



## Appendix 1

# Capital and risk management

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Certain disclosures in this appendix are within the scope of EY's review report and are marked accordingly.

## Appendix 1 Capital and risk management

### Capital, liquidity and funding risk

#### Key developments

- The CET1 ratio decreased by 20 basis points to 16.0% as a result of the £2.0 billion attributable profit, offset by a foreseeable 5p ordinary dividend accrual of £0.6 billion, 12p special dividend of £1.4 billion and the impact of IFRS 16.
- RWAs decreased by £0.2 billion in H1 2019. Credit risk decreased by £0.8 billion driven by the completion of the merger of Alawwal bank and SABB reducing credit risk by £4.6 billion, offset by increases in credit risk driven by the £1.3 billion uplift due to adoption of IFRS 16 from 1 January 2019, an increase due to PD calibrations affecting asset quality and growth in asset size. Counterparty credit risk increased primarily due to increased exposures.
- The leverage ratio decreased to 5.2% driven by decreased capital.
- The total loss absorbing capital ratio of 32.1% is above the BOE requirement of 24.0% by 1 January 2020.
- In the first half of 2019, RBSG issued £3.0 billion new MREL eligible senior debt and redeemed a €1.0 billion Tier 2 security, with £0.5 billion of non-MREL RBSG senior debt also being repaid on maturity during the period. In subsidiaries, NWB issued a £750 million covered bond and NatWest Markets Plc maintained active issuance programmes for senior unsecured and secured notes, with net issuance of around £3 billion in the period.
- RBSG participation in the Bank of England's Term Funding Scheme reduced by £4 billion.
- The liquidity coverage ratio decreased from 158% to 154% driven by reductions in NWM Plc's liquidity position due to seasonally low outflows at 31 December 2018.
- The net stable funding ratio was relatively consistent at 140% compared to 141% for FY 2018.

#### Minimum capital requirements

The Group is subject to minimum capital requirements relative to RWAs. The table below summarises the minimum ratios of capital to RWAs that the Group is expected to have to meet under the end-point CRR requirements applicable from 1 January 2019. These ratios apply at the consolidated group level. Different minimum capital requirements may apply to individual legal entities or sub-groups.

Minimum requirements	Type	CET1	Total Tier 1	Total capital
System wide	Pillar 1 minimum requirements	4.5%	6.0%	8.0%
	Capital conservation buffer	2.5%	2.5%	2.5%
	Countercyclical capital buffer (1)	0.7%	0.7%	0.7%
	G-SIB buffer (2)	1.0%	1.0%	1.0%
Bank specific	Pillar 2A (4)	2.0%	2.7%	3.6%
Total (excluding PRA buffer) (5)		10.7%	12.9%	15.8%
Capital ratios at 30 June 2019		16.0%	18.2%	20.9%

Notes:

- The countercyclical capital buffer (CCyB) applied to UK designated assets is set by the Financial Policy Committee (FPC). The UK CCyB is currently 1.0% (effective from November 2018). The Republic of Ireland CCyB is currently 0.0%, the CBI have announced an increase to 1.0% effective July 2019. Foreign exposures may be subject to different CCyB rates depending on the rate set in those jurisdictions. Firm specific CCyB is based on a weighted average at CCyB's applicable to countries in which the Bank has exposures.
- Globally systemically important banks (G-SIBs), as designated by the Financial Stability Board (FSB), are subject to an additional capital buffer of between 1.0% and 3.5%. In November 2018 the FSB announced that RBS is no longer a G-SIB. From 1 January 2020, RBS will be released from this global buffer requirement.
- The Group will be subject to a systemic risk buffer (SRB) and this will apply at the ring-fenced bank sub-group level rather than at the consolidated group level. As from 1 August 2019 NWB will be subject to a Systemic Risk Buffer of 1.5%. Where the Systemic Risk Buffer is greater than the G-SII buffer, the PRA may require the consolidated group to hold a higher level of capital through the PRA buffer and Leverage Ratio Group add-on.
- From 1 January 2015, UK banks have been required to meet at least 56% of its Pillar 2A capital requirement with CET1 capital and with balance with Additional Tier 1 and/or Tier 2 capital. Additional capital requirements under Pillar 2A may be specified by the PRA as a ratio or as an absolute value. The table sets out an implied ratio to cover the full value of Pillar 2A requirements.
- The Group may be subject to a PRA buffer requirement as set by the PRA. The PRA buffer consists of two components:
  - A risk management and governance buffer that is set as a scalar, up to 40% of the Pillar 1 and Pillar 2A requirements.
  - A buffer to cover stress risks informed by the results of the BoE concurrent stress testing results.
 The PRA requires that the level of this buffer is not publicly disclosed.
- The capital conservation buffer, the countercyclical capital buffer, the G-SIB buffer and systemic risk buffer (where applicable) make up the combined buffer. If the Group fails to meet the combined buffer requirement, it is subject to restrictions on distributions on CET1 instruments, discretionary coupons on AT1 instruments and on payment of variable remuneration or discretionary pension benefits. These restrictions are calculated by reference to the Group's Maximum Distributable Amount (MDA). Where a PRA buffer is applicable, the MDA trigger is below the PRA buffer and MDA restrictions are not automatically triggered if the Group fails to meet its PRA buffer. The MDA is calculated as the amount of interim or year-end profits not yet incorporated into CET1 capital multiplied by a factor ranging from 0 to 0.6 depending on the size of the CET1 shortfall against the combined buffer.

## Appendix 1 Capital and risk management

### Capital, liquidity and funding risk continued

#### Capital flow statement

Refer to Business performance summary - Capital and leverage for information on Capital, RWAs and leverage and the Pillar 3 supplement for capital and leverage relating to significant subsidiaries and also CRR templates. The table below analyses the movement in end-point CRR CET1, AT1 and Tier 2 capital for the half year ended 30 June 2019.

	CET1 £m	AT1 £m	Tier 2 £m	Total £m
<b>At 1 January 2019</b>	<b>30,639</b>	<b>4,051</b>	<b>6,483</b>	<b>41,173</b>
Profit for the year	711	-	-	711
Own credit	144	-	-	144
Share capital and reserve movements in respect of employee share schemes	49	-	-	49
Foreign exchange reserve	(296)	-	-	(296)
FVOCI reserves	(78)	-	-	(78)
Goodwill and intangibles deduction	(15)	-	-	(15)
Deferred tax assets	(129)	-	-	(129)
Prudential valuation adjustments	75	-	-	75
Expected loss less impairment	(72)	-	-	(72)
Net dated subordinated debt/grandfathered instruments	-	-	(1,400)	(1,400)
Foreign exchange movements	-	-	36	36
Foreseeable ordinary and special dividends	(728)	-	-	(728)
Other movements	(109)	-	-	(109)
<b>At 30 June 2019</b>	<b>30,191</b>	<b>4,051</b>	<b>5,119</b>	<b>39,361</b>

#### Risk-weighted assets

The table below analyses the movement in RWAs on the end-point CRR basis during the half year, by key drivers.

	Credit risk £bn	Counterparty credit risk £bn	Market risk £bn	Operational risk £bn	Total RWAs £bn
<b>At 1 January 2019</b>	<b>137.9</b>	<b>13.6</b>	<b>14.8</b>	<b>22.4</b>	<b>188.7</b>
Foreign exchange movement	0.1	-	-	-	0.1
Business movements (1)	2.9	0.4	(0.4)	0.2	3.1
Risk parameter changes (2)	0.7	0.1	-	-	0.8
Model updates (3)	0.2	-	0.2	-	0.4
Other movements (4)	(4.7)	0.1	-	-	(4.6)
<b>At 30 June 2019</b>	<b>137.1</b>	<b>14.2</b>	<b>14.6</b>	<b>22.6</b>	<b>188.5</b>

The table below analyses segmental RWAs.

	Personal & Ulster		Commercial & Private		RBSI £bn	NatWest Markets £bn	Central items & other £bn	Total £bn
	UK PB £bn	Ulster Bank Rsl £bn	Commercial Banking £bn	Private Banking £bn				
<b>Total RWAs</b>								
<b>At 1 January 2019 *</b>	<b>34.3</b>	<b>14.7</b>	<b>78.4</b>	<b>9.4</b>	<b>6.9</b>	<b>44.9</b>	<b>0.1</b>	<b>188.7</b>
Foreign exchange movement	-	-	0.1	-	-	-	-	0.1
Business movements (1)	1.4	(0.1)	1.0	0.3	0.2	-	0.3	3.1
Risk parameter changes (2)	1.3	(0.4)	(0.2)	-	-	0.1	-	0.8
Model updates (3)	-	-	0.2	-	-	0.2	-	0.4
Other movements (4)	-	-	(1.7)	-	(0.2)	(3.8)	1.1	(4.6)
<b>At 30 June 2019</b>	<b>37.0</b>	<b>14.2</b>	<b>77.8</b>	<b>9.7</b>	<b>6.9</b>	<b>41.4</b>	<b>1.5</b>	<b>188.5</b>
Credit risk	29.3	13.2	68.5	8.4	6.1	10.1	1.5	137.1
Counterparty credit risk	0.1	-	0.2	0.1	-	13.8	-	14.2
Market risk	0.1	-	0.3	-	-	14.2	-	14.6
Operational risk	7.5	1.0	8.8	1.2	0.8	3.3	-	22.6
<b>Total RWAs</b>	<b>37.0</b>	<b>14.2</b>	<b>77.8</b>	<b>9.7</b>	<b>6.9</b>	<b>41.4</b>	<b>1.5</b>	<b>188.5</b>

\*Restated. Refer to Note 1 of the main announcement for further details.

(1) Included within business movements is the £1.3 billion uplift in credit risk due to adoption of IFRS 16 from 1 January 2019.

(2) Risk parameter changes relate to asset quality metrics of customers and counterparties such as probability of default (PD) and loss given default (LGD).

(3) Model updates relates primarily to revision in LGD models for the UK mid-corporate portfolios.

(4) Other primarily reflects the reduction following the Alawwal bank merger. Other also reflects assets which have transferred between Commercial Banking, RBSI, Central items and NatWest Markets.

## Appendix 1 Capital and risk management

### Capital, liquidity and funding risk continued

Capital resources (Within the scope of EY's review report)

	30 June 2019		31 December 2018	
	End-point CRR basis £m	PRA transitional basis £m	End-point CRR basis £m	PRA transitional basis £m
<b>Shareholders' equity (excluding non-controlling interests)</b>				
Shareholders' equity	46,221	46,221	45,736	45,736
Preference shares - equity	(496)	(496)	(496)	(496)
Other equity instruments	(4,058)	(4,058)	(4,058)	(4,058)
	41,667	41,667	41,182	41,182
<b>Regulatory adjustments and deductions</b>				
Own credit	(261)	(261)	(405)	(405)
Defined benefit pension fund adjustment	(400)	(400)	(394)	(394)
Cash flow hedging reserve	(117)	(117)	191	191
Deferred tax assets	(869)	(869)	(740)	(740)
Prudential valuation adjustments	(419)	(419)	(494)	(494)
Goodwill and other intangible assets	(6,631)	(6,631)	(6,616)	(6,616)
Expected losses less impairments	(726)	(726)	(654)	(654)
Foreseeable ordinary and special dividends	(2,053)	(2,053)	(1,326)	(1,326)
Other regulatory adjustments	-	-	(105)	(105)
	(11,476)	(11,476)	(10,543)	(10,543)
<b>CET1 capital</b>	<b>30,191</b>	<b>30,191</b>	30,639	30,639
<b>Additional Tier 1 (AT1) capital</b>				
Qualifying instruments and related share premium	4,051	4,051	4,051	4,051
Qualifying instruments and related share premium subject to phase out	-	1,398	-	1,393
Qualifying instruments issued by subsidiaries and held by third parties subject to phase out	-	140	-	140
<b>AT1 capital</b>	<b>4,051</b>	<b>5,589</b>	4,051	5,584
<b>Tier 1 capital</b>	<b>34,242</b>	<b>35,780</b>	34,690	36,223
<b>Qualifying Tier 2 capital</b>				
Qualifying instruments and related share premium	4,969	5,054	6,301	6,386
Qualifying instruments issued by subsidiaries and held by third parties	150	1,498	182	1,565
<b>Tier 2 capital</b>	<b>5,119</b>	<b>6,552</b>	6,483	7,951
<b>Total regulatory capital</b>	<b>39,361</b>	<b>42,332</b>	41,173	44,174

## Appendix 1 Capital and risk management

### Capital, liquidity and funding risk continued

#### Loss absorbing capital

The following table illustrates the components of estimated loss absorbing capital (LAC) in RBSG plc and operating subsidiaries and includes external issuances only. The table is prepared on a transitional basis, including the benefit of regulatory capital instruments issued from operating companies, to the extent they meet the current MREL criteria.

