losses)

§ improve the effective management of the Group and strengthen its brand and external reputation.

The Group is committed to the management and measurement of operational risk and was granted a waiver by the FSA (now the PRA) to operate an Advanced Measurement Approach (AMA) for operational risk, which commenced in January 2008. The majority of the Group calculates regulatory capital requirements using AMA (94% of capital requirements), except for small parts of the organisation acquired since the original permission (6% of capital requirements) using the Basic Indicator Approach (BIA). The Group works to benchmark its internal operational risk management and measurement practices with peer banks and to drive the further development of advanced techniques.

The Group is committed to operating within a strong system of internal controls that enables business to be transacted and risk taken without exposing the Group to unacceptable potential losses or reputational damages. The Group has an overarching framework that sets out the approach to internal governance. This guide establishes the mechanisms and processes by which the Board directs the organisation, through setting the tone and expectations from the top, delegating authority and monitoring compliance.

#### Organisation and structure

#### Organisation and structure

Operational Risk comprises a number of specific risks defined as follow:

§ **external supplier:** inadequate selection and ongoing management of external suppliers

§ **financial reporting:** reporting mis-statement or omission within external financial or regulatory reporting

§ **fraud:** dishonest behaviour with the intent to make a gain or cause a loss to others

§ **information:** inadequate protection of the Group's information in accordance with its value and sensitivity

§ **payments process:** failure in operation of payments processes

§ **people:** inadequate people capabilities, and/or performance/reward structures, and/or inappropriate behaviours

§ **premises & security:** unavailability of premises (to meet business demand) and/or safe working environments, and inadequate protection of physical assets, employees and customers against external threats

§ **taxation:** failure to comply with tax laws and practice which could lead to financial penalties, additional tax charges or reputational damages

§ **technology (including cyber security):** failure to develop and deploy secure, stable and reliable technology solutions which includes risk of loss or detriment to the Group's business and customers as a result of actions committed or facilitated through the use of networked information systems

§ **transaction operations:** failure in the management of critical transaction processes.

Barclays approach to managing risks

## Management of operational risk

In order to ensure complete coverage of the potential adverse impacts on the Group arising from operational risk, the operational risk taxonomy extends beyond the operational risks listed above to cover areas included within conduct risk. For more information on conduct risk please see page 399.

These risks may result in financial and/or non-financial impacts including legal/regulatory breaches or reputational damages.

The Group also recognises that there are certain threats/risk drivers that are more thematic and have the potential to impact the bank's strategic objectives. These are Enterprise Risk Themes and require an overarching and integrated management approach. These include:

§ **change:** risk of failure in delivering change appropriately

§ **cyber:** any cyber attack that disrupts the ability of networks, infrastructures, or applications to perform their intended functions

§ **resilience:** characteristic of an organisation, whereby it is able to survive and prosper in its commercial endeavors regardless of the impact 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 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 governance, risk and control. Businesses 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 Group Head of Operational Risk is responsible for establishing, owning and maintaining an appropriate Group-wide Operational Risk Framework and for overseeing the portfolio of operational risk across the Group.

Operational risk management acts in a second line of defence capacity, and is responsible for implementation of the framework and monitoring operational risk events and risk exposures. Key indicators (KIs) allow the Group to monitor its operational risk profile and alert management when risk levels exceed acceptable ranges or risk appetite levels and drive timely decision making and actions. Through attendance at business GRC meetings, operational risk management provides specific risk input into the issues highlighted and the overall risk profile of the business. 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 BRC or the BAC.

Specific reports are prepared by businesses, Key Risk Officers and 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 the Group to manage and measure its operational risk profile and to calculate the amount of operational risk capital that the Group needs to hold to absorb potential losses. The minimum, mandatory requirements for each of these elements are set out in the Group Operational Risk Framework and supporting policies and standards. This framework is implemented across the Group with all businesses 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**

The Group identifies and assesses all material risks within each business and evaluates the key controls in place to mitigate those risks. Managers

in the businesses use self-assessment techniques to identify risks, evaluate the effectiveness of key controls in place and assess whether the risks are being effectively managed. The businesses are then able to make decisions on what action, if any, is required to reduce the level of risk to the Group. These risk assessments are monitored on a regular basis to ensure that each business continually understands the risks it faces.

#### **Risk events**

An operational risk event is any circumstance where, through the lack or failure of a control, the Group has actually, or could have, made a loss. The definition includes situations in which the 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 the 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.

The 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.

#### **Operational risk appetite**

The Group's approach to determining its operational risk appetite combines both quantitative measures and qualitative judgement, in order to best reflect the nature of non-financial risks.



The monitoring and tracking of operational risk measures is supplemented with qualitative review and discussion at senior management executive committees on the actions being taken to improve controls and reduce risk to an acceptable level.

Operational risk appetite is aligned to the Group's Risk Appetite Framework. The BRC considers, and recommends to the Board for approval, the Group's risk appetite statement for operational risk based on performance in the current year and the projections for financial volatility the following year.

### **Key indicators**

Key indicators (KIs) are metrics which allow the Group to monitor its operational risk profile. KIs include measurable thresholds that reflect the risk appetite of the business and are monitored to alert management when risk levels exceed acceptable ranges or risk appetite levels and drive timely decision making and actions.

### **Risk scenarios**

Risk scenarios are a summary of the extreme potential risk exposure for each risk in each business and function, and include an assessment of the potential frequency of risk events, the average size of losses and three extreme scenarios. The risk scenario assessments are a key input to the Advanced Measurement Approach calculation of regulatory and 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 risk information. The businesses and functions analyse potential extreme scenarios, considering the:

§ circumstances and contributing factors that could lead to an extreme event

§ potential financial and non-financial impacts (for example reputational damage)

§ 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 may then conclude whether the potential risk is acceptable (within appetite) 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 such as mis-selling, conduct and financial crime risks.

Barclays approach to managing risks

## Management of operational risk

### Reporting

The ongoing monitoring and reporting of operational risk is a key component of the Operational Risk Framework. Reports are used by the operational risk function and by business management to understand, monitor, manage and control operational risks and losses.

The operational risk profile is reviewed by senior management at the Businesses GRC meetings as well as Operational Risk Review Forum and BRC, BAC and the Board.

### Operational risk measurement

The Group assesses its operational risk capital requirements using an Advanced Measurement Approach. The approach involves estimating the potential range of losses that could be incurred in a year from operational risk events, using statistical distributions. Regulatory capital requirements are set to cover 99.9% of the estimated losses. The Group also assesses its economic capital requirements to cover 99.98% of the estimated losses that exceed the typical losses (diversified across all risk classes).

The potential frequency and severity of losses is estimated for each Key Risk (within the Operational Risk and Conduct risk categories) across the Group's businesses and functions. The potential range of individual loss severities is represented by a statistical distribution, estimated from the average loss size and three extreme scenarios (from Risk Assessments), as well as loss data from the Operational Riskdata eXchange (ORX).

The capital calculation also takes into account the possibility of dependences between operational risk losses occurring in a year (between businesses and functions and between risks).

In certain joint ventures and associates, the Group uses the Basic Indicator Approach to determine the capital requirements: some Africa Retail Banking, including Barclays Bank Mozambique and National Bank of Commerce (Tanzania); the business activities acquired from Lehman Brothers; and the portfolios of assets purchased from Woolworths Financial Services in South Africa, Standard Life Bank, ING Direct, MBNA Corporate Cards, Upromise, RCI, Egg Cards, EdCon, Sallie Mae, Ameriprice, Hawaiian Airlines, JetBlue and US Airways.

Barclays approach to managing risks

Management of model risk

The sources of model risks, and how those risks are managed, are detailed in this section.

§ The types of risks that are classified as model risks are described on page 397.

§ Governance, management and measurement techniques are covered on page 397.

Barclays approach to managing risks

## Management of model risk

### Model risk

Model risk is the potential for adverse consequences arising from decisions based on incorrect or misused model outputs.

#### Overview

Barclays 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.

Because 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 ensuring that model risk is assessed and managed 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 allocates substantial resources to identify and record models and their usage, document and monitor the performance of models, validate models and ensure that model limitations are adequately addressed.

Barclays has a dedicated Model Risk Management (MRM) function that consists of two main units: 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.

The model risk 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, as well as vendor models and CCAR benchmarking.

Barclays is continuously enhancing model risk management. MRM reports to the Group Chief Risk Officer and operates a global framework. Implementation of best practice standards is a central objective of the Group. Large new model development programmes are currently in motion to implement the model requirements of UK structural reform, CCAR, FRTB and IFRS9.

## Organisation and structure

## Roles and responsibilities

The key model risk management activities include:

- § ensuring that models are correctly identified across all relevant areas of the firm, and recorded in the Group Models Database (GMD), the Group-wide model inventory. The heads of the relevant areas (typically, the Business Chief Risk Officers, Business Chief Executive Officers, the Treasurer, the Chief Financial Officer etc) annually attest to the completeness and accuracy of the model inventory. MGC undertakes regular conformance reviews on the model inventory. These activities are detailed in the Model Inventory, Workflow and Taxonomy Standard
- § ensuring 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 ensure that the model presented to IVU is and remains fit for purpose, in accordance with the Model Documentation Standard, and the Model Testing, Monitoring and Annual Review Standard
- § ensuring that every model is subject to validation and approval by IVU, prior to being implemented and on a continual basis, in accordance with the Model Validation and Approval Standard. 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
- § specific Standards cover model risk management activities relating to CCAR benchmarking and challenger modelling, model overlays, vendor models, and model complexity and materiality.

Barclays approach to managing risks

Management of conduct risk

This section provides an analysis of the management of conduct risk.

§ Conduct risk is the risk that detriment is caused to our customers, clients, counterparties or the Group and its employees because of inappropriate judgement in the execution of our business activities (see page 399).

Barclays approach to managing risks

## Management of conduct risk

### Conduct risk

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.

#### Overview

The Group defines, manages and mitigates conduct risk with the goals of providing positive customer and client outcomes and protecting market integrity. This includes taking reasonable steps to ensure our culture and strategy are appropriately aligned to these goals; our products and services are reasonably designed and delivered to meet the needs of our customers and clients as well as promoting the fair and orderly operation of the markets in which we do business.

As part of the Enterprise Risk Management Framework (ERMF) refresh (page 344), Reputation risk has been designated as a Principal Risk and Financial Crime has been designated as a Risk Category under Conduct Risk.

#### Organisation and structure

The Group Risk Committee (GRC) is the most senior Executive body responsible for reviewing and monitoring the effectiveness of Barclays management of conduct risk.

#### Roles and responsibilities

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The Conduct PRF comprises a number of elements that allow the Group to manage and measure its conduct risk profile.

The PRF is implemented vertically across the Group through an organisational structure that requires all businesses to implement and operate their own conduct risk frameworks that meet the requirements within the ERMF.

The primary responsibility for managing conduct risk and compliance with control requirements sits with the business where the risk arises. The Conduct Risk Accountable Executive for each business is responsible for ensuring the implementation of, and adherence to the PRF.

The Conduct Risk Lead is responsible for owning and maintaining an appropriate Group-wide Conduct Risk PRF and for overseeing Group-wide conduct risk management.

Businesses are required to report their conduct risks on both a quarterly and an event-driven basis. 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.

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Barclays approach to managing risks

### Management of reputation risk

This section provides an analysis 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 401).

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' integrity and competence may reduce the attractiveness of Barclays 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.

With effect from 2017, Reputation Risk has been re-designated as a Principal Risk within the Enterprise Risk Management Framework.

### Organisation and structure

The Group Risk Committee (GRC) is the most senior Executive body responsible for reviewing and monitoring the effectiveness of Barclays' management of Reputation Risk.

### Roles and responsibilities

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The Chief Compliance Officer is accountable for ensuring that a Reputation Principal Risk Framework and policies are developed and that they are subject to limits, monitored, reported on and escalated, as required.

Reputation risk it is by nature pervasive and can be difficult to quantify, requiring more subjective judgment than many other risks. The Reputation Principal Risk Framework sets out what is required to ensure reputation risk is managed effectively and consistently across the bank.

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.

Each business is required to operate within established reputation risk appetite and to submit quarterly reports to the Group Reputation Management team, highlighting their most significant current and potential reputation risks and issues and how they are being managed. These reports are a key internal source of information for the quarterly reputation risk reports which are prepared for the Group Risk Committee and the Board Reputation Committee.

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Barclays approach to managing risks

Management of legal risk

This section provides an analysis 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 403)

Barclays approach to managing risks

## Management of legal risk

### 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.

### Overview

With effect from 2017, legal risk, which was previously a Key Risk under operational risk, has been re-designated as a Principal Risk within the Enterprise Risk Management Framework.

The Legal Risk Framework prescribes group-wide requirements for the identification, measurement and management of legal risk, covering assessment, risk appetite, key indicators and governance. The Group General Counsel (GCC) is the Legal Principal Risk Officer and owns the Legal Risk Framework and the associated legal policies.

Legal risk is defined by the five respective Legal Policies:

§ **Contractual arrangements** failure to have enforceable contracts in place or for contracts to be enforceable as intended

§ **Litigation management** failure to adequately manage litigation involving Barclays as either claimant or defendant

§ **Intellectual property (IP)** failure to protect the Group's IP assets or Barclays infringing IP rights of third parties

§ **Competition/antitrust law** failure to follow competition/antitrust law or failure to manage relationships with competition and antitrust authorities

§ **Use of law firms** failure to control instruction of an external law firm.

Group-wide and Business/Function specific Standards may be put in place to support the implementation of the legal policies. The standards are aligned to one of the policies and are implemented by Businesses/ Functions.

### **Organisation and structure**

The Group Risk Committee (GRC) is the most senior executive body responsible for reviewing and monitoring the effectiveness of Barclays management of legal risk. Escalation paths from this forum exist to the Board of Barclays Plc.

### **Roles and responsibilities**

The Legal Risk Framework sets out what is required to ensure legal risk is managed effectively and consistently across the bank.

The primary responsibility for managing legal risk and adherence to the control requirements sits with the business where the risk arises.

On behalf of the businesses, the aligned General Counsel or Legal Senior Management, will undertake legal risk appetite assessments and provide advice and guidance on legal risk management. The legal risk assessment includes both quantitative and qualitative criteria including:

§ Knowledge of legal risk material control issues or weaknesses

§ Emerging risks resulting from upcoming changes in the control environment, systems, or internal organisational structures

§ Potential implications on Barclays of forthcoming changes in the external legal and regulatory environment and/or prevailing decisions from courts and enforcing authorities as they relate to defined legal risks.

§

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The Legal Principal Risk Officer is responsible for owning and maintaining an appropriate Legal Risk Framework and for overseeing Group-wide legal risk management.

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## Additional information

Additional financial disclosure (unaudited)

## Deposits and short-term borrowings

### Deposits

Deposits include deposits from banks and customer accounts.

Average for the year ended	2016	2015	2014
31 December <sup>a</sup>	£m	£m	£m
<b>Deposits from banks</b>			
UK	5,552	7,402	6,002
Europe	38,180	40,389	41,101
Americas	6,633	7,439	6,191
Asia	6,611	6,744	6,524
Africa	2,705	3,710	3,735
<b>Total deposits from banks</b>	<b>59,681</b>	65,684	63,553
<b>Customer Accounts</b>			
UK	301,730	283,482	274,468
Europe	41,718	44,474	55,121
Americas	76,909	70,924	65,433
Asia	7,914	10,279	13,444
Africa	12,258	39,159	43,101
<b>Customer Accounts</b>	<b>440,529</b>	448,318	451,567

Deposits from banks in offices in the United Kingdom received from non-residents amounted to £36,976m (2015: £31,976m). The balances below are on a spot basis as at 31 December 2016, rather than the average basis per the tables included above.

Year ended 31 December	2016	2015	2014
	£m	£m	£m
<b>Customer Accounts</b>	<b>423,178</b>	418,242	427,704
<b>In offices in the United Kingdom:</b>			
Current and Demand Accounts			
- interest free	85,296	73,987	68,647
Current and Demand Accounts			
- interest bearing	37,200	33,467	34,047
Savings accounts	123,833	119,838	114,828



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Other time deposits- retail	14,526	13,903	12,100
Other time deposits- wholesale	84,805	70,399	72,150
<b>Total repayable in offices in the United Kingdom</b>	<b>345,660</b>	311,594	301,772
<b>In offices outside the United Kingdom:</b>			
Current and Demand Accounts			
- interest free	9,722	12,777	17,236
Current and Demand Accounts			
- interest bearing	5,986	26,891	23,127
Savings accounts	9,511	15,729	16,335
Other time deposits	52,299	51,251	69,234
<b>Total repayable in offices outside the United Kingdom</b>	<b>77,518</b>	106,648	125,932

Customer accounts deposits in offices in the United Kingdom received from non-residents amounted to £51,161m (2015: £41,924m<sup>b</sup>).

Note

a Calculated based on month-end balances. The average balance differs to the average balance sheets as the latter excludes non-interest bearing settlement balances.

b Amounts for 2015 have been revised by £5,205m to better reflect amounts due from non-residents.

## Additional information

Additional financial disclosure (unaudited)

### Short-term borrowings

Short-term borrowings include deposits from banks, commercial paper, negotiable certificates of deposit and repurchase agreements.

#### Deposits from banks

Deposits from banks are taken from a wide range of counterparties and generally have maturities of less than one year.

	<b>2016</b>	2015	2014
	<b>£m</b>	£m	£m
Year-end balance	<b>48,214</b>	47,080	58,390
Average balance <sup>a, b</sup>	<b>59,681</b>	65,684	63,553
Maximum balance <sup>a</sup>	<b>66,404</b>	84,270	72,810
Average interest rate during year	<b>0.4%</b>	0.3%	0.3%
Year-end interest rate	<b>0.4%</b>	0.2%	0.4%
Notes			

a Calculated based on month-end balances.

b The average balance differs to the average balance sheet as the latter excludes non-interest bearing settlement balances.

#### Commercial paper

Commercial paper is issued by the Group, mainly in the United States, generally in denominations of not less than \$100,000, with maturities of up to 270 days.

	<b>2016</b>	2015	2014
	<b>£m</b>	£m	£m
Year-end balance	<b>8,132</b>	6,689	7,125
Average balance <sup>a</sup>	<b>7,711</b>	9,192	11,797
Maximum balance <sup>a</sup>	<b>8,471</b>	13,407	16,891
Average interest rate during year	<b>0.8%</b>	0.3%	0.3%
Year-end interest rate	<b>1.0%</b>	0.3%	0.2%
Note			

aCalculated based on month-end balances.

### **Negotiable certificates of deposit**

Negotiable certificates of deposits are issued mainly in the United Kingdom and United States, generally in denominations of not less than \$100,000.

	<b>2016</b>	2015	2014
	<b>£m</b>	£m	£m
Year-end balance	<b>20,373</b>	14,312	23,928
Average balance <sup>a</sup>	<b>15,540</b>	22,298	23,947
Maximum balance <sup>a</sup>	<b>20,373</b>	29,216	29,100
Average interest rate during year	<b>0.4%</b>	1.0%	0.9%
Year-end interest rate	<b>0.5%</b>	1.0%	0.9%
Note			

aCalculated based on month-end balances.

## Additional information

Additional financial disclosure (unaudited)

### Repurchase Agreements

Repurchase agreements are entered into with both customers and banks and generally have maturities of not more than three months.

	2016 £m	2015 £m	2014 £m
Year-end balance <sup>d</sup>	19,760	25,035	124,479
Average balance <sup>a, b, c, d</sup>	24,966	114,933	191,181
Maximum balance <sup>a, d</sup>	28,057	167,343	218,523
Average interest rate during year	0.8%	0.3%	0.2%
	0.7%	0.3%	0.2%
Year-end interest rate			
Notes			

aCalculated based on month-end balances.

bThe average balance differs to the average balance sheet as the latter excludes non-interest bearing settlement balances.

cThe average balance differs to the average balance sheet as the latter is stated on a gross basis prior to any offsetting of liabilities against assets.

dDuring 2015, reverse repurchase and repurchase agreements including other similar lending and borrowing in certain businesses have been designated at fair value following a change in accounting treatment to better align to the way the business manages the portfolio's risk and performance.

### Commitments and contractual obligations

Commercial commitments include guarantees, contingent liabilities and standby facilities.

## Commercial commitments

## Amount of commitment expiration per period

	Amount of commitment expiration per period				Total amounts committed £m
	Less than one year £m	Between one to three years £m	Between three to five years £m	After five years £m	
	<b>As at 31 December 2016</b>				
Guarantees and letters of credit pledged as collateral security	14,498	403	25	377	15,304
Performance guarantees, acceptances and endorsements	4,400	140	64	32	4,636
Documentary credits and other short-term trade related transactions	1,005	-	-	-	1,005
Forward starting reverse repurchase agreements	24	-	-	-	24
Standby facilities, credit lines and other commitments	302,335	102	150	70	302,657
<b>As at 31 December 2015</b>					
Guarantees and letters of credit pledged as collateral security	15,227	499	47	292	16,065
Performance guarantees, acceptances and endorsements	4,350	83	114	10	4,557
Documentary credits and other short-term trade related transactions	718	119	8	-	845
Forward starting reverse repurchase agreements	93	-	-	-	93
Standby facilities, credit lines and other commitments	278,923	1,426	906	114	281,369
Note					

Commercial commitments for 2016 exclude BAGL balances now held for sale but are included for 2015

## Additional information

Additional financial disclosure (unaudited)

Contractual obligations include debt securities, operating lease and purchase obligations.

## Contractual obligations

	Payments due by period				Total £m
	Less than	one to	three to	After five	
	one year £m	three years £m	five years £m	years £m	
<b>As at 31 December 2016</b>					
Long-term debt <sup>a</sup>	46,528	20,005	19,829	31,044	117,406
Operating lease obligations	364	547	450	1,520	2,881
Purchase obligations	342	206	122	127	797
<b>Total</b>	<b>47,234</b>	<b>20,758</b>	<b>20,401</b>	<b>32,691</b>	<b>121,084</b>
<b>As at 31 December 2015</b>					
Long-term debt <sup>a</sup>	30,525	23,101	17,773	31,978	103,377
Operating lease obligations	377	603	535	1,874	3,389
Purchase obligations	485	434	262	276	1,457
<b>Total</b>	<b>31,387</b>	<b>24,138</b>	<b>18,570</b>	<b>34,128</b>	<b>108,223</b>
Notes					

<sup>a</sup>Long-term debt has been prepared to reflect cash flows on an undiscounted basis, which includes interest payments. Net cash flows from derivatives used to hedge long-term debt amount to £3.5bn (2015: £5.5bn).

Further information on the contractual maturity of the Group's assets and liabilities is given in the Funding section of the Risk Review.



[Additional information](#)

Additional financial disclosure (unaudited)

**Securities**

<b>Securities at fair value</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>As at 31 December</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
<b>Investment securities</b>			
<b>Financial Investments</b>			
United Kingdom government	15,351	17,947	18,849
Other government	28,750	49,427	41,700
Other public bodies and US Agencies	1,635	5,462	6,034
Mortgage and asset backed securities	804	1,082	1,230
Bank and building society certificates of deposit			38
Corporate and other issuers	16,339	15,360	17,688
<b>Debt securities</b>	<b>62,879</b>	<b>89,278</b>	<b>85,539</b>
<b>Equity securities</b>	<b>438</b>	<b>989</b>	<b>527</b>



<b>Investment securities</b>	<b>Financial Investments</b>	<b>63,317</b>	90,267	86,066
<b>Other securities</b>	<b>held for trading</b>			
United Kingdom government		<b>4,793</b>	4,020	7,450
Other government		<b>15,134</b>	19,503	29,720
Other public bodies and US Agencies		<b>5,396</b>	8,683	9,879
Mortgage and asset backed securities		<b>1,568</b>	2,927	7,165
Bank and building society certificates of deposit		<b>23</b>	559	240
Corporate and other issuers		<b>11,875</b>	9,884	11,544
<b>Debt securities</b>		<b>38,789</b>	45,576	65,998
<b>Equity securities</b>		<b>38,329</b>	29,055	44,576
<b>Other securities</b>	<b>held for trading</b>	<b>77,118</b>	74,631	110,574

Investment debt securities include government securities held as part of the Group's treasury management portfolio for asset and liability, liquidity and regulatory purposes and are for use on a continuing basis in the activities of the Group. In addition, the Group holds as investments listed and unlisted corporate securities.

#### Maturities and yield of Financial Investments

As at 31 December 2016

	<b>Maturing with one year</b>		<b>Maturing one but within five years</b>		<b>Maturing after five but within ten years</b>		<b>Maturing after ten years</b>		<b>Amount</b>
	<b>Amount</b>	<b>Yield</b>	<b>Amount</b>	<b>Yield</b>	<b>Amount</b>	<b>Yield</b>	<b>Amount</b>	<b>Yield</b>	
	<b>£m</b>	<b>%</b>	<b>£m</b>	<b>%</b>	<b>£m</b>	<b>%</b>	<b>£m</b>	<b>%</b>	
Government	<b>3,014</b>	<b>1.4%</b>	<b>22,635</b>	<b>1.4%</b>	<b>10,153</b>	<b>1.3%</b>	<b>8,300</b>	<b>2.8%</b>	<b>4</b>
Other public bodies and US Agencies	<b>157</b>	<b>1.3%</b>	<b>1,469</b>	<b>0.9%</b>	<b>-</b>	<b>0.0%</b>	<b>-</b>	<b>0.0%</b>	
Other issuers	<b>4,249</b>	<b>1.0%</b>	<b>10,024</b>	<b>2.0%</b>	<b>2,585</b>	<b>2.0%</b>	<b>293</b>	<b>2.0%</b>	<b>1</b>
<b>Total book value</b>	<b>7,420</b>	<b>1.2%</b>	<b>34,128</b>	<b>1.5%</b>	<b>12,738</b>	<b>1.5%</b>	<b>8,593</b>	<b>2.7%</b>	<b>6</b>

The yield for each range of maturities is calculated by dividing the annualised interest income prevailing at 31 December 2016 by the fair value of securities held at that date.

**Additional information**

Additional financial disclosure (unaudited)

**Average balance sheet**

Average balances are based upon monthly averages.

<b>Assets</b>		<b>2016</b>				
		<b>Average balance</b>	<b>Interest income</b>	<b>Interest presented elsewhere</b>	<b>Total interest</b>	<b>Rate</b>
		<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>%</b>
Loans and advances to banks	UK	55,902	588	3	591	1.1
Loans and advances to banks	Non-UK	65,549	197	-	197	0.3
	<b>Total</b>	<b>121,451</b>	<b>785</b>	<b>3</b>	<b>788</b>	<b>0.6</b>

<b>Loans and advances to banks<sup>a</sup></b>						
Loans and advances to customers	UK	290,751	9,665	136	9,801	3.4
Loans and advances to customers	Non-UK	92,044	3,293	89	3,382	3.7
<b>Loans and advances to customers<sup>a</sup></b>	<b>Total</b>	<b>382,795</b>	<b>12,958</b>	<b>225</b>	<b>13,183</b>	<b>3.4</b>
Financial investments	UK	71,697	520	43	563	0.8
Financial investments	Non-UK	7,661	220	-	220	2.9
<b>Financial investments</b>	<b>Total</b>	<b>79,358</b>	<b>740</b>	<b>43</b>	<b>783</b>	<b>1.0</b>
Reverse repurchase agreements	UK	5,949	(7)	71	64	1.1
Reverse repurchase agreements	Non-UK	14,752	34	287	321	2.2
<b>Reverse repurchase agreements<sup>b</sup></b>	<b>Total</b>	<b>20,701</b>	<b>27</b>	<b>358</b>	<b>385</b>	<b>1.9</b>
Other interest income <sup>c</sup>			31	-	31	-
<b>Total interest earning assets not at fair value through P&amp;L</b>		<b>604,305</b>	<b>14,541</b>	<b>629</b>	<b>15,170</b>	<b>2.5</b>
Less interest expense			(4,004)	(214)	(4,218)	-
<b>Net interest</b>		<b>604,305</b>	<b>10,537</b>	<b>415</b>	<b>10,952</b>	<b>1.8</b>
Interest earning assets at fair value through P&L	UK	65,449				
Interest earning assets at fair value through P&L	Non-UK	78,470				
<b>Interest earning assets at fair value through P&amp;L</b>	<b>Total</b>	<b>143,919</b>				
<b>Total interest earning assets</b>		<b>748,224</b>				
Impairments		(4,669)				
Non-interest earning assets		550,299				
<b>Total</b>		<b>1,293,854</b>				
<b>Percentage of total average interest earning assets in offices outside the UK</b>		<b>35%</b>				
Notes						

a Loans and advances to banks and customers include all doubtful lendings, including non-accrual lendings. Interest receivable on such lendings has been included to the extent to which either cash payments have been received or interest has been accrued in accordance with the income recognition policy of the Group.

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- b Average balances for reverse repurchase agreements and cash collateral on securities borrowed have been stated on a gross basis prior to any offsetting to provide a more meaningful comparison to the related interest income and expense. The Group balance sheet offsets financial assets and liabilities where there is a legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis or to realise an asset and liability simultaneously. Reverse repurchase and repurchase agreements including other similar lending and borrowing in certain businesses have been designated at fair value following a change in accounting treatment to better align to the way the business manages the portfolio's risk and performance.
  
- c Other interest income principally includes interest income relating to hedging activity.

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## Additional information

Additional financial disclosure (unaudited)

Assets		2015				
		Interest presented within net			Interest presented	
		Average balance	interest income	elsewhere	Total interest	Rate
		£m	£m	£m	£m	%
Loans and advances to banks	UK	51,597	513	1	514	1.0
Loans and advances to banks	Non-UK	48,521	131	60	191	0.4
<b>Loans and advances to banks<sup>a</sup></b>	<b>Total</b>	100,118	644	61	705	0.7
Loans and advances to customers	UK	283,191	9,686	84	9,770	3.4
Loans and advances to customers	Non-UK	120,252	2,825	3,420	6,245	5.2

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<b>Loans and advances to customers<sup>a</sup></b>	<b>Total</b>	403,443	12,511	3,504	16,015	4.0
Financial investments	UK	84,291	494	-	494	0.6
Financial investments	Non-UK	9,436	204	144	348	3.7
<b>Financial investments</b>	<b>Total</b>	93,727	698	144	842	0.9
Reverse repurchase agreements	UK	86,322	18	187	205	0.2
Reverse repurchase agreements	Non-UK	96,187	(239)	479	240	0.2
<b>Reverse repurchase agreements<sup>b</sup></b>	<b>Total</b>	182,509	(221)	666	445	0.2
Other interest income <sup>c</sup>		-	321	-	321	-
<b>Total interest earning assets not at fair value through P&amp;L</b>		779,797	13,953	4,375	18,328	2.4
Less interest expense		-	(3,345)	(2,371)	(5,716)	-
<b>Net interest</b>		779,797	10,608	2,004	12,612	1.6
Interest earning assets at fair value through P&L	UK	48,360				
Interest earning assets at fair value through P&L	Non-UK	81,031				
<b>Interest earning assets at fair value through P&amp;L</b>	<b>Total</b>	129,391				
<b>Total interest earning assets</b>		909,188				
Impairments		(5,273)				
Non-interest earning assets		526,448				
<b>Total</b>		1,430,363				
<b>Percentage of total average interest earning assets in offices outside the UK</b>		39%				
Notes						

a Loans and advances to banks and customers include all doubtful lendings, including non-accrual lendings. Interest receivable on such lendings has been included to the extent to which either cash payments have been received or interest has been accrued in accordance with the income recognition policy of the Group.

b Average balances for reverse repurchase agreements and cash collateral on securities borrowed have been stated on a gross basis prior to any offsetting to provide a more meaningful comparison to the related interest income and expense. The Group balance sheet offsets financial assets and liabilities where there is a legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis or to realise an asset and liability simultaneously.

c. Other interest income principally includes interest income relating to hedging activity.

d. Net Interest Income from discontinued operations is included within Interest presented elsewhere.

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## Additional information

Additional financial disclosure (unaudited)

Assets		2014				
		Average balance	Interest income	Interest presented within net	Interest presented elsewhere	Total interest
		£m	£m	£m	£m	%
Loans and advances to banks	UK	48,162	380	-	380	0.8
Loans and advances to banks	Non-UK	47,375	185	77	262	0.6
<b>Loans and advances to banks<sup>a</sup></b>	<b>Total</b>	<b>95,537</b>	<b>565</b>	<b>77</b>	<b>642</b>	<b>0.7</b>

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Loans and advances to customers	UK	272,463	10,021	74	10,095	3.7
Loans and advances to customers	Non-UK	137,122	2,744	3,338	6,082	4.4
<b>Loans and advances to customers<sup>a</sup></b>	<b>Total</b>	409,585	12,765	3,412	16,177	3.9
Financial investments	UK	74,868	686	-	686	0.9
Financial investments	Non-UK	11,130	117	175	292	2.6
<b>Financial investments</b>	<b>Total</b>	85,998	803	175	978	1.1
Reverse repurchase agreements	UK	155,170	31	589	620	0.4
Reverse repurchase agreements	Non-UK	127,670	(316)	658	342	0.3
<b>Reverse repurchase agreements<sup>b</sup></b>	<b>Total</b>	282,840	(285)	1,247	962	0.3
Other interest income <sup>c</sup>		-	346	-	346	-
<b>Total interest earning assets not at fair value through P&amp;L</b>		873,960	14,194	4,911	19,105	2.2
Less interest expense		-	(4,108)	(2,763)	(6,871)	-
<b>Net interest</b>		873,960	10,086	2,148	12,234	1.4
Interest earning assets at fair value through P&L	UK	57,070				
Interest earning assets at fair value through P&L	Non-UK	56,477				
<b>Interest earning assets at fair value through P&amp;L</b>	<b>Total</b>	113,547				
<b>Total interest earning assets</b>		987,507				
Impairments		(6,770)				
Non-interest earning assets		515,020				
<b>Total</b>		1,495,757				
<b>Percentage of total average interest earning assets in offices outside the UK</b>		38%				

Notes

a Loans and advances to banks and customers include all doubtful lendings, including non-accrual lendings. Interest receivable on such lendings has been included to the extent to which either cash payments have been received or interest has been accrued in accordance with the income recognition policy of the Group.

b Average balances for reverse repurchase agreements and cash collateral on securities borrowed have been stated on a gross basis prior to any offsetting to provide a more meaningful comparison to the related interest income and expense. The Group balance sheet offsets financial assets and liabilities where there is a legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis or to realise an asset and liability

simultaneously.

c. Other interest income principally includes interest income relating to hedging activity.

d. Net Interest Income from discontinued operations is included within Interest presented elsewhere.

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## Additional information

Additional financial disclosure (unaudited)

## Liabilities

2016

Interest

presented

within  
net

Interest

Average

interest

presented

balance

income

elsewhere

Total interest

Rate

£m

£m

£m

£m

%

Deposits by banks	UK	44,890	145	2	147	0.3
Deposits by banks	Non-UK	9,469	120	-	120	1.3
<b>Deposits by banks</b>	<b>Total</b>	<b>54,359</b>	<b>265</b>	<b>2</b>	<b>267</b>	<b>0.5</b>
Customer accounts	UK	251,738	400	(84)	316	0.1
Customer accounts	Non-UK	62,127	1,113	74	1,187	1.9
<b>Customer accounts</b>	<b>Total</b>	<b>313,865</b>	<b>1,513</b>	<b>(10)</b>	<b>1,503</b>	<b>0.5</b>
Debt securities in issue	UK	39,956	757	-	757	1.9

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Debt securities in issue	Non-UK	25,712	232	-	232	0.9
<b>Debt securities in issue</b>	<b>Total</b>	<b>65,668</b>	<b>989</b>	<b>-</b>	<b>989</b>	<b>1.5</b>
Subordinated liabilities	UK	22,437	1,104	-	1,104	4.9
Subordinated liabilities	Non-UK	228	-	-	-	-
<b>Subordinated liabilities</b>	<b>Total</b>	<b>22,665</b>	<b>1,104</b>	<b>-</b>	<b>1,104</b>	<b>4.9</b>
Repurchase agreements	UK	13,736	116	110	226	1.6
Repurchase agreements	Non-UK	11,424	47	112	159	1.4
<b>Repurchase agreements<sup>a</sup></b>	<b>Total</b>	<b>25,160</b>	<b>163</b>	<b>222</b>	<b>385</b>	<b>1.5</b>
Other interest expense <sup>b</sup>			(30)	-	(30)	-
<b>Total interest bearing liabilities not at fair value through P&amp;L</b>		<b>481,717</b>	<b>4,004</b>	<b>214</b>	<b>4,218</b>	<b>0.9</b>
Interest bearing liabilities at fair value through P&L	UK	78,036				
Interest bearing liabilities at fair value through P&L	Non-UK	69,976				
<b>Interest bearing liabilities at fair value through P&amp;L</b>	<b>Total</b>	<b>148,012</b>				
<b>Total interest bearing liabilities</b>		<b>629,729</b>				
Interest free customer deposits	UK	78,788				
Interest free customer deposits	Non-UK	10,074				
<b>Interest free customer deposits</b>	<b>Total</b>	<b>88,862</b>				
Other non-interest bearing liabilities		510,767				
Shareholders' equity		64,496				
<b>Total</b>		<b>1,293,854</b>				
<b>Percentage of total average interest bearing liabilities in offices outside the UK</b>		<b>28%</b>				

Notes

a Average balances for repurchase agreements and cash collateral on securities lent have been stated on a gross basis prior to any offsetting to provide a more meaningful comparison to the related interest income and expense. The Group balance sheet offsets financial assets and liabilities where there is a legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis or to realise an asset and liability simultaneously. Reverse repurchase and repurchase agreements including other similar lending and borrowing in certain businesses have been designated at fair value following a change in accounting treatment to better align to the way the business manages the portfolio's risk and performance.

b Other interest expense principally includes interest expense relating to hedging activity.

c. Net Interest Income from discontinued operations is included within Interest presented elsewhere.

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## Additional information

Additional financial disclosure (unaudited)

Liabilities		2015				
		Interest presented within net			Interest presented	Total interest
		Average balance	interest income	elsewhere		
		£m	£m	£m	£m	%
Deposits by banks	UK	46,577	72	8	80	0.2
Deposits by banks	Non-UK	12,716	59	49	108	0.8
<b>Deposits by banks</b>	<b>Total</b>	<b>59,293</b>	<b>131</b>	<b>57</b>	<b>188</b>	<b>0.3</b>
Customer accounts	UK	237,723	2,185	28	2,213	0.9
Customer accounts	Non-UK	84,304	(781)	1,401	620	0.7

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<b>Customer accounts</b>	<b>Total</b>	322,027	1,404	1,429	2,833	0.9
Debt securities in issue	UK	45,625	346	58	404	0.9
Debt securities in issue	Non-UK	35,507	205	431	636	1.8
<b>Debt securities in issue</b>	<b>Total</b>	81,132	551	489	1,040	1.3
Subordinated liabilities	UK	20,015	1,007	-	1,007	5.0
Subordinated liabilities	Non-UK	818	8	72	80	9.8
<b>Subordinated liabilities</b>	<b>Total</b>	20,833	1,015	72	1,087	5.2
Repurchase agreements	UK	94,660	-	232	232	0.2
Repurchase agreements	Non-UK	93,438	52	231	283	0.3
<b>Repurchase agreements<sup>a</sup></b>	<b>Total</b>	188,098	52	463	515	0.3
Other interest expense <sup>b</sup>		-	192	(139)	53	-
<b>Total interest bearing liabilities not at fair value through P&amp;L</b>		671,383	3,345	2,371	5,716	0.9
Interest bearing liabilities at fair value through P&L	UK	51,164				
Interest bearing liabilities at fair value through P&L	Non-UK	63,779				
<b>Interest bearing liabilities at fair value through P&amp;L</b>	<b>Total</b>	114,943				
<b>Total interest bearing liabilities</b>		786,326				
Interest free customer deposits	UK	71,763				
Interest free customer deposits	Non-UK	14,182				
<b>Interest free customer deposits</b>	<b>Total</b>	85,945				
Other non-interest bearing liabilities		490,992				
Shareholders' equity		67,100				
<b>Total</b>		1,430,363				
<b>Percentage of total average interest bearing liabilities in offices outside the UK</b>		37%				

Notes

a Average balances for repurchase agreements and cash collateral on securities lent have been stated on a gross basis prior to any offsetting to provide a more meaningful comparison to the related interest income and expense. The Group balance sheet offsets financial assets and liabilities where there is a legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis or to realise an asset and liability simultaneously.



b. Other interest expense principally includes interest expense relating to hedging activity.

c. Net Interest Income from discontinued operations is included within Interest presented elsewhere.

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## Additional information

Additional financial disclosure (unaudited)

## Liabilities

2014

		Interest presented within net		Interest presented		Total interest	Rate
		Average balance	interest income	elsewhere			
		£m	£m	£m	£m	£m	%
Deposits by banks	UK	41,931	89	-	89	89	0.2
Deposits by banks	Non-UK	15,388	44	70	114	114	0.7
<b>Deposits by banks</b>	<b>Total</b>	<b>57,319</b>	<b>133</b>	<b>70</b>	<b>203</b>	<b>203</b>	<b>0.4</b>
Customer accounts	UK	231,792	2,761	6	2,767	2,767	1.2
Customer accounts	Non-UK	92,337	(557)	1,516	959	959	1.0
<b>Customer accounts</b>	<b>Total</b>	<b>324,129</b>	<b>2,204</b>	<b>1,522</b>	<b>3,726</b>	<b>3,726</b>	<b>1.1</b>

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Debt securities in issue	UK	51,218	456	82	538	1.1
Debt securities in issue	Non-UK	38,515	236	425	661	1.7
<b>Debt securities in issue</b>	<b>Total</b>	89,733	692	507	1,199	1.3
Subordinated liabilities	UK	19,575	989	-	989	5.1
Subordinated liabilities	Non-UK	1,151	17	64	81	7.0
<b>Subordinated liabilities</b>	<b>Total</b>	20,726	1,006	64	1,070	5.2
Repurchase agreements	UK	166,224	64	376	440	0.3
Repurchase agreements	Non-UK	126,347	9	230	239	0.2
<b>Repurchase agreements<sup>a</sup></b>	<b>Total</b>	292,571	73	606	679	0.2
Other interest expense <sup>b</sup>			-	(6)	(6)	-
<b>Total interest bearing liabilities not at fair value through P&amp;L</b>		784,478	4,108	2,763	6,871	0.9
Interest bearing liabilities at fair value through P&L	UK	37,722				
Interest bearing liabilities at fair value through P&L	Non-UK	28,755				
<b>Interest bearing liabilities at fair value through P&amp;L</b>	<b>Total</b>	66,477				
<b>Total interest bearing liabilities</b>		850,955				
Interest free customer deposits	UK	65,294				
Interest free customer deposits	Non-UK	15,033				
<b>Interest free customer deposits</b>	<b>Total</b>	80,327				
Other non-interest bearing liabilities		498,675				
Shareholders' equity		65,800				
<b>Total</b>		1,495,757				
<b>Percentage of total average interest bearing liabilities in offices outside the UK</b>		36%				

Notes

a Average balances for repurchase agreements and cash collateral on securities lent have been stated on a gross basis prior to any offsetting to provide a more meaningful comparison to the related interest income and expense. The Group balance sheet offsets financial assets and liabilities where there is a legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis or to realise an asset and liability simultaneously.

b Other interest expense principally includes interest expense relating to hedging activity.

c. Net Interest Income from discontinued operations is included within Interest presented elsewhere.

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## Additional information

Additional financial disclosure (unaudited)

**Changes in total interest volume and rate analysis**

The following tables allocate changes in interest between changes in volume and changes in interest rates for the last two years. Volume and rate variances have been calculated on the movement in the average balances and the change in the interest rates on average interest earning assets and average interest bearing liabilities. Where variances have arisen from changes in both volumes and interest rates, these have been allocated proportionately between the two.

		2016/2015 Change due to			2015/2014 Change due to		
		increase/(decrease) in:			increase/(decrease) in:		
		Total			Total		
		change	Volume	Rate	change	Volume	Rate
		£m	£m	£m	£m	£m	£m
Loans and advances to banks	UK	77	45	32	134	28	106
Loans and advances to banks	Non-UK	6	57	(51)	(71)	7	(78)
<b>Loans and advances to banks</b>	<b>Total</b>	<b>83</b>	<b>102</b>	<b>(19)</b>	<b>63</b>	<b>35</b>	<b>28</b>
Loans and advances to customers	UK	31	258	(227)	(325)	387	(712)
Loans and advances to customers	Non-UK	(2,863)	(1,274)	(1,589)	163	(802)	965
	<b>Total</b>	<b>(2,832)</b>	<b>(1,016)</b>	<b>(1,816)</b>	<b>(162)</b>	<b>(415)</b>	<b>253</b>

<b>Loans and advances to customers</b>							
Financial investments	UK	69	(82)	151	(192)	78	(270)
Financial investments	Non-UK	(128)	(59)	(69)	56	(49)	105
<b>Financial investments</b>	<b>Total</b>	<b>(59)</b>	<b>(141)</b>	<b>82</b>	<b>(136)</b>	<b>29</b>	<b>(165)</b>
Reverse repurchase agreements	UK	(141)	(332)	191	(415)	(216)	(198)
Reverse repurchase agreements	Non-UK	81	(358)	439	(102)	(79)	(22)
<b>Reverse repurchase agreements</b>	<b>Total</b>	<b>(60)</b>	<b>(690)</b>	<b>630</b>	<b>(517)</b>	<b>(295)</b>	<b>(220)</b>
<b>Other interest income</b>		<b>(290)</b>	<b>-</b>	<b>(290)</b>	<b>(25)</b>	<b>-</b>	<b>(25)</b>
<b>Total interest receivable</b>		<b>(3,158)</b>	<b>(1,745)</b>	<b>(1,413)</b>	<b>(777)</b>	<b>(646)</b>	<b>(129)</b>

## 2016/2015 Change due to

## 2015/2014 Change due to

## Interest expense

## increase/(decrease) in:

## increase/(decrease) in:

## Total

## Total

	change	Volume	Rate	change	Volume	Rate
--	--------	--------	------	--------	--------	------

£m

£m

£m

£m

£m

£m

Deposits by banks	UK	67	(1)	68	(9)	10	(19)
Deposits by banks	Non-UK	12	(31)	43	(6)	(21)	15
<b>Deposits by banks</b>	<b>Total</b>	<b>79</b>	<b>(32)</b>	<b>111</b>	<b>(15)</b>	<b>(11)</b>	<b>(4)</b>
Customer accounts	UK	(1,897)	124	(2,021)	(554)	69	(623)
Customer accounts	Non-UK	567	(201)	768	(339)	(78)	(261)
<b>Customer accounts</b>	<b>Total</b>	<b>(1,330)</b>	<b>(77)</b>	<b>(1,253)</b>	<b>(893)</b>	<b>(9)</b>	<b>(884)</b>
Debt securities in issue	UK	353	(56)	409	(134)	(55)	(79)
Debt securities in issue	Non-UK	(404)	(145)	(259)	(25)	(53)	28
<b>Debt securities in issue</b>	<b>Total</b>	<b>(51)</b>	<b>(201)</b>	<b>150</b>	<b>(159)</b>	<b>(108)</b>	<b>(51)</b>
Subordinated liabilities	UK	97	121	(24)	18	23	(5)
Subordinated liabilities	Non-UK	(80)	(33)	(47)	(1)	(27)	26
<b>Subordinated liabilities</b>	<b>Total</b>	<b>17</b>	<b>88</b>	<b>(71)</b>	<b>17</b>	<b>(4)</b>	<b>21</b>
Repurchase agreements	UK	(5)	(344)	339	(208)	(177)	(31)

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Repurchase agreements	Non-UK	(124)	(423)	299	44	(73)	117
<b>Repurchase agreements</b>	<b>Total</b>	<b>(129)</b>	<b>(767)</b>	<b>638</b>	(164)	(250)	86
<b>Other interest expense</b>		<b>(83)</b>	<b>-</b>	<b>(83)</b>	59	-	59
<b>Total interest payable</b>		<b>(1,497)</b>	<b>(989)</b>	<b>(508)</b>	(1,155)	(382)	(773)

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## Additional information

Additional financial disclosure (unaudited)

### Credit risk additional disclosure

This section of the report contains supplementary information that is more detailed or contains longer histories than the data presented in the credit risk management section.

#### A. Impairment

#### Movements in allowance for impairment by geography

	2016	2015	2014	2013	2012
	£m	£m	£m	£m	£m
Allowance for impairment as at 1 January	4,921	5,455	7,258	7,799	10,597
Effects of the adoption of IFRS 10	-	-	-	-	(1,701)
Acquisitions and disposals	(5)	-	13	(5)	(80)
Unwind of discount	(75)	(149)	(153)	(179)	(211)
Exchange and other adjustments	(736)	(617)	(1,047)	(260)	(206)
<b>Amounts written off:</b>					
United Kingdom	(1,272)	(1,354)	(1,313)	(1,548)	(1,972)
Europe	(218)	(200)	(742)	(957)	(1,119)
Americas	(664)	(411)	(535)	(276)	(311)



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Africa and Middle East	(20)	(300)	(423)	(534)	(655)
Asia	(19)	(12)	(24)	(28)	(62)
<b>Recoveries:</b>					
United Kingdom	241	281	147	119	127
Europe	18	15	27	18	31
Americas	104	52	-	-	-
Africa and Middle East	1	52	46	63	51
Asia	1	-	1	1	3
<b>New and increased impairment allowance:</b>					
United Kingdom	1,659	1,559	1,596	1,687	1,728
Europe	350	399	757	1,131	1,566
Americas	1,164	649	378	514	250
Africa and Middle East	73	438	449	566	853
Asia	13	11	50	31	50
<b>Reversals of impairment allowance:</b>					
United Kingdom	(288)	(320)	(381)	(302)	(356)
Europe	(90)	(141)	(337)	(323)	(463)
Americas	(139)	(59)	(38)	(4)	(23)
Africa and Middle East	(29)	(22)	(45)	(45)	(70)
Asia	(5)	(5)	(8)	(9)	(16)
<b>Recoveries:</b>					
United Kingdom	(241)	(281)	(147)	(119)	(127)
Europe	(18)	(15)	(27)	(18)	(31)
Americas	(104)	(52)	-	-	-
Africa and Middle East	(1)	(52)	(46)	(63)	(51)
Asia	(1)	-	(1)	(1)	(3)
<b>Allowance for impairment as at 31 December</b>	<b>4,620</b>	4,921	5,455	7,258	7,799
<b>Average loans and advances for the year</b>	<b>504,246</b>	503,561	505,122	525,995	564,128

## Additional information

Additional financial disclosure (unaudited)

## Analysis of impairment charges

	2016	2015	2014	2013	2012
As at 31 December	£m	£m	£m	£m	£m
<b>Impairment charges:</b>					
United Kingdom	1,130	960	1,071	1,262	1,245
Europe	242	244	392	790	1,072
Americas	921	539	339	510	227
Africa and Middle East	43	7	9	(12)	37
Asia	7	6	41	21	31
Impairment on loans and advances	2,343	1,756	1,852	2,571	2,612
Impairment on available for sale assets	21	18	(31)	-	40
Impairment on reverse repurchase agreements	-	-	(5)	8	(3)
<b>Impairment charges</b>	<b>2,364</b>	1,774	1,816	2,579	2,649
Other credit provisions charge	9	(12)	5	17	(4)
<b>Impairment charges</b>	<b>2,373</b>	1,762	1,821	2,596	2,645

The industry classifications in the tables below have been prepared at the level of the borrowing entity. This means that a loan to a subsidiary of a major corporation is classified by the industry in which the subsidiary operates, even though the Parent's predominant business may be in a different industry.