	30 June 2019				31 December 2018			
	Par value (1) £bn	Balance			Par value (1) £bn	Balance		
		sheet value £bn	Regulatory value (2) £bn	LAC value (3) £bn		sheet value £bn	Regulatory value (2) £bn	LAC value (3) £bn
CET1 capital (4)	30.2	30.2	30.2	30.2	30.6	30.6	30.6	30.6
Tier 1 capital: end-point CRR compliant AT1								
of which: RBSG (holdco)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
of which: RBSG operating subsidiaries (opcos)	-	-	-	-	-	-	-	-
	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Tier 1 capital: end-point CRR non compliant								
of which: holdco	1.4	1.6	1.4	0.5	1.4	1.6	1.4	0.5
of which: opcos	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	1.5	1.7	1.5	0.6	1.5	1.7	1.5	0.6
Tier 2 capital: end-point CRR compliant								
of which: holdco	5.9	6.1	5.0	4.3	6.8	6.7	6.3	5.1
of which: opcos	0.5	0.5	0.3	0.5	0.5	0.5	0.3	0.5
	6.4	6.6	5.3	4.8	7.3	7.2	6.6	5.6
Tier 2 capital: end-point CRR non compliant								
of which: holdco	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
of which: opcos	1.6	2.0	1.3	1.7	1.9	2.0	1.4	1.6
	1.7	2.1	1.4	1.8	2.0	2.1	1.5	1.7
Senior unsecured debt securities issued by:								
RBSG holdco	19.4	20.0	-	19.2	16.8	16.8	-	15.5
RBS opcos	20.6	20.5	-	-	17.1	16.9	-	-
	40.0	40.5	-	19.2	33.9	33.7	-	15.5
Total	83.8	85.0	42.4	60.6	79.3	79.3	44.2	58.0
RWAs				188.5				188.7
CRR leverage exposure				659.1				644.5
LAC as a ratio of RWAs				32.1%				30.7%
LAC as a ratio of CRR leverage exposure				9.2%				9.0%

#### Notes:

- (1) Par value reflects the nominal value of securities issued.
- (2) Regulatory capital instruments issued from operating companies are included in the transitional LAC calculation, to the extent they meet the current MREL criteria.
- (3) LAC value reflects RBS's interpretation of the Bank of England's approach to setting a minimum requirement for own funds and eligible liabilities (MREL), published in June 2018. MREL policy and requirements remain subject to further potential development, as such RBS estimated position remains subject to potential change. Liabilities excluded from LAC include instruments with less than one year remaining to maturity, structured debt, operating company senior debt, and other instruments that do not meet the MREL criteria. The LAC calculation includes eligible Tier 1 and Tier 2 securities before the application of any regulatory caps or adjustments.
- (4) Corresponding shareholders' equity was £46.2 billion (31 December 2018 - £45.7 billion).
- (5) Regulatory amounts reported for AT1, Tier 1 and Tier 2 instruments are before grandfathering restrictions imposed by CRR.

## Appendix 1 Capital and risk management

### Capital, liquidity and funding risk continued

Funding sources (Within the scope of EY's review report)

The table below shows the carrying values of the principal funding sources based on contractual maturity. Balance sheet captions include balances held at all classifications under IFRS 9 but excludes derivative cash collateral.

	30 June 2019			31 December 2018		
	Short-term less than 1 year £m	Long-term more than 1 year £m	Total £m	Short-term less than 1 year £m	Long-term more than 1 year £m	Total £m
<b>Personal and corporate deposits</b>						
Personal (1)	<b>180,503</b>	<b>1,376</b>	<b>181,879</b>	178,293	1,499	179,792
Corporate (2)	<b>132,323</b>	<b>272</b>	<b>132,595</b>	131,575	142	131,717
	<b>312,826</b>	<b>1,648</b>	<b>314,474</b>	309,868	1,641	311,509
<b>Financial institutions deposits</b>						
Banks (3)	<b>6,581</b>	<b>13,315</b>	<b>19,896</b>	6,758	15,865	22,623
Non-bank financial institutions (NBFIs) (4)	<b>46,977</b>	<b>1,092</b>	<b>48,069</b>	46,800	564	47,364
	<b>53,558</b>	<b>14,407</b>	<b>67,965</b>	53,558	16,429	69,987
<b>Debt securities in issue</b>						
Commercial papers (CPs) and certificates of deposits (CDs)	<b>3,192</b>	<b>16</b>	<b>3,208</b>	3,157	-	3,157
Medium-term notes	<b>7,651</b>	<b>29,662</b>	<b>37,313</b>	4,928	25,596	30,524
Covered bonds	<b>1,252</b>	<b>4,888</b>	<b>6,140</b>	-	5,367	5,367
Securitisations	-	<b>1,215</b>	<b>1,215</b>	-	1,375	1,375
	<b>12,095</b>	<b>35,781</b>	<b>47,876</b>	8,085	32,338	40,423
<b>Subordinated liabilities</b>						
	<b>134</b>	<b>9,674</b>	<b>9,808</b>	299	10,236	10,535
<b>Repos (5)</b>						
Sovereign	<b>1,479</b>	-	<b>1,479</b>	405	-	405
Financial institutions	<b>34,431</b>	<b>424</b>	<b>34,855</b>	29,664	-	29,664
Corporate	<b>472</b>	-	<b>472</b>	291	-	291
	<b>36,382</b>	<b>424</b>	<b>36,806</b>	30,360	-	30,360
<b>Total funding</b>						
	<b>414,995</b>	<b>61,934</b>	<b>476,929</b>	402,170	60,644	462,814
<i>Of which: available in resolution (6)</i>						
	-	<b>25,943</b>	<b>25,943</b>	-	22,909	22,909
<b>CET 1 capital</b>						
			<b>30,191</b>			30,639
<b>CRR Leverage exposure</b>						
			<b>659,105</b>			644,498
<b>Funded assets</b>						
			<b>584,274</b>			560,886
<b>Funding coverage of CET 1 capital</b>						
			<b>16</b>			15
<b>Funding as a % of leverage exposure</b>						
			<b>72%</b>			72%
<b>Funding as a % of funded assets</b>						
			<b>82%</b>			83%
<b>Funding available in resolution as a % of CET1 capital</b>						
			<b>86%</b>			75%
<b>Funding available in resolution as a % of leverage exposure</b>						
			<b>4%</b>			4%

Notes:

- (1) Includes £104 million (31 December 2018 - £206 million) of DFV deposits included in other financial liabilities balance sheet.
- (2) Includes £1,027 million (31 December 2018 - £428 million) of HFT deposits included in trading liabilities.
- (3) Includes £519 million (31 December 2018 - £267 million) of HFT deposits included in trading liabilities on the balance sheet. Includes £10 billion (31 December 2018 - £14 billion) relating to Term Funding Scheme participation and £1.8 billion (31 December 2018 - £1.8 billion) relating to RBS's participation in central bank financing operations under the European Central Bank's Targeted Long-term refinancing operations.
- (4) Includes £789 million (31 December 2018 - £1,093 million) of HFT deposits included in trading liabilities and nil (31 December 2018 - £7 million) of DFV deposits included in other financial liabilities on the balance sheet.
- (5) Includes HFT repos of £32,087 million (31 December 2018 - £25,645 million) and amortised cost repos of £4,719 million (31 December 2018 - £4,715 million).
- (6) Eligible liabilities (as defined in the Banking Act 2009 as amended from time to time) that meet the eligibility criteria set out in the regulations, rules, policies, guidelines, or statements of the Bank of England including the Statement of Policy published by the Bank of England in June 2018. The balance consists of £19 billion (31 December 2018 - £16 billion) under debt securities in issue (senior MREL) and £7 billion (31 December 2018 - £7 billion) under subordinated liabilities.

## Appendix 1 Capital and risk management

### Capital, liquidity and funding risk continued

**Liquidity portfolio** (Within the scope of EY's review report)

The table below shows the liquidity portfolio by product, liquidity value and by carrying value.

	Liquidity value					
	30 June 2019			31 December 2018		
	RBSG (1) £m	UK DoL Sub (2) £m	NWM Plc £m	RBSG (1) £m	UK DoL Sub (2) £m	NWM Plc £m
Cash and balances at central banks	83,979	56,173	12,783	83,781	59,745	11,005
Central and local government bonds						
AAA rated governments	5,914	2,458	1,532	8,188	4,386	615
AA- to AA+ rated governments and US agencies	41,013	30,427	4,260	35,683	25,845	5,256
Below AA rated governments	1,594	-	1,274	-	-	-
	48,521	32,885	7,066	43,871	30,231	5,871
Primary liquidity	132,500	89,058	19,849	127,652	89,976	16,876
Secondary liquidity (3)	70,575	69,652	344	70,231	69,642	344
Total liquidity value	203,075	158,710	20,193	197,882	159,618	17,220
Total carrying value	232,653	187,874	20,408	225,039	186,340	17,388

Notes:

- (1) RBSG includes UK DoLSub, NatWest Markets Plc and other significant operating subsidiaries that hold liquidity portfolios. These include RBS International, NWM N.V. and Ulster Bank Ireland DAC who hold managed portfolios that comply with local regulations that may differ from PRA rules.
- (2) UK DoLSub comprises RBSG's four licensed deposit-taking UK banks within the ring-fenced bank: National Westminster Bank Plc, The Royal Bank of Scotland plc, Coutts & Co and Ulster Bank Limited.
- (3) Secondary liquidity represents assets pre-positioned with central bank refinancing facilities. Liquidity value is lower than carrying value as it is stated after discounts applied by the Bank of England and other central banks to instruments.

## Appendix 1 Capital and risk management

### Credit risk

#### Economic loss drivers (Within the scope of EY's review report)

A full description of the framework for incorporating economic loss drivers in to IFRS9 ECL calculations is provided in the Group's 2018 Annual Report & Accounts. It includes a description of the approach adopted on multiple economic scenarios for both Personal and Wholesale portfolios.

The table and commentary below provides an update on the base case economics used at June 2019, and also the multiple economic scenarios used for Personal portfolios.

The average over the five year horizon (2019 to 2023) for the central base case and two upside and downside scenarios used for ECL modelling are set out below.

	30 June 2019					31 December 2018				
	Upside 2 %	Upside 1 %	Base case %	Downside 1 %	Downside 2 %	Upside 2 %	Upside 1 %	Base case %	Downside 1 %	Downside 2 %
<b>UK</b>										
GDP - change	2.5	2.2	1.6	1.3	0.9	2.6	2.3	1.7	1.5	1.1
Unemployment	3.2	3.7	4.7	5.4	6.5	3.3	3.8	5.0	5.6	6.9
House Price Inflation - change	4.7	3.7	1.7	1.0	(0.9)	4.3	3.3	1.7	1.1	(0.5)
Bank of England base rate	1.3	1.2	1.0	0.1	-	1.7	1.3	1.1	0.5	-
<b>Republic of Ireland</b>										
GDP - change	5.3	4.3	3.5	3.1	2.4	4.3	3.6	3.0	3.1	2.8
Unemployment	4.1	4.5	5.1	5.9	6.7	4.2	4.6	5.2	6.0	6.8
House Price Inflation - change	10.0	7.3	3.9	2.8	(0.1)	9.2	6.8	4.0	3.2	0.8
European Central Bank base rate	1.5	0.8	0.1	-	-	1.3	0.8	0.3	-	-
World GDP - change	3.9	3.4	2.8	2.5	2.0	3.6	3.2	2.7	2.5	2.3
Probability weight	12.7	14.8	30.0	29.7	12.7	12.8	17.0	30.0	25.6	14.6

#### Probability weightings of scenarios (Within the scope of EY's review report)

RBS's approach to IFRS 9 multiple economic scenarios in Personal involves selecting a suitable set of discrete scenarios to characterise the distribution of risks in the economic outlook and assigning appropriate probability weights to those scenarios. This involves the following steps:

- **Scenario selection** – Two upside and two downside scenarios from Moody's inventory of scenarios were chosen. The aim is to obtain downside scenarios that are not as severe as stress tests, so typically they have a severity of around one in ten and one in five of approximate likelihood, along with corresponding upsides.
- **Severity assessment** – Having selected the most appropriate scenarios their severity is then assessed based on the behaviour of UK GDP by calculating a variety of measures such as average growth, deviation from baseline and peak to trough falls. These measures are compared against a set of 1,000 model runs, following which, a percentile in the distribution is established which most closely corresponds to the scenario.
- **Probability assignment** – Having established the relevant percentile points, probability weights are assigned to ensure that the scenarios produce an unbiased result. If the severity assessment step shows the scenarios to be broadly symmetric, then this will result in a symmetric probability weight (same probability weight above and below the base case). However, if the downsides are not as extreme as the upsides, then a higher probability weight is allocated to the downsides to ensure the unbiasedness requirement is satisfied. This adjustment is made purely to restore unbiasedness, not to address any relative skew in the distribution of risks in the economic outlook.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities

#### Introduction

This section covers the credit risk profile of RBS's banking activities. Banking activities include a small number of portfolios that were carried at fair value.