**Total impairment charges on loans and advances by industry**

	<b>2016</b>	2015	2014	2013	2012
<b>As at 31 December</b>	<b>£m</b>	£m	£m	£m	£m
United Kingdom:					
Financial institutions	<b>(1)</b>	(4)	(9)	2	30
Manufacturing	<b>39</b>	(8)	1	44	12
Construction	<b>7</b>	10	8	23	25
Property	<b>(13)</b>	11	10	25	82
Energy and water	<b>12</b>	42	-	-	1
Wholesale and retail distribution and leisure	<b>38</b>	38	54	52	109
Business and other services	<b>56</b>	110	76	82	138
Home loans	<b>(4)</b>	27	28	38	18
Cards, unsecured and other personal lending	<b>975</b>	735	893	980	799
Other	<b>20</b>	(1)	10	16	31
<b>Total United Kingdom</b>	<b>1,129</b>	960	1,071	1,262	1,245
Overseas	<b>1,214</b>	796	781	1,309	1,367
<b>Total Impairment charges</b>	<b>2,343</b>	1,756	1,852	2,571	2,612

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## Additional information

Additional financial disclosure (unaudited)

## Allowance for impairment by industry

	2016		2015		2014		2013		2012	
As at 31 December	£m	%	£m	%	£m	%	£m	%	£m	%
United Kingdom:										
Financial institutions	5	0.1	10	0.2	9	0.2	23	0.3	411	5.3
Manufacturing	60	1.3	30	0.6	32	0.6	84	1.2	37	0.5
Construction	35	0.8	32	0.7	33	0.6	45	0.6	31	0.4
Property	89	1.9	122	2.5	140	2.6	73	1.0	118	1.5
Government and central bank	-	-	-	-	-	-	18	0.2	-	-
Energy and water	114	2.5	90	1.8	-	-	1	-	-	-
Wholesale and retail distribution and leisure	143	3.1	124	2.5	137	2.5	124	1.7	243	3.1
Business and other services	252	5.5	238	4.8	205	3.8	202	2.8	217	2.8
Home loans	144	3.1	157	3.2	123	2.3	111	1.5	129	1.7
Cards, unsecured and other personal lending	1,653	35.8	1,652	33.6	1,912	35.1	2,228	30.7	2,043	26.2
Other	49	1.1	37	0.8	61	1.1	71	1.0	41	0.5
	<b>2,544</b>	<b>55.1</b>	<b>2,492</b>	<b>50.6</b>	<b>2,652</b>	<b>48.6</b>	<b>2,980</b>	<b>41.1</b>	<b>3,270</b>	<b>41.9</b>

<b>Total United Kingdom</b>										
Overseas	<b>2,076</b>	<b>44.9</b>	2,429	49.4	2,803	51.4	4,278	58.9	4,529	58.1
<b>Total</b>	<b>4,620</b>	<b>100.0</b>	4,921	100.0	5,455	100.0	7,258	100.0	7,799	100.0

### Amounts written off and recovered by industry

	Amounts written off					Recoveries of amounts previously written off				
	2016	2015	2014	2013	2012	2016	2015	2014	2013	2012
As at 31 December	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
United Kingdom:										
Financial institutions	<b>2</b>	3	1	13	55	<b>1</b>	8	11	1	4
Manufacturing	<b>15</b>	6	13	55	76	<b>3</b>	2	6	4	2
Construction	<b>5</b>	13	21	26	52	<b>1</b>	3	3	2	4
Property	<b>18</b>	24	19	34	95	<b>11</b>	13	17	1	7
Energy and water	<b>-</b>	-	-	1	1	<b>2</b>	2	-	-	-
Wholesale and retail distribution and leisure	<b>25</b>	94	48	78	246	<b>5</b>	17	13	4	13
Business and other services	<b>52</b>	65	59	138	200	<b>10</b>	15	10	19	22
Home loans	<b>11</b>	22	15	39	36	<b>-</b>	3	2	2	2
Cards, unsecured and other personal lending	<b>1,134</b>	1,113	994	1,127	1,184	<b>206</b>	214	81	82	73
Other	<b>10</b>	14	144	37	27	<b>2</b>	4	4	4	-
<b>Total United Kingdom</b>	<b>1,272</b>	1,354	1,314	1,548	1,972	<b>241</b>	281	147	119	127
Overseas	<b>921</b>	923	1,723	1,795	2,147	<b>125</b>	119	74	82	85
<b>Total</b>	<b>2,193</b>	2,277	3,037	3,343	4,119	<b>366</b>	400	221	201	212

**Impairment ratios**

	<b>2016</b>	2015	2014	2013	2012
	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
Impairment charges as a percentage of average loans and advances	<b>0.46</b>	0.42	0.44	0.58	0.59
Amounts written off (net of recoveries) as a percentage of average loans and advances	<b>0.36</b>	0.37	0.56	0.60	0.69
Allowance for impairment balance as a percentage of loans and advances as at 31 December	<b>1.05</b>	1.10	1.15	1.54	1.65

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## Additional information

Additional financial disclosure (unaudited)

**B. Potential credit risk loans**

## Credit risk loans summary

	2016	2015	2014	2013	2012
As at 31 December	£m	£m	£m	£m	£m
Impaired loans	4,614	5,635	6,854	10,510	11,747
Accruing loans which are contractually overdue 90 days or more as to principal or interest	1,474	1,744	1,912	1,903	2,490
Impaired and restructured loans	403	438	723	885	788
<b>Credit risk loans</b>	<b>6,491</b>	<b>7,817</b>	<b>9,489</b>	<b>13,298</b>	<b>15,025</b>

	2016	2015	2014	2013	2012
Credit risk loans	£m	£m	£m	£m	£m

## As at 31 December

**Impaired loans:**

United Kingdom	2,688	2747	3090	3986	4717
Europe	1,078	1198	2011	4137	4433
Americas	641	499	317	683	357
Africa and Middle East	140	1106	1353	1626	2167
Asia	67	85	83	78	73
<b>Total</b>	<b>4,614</b>	<b>5,635</b>	<b>6,854</b>	<b>10,510</b>	<b>11,747</b>

**Accruing loans which are contractually overdue 90 days or more as to principal or interest:**

United Kingdom	<b>810</b>	848	971	953	1,227
Europe	<b>331</b>	300	354	503	476
Americas	<b>320</b>	185	149	81	96
Africa and Middle East	<b>13</b>	411	437	364	688
Asia	<b>-</b>	-	1	2	3
<b>Total</b>	<b>1,474</b>	1,744	1,912	1,903	2,490

**Impaired and restructured loans:**

United Kingdom	<b>217</b>	286	559	734	615
Europe	<b>6</b>	33	31	13	27
Americas	<b>180</b>	117	90	81	116
Africa and Middle East	<b>-</b>	2	42	56	25
Asia	<b>-</b>	-	1	1	5
<b>Total</b>	<b>403</b>	438	723	885	788

**Total credit risk loans:**

United Kingdom	<b>3,715</b>	3,881	4,620	5,673	6,559
Europe	<b>1,415</b>	1,531	2,396	4,653	4,936
Americas	<b>1,141</b>	801	556	845	569
Africa and Middle East	<b>153</b>	1,519	1,832	2,046	2,880
Asia	<b>67</b>	85	85	81	81
<b>Credit risk loans</b>	<b>6,491</b>	7,817	9,489	13,298	15,025



## Additional information

Additional financial disclosure (unaudited)

<b>Potential problem loans</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
<b>As at 31 December</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
United Kingdom	<b>1,302</b>	983	942	1,112	1,035
Europe	<b>209</b>	158	208	285	430
Americas	<b>599</b>	487	146	99	80
Africa and Middle East	<b>32</b>	408	306	310	314
Asia	<b>54</b>	14	10	2	1
<b>Potential problem loans</b>	<b>2,196</b>	2,050	1,612	1,808	1,860

	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>Interest foregone on credit risk loans</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
<b>Interest income that would have been recognised under the original contractual terms</b>			
United Kingdom	<b>91</b>	139	195
Rest of the World	<b>196</b>	151	173
			<b>1081</b>

<b>Total</b>	<b>287</b>	290	368		
<b>Total impairment allowance coverage of credit risk loans</b>	<b>2016</b>	2015	2014	2013	2012
	%	%	%	%	%
<b>As at 31 December</b>					
United Kingdom	<b>68.5</b>	64.2	57.4	52.5	49.9
Europe	<b>48.4</b>	53.3	50.9	53.4	52.8
Americas	<b>109.3</b>	89.2	89.7	77.4	83.0
Africa and Middle East	<b>58.2</b>	55.3	54.7	52.7	48.0
Asia	<b>82.1</b>	70.3	96.5	72.8	86.4
<b>Total coverage of credit risk lending</b>	<b>71.2</b>	63.0	57.5	54.6	51.9
<b>Total impairment allowance coverage of potential credit risk loans</b>	<b>2016</b>	2015	2014	2013	2012
	%	%	%	%	%
<b>As at 31 December</b>					
United Kingdom	<b>50.7</b>	51.2	48.7	43.9	43.1
Europe	<b>42.2</b>	48.3	46.9	50.3	48.6
Americas	<b>71.7</b>	55.5	71.1	69.3	72.7
Africa and Middle East	<b>48.1</b>	43.6	46.9	45.8	43.2
Asia	<b>45.5</b>	60.4	86.3	71.1	85.4
<b>Total coverage of potential credit risk lending</b>	<b>53.2</b>	49.9	49.7	48.0	46.2



Additional information

Additional financial disclosure (unaudited)

C. Maturity Analysis of Loans and Advances

Maturity analysis of loans and advances to customers

Over

Over

three Over six Over one

three Over five

months months year but

years but years but

Not more but not but not not more

not more not more

than more more than

On three than six than one three than five than ten Over ten

demand months months year years years years years Total

As at  
31 December  
2016

United  
Kingdom

£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
14,810	20,056	1,127	2,929	14,917	14,123	4,478	13,626	86,066	

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Corporate lending									
Other lending to customers in the United Kingdom	3,544	3,768	2,489	5,181	19,484	16,020	34,367	85,377	170,230
<b>Total United Kingdom</b>	<b>18,354</b>	<b>23,824</b>	<b>3,616</b>	<b>8,110</b>	<b>34,401</b>	<b>30,143</b>	<b>38,845</b>	<b>99,003</b>	<b>256,296</b>
Europe	5,295	21,497	1,076	1,948	5,618	4,917	2,870	4,515	47,736
Americas	3,442	35,518	2,330	4,781	13,982	8,822	6,646	6,771	82,292
Africa and Middle East	210	861	200	307	578	870	93	59	3,178
Asia	895	4,482	454	764	912	307	74	14	7,902
<b>Total loans and advances to customers</b>	<b>28,196</b>	<b>86,182</b>	<b>7,676</b>	<b>15,910</b>	<b>55,491</b>	<b>45,059</b>	<b>48,528</b>	<b>110,362</b>	<b>397,404</b>

As at  
31 December  
2015

**United Kingdom**

Corporate lending	14,634	14,957	2,791	3,301	12,692	13,922	4,585	11,307	78,189
Other lending to customers in the United Kingdom	3,811	4,157	2,454	5,248	18,925	15,911	33,604	79,279	163,389
<b>Total United Kingdom</b>	<b>18,445</b>	<b>19,114</b>	<b>5,245</b>	<b>8,549</b>	<b>31,617</b>	<b>29,833</b>	<b>38,189</b>	<b>90,586</b>	<b>241,578</b>
Europe	4,459	19,236	4,639	1,957	4,865	4,400	3,351	5,281	48,188
Americas	3,090	30,144	2,788	5,336	10,987	8,450	4,926	4,807	70,528
Africa and Middle East	4,034	3,021	1,503	2,435	7,057	5,855	4,485	5,910	34,300
Asia	509	5,169	578	1,410	1,092	544	175	67	9,544
<b>Total loans and advances to customers</b>	<b>30,537</b>	<b>76,684</b>	<b>14,753</b>	<b>19,687</b>	<b>55,618</b>	<b>49,082</b>	<b>51,126</b>	<b>106,651</b>	<b>404,138</b>

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## Additional information

Additional financial disclosure (unaudited)

## Maturity analysis of loans and advances to banks

	On demand	Not more than three months	Over three months but not more than six months	Over six months but not more than one year	Over one year but not more than three years	Over three years but not more than five years	Over five years but not more than ten years	Over ten years	Total
As at 31 December 2016	£m	£m	£m	£m	£m	£m	£m	£m	£m
United Kingdom	270	5,624	1,485	34	45	-	-	-	7,458
Europe	1,178	11,398	12	25	61	-	-	-	12,674
Americas	1,887	14,329	136	211	313	18	-	-	16,894

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Africa and Middle East	224	772	305	331	146	-	-	-	1,778
Asia	1,299	2,224	815	12	83	1	13	-	4,447
<b>Total loans and advances to banks</b>	<b>4,858</b>	<b>34,347</b>	<b>2,753</b>	<b>613</b>	<b>648</b>	<b>19</b>	<b>13</b>	<b>-</b>	<b>43,251</b>
<b>As at 31 December 2015</b>									
United Kingdom	441	9,520	560	-	199	13	-	-	10,733
Europe	1,109	7,885	832	26	66	-	-	-	9,918
Americas	1,193	10,980	244	327	308	26	-	-	13,078
Africa and Middle East	1,173	880	102	306	404	1	-	34	2,900
Asia	1,438	2,274	216	175	602	3	12	-	4,720
<b>Total loans and advances to banks</b>	<b>5,354</b>	<b>31,539</b>	<b>1,954</b>	<b>834</b>	<b>1,579</b>	<b>43</b>	<b>12</b>	<b>34</b>	<b>41,349</b>

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## Additional information

Additional financial disclosure (unaudited)

## D. Industrial and Geographical Concentrations of Loans and Advances

## Loans and advances to customers by industry

	2016	2015	2014	2013	2012
As at 31 December	£m	£m	£m	£m	£m
Financial institutions	91,826	80,785	103,503	103,703	93,745
Manufacturing	12,470	12,444	11,849	10,632	11,907
Construction	3,525	3,798	3,767	4,245	4,625
Property	20,856	20,019	19,544	20,844	22,575
Government and central bank	12,029	5,942	7,127	4,999	4,809
Energy and water	7,565	7,874	8,557	7,547	7,638
Wholesale and retail distribution and leisure	13,143	14,034	13,635	13,288	15,070
Business and other services	22,135	26,092	22,803	20,663	24,722
Home loans	145,184	156,384	167,520	180,295	172,875
Cards, unsecured loans and other personal lending	59,851	63,217	58,914	55,806	58,863
Other	8,820	13,549	16,003	19,463	21,530
<b>Loans and advances to customers</b>	<b>397,404</b>	<b>404,138</b>	<b>433,222</b>	<b>441,485</b>	<b>438,359</b>

## Loans and advances to customers in the UK

	2016	2015	2014	2013	2012
As at 31 December	£m	£m	£m	£m	£m
Financial institutions	22,214	18,530	23,728	22,101	22,290
Manufacturing	6,816	5,735	6,274	5,411	6,078
Construction	3,254	3,164	2,957	3,195	3,108



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Property	18,145	15,556	15,053	15,096	15,283
Government and central bank	6,654	512	276	819	198
Energy and water	2,348	1,922	2,096	1,715	2,286
Wholesale and retail distribution and leisure	10,586	10,382	9,997	9,734	9,810
Business and other services	16,427	16,314	13,944	13,052	15,971
Home loans	131,945	132,324	132,864	129,703	119,781
Cards, unsecured loans and other personal lending	31,260	30,452	28,061	30,396	31,772
Other	6,647	6,687	8,944	8,444	9,476
<b>Loans and advances to customers in the UK</b>	<b>256,296</b>	<b>241,578</b>	<b>244,194</b>	<b>239,666</b>	<b>236,053</b>

**Loans and advances to customers in Europe**

	2016	2015	2014	2013	2012
As at 31 December	£m	£m	£m	£m	£m
Financial institutions	19,803	16,918	22,126	17,791	20,245
Manufacturing	2,613	2,352	1,641	2,051	2,827
Construction	30	68	193	625	663
Property	1,047	796	1,175	2,652	3,242
Government and central bank	3,545	3,415	3,759	1,583	2,458
Energy and water	1,497	1,280	2,612	3,119	2,376
Wholesale and retail distribution and leisure	944	711	1,105	1,524	2,588
Business and other services	1,170	3,355	1,878	2,882	2,985
Home loans	12,189	12,503	19,933	35,110	36,965
Cards, unsecured loans and other personal lending	4,283	5,047	5,226	7,146	6,346
Other	615	1,743	1,589	2,014	2,471
<b>Loans and advances to customers in Europe</b>	<b>47,736</b>	<b>48,188</b>	<b>61,237</b>	<b>76,497</b>	<b>83,166</b>

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## Additional information

Additional financial disclosure (unaudited)

**Loans and advances to customers in the Americas**

	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
<b>As at 31 December</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Financial institutions	<b>45,193</b>	39,798	49,171	49,457	43,428
Manufacturing	<b>2,516</b>	1,562	1,458	1,308	1,229
Construction	<b>204</b>	120	119	19	1
Property	<b>1,472</b>	1,720	1,542	944	686
Government and central bank	<b>125</b>	3	320	371	785
Energy and water	<b>2,720</b>	2,914	2,487	1,496	1,761
Wholesale and retail distribution and leisure	<b>985</b>	934	490	473	739
Business and other services	<b>3,904</b>	3,363	3,262	2,227	2,368
Home loans	<b>595</b>	624	770	783	480
Cards, unsecured loans and other personal lending	<b>23,700</b>	18,140	15,666	12,936	12,047
Other	<b>878</b>	1,350	1,775	1,301	1,235
<b>Loans and advances to customers in the Americas</b>	<b>82,292</b>	70,528	77,060	71,315	64,759

**Loans and advances to customers in Africa and Middle East**

	2016	2015	2014	2013	2012
As at 31 December	£m	£m	£m	£m	£m
Financial institutions	427	1,860	4,169	6,298	4,546
Manufacturing	60	2,320	1,856	1,229	1,252
Construction	2	363	403	379	829
Property	96	1,780	1,579	2,029	3,117
Government and central bank	483	613	997	1,090	1,368
Energy and water	494	1,025	645	739	822
Wholesale and retail distribution and leisure	328	1,837	1,831	1,378	1,833
Business and other services	237	2,685	3,358	2,058	2,760
Home loans	357	10,689	13,591	14,347	15,376
Cards, unsecured loans and other personal lending	494	8,081	8,605	4,043	7,540
Other	200	3,047	3,210	7,073	7,827
<b>Loans and advances to customers in Africa and Middle East</b>	<b>3,178</b>	<b>34,300</b>	<b>40,244</b>	<b>40,663</b>	<b>47,270</b>

**Loans and advances to customers in Asia**

	2016	2015	2014	2013	2012
As at 31 December	£m	£m	£m	£m	£m
Financial institutions	4,189	3,679	4,309	8,056	3,236
Manufacturing	465	475	620	633	521

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Construction	35	83	95	27	24
Property	96	167	195	123	247
Government and central bank	1,222	1,399	1,775	1,136	-
Energy and water	506	733	717	478	393
Wholesale and retail distribution and leisure	300	170	212	179	100
Business and other services	397	375	361	444	638
Home loans	98	244	362	352	273
Cards, unsecured loans and other personal lending	114	1,497	1,356	1,285	1,158
Other	480	722	485	631	521
<b>Loans and advances to customers in Asia</b>	<b>7,902</b>	<b>9,544</b>	<b>10,487</b>	<b>13,344</b>	<b>7,111</b>

## Interest rate sensitivity of loans and advances

2016

2015

## advances

	Fixed rate	Variable rate	Total	Fixed rate	Variable rate	Total
As at 31 December	£m	£m	£m	£m	£m	£m
Banks	14,047	29,204	43,251	12,348	29,001	41,349
Customers	124,995	272,409	397,404	121,960	282,178	404,138



## Additional information

Additional financial disclosure (unaudited)

Foreign outstandings in currencies other than the local currency of the borrower for countries where this exceeds 0.75% of total Group assets

				Commercial
			Banks	industrial
			and other	Government
			financial	and official
			institutions	institutions
	As % of	Total	sectors	private
	assets	£m	£m	£m
<b>As at 31 December 2016<sup>a</sup></b>				
United States	7.5	91,365	11,749	10,149
Germany	1.6	18,044	10,204	4,685
France	1.8	19,153	8,120	2,872
Cayman Islands	2.0	14,192	28	2
				69,468
				3,155
				8,161
				14,162

Switzerland	0.8	9,884	651	7,533	1,700
As at 31 December 2015 <sup>a</sup>					
United States	6.9	76,744	11,648	18,422	46,674
Germany	1.7	18,564	10,054	5,916	2,594
France	1.6	18,388	6,250	7,694	4,444
Netherlands	0.9	10,574	1,074	3,208	6,292
Cayman Islands	1.0	10,748	78	1	10,669
Switzerland	0.8	9,336	1,452	6,642	1,242
As at 31 December 2014					
United States	6.2	84,606	7,196	23,409	54,001
Germany	1.4	19,481	8,381	8,620	2,480
France	2.0	26,884	12,632	5,919	8,333
Netherlands	1.1	15,080	1,437	3,279	10,364
Cayman Islands	0.9	12,480	49	1	12,430

Note

a Figures are net of short securities.

#### Off-Balance Sheet and other Credit Exposures

As at 31 December

	2016	2015	2014
	£m	£m	£m
<b>Off-balance sheet exposures</b>			
Contingent liabilities	19,939	20,621	21,324
Commitments	303,686	282,307	291,262
<b>On-balance sheet exposures</b>			
Trading portfolio assets	80,240	77,348	114,717
Financial assets designated at fair value	78,608	76,830	38,300
Derivative financial instruments	346,626	327,709	439,909
Financial investments	63,318	90,267	86,066



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[Additional information](#)

Additional financial disclosure (unaudited)

Notional principal amounts of credit derivatives	2016	2015	2014
As at 31 December	£m	£m	£m
Credit derivatives held or issued for trading purposes <sup>a</sup>	<b>947,800</b>	948,646	1,183,963
Note			

<sup>a</sup>Includes credit derivatives held as economic hedges which are not designated as hedges for accounting purposes.

**Additional Related Parties disclosures**

For US disclosure purposes, the aggregate emoluments of all Directors and Officers of Barclays PLC who held office during the year (2016:32, 2015: 32 persons, 2014: 33 persons) for the year ended 31st December 2016 amounted to £71m (2015: £52.2m, 2014: £56.9m). In addition, the aggregate amount set aside for the year ended 31st December 2016, to provide pension benefits for the Directors and Officers amounted to £0.2m (2015:£ 0.3m 2014: £0.3m).

**Ratio of earnings to fixed charges**  
**Barclays Plc**

2016	2015	2014	2013	2012
------	------	------	------	------

(In £m except for ratios)

<b>Fixed charges</b>					
Interest expense	<b>4,004</b>	3,345	4,108	4,904	5,330
Rental expense	<b>208</b>	157	207	221	213
Total Fixed charges	<b>4,212</b>	3,502	4,315	5,125	5,543
<b>Earnings</b>					
Income before taxes and non-controlling interests	<b>3,230</b>	1,146	1,313	1,879	(175)
Less: unremitted pre-tax income of associated companies and joint ventures	<b>(53)</b>	(26)	(34)	102	(94)
Total earnings excluding fixed charges	<b>3,177</b>	1,120	1,279	1,981	(269)
Fixed charges	<b>4,212</b>	3,502	4,315	5,125	5,543
Total earnings including fixed charges	<b>7,389</b>	4,622	5,594	7,106	5,274
<b>Ratio of earnings to fixed charges</b>	<b>1.75</b>	1.32	1.30	1.39	0.95

### Ratio of earnings to fixed charges and preference shares

#### Barclays Plc

**2016**                      2015                      2014                      2013                      2012

(In £m except for ratios)

<b>Fixed charges, preference share dividends and similar appropriations</b>					
Interest expense	<b>4,004</b>	3,345	4,108	4,904	5,330
Rental expense	<b>208</b>	157	207	221	213
Fixed charges	<b>4,212</b>	3,502	4,315	5,125	5,543
Preference share dividends and similar appropriations	<b>343</b>	345	443	412	466

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Total fixed charges	<b>4,555</b>	3,847	4,758	5,537	6,009
<b>Earnings</b>					
Income before taxes and non-controlling interests	<b>3,230</b>	1,146	1,313	1,879	(175)
Less: unremitted pre-tax income of associated companies and joint ventures	<b>(53)</b>	(26)	(34)	102	(94)
Total earnings excluding fixed charges	<b>3,177</b>	1,120	1,279	1,981	(269)
Fixed charges	<b>4,555</b>	3,847	4,758	5,537	6,009
Total earnings including fixed charges	<b>7,732</b>	4,967	6,037	7,518	5,740
<b>Ratio of earnings to fixed charges, preference share dividends and similar appropriations</b>	<b>1.70</b>	1.29	1.27	1.36	0.96

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Independent Registered Public Accounting Firm's Report

**Report of Independent Registered Public Accounting Firm**

**To the Board of Directors and Shareholders of Barclays Bank PLC**

In our opinion, the accompanying consolidated balance sheets and the related consolidated income statements, statements of comprehensive income, consolidated statements of changes in equity and consolidated cash flow statements present fairly, in all material respects, the financial position of Barclays Bank PLC ( the Bank ) and its subsidiaries at 31 December 2016 and 31 December 2015, and the results of their operations and their cash flows for each of the three years in the period ended 31 December 2016 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. These financial statements are the responsibility of the Bank's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

London, United Kingdom

22 February 2017

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## Presentation of information

- Consolidated income statement
- Consolidated statement of comprehensive income
- Consolidated balance sheet
- Consolidated statement of changes in equity
- Consolidated cash flow statement
- Notes to the accounts
- Financial data

Barclays Bank PLC is a public limited company, registered in England under company number 1026167. The bank was incorporated on 7 August 1925 under the Colonial Bank Act 1925 and on the 4 October 1971 was registered as a company limited by shares under the Companies Act 1948 to 1967. Pursuant to The Barclays Bank Act 1984, on 1 January 1985 the Bank was registered as a public limited company and its name was changed from Barclays Bank International Limited to Barclays Bank PLC.

All of the issued ordinary share capital of Barclays Bank PLC is owned by Barclays PLC.

### Barclays approach to disclosures

The Group aims to continually enhance its disclosures and their usefulness to the readers of the financial statements in the light of developing market practice and areas of focus. Consequently Barclays disclosures go beyond the minimum standards required by accounting standards and other regulatory requirements.

Barclays continue to support the recommendations and guidance made by the Enhanced Disclosure Taskforce (EDTF). The EDTF was formed by the Financial Stability Board with a remit to broaden and deepen the risk disclosures of global banks in a number of areas, including liquidity and funding, credit risk and market risk. Barclays has adopted the recommendations across the Annual Report and Pillar 3 report.

In line with the Financial Reporting Council's guidance on Clear and Concise reporting, Barclays has focused reporting on material items and sought to reorganise information to aid users understanding.

It is Barclays view that best in class disclosures will continue to evolve in light of ongoing market and stakeholder engagement with the banking sector. Barclays are committed to engaging with a published Code for Financial Reporting Disclosure (the Code). The Code sets out five disclosure principles together with supporting guidance which states that UK banks will:

Provide high quality, meaningful and decision-useful disclosures;

Review and enhance their financial instrument disclosures for key areas of interest;

Assess the applicability and relevance of good practice recommendations to their disclosures acknowledging the importance of such guidance;

Seek to enhance the comparability of financial statement disclosures across the UK banking sector; and

Clearly differentiate in their annual reports between information that is audited and information that is unaudited.

On 1 March 2016, Barclays announced its intention to sell down the Group's interest in BAGL. This sell down is intended to be to a level which will permit deconsolidation from an accounting and regulatory perspective, subject to shareholder and regulatory approvals as required. As the Africa Banking Business meets requirements for presentation as a discontinued operation, these results have been presented as two lines on the face of the Group income statement, representing the profit after tax and non-controlling interest in respect of the discontinued operation.

#### British Bankers' Association (BBA) Code for Financial Reporting Disclosure

Barclays has adopted the BBA Code for Financial Reporting Disclosure and has prepared the 2016 Annual Report and Accounts in compliance with the Code.

#### Statutory Accounts

The consolidated accounts of Barclays PLC and its subsidiaries are set out on pages 216 to 316 along with the accounts of Barclays PLC itself on pages 224 to 225. The accounting policies on pages 226 to 230 and the Notes commencing on page 226 apply equally to both sets of accounts unless otherwise stated.

The financial statements have been prepared on going concern basis, in accordance with The Companies Act 2006 as applicable to companies using IFRS.

#### Capital Requirements Country-by-Country Reporting

HM Treasury has transposed the requirements set out under CRD IV and issued the Capital Requirements Country-by-Country Reporting Regulations 2013. The legislation requires Barclays PLC to publish additional information in respect of the year ended 31 December 2016. This information is available on the Barclays's website: [barclays.com/citizenship/reports-and-publications/country-snapshot.html](http://barclays.com/citizenship/reports-and-publications/country-snapshot.html)

**Barclays Bank PLC data**

More extensive disclosures are contained in the Barclays PLC Results Announcement for the period ended 31 December 2016, attached, including risk exposures and business performance, which are materially the same as those for Barclays Bank PLC.

Barclays Bank PLC is a wholly owned subsidiary of Barclays PLC, which is the Group's ultimate parent company. The business activities of Barclays Bank PLC Group and Barclays PLC Group are fundamentally the same as the only differences are the holding company, Barclays PLC and following a restructure in November 2016, the Group Service Company transferring from Barclays Bank PLC to Barclays PLC.

Differences between Barclays PLC and Barclays Bank PLC results can be summarised as follows:

Balance Sheet Asset size   Barclays PLC £1,213,126m, Barclays Bank PLC £1,213,955m

Income Statement Profit before tax   Barclays PLC £2,828m, Barclays Bank PLC £3,729m

The differences occur primarily due to the following reasons:

Funding structures

Cash flow hedging

Group Service Company

More detail regarding the main differences is described below.

**Funding structures**

Instrument Type	Barclays PLC	Barclays Bank PLC
	£m	£m
Preference shares	-	5,836
Other shareholders' equity	6,492	271 3,522

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Non-controlling interests (NCI)

Preference shares and capital notes issued by Barclays Bank PLC are included within share capital in Barclays Bank PLC, and where still outstanding are presented as non-controlling interests in the financial statements of Barclays PLC Group.

<b>Instrument Type</b>	<b>Barclays PLC</b>	<b>Barclays Bank PLC</b>
------------------------	---------------------	--------------------------

	<b>£m</b>	<b>£m</b>
Treasury shares	(42)	-

Barclays PLC shares held for the purposes of employee share schemes and for trading are recognised as available for sale investments and trading portfolio assets respectively within Barclays Bank PLC. Barclays PLC deducts these treasury shares from shareholders' equity.

<b>Instrument Type</b>	<b>Barclays PLC</b>	<b>Barclays Bank PLC</b>
------------------------	---------------------	--------------------------

	<b>£m</b>	<b>£m</b>
Capital Redemption Reserve (CRR)	394	38

Arising from the redemption or exchange of Barclays PLC or Barclays Bank PLC shares respectively

<b>Instrument Type</b>	<b>Barclays PLC</b>	<b>Barclays Bank PLC</b>
------------------------	---------------------	--------------------------

	<b>£m</b>	<b>£m</b>
Derivative financial instruments	346,626	346,820
Loans and advances to banks	43,251	43,634
Subordinated liabilities	(23,383)	(23,871)

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## Barclays Bank PLC data

Barclays Bank PLC has in issue two series of contingent capital notes (CCNs). These both pay interest and principal to the holder unless the consolidated CRD IV CET 1 ratio (FSA October 2012 transitional statement) of Barclays PLC falls below 7%, in which case they are cancelled from the Barclays PLC consolidated perspective. The coupon payable on the CCNs is higher than a market rate of interest for a similar note without this risk. Barclays Bank PLC holds a derivative asset and loan relating to these issuances. The CCN is included in subordinated liabilities and has a higher carrying value in Barclays Bank PLC due to the higher fair value on initial recognition.

## Cash flow hedging

Instrument Type	Barclays PLC	Barclays Bank PLC
	£m	£m
<b>Income Statement</b>		
Net interest income	10,537	11,457
Tax	(993)	(1,245)
<b>Equity</b>		
Cash flow hedging reserve	2,105	954

Barclays PLC cash flow hedging reserve is larger than Barclays Bank PLC as it is no longer exposed to the same variable rate cash flows. This is as a direct result of anticipated bank ring fencing and transfer of assets to an entity which is not expected to be consolidated by Barclays Bank PLC (although is expected to be consolidated by Barclays PLC). There is also a difference in the income statement due to variance in income and tax due to cash flow hedging not included in Barclays Bank PLC.

## Group Service Company

The ownership of the Group service company was transferred in November 2016 contributing to the following key differences between Barclays PLC and Barclays Bank PLC.

Instrument Type	Barclays PLC	Barclays Bank PLC
-----------------	--------------	-------------------

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	<b>£m</b>	<b>£m</b>
<b>Staff costs</b>	(9,423)	(9,211)
Administration and general expenses	(2,917)	(3,200)

Employees within the Group Service Company reallocated from Barclays Bank PLC as part of the restructure. Therefore these staff costs are only shown in Barclays PLC. Group Service Company recharged costs to Barclays Bank PLC leading to higher expenses. These are eliminated on consolidation in Barclays PLC.

<b>Instrument Type</b>	<b>Barclays PLC</b>	<b>Barclays Bank PLC</b>
	<b>£m</b>	<b>£m</b>
Prepayments, accrued income and other assets	2,893	4,011

Barclays Bank PLC recognises a receivable from the Group Service Company which is eliminated on consolidation in Barclays PLC. The Bank funded acquisition of shares on behalf of the Group Service Company to satisfy employee share awards creating a receivable of £1bn.

<b>Instrument Type</b>	<b>Barclays PLC</b>	<b>Barclays Bank PLC</b>
	<b>£m</b>	<b>£m</b>
Goodwill and intangibles	7,726	7,348
Property, plant and equipment	2,825	2,466
Customer accounts	(423,178)	(424,703)
Debt securities in issue	(75,932)	(75,369)
Provisions	(4,134)	(3,909)

Differences driven by Group Service Company balances reflected in Barclays PLC only, or in the case of customer accounts, intercompany balances between Group Service Company and Barclays Bank Plc, which eliminate on consolidation in Barclays PLC.

## Barclays Bank PLC data

## Consolidated income statement

		2016	2015	2014
For the year ended 31 December 2016	Notes	£m	£m	£m
<b>Continuing operations</b>				
Interest income	a	14,423	13,947	14,200
Interest expense	a	(2,966)	(2,584)	(4,056)
<b>Net interest income</b>		<b>11,457</b>	11,363	10,144
Fee and commission income	b	8,625	8,494	8,636
Fee and commission expense	b	(1,789)	(1,611)	(1,500)
<b>Net fee and commission income</b>		<b>6,836</b>	6,883	7,136
Net trading income	c	2,795	3,430	3,064
Net investment income	d	1,324	1,097	1,309
Other income		57	35	157
<b>Total income</b>		<b>22,469</b>	22,808	21,810
Credit impairment charges and other credit provisions	7	(2,373)	(1,762)	(1,821)
<b>Net operating income</b>		<b>20,096</b>	21,046	19,989
Staff costs	8	(9,211)	(8,853)	(9,860)
Infrastructure costs	e	(2,937)	(2,691)	(2,895)
Administration and general expenses	e	(3,200)	(2,983)	(3,063)
Provisions for UK customer redress	27	(1,000)	(2,772)	(1,110)
	27		(1,237)	(1,250)

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Provision for ongoing investigations and litigation including Foreign Exchange				
<b>Operating expenses</b>		<b>(16,348)</b>	(18,536)	(18,178)
Share of post-tax results of associates and joint ventures		<b>70</b>	41	28
Loss/(gains) on disposal of subsidiaries, associates and joint ventures	9	<b>565</b>	(637)	(473)
<b>Profit before tax from continuing operations</b>		<b>4,383</b>	1,914	1,366
Tax	f	<b>(1,245)</b>	(1,302)	(1,165)
<b>Profit after tax from continuing operations</b>		<b>3,138</b>	612	201
<b>Profit after tax from discontinued operations</b>		<b>591</b>	626	653
<b>Profit after tax</b>		<b>3,729</b>	1,238	854
Equity holders of the Parent		<b>2,867</b>	566	85
Other equity holders	n	<b>457</b>	345	443
Non-controlling interests				
Profit attributable to non-controlling interests in respect of continuing operations		<b>3</b>	3	6
Profit attributable to non-controlling interests in respect of discontinued operations		<b>402</b>	324	320
<b>Profit after tax</b>		<b>3,729</b>	1,238	854

The note numbers refer to the notes on pages 226 to 316, whereas the note letters refer to Barclays Bank PLC supplementary notes on pages 436 to 446.

Barclays Bank PLC supplementary notes provided on pages 436 to 446 cover the line items where there is a difference to Barclays PLC.

## Barclays Bank PLC data

## Consolidated statement of comprehensive income

	2016	2015	2014
	£m	£m	£m
<b>For the year ended 31 December</b>			
<b>Profit after tax</b>	3,729	1,238	854
<b>Profit after tax from continuing operations</b>	3,138	612	201
<b>Profit after tax from discontinued operations</b>	591	626	653
<b>Other comprehensive income/(loss) for continuing operations:</b>			
<b>Currency translation reserve<sup>a</sup></b>			
- Currency translation differences	3,027	748	774
<b>Available for sale reserve<sup>a</sup></b>			
- Net gains from changes in fair value	2,178	60	5,352
- Net losses transferred to net profit on disposal	(912)	(377)	(619)
- Net losses/(gains) transferred to net profit due to impairment	20	17	(31)
- Net losses transferred to net profit due to fair value hedging	(1,677)	(148)	(4,074)
- Changes in insurance liabilities	53	86	(94)
- Tax	(18)	132	(103)
<b>Cash flow hedging reserve<sup>a</sup></b>			
- Net gains/(losses) from changes in fair value	689	(990)	2,651
- Net losses transferred to net profit	(431)	(276)	(713)
	(59)	221	(384)

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- Tax			
<b>Other</b>	<b>47</b>	19	(19)
<b>Total comprehensive income/(loss) that may be recycled to profit and loss</b>	<b>2,917</b>	(508)	2,740
<b>Other comprehensive income/(loss) not recycled to profit and loss:</b>			
Retirement benefit remeasurements	(1,309)	1,179	268
Tax	329	(260)	(63)
<b>Total comprehensive income for the year, net of tax from continuing operations</b>	<b>5,075</b>	1,023	3,146
<b>Total comprehensive income/(loss) for the year, net of tax from discontinued operations</b>	<b>2,111</b>	(720)	346
<b>Total comprehensive income for the year</b>	<b>7,186</b>	303	3,492
<b>Attributable to:</b>			
Equity holders of the Parent	<b>5,947</b>	457	3,245
Non-controlling interests	<b>1,239</b>	(154)	247
	<b>7,186</b>	303	3,492
Notes			

a For further details refer to Note 1

## Barclays Bank PLC data

## Consolidated balance sheet

		31 December	31 December	31 December
		2016	2015	2014
As at 31.12.2016	Notes	£m	£m	£m
<b>Assets</b>				
Cash and balances at central banks		102,328	49,711	39,695
Items in the course of collection from other banks		1,467	1,011	1,210
Trading portfolio assets	g	80,255	77,398	114,755
Financial assets designated at fair value	13	78,608	76,830	38,300
Derivative financial instruments	j	346,820	327,870	440,076
Financial investments	h	63,365	90,304	86,105
Loans and advances to banks	i	43,634	41,829	42,657
Loans and advances to customers	i	392,783	399,217	427,767
Reverse repurchase agreements and other similar secured lending	21	13,454	28,187	131,753
Prepayments, accrued income and other assets		4,011	3,027	3,604
Investments in associates and joint ventures	39	684	573	711
Property, plant and equipment	22	2,466	3,468	3,786
Goodwill and intangible assets	23	7,348	8,222	8,180
Current tax assets	f	501	385	334
Deferred tax assets	10	4,763	4,495	4,130
Retirement benefit assets	35	14	836	56
Assets in disposal groups classified as held for disposal	46	71,454	7,364	15,574
<b>Total assets</b>		<b>1,213,955</b>	<b>1,120,727</b>	<b>1,358,693</b>
<b>Liabilities</b>				
Deposits from banks		48,214	47,080	58,390
Items in the course of collection due to other banks		636	1,013	1,177
Customer accounts		424,703	418,307	427,868
Repurchase agreements and other similar secured borrowing	21	19,760	25,035	124,479

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Trading portfolio liabilities	12	34,687	33,967	45,124
Financial liabilities designated at fair value	16	96,032	91,745	56,972
Derivative financial instruments	j	340,487	324,252	439,320
Debt securities in issue		75,369	69,150	86,099
Subordinated liabilities	29	23,871	21,955	21,685
Accruals, deferred income and other liabilities	25	8,951	10,612	11,432
Provisions	26	3,909	4,142	4,135
Current tax liabilities	f	708	930	1,023
Deferred tax liabilities		4	100	255
Retirement benefit liabilities	35	377	423	1,574
Liabilities included in disposal groups classified as held for sale	45	65,292	5,997	13,115
<b>Total liabilities</b>		<b>1,143,000</b>	1,054,708	1,292,648
<b>Total equity</b>				
Called up share capital and share premium	31	14,462	14,472	14,472
Other equity instruments	31	6,486	5,350	4,350
Other reserves	32	4,295	933	2,322
Retained earnings		42,190	43,350	42,650
Total equity excluding non-controlling interests		67,433	64,105	63,794
Non-controlling interests	n	3,522	1,914	2,251
<b>Total equity</b>		<b>70,955</b>	66,019	66,045
<b>Total liabilities and equity</b>		<b>1,213,955</b>	1,120,727	1,358,693

The note numbers refer to the notes on pages 226 to 316, whereas the note letters refer to those on pages 436 to 446.

These financial statements have been approved for issue by the Board of Directors on 29 February 2016.



## Barclays Bank PLC data

## Consolidated statement of changes in equity

	Called up share capital and share premium <sup>a</sup>	Other instruments <sup>a</sup>	Available for sale reserve <sup>b</sup>	Cash flow hedging reserve <sup>b</sup>	Currency translation reserve <sup>b</sup>	Other reserves and equity <sup>a</sup>	Retained earnings	Total equity excluding non- controlling interests
	£m	£m	£m	£m	£m	£m	£m	£m
<b>Balance at 1 January 2016</b>	<b>14,472</b>	<b>5,350</b>	<b>338</b>	<b>709</b>	<b>(623)</b>	<b>509</b>	<b>43,350</b>	<b>64,105</b>
Profit after tax	-	457	-	-	-	-	2,678	3,135
Currency translation movements	-	-	-	-	3,025	-	-	3,025
Available for sale investments	-	-	(356)	-	-	-	-	(356)
Cash flow hedges	-	-	-	199	-	-	-	199
Pension remeasurement	-	-	-	-	-	-	(980)	(980)
Other	(17)	-	-	-	-	-	64	47
	<b>(17)</b>	<b>457</b>	<b>(356)</b>	<b>199</b>	<b>3,025</b>	<b>-</b>	<b>1,762</b>	<b>5,070</b>

Other comprehensive income for the period from continuing operations								
Other comprehensive income for the period from discontinued operations	-	-	(4)	46	652	-	183	877
<b>Total comprehensive income for the year</b>	<b>(17)</b>	<b>457</b>	<b>(360)</b>	<b>245</b>	<b>3,677</b>	<b>-</b>	<b>1,945</b>	<b>5,947</b>
Issue and exchange of equity instruments	-	1,136	-	-	-	-	-	1,136
Other equity instruments coupons paid	-	(457)	-	-	-	-	128	(329)
Equity settled share schemes	-	-	-	-	-	-	577	577
Redemption of preference shares	-	-	-	-	-	(199)	(1,378)	(1,577)
Vesting of shares under employee share schemes	-	-	-	-	-	-	(414)	(414)
Dividends paid	-	-	-	-	-	-	(978)	(978)
Capital contribution from Barclays PLC	-	-	-	-	-	-	114	114
Net equity impact of partial BAGL disposal	-	-	-	-	-	-	(349)	(349)
Net equity impact of Group Service Company disposal	-	-	-	-	-	-	(806)	(806)
Other reserve movements	7	-	-	-	-	(1)	1	7

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<b>Balance at 31st December 2016</b>	<b>14,462</b>	<b>6,486</b>	<b>(22)</b>	<b>954</b>	<b>3,054</b>	<b>309</b>	<b>42,190</b>	<b>67,433</b>
<b>Balance at 1 January 2015</b>	14,472	4,350	578	1,817	(582)	509	42,650	63,794
<b>Continuing Operations</b>								
Profit after tax	-	345	-	-	-	-	264	609
Currency translation movements	-	-	-	-	748	-	-	748
Available for sale investments	-	-	(230)	-	-	-	-	(230)
Cash flow hedges	-	-	-	(1,045)	-	-	-	(1,045)
Pension remeasurement	-	-	-	-	-	-	919	919
Other	-	-	-	-	-	-	19	19
<b>Other comprehensive income for the period from continuing operations</b>	-	345	(230)	(1,045)	748	-	1,202	1,020
<b>Other comprehensive income for the period from discontinued operations</b>	-	-	(10)	(63)	(789)	-	299	(563)
<b>Total comprehensive income for the year</b>	-	345	(240)	(1,108)	(41)	-	1,501	457
Issue of shares under employees share schemes	-	-	-	-	-	-	571	571
Issue and exchange of equity instruments	-	1,000	-	-	-	-	-	1,000
Other equity instruments coupons paid	-	(345)	-	-	-	-	70	(275)
	-	-	-	-	-	-	(755)	(755)

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Vesting of shares under employee share schemes

Dividends paid	-	-	-	-	-	-	(1,219)	(1,219)
Capital contribution from Barclays PLC	-	-	-	-	-	-	560	560
Other reserve movements	-	-	-	-	-	-	(28)	(28)
<b>Balance at 31st December 2015</b>	14,472	5,350	338	709	(623)	509	43,350	64,105
<b>Balance at 1 January 2014</b>	14,494	2,078	151	273	(1,142)	485	44,670	61,009
<b>Continuing Operations</b>								
Profit after tax	-	250	-	-	-	-	(55)	195
Currency translation movements	-	-	-	-	773	-	-	773
Available for sale investments	-	-	431	-	-	-	-	431
Cash flow hedges	-	-	-	1,554	-	-	-	1,554
Pension remeasurement	-	-	-	-	-	-	205	205
Other	-	-	-	-	-	-	(19)	(19)
<b>Other comprehensive income for the period from continuing operations</b>	-	250	431	1,554	773	-	131	3,139
<b>Other comprehensive income for the period from discontinued operations</b>	-	-	(4)	(10)	(213)	-	333	106
<b>Total comprehensive income for the year</b>	-	250	427	1,544	560	-	464	3,245
	(15)	2,272	-	-	-	16	(1,683)	590

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Issue and exchange of equity instruments									
Other equity instruments coupons paid	-	(250)	-	-	-	-	54	(196)	
Redemption of preference shares	(7)	-	-	-	-	8	(792)	(791)	
Equity settled share schemes	-	-	-	-	-	-	693	693	
Vesting of shares under employee share schemes	-	-	-	-	-	-	(866)	(866)	
Dividends paid	-	-	-	-	-	-	(1,262)	(1,262)	
Capital contribution from Barclays PLC	-	-	-	-	-	-	1,412	1,412	
Other reserve movements	-	-	-	-	-	-	(40)	(40)	
<b>Balance at 31st December 2014</b>	14,472	4,350	578	1,817	(582)	509	42,650	63,794	
Notes									

a For further details refer to Note l

b For further details refer to Note m

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## Barclays Bank PLC data

## Consolidated cash flow statement

For the year ended 31 December

	2016	2015	2014
	£m	£m	£m
<b>Continuing operations</b>			
<b>Reconciliation of profit before tax to net cash flows from operating activities:</b>			
<b>Profit before tax</b>	<b>4,383</b>	1,914	1,365
<b>Adjustment for non-cash items:</b>			
Allowance for impairment	2,357	1,752	1,816
Depreciation, amortisation and impairment of property, plant, equipment and intangibles	1,232	1,215	1,108
Other provisions, including pensions	1,726	4,243	3,487
Net profit on disposal of investments and property, plant and equipment	(912)	(374)	(620)
Other non-cash movements including exchange rate movements	20,780	(1,189)	(1,486)
<b>Changes in operating assets and liabilities</b>			
Net (increase)/decrease in loans and advances to banks and customers	(25,439)	22,705	3,933
Net decrease in reverse repurchase agreements and other similar lending	14,733	103,471	54,380
Net increase/(decrease) in deposits and debt securities in issue	49,961	(33,219)	(2,189)
Net (decrease) in repurchase agreements and other similar borrowing	(4,852)	(99,602)	(72,107)
Net (increase)/decrease in derivative financial instruments	(2,351)	(3,309)	2,954
Net (increase)/decrease in trading assets	(5,542)	37,079	18,633
Net increase/(decrease) in trading liabilities	880	(10,877)	(8,565)
Net decrease/(increase) in financial investments	807	(3,064)	(5,882)
Net (increase) in other assets	(3,731)	(2,680)	(14,642)
Net (increase)/decrease in other liabilities	(452)	(1,772)	7,360
Corporate income tax paid	(742)	(1,643)	(1,590)
<b>Net cash from operating activities</b>	<b>11,278</b>	<b>14,650</b>	(12,045)
Purchase of available for sale investments	(65,086)	(120,061)	(109,290)
Proceeds from sale or redemption of available for sale investments	102,515	114,529	119,129
Purchase of property, plant and equipment and intangibles	(2,054)	(1,928)	(1,690)

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Proceeds from sale of property, plant and equipment and intangibles	234	393	354
Proceeds from part disposal of investment in BAGL	595	-	-
Other cash flows associated with investing activities	32	516	(68)
<b>Net cash from investing activities</b>	<b>36,236</b>	(6,551)	8,435
Dividends paid	(1,186)	(1,428)	(1,452)
Issuance of subordinated debt	1,457	879	848
Redemption of subordinated debt	(1,143)	(556)	(869)
Net redemption of shares and other equity instruments	1,125	655	(1,100)
Capital contribution from Barclays PLC	114	560	1,412
Repurchase of shares and other equity instruments	(1,378)	-	-
<b>Net cash from financing activities</b>	<b>(1,011)</b>	110	(1,161)
<b>Net cash from discontinued operations</b>	<b>405</b>	(1,821)	1,809
<b>Effect of exchange rates on cash and cash equivalents</b>	<b>10,468</b>	1,689	(313)
<b>Net increase in cash and cash equivalents</b>	<b>57,376</b>	8,077	(3,275)
Cash and cash equivalents at beginning of year	86,556	78,479	81,754
<b>Cash and cash equivalents at end of year</b>	<b>143,932</b>	86,556	78,479
<b>Cash and cash equivalents comprise:</b>			
Cash and balances at central banks	102,328	49,711	39,695
Loans and advances to banks with original maturity less than three months	38,099	35,876	36,282
Available for sale treasury and other eligible bills with original maturity less than three months	356	816	2,322
Trading portfolio assets with original maturity less than three months	-	153	180
Cash and cash equivalents held for sale	3,149	-	-
	<b>143,932</b>	86,556	78,479

Interest received by The Group was £21,981m (2015: £20,370m; 2014: £21,372m) and interest paid by The Group was £7,812m (2015: £6,992m; 2014: £8,566m).

The Group is required to maintain balances with central banks and other regulatory authorities and these amounted to £4,254m at 31 December 2016 (2015: £4,369m; 2014: £4,448m).

For the purposes of the cash flow statement, cash comprises cash on hand and demand deposits, and cash equivalents comprise highly liquid investments that are convertible into cash with an insignificant risk of changes in value with original maturities of three months or less. Repurchase and reverse repurchase agreements are not considered to be part of cash equivalents.

## Barclays Bank PLC data

Notes to the accounts

**a Net interest income**

	2016	2015	2014
	£m	£m	£m
Cash and balances with central banks	186	157	186
Financial investments	740	698	803
Loans and advances to banks	483	481	382
Loans and advances to customers	12,957	12,512	12,768
Other	57	99	61
<b>Interest income<sup>a</sup></b>	<b>14,423</b>	13,947	14,200
Deposits from banks	(204)	(123)	(138)
Customer accounts	(1,808)	(1,510)	(2,166)
Debt securities in issue	(690)	(422)	(684)
Subordinated liabilities	(988)	(978)	(995)
Other	724	449	(73)
<b>Interest expense<sup>a</sup></b>	<b>(2,966)</b>	(2,584)	(4,056)
<b>Net interest income</b>	<b>11,457</b>	11,363	10,144

**b Net fee and commission income**



	2016	2015	2014
	£m	£m	£m
Banking, investment management and credit related fees and commissions	8,507	8,365	8,483
Foreign exchange commission	118	129	139
<b>Fee and commission income</b>	<b>8,625</b>	8,494	8,622
<b>Fee and commission expense</b>	<b>(1,789)</b>	(1,611)	(1,500)
<b>Net fee and commission income</b>	<b>6,836</b>	6,883	7,122

### c Net Trading Income

	2016	2015	2014
	£m	£m	£m
Trading income	2,830	3,000	3,030
Own credit gains/(losses)	(35)	430	34
<b>Net trading income</b>	<b>2,795</b>	3,430	3,064

Note

a Both interest income and interest expenses for 2015 and 2014 have been adjusted by £442m and £605m respectively, in order to better align the effect of hedge accounting relationships with the related hedged items. The following categories were restated: financial investments by £(545)m (2014: £(637)m), loans and advances to customers by £987m (2014: £1,242m), customer accounts by £(1,783m) (2014: £(2,016)m), debt securities in issues by £784m (2014: £859m) and subordinated liabilities by £557m (2014: £552m).



## Barclays Bank PLC data

Notes to the accounts

**d Net investment income**

	2016	2015	2014
	£m	£m	£m
Net gain from disposal of available for sale assets	912	385	622
Dividend income	8	8	9
Net gain from financial instruments designated at fair value	158	193	203
Other investment income	246	511	475
<b>Net investment income</b>	<b>1,324</b>	1,097	1,309

**e Administrative and general expenses**

	2016	2015	2014
	£m	£m	£m
<b>Infrastructure costs</b>			
Property and equipment	1,147	1,082	1,281
Depreciation of property, plant and equipment	482	475	495
Operating lease rentals	550	411	512
Amortisation of intangible assets	661	570	454
Impairment of property, equipment and intangible assets	97	150	153
Gain on property disposals	-	3	-
<b>Total infrastructure costs</b>	<b>2,937</b>	2,691	2,895

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<b>Administration and general costs</b>			
Consultancy, legal and professional fees	<b>1,079</b>	1,078	997
Subscriptions, publications, stationery and communications	<b>638</b>	678	756
Marketing, advertising and sponsorship	<b>430</b>	451	470
Travel and accommodation	<b>132</b>	188	185
UK bank levy	<b>410</b>	425	418
Goodwill Impairment	<b>-</b>	102	-
Other administration and general expenses	<b>511</b>	61	237
<b>Total administration and general costs</b>	<b>3,200</b>	2,983	3,063
<b>Staff costs<sup>a</sup></b>	<b>9,211</b>	8,853	9,860
<b>Provision for UK customer redress</b>	<b>1,000</b>	2,772	1,110
<b>Provision for ongoing investigations and litigation including Foreign Exchange</b>	<b>-</b>	1,237	1,250
<b>Operating expenses<sup>b</sup></b>	<b>16,348</b>	18,536	18,178

<sup>a</sup>The Group has realigned outsourcing costs from administration and general expenses to staff costs in order to more appropriately reflect the nature and internal management of these costs. The net effect of these movements is to reduce administration and general expenses and to increase staff costs to £1,063m in 2016 and £1,014m in 2015.

<sup>b</sup>Total operating expenses of £16,348m (2015: £18,536m; 2014: £18,178m) include depreciation of property, plant and equipment of £482m (2015: £475m; 2014: £495m), amortisation of intangible assets of £661m (2015: £570m; 2014: £454m), goodwill impairment nil (2015 : £102m; 2014 : nil) and administration and other expenses of £15,205m (2015 £17,389m; 2014: £17,229m).

## Barclays Bank PLC data

Notes to the accounts

**f Tax**

	2016	2015	2014
	£m	£m	£m
<b>Current tax charge/(credit)</b>			
Current year	1,147	1,772	1,158
Adjustment for prior years	(359)	(188)	(19)
	788	1,584	1,139
<b>Deferred tax charge/(credit)</b>			
Current year	392	(360)	92
Adjustment for prior years	65	78	(66)
	457	(282)	26
<b>Tax charge</b>	<b>1,245</b>	<b>1,302</b>	<b>1,165</b>

Tax relating to each component of other comprehensive income can be found in the consolidated statement of comprehensive income which additionally includes within Other a tax credit of £49m (2015: £19m credit) principally relating to share based payments.

The table below shows the reconciliation between the actual tax charge and the tax charge that would result from applying the standard UK corporation tax rate to The Group's profit before tax.