#### Financial instruments within the scope of the IFRS 9 ECL framework (Within the scope of EY's review report)

Refer to Note 8 of the main announcement for balance sheet analysis of financial assets that are classified as amortised cost (AC) or fair value through other comprehensive income (FVOCI), the starting point for IFRS 9 ECL framework assessment.

#### Financial assets

Of the total third party £485.1 billion AC and FVOCI balance (gross of ECL), £472 billion or 97% was within the scope of the IFRS 9 ECL framework and comprised by stage: Stage 1 £438.8 billion; Stage 2 £25.9 billion; and Stage 3 £7.3 billion (31 December 2018 – £463.9 billion of which Stage 1 £430.1 billion; Stage 2 £26.1 billion; and Stage 3 £7.7 billion). Total assets within IFRS 9 ECL scope comprised the following by balance sheet caption and stage:

- Loans: £325 billion of which Stage 1 £292 billion; Stage 2 £25.7 billion; and Stage 3 £7.3 billion (31 December 2018 – £319.8 billion of which Stage 1 £286.0 billion; Stage 2 £26.1 billion; and Stage 3 £7.7 billion).
- Other financial assets: £147 billion of which Stage 1 £146.8 billion; Stage 2 £0.2 billion; and Stage 3 nil (31 December 2018 – £144.1 billion of which Stage 1 £144.1 billion; Stage 2 nil; and Stage 3 nil).

Those assets outside the framework were as follows:

- Settlement balances, items in the course of collection, cash balances and other non-credit risk assets of £10.1 billion. These were assessed as having no ECL unless there was evidence that they were credit impaired.
- Equity shares of £1.1 billion as not within the IFRS 9 ECL framework by definition.
- Fair value adjustments of £1.1 billion on loans hedged by interest rate swaps, where the underlying loan was within the IFRS 9 ECL scope.
- Group-originated securitisations, where ECL was captured on the underlying loans of £0.4 billion.
- Commercial cards which operate in a similar manner to charge cards, with balances repaid monthly via mandated direct debit with the underlying risk of loss captured within the customer's linked current account of £0.4 billion.

#### Contingent liabilities and commitments

In addition to contingent liabilities and commitments disclosed in Note 12 of the main announcement, reputationally-committed limits are also included in the scope of the IFRS 9 ECL framework. These are offset by £4 billion out of scope balances primarily related to facilities that, if drawn, would not be classified as AC or FVOCI, or undrawn limits relating to financial assets exclusions. Total contingent liabilities (including financial guarantees) and commitments within IFRS 9 ECL scope of £177.4 billion comprised Stage 1; £171.3 billion; Stage 2 £5.4 billion; and Stage 3 £0.7 billion.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Portfolio summary – segment analysis (Within the scope of EY's review report)

The table below shows gross loans and ECL, by segment and stage, within the scope of the IFRS 9 ECL framework.

	UK PB £m	Ulster Bank Roi £m	Commercial Banking £m	Private Banking £m	RBSI £m	NWM £m	Central items & other £m	Total £m
<b>30 June 2019</b>								
Loans - amortised cost								
Stage 1	137,384	19,684	90,287	14,198	15,011	9,539	5,881	291,984
Stage 2	13,515	1,638	9,237	531	426	229	129	25,705
Stage 3	1,827	2,171	2,340	173	99	715	-	7,325
	<b>152,726</b>	<b>23,493</b>	<b>101,864</b>	<b>14,902</b>	<b>15,536</b>	<b>10,483</b>	<b>6,010</b>	<b>325,014</b>
ECL provisions (1)								
Stage 1	99	28	123	12	4	8	6	280
Stage 2	417	56	187	9	2	10	1	682
Stage 3	710	588	926	19	16	81	-	2,340
	<b>1,226</b>	<b>672</b>	<b>1,236</b>	<b>40</b>	<b>22</b>	<b>99</b>	<b>7</b>	<b>3,302</b>
ECL provisions coverage (2)								
Stage 1 (%)	0.07	0.14	0.14	0.08	0.03	0.08	0.10	0.10
Stage 2 (%)	3.09	3.42	2.02	1.69	0.47	4.37	0.78	2.65
Stage 3 (%)	38.86	27.08	39.57	10.98	16.16	11.33	-	31.95
	<b>0.80</b>	<b>2.86</b>	<b>1.21</b>	<b>0.27</b>	<b>0.14</b>	<b>0.94</b>	<b>0.12</b>	<b>1.02</b>
Impairment losses								
ECL charge (3)	181	(21)	202	(3)	(3)	(36)	3	323
Stage 1	(53)	(24)	(55)	(5)	(3)	(2)	2	(140)
Stage 2	103	(38)	38	(1)	-	(2)	1	101
Stage 3	131	41	219	3	-	(32)	-	362
ECL loss rate - annualised (basis points)	23.70	(17.88)	39.66	(4.03)	(3.86)	(68.68)	9.98	19.88
Amounts written-off	90	72	276	1	2	11	-	452
<b>31 December 2018*</b>								
Loans - amortised cost								
Stage 1	134,836	17,822	91,034	13,750	13,383	8,196	6,964	285,985
Stage 2	13,245	2,080	9,518	531	289	407	27	26,097
Stage 3	1,908	2,308	2,448	225	101	728	-	7,718
	<b>149,989</b>	<b>22,210</b>	<b>103,000</b>	<b>14,506</b>	<b>13,773</b>	<b>9,331</b>	<b>6,991</b>	<b>319,800</b>
ECL provisions (1)								
Stage 1	101	35	124	13	6	6	-	285
Stage 2	430	114	194	10	3	12	-	763
Stage 3	597	638	942	20	17	106	-	2,320
	<b>1,128</b>	<b>787</b>	<b>1,260</b>	<b>43</b>	<b>26</b>	<b>124</b>	<b>-</b>	<b>3,368</b>
ECL provisions coverage (2)								
Stage 1 (%)	0.07	0.20	0.14	0.09	0.04	0.07	-	0.10
Stage 2 (%)	3.25	5.48	2.04	1.88	1.04	2.95	-	2.92
Stage 3 (%)	31.29	27.64	38.48	8.89	16.83	14.56	-	30.06
	<b>0.75</b>	<b>3.54</b>	<b>1.22</b>	<b>0.30</b>	<b>0.19</b>	<b>1.33</b>	<b>-</b>	<b>1.05</b>
Impairment losses								
ECL charge (3)	339	15	147	(6)	(2)	(92)	(3)	398
ECL loss rate - annualised (basis points)	22.60	6.75	14.27	(4.14)	(1.45)	(98.60)	(4.29)	12.45
Amounts written-off	445	372	572	7	9	89	-	1,494

\*Restated. Refer to Note 1 of the main announcement for further details.

Notes:

(1) Includes £4 million (31 December 2018 – £5 million) related to assets at FVOCI.

(2) ECL provisions coverage is ECL provisions divided by loans - amortised cost.

(3) Includes a £30 million charge (31 December 2018 – £3 million charge) related to other financial assets, of which nil (31 December 2018 – £1 million charge) related to assets at FVOCI; and a £28 million charge (31 December 2018 – £31 million release) related to contingent liabilities.

### Key points

- Total ECL provisions reduced slightly in the first half of 2019. The reduced ECL requirement in Stage 1 and Stage 2 performing exposures offset a small increased provisioning requirement in Stage 3 exposures. The ECL requirement arising from the economic uncertainty associated with Brexit is formally reviewed by the Provisions Committee at the end of each quarter. As at the end of H1 2019, the modelled impact remained unchanged from the year end at £101 million.
- In UK PB, the ECL levels remained broadly stable in Stage 1 and Stage 2 with the increase in Stage 3 including the effect of a loss rate model adjustment on unsecured lending. In addition, the value of new defaults was higher than write-offs and debt repayments by customers, and unlike in 2018, there were no debt sales in H1 2019.
- In Ulster Bank Roi, the reduction in ECL was driven by ongoing improvements in the portfolio performance and the completion of the remainder of the Bank's 2018 sale of non-performing loans in H1 2019.
- In Commercial Banking, the ECL balance reduced marginally with write-offs of legacy positions more than offsetting the small number of significant individual charges during the period.
- The impairment charge for the half year was £323 million (20 basis points annualised), remaining below the longer term view of normalised loss rates of between 30 and 40 basis points. The charge in Q2 2019 was higher than Q1, driven by a small number of significant individual charges within Commercial Banking.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Segmental loans and impairment metrics (Within the scope of EY's review report)

The table below shows gross loans and ECL, by segment and stage, within the scope of the ECL framework.