	2016	2015	2014
	£m	£m	£m
<b>Profit before tax from continuing operations</b>	<b>4,383</b>	1,914	1,366
Tax charge based on the standard UK corporation tax rate of 20% (2015: 20.25%, 2014: 21.50%)	<b>877</b>	387	293
Impact of profits/losses earned in territories with different statutory rates to the UK (weighted average tax rate is 29.5% (2015: 28.1%, 2014: 29.0%))	<b>415</b>	151	103
<u>Recurring items:</u>			
Non-creditable taxes including withholding taxes	<b>277</b>	309	329
Non-deductible expenses	<b>114</b>	67	146
Impact of UK bank levy being non-deductible	<b>82</b>	96	99
Banking surcharge on UK profits	<b>75</b>	-	-
Other items	<b>49</b>	(16)	75
Tax adjustments in respect of share based payments	<b>34</b>	30	21
Impact of change in tax rates	<b>32</b>	158	9
Adjustments in respect of prior years	<b>(294)</b>	(110)	(85)
Non-taxable gains and income	<b>(208)</b>	(197)	(212)
Changes in recognition of deferred tax and effect of unrecognised tax losses	<b>(178)</b>	(71)	(115)
Impact of BB PLC's overseas branches being taxed both locally and in the UK	<b>(128)</b>	(35)	(68)
<u>Non-recurring items:</u>			
Non-deductible provisions for UK customer redress	<b>203</b>	283	-
Non-deductible impairments and losses on divestments	<b>27</b>	39	234

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Non-deductible provisions for investigations and litigation	<b>48</b>	261	387
Non-taxable gains and income on divestments	<b>(180)</b>	(50)	(51)
<b>Tax charge</b>	<b>1,245</b>	1,302	1,165
<b>Effective tax rate</b>	<b>28.4%</b>	68.0%	85.3%

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## Barclays Bank PLC data

Notes to the accounts

**Current tax assets and liabilities**

Movements on current tax assets and liabilities were as follows:

	2016	2015
	£m	£m
Assets	385	334
Liabilities	(930)	(1,023)
<b>As at 1 January</b>	<b>(545)</b>	<b>(689)</b>
Income statement from continuing operations	(788)	(1,584)
Income statement in relation to BAGL disposal group	-	(301)
Other comprehensive income	295	145
Corporate income tax paid	742	1,643
Other movements	89	241
	(207)	(545)
Assets	501	385
Liabilities	(708)	(930)
<b>As at 31 December</b>	<b>(207)</b>	<b>(545)</b>



Other movements include the impact of changes in foreign exchange rates, as well as deferred tax amounts relating to acquisitions, disposals and transfers to held for sale.

## Barclays Bank PLC data

Notes to the accounts

## g Trading portfolio assets

	2016	2015
	£m	£m
Debt securities and other eligible bills	38,804	45,626
Equity securities	38,329	29,055
Traded loans	2,975	2,474
Commodities	147	243
<b>Trading portfolio assets</b>	<b>80,255</b>	<b>77,398</b>

## h Financial Investments

	2016	2015
	£m	£m
Available for sale debt securities and other eligible bills	57,704	89,278
Available for sale equity securities	485	1,206
Held to maturity debt securities	5,176	-
<b>Financial Investments</b>	<b>63,365</b>	<b>90,304</b>

**i Loans and advances to banks and customers**

	<b>2016</b>	2015
	<b>£m</b>	£m
Gross loans and advances to banks	<b>43,634</b>	41,829
Less: allowance for impairment	-	-
<b>Loans and advances to banks</b>	<b>43,634</b>	41,829
Gross loans and advances to customers	<b>397,403</b>	404,138
Less: allowance for impairment	<b>(4,620)</b>	(4,921)
<b>Loans and advances to customers</b>	<b>392,783</b>	399,217

**j Derivative financial instruments**

	Notional contract amount	Fair value Assets	Liabilities
	£m	£m	£m
<b>Year ended 31 December 2016</b>			
Total derivative assets/(liabilities) held for trading	<b>36,261,030</b>	<b>345,834</b>	<b>(339,647)</b>
Total derivative assets/(liabilities) held for risk management	<b>261,314</b>	<b>986</b>	<b>(840)</b>

<b>Derivative assets/(liabilities)</b>	<b>36,522,344</b>	<b>346,820</b>	<b>(340,487)</b>
<b>Year ended 31 December 2015</b>			
Total derivative assets/(liabilities) held for trading	29,437,102	326,933	(323,788)
Total derivative assets/(liabilities) held for risk management	316,605	937	(464)
<b>Derivative assets/(liabilities)</b>	<b>29,753,707</b>	<b>327,870</b>	<b>(324,252)</b>

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Barclays Bank PLC data

Notes to the accounts

**k Subordinated liabilities**

	2016	2015
	£m	£m
Undated subordinated liabilities	4,495	5,248
Dated subordinated liabilities	19,376	16,707
<b>Total subordinated liabilities</b>	<b>23,871</b>	<b>21,955</b>

**l Ordinary shares, share premium, and other equity**

Called up share capital, allotted and fully paid

Ordinary	Preference	Share	Total share	Other
share	share	premium	capital and	equity
capital	capital	£m	share	instruments
£m	£m		premium	£m

	£m				
As at 1 January 2016	2,342	38	12,092	14,472	5,350
AT1 securities issuance	-	-	-	-	1,136
Redemptions	-	(10)	-	(10)	-
As at 31 December 2016	2,342	28	12,092	14,462	6,486
As at 1 January 2015	2,342	38	12,092	14,472	4,350
AT1 securities issuance	-	-	-	-	1,000
As at 31 December 2015	2,342	38	12,092	14,472	5,350

### Ordinary shares

The issued ordinary share capital of Barclays Bank PLC, as at 31 December 2016, comprised 2,342 million ordinary shares of £1 each (2015: 2,342 million).

Ordinary share capital constitutes 60% (2015: 60%) of total share capital issued.

### Preference shares

The issued preference share capital of Barclays Bank PLC, as at 31 December 2016, comprised 1,000 Sterling Preference Shares of £1 each (2015: 1,000); 31,856 Euro Preference Shares of 100 each (2015: 31,856); 20,930 Sterling Preference Shares of £100 each (2015: 20,930); 58,133 US Dollar Preference Shares of \$100 each (2015: 58,133); and 161 million US Dollar Preference Shares of \$0.25 each (2015: 237 million). In the second quarter of 2016, 46 million US Dollar Preference Shares of \$0.25 each were redeemed. In the third quarter of 2016, 30 million US Dollar Preference Shares of \$0.25 were redeemed.

Preference share capital constitutes 40% (2015: 40%) of total share capital issued.

### *Sterling £1 Preference Shares*

1,000 Sterling cumulative callable preference shares of £1 each (the £1 Preference Shares) were issued on 31 December 2004 at nil premium.

The £1 Preference Shares entitle the holders thereof to receive Sterling cumulative cash dividends out of distributable profits of Barclays Bank PLC, semi-annually at a rate reset semi-annually equal to the Sterling interbank offered rate for six-month sterling deposits.

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Barclays Bank PLC shall be obliged to pay such dividends if: (1) it has profits available for the purpose of distribution under the Companies Act 2006 as at each dividend payment date; and (2) it is solvent on the relevant dividend payment date, provided that a capital regulations condition is satisfied on such dividend payment date. The dividends shall not be due and payable on the relevant dividend payment date except to the extent that Barclays Bank PLC could make such payment and still be solvent immediately thereafter. Barclays Bank PLC shall be considered solvent on any date if: (1) it is able to pay its debts to senior creditors as they fall due; and (2) its auditors have reported within the previous six months that its assets exceed its liabilities. If Barclays Bank PLC shall not pay, or shall pay only in part, a dividend for a period of seven days or more after the due date for payment, the holders of the £1 Preference Shares may institute proceedings for the winding-up of Barclays Bank PLC. No remedy against Barclays Bank PLC shall be available to the holder of any £1 Preference Shares for the recovery of amounts owing in respect of £1 Preference Shares other than the institution of proceedings for the winding-up of Barclays Bank PLC and/or proving in such winding-up.

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## Barclays Bank PLC data

### Notes to the accounts

On a winding-up or other return of capital (other than a redemption or purchase by Barclays Bank PLC of any of its issued shares, or a reduction of share capital, permitted by the Articles of Barclays Bank PLC and under applicable law), the assets of Barclays Bank PLC available to shareholders shall be applied in priority to any payment to the holders of ordinary shares and any other class of shares in the capital of Barclays Bank PLC then in issue ranking junior to the £1 Preference Shares on such a return of capital and *pari passu* on such a return of capital with the holders of any other class of shares in the capital of Barclays Bank PLC then in issue (other than any class of shares in the capital of Barclays Bank PLC then in issue ranking in priority to the £1 Preference Shares on a winding-up or other such return of capital), in payment to the holders of the £1 Preference Shares of a sum equal to the aggregate of: (1) an amount equal to the dividends accrued thereon for the then current dividend period (and any accumulated arrears thereof) to the date of the commencement of the winding-up or other such return of capital; and (2) an amount equal to £1 per £1 Preference Share. After payment of the full amount of the liquidating distributions to which they are entitled, the holders of the £1 Preference Shares will have no right or claim to any of the remaining assets of Barclays Bank PLC and will not be entitled to any further participation in such return of capital.

The £1 Preference Shares are redeemable at the option of Barclays Bank PLC, in whole but not in part only, subject to the Companies Act 2006 and its Articles. Holders of the £1 Preference Shares are not entitled to receive notice of, or to attend, or vote at, any general meeting of Barclays Bank PLC.

### *Euro Preference Shares*

140,000 Euro 4.75% non-cumulative callable preference shares of 100 each (the 4.75% Preference Shares) were issued on 15 March 2005 for a consideration of 1,383.3m (£966.7m), of which the nominal value was 14m and the balance was share premium. The 4.75% Preference Shares entitle the holders thereof to receive Euro non-cumulative cash dividends out of distributable profits of Barclays Bank PLC, annually at a fixed rate of 4.75% per annum on the amount of 10,000 per preference share until 15 March 2020, and thereafter quarterly at a rate reset quarterly equal to 0.71% per annum above the Euro interbank offered rate for three-month Euro deposits.

The 4.75% Preference Shares are redeemable at the option of Barclays Bank PLC, in whole but not in part only, on 15 March 2020, and on each dividend payment date thereafter at 10,000 per share plus any dividends accrued for the then current dividend period to the date fixed for redemption.

### *Sterling Preference Shares*

75,000 Sterling 6.0% non-cumulative callable preference shares of £100 each (the 6.0% Preference Shares) were issued on 22 June 2005 for a consideration of £743.7m, of which the nominal value was £7.5m and the balance was share premium. The 6.0% Preference Shares entitle the holders thereof to receive Sterling non-cumulative cash dividends out of distributable profits of Barclays Bank PLC, annually at a fixed rate of 6.0% per annum on the amount of £10,000 per preference share until 15 December 2017, and thereafter quarterly at a rate reset quarterly equal to 1.42% per annum above the London interbank offered rate for three-month Sterling deposits.



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The 6.0% Preference Shares are redeemable at the option of Barclays Bank PLC, in whole but not in part only, on 15 December 2017, and on each dividend payment date thereafter at £10,000 per share plus any dividends accrued for the then current dividend period to the date fixed for redemption.

### *US Dollar Preference Shares*

100,000 US Dollar 6.278% non-cumulative callable preference shares of \$100 each (the 6.278% Preference Shares), represented by 100,000 American Depositary Shares, Series 1, were issued on 8 June 2005 for a consideration of \$995.4m (£548.1m), of which the nominal value was \$10m and the balance was share premium. The 6.278% Preference Shares entitle the holders thereof to receive US Dollar non-cumulative cash dividends out of distributable profits of Barclays Bank PLC, semi-annually at a fixed rate of 6.278% per annum on the amount of \$10,000 per preference share until 15 December 2034, and thereafter quarterly at a rate reset quarterly equal to 1.55% per annum above the London interbank offered rate for three-month US Dollar deposits.

The 6.278% Preference Shares are redeemable at the option of Barclays Bank PLC, in whole but not in part only, on 15 December 2034, and on each dividend payment date thereafter at \$10,000 per share plus any dividends accrued for the then current dividend period to the date fixed for redemption.

55 million US Dollar 7.1% non-cumulative callable preference shares of \$0.25 each (the 7.1% Preference Shares), represented by 55 million American Depositary Shares, Series 3, were issued on 13 September 2007 for a consideration of \$1,335m (£657m), of which the nominal value was \$13.75m and the balance was share premium. The 7.1% Preference Shares entitle the holders thereof to receive US Dollar non-cumulative cash dividends out of distributable profits of Barclays Bank PLC, quarterly at a fixed rate of 7.1% per annum on the amount of \$25 per preference share.

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Barclays Bank PLC data

Notes to the accounts

The 7.1% Preference Shares are redeemable at the option of Barclays Bank PLC, in whole or in part, on any dividend payment date at \$25 per share plus any dividends accrued for the then current dividend period to the date fixed for redemption.

106 million US Dollar 8.125% non-cumulative callable preference shares of \$0.25 each (the 8.125% Preference Shares), represented by 106 million American Depositary Shares, Series 5, were issued on 11 April 2008 and 25 April 2008 for a total consideration of \$2,650m (£1,345m), of which the nominal value was \$26.5m and the balance was share premium. The 8.125% Preference Shares entitle the holders thereof to receive US Dollar non-cumulative cash dividends out of distributable profits of Barclays Bank PLC, quarterly at a fixed rate of 8.125% per annum on the amount of \$25 per preference share.

The 8.125% Preference Shares are redeemable at the option of Barclays Bank PLC, in whole or in part, on any dividend payment date at \$25 per share plus any dividends accrued for the then current dividend period to the date fixed for redemption.

No redemption or purchase of any 4.75% Preference Shares, the 6.0% Preference Shares, the 6.278% Preference Shares, the 6.625% Preference Shares, the 7.1% Preference Shares, the 7.75% Preference Shares and the 8.125% Preference Shares (together, the Preference Shares) may be made by Barclays Bank PLC without the prior approval of the UK PRA and any such redemption will be subject to the Companies Act 2006 and the Articles of Barclays Bank PLC.

On a winding-up of Barclays Bank PLC or other return of capital (other than a redemption or purchase of shares of Barclays Bank PLC, or a reduction of share capital), a holder of Preference Shares will rank in the application of assets of Barclays Bank PLC available to shareholders: (1) junior to the holder of any shares of Barclays Bank PLC in issue ranking in priority to the Preference Shares; (2) equally in all respects with holders of other preference shares and any other shares of Barclays Bank PLC in issue ranking *pari passu* with the Preference Shares; and (3) in priority to the holders of ordinary shares and any other shares of Barclays Bank PLC in issue ranking junior to the Preference Shares.

The holders of the £13m 6% Callable Perpetual Core Tier One Notes and the \$569m 6.86% Callable Perpetual Core Tier One Notes of Barclays Bank PLC (together, the TONs) and the holders of the £35m 5.3304% Step-up Callable Perpetual Reserve Capital Instruments, the \$159m 5.926% Step-up Callable Perpetual Reserve Capital Instruments, the £33m 6.3688% Step-up Callable Perpetual Reserve Capital Instruments, the \$117m 7.434% Step-up Callable Perpetual Reserve Capital Instruments and the £3,000m 14% Step-up Callable Perpetual Reserve Capital Instruments of Barclays Bank PLC (together, the RCIs) would, for the purposes only of calculating the amounts payable in respect of such securities on a winding-up of Barclays Bank PLC, subject to limited exceptions and to the extent that the TONs and the RCIs are then in issue, rank *pari passu* with the holders of the most senior class or classes of preference shares then in issue in the capital of Barclays Bank PLC. Accordingly, the holders of the preference shares would rank equally with the holders of such TONs and RCIs on such a winding-up of Barclays Bank PLC (unless one or more classes of shares of Barclays Bank PLC ranking in priority to the preference shares are in issue at the time of such

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winding-up, in which event the holders of such TONs and RCIs would rank equally with the holders of such shares and in priority to the holders of the preference shares).

Subject to such ranking, in such event, holders of the preference shares will be entitled to receive out of assets of Barclays Bank PLC available for distributions to shareholders, liquidating distributions in the amount of 10,000 per 4.75% Preference Share, £10,000 per 6.0% Preference Share, \$10,000 per 6.278% Preference Share, \$25 per 6.625% Preference Share, \$25 per 7.1% Preference Share, \$25 per 7.75% Preference Share and \$0.25 per 8.125% Preference Share, plus, in each case, an amount equal to the accrued dividend for the then current dividend period to the date of the commencement of the winding-up or other such return of capital. If a dividend is not paid in full on any preference shares on any dividend payment date, then a dividend restriction shall apply.

This dividend restriction will mean that neither Barclays Bank PLC nor Barclays PLC may (a) declare or pay a dividend (other than payment by Barclays PLC of a final dividend declared by its shareholders prior to the relevant dividend payment date, or a dividend paid by Barclays Bank PLC to Barclays PLC or to a wholly owned subsidiary) on any of their respective ordinary shares, other preference shares or other share capital or (b) redeem, purchase, reduce or otherwise acquire any of their respective share capital, other than shares of Barclays Bank PLC held by Barclays PLC or a wholly owned subsidiary, until the earlier of: (1) the date on which Barclays Bank PLC next declares and pays in full a preference dividend; and (2) the date on or by which all the preference shares are redeemed in full or purchased by Barclays Bank PLC.

Holders of the preference shares are not entitled to receive notice of, or to attend, or vote at, any general meeting of Barclays Bank PLC. Barclays Bank PLC is not permitted to create a class of shares ranking as regards participation in the profits or assets of Barclays Bank PLC in priority to the preference shares, save with the sanction of a special resolution of a separate general meeting of the holders of the preference shares (requiring a majority of not less than three-fourths of the holders of the preference shares voting at the separate general meeting) or with the consent in writing of the holders of three-fourths of the preference shares.

Except as described above, the holders of the preference shares have no right to participate in the surplus assets of Barclays Bank PLC.

## Barclays Bank PLC data

Notes to the accounts

### Other equity instruments

Other equity instruments of £6,486m (2015: £5,230m) include AT1 securities issued by Barclays Bank PLC. In 2016, there was one issuance of Fixed Rate Resetting Perpetual Subordinated Contingent Convertible Securities, with a principal amount of £1.1bn.

The AT1 securities are perpetual securities with no fixed maturity and are structured to qualify as AT1 instruments under CRD IV.

### Other shareholders' equity

	The Group		The Bank	
	2016	2015	2016	2015
	£m	£m	£m	£m
As at 1 January	485	485	549	549
Redemption	(214)	-	(214)	-
As at 31 December	271	485	335	549

Included in other shareholders' equity are capital notes which bear interest at rates fixed periodically in advance, based on London interbank rates. These notes are repayable in each case, at the option of the Bank, in whole on any interest payment date. The Bank is not obliged to make a payment of interest on its capital notes if, in the preceding six months, a dividend has not been declared or paid on any class of shares of Barclays PLC.

Upper Tier 2 Capital instruments were redeemed in full during 2016, resulting in a reduction in other shareholders' equity of £214m.

### Reserves

#### Currency translation reserve

The currency translation reserve represents the cumulative gains and losses on the retranslation of the Group's net investment in foreign operations, net of the effects of hedging.

As at 31 December 2016 there was a credit balance of £3,054m (2015: £623m debit) in the currency translation reserve. The increase in the credit balance of £3,677m (2015: £41m debit) principally reflected the strengthening of all major currencies against GBP. The currency translation reserve movement associated with non-controlling interests

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was a £801m credit (2015: £435m debit) reflecting the appreciation of ZAR against GBP.

During the year a £94m net gain (2015: £65m net loss) from recycling of the currency translation reserve was recognised in the income statement.

### Available for sale reserve

The available for sale reserve represents the unrealised change in the fair value of available for sale investments since initial recognition.

As at 31 December 2016 there was a debit balance of £22m in the available for sale reserve (2015: £338m credit). The decrease of £360m (2015: £240m decrease) primarily due to £2,223m gain from changes in fair value on Government Bonds, predominantly held in the liquidity pool, £1,677m of losses from related hedging, £912m of net gains transferred to net profit, mainly due to £615m gain on disposal of Barclays share of Visa Europe Limited. A tax charge of £28m was recognised in the period relating to these items.

### Cash flow hedging reserve

The cash flow hedging reserve represents the cumulative gains and losses on effective cash flow hedging instruments that will be recycled to the income statement when the hedged transactions affect profit or loss.

As at 31 December 2016 there was a credit balance of £954m (2015: £709m credit) in the cash flow hedging reserve. The increase of £245m (2015: £1,108m decrease) principally reflected a £829m increase in the fair value of interest rate swaps held for hedging purposes as interest rate forward curves decreased, partially offset by £516m gains recycled to the income statement in line with when the hedged item affects profit or loss and a tax credit of £93m.

### m Non-controlling interests

	Profit attributable to Non-		Equity attributable to Non-		Dividends paid to Non-	
	Controlling interest		Controlling interest		Controlling interest	
	2016	2015	2016	2015	2016	2015
	£m	£m	£m	£m	£m	£m
Barclays Africa Group Limited	402	324	3,507	1,902	235	209
Other non-controlling interests	3	3	15	12	-	-
<b>Total</b>	<b>405</b>	<b>327</b>	<b>3,522</b>	<b>1,914</b>	<b>235</b>	<b>209</b>

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Barclays Bank PLC owns 50.2% (2015: 62.5%) of Barclays Africa Group Limited.

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## Barclays Bank PLC data

Notes to the accounts

### n Dividends on ordinary shares

Ordinary dividends were paid to enable Barclays PLC to fund its dividend to shareholders.

The 2016 financial statements include £638m (2015: £876m) of dividends paid. This includes the final dividend declared in relation to the prior year of £502m (2015: £476m) and interim dividends of £119m (2015: £400m), resulting in interim dividends of 5p (2015: 17p) per ordinary share and a total dividend for the year of 27p (2015: 37p) per ordinary share paid during the year. There was a £18m dividend in specie paid to Barclays PLC in respect of the distribution of Group Service Company to Barclays Bank PLC.

Dividends paid on the 4.75% 100 preference shares amounted to £370.20 per share (2015: £339.67). Dividends paid on the 6.0% £100 preference shares amounted to £600.00 per share (2015: £600.00). Dividends paid on the 6.278% US\$100 preference shares amounted to £467.05 per share (2015: £410.28). Dividends paid on the 6.625% US\$0.25 preference shares amounted to £1.19 per share (2015: £1.09). Dividends paid on the 7.1% US\$0.25 preference shares amounted to £1.30 per share (2015: £1.17). Dividends paid on the 7.75% US\$0.25 preference shares amounted to £1.35 per share (2015: £1.28). Dividends paid on the 8.125% US\$0.25 preference shares amounted to £1.49 per share (2015: £1.34).

Dividends paid on preference shares amounted to £339m (2015: £343m). Dividends paid on other equity instruments amounted to £462m (2015: £346m).

### o Capital

The Barclays Bank PLC Group's policies and objectives for managing capital are the same as those for the Barclays PLC Group, disclosed on page 388.

The table below provides details of the Barclays Bank PLC Group at 31 December 2016.

### Regulatory capital

2016

	£m
Fully loaded Common Equity Tier 1	46,450
PRA Transitional Tier 1	58,652
PRA Transitional Total Capital Resources	74,871





## Barclays Bank PLC data

Notes to the accounts

### **p Segmental reporting**

Segmental reporting by Barclays Bank PLC is the same as that presented in the Barclays PLC financial statements, except for:

the difference in profit before tax of £1.2bn (2015: £0.8bn) between Barclays PLC and Barclays Bank PLC is included in Head Office; and

the difference in total assets of £0.9bn (2015: £0.8bn) is mainly due to loan notes issued by Barclays Bank PLC to fund the derivatives in Barclays PLC.

### **q Related Parties**

The aggregate emoluments of all Directors and Officers of Barclays Bank PLC who held office during the year (2016: 33 persons, 2015: 33 persons, 2014: 34 persons) for the year ended 31st December 2016 amounted to £71.3m (2015: £52.5m, 2014: £57.0m). In addition, the aggregate amount set aside by the Bank and its subsidiaries for the year ended 31st December 2016, to provide pension benefits for the Directors and Officers amounted to £0.2m (2015: £0.3m 2014: £0.3m).

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**Additional Financial data**

Additional financial disclosure (unaudited)

	2016	2015	2014	2013	2012
<b>Selected financial statistics</b>					
	%	%	%	%	%
Return on average shareholders' equity	4.5	0.9	0.1	1.7	(0.5)
Return on average total assets <sup>b</sup>	0.2	-	-	0.1	-
Average shareholders' equity as a percentage of average total assets	5.1	4.9	4.6	3.9	3.8

	2016	2015	2014	2013	2012
<b>Selected income statement data</b>					
	£m	£m	£m	£m	£m
<b>Continuing operations</b>					
Interest income	14,423	13,947	14,200	14,361	14,772
Interest expense	(2,966)	(2,584)	(4,056)	(4,851)	(5,334)
Non-interest income	11,012	11,445	11,665	14,553	11,251
Operating expenses	(16,348)	(18,536)	(18,178)	(19,534)	(18,474)
Impairment charges	(2,373)	(1,762)	(1,821)	(2,601)	(2,659)
Share of post-tax results of associates and joint ventures	70	41	28	(65)	92
Profit on disposal of subsidiaries, associates and joint ventures	565	(637)	(473)	6	28
Gain on acquisitions	-	-	-	26	2
<b>Profit before tax</b>	<b>4,383</b>	1,914	1,365	1,896	(322)
<b>Profit attributable to equity holders of the parent</b>	<b>2,867</b>	566	85	963	(306)

	2016	2015	2014	2013	2012
<b>Selected balance sheet data</b>					
	£m	£m	£m	£m	£m
Total shareholders' equity	60,947	64,105	59,444	58,931	57,067

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Subordinated liabilities	<b>23,871</b>	21,955	21,685	22,249	24,422
Deposits from banks, customer accounts and debt securities in issue	<b>548,286</b>	534,537	572,357	574,340	587,787
Loans and advances to banks and customers	<b>436,417</b>	441,046	470,424	474,059	472,809
Total assets	<b>1,213,955</b>	1,120,727	1,358,693	1,344,201	1,512,777
Notes					

aReturn on average shareholders' equity represents profit attributable to the equity holders of the parent as a percentage of average shareholders' equity.

bReturn on average total assets represents profit attributable to the equity holders of the parent as a percentage of average total assets.

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**Additional Financial data**

Additional financial disclosure (unaudited)

Ratio of earnings to fixed charges Barclays Bank Plc 2016 2015 2014 2013 2012

(In £m except for ratios)

**Ratio of earnings to fixed charges****Fixed charges**

Interest expense 2,966 2,584 4,056 4,851 5,334

Rental expense 204 157 207 219 216

Total fixed charges 3,170 2,741 4,263 5,070 5,550

**Earnings**

Income before taxes and non-controlling interests 4,383 1,914 1,365 1,896 322

Less: unremitted pre-tax income of associated companies and joint ventures (53) (26) (34) 102 (94)

Total earnings excluding fixed charges 4,330 1,888 1,331 1,998 (416)

Fixed charges 3,170 2,741 4,263 5,070 5,550

Total earnings including fixed charges 7,500 4,629 5,594 7,068 5,134

**Ratio of earnings to fixed charges** 2.37 1.69 1.31 1.39 0.93

2016 2015 2014 2013 2012

Ratio of earnings to fixed charges and preference shares Barclays Bank Plc

(In £m except for ratios)

<b>Combined fixed charges, preference share dividends and similar appropriations</b>					
Interest expense	<b>2,966</b>	2,584	4,056	4,851	5,334
Rental expense	<b>204</b>	157	207	219	216
Fixed charges	<b>3,170</b>	2,741	4,263	5,070	5,550
Preference share dividends and similar appropriations	<b>343</b>	345	443	412	466
Total fixed charges	<b>3,513</b>	3,086	4,706	5,482	6,016
<b>Earnings</b>					
Income before taxes and non-controlling interests	<b>4,383</b>	1,914	1,365	1,896	322
Less: unremitted pre-tax income of associated companies and joint ventures	<b>(53)</b>	(26)	(34)	102	(94)
Total earnings excluding fixed charges	<b>4,330</b>	1,888	1,331	1,998	416
Fixed charges	<b>3,513</b>	3,086	4,706	5,482	6,016
Total earnings including fixed charges	<b>7,843</b>	4,974	6,037	7,480	5,600
<b>Ratio of earnings to fixed charges, preference share dividends and similar appropriations</b>	<b>2.23</b>	1.61	1.28	1.36	0.93

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### Glossary of terms

**A-IRB / Advanced-Internal Ratings Based** See Internal Ratings Based (IRB) .

**ABS CDO Super Senior** Super senior tranches of debt linked to collateralised debt obligations of asset backed securities (defined below). Payment of super senior tranches takes priority over other obligations.

**Acceptances and endorsements** An acceptance is an undertaking by a bank to pay a bill of exchange drawn on a customer. The Group expects most acceptances to be presented, but reimbursement by the customer is normally immediate. Endorsements are residual liabilities of the Group in respect of bills of exchange which have been paid and subsequently rediscounted.

**Additional Tier 1 (AT1) capital** In the context of CRD IV, a type of capital as defined in the Capital Requirements Regulation (CRR).

**Additional Tier 1 (AT1) securities** Securities that are treated as additional tier 1 (AT1) capital in the context of CRD IV.

**Advanced Measurement Approach** Under CRD IV, operational risk charges can be calculated by using one of three methods (or approaches) that increase in sophistication and risk sensitivity: (i) the Basic Indicator Approach; (ii) the Standardised Approach; and (iii) the Advanced Measurement Approach (AMA). Under the AMA the banks are allowed to develop their own empirical model to quantify required capital for operational risk. Banks can only use this approach subject to approval from their local regulators.

**Africa Banking** The previously reported Africa Retail and Business Banking combined with other businesses across Africa (excluding the Egypt and Zimbabwe businesses transferred to Barclays Non-Core). The Africa head office function is also included in Barclays Africa. This combined Barclays Africa business is managed under three primary businesses: Retail and Business Banking; Wealth, Investment Management and Insurance; and Corporate and Investment Banking. The resulting Barclays Africa business comprises the Barclays Africa Group Limited ( BAGL or Barclays Africa ) listed entity.

**Agencies** Bonds issued by state and / or government agencies or government-sponsored entities.

**Agency Mortgage-Backed Securities** Mortgage-Backed Securities issued by government-sponsored institutions.

**All price risk (APR)** An estimate of all the material market risks, including rating migration and default for the correlation trading portfolio.

**American Depository Receipts (ADR)** A negotiable certificate that represents the ownership of shares in a non-US company (for example Barclays) trading in US financial markets.

**Americas** Geographic segment comprising the USA, Canada and countries where Barclays operates within Latin America.

**Annual Earnings at Risk (AEAR)** Impact on earnings of a parallel (upward or downward) movement in interest rates.

**Application scorecards** Algorithm based decision tools used to aid business decisions and manage credit risk based on available customer data at the point of application for a product.

**Arrears** Customers are said to be in arrears when they are behind in fulfilling their obligations with the result that an outstanding loan is unpaid or overdue. Such customers are also said to be in a state of delinquency. When a customer is in arrears, their entire outstanding balance is said to be delinquent, meaning that delinquent balances are the total outstanding loans on which payments are overdue.

**Arrears Managed Accounts** Arrears Managed Accounts are principally Business Lending customers in arrears with an exposure limit less than £50,000 in the UK and 100,000 in Europe, supervised using processes designed to manage a homogeneous set of assets.

**Asia** Geographic segment comprising countries where Barclays operates within Asia (including Singapore, Japan, China and India), Australia and the Middle East.

**Asset Backed Commercial Paper** Typically short-term notes secured on specified assets issued by consolidated special purpose entities for funding purposes.

**Asset Backed Securities (ABS)** Securities that represent an interest in an underlying pool of referenced assets. The referenced pool can comprise any assets which attract a set of associated cash flows but are commonly pools of residential or commercial mortgages and, in the case of Collateralised Debt Obligations (CDOs), the referenced pool may be ABS or other classes of assets.

**Attributable profit** Profit after tax that is attributable to ordinary equity holders of Barclays PLC adjusted for the after tax amounts of capital securities classified as equity.

**Average allocated tangible shareholders equity** Calculated as the average of the monthly period-end allocated tangible equity during the period.

**Average leverage ratio** As per the updated PRA rulebook, is calculated as the average capital measure divided by the average exposure measure for the quarter, where the average is based on the capital and exposure measure on the last day of each month in the quarter.

**Average shareholders equity** Calculated as the average of monthly period end shareholders equity excluding non-controlling interests.

**Average tangible shareholders equity** Calculated as the average of monthly period end shareholders equity excluding non-controlling interests adjusted for the deduction of intangible assets and goodwill.

**Back testing** Includes a number of techniques that assess the continued statistical validity of a model by simulating how the model would have predicted recent experience.

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**Balance weighted Loan to Value (LTV) ratio** In the context of the credit risk disclosures on secured home loans, a means of calculating marked to market LTVs derived by calculating individual LTVs at account level and weighting it by the balances to arrive at the average position. Balance weighted loan to value is calculated using the following formula:  $LTV = ((\text{loan balance } 1 \times \text{MTM LTV}\%$

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for loan 1) + (loan balance 2 x MTM LTV% for loan 2) + ... ) / total outstandings in portfolio.

**The Bank** Barclays Bank PLC.

**Barclaycard** An international consumer payments company serving the needs of businesses and consumers through credit cards, consumer lending, merchant acquiring, commercial cards and point of sale finance. Barclaycard has scaled operations in UK, US, Germany and Scandinavia.

**Barclays Core** Barclays Core includes Barclays UK, Barclays International and Head Office. See also Barclays Non-Core

**Barclays Core Operating businesses** The core Barclays businesses operated by Barclays UK (which include the UK Personal business, the small UK Corporate and UK Wealth businesses and the Barclaycard UK consumer credit cards business) and Barclays International (which include the large UK Corporate business; the international Corporate and Wealth businesses; the Investment Bank; the international Barclaycard business; and Barclaycard Business Solutions). See also Barclays Non-Core

**Barclays Direct** A Barclays brand, comprising the savings and mortgage businesses acquired from ING Direct UK in March 2013.

**Barclays International** The division of Barclays which will not ultimately be ring-fenced as part of regulatory ring fencing requirements. The division includes the large UK Corporate business; the international Corporate and Wealth businesses; the Investment Bank; the international Barclaycard business (consisting of the US, German and Nordic consumer credit cards businesses); and Barclaycard Business Solutions (including merchant acquiring).

**Barclays Non-Core** This unit groups together businesses and assets that are not strategically attractive to Barclays and that will be exited, or run down. See also Barclays Core

**Barclays UK** The division of Barclays which will be ring-fenced as part of regulatory ring fencing requirements. The division includes the UK Personal business; the small UK Corporate and UK Wealth businesses; and the Barclaycard UK consumer credit cards business

**Basel** The third of the Basel Accords on banking supervision. Developed in response to the financial crisis of 2008, setting new requirements on composition of capital, counterparty credit risk, liquidity and leverage ratios.

**Basel Committee of Banking Supervisors (BCBS or The Basel Committee)** A forum for regular cooperation on banking supervisory matters which develops global supervisory standards for the banking industry. Its members are officials

from central banks or prudential supervisors from 27 countries and territories.

**Basis point(s) / bp(s)** One hundredth of a per cent (0.01%); 100 basis points is 1%. The measure is used in quoting movements in interest rates, yields on securities and for other purposes.

**Basis risk** Measures the impact of changes in tenor basis (e.g., the basis between swaps vs. 3 month (3M) Libor and swaps vs. 6 month (6M) Libor) and cross currency basis.

**Behavioural scorecards** Algorithm based decision tools used to aid business decisions and manage credit risk based on existing customer data derived from account usage.

**Book quality** In the context of the Funding Risk, Capital Risk section, changes in RWAs caused by factors such as underlying customer behaviour or demographics leading to changes in risk profile.

**Book size** In the context of the Funding Risk, Capital Risk section, changes in RWAs driven by business activity, including net originations or repayments.

**Businesses** In the context of Non-Core Analysis of Total income, Barclays Non Core businesses comprise ongoing businesses seeking to be sold-off or run down including Europe retail and non-core elements of the Investment Bank and other non strategic businesses.

**Business Lending** Business Lending in Barclays UK that primarily relates to small and medium enterprises typically with exposures up to £3m or with a turnover up to £5m.

**Business scenario stresses** Multi asset scenario analysis of extreme, but plausible events that may impact the market risk exposures of the Investment Bank.

**Buy to let mortgage** A mortgage where the intention of the customer (investor) was to let the property at origination.

**Capital Conservation Buffer (CCB)** Common Equity Tier 1 capital required to be held under CRD IV to ensure that banks build up surplus capital outside periods of stress which can be drawn down if losses are incurred.

**Capital deduction approach** An approach available to institutions when calculating risk-weighted assets for securitisation exposures. It is the same as a deduction from capital where most punitive risk weight of 1250% is applied (assuming 8% Capital Adequacy ratio).

**Capital ratios** Key financial ratios measuring the Group's capital adequacy or financial strength. These include the CET1 ratio, Tier 1 capital ratio and Total capital ratio.

**Capital requirements** Amount to be held by the Group to cover the risk of losses to a certain confidence level.

**Capital Requirements Regulation (CRR)** Regulation (EU) No 575/2013, which accompanies CRD IV and sets out detailed rules for capital eligibility, the calculation of RWAs, the measurement of leverage, the management of large exposures and minimum standards for liquidity.

**Capital requirements on the underlying exposures (KIRB)** An approach available to banks when calculating risk weighted assets (RWA) for securitisation exposures. This is based upon the RWA amounts that would be calculated

under the IRB approach for the

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underlying pool of securitised exposures in the program, had such exposures not been securitised.

**Capital resources** Financial instruments on balance sheet that are eligible to satisfy capital requirements.

**Central Counterparty / Central Clearing Counterparties (CCPs)** A clearing house mediating between the buyer and the seller in a financial transaction, such as a derivative contract or repurchase agreement (repo). Where a central counterparty is used, a single bi-lateral contract between the buyer and seller is replaced with two contracts, one between the buyer and the CCP and one between the CCP and the seller. The use of CCPs allows for greater oversight and improved credit risk mitigation in over-the-counter (OTC) markets.

**Charge-off** In the retail segment this refers to the point in time when collections activity changes from the collection of arrears to the recovery of the full balance. This is normally when six payments are in arrears.

**Chargeadd-on and non VaR** In the context of Risk Weighted Assets, any additional Market Risk not captured within Modelled VaR, including Incremental Risk Charges and Correlation Risk.

**Client Assets** Assets managed or administered by Barclays on behalf of clients including assets under management (AUM), custody assets, assets under administration and client deposits.

**CLOs and Other insured assets** Highly rated CLO positions wrapped by monolines and non-CLOs wrapped by monolines and other assets wrapped with Credit Support Annex (CSA) protection.

**Collateralised Debt Obligation (CDO)** Securities issued by a third party which reference Asset Backed Securities (ABSs) (defined above) and/or certain other related assets purchased by the issuer. CDOs may feature exposure to sub-prime mortgage assets through the underlying assets.

**Collateralised Loan Obligation (CLO)** A security backed by the repayments from a pool of commercial loans. The payments may be made to different classes of owners (in tranches).

**Collateralised Mortgage Obligation (CMO)** A type of security backed by mortgages. A special purpose entity receives income from the mortgages and passes them on to investors of the security.

**Collectively assessed impairment allowances** Impairment of financial assets is measured collectively where a portfolio comprises homogenous assets and where appropriate statistical techniques are available.

**Combined Buffer Requirement** In the context of the CRD IV capital obligations, the combined requirements of the Capital Conservation Buffer, the GSII Buffer, the OSII buffer, the Systemic Risk bubble and an institution specific counter-cyclical buffer.

**Commercial paper (CP)** Short-term notes issued by entities, including banks, for funding purposes.

**Commercial real estate** Commercial real estate includes office buildings, industrial property, medical centres, hotels, retail stores, shopping centres, farm land, multifamily housing buildings, warehouses, garages, and industrial properties and other similar

properties. Commercial real estate loans are loans backed by a package of commercial real estate. Note: for the purposes of the Credit Risk section, the UK CRE portfolio includes property investment, development, trading and housebuilders but excludes social housing contractors.

**Committee of Sponsoring Organisations of the Treadway Commission Framework (COSO)** A joint initiative of five private sector organisations dedicated to providing development of frameworks and guidance on enterprise risk management, internal control and fraud deterrence.

**Commodity derivatives** Exchange traded and over-the-counter (OTC) derivatives based on an underlying commodity (e.g. metals, precious metals, oil and oil related, power and natural gas).

**Commodity risk** Measures the impact of changes in commodity prices and volatilities, including the basis between related commodities (e.g. Brent vs. WTI crude prices).

**Common Equity Tier 1 (CET1) capital** In the context of CRD IV, a type of capital as defined by the Capital Requirements Regulation, predominantly consisting of common equity.

**Common Equity Tier 1 (CET1) ratio** A measure of the Group's Common Equity Tier 1 capital as a percentage of Risk Weighted Assets under CRD IV. The Group must meet a prescribed ratio.

**Compensation: income ratio** The ratio of compensation expense over total income. Compensation represents total staff costs less non-compensation items consisting of outsourcing, bank payroll tax, staff training, redundancy costs and retirement costs.

**Comprehensive Risk Measure (CRM)** An estimate of all the material market risks, including rating migration and default for the correlation trading portfolio. Also referred to as All Price Risk (APR) and Comprehensive Risk Capital Charge (CRCC).

**Constant Currency Basis** Excluding the impact of foreign currency conversion to GBP when comparing financial results in two different financial periods.

**Contingent capital notes (CCNs)** Interest bearing debt securities issued by Barclays PLC or its subsidiaries that are either permanently written off or converted into an equity instrument from the issuer's perspective in the event of the Group's core tier 1 (CT1) or Common Equity Tier 1 (CET1) ratio, as appropriate, falling below a specified level.

**Core deposit intangibles** Premium paid to acquire the deposit base of an institution.

**Correlation risk** Refers to the change in marked to market value of a security when the correlation between the underlying assets changes over time.

**Corporate and Investment Banking (CIB)** Barclays Corporate and Investment Banking businesses which form part of Barclays International.

**Cost: income ratio** Total operating expenses divided by total income.



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**Cost of Equity** The rate of return targeted by the equity holders of a company.

**Cost: net operating income ratio** Operating expenses compared to total income less credit impairment charges and other provisions.

**Cost to Achieve (CTA)** Non-recurring investment in initiatives to drive cost and business efficiency across Barclays through rightsizing, industrialisation and innovation.

**Cost to income jaw** Relationship of the percentage change movement in total operating expenses relative to total income.

**Counter-Cyclical Capital Buffer (CCCB)** CET1 Capital that is required to be held under CRD IV rules to ensure that banks build up surplus capital when macroeconomics conditions indicate areas of the economy are overheating.

**Counter-Cyclical Capital Buffer (CCyB)** A macroprudential buffer that applies to all PRA regulated institutions from 2018 and is calculated at 35% of any risk weighted countercyclical capital buffer set by the FPC. The CCLB applies in addition to the minimum of 3% and any G-SII additional Leverage Ratio Buffer that applies,

**Counterparty credit risk** In the context of Risk Weighted Assets, a component of Risk Weighted Assets that represents the risk of loss in derivatives, repurchase agreements and similar transactions resulting from the default of the counterparty.

**Coverage ratio** In the context of the Credit risk disclosures, impairment allowances as a percentage of Credit Risk Loan balances.

**Covered bonds** Debt securities backed by a portfolio of mortgages that are segregated from the issuer's other assets solely for the benefit of the holders of the covered bonds.

**CRD IV** The Fourth Capital Requirements Directive, an EU Directive and an accompanying Regulation (CRR) that together prescribe EU capital adequacy and liquidity requirements and implements Basel 3 in the European Union.

**Credit conversion factor (CCF)** Factor used to estimate the risk from off-balance sheet commitments for the purpose of calculating the total Exposure at Default (EAD) used to calculate Risk Weighted Assets (RWAs).

**Credit default swaps (CDS)** A contract under which the protection seller receives premiums or interest-related payments in return for contracting to make payments to the protection buyer in the event of a defined credit event. Credit events normally include bankruptcy, payment default on a reference asset or assets, or downgrades by a rating agency.

**Credit derivatives (CDs)** An arrangement whereby the credit risk of an asset (the reference asset) is transferred from the buyer to the seller of the protection.

**Credit impairment charges** Also known as credit impairment. Impairment charges on loans and advances to customers and banks and impairment charges on available for sale assets and reverse repurchase agreements.

**Credit market exposures** Assets and other instruments relating to commercial real estate and leveraged finance businesses that have been significantly impacted by the deterioration in the global credit markets. The exposures include positions subject to fair value movements in the Income Statement, positions that are classified as loans and advances and available for sale and other assets.

**Credit Products** Represents credit products and Securitised Products income.

**Credit quality step** In the context of the Standardised Approach to calculating credit risk RWAs, a credit quality assessment scale maps the credit assessments of a recognised credit rating agency or export credit agency to credit quality steps that determine the risk weight to be applied to an exposure.

**Credit Rating** An evaluation of the creditworthiness of an entity seeking to enter into a credit agreement.

**Credit risk** The risk of the Group suffering financial loss if a counterparty fails to fulfil its contractual obligations to the Group under a loan agreement or similar. In the context of Risk Weighted Assets, it is the component of Risk Weighted Assets that represents the risk of loss in loans and advances and similar transactions resulting from the default of the counterparty.

**Credit Risk Loans (CRLs)** A loan becomes a credit risk loan when evidence of deterioration has been observed, for example a missed payment or other breach of covenant. A loan may be reported in one of three categories: (i) impaired loans; (ii) accruing past due 90 days or more; and (iii) impaired or restructured loans. These may include loans which, while impaired, are still performing but have associated individual impairment allowances raised against them.

**Credit risk mitigation** A range of techniques and strategies to actively mitigate credit risks to which the bank is exposed. These can be broadly divided into three types; collateral, netting and set-off, and risk transfer.

**Credit spread** The premium over the benchmark or risk-free rate required by the market to accept a lower credit quality.

**Credit Valuation Adjustment (CVA)** The difference between the risk-free value of a portfolio of trades and the market value which takes into account the counterparty's risk of default. The CVA therefore represents an estimate of the adjustment to fair value that a market participant would make to incorporate the credit risk of the counterparty due to any failure to perform on contractual agreements.

**CRL Coverage** Impairment allowances as a percentage of total CRL (See Credit Risk Loans). Also known as the CRL coverage ratio.

**Customer assets** Represents loans and advances to customers. Average balances are calculated as the sum of all daily balances for the year to date divided by number of days in the year to date.

**Customer deposits** In the context of Funding Risk, Liquidity Risk section, money deposited by all individuals and companies that are not credit institutions. Such funds are recorded as liabilities in the Group's balance sheet under Customer Accounts.



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**Customer liabilities** Customer deposits.

**Customer net interest income** The sum of customer asset and customer liability net interest income. Customer net interest income reflects interest related to customer assets and liabilities only and does not include any interest on securities or other non-customer assets and liabilities.

**CVA volatility charge** The volatility charge added to exposures that adjusts fair-market valuation on a portfolio of transactions with a counterparty. This is to reflect the current market value of the credit risk associated with the counterparty to the Bank. The charge is prescribed by the CRR.

**Daily Value at Risk (DVaR)** An estimate of the potential loss which might arise from market movements under normal market conditions, if the current positions were to be held unchanged for one business day, measured to a specified confidence level.

**DBRS** A credit rating agency.

**Debit Valuation Adjustment (DVA)** The opposite of Credit Valuation Adjustment (CVA). It is the difference between the risk-free value of a portfolio of trades and the market value which takes into account the Group's risk of default. The DVA, therefore, represents an estimate of the adjustment to fair value that a market participant would make to incorporate the credit risk of the Group due to any failure to perform on contractual obligations. The DVA decreases the value of a liability to take into account a reduction in the remaining balance that would be settled should the Group default or not perform any contractual obligations.

**Debbuy-backs** Purchases of the Group's issued debt securities, including equity accounted instruments, leading to their de-recognition from the balance sheet.

**Debt securities in issue** Transferable securities evidencing indebtedness of the Group. These are liabilities of the Group and include certificates of deposit and commercial paper.

**Default grades** Barclays classify ranges of default probabilities into a set of 21 intervals called default grades, in order to distinguish differences in the probability of default risk.

**Default fund contributions** The amount of contribution made by members of a central counterparty (CCP). All members are required to contribute to this fund in advance of using a CCP. The default fund can be used by the CCP to cover losses incurred by the CCP where losses are greater than the margins provided by that member.

**Derivatives** In the context of Non-Core Analysis of Total income, Derivatives comprise non strategic businesses from the non-core Investment Bank

**Derivatives netting** Adjustments applied across asset and liability mark-to-market derivative positions pursuant to legally enforceable bilateral netting agreements and eligible cash collateral received in derivative transactions that meet the requirements of BCBS 270.

**Diversification effect** Reflects the fact the risk of a diversified portfolio is smaller than the sum of the risks of its constituent parts. It is measured as the sum of the individual asset class DVaR (see above) estimates less the total DVaR.

**Dodd-Frank Act (DFA)** The US Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010.

**Early warning lists (EWL)** Categorisations for wholesale customers used to identify at an early stage those customers where it is believed that difficulties may develop, allowing timely corrective action to be taken. There are three categories of EWL, with risk increasing from EWL 1 (caution) to EWL 2 (medium) and EWL 3 (high). It is expected that most cases would be categorised EWL 1 before moving to 2 or 3, but it is recognised that some cases may be categorised to EWL 2 or 3 directly.

**Early Warning List (EWL) Managed accounts** EWL Managed accounts are Business Lending customers that exceed the Arrears Managed Accounts limits and are monitored with standard processes that record heightened levels of risk through an EWL grading.

**Earnings per Share contribution** The attributable profit or loss generated by a particular business or segment divided by the weighted average number of Barclays shares in issue to illustrate on a per share basis how that business or segment contributes total earnings per share.

**Economic Value of Equity (EVE)** Change in the present value of the banking book of a parallel (upward or downward) interest rate shock.

**Encumbrance** The use of assets to secure liabilities, such as by way of a lien or charge.

**Enterprise Risk Management Framework (ERMF)** Barclays risk management responsibilities are laid out in the Enterprise Risk Management Framework. This framework creates clear ownership and accountability, ensures the Group's most significant risk exposures are controlled, understood and managed in accordance with agreed risk appetite, and ensures regular reporting of both risk exposures and the operating effectiveness of controls. This framework also clarifies the definition of the three lines of defence and extends its scope to all businesses and functions.

**Equities** Trading businesses encompassing Cash Equities, Equity Derivatives & Equity Financing

**Equity and stock index derivatives** Derivatives whose value is derived from equity securities. This category includes equity and stock index swaps and options (including warrants, which are equity options listed on an exchange). The Group also enters into fund-linked derivatives, being swaps and options whose underlyings include mutual funds, hedge funds, indices and multi-asset portfolios. An equity swap is an agreement between two parties to exchange periodic payments, based upon a notional principal amount, with one side paying fixed or floating interest and the other side paying based on the actual return of the stock or stock index. An equity option provides the buyer with the right, but not the obligation, either to purchase or sell a specified stock, basket of stocks or stock index at a specified price or level on or before a specified date.

**Equity risk** In the context of trading book capital requirements, the risk of change in market value of an equity investment.

[Equity structural hedge](#) An interest rate hedge in place to manage the volatility in net earnings generated by businesses on the Group's

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equity, with the impact allocated to businesses in line with their economic capital usage.

**Euro Interbank Offered Rate (EURIBOR)** A benchmark interest rate at which banks can borrow funds from other banks in the European interbank market.

**Europe** Geographic segment comprising countries in which Barclays operates within the EU (excluding UK), Northern Continental and Eastern Europe.

**European Securities and Markets Authority (ESMA)** An independent European Supervisory Authority with the remit of enhancing the protection of investors and reinforcing stable and well-functioning financial markets in the European Union.

**Expected losses** The Group's measure of anticipated losses for exposures captured under an internal ratings based credit risk approach for capital adequacy calculations. It is measured as the Barclays modelled view of anticipated losses based on Probability of Default (PD), Loss Given Default (LGD) and Exposure at Default (EAD), with a one year time horizon.

**Expert lender models** Models of risk measures that are used for parts of the portfolio where the risk drivers are specific to a particular counterparty, but where there is insufficient data to support the construction of a statistical model. These models utilise the knowledge of credit experts that have in depth experience of the specific customer type being modelled.

**Exposure** Generally refers to positions or actions taken by the firm, or consequences thereof, that may put a certain amount of a bank's resources at risk.

**Exposure at Default (EAD)** The estimation of the extent to which Barclays may be exposed to a customer or counterparty in the event of, and at the time of, that counterparty's default. At default, the customer may not have drawn the loan fully or may already have repaid some of the principal, so that exposure may be less than the approved loan limit.

**External Credit Assessment Institutions (ECAI)** Institutions whose credit assessments may be used by credit institutions for the determination of risk weight exposures according to CRD IV.

**F-IRB / Foundation-Internal Ratings Based** See Internal Ratings Based (IRB) .

**Financial Conduct Authority (FCA)** The statutory body responsible for conduct of business regulation and supervision of UK authorised firms. The FCA also has responsibility for the prudential regulation of firms that do not fall within the PRA's scope.

**Financial Services Compensation Scheme (FSCS)** The UK's fund for compensation of authorised financial services firms that are unable to pay claims.

**Financial collateral comprehensive method (FCCM)** A counterparty credit risk exposure calculation approach which applies volatility adjustments to the market value of exposure and collateral when calculating risk weighted asset values.

**Fitch** A credit rating agency.

**Forbearance** Forbearance programmes to assist customers in financial difficulty through agreements to accept 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 or a third party and include approved debt counselling plans, minimum due reductions, interest rate concessions and switches from capital and interest repayments to interest-only payments.

**Forbearance Programmes for Credit Cards** Can be split into 2 main types: Repayment plans- A temporary reduction in the minimum payment due, for a maximum of 60 months. This may involve a reduction in interest rates to prevent negative amortization; Fully amortising- A permanent conversion of the outstanding balance into a fully amortising loan, over a maximum period of 60 months for cards and 120 months for loans.

**Forbearance Programmes for Home Loans** Can be split into 4 main types: Interest-only conversions- A temporary change from a capital and interest repayment to an interest-only repayment, for a maximum of 24 months; Interest rate reductions- A temporary reduction in interest rate, for a maximum of 12 months; Payment concessions- An agreement to temporarily accept reduced loan repayments, for a maximum of 24 months; Term extensions- A permanent extension to the loan maturity date which may involve a reduction in interest rates, and usually involves the capitalisation of arrears.

**Forbearance Programmes for Unsecured Loans** Can be split into 3 main types: Payment concessions- An agreement to temporarily accept reduced loan repayments, for a maximum of 12 months; Term extensions- A permanent extension to the loan maturity date, usually involving the capitalisation of arrears; Fully amortising- A permanent conversion of the outstanding balance into a fully amortising loan, over a maximum period of 60 months for cards and 120 months for loans.

**Foreclosures in Progress** The process by which the bank initiates legal action against a customer with the intention of terminating a loan agreement whereby the bank may repossess the property subject to local law and recover amounts it is owed.

**Foreign exchange derivatives** The Group's principal exchange rate-related contracts are forward foreign exchange contracts, currency swaps and currency options. Forward foreign exchange contracts are agreements to buy or sell a specified quantity of foreign currency, usually on a specified future date at an agreed rate. Currency swaps generally involves the exchange, or notional exchange, of equivalent amounts of two currencies and a commitment to exchange interest periodically until the principal amounts are re-exchanged on a future date. Currency options provide the buyer with the right, but not the obligation, either to purchase or sell a fixed amount of a currency at a specified exchange rate on or before a future date. As compensation for assuming the option risk, the option writer generally receives a premium at the start of the option period.