30 June 2019	Gross loans							ECL provisions (2)							
	Stage 2 (1)			Stage 3				Stage 2 (1)			Stage 3				
	Stage 1	£m	£m	Stage 1	£m	£m	Total	Stage 1	£m	£m	£m	Total	Stage 1	£m	Total
<b>UK PB</b>	<b>137,384</b>	<b>12,900</b>	<b>615</b>	<b>13,515</b>	<b>1,827</b>	<b>152,726</b>	<b>99</b>	<b>371</b>	<b>46</b>	<b>417</b>	<b>710</b>	<b>1,226</b>			
<b>Ulster Bank R01</b>	<b>19,684</b>	<b>1,583</b>	<b>55</b>	<b>1,638</b>	<b>2,171</b>	<b>23,493</b>	<b>28</b>	<b>51</b>	<b>5</b>	<b>56</b>	<b>588</b>	<b>672</b>			
<i>Personal (3)</i>	<i>11,304</i>	<i>1,082</i>	<i>37</i>	<i>1,119</i>	<i>2,000</i>	<i>14,423</i>	<i>9</i>	<i>23</i>	<i>3</i>	<i>26</i>	<i>490</i>	<i>525</i>			
<i>Wholesale</i>	<i>8,380</i>	<i>501</i>	<i>18</i>	<i>519</i>	<i>171</i>	<i>9,070</i>	<i>19</i>	<i>28</i>	<i>2</i>	<i>30</i>	<i>98</i>	<i>147</i>			
<b>Commercial Banking</b>	<b>90,287</b>	<b>8,891</b>	<b>346</b>	<b>9,237</b>	<b>2,340</b>	<b>101,864</b>	<b>123</b>	<b>181</b>	<b>6</b>	<b>187</b>	<b>926</b>	<b>1,236</b>			
<b>Private Banking</b>	<b>14,198</b>	<b>356</b>	<b>175</b>	<b>531</b>	<b>173</b>	<b>14,902</b>	<b>12</b>	<b>4</b>	<b>5</b>	<b>9</b>	<b>19</b>	<b>40</b>			
<i>Personal</i>	<i>11,324</i>	<i>203</i>	<i>51</i>	<i>254</i>	<i>157</i>	<i>11,735</i>	<i>4</i>	<i>3</i>	<i>-</i>	<i>3</i>	<i>15</i>	<i>22</i>			
<i>Wholesale</i>	<i>2,874</i>	<i>153</i>	<i>124</i>	<i>277</i>	<i>16</i>	<i>3,167</i>	<i>8</i>	<i>1</i>	<i>5</i>	<i>6</i>	<i>4</i>	<i>18</i>			
<b>RBS International</b>	<b>15,011</b>	<b>417</b>	<b>9</b>	<b>426</b>	<b>99</b>	<b>15,536</b>	<b>4</b>	<b>2</b>	<b>-</b>	<b>2</b>	<b>16</b>	<b>22</b>			
<i>Personal</i>	<i>2,610</i>	<i>36</i>	<i>7</i>	<i>43</i>	<i>86</i>	<i>2,739</i>	<i>1</i>	<i>1</i>	<i>-</i>	<i>1</i>	<i>12</i>	<i>14</i>			
<i>Wholesale</i>	<i>12,401</i>	<i>381</i>	<i>2</i>	<i>383</i>	<i>13</i>	<i>12,797</i>	<i>3</i>	<i>1</i>	<i>-</i>	<i>1</i>	<i>4</i>	<i>8</i>			
<b>NatWest Markets</b>	<b>9,539</b>	<b>229</b>	<b>-</b>	<b>229</b>	<b>715</b>	<b>10,483</b>	<b>8</b>	<b>10</b>	<b>-</b>	<b>10</b>	<b>81</b>	<b>99</b>			
<b>Central items and other</b>	<b>5,881</b>	<b>129</b>	<b>-</b>	<b>129</b>	<b>-</b>	<b>6,010</b>	<b>6</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>7</b>			
<b>Total loans</b>	<b>291,984</b>	<b>24,505</b>	<b>1,200</b>	<b>25,705</b>	<b>7,325</b>	<b>325,014</b>	<b>280</b>	<b>620</b>	<b>62</b>	<b>682</b>	<b>2,340</b>	<b>3,302</b>			
Of which:															
<i>Personal</i>	<i>162,622</i>	<i>14,221</i>	<i>710</i>	<i>14,931</i>	<i>4,070</i>	<i>181,623</i>	<i>113</i>	<i>398</i>	<i>49</i>	<i>447</i>	<i>1,227</i>	<i>1,787</i>			
<i>Wholesale</i>	<i>129,362</i>	<i>10,284</i>	<i>490</i>	<i>10,774</i>	<i>3,255</i>	<i>143,391</i>	<i>167</i>	<i>222</i>	<i>13</i>	<i>235</i>	<i>1,113</i>	<i>1,515</i>			
31 December 2018*															
<b>UK PB</b>	<b>134,836</b>	<b>12,521</b>	<b>725</b>	<b>13,245</b>	<b>1,908</b>	<b>149,989</b>	<b>101</b>	<b>382</b>	<b>48</b>	<b>430</b>	<b>597</b>	<b>1,128</b>			
<b>Ulster Bank R01</b>	<b>17,822</b>	<b>1,968</b>	<b>112</b>	<b>2,080</b>	<b>2,308</b>	<b>22,210</b>	<b>35</b>	<b>103</b>	<b>11</b>	<b>114</b>	<b>638</b>	<b>787</b>			
<i>Personal (3)</i>	<i>11,059</i>	<i>1,353</i>	<i>105</i>	<i>1,458</i>	<i>2,153</i>	<i>14,670</i>	<i>13</i>	<i>73</i>	<i>11</i>	<i>84</i>	<i>530</i>	<i>627</i>			
<i>Wholesale</i>	<i>6,763</i>	<i>615</i>	<i>7</i>	<i>622</i>	<i>155</i>	<i>7,540</i>	<i>22</i>	<i>30</i>	<i>-</i>	<i>30</i>	<i>108</i>	<i>160</i>			
<b>Commercial Banking</b>	<b>91,034</b>	<b>9,087</b>	<b>430</b>	<b>9,518</b>	<b>2,448</b>	<b>103,000</b>	<b>124</b>	<b>186</b>	<b>8</b>	<b>194</b>	<b>942</b>	<b>1,260</b>			
<b>Private Banking</b>	<b>13,750</b>	<b>380</b>	<b>151</b>	<b>531</b>	<b>225</b>	<b>14,506</b>	<b>13</b>	<b>5</b>	<b>5</b>	<b>10</b>	<b>20</b>	<b>43</b>			
<i>Personal</i>	<i>10,803</i>	<i>183</i>	<i>25</i>	<i>208</i>	<i>203</i>	<i>11,214</i>	<i>5</i>	<i>3</i>	<i>-</i>	<i>3</i>	<i>17</i>	<i>25</i>			
<i>Wholesale</i>	<i>2,947</i>	<i>197</i>	<i>126</i>	<i>323</i>	<i>22</i>	<i>3,292</i>	<i>8</i>	<i>2</i>	<i>5</i>	<i>7</i>	<i>3</i>	<i>18</i>			
<b>RBS International</b>	<b>13,383</b>	<b>274</b>	<b>15</b>	<b>289</b>	<b>101</b>	<b>13,773</b>	<b>6</b>	<b>3</b>	<b>-</b>	<b>3</b>	<b>17</b>	<b>26</b>			
<b>NatWest Markets</b>	<b>8,196</b>	<b>407</b>	<b>-</b>	<b>407</b>	<b>728</b>	<b>9,331</b>	<b>6</b>	<b>12</b>	<b>-</b>	<b>12</b>	<b>106</b>	<b>124</b>			
<b>Central items and other</b>	<b>6,964</b>	<b>27</b>	<b>-</b>	<b>27</b>	<b>-</b>	<b>6,991</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>			
<b>Total loans</b>	<b>285,985</b>	<b>24,664</b>	<b>1,433</b>	<b>26,097</b>	<b>7,718</b>	<b>319,800</b>	<b>285</b>	<b>691</b>	<b>72</b>	<b>763</b>	<b>2,320</b>	<b>3,368</b>			
Of which:															
<i>Personal</i>	<i>159,553</i>	<i>14,106</i>	<i>865</i>	<i>14,971</i>	<i>4,351</i>	<i>178,875</i>	<i>122</i>	<i>458</i>	<i>59</i>	<i>517</i>	<i>1,158</i>	<i>1,797</i>			
<i>Wholesale</i>	<i>126,432</i>	<i>10,558</i>	<i>568</i>	<i>11,126</i>	<i>3,367</i>	<i>140,925</i>	<i>163</i>	<i>233</i>	<i>13</i>	<i>246</i>	<i>1,162</i>	<i>1,571</i>			

\*Restated. Refer to Note 1 of the main announcement for further details.

For the notes to this table refer to the following page.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Segmental loans and impairment metrics (Within the scope of EY's review report)

The table below shows gross loans and ECL provisions, by days past due, by segment and stage, within the scope of the ECL framework.

30 June 2019	ECL provisions coverage						ECL		
	Stage 2 (1,2)			Stage 3	Total	Total charge £m	Loss rate basis points	Amounts written-off £m	
	Stage 1 %	≤30 DPD %	>30 DPD %		Total %				
<b>UK PB</b>	<b>0.07</b>	<b>2.88</b>	<b>7.48</b>	<b>3.09</b>	<b>38.86</b>	<b>0.80</b>	<b>181</b>	<b>23.70</b>	<b>90</b>
<b>Ulster Bank Roi</b>	<b>0.14</b>	<b>3.22</b>	<b>9.09</b>	<b>3.42</b>	<b>27.08</b>	<b>2.86</b>	<b>(21)</b>	<b>(17.88)</b>	<b>72</b>
Personal (3)	<b>0.08</b>	<b>2.13</b>	<b>8.11</b>	<b>2.32</b>	<b>24.50</b>	<b>3.64</b>	<b>(10)</b>	<b>(13.87)</b>	<b>64</b>
Wholesale	<b>0.23</b>	<b>5.59</b>	<b>11.11</b>	<b>5.78</b>	<b>57.31</b>	<b>1.62</b>	<b>(11)</b>	<b>(24.26)</b>	<b>8</b>
<b>Commercial Banking</b>	<b>0.14</b>	<b>2.04</b>	<b>1.73</b>	<b>2.02</b>	<b>39.57</b>	<b>1.21</b>	<b>202</b>	<b>39.66</b>	<b>276</b>
<b>Private Banking</b>	<b>0.08</b>	<b>1.12</b>	<b>2.86</b>	<b>1.69</b>	<b>10.98</b>	<b>0.27</b>	<b>(3)</b>	<b>(4.03)</b>	<b>1</b>
Personal	<b>0.04</b>	<b>1.48</b>	-	<b>1.18</b>	<b>9.55</b>	<b>0.19</b>	<b>(3)</b>	<b>(5.11)</b>	<b>1</b>
Wholesale	<b>0.28</b>	<b>0.65</b>	<b>4.03</b>	<b>2.17</b>	<b>25.00</b>	<b>0.57</b>	-	-	-
<b>RBS International</b>	<b>0.03</b>	<b>0.48</b>	-	<b>0.47</b>	<b>16.16</b>	<b>0.14</b>	<b>(3)</b>	<b>(3.86)</b>	<b>2</b>
Personal	<b>0.04</b>	<b>2.78</b>	-	<b>2.33</b>	<b>13.95</b>	<b>0.51</b>	<b>(1)</b>	<b>(7.30)</b>	<b>2</b>
Wholesale	<b>0.02</b>	<b>0.26</b>	-	<b>0.26</b>	<b>30.77</b>	<b>0.06</b>	<b>(2)</b>	<b>(3.13)</b>	-
<b>NatWest Markets</b>	<b>0.08</b>	<b>4.37</b>	-	<b>4.37</b>	<b>11.33</b>	<b>0.94</b>	<b>(36)</b>	<b>(68.68)</b>	<b>11</b>
<b>Central items and other</b>	<b>0.10</b>	<b>0.78</b>	-	<b>0.78</b>	-	<b>0.12</b>	<b>3</b>	<b>9.98</b>	-
<b>Total loans</b>	<b>0.10</b>	<b>2.53</b>	<b>5.17</b>	<b>2.65</b>	<b>31.95</b>	<b>1.02</b>	<b>323</b>	<b>19.88</b>	<b>452</b>
Of which:									
Personal	<b>0.07</b>	<b>2.80</b>	<b>6.90</b>	<b>2.99</b>	<b>30.15</b>	<b>0.98</b>	<b>167</b>	<b>18.39</b>	<b>157</b>
Wholesale	<b>0.13</b>	<b>2.16</b>	<b>2.65</b>	<b>2.18</b>	<b>34.19</b>	<b>1.06</b>	<b>156</b>	<b>21.76</b>	<b>295</b>
31 December 2018*									
<b>UK PB</b>	<b>0.07</b>	<b>3.05</b>	<b>6.62</b>	<b>3.25</b>	<b>31.29</b>	<b>0.75</b>	<b>339</b>	<b>22.6</b>	<b>445</b>
<b>Ulster Bank Roi</b>	<b>0.20</b>	<b>5.23</b>	<b>9.82</b>	<b>5.48</b>	<b>27.64</b>	<b>3.54</b>	<b>15</b>	<b>6.8</b>	<b>372</b>
Personal (3)	<b>0.12</b>	<b>5.40</b>	<b>10.48</b>	<b>5.76</b>	<b>24.62</b>	<b>4.27</b>	<b>20</b>	<b>13.6</b>	<b>343</b>
Wholesale	<b>0.33</b>	<b>4.88</b>	-	<b>4.82</b>	<b>69.68</b>	<b>2.12</b>	<b>(5)</b>	<b>(6.6)</b>	<b>29</b>
<b>Commercial Banking</b>	<b>0.14</b>	<b>2.05</b>	<b>1.86</b>	<b>2.04</b>	<b>38.48</b>	<b>1.22</b>	<b>147</b>	<b>14.3</b>	<b>572</b>
<b>Private Banking</b>	<b>0.09</b>	<b>1.32</b>	<b>3.31</b>	<b>1.88</b>	<b>8.89</b>	<b>0.30</b>	<b>(6)</b>	<b>(4.1)</b>	<b>7</b>
Personal	<b>0.05</b>	<b>1.64</b>	-	<b>1.44</b>	<b>8.37</b>	<b>0.22</b>	<b>(6)</b>	<b>(5.4)</b>	<b>5</b>
Wholesale	<b>0.27</b>	<b>1.02</b>	<b>3.97</b>	<b>2.17</b>	<b>13.64</b>	<b>0.55</b>	-	-	<b>2</b>
<b>RBS International</b>	<b>0.04</b>	<b>1.09</b>	-	<b>1.04</b>	<b>16.83</b>	<b>0.19</b>	<b>(2)</b>	<b>(1.5)</b>	<b>9</b>
<b>NatWest Markets</b>	<b>0.07</b>	<b>2.95</b>	-	<b>2.95</b>	<b>14.56</b>	<b>1.33</b>	<b>(92)</b>	<b>(98.6)</b>	<b>89</b>
<b>Central items and other</b>	-	-	-	-	-	-	<b>(3)</b>	<b>(4.3)</b>	-
<b>Total loans excluding balances at central banks</b>	<b>0.10</b>	<b>2.80</b>	<b>5.02</b>	<b>2.92</b>	<b>30.06</b>	<b>1.05</b>	<b>398</b>	<b>12.5</b>	<b>1,494</b>
Personal	<b>0.08</b>	<b>3.25</b>	<b>6.82</b>	<b>3.45</b>	<b>26.61</b>	<b>1.00</b>	<b>354</b>	<b>19.8</b>	<b>776</b>
Wholesale	<b>0.13</b>	<b>2.21</b>	<b>2.29</b>	<b>2.21</b>	<b>34.51</b>	<b>1.11</b>	<b>44</b>	<b>3.1</b>	<b>718</b>
<b>Total loans</b>	<b>0.08</b>	<b>2.80</b>	<b>5.02</b>	<b>2.92</b>	<b>30.06</b>	<b>0.83</b>	<b>398</b>	<b>9.8</b>	<b>1,494</b>

\*Restated. Refer to Note 1 of the main announcement for further details.

Notes:

- (1) 30 DPD – 30 days past due, the mandatory 30 days past due backstop is prescribed by IFRS 9 for significant increase in credit risk.
- (2) ECL provisions on contingent liabilities and commitments are included within the Financial assets section so as not to distort ECL coverage ratios.
- (3) Includes a £1 million charge and a £1 million write off (31 December 2018 – £1 million and £3 million) related to the business banking portfolio in Ulster Bank Roi.
- (4) Balances at central banks in scope for ECL are £84.1 billion (31 December 2018 - £87.2 billion). ECL provision related to these balances is £3 million (31 December 2018 - £2 million).

### Key points

- For UK PB, the annualised loss rate of 24 basis points compared to 23 basis points for 2018, with the impairment charge for underlying new defaults broadly stable in H1 2019. The overall coverage level increased slightly driven by the uplift in Stage 3 which included the effect of a loss rate model adjustment on unsecured lending. The reduction in the total value of Stage 3 exposures reflected a methodology refinement in the mortgage portfolio.
- In Ulster Bank Roi, the P&L benefited from a provision release due to improvements in the portfolio performance reflective of the prevailing macro economic environment.
- In Commercial Banking, the loss rate of 40 basis points increased from 2018 reflecting a small number of individual charges and a reduction in the level of impairment releases. The coverage level remained stable at 1.21%.
- In NatWest Markets, the negative loss rate reflected the impact of impairment releases on the legacy portfolio and included a £27 million gain on purchased or originated credit impaired assets.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Portfolio summary – sector analysis (Within the scope of EY's review report)

The table below shows financial assets and off-balance sheet exposures gross of ECL and related ECL provisions, impairment and past due by sector, asset quality and geographical region based on the country of operation of the customer.

30 June 2019	Personal				Wholesale				Total	
	Mortgages (1) £m	Credit		Other	Property £m	Corporate £m	FI £m	Sovereign £m	Total £m	Total £m
		Cards £m	Personal £m	Total £m						
Loans by geography	167,499	4,181	9,943	181,623	36,918	71,708	27,035	7,730	143,391	325,014
- UK	152,515	4,085	9,467	166,067	33,910	59,111	17,312	3,428	113,761	279,828
- RoI	14,119	96	223	14,438	1,225	4,131	194	3,662	9,212	23,650
- Other Europe	274	-	90	364	1,387	3,927	4,308	334	9,956	10,320
- RoW	591	-	163	754	396	4,539	5,221	306	10,462	11,216
Loans by asset quality (2,3)	167,499	4,181	9,943	181,623	36,918	71,708	27,035	7,730	143,391	325,014
- AQ1-AQ4	105,736	24	1,070	106,830	15,740	23,161	25,792	7,574	72,267	179,097
- AQ5-AQ8	57,317	3,955	7,935	69,207	19,548	46,230	1,219	150	67,147	136,354
- AQ9	1,144	62	310	1,516	114	605	2	1	722	2,238
- AQ10	3,302	140	628	4,070	1,516	1,712	22	5	3,255	7,325
Loans by stage	167,499	4,181	9,943	181,623	36,918	71,708	27,035	7,730	143,391	325,014
- Stage 1	152,647	2,831	7,144	162,622	33,252	61,854	26,537	7,719	129,362	291,984
- Stage 2	11,550	1,210	2,171	14,931	2,150	8,142	476	6	10,774	25,705
- Stage 3	3,302	140	628	4,070	1,516	1,712	22	5	3,255	7,325
Weighted average 12 months PDs *										
- IFRS 9 (%)	0.33	4.15	2.84	0.55	0.73	0.91	0.12	0.07	0.71	0.61
- Basel (%)	0.83	3.82	4.02	1.06	0.98	1.59	0.22	0.08	1.07	1.07
ECL provisions by geography	739	224	824	1,787	424	1,050	32	9	1,515	3,302
- UK	236	221	805	1,262	361	681	17	6	1,065	2,327
- RoI	503	3	19	525	40	116	1	1	158	683
- Other Europe	-	-	-	-	21	139	12	1	173	173
- RoW	-	-	-	-	2	114	2	1	119	119
ECL provisions by stage	739	224	824	1,787	424	1,050	32	9	1,515	3,302
- Stage 1	16	36	61	113	44	103	11	9	167	280
- Stage 2	96	100	251	447	41	185	9	-	235	682
- Stage 3	627	88	512	1,227	339	762	12	-	1,113	2,340
ECL provisions coverage (%)	0.44	5.36	8.29	0.98	1.15	1.46	0.12	0.12	1.06	1.02
- Stage 1 (%)	0.01	1.27	0.85	0.07	0.13	0.17	0.04	0.12	0.13	0.10
- Stage 2 (%)	0.83	8.26	11.56	2.99	1.91	2.27	1.89	-	2.18	2.65
- Stage 3 (%)	18.99	62.86	81.53	30.15	22.36	44.51	54.55	-	34.19	31.95
ECL charge	3	26	138	167	22	134	(2)	2	156	323
ECL loss rate (%)	-	1.24	2.78	0.18	0.12	0.37	(0.01)	0.05	0.22	0.20
Amounts written-off	71	35	51	157	173	112	10	-	295	452
Other financial assets by asset quality (3)	-	-	-	-	-	710	12,490	133,781	146,981	146,981
- AQ1-AQ4	-	-	-	-	-	115	11,825	133,781	145,721	145,721
- AQ5-AQ8	-	-	-	-	-	587	659	-	1,246	1,246
- AQ9	-	-	-	-	-	8	3	-	11	11
- AQ10	-	-	-	-	-	-	3	-	3	3
Off-balance sheet	12,883	16,768	12,390	42,041	16,230	53,157	26,949	39,064	135,400	177,441
Loan commitments	12,883	16,768	12,380	42,031	15,538	50,061	25,356	39,064	130,019	172,050
Financial guarantees	-	-	10	10	692	3,096	1,593	-	5,381	5,391
Off-balance sheet by asset quality (3)	12,883	16,768	12,390	42,041	16,230	53,157	26,949	39,064	135,400	177,441
- AQ1-AQ4	11,830	309	9,455	21,594	11,983	36,462	25,443	39,049	112,937	134,531
- AQ5-AQ8	1,043	16,166	2,924	20,133	4,125	16,349	1,504	15	21,993	42,126
- AQ9	1	4	11	16	8	88	-	-	96	112
- AQ10 (4)	9	289	-	298	114	258	2	-	374	672

\*Not within the scope of EY's review report.

For the notes to this table refer to the following page.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Portfolio summary – sector analysis (Within the scope of EY's review report)

	Personal				Wholesale				Total	
	Mortgages (1) £m	Credit cards £m	Other personal £m	Total £m	Property £m	Corporate £m	FI £m	Sovereign £m	Total £m	£m
<b>31 December 2018</b>										
<b>Loans by geography</b>	165,081	4,216	9,578	178,875	36,707	72,240	25,011	6,967	140,925	319,800
- <i>UK</i>	150,233	4,112	9,117	163,462	33,855	60,657	11,611	3,089	109,212	272,674
- <i>RoI</i>	14,350	104	233	14,687	1,114	3,733	392	2,497	7,736	22,423
- <i>Other Europe</i>	102	-	67	169	1,395	3,760	5,903	1,088	12,146	12,315
- <i>RoW</i>	396	-	161	557	343	4,090	7,105	293	11,831	12,388
<b>Loans by asset quality (2,3)</b>	165,081	4,216	9,578	178,875	36,707	72,240	25,011	6,967	140,925	319,800
- AQ1-AQ4	104,989	35	1,040	106,064	16,133	22,587	22,397	6,802	67,919	173,983
- AQ5-AQ8	55,139	3,990	7,736	66,865	18,815	47,651	2,574	161	69,201	136,066
- AQ9	1,287	69	239	1,595	74	359	5	-	438	2,033
- AQ10	3,666	122	563	4,351	1,685	1,643	35	4	3,367	7,718
<b>Loans by stage</b>	165,081	4,216	9,578	178,875	36,707	72,240	25,011	6,967	140,925	319,800
- <i>Stage 1</i>	149,760	2,851	6,942	159,553	33,145	61,844	24,502	6,941	126,432	285,985
- <i>Stage 2</i>	11,655	1,243	2,073	14,971	1,877	8,753	474	22	11,126	26,097
- <i>Stage 3</i>	3,666	122	563	4,351	1,685	1,643	35	4	3,367	7,718
<b>Weighted average 12 months PDs *</b>										
- IFRS 9 (%)	0.32	4.03	2.77	0.54	0.75	0.97	0.14	0.06	0.75	0.62
- Basel (%)	0.84	3.52	3.50	1.04	0.95	1.43	0.23	0.06	1.01	1.03
<b>ECL provisions by geography</b>	839	230	728	1,797	588	941	41	1	1,571	3,368
- <i>UK</i>	237	227	707	1,171	518	615	27	1	1,161	2,332
- <i>RoI</i>	602	3	21	626	43	125	2	-	170	796
- <i>Other Europe</i>	-	-	-	-	22	53	10	-	85	85
- <i>RoW</i>	-	-	-	-	5	148	2	-	155	155
<b>ECL provisions by stage</b>	839	230	728	1,797	588	941	41	1	1,571	3,368
- <i>Stage 1</i>	23	38	61	122	43	107	12	1	163	285
- <i>Stage 2</i>	150	120	247	517	39	200	7	-	246	763
- <i>Stage 3</i>	666	72	420	1,158	506	634	22	-	1,162	2,320
<b>ECL provisions coverage (%)</b>	0.51	5.46	7.60	1.00	1.60	1.30	0.16	0.01	1.11	1.05
- <i>Stage 1 (%)</i>	0.02	1.33	0.88	0.08	0.13	0.17	0.05	0.01	0.13	0.10
- <i>Stage 2 (%)</i>	1.29	9.65	11.92	3.45	2.08	2.28	1.48	-	2.21	2.92
- <i>Stage 3 (%)</i>	18.17	59.02	74.60	26.61	30.03	38.59	62.86	-	34.51	30.06
<b>ECL charge</b>	57	87	210	354	30	13	3	(2)	44	398
<b>ECL loss rate (%)</b>	0.03	2.06	2.19	0.20	0.08	0.02	0.01	(0.03)	0.03	0.12
<b>Amounts written-off</b>	368	79	329	776	292	395	31	-	718	1,494
<b>Other financial assets by asset quality (3)</b>	-	-	-	-	105	652	8,838	134,546	144,141	144,141
- AQ1-AQ4	-	-	-	-	105	10	8,110	134,546	142,771	142,771
- AQ5-AQ8	-	-	-	-	-	642	721	-	1,363	1,363
- AQ9	-	-	-	-	-	-	4	-	4	4
- AQ10	-	-	-	-	-	-	3	-	3	3
<b>Off-balance sheet</b>	13,228	16,613	12,229	42,070	16,044	52,730	28,761	29,277	126,812	168,882
<b>Loan commitments</b>	13,228	16,613	12,229	42,070	15,335	48,569	26,684	29,276	119,864	161,934
<b>Financial guarantees</b>	-	-	-	-	709	4,161	2,077	1	6,948	6,948
<b>Off-balance sheet by asset quality (3)</b>	13,228	16,613	12,229	42,070	16,044	52,730	28,761	29,277	126,812	168,882
- AQ1-AQ4	12,116	422	9,103	21,641	11,945	36,134	27,364	29,262	104,705	126,346
- AQ5-AQ8	1,101	15,900	3,116	20,117	3,928	16,390	1,397	15	21,730	41,847
- AQ9	1	8	10	19	6	46	-	-	52	71
- AQ10 (4)	10	283	-	293	165	160	-	-	325	618

\*Not within the scope of EY's review report.