**Foreign exchange risk** In the context of DVaR, the impact of changes in foreign exchange rates and volatilities.

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**Front Arena** A deal solution that helps to trade and manage positions and risk in the global capital markets.

**Full time equivalent** Full time equivalent units are the job hours paid for employee services divided by the number of ordinary-time hours normally paid for a full-time staff member when on the job (or contract employees where applicable).

**Fully loaded** When a measure is presented or described as being on a fully loaded basis, it is calculated without applying the transitional provisions set out in Part Ten of CRD IV.

**Fully loaded CET1 ratio** A risk based ratio calculated as Common Equity Tier 1 capital divided by Risk Weighted Assets (before the application of transitional provisions set out in CRD IV and interpretive guidance published by the PRA).

**Funding for Lending Scheme (FLS)** Scheme launched by the Bank of England to incentivise banks and building societies to lend to UK households and non-financial companies through reduced funding costs, the benefits of which are passed on to UK borrowers in the form of cheaper and more easily available loans.

**Funding mismatch** In the context of Eurozone balance sheet funding exposures, the excess of local euro denominated external assets, such as customer loans, over local euro denominated liabilities, such as customer deposits.

**Funding risk** The risk that the Group may not be able to achieve its business plans due to being unable to maintain appropriate capital ratios (Capital Risk), being unable to meet its obligations as they fall due (Liquidity Risk), rating agency methodology changes or of adverse changes in interest rate curves impacting structural hedges of non interest bearing assets/ liabilities or on income or foreign exchange rates on capital ratios (Structural risk).

**Funds and fund-linked products** Includes holdings in mutual funds, hedge funds, fund of funds and fund linked derivatives.

**Gains on acquisitions** The amount by which the acquirer's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities, recognised in a business combination, exceeds the cost of the combination.

**General market risk** The risk of a price change in a financial instrument due to a change in level of interest rates or owing to a broad equity market movement unrelated to any specific attributes of individual securities.



**Globally-Systemically Important Bank (G-SIBs or G-SIIs)** Global financial institutions whose size, complexity and systemic interconnectedness, mean that their distress or failure would cause significant disruption to the wider financial system and economic activity. The Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (BCBS) have identified a group of 30 globally systemically important banks.

**G-SII additional leverage ratio buffer (G-SII ALRB)** A macroprudential buffer that applies to globally systemically important banks (G-SIBs) and other major domestic UK banks and building societies, including banks that are subject to ring-fencing requirements. The G-SII ALRB will be calibrated as 35% (on a phased basis) of the combined systemic risk buffers that applies to the bank.

**GSII Buffer** Common Equity Tier 1 capital required to be held under CRD IV to ensure that G-SIBs build up surplus capital to compensate for the systemic risk that such institutions represent to the financial system.

**Grandfathering** In the context of CRD IV capital resources, the application of the rules on instrument eligibility during the transitional period as defined in the Capital Requirements Regulation.

**Gross charge-off rates** Represents the balances charged-off to recoveries in the reporting period, expressed as a percentage of average outstanding balances excluding balances in recoveries. Charge-off to recoveries generally occurs when the collections focus switches from the collection of arrears to the recovery of the entire outstanding balance, and represents a fundamental change in the relationship between the bank and the customer. This is a measure of the proportion of customers that have gone into default during the period.

**Gross new lending** New lending advanced to customers during the period.

**Group** Barclays PLC together with its subsidiaries.

**Guarantee** Unless otherwise described, an undertaking by a third party to pay a creditor should a debtor fail to do so. It is a form of credit substitution.

**Head Office and Other Operations** A business segment comprising Brand and Marketing, Finance, Head Office, Human Resources, Internal Audit, Legal and Compliance, Risk, Treasury and Tax and other operations.

**High Net Worth** Businesses within Barclays UK and Barclays International that provide banking and other services to high net worth customers.

**High Risk** In retail banking, High Risk is defined as the subset of date customers who, either through an event or observed behaviour exhibit potential financial difficulty. Where appropriate, these customers are proactively contacted to assess whether assistance is required.

**Home loan** A loan to purchase a residential property. The property is then used as collateral to guarantee repayment of the loan. The borrower gives the lender a lien against the property and the lender can foreclose on the property if the borrower does not repay the loan per the agreed terms. Also known as a residential mortgage.

**IHC or US IHC** Barclays US LLC, the intermediate holding company established by Barclays in July 2016, which holds most of Barclays' subsidiaries and assets in the United States.

**IMA / Internal Model Approach** In the context of Risk Weighted Assets, Risk Weighted Assets for which the exposure amount has been derived via the use of a PRA approved internal market risk model.

**IMM / Internal Model Method** In the context of Risk Weighted Assets, Risk Weighted Assets for which the exposure amount has been derived via the use of a PRA approved internal counterparty credit risk model.



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**Impairment allowances** A provision held on the balance sheet as a result of the raising of a charge against profit for incurred losses in the lending book. An impairment allowance may either be identified or unidentified and individual or collective.

**Impairment coverage ratio** Impairment allowance held against balances in specific LTV band expressed as a percentage of balances in the specific LTV Band.

**Income** Total income,, unless otherwise specified.

**Incremental Risk Charge** 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.

**Independent Commission on Banking (ICB)** Body set up by HM Government to identify structural and non-structural measures to reform the UK banking system and promote competition.

**Individual liquidity guidance (ILG)** Guidance given to a firm about the amount, quality and funding profile of liquidity resources that the PRA has asked the firm to maintain.

**Inflation risk** In the context of DVaR, the impact of changes in inflation rates and volatilities on cash instruments and derivatives.

**Insurance Risk** The risk of the Group's aggregate insurance premiums received from policyholders under a portfolio of insurance contracts being inadequate to cover the claims arising from those policies.

**Interchange** Income paid to a credit card issuer for the clearing and settlement of a sale or cash advance transaction.

**Interest only home loans** Under the terms of these loans, the customer makes payments of interest only for the entire term of the mortgage, although customers may make early repayments of the principal within the terms of their agreement. The customer is responsible for repaying the entire outstanding principal on maturity, which may require the sale of the mortgaged property.

**Interest rate derivatives** Derivatives linked to interest rates. This category includes interest rate swaps, collars, floors options and swaptions. An interest rate swap is an agreement between two parties to exchange fixed rate and floating rate interest by means of periodic payments based upon a notional principal amount and the interest rates defined in the contract. Certain agreements combine interest rate and foreign currency swap transactions, which may or may not include the exchange of principal amounts. A basis swap is a form of interest rate swap, in which both parties

exchange interest payments based on floating rates, where the floating rates are based upon different underlying reference indices. In a forward rate agreement, two parties agree a future settlement of the difference between an agreed rate and a future interest rate, applied to a notional principal amount. The settlement, which generally occurs at the start of the contract period, is the discounted present value of the payment that would otherwise be made at the end of that period.

**Interest rate risk** The risk of interest rate volatility adversely impacting the Groups net interest margin. In the context of the

calculation of market risk DVaR, measures the impact of changes in interest (swap) rates and volatilities on cash instruments and derivatives.

**Internal Assessment Approach (IAA)** One of three types of calculation that a firm with permission to use the Internal Ratings Based (IRB) approach may apply to securitisation exposures. It consists of mapping a firm's internal rating methodology for credit exposures to those of an External Credit Assessment Institution (ECAI) to determine the appropriate risk weight based on the ratings based approach. Its applicability is limited to ABCP programmes related to liquidity facilities and credit enhancement.

**Internal Capital Adequacy Assessment Process (ICAAP)** Companies are required to perform a formal Internal Capital Adequacy Assessment Process (ICAAP) as part of the Pillar 2 requirements (BIPRU) and to provide this document to the PRA on a yearly basis. The ICAAP document summarises the group's risk management framework, including approach to managing all risks (i.e. Pillar 1 and non-Pillar 1 risks); and, the group's risk appetite, economic capital and stress testing frameworks.

**Internal model method (IMM)** In the context of Risk Weighted Assets, Risk Weighted Assets for which the exposure amount has been derived via the use of a PRA approved internal counterparty credit risk model.

**Internal Ratings Based (IRB)** An approach under the CRR framework that relies on the bank's internal models to derive the risk weights. The IRB approach is divided into two alternative applications, Advanced and Foundation:

Advanced IRB ( A-IRB ): the bank uses its own estimates of probability of default (PD), loss given default (LGD) and credit conversion factor to model a given risk exposure.

Foundation IRB: the bank applies its own PD as for Advanced, but it uses standard parameters for the LGD and the credit conversion factor. The Foundation IRB approach is specifically designed for wholesale credit exposures. Hence retail, equity, securitisation positions and non-credit obligations asset exposures are treated under standardised or A-IRB.

**Investment Bank** The Group's investment bank which consists of origination led and returns focused markets and banking business which forms part of the Corporate and Investment Banking segment of Barclays International.

**Investment Banking Fees** In the context of Investment Bank Analysis of Total Income, fees generated from origination activity businesses including financial advisory, debt and equity underwriting.

**Investment grade** A debt security, treasury bill or similar instrument with a credit rating of AAA to BBB as measured by external credit rating agencies.

**ISDA Master Agreement** The most commonly used master contract for OTC derivative transactions internationally. It is part of a framework of documents, designed to enable OTC derivatives to be documented fully and flexibly. The

framework consists of a master

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agreement, a schedule, confirmations, definition booklets, and a credit support annex. The ISDA master agreement is published by the International Swaps and Derivatives Association (ISDA).

**Key Risk Scenarios (KRS)** Key Risk Scenarios are a summary of the extreme potential risk exposure for each Key Risk in each business and function, including an assessment of the potential frequency of risk events, the average size of losses and three extreme scenarios. The Key Risk Scenario assessments are a key input to the Advanced Measurement Approach calculation of regulatory and economic capital requirements.

**Large exposure** A large exposure is defined as the total exposure of a firm to a counterparty or group of connected clients, whether in the banking book or trading book or both, which in aggregate equals or exceeds 10% of the firm's eligible capital.

**Lender Option Borrower Option (LOBO)** A clause previously included in ESHLA loans that allowed Barclays, on specific dates, to raise the fixed interest rate on the loan, upon which the borrower had the option to either continue with the loan at the higher rate, or re-pay the loan at par.

**Lending** In the context of Investment Bank Analysis of Total Income, lending income includes net interest income, gains or losses on loan sale activity, and risk management activity relating to the loan portfolio.

**Letters of credit** A letter typically used for the purposes of international trade guaranteeing that a debtor's payment to a creditor will be made on time and in full. In the event that the debtor is unable to make payment, the bank will be required to cover the full or remaining amount of the purchase.

**Level 1 assets** High quality liquid assets under the Basel Committee's Liquidity Coverage Ratio (LCR), including cash, central bank reserves and higher quality government securities.

**Level 2 assets** Under the Basel Committee's Liquidity Coverage Ratio high quality liquid assets (HQLA) are comprised of Level 1 and Level 2 assets, with the latter comprised of Level 2A and Level 2B assets. Level 2A assets include, for example, lower quality government securities, covered bonds and corporate debt securities. Level 2B assets include, for example, lower rated corporate bonds, residential mortgage backed securities and equities that meet certain conditions.

**Leverage ratio** A measure of the Group's Tier 1 capital to total leverage exposure under CRD IV.

**Liquidity Coverage Ratio (LCR)** The ratio of the stock of high quality liquid assets to expected net cash outflows over the next 30 days. High-quality liquid assets should be unencumbered, liquid in markets during a time of stress and,

ideally, be central bank eligible. These include, for example, cash and claims on central governments and central banks.

**Liquidity Pool** The Group liquidity pool comprises cash at central banks and highly liquid collateral specifically held by the Group as a contingency to enable the bank to meet cash outflows in the event of stressed market conditions.

**Liquidity risk appetite (LRA)** The level of liquidity risk that the Group chooses to take in pursuit of its business objectives and in meeting its regulatory obligations.

**Liquidity Risk Management Framework (the Liquidity Framework)** The Liquidity Risk Management Framework (the Liquidity Framework), which is sanctioned by the Board Risk Committee (BRC) and which incorporates liquidity policies, systems and controls that the Group has implemented to manage liquidity risk within tolerances approved by the Board and regulatory agencies.

**Litigation and conduct charges** Litigation and conduct charges include regulatory fines, litigation settlements and conduct related customer redress.

**Loan loss rate** Is quoted in basis points and represents total loan impairment divided by gross loans and advances to customers and banks held at amortised cost at the balance sheet date.

**Loan to deposit ratio** Loans and advances divided by customer accounts calculated for Barclays UK; Barclays International and Non-Core, excluding investment banking businesses. This excludes particular liabilities issued by the retail businesses that have characteristics comparable to retail deposits (for example structured Certificates of Deposit and retail bonds), which are included within debt securities in issue.

**Loan to value (LTV) ratio** Expresses the amount borrowed against an asset (i.e. a mortgage) as a percentage of the appraised value of the asset. The ratios are used in determining the appropriate level of risk for the loan and are generally reported as an average for new mortgages or an entire portfolio. Also see Marked to market (MMT) LTV ratio.

**London Interbank Offered Rate (LIBOR)** A benchmark interest rate at which banks can borrow funds from other banks in the London interbank market.

**Long-term refinancing operation (LTRO)** The European Central Bank's 3 year long term bank refinancing operation.

**Loss Given Default (LGD)** The fraction of Exposure at Default (EAD) (defined above) that will not be recovered following default. LGD comprises the actual loss (the part that is not expected to be recovered), together with the economic costs associated with the recovery process.

**Macro Products** Represents Rates, currency and commodities income.

**Management DVaR** The Daily Value at Risk (DVaR) used for internal market risk management purposes. The Investment Bank uses a DVaR with a two-year equally weighted historical period, at a 95% confidence level, for all trading portfolios and certain banking books.

**Mandatory break clause** In the context of counterparty credit risk, a contract clause that means a trade will be ended on a particular date.

**Marked to market approach** A counterparty credit risk exposure calculation approach which uses the current mark to market value of derivative positions as well as a potential future exposure add-on to calculate an exposure to which a risk weight can be applied.





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**Marked to market (MTM) LTV ratio** The loan amount as a percentage of the current value of the asset used to secure the loan. Also see Balance weighted Loan to Value (LTV) ratio and Valuation weighted Loan to Value (LTV) ratio.

**Market risk** The risk of the Group suffering financial loss due to changes in market prices. In the context of Risk Weighted Assets, it is the component of Risk Weighted Assets that represents the risk of loss resulting from fluctuations in the market value of positions held in equities, commodities, currencies, derivatives and interest rates.

**Master netting agreements** An agreement that provides for a single net settlement of all financial instruments and collateral covered by the agreement in the event of the counterparty's default or bankruptcy or insolvency, resulting in a reduced exposure.

**Master trust securitisation programmes** A securitisation structure where a trust is set up for the purpose of acquiring a pool of receivables. The trust issues multiple series of securities backed by these receivables.

**Matchbook (or matched book)** An asset/liability management strategy where assets are matched against liabilities of equivalent value and maturity.

**Material Risk Takers (MRTs)** Categories of staff whose professional activities have or are deemed to have a material impact on Barclays' risk profile, as determined in accordance with the European Banking Authority regulatory technical standard on the identification of such staff.

**Methodology and policy** In the context of the Funding Risk, Capital Risk section, the effect on RWAs of methodology changes driven by regulatory policy changes.

**Minimum capital requirement** Under Pillar 1 of the Basel framework, the amount of capital required for an exposure.

**Model updates** In the context of the Funding Risk, Capital Risk section, changes in RWAs caused by model implementation, changes in model scope or any changes required to address model malfunctions.

**Model validation** Process through which models are independently challenged, tested and verified to prove that they have been built, implemented and used correctly, and that they continue to be fit-for-purpose.

**Modelled VaR** In the context of Risk Weighted Assets, Market risk calculated using value at risk models laid down by the CRR and supervised by the PRA.

**Money market funds** Investment funds typically invested in short-term debt securities.

**Monoline derivatives** Derivatives with a monoline insurer such as credit default swaps referencing the underlying exposures held.

**Moody's** A credit rating agency.

**Mortgage Current Accounts (MCA) Reserves** A secured overdraft facility available to home loan customers which allows them to borrow against the equity in their home. It allows draw-down up to an agreed available limit on a separate but connected account to the main mortgage loan facility. The balance drawn must be repaid on redemption of the mortgage.

**Multilateral development banks** Financial institutions created for the purposes of development, where membership transcends national boundaries.

**National discretion** Discretions in CRD IV given to member states to allow the local regulator additional powers in the application of certain CRD IV rules in its jurisdiction.

**Net asset value per share** Calculated by dividing shareholders' equity, excluding non-controlling interests and other equity instruments, by the number of issued ordinary shares.

**Net interest income** The difference between interest income on assets and interest expense on liabilities.

**Net interest margin** Net interest income divided by the sum of average customer assets.

**Net investment income** Changes in the fair value of financial instruments designated at fair value, dividend income and the net result on disposal of available for sale assets.

**Net Stable Funding Ratio (NSFR)** The ratio of available stable funding to required stable funding over a one year time horizon, assuming a stressed scenario. The ratio is required to be over 100%. Available stable funding would include such items as equity capital, preferred stock with a maturity of over 1 year, or liabilities with a maturity of over 1 year. The required amount of stable funding is calculated as the sum of the value of the assets held and funded by the institution, multiplied by a specific required stable funding (RSF) factor assigned to each particular asset type, added to the amount of potential liquidity exposure multiplied by its associated RSF factor.

**Net tangible asset value per share** Calculated by dividing shareholders' equity, excluding non-controlling interests and other equity instruments, less goodwill and intangible assets, by the number of issued ordinary shares.

**Net trading income** Gains and losses arising from trading positions which are held at fair value, in respect of both market-making and customer business, together with interest, dividends and funding costs relating to trading activities.

**Net written credit protection** In the context of leverage exposure, the net notional value of credit derivatives protection sold and credit derivatives protection bought.

**New bookings** The total of the original balance on accounts opened in the reporting period, including any applicable fees and charges included in the loan amount.

**Non-asset backed debt instruments** Debt instruments not backed by collateral, including government bonds; US agency bonds;



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corporate bonds; commercial paper; certificates of deposit; convertible bonds; corporate bonds and issued notes.

**Non-customer net interest income(NII) Non-customer interest income** Principally comprises the impact of product and equity structural hedges, as well as certain other net interest income received on government bonds and other debt securities held for the purposes of interest rate hedging and liquidity for local banking activities.

**Non-model method (NMM)** In the context of Risk Weighted Assets, Counterparty credit risk, Risk Weighted Assets where the exposure amount has been derived through the use of CRR norms, as opposed to an internal model.

**Non-performance costs** Costs other than performance costs.

**Non-performing proportion of outstanding balances** Defined as balances greater than 90 days delinquent (including forbearance accounts greater than 90 days and accounts charged off to recoveries), expressed as a percentage of outstanding balances.

**Non-performing balances impairment coverage ratio** Impairment allowance held against non performing balances expressed as a percentage of non performing balances.

**Non-Traded Market Risk** The risk of a reduction to earnings or capital due to an inability to hedge the banking book balance sheet.

**Non-Traded VaR** Reflects the volatility in the value of the available for sale investments in the liquidity pool which flow directly through capital via the available for sale reserve. The underlying methodology to calculate non traded VaR is similar to Traded Management VaR, but the two measures are not directly comparable. The Non Traded VaR represents the volatility to capital driven by the available for sale exposures. These exposures are in the banking book and do not meet the criteria for trading book treatment.

**Notable items** Notable items are considered to be significant items impacting comparability of performance and are shown for each of the business segments.

**Notch** A single unit of measurement in a credit rating scale.

**Notional amount** The nominal or face amount of a financial instrument, such as a loan or a derivative, that is used to calculate payments made on that instrument.

**Operational risk** The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, including legal risk. In the context of Risk Weighted Assets, it is the component of Risk Weighted Assets that represents the risk of loss resulting from these risks.

**Operational RiskData eXchange (ORX)** The Operational Riskdata eXchange Association (ORX) is a not-for-profit industry association dedicated to advancing the measurement and management of operational risk in the global financial services industry. Barclays is a member of ORX. **Origination led** Focus on high margin low capital fee based activities and related hedging opportunities.

**Origination exposure model** A technique used to measure the counterparty credit risk of losing anticipated cash flows from

forwards, swaps, options and other derivatives contracts in the event the counterparty to the contract should default.

**OSII** Other systemically important institutions are institutions that are deemed to create risk to financial stability due to their systemic importance.

**Over-the-counter (OTC) derivatives** Derivative contracts that are traded (and privately negotiated) directly between two parties. They offer flexibility because, unlike standardised exchange-traded products, they can be tailored to fit specific needs.

**Own credit** The effect of changes in the Group's own credit standing on the fair value of financial liabilities.

**Owner occupied mortgage** A mortgage where the intention of the customer was to occupy the property at origination.

**Past due items** Refers to loans where the borrower has failed to make a payment when due under the terms of the loan contract.

**Payment Protection Insurance (PPI) redress** Provision for the settlement of PPI miss-selling claims and related claims management costs.

**Pension Risk** The risk of the Group's earnings and capital being adversely impacted by the Group's defined benefit obligations increasing or the value of the assets backing these defined benefit obligations decreasing due to changes in both the level and volatility of prices.

**Performance costs** The accounting charge recognised in the period for performance awards. For deferred incentives and long-term incentives, the accounting charge is spread over the relevant periods in which the employee delivers service.

**Period end allocated tangible equity** Allocated tangible equity is calculated as 11.5% of CRD IV fully loaded risk weighted assets for each business, adjusted for CRD IV fully loaded capital deductions, excluding goodwill and intangible assets, reflecting assumptions the Group uses for capital planning purposes. Head Office tangible equity represents the difference between the Group's tangible equity and the amounts allocated to businesses.

**Pillar 1** The part of the Basel framework that sets out the rules that govern the calculation of Minimum capital requirements for credit, market and operational risks.

**Pillar 2** The part of the Basel framework that covers the supervisory reviews of the bank's internal assessment of capital to ensure that firms have adequate capital to support all the relevant risks in their business.

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**Pillar 3** The part of the Basel framework that covers external communication of risk and capital information by banks to promote transparency and good risk management.

**Post-model adjustment (PMA)** In the context of Basel models, a PMA is a short term increase in regulatory capital applied at portfolio level to account for model input data deficiencies, inadequate model performance or changes to regulatory definitions

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(e.g. definition of default) to ensure the model output is accurate, complete and appropriate.

**Potential Credit Risk Loans (PCRLs)** Comprise the outstanding balances to Potential Problem Loans (defined below) and the three categories of Credit Risk Loans (defined above).

**Potential Future Exposure on Derivatives** A regulatory calculation in respect of the Group's potential future credit exposure on both exchange traded and OTC derivative contracts, calculated by assigning a standardised percentage (based on the underlying risk category and residual trade maturity) to the gross notional value of each contract.

**Potential Problem Loans (PPLs)** Loans where serious doubt exists as to the ability of the borrowers to continue to comply with repayment terms in the near future.

**PRA waivers** PRA approvals that specifically give permission to the Bank to either modify or waive existing rules. Waivers are specific to an organisation and require applications being submitted to and approved by the PRA.

**Primary securitisations** The issuance of securities (bonds and commercial papers) for fund-raising.

**Primary Stress Tests** In the context of Traded Market Risk, Stress Testing provides an estimate of potentially significant future losses that might arise from extreme market moves or scenarios. Primary Stress Tests apply stress moves to key liquid risk factors for each of the major trading asset classes.

**Prime Services** Involves financing of fixed income and equity positions using Repo and stock lending facilities. The Prime Services business also provides brokerage facilitation services for hedge fund clients offering execution and clearance facilities for a variety of asset classes.

**Principal** In the context of a loan, the amount borrowed, or the part of the amount borrowed which remains unpaid (excluding interest).

**Principal Investments** Private equity investments.

**Principal Risks** the principal risks affecting the Group described in the risk review section of the Barclays PLC Annual Report.

**Private equity investments** Investments in equity securities in operating companies not quoted on a public exchange. Investment in private equity often involves the investment of capital in private companies or the acquisition of a public company that results in the delisting of public equity. Capital for private equity investment is raised by retail or

institutional investors and used to fund investment strategies such as leveraged buyouts, venture capital, growth capital, distressed investments and mezzanine capital.

**Private-label securitisation** Residential mortgage backed security transactions sold or guaranteed by entities that are not sponsored or owned by the government.

**Probability of Default (PD)** The likelihood that a loan will not be repaid and will fall into default. PD may be calculated for each client who has a loan (normally applicable to wholesale customers/clients)

or for a portfolio of clients with similar attributes (normally applicable to retail customers). To calculate PD, Barclays assesses the credit quality of borrowers and other counterparties and assigns them an internal risk rating. Multiple rating methodologies may be used to inform the rating decision on individual large credits, such as internal and external models, rating agency ratings, and for wholesale assets market information such as credit spreads. For smaller credits, a single source may suffice such as the result from an internal rating model.

**Product structural hedge** An interest rate hedge that converts short term interest margin volatility on product balances (such as non-interest bearing current accounts and managed rate deposits) into a more stable medium term rate and which is built on a monthly basis to achieve a targeted maturity profile.

**Properties in Possession held as Loans and Advances to Customers** Properties in the UK and Italy where the customer continues to retain legal title but where the bank 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.

**Properties in Possession held as Other Real Estate Owned** Properties in South Africa, where the bank has taken legal ownership of the title as a result of purchase at an auction or similar and treated as Other Real Estate Owned within other assets on the bank's balance sheet.

**Proprietary trading** When a bank, brokerage or other financial institution trades on its own account, at its own risk, rather than on behalf of customers, so as to make a profit for itself.

**Prudential Regulation Authority (PRA)** The statutory body responsible for the prudential supervision of banks, building societies, insurers and a small number of significant investment firms in the UK. The PRA is a subsidiary of the Bank of England.

**Prudential valuation adjustment (PVA)** A calculation which adjusts the accounting values of positions held on balance sheet at fair value to comply with regulatory valuation standards, which place greater emphasis on the inherent uncertainty around the value at which a trading book position could be exited.

**Public benchmark** Unsecured medium term notes issued in public syndicated transactions.

**Qualifying Revolving Retail Exposure (QRRE)** In the context of the IRB approach to credit risk RWA calculations, an exposure meeting the criteria set out in BIPRU 4.6.42 R (2). It includes most types of credit card exposure.

**Rates** In the context of Investment Bank income analysis, trading revenue relating to government bonds and linear interest rate derivatives.

**Re-aging** The returning of a delinquent account to up-to-date status without collecting the full arrears (principal, interest and fees).





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**Real Estate Mortgage Investment Conduits (REMICs)** An entity that holds a fixed pool of mortgages and that is separated into multiple classes of interests for issuance to investors.

**Recoveries Impairment Coverage Ratio** Impairment allowance held against recoveries balances expressed as a percentage of balance in recoveries.

**Recoveries proportion of outstanding balances** Represents the amount of recoveries (gross month-end customer balances of all accounts that have charged-off) as at the period end compared to total outstanding balances. The size of the recoveries book would ultimately have an impact on the overall impairment requirement on the portfolio. Balances in recoveries will decrease if: assets are written-off; amounts are collected; or assets are sold to a third party (i.e. debt sale).

**Redenomination risk** The risk of financial loss to the Group should one or more countries exit from the Euro, potentially leading to the devaluation of local balance sheet assets and liabilities.