Notes:

- (1) Includes £0.6 billion (31 December 2018 – £0.7 billion) secured lending in Private Banking, in line with ECL calculation methodology.
- (2) AQ10 includes £0.7 billion (31 December 2018 – £0.6 billion) of RoI mortgages which are not currently considered defaulted for capital calculation purposes for RoI but included in Stage 3.
- (3) AQ bands are based on Basel PDs and mapping is as follows:

Internal asset quality band	Probability of default range	Indicative S&P rating
AQ1	0% - 0.034%	AAA to AA
AQ2	0.034% - 0.048%	AA to AA-
AQ3	0.048% - 0.095%	A+ to A
AQ4	0.095% - 0.381%	BBB+ to BBB-
AQ5	0.381% - 1.076%	BB+ to BB
AQ6	1.076% - 2.153%	BB- to B+
AQ7	2.153% - 6.089%	B+ to B
AQ8	6.089% - 17.222%	B- to CCC+
AQ9	17.222% - 100%	CCC to C
AQ10	100%	D

- (4) £0.3 billion (December 2018 - £0.3 billion) AQ10 Personal balances primarily relate to loan commitments, the draw down of which is effectively prohibited.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Portfolio summary – sector analysis (Within the scope of EY's review report)

#### Wholesale forbearance

The table below shows Wholesale forbearance, Heightened Monitoring and Risk of Credit Loss by sector. Personal forbearance is disclosed on the next page.

30 June 2019	FI £m	Property £m	Sovereigns £m	Other corporate £m	Total £m
Forbearance (flow)	3	284	-	1,594	1,881
Heightened Monitoring and Risk of Credit Loss	88	1,082	-	3,771	4,941
<b>31 December 2018</b>					
Forbearance (flow)	14	305	-	2,247	2,566
Heightened Monitoring and Risk of Credit Loss	100	503	16	4,145	4,764

#### Key points

- Loans by stage – The percentage of exposure in Stage 1 and Stage 2 was broadly unchanged from the 2018 year end. The reduction in value of mortgage Stage 3 exposures included a methodology change in the UK PB portfolio and also the completion of the remainder of Ulster Bank ROL's 2018 sale of non-performing loans in H1 2019.
- Weighted average 12 months PDs – In Wholesale, Basel PDs, which are based on a through-the-cycle approach, tend to be higher than point-in-time best estimate IFRS 9 PDs, which reflect the current state in the economic cycle. Basel PDs also include an element of conservatism associated with the regulatory capital framework. In Personal, the Basel PDs, which are point-in-time estimates, also tend to be higher also reflecting conservatism (conservatism is higher in mortgages than other products), and an element of default rate under-prediction in the IFRS 9 PD models. This overall default rate under-prediction was mitigated by net ECL modelling overlays of approximately £30 million at H1 2019, pending model calibrations being implemented. The IFRS 9 PD for credit cards was higher than the Basel equivalent and reflected the relative sensitivity of the IFRS 9 model to forward-looking economic drivers, as well as an IFRS 9 model over-prediction mitigated within the ECL overlay.
- ECL provision by stage and coverage – The majority of ECL by value in both Personal and Wholesale was in Stage 3. Provision coverage was progressively higher by stage reflecting the lifetime nature of losses in both Stage 2 and Stage 3. In the Personal portfolio, provision coverage was materially lower in mortgages relative to credit cards and other personal unsecured products reflecting the secured nature of the facilities. For Wholesale exposures, security and enterprise value mitigated losses in Stage 3.
- In mortgages, the reduction in Stage 1 and Stage 2 ECL was driven by the movement of exposures into Stage 3 following a regulatory driven revision to the definition of default in the Ulster Bank ROL business. The corresponding increase in Stage 3 ECL was offset by the completion of the remainder of Ulster Bank ROL's 2018 sale of non-performing loans in H1 2019. The increase in ECL and provision coverage on Other personal included the effect of a loss rate model adjustment.
- The ECL impairment charge for the half year was £323 million (20 basis points annualised), remaining below the longer term view of normalised loss rates of 30 to 40 basis points. The charge in Q2 2019 was higher than Q1, driven by a small number of significant individual charges.
- Completed Wholesale forbearance in the six months to 30 June 2019 was £1.9 billion compared to £2.6 billion for the full year 2018. Forbearance during the period was largely driven by Services, Retail & Leisure, Property and Transport sectors. The volume of customers completing forbearance was similar to 2018. However, exposure levels increased due to a small number of entities with large exposures. The portfolio continues to be monitored closely with targeted sector reviews.
- Heightened Monitoring and Risk of Credit Loss – The volume of customers classified as Heightened Monitoring or Risk of Credit Loss remained similar to December 2018 with exposure increasing from £4.8 billion to £4.9 billion in the period to 30 June 2019. The increase in exposures was driven by the Heightened Monitoring portfolio. With ongoing economic and political uncertainty, key wholesale sectors continue to be reviewed at senior credit forums with business appetite and underwriting standards tightened where necessary.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Personal portfolio (Within the scope of EY's review report)

Disclosures in the Personal portfolio section include drawn exposure (gross of provisions).

	30 June 2019					31 December 2018				
	UK PB £m	Ulster Bank Rol £m	Private Banking £m	RBSI £m	Total £m	UK PB £m	Ulster Bank Rol £m	Private Banking £m	RBSI £m	Total £m
<b>Personal lending</b>										
<b>Mortgages</b>	<b>140,929</b>	<b>14,181</b>	<b>9,474</b>	<b>2,661</b>	<b>167,245</b>	138,250	14,361	9,082	2,684	164,377
of which:										
Owner occupied	125,719	13,070	8,302	1,756	148,847	122,642	13,105	7,953	1,781	145,481
Buy-to-let	15,210	1,111	1,172	905	18,398	15,608	1,256	1,129	903	18,896
Interest only - variable	7,062	179	3,585	431	11,257	8,358	188	3,871	489	12,906
Interest only - fixed	12,632	10	4,275	226	17,143	12,229	12	3,636	187	16,064
Mixed (1)	6,088	63	2	22	6,175	6,036	68	2	18	6,124
Impairment provision (2)	215	502	5	13	735	212	602	5	16	835
<b>Other personal lending (3)</b>	<b>12,179</b>	<b>317</b>	<b>1,654</b>	<b>52</b>	<b>14,202</b>	11,633	330	1,676	55	13,694
Impairment provision (2)	1,003	22	17	1	1,043	909	25	19	1	954
<b>Total personal lending</b>	<b>153,108</b>	<b>14,498</b>	<b>11,128</b>	<b>2,713</b>	<b>181,447</b>	149,883	14,691	10,758	2,739	178,071
<b>Mortgage LTV ratios</b>										
- Total portfolio	57%	61%	56%	58%	57%	56%	62%	56%	58%	57%
- Stage 1	57%	58%	56%	57%	57%	56%	58%	56%	57%	56%
- Stage 2	59%	66%	56%	66%	60%	58%	67%	58%	55%	59%
- Stage 3	56%	74%	58%	91%	67%	55%	77%	58%	99%	69%
- Buy-to-let	53%	63%	53%	53%	54%	53%	64%	53%	53%	54%
- Stage 1	52%	60%	53%	53%	53%	53%	58%	53%	52%	53%
- Stage 2	58%	68%	58%	48%	59%	57%	72%	53%	57%	60%
- Stage 3	59%	76%	61%	67%	68%	58%	78%	68%	75%	71%
<b>Gross new mortgage lending</b>	<b>13,957</b>	<b>612</b>	<b>1,015</b>	<b>173</b>	<b>15,757</b>	29,555	1,015	1,846	353	32,769
of which:										
Owner occupied exposure	13,480	606	929	113	15,128	28,608	1,004	1,689	241	31,542
Weighted average LTV	70%	75%	64%	73%	70%	69%	73%	62%	68%	69%
Buy-to-let exposure	477	5	86	60	628	947	11	157	112	1,227
Weighted average LTV	62%	59%	57%	64%	61%	61%	57%	55%	61%	60%
Interest only variable rate	13	-	309	3	325	43	-	697	13	753
Interest only fixed rate	567	-	500	30	1,097	1,189	-	764	43	1,996
Mixed (1)	461	-	-	-	461	912	1	-	-	913
<b>Mortgage forbearance</b>										
Forbearance flow	254	169	9	3	435	446	210	11	16	683
Forbearance stock	1,289	2,429	7	12	3,737	1,338	2,645	8	17	4,008
Current	683	1,265	4	10	1,962	724	1,291	6	14	2,035
1-3 months in arrears	351	204	3	1	559	350	261	-	1	612
>3 months in arrears	255	960	-	1	1,216	264	1,093	2	3	1,362

Notes:

- (1) Includes accounts which have an interest only sub-account and a capital and interest sub-account to provide a more comprehensive view of interest only exposures.
- (2) For UK PB this excludes a non material amount of provisions held on relatively small legacy portfolios.
- (3) Other lending comprises unsecured lending except for Private Banking, which includes both secured and unsecured lending. Other Lending excludes loans that are commercial in nature.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Personal portfolio (Within the scope of EY's review report)

#### Key points

- The overall credit risk profile of the Personal portfolio, and its performance against credit risk appetite, remained stable during 2019.
- In UK PB, lending grew by £2.7 billion in the first six months with new lending partly offset by mortgage redemptions and repayments. In Ulster Bank Rol, the reduction in the mortgage portfolio was primarily driven by the completion of the remainder of Ulster Bank Rol's 2018 sale of non-performing loans in H1 2019, as well as portfolio amortisation and redemptions outweighing new lending in the first half of 2019.
- New mortgage lending was higher than in H1 2018. The existing mortgage stock and new business were closely monitored against agreed risk appetite parameters. These included loan-to-value ratios, loan-to-income ratios, buy-to-let concentrations, new-build concentrations and credit quality. Underwriting standards were maintained during the period.
- Mortgage growth was driven by the owner-occupied portfolio. New mortgages in the buy-to-let portfolio remained subdued as tax and regulatory changes in the UK affected borrower activity.
- The mortgage portfolio loan-to-value ratio increased slightly in the UK, reflecting slower UK house price growth.
- The stock of lending in Greater London and the South East was 42% of the UK PB portfolio. (31 December 2018 – 42%). The average weighted loan-to-value for these regions was 52% (31 December 2018 – 51%) compared to 57% for all regions.
- By value, the proportion of mortgages on interest only and mixed terms (capital and interest only) reduced, driven by fewer buy-to-let mortgages and low volumes of owner occupier interest only new business.
- As at 30 June 2019, 85% of customers in the UK PB mortgage portfolio were on fixed rates (47% on five-year deals). In addition, 97% of all new mortgage completions were fixed-rate deals (62% of which were five-year deals), as customers sought to minimise the impact of potential rate rises.
- The growth in unsecured lending during the first six months of 2019 was driven by the UK PB unsecured loans portfolio. The bank also reintroduced 0% balance transfer credit cards during the period which has increased credit card exposure. Unsecured new business increased 2% in the first half of 2019 (compared to H2 2018), reflecting product offering differences, pricing initiatives, and increased marketing activity.
- Unsecured credit quality improved modestly, reflecting active portfolio management with tightening implemented across loan and credit card portfolios in H1 2019 to ensure that performance of higher risk customers remained within risk appetite.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Personal portfolio (Within the scope of EY's review report)

#### Mortgage LTV distribution by stage

The table below shows gross mortgage lending and related ECL by LTV band. Mortgage lending not within the scope of IFRS 9 ECL reflected portfolios carried at fair value.

UK PB 30 June 2019	Mortgages				Total £m	Gross new lending £m	ECL provisions			ECL provisions coverage (2)						
	Not within IFRS 9 ECL scope			Of which: Gross new lending £m			Stage 1	Stage 2	Stage 3	Total (1) £m	Stage 1 %	Stage 2 %	Stage 3 %	Total %		
	Stage 1 £m	Stage 2 £m	Stage 3 £m				Stage 1 £m	Stage 2 £m	Stage 3 £m	Total (1) £m	Stage 1 %	Stage 2 %	Stage 3 %	Total %		
≤50%	46,571	3,362	511	140	50,584	2,045	1	18	63	82	-	0.5	12.3	0.2		
>50% and ≤70%	44,371	3,679	465	40	48,555	3,873	2	25	38	65	-	0.7	8.2	0.1		
>70% and ≤80%	21,454	1,702	153	8	23,317	3,578	2	12	12	26	-	0.7	8.0	0.1		
>80% and ≤90%	13,419	1,191	84	4	14,698	3,868	2	12	8	22	-	1.0	9.7	0.1		
>90% and ≤100%	3,210	241	25	5	3,481	511	1	5	3	9	-	2.0	11.8	0.2		
>100% and ≤110%	50	36	9	1	96	-	-	2	2	4	0.1	4.3	17.5	3.2		
>110% and ≤130%	57	36	9	2	104	-	-	2	2	4	0.1	5.4	24.1	3.9		
>130% and ≤150%	22	23	6	-	51	-	-	1	1	2	0.1	5.7	15.4	4.4		
>150%	4	9	4	-	17	-	-	-	1	1	0.1	5.2	30.6	10.2		
Total with LTVs	129,158	10,279	1,266	200	140,903	13,875	8	77	130	215	-	0.7	10.3	0.2		
Other	22	3	1	-	26	82	-	-	-	-	0.1	4.5	48.1	2.2		
<b>Total</b>	<b>129,180</b>	<b>10,282</b>	<b>1,267</b>	<b>200</b>	<b>140,929</b>	<b>13,957</b>	<b>8</b>	<b>77</b>	<b>130</b>	<b>215</b>	<b>-</b>	<b>0.7</b>	<b>10.3</b>	<b>0.2</b>		

  

31 December 2018	Mortgages				Total £m	Gross new lending £m	ECL provisions			ECL provisions coverage (2)						
	Not within IFRS 9 ECL scope			Of which: Gross new lending £m			Stage 1	Stage 2	Stage 3	Total (1) £m	Stage 1 %	Stage 2 %	Stage 3 %	Total %		
	Stage 1 £m	Stage 2 £m	Stage 3 £m	scope £m			Stage 1 £m	Stage 2 £m	Stage 3 £m	Total (1) £m	Stage 1 %	Stage 2 %	Stage 3 %	Total %		
≤50%	47,111	3,423	516	153	51,203	4,779	2	16	64	82	-	0.5	12.4	0.2		
>50% and ≤70%	44,037	3,632	459	49	48,177	8,535	2	23	39	64	-	0.6	8.5	0.1		
>70% and ≤80%	20,345	1,490	135	15	21,985	7,434	1	11	11	23	-	0.7	8.1	0.1		
>80% and ≤90%	12,733	1,118	81	12	13,944	7,524	2	12	8	22	-	1.1	10.0	0.2		
>90% and ≤100%	2,343	178	24	7	2,552	1,104	1	4	3	8	-	2.4	12.1	0.3		
>100% and ≤110%	57	35	8	1	101	-	-	2	1	3	0.1	4.6	14.1	2.8		
>110% and ≤130%	53	41	9	2	105	-	-	2	1	3	0.1	5.4	14.6	3.4		
>130% and ≤150%	23	23	6	-	52	-	-	1	1	2	0.1	6.2	13.4	4.3		
>150%	3	9	3	-	15	-	-	1	1	2	0.1	6.2	17.3	7.2		
Total with LTVs	126,705	9,949	1,241	239	138,134	29,376	8	72	129	209	-	0.7	10.4	0.2		
Other	96	13	4	3	116	179	-	1	2	3	-	4.7	53.5	2.6		
<b>Total</b>	<b>126,801</b>	<b>9,962</b>	<b>1,245</b>	<b>242</b>	<b>138,250</b>	<b>29,555</b>	<b>8</b>	<b>73</b>	<b>131</b>	<b>212</b>	<b>-</b>	<b>0.7</b>	<b>10.5</b>	<b>0.2</b>		

For the notes to this table refer to the following page.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Personal portfolio (Within the scope of EY's review report)

Ulster Bank R01 30 June 2019	Mortgages				ECL provisions				ECL provisions coverage (2)			
	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total £m	Stage 1 %	Stage 2 %	Stage 3 %	Total %
≤50%	4,120	333	518	4,971	2	5	79	86	-	1.4	15.2	1.7
>50% and ≤70%	3,537	252	448	4,237	1	4	70	75	-	1.4	15.6	1.8
>70% and ≤80%	1,392	134	233	1,759	1	2	48	51	-	1.5	20.6	2.9
>80% and ≤90%	1,077	121	241	1,439	1	2	61	64	0.1	1.8	25.4	4.4
>90% and ≤100%	540	97	204	841	-	2	64	66	0.1	1.9	31.1	7.8
>100% and ≤110%	247	59	158	464	-	2	52	54	0.1	2.9	33.2	11.7
>110% and ≤130%	149	44	168	361	-	1	69	70	0.2	3.2	40.9	19.5
>130% and ≤150%	19	8	51	78	-	-	25	25	0.3	5.9	49.3	33.1
>150%	8	2	21	31	-	-	11	11	0.3	10.2	52.7	36.3
Total with LTVs	11,089	1,050	2,042	14,181	5	18	479	502	0.1	1.7	23.4	3.5
31 December 2018												
≤50%	3,818	374	463	4,655	1	5	40	46	-	1.4	8.6	1.0
>50% and ≤70%	3,567	365	459	4,391	2	10	47	59	-	2.7	10.3	1.3
>70% and ≤80%	1,564	190	241	1,995	1	11	52	64	0.1	5.5	21.5	3.2
>80% and ≤90%	1,059	184	272	1,515	2	15	82	99	0.2	8.3	30.2	6.5
>90% and ≤100%	570	154	261	985	2	17	99	118	0.4	11.1	37.7	11.9
>100% and ≤110%	197	80	207	484	2	10	85	97	0.9	12.8	41.1	20.1
>110% and ≤130%	51	35	179	265	-	6	84	90	0.8	16.6	47.0	34.0
>130% and ≤150%	5	5	37	47	-	1	20	21	0.3	19.1	54.7	45.2
>150%	10	1	13	24	-	1	7	8	2.1	27.2	58.9	33.5
Total with LTVs	10,841	1,388	2,132	14,361	10	76	516	602	0.1	5.4	24.2	4.2

Notes:

(1) Excludes a non-material amount of provisions held on relatively small legacy portfolios.

(2) ECL provisions coverage is ECL provisions divided by drawn exposure.

### Key points

- The UK mortgage portfolio LTV ratio increased slightly reflecting slower UK house price growth. In Ulster Bank R01 the small changes to portfolio level LTVs were mainly driven by the implementation of an enhanced indexation methodology that improves the granularity of information at individual mortgage account level.
- ECL coverage rates increased through the LTV bands with both UK PB and Ulster Bank R01 having only limited exposures in the highest LTV bands. The relatively high coverage level in the lowest LTV band for UK PB included the effect of the modelling approach that recognised an element of expected loss on mortgages that are not subject to formal repossession activity, and also discounting expected recoveries over time. Similarly in Ulster Bank R01, the relatively high coverage level in the lower LTV bands is driven by the implementation of a new modelling methodology that applies higher losses to these LTV bands.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Personal portfolio (Within the scope of EY's review report)

UK PB Mortgage LTV distribution by region

LTV ratio value	≤50%	50% ≤80%	80% ≤100%	100% ≤150%	>150%	Total	Weighted average LTV	Other	Total	Total
	£m	£m	£m	£m	£m	£m	%	£m	£m	%
<b>30 June 2019</b>										
South East	13,336	18,064	4,099	11	-	35,510	56	8	35,518	25
Greater London	13,792	9,442	837	4	-	24,075	47	4	24,079	17
Scotland	3,591	5,987	1,188	2	-	10,768	58	1	10,769	8
North West	4,029	7,830	2,140	5	-	14,004	60	3	14,007	10
South West	4,265	7,089	1,323	7	-	12,684	57	2	12,686	9
West Midlands	2,791	5,653	1,735	5	-	10,184	61	1	10,185	7
Rest of the UK	8,780	17,807	6,856	218	17	33,678	63	7	33,685	24
<b>Total</b>	<b>50,584</b>	<b>71,872</b>	<b>18,178</b>	<b>252</b>	<b>17</b>	<b>140,903</b>	<b>57</b>	<b>26</b>	<b>140,929</b>	<b>100</b>
<b>31 December 2018</b>										
South East	14,699	17,147	2,843	8	-	34,697	53	27	34,724	25
Greater London	12,928	9,614	1,298	3	-	23,843	48	19	23,862	17
Scotland	3,205	5,612	1,844	11	-	10,672	60	8	10,680	8
North West	4,163	7,756	1,970	6	-	13,895	59	12	13,907	10
South West	4,231	6,843	1,292	8	-	12,374	57	9	12,383	9
West Midlands	3,036	5,642	1,192	4	-	9,874	58	7	9,881	7
Rest of the UK	8,942	17,548	6,056	217	16	32,779	62	34	32,813	24
<b>Total</b>	<b>51,204</b>	<b>70,162</b>	<b>16,495</b>	<b>257</b>	<b>16</b>	<b>138,134</b>	<b>56</b>	<b>116</b>	<b>138,250</b>	<b>100</b>

### Commercial real estate (CRE)

The CRE portfolio comprises exposures to entities involved in the development of, or investment in, commercial and residential properties (including house builders but excluding housing associations, construction and the building materials sub-sector). The sector is reviewed regularly at senior executive committees. Reviews include portfolio credit quality, capital consumption and control frameworks. All disclosures in the CRE section are based on current exposure (gross of provisions). Current exposure is defined as: loans; the amount drawn under a credit facility plus accrued interest; contingent obligations; the issued amount of guarantee or letter of credit; derivatives – the mark-to-market value, netted where netting agreements exist and net of legally enforceable collateral.

By geography and sub sector (1)	30 June 2019				31 December 2018			
	UK £m	Rol £m	Other £m	Total £m	UK £m	Rol £m	Other £m	Total £m
<b>Investment</b>								
Residential (2)	4,571	382	27	4,980	4,426	363	54	4,843
Office (3)	3,014	150	621	3,785	2,889	164	651	3,704
Retail (4)	5,239	52	126	5,417	5,168	40	92	5,300
Industrial (5)	2,351	54	106	2,511	2,270	51	176	2,497
Mixed/other (6)	3,340	214	38	3,592	3,221	180	123	3,524
	<b>18,515</b>	<b>852</b>	<b>918</b>	<b>20,285</b>	<b>17,974</b>	<b>798</b>	<b>1,096</b>	<b>19,868</b>
<b>Development</b>								
Residential (2)	2,639	152	20	2,811	2,715	122	124	2,961
Office (3)	118	-	-	118	192	-	-	192
Retail (4)	103	7	1	111	94	7	1	102
Industrial (5)	120	2	-	122	119	2	12	133
Mixed/other (6)	27	3	-	30	32	2	-	34
	<b>3,007</b>	<b>164</b>	<b>21</b>	<b>3,192</b>	<b>3,152</b>	<b>133</b>	<b>137</b>	<b>3,422</b>
<b>Total</b>	<b>21,522</b>	<b>1,016</b>	<b>939</b>	<b>23,477</b>	<b>21,126</b>	<b>931</b>	<b>1,233</b>	<b>23,290</b>

Notes:

- (1) Geographical splits are based on country of collateral risk.
- (2) Residential properties including houses, flats and student accommodation.
- (3) Office properties including offices in central business districts, regional headquarters and business parks.
- (4) Retail properties including high street retail, shopping centres, restaurants, bars and gyms.
- (5) Industrial properties including distribution centres, manufacturing and warehouses.
- (6) Mixed usage or other properties that do not fall within the other categories above. Mixed generally relates to a mixture of retail/office with residential.

## Appendix 1 Capital and risk management

### Credit risk: Banking activities continued

#### Commercial real estate

CRE LTV distribution by stage (Within the scope of EY's review report)

The table below shows CRE current exposure and related ECL by LTV band.