**Regulatory capital** The amount of capital that a bank holds to satisfy regulatory requirements.

**Renegotiated loans** Loans are generally renegotiated either as part of an ongoing customer relationship or in response to an adverse change in the circumstances of the borrower. In the latter case renegotiation can result in an extension of the due date of payment or repayment plans under which the Group offers a concessionary rate of interest to genuinely distressed borrowers. This will result in the asset continuing to be overdue and will be individually impaired where the renegotiated payments of interest and principal will not recover the original carrying amount of the asset. In other cases, renegotiation will lead to a new agreement, which is treated as a new loan.

**Repricing lag risk** The risk that when underlying interest rates change it can take a number of months to change the customer rate e.g. should rates decrease then we would need to let our variable savings rate customers know that we would be decreasing their savings rates. This could result in a loss of income as it may take several months, whereas the funding/investment benefit reduces immediately.

**Repurchase agreement (Repo) / Reverse repurchase agreement (Reverse repo)** Arrangements that allow counterparties to use financial securities as collateral for an interest bearing cash loan. The borrower agrees to sell a security to the lender subject to a commitment to repurchase the asset at a specified price on a given date. For the party selling the security (and agreeing to repurchase it in the future) it is a Repurchase agreement or Repo; for the counterparty to the transaction (buying the security and agreeing to sell in the future) it is a Reverse repurchase agreement or Reverse repo.

**Re-securitisations** The repackaging of Securitised Products into securities. The resulting securities are therefore securitisation positions where the underlying assets are also predominantly securitisation positions.

**Reserve Capital Instruments (RCIs)** Hybrid issued capital securities which may be debt or equity accounted, depending on the terms.

**Residential Mortgage-Backed Securities (RMBS)** Securities that represent interests in a group of residential mortgages. Investors in these securities have the right to cash received from future mortgage payments (interest and/or principal).

**Residual maturity** The remaining contractual term of a credit obligation associated with a credit exposure.

**Restructured loans** Comprises loans where, for economic or legal reasons related to the debtor's financial difficulties, a concession has been granted to the debtor that would not otherwise be considered. Where the concession results in the expected cash flows discounted at the original effective interest rate being less than the loan's carrying value, an impairment allowance will be raised.

**Retail Loans** Loans to individuals or small and medium sized enterprises rather than to financial institutions and larger businesses. It includes both secured and unsecured loans such as mortgages and credit card balances, as well as loans to certain smaller business customers, typically with exposures up to £3m or with a turnover up to £5m.

**Return on average Risk Weighted Assets** Statutory profit as a proportion of average Risk Weighted Assets.

**Return on average shareholders' equity** Statutory profit after tax attributable to ordinary shareholders, including an adjustment for the tax credit in reserves in respect of other equity instruments, as a proportion of average shareholders' equity, excluding non-controlling interests and other equity instruments.

**Return on average tangible shareholders' equity** Statutory profit after tax attributable to ordinary shareholders, including an adjustment for the tax credit in reserves in respect of other equity instruments, as a proportion of average shareholders' equity excluding non-controlling interests and other equity instruments adjusted for the deduction of intangible assets and goodwill.

**Return on average allocated tangible shareholders' equity** Statutory profit after tax attributable to ordinary shareholders, including an adjustment for the tax credit in reserves in respect of other equity instruments, as a proportion of average allocated tangible shareholders' equity.

**Risk Appetite** The level of risk that Barclays is prepared to accept whilst pursuing its business strategy, recognising a range of possible outcomes as business plans are implemented.

**Risk weighted assets (RWAs)** A measure of a bank's assets adjusted for their associated risks. Risk weightings are established in accordance with the Basel rules as implemented by CRD IV and local regulators.

**Risks not in VaR (RNIVS)** Refers to all the key risks which are not captured or not well captured within the VaR model framework.

**Roll rate analysis** The measurement of the rate at which retail accounts deteriorate through delinquency phases.

**Sales commissions, commitments and other incentives** Includes commission-based arrangements, guaranteed incentives and Long Term Incentive Plan awards.



## Glossary

**Sarbanes-Oxley requirements** The Sarbanes-Oxley Act 2002 (SOX), which was introduced by the U.S. Government to safeguard against corporate governance scandals such as Enron, WorldCom and Tyco. All US-listed companies must comply with SOX.

**Second Lien** Debt that is issued against the same collateral as higher lien debt but that is subordinate to it. In the case of default, compensation for this debt will only be received after the first lien has been repaid and thus represents a riskier investment than the first lien.

**Secondary Stress Tests** Secondary stress tests are used in measuring potential losses arising from illiquid market risks that cannot be hedged or reduced within the time period covered in Primary Stress Tests.

**Securities and loans** In the context of Non-Core Analysis of Total income, Barclays Non-Core Securities and Loans comprise non strategic businesses, predominantly from the non-core Investment Bank and Corporate Bank.

**Securities Financing Transactions (SFT)** In the context of Risk Weighted Assets (RWAs), any of the following transactions: a repurchase transaction, a securities or commodities lending or borrowing transaction, or a margin lending transaction whereby cash collateral is received or paid in respect of the transfer of a related asset.

**Securities financing transactions adjustments** In the context of leverage ratio, a regulatory add-on calculated as exposure less collateral, taking into account master netting agreements.

**Securities lending arrangements** Arrangements whereby securities are legally transferred to a third party subject to an agreement to return them at a future date. The counterparty generally provides collateral against non performance in the form of cash or other assets.

**Securitisation** Typically, a process by which debt instruments such as mortgage loans or credit card balances are aggregated into a pool, which is used to back new securities. A company sells assets to a special purpose vehicle (SPV) which then issues securities backed by the assets. This allows the credit quality of the assets to be separated from the credit rating of the original borrower and transfers risk to external investors.

**Securitised Products** A business within the Investment Bank that offers a range of products relating to residential mortgage backed securities, commercial mortgage backed securities and other asset backed securities, in addition to restructuring and unwinding legacy credit structures.

**Set-off clauses** In the context of Counterparty credit risk, contract clauses that allow Barclays to set off amounts owed to us by a counterparty against amounts owed by us to the counterparty.

**Settlement balances** Are receivables or payables recorded between the date (the trade date) a financial instrument (such as a bond) is sold, purchased or otherwise closed out, and the date the asset is delivered by or to the entity (the settlement date) and cash is received or paid.

**Settlement risk** The risk that settlement in a transfer system will not take place as expected, usually owing to a party defaulting on one or more settlement obligations.

**Slotting** Slotting is a Basel 2 approach that requires a standard set of rules to be used in 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 BIPRU 4.5.

**South Africa** In the context of Africa Banking, the operations of Africa Banking based in South Africa.

**Sovereign exposure(s)** Exposures to central governments, including holdings in government bonds and local government bonds.

**Specific market risk** A risk that is due to the individual nature of an asset and can potentially be diversified or the risk of a price change in an investment due to factors related to the issuer or, in the case of a derivative, the issuer of the underlying investment.

**Spread risk** Measures the impact of changes to the swap spread, i.e. the difference between swap rates and government bond yields.

**Standard & Poor's** A credit rating agency.

**Standby facilities, credit lines and other commitments** Agreements to lend to a customer in the future, subject to certain conditions. Such commitments are either made for a fixed period, or have no specific maturity but are cancellable by the lender subject to notice requirements.

**Statutory** Line items of income, expense, profit or loss, assets, liabilities or equity stated in accordance with the requirements of the UK Companies Act 2006 and the requirements of International Financial Reporting Standards (IFRS).

**Statutory return on average shareholders' equity** Statutory profit after tax attributable to ordinary shareholders as a proportion of average shareholders' equity.

**STD / Standardised Approach** A method of calculating Risk Weighted Assets that relies on a mandatory framework set by the regulator to derive risk weights based on counterparty type and a credit rating provided by an External Credit Assessment Institute.

**Stress Testing** A process which involves identifying possible future adverse events or changes in economic conditions that could have unfavourable effects on the Group (either financial or non-financial), assessing the Group's ability to withstand such changes, and identifying management actions to mitigate the impact.

**Stressed Value at Risk (SVaR)** An estimate of the potential loss arising from a 12 month period of significant financial stress over a one day horizon.

**Structured entity** An entity in which voting or similar rights are not the dominant factor in deciding control. Structured entities are generally created to achieve a narrow and well defined objective with restrictions around their ongoing activities.

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## Glossary

**Structural hedge / hedging** An interest rate hedge which functions to reduce the impact of the volatility of short-term interest rate movements on positions that exist within the balance sheet that carry interest rates that do not re-price with market rates. See also [Equity structural hedge](#) and [Product structural hedge](#) .

**Structural model of default** A model based on the assumption that an obligor will default when its assets are insufficient to cover its liabilities.

**Structured credit** Includes legacy structured credit portfolio primarily comprising derivative exposure and financing exposure to structured credit vehicles.

**Subordinated liabilities** Liabilities which, in the event of insolvency or liquidation of the issuer, are subordinated to the claims of depositors and other creditors of the issuer.

**Supranational bonds** Bonds issued by an international organisation, where membership transcends national boundaries (e.g. the European Union or World Trade Organisation).

**Synthetic Securitisation Transactions** Securitisation transactions effected through the use of derivatives.

**Systemic Risk Buffer** CET1 capital that may be required to be held as part of the Combined Buffer Requirement increasing the capacity of UK banks to absorb stress and limiting the damage to the economy as a result of restricted lending.

**Tangible net asset value** Shareholders' equity excluding controlling interests adjusted for the deduction of intangible assets and goodwill.

**Tangible net asset value per share** Shareholders' equity excluding controlling interests adjusted for the deduction of intangible assets and goodwill, divided by the number of issued ordinary shares.

**Tangible shareholders equity** Shareholders' equity excluding controlling interests adjusted for the deduction of intangible assets and goodwill.

**Term premium** Additional interest required by investors to hold assets with a longer period to maturity.

**The three lines of defence** The three lines of defence operating model enables Barclays to separate risk management activities between those parties that: own and take risk, and implement controls (first line); oversee and challenge the first line, provide second line risk management activity and support controls (second line); and, provide assurance that



the Evaluate, Respond and Monitor ( E-R-M ) process is-for-purpose, and that it is being carried out as intended (third line).

**Tier 1 capital** The sum of the Common Equity Tier 1 capital and Additional Tier 1 capital.

**Tier 1 capital ratio** The ratio which expresses Tier 1 capital as a percentage of Risk Weighted Assets under CRD IV.

**Tier 2 (T2) capital** In the context of CRD IV, a type of capital as defined in the Capital Requirements Regulation.

**Tier 2 (T2) securities** Securities that are treated as Tier 2 (T2) capital in the context of CRD IV.

**Total capital ratio** Total Regulatory capital as a percentage of Risk Weighted Assets.

**Total outstanding balance** In retail banking, total outstanding balance is defined as the gross month-end customer balances on all accounts including accounts charged off to recoveries.

**Total return swap** An instrument whereby the seller of protection receives the full return of the asset, including both the income and change in the capital value of the asset. The buyer of the protection in return receives a predetermined amount.

**Total balances on forbearance programmes coverage ratio** Impairment allowance held against Forbearance balances expressed as a percentage of balance in forbearance.

**Traded Market Risk** The risk of a reduction to earnings or capital due to volatility of trading book positions.

**Trading book** All positions in financial instruments and commodities held by an institution either with trading intent, or in order to hedge positions held with trading intent.

**Traditional Securitisation Transactions** Securitisation transactions in which an underlying pool of assets generates cash flows to service payments to investors.

**Transitional** In the context of CRD IV a measure is described as transitional when the transitional provisions set out in Part Ten of the CRD IV Regulation are applied in its calculation.

**Unencumbered** Assets not used to secure liabilities or otherwise pledged.

**United Kingdom (UK)** Geographic segment where Barclays operates comprising the UK. Also see [Europe](#) .

**UK Bank levy** A levy that applies to UK banks, building societies and the UK operations of foreign banks. The levy is payable based on a percentage of the chargeable equity and liabilities of the bank on its balance sheet date.

**UK leverage ratio** as per the updated PRA rulebook, is calculated as the average capital measure divided by the average exposure measure for the quarter, where the average is based on the capital and exposure measure on the last day of each month in the quarter. The average exposure calculation also includes the FPC's recommendation to allow firms to exclude claims on the central bank from the calculation of the leverage exposure measure, as long as these are matched by deposits denominated in the same currency and of identical or longer maturity.

**US Partner Portfolio** Co-branded credit card programs with companies across various sectors including travel, entertainment, retail and financial sectors.

**US Residential Mortgages** Securities that represent interests in a group of US residential mortgages.



## Glossary

**Utilisation rate** Utilisation of MCA balances expressed as a percentage of total MCA reserve limits.

**Valuation weighted Loan to Value (LTV) Ratio** In the context of credit risk disclosures on secured home loans, a means of calculating marked to market LTVs derived by comparing total outstanding balance and the value of total collateral we hold against these balances. Valuation weighted loan to value is calculated using the following formula:  $LTV = \text{total outstandings in portfolio} / \text{total property values of total outstandings in portfolio}$ .

**Value at Risk (VaR)** See DVaR .

**Weighted off balance sheet commitments** Regulatory add-ons to the leverage exposure measure based on credit conversion factors used in the Standardised Approach to credit risk.

**Wholesale loans / lending** Lending to larger businesses, financial institutions and sovereign entities.

**Write-off** Refers to the point where it is determined that an asset is irrecoverable, or it is no longer considered economically viable to try to recover the asset or it is deemed immaterial or full and final settlement is reached and the shortfall written off. 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.

**Wrong-way risk** Arises, in a trading exposure, when there is significant correlation between the underlying asset and the counterparty, which in the event of default would lead to a significant mark to market loss. When assessing the credit exposure of a wrong-way trade, analysts take into account the correlation between the counterparty and the underlying asset as part of the sanctioning process.

Shareholder information

[Resources for shareholders including  
contact details for shareholder enquiries](#)

**Shareholder information**

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[Your Barclays shareholding](#)

## Key dates

### **5 April 2017**

Final dividend payment date

### **28 April 2017**

Q1 Results Announcement

### **10 May 2017**

Annual General Meeting

### **18 September 2017**

Interim dividend payment date<sup>1</sup>

## Annual General Meeting (AGM)

This year's AGM will be held at the Royal Festival Hall, Southbank Centre, Belvedere Road, London SE1 8XX on Wednesday, 10 May 2017 at 11.00am.

The Chairman and Chief Executive will update shareholders on our performance in 2016 and our goals for 2017. Shareholders will also have the opportunity to ask the Board questions at the meeting.

You can find out more at

[home.barclays/agm](http://home.barclays/agm)

**Dividends**

The last dividend for the year ended 31 December 2016 will be 2.09 pence per share, making the 2016 total dividend 3.09 pence, in line with our intention to reduce the dividend in 2016 and 2017 to help us to continue the rundown of Non-Core. The Board recognise the importance of paying a meaningful dividend and are committed to doing so in the future.

### How do Barclays shareholders receive their dividends?

As at 31 December 2016, Barclays shareholders received their dividends in the following ways:

<b>Direct to bank account</b>	<b>53.5%</b>
Cheque	25.1%
Scrip dividend programme (new shares)	21.4%

### Save time and receive your dividends faster by choosing to have them paid directly into your bank or building society account

It is easy to set up and your money will be in your bank account on the dividend payment date. If you hold 2,500 shares or less, you can provide your bank or building society details quickly and easily over the telephone using the Equiniti contact details overleaf. If you hold more than 2,500 shares, please contact Equiniti for details of how to change your payment instruction.

### Scrip Dividend Programme

Shareholders can choose to have their dividends reinvested in new ordinary Barclays shares through the Scrip Dividend Programme. More information, including the Terms and Conditions and application form, are available on our website.

To find out more, contact Equiniti or visit

**[home.barclays/dividends](http://home.barclays/dividends)**

### Keep your personal details up to date

Please remember to tell Equiniti if:

§ you move

§ you need to update your bank or building society details.

If you are a Shareview member, you can update your bank or building society account or address details online. If you hold 2,500 shares or less, you can update details quickly and easily over the telephone using the Equiniti contact details overleaf. If you hold more than 2,500 shares you will need to write to Equiniti. You must provide a copy of

your share certificate, Sharestore statement or most recent dividend confirmation. If these are not available, you will need to provide a copy of a utility bill or bank statement dated in the last three months.

### **Donations to charity**

We launched a Share Dealing Service in November 2016 aimed at shareholders with relatively small shareholdings for whom it might otherwise be uneconomical to deal. One option open to shareholders was to donate their sale proceeds to ShareGift. As a result of this initiative, more than £100,000 was donated.

### **Returning funds to shareholders**

Over 60,000 shareholders did not cash their Shares Not Taken Up (SNTU) cheque following the Rights Issue in September 2013. In 2016, we continued the tracing process to reunite these shareholders with their SNTU monies and any unclaimed dividends. By the end of the year, we had returned over £1.65m to our shareholders.

Note

<sup>1</sup> Please note that this date is provisional and subject to change.

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## Useful contact details

### Equiniti

The Barclays share register is maintained by Equiniti. If you have any questions about your Barclays shares, please contact Equiniti by visiting [shareview.co.uk](http://shareview.co.uk)

#### Equiniti

0371 384 2055<sup>2</sup> (in the UK)

+44 121 415 7004 (from overseas)

0371 384 2255<sup>2</sup> (for the hearing impaired in the UK)

+44 121 415 7028 (for the hearing impaired from overseas)

Aspect House  
Spencer Road  
Lancing  
West Sussex  
BN99 6DA

### American Depositary Receipts (ADRs)

ADRs represent the ownership of Barclays PLC shares which are traded on the New York Stock Exchange. ADRs carry prices, and pay dividends, in US dollars.

If you have any questions about ADRs, please contact J.P. Morgan: [jpmorgan.adr@wellsfargo.com](mailto:jpmorgan.adr@wellsfargo.com) or visit [adr.com](http://adr.com)

#### J.P. Morgan Shareholder Services

+1 800 990 1135 (toll free in US and Canada)

+1 651 453 2128 (outside the US and Canada)

JPMorgan Chase Bank N.A.  
PO Box 64504



St Paul  
MN 55164-0854  
USA

## Shareholder Relations

To give us your feedback or if you have any questions,

please contact: [privateshareholderrelations@barclays.com](mailto:privateshareholderrelations@barclays.com)

### Shareholder Relations

Barclays PLC  
1 Churchill Place  
London  
E14 5HP

## Share price

Information on the Barclays share price and other share price tools are available at:  
[home.barclays/investorrelations](http://home.barclays/investorrelations)

### Alternative formats

Shareholder documents can be provided in large print, audio CD or braille free of charge by calling Equiniti.

0371 384 2055<sup>2</sup> (in the UK)

+44 121 415 7004 (from overseas)

Audio versions of the Strategic Report will also be available at the AGM

### [Managing your shares online](#)

#### Shareview

Barclays shareholders can go online to manage their shareholding and find out about Barclays performance by joining Shareview.

Through Shareview, you:

§ will receive the latest updates from Barclays direct to your email.

§ can update your address and bank details online.

§ can vote in advance of general meetings.

To join Shareview, please follow these three easy steps:

- |        |  |
|--------|--|
| Step 1 | Go to <a href="https://shareview.co.uk">shareview.co.uk</a>                    |
| Step 2 | Register for electronic communications by following the instructions on screen |
| Step 3 | You will be sent an activation code in the post the next working day           |

### Shareholder security

Shareholders should be wary of any cold calls with an offer to buy or sell shares. Fraudsters use persuasive and high-pressure techniques to lure shareholders into high-risk investments or scams. You should treat any unsolicited calls with caution.

Please keep in mind that firms authorised by the Financial Conduct Authority (FCA) are unlikely to contact you out of the blue. You should consider getting independent financial or professional advice from someone unconnected to the respective firm before you hand over any money.

**Report a scam.** If you suspect that you have been approached by fraudsters please tell the FCA using the share fraud reporting form at [fca.org.uk/scams](https://fca.org.uk/scams). You can also call the FCA Helpline on 0800 111 6768 or through Action Fraud on 0300 123 2040.

Note

<sup>2</sup> Lines open 8.30am to 5.30pm Monday to Friday, excluding public holidays.

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**Signatures**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorised the undersigned to sign this annual report on its behalf.

Date February 23<sup>rd</sup>, 2017

**Barclays PLC**

(Registrant)

By  
/s/ Tushar Morzaria

**Tushar Morzaria, Group Finance Director**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorised the undersigned to sign this annual report on its behalf.

Date February 23<sup>rd</sup>, 2017

**Barclays Bank PLC**

(Registrant)

By  
/s/ Tushar Morzaria

**Tushar Morzaria, Group Finance Director**

**EXHIBIT INDEX**

<b><u>Exhibit</u></b>	<b><u>Description</u></b>
1.1	Articles of Association of Barclays PLC (incorporated by reference to the Form 6-K filed on May 2 <sup>nd</sup> , 2013)
1.2	Articles of Association of Barclays Bank PLC (incorporated by reference to the Form 6-K filed on May 13 <sup>th</sup> , 2010)
2.1	Long Term Debt Instruments: Neither Barclays PLC nor Barclays Bank PLC is party to any single instrument relating to long-term debt pursuant to which a total amount of securities exceeding 10% of either Barclays PLC's or Barclays Bank PLC's total assets (on a consolidated basis) is authorized to be issued. Each of Barclays PLC and Barclays Bank PLC hereby agrees to furnish to the Securities and Exchange Commission (the Commission), upon its request, a copy of any instrument defining the rights of holders of its long-term debt or the rights of holders of the long-term debt of any of its subsidiaries for which consolidated or unconsolidated financial statements are required to be filed with the Commission.
4.0	Rules of the Barclays Group Performance Share Plan (2005) (incorporated by reference to the 2006 Form 20-F filed on March 26 <sup>th</sup> , 2007)
4.1	Rules of the Barclays PLC Renewed 1986 Executive Share Option Scheme (incorporated by reference to the Barclays PLC Registration Statement on Form S-8 (File no. 333-153723) filed on September 29 <sup>th</sup> , 2008)
4.2	Rules of the Barclays PLC Approved Incentive Share Option Plan (incorporated by reference to the Barclays PLC Registration Statement on Form S-8 (File no. 333-153723) filed on September 29 <sup>th</sup> , 2008)
4.3	Rules of the Barclays PLC Unapproved Incentive Share Option Plans (incorporated by reference to the Barclays PLC Registration Statement on Form S-8 (File no. 333-153723) filed on September 29 <sup>th</sup> , 2008)
4.4	Rules of the Barclays PLC Executive Share Award Scheme - Incorporated by reference to the Barclays PLC Registration Statement on Form S-8 (File no. 333-173899) filed on May 3 <sup>rd</sup> , 2011)
4.5	Rules of the Barclays Group Special Award Performance Share Plan (incorporated by reference to the Barclays PLC Registration Statement on Form S-8 (File no. 333-153723) filed on September 29 <sup>th</sup> , 2008)
4.6	Rules of the Barclays Group Incentive Share Plan (incorporated by reference to the Barclays PLC Registration Statement on Form S-8 (File no. 333-153723) filed on September 29 <sup>th</sup> , 2008)
4.7	Rules of Barclays Bank PLC 1999 Directors Deferred Compensation Plan (amended and restated, effective January 1 <sup>st</sup> , 2008) (incorporated by reference to Barclays Bank PLC's Registration Statement on Form S-8 (File no. 333-149301) filed on February 19 <sup>th</sup> , 2008)
4.8	Rules of Barclays Bank PLC Senior Management Deferred Compensation Plan (amended and restated, effective January 1 <sup>st</sup> , 2008) (incorporated by reference to Barclays Bank PLC's Registration Statement on Form S-8 (File no. 333-149302) filed on February 19 <sup>th</sup> , 2008)

4.9 Rules of the Barclays Group Share Value Plan (incorporated by reference to the 2013 Form 20-F filed on

March 14<sup>th</sup>, 2014)

- 4.10 Rules of the Barclays PLC Long Term Incentive Plan (Incorporated by reference to the Barclays PLC Registration Statement on Form S-8 (File no. 333-173899) filed on May 3<sup>rd</sup>, 2011)
- 4.11 Rules of the Barclays Group Deferred Share Value Plan
- 4.12 Contract of Employment Tushar Morzaria (Incorporated by reference to the 2014 Form 20-F filed on March 14<sup>th</sup>, 2014)
- 4.13 Appointment Letter Reuben Jeffery III (incorporated by reference to the 2009 Form 20-F filed on March 1<sup>st</sup>, 2010)
- 4.14 Appointment Letter Dambisa Moyo (incorporated by reference to the 2010 Form 20-F filed on March 2<sup>nd</sup>, 2011)
- 4.15 Appointment Letter Tim Breedon (incorporated by reference to the 2012 Form 20-F filed on March 1<sup>st</sup>, 2013)
- 4.16 Appointment Letter Diane de Saint Victor (incorporated by reference to the 2012 Form 20-F filed on March 13<sup>th</sup>, 2013)
- 4.17 Appointment Letter Michael Ashley (Incorporated by reference to the 2013 Form 20-F filed on March 1<sup>st</sup>, 2014)
- 4.18 Appointment Letter Stephen Thieke (Incorporated by reference to the 2013 Form 20-F filed on March 1<sup>st</sup>, 2014)
- 4.19 Appointment Letter - Crawford Gillies (Incorporated by reference to the 2014 Form 20-F filed on March 3<sup>rd</sup>, 2015)
- 4.20 Appointment Letter - John McFarlane (Incorporated by reference to the 2014 Form 20-F filed on March 3<sup>rd</sup>, 2015)
- 4.21 Appointment Letter Sir Gerry Grimstone (incorporated by reference to the 2015 Form 20-F filed on March 1<sup>st</sup>, 2016)
- 4.22 Appointment Letter Diane Schueneman (incorporated by reference to the 2015 Form 20-F filed on March 1<sup>st</sup>, 2016)
- 4.23 Contract of employment James E Staley (incorporated by reference to the 2015 Form 20-F filed on March 1<sup>st</sup>, 2016)
- 4.24 Transfer of Employment James E Staley
- 4.25 Transfer of Employment Tushar Morzaria
- 4.26 Appointment Letter Mary Francis

- 7.1 Ratios of earnings to fixed charges. The calculations can be found in the Barclays Bank PLC financial data on page 448 of the Form 20-F.
- 7.2 Ratios of earnings to combined fixed charges, preference share dividends and similar appropriations. The calculations can be found in the Barclays Bank PLC financial data on page 448 of the Form 20-F.
- 7.3 Ratios of earnings to fixed charges. The calculations can be found in the Barclays PLC financial data on page 426 of the Form 20-F.
- 7.4 Ratios of earnings to combined fixed charges, preference share dividends and similar appropriations. The calculations can be found in the Barclays PLC financial data on page 426 of the Form 20-F.
- 8.1 List of subsidiaries The list of subsidiaries of Barclays PLC can be found in Note 46 of the Barclays PLC financial statements on pages 308 to 316 of the Form 20-F.
- 11.1 Code of Ethics
- 12.1 Certifications filed pursuant to 17 CFR 240. 13(a)-14(a)
- 13.1 Certifications filed pursuant to 17 CFR 240. 13(a) and 18 U.S.C 1350(a) and 1350(b)
- 15.1 Consent of PricewaterhouseCoopers LLP for incorporation by reference of reports in certain securities registration statements of Barclays PLC and Barclays Bank PLC.
- 99.2 A table setting forth the issued share capital of Barclays PLC and the Barclays PLC Group's total shareholders equity, indebtedness and contingent liabilities as at 31 December 2016
- 99.3 A table setting forth the issued share capital of Barclays Bank PLC and the Barclays Bank PLC Group's total shareholders equity, indebtedness and contingent liabilities as at 31 December 2016