30 June 2019	Current exposure (gross of provisions) (1,2)					ECL provisions			ECL provisions coverage (4)				
	Not within IFRS 9 ECL scope (3)			Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total £m	Stage 1 %	Stage 2 %	Stage 3 %	Total %	
	Stage 1 £m	Stage 2 £m	Stage 3 £m										
≤50%	8,836	264	45	794	9,939	8	5	12	25	0.1	1.8	26.3	0.3
>50% and ≤70%	4,674	464	79	781	5,998	6	6	12	24	0.1	1.3	14.9	0.5
>70% and ≤80%	266	92	36	15	409	1	1	9	11	0.3	1.1	24.8	2.7
>80% and ≤90%	70	7	22	2	101	-	-	4	4	0.4	4.7	16.3	4.2
>90% and ≤100%	14	4	24	1	43	-	1	12	13	0.7	15.1	50.4	29.3
>100% and ≤110%	24	4	12	-	40	-	-	4	4	0.4	5.0	36.1	11.7
>110% and ≤130%	13	12	114	4	143	-	1	29	30	0.7	5.0	24.7	20.9
>130% and ≤150%	7	3	5	-	15	-	-	2	2	1.0	14.1	48.4	20.2
>150%	37	5	30	-	72	-	1	20	21	0.6	10.8	68.4	29.3
Total with LTVs	13,941	855	367	1,597	16,760	15	15	104	134	0.1	1.7	28.2	0.9
Total portfolio average LTV (%)	44%	55%	101%	48%	46%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Other (5)	2,217	283	716	309	3,525	3	4	51	58	0.1	1.6	7.1	1.8
Development (6)	2,667	194	144	187	3,192	10	3	73	86	0.4	1.7	50.8	2.9
<b>Total</b>	<b>18,824</b>	<b>1,332</b>	<b>1,227</b>	<b>2,093</b>	<b>23,477</b>	<b>28</b>	<b>22</b>	<b>228</b>	<b>278</b>	<b>0.2</b>	<b>1.6</b>	<b>18.6</b>	<b>1.3</b>

  

31 December 2018	Current exposure (gross of provisions) (1,2)					ECL provisions			ECL provisions coverage (4)				
	Not within IFRS 9 ECL scope (3)			Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total £m	Stage 1 %	Stage 2 %	Stage 3 %	Total %	
	Stage 1 £m	Stage 2 £m	Stage 3 £m										
≤50%	8,229	245	52	795	9,321	7	4	14	25	0.1	1.7	26.4	0.3
>50% and ≤70%	4,769	297	78	703	5,847	6	6	14	26	0.1	2.0	17.8	0.5
>70% and ≤80%	394	43	33	6	476	1	1	8	10	0.3	2.6	23.4	2.1
>80% and ≤90%	55	11	24	2	92	-	-	5	5	0.3	3.4	20.9	6.1
>90% and ≤100%	31	7	20	1	59	-	-	7	7	0.6	5.1	34.9	12.9
>100% and ≤110%	53	4	15	-	72	-	-	5	5	0.3	4.2	34.6	7.6
>110% and ≤130%	22	3	111	4	140	-	-	22	22	0.4	5.4	19.4	16.0
>130% and ≤150%	6	10	10	-	26	-	1	4	5	0.9	6.3	40.6	18.1
>150%	30	6	42	-	78	-	1	29	30	0.5	9.8	69.6	38.1
Total with LTVs	13,589	626	385	1,511	16,111	14	13	108	135	0.1	2.1	27.9	0.9
Total portfolio average LTV (%)	-	1	1	-	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Other (5)	2,655	133	784	185	3,757	4	5	50	59	0.2	4.0	6.3	1.7
Development (6)	2,865	205	178	174	3,422	11	3	80	94	0.4	1.6	44.8	2.9
<b>Total</b>	<b>19,109</b>	<b>964</b>	<b>1,347</b>	<b>1,870</b>	<b>23,290</b>	<b>29</b>	<b>21</b>	<b>238</b>	<b>288</b>	<b>0.2</b>	<b>2.3</b>	<b>17.6</b>	<b>1.3</b>

Notes:

- (1) Comprises gross lending, interest rate hedging derivatives and other assets carried at fair value that are managed as part of the overall CRE portfolio.
- (2) The exposure in Stage 3 mainly related to legacy assets.
- (3) Includes exposures relating to non-modelled portfolios and other exposures carried at fair value, including derivatives.
- (4) ECL provisions coverage is ECL provisions divided by current exposure.
- (5) Relates mainly to business banking, rate risk management products and unsecured corporate lending. The low Stage 3 ECL provisions coverage was driven by a single large exposure, which has been written down to the expected recoverable amount.
- (6) Related to the development of commercial and residential properties. LTV is not a meaningful measure for this type of lending activity.

#### Key points

- Overall – The majority of the CRE portfolio was managed in the UK within Commercial Banking and Private Banking. Business appetite and strategy remain aligned across the segments.
- 2019 trends – The portfolio remained broadly unchanged in size and composition, although activity in the commercial property market in H1 2019 has been slower than in previous years. While the office and industrial sub-sectors have remained relatively resilient to date, rents and values in the retail sub-sector and market liquidity have declined significantly. The risk of a disorderly exit from the EU persists. The mainstream residential CRE market remained resilient, supported by high employment and a competitive mortgage market. However, liquidity has been markedly reduced for higher value homes and values in London reduced slightly from recent highs. The build to rent market continues to grow, backed by very strong demand from institutional investors.
- Credit quality – Despite the challenges in the sub-sector, the CRE retail portfolio had a low default rate, with a limited number of new defaults. The sub-sector was monitored on a regular basis and credit quality was in line with the wider CRE portfolio.
- Risk appetite – Lending criteria for commercial real estate are considered conservative, with lower leverage required for new London office originations, in addition to parts of the retail sector.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Flow statements (Within the scope of EY's review report)

The flow statements that follow show the main ECL and related income statement movements. They also show the changes in ECL as well as the changes in related financial assets used in determining ECL. Due to differences in scope, exposures in this section may therefore differ from those reported in other tables in the credit risk section, principally in relation to exposures in Stage 1 and Stage 2. These differences do not have a material ECL impact. Other points to note:

- Financial assets presented in the flow statements include treasury liquidity portfolios, comprising balances at central banks and debt securities, as well as loans. Both modelled and non-modelled portfolios are included.
- Stage transfers (for example, exposures moving from Stage 1 to Stage 2) are a key feature of ECL movements, with the net re-measurement cost of transitioning to a worse stage being a primary driver of income statement charges. Similarly there is an ECL benefit for accounts improving stage.
- Changes in risk parameters shows the reassessment of the ECL within a given stage, including any ECL overlays and residual income statement gains or losses at the point of write-off or accounting write-down.
- Other (P&L only items) includes any subsequent changes in the value of written-down assets (for example, fortuitous recoveries) along with other direct write-off items such as direct recovery costs. Other (P&L only items) affects the income statement but does not affect balance sheet ECL movements.
- Amounts written-off – represent the gross asset written-down against accounts with ECL, including the net asset write-down for any debt sale activity.
- There were small ECL flows from Stage 3 to Stage 1. This does not however indicate that accounts returned from Stage 3 to Stage 1 directly. On a similar basis, there were flows from Stage 1 to Stage 3 including transfers due to unexpected default events. The small number of write-offs in Stage 1 and Stage 2 reflect the effect of portfolio debt sales and also staging at the start of the analysis period.
- The impact of model changes during H1 2019 was not material at a RBS Group-wide level or in the portfolios disclosed below.
- Reporting enhancements since 31 December 2018 now mean all movements are captured monthly and aggregated. Previously, for example, the main Personal portfolios were prepared on a six month movement basis.

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets £m	ECL £m						
<b>Group total</b>								
<b>At 1 January 2019</b>	422,541	297	27,360	772	7,796	2,327	457,697	3,396
Currency translation and other adjustments	227	(2)	(2)	(2)	97	-	322	(4)
Transfers from Stage 1 to Stage 2	(13,427)	(54)	13,427	54	-	-	-	-
Transfers from Stage 2 to Stage 1	10,781	167	(10,781)	(167)	-	-	-	-
Transfers to Stage 3	(216)	(3)	(1,663)	(136)	1,879	139	-	-
Transfers from Stage 3	241	15	727	64	(968)	(79)	-	-
Net re-measurement of ECL on stage transfer		(140)		279		307		446
Changes in risk parameters (model inputs)		(37)		(138)		172		(3)
Other changes in net exposure	(7,654)	37	(2,257)	(40)	(892)	(32)	(10,803)	(35)
Other (P&L only items)		-		-		(85)		(85)
<b>Income statement (releases)/charges</b>		(140)		101		362		323
Amounts written-off	-	-	(4)	(4)	(448)	(448)	(452)	(452)
Other movements		-		-		(46)		(46)
<b>At 30 June 2019</b>	412,493	280	26,807	682	7,464	2,340	446,764	3,302
<b>Net carrying amount</b>	412,213		26,125		5,124		443,462	

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Flow statements (Within the scope of EY's review report)

The following flow statements show the material portfolios underpinning the Group flow statements.

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets £m	ECL £m	Financial assets £m	ECL £m	Financial assets £m	ECL £m	Financial assets £m	ECL £m
<b>UK PB - mortgages</b>								
<b>At 1 January 2019</b>	<b>127,671</b>	<b>10</b>	<b>10,241</b>	<b>74</b>	<b>1,216</b>	<b>132</b>	<b>139,128</b>	<b>216</b>
Transfers from Stage 1 to Stage 2	(3,535)	(1)	3,535	1	-	-	-	-
Transfers from Stage 2 to Stage 1	2,507	8	(2,507)	(8)	-	-	-	-
Transfers to Stage 3	(8)	-	(324)	(11)	332	11	-	-
Transfers from Stage 3	12	1	188	15	(200)	(16)	-	-
Net re-measurement of ECL on stage transfer		(8)		15		9		16
Changes in risk parameters (model inputs)		-		(2)		32		30
Other changes in net exposure	1,559	(1)	(742)	(6)	(119)	(7)	698	(14)
Other (P&L only items)		-		-		(14)		(14)
<b>Income statement (releases)/charges</b>		(9)		7		20		18
Amounts written-off	-	-	(1)	(1)	(11)	(11)	(12)	(12)
Other movements		-		-		(18)		(18)
<b>At 30 June 2019</b>	<b>128,206</b>	<b>9</b>	<b>10,390</b>	<b>77</b>	<b>1,218</b>	<b>132</b>	<b>139,814</b>	<b>218</b>
<b>Net carrying amount</b>	<b>128,197</b>		<b>10,313</b>		<b>1,086</b>		<b>139,596</b>	

#### Key points

- ECL remained broadly stable across all stages.
- ECL transfers from Stage 3 back to Stage 1 and Stage 2 were higher than those in unsecured lending, due to the higher cure activity typically seen in mortgages.
- The increase in Stage 3 ECL changes in risk parameters reflected the monthly assessment of the loss requirement, capturing underlying portfolio movements.
- Write-off occurs once the repossessed property has been sold and there is a residual shortfall balance remaining outstanding. Write-off would typically be within five years from default but can be longer.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Flow statements (Within the scope of EY's review report)

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets £m	ECL £m						
<b>UK PB - credit cards</b>								
<b>At 1 January 2019</b>	2,632	36	1,226	118	106	71	3,964	225
Transfers from Stage 1 to Stage 2	(617)	(11)	617	11	-	-	-	-
Transfers from Stage 2 to Stage 1	522	35	(522)	(35)	-	-	-	-
Transfers to Stage 3	(10)	-	(65)	(21)	75	21	-	-
Transfers from Stage 3	-	-	5	3	(5)	(3)	-	-
Net re-measurement of ECL on stage transfer		(25)		73		28	-	76
Changes in risk parameters (model inputs)		(10)		(51)		8	-	(53)
Other changes in net exposure	23	9	(64)	-	(15)	(1)	(56)	8
Other (P&L only items)		-		-		(5)		(5)
<b>Income statement (releases)/charges</b>		(26)		22		30		26
Amounts written off	-	-	-	-	(35)	(35)	(35)	(35)
Other movements	-	-	-	-		(3)		(3)
<b>At 30 June 2019</b>	2,550	34	1,197	98	126	86	3,873	218
<b>Net carrying amount</b>	2,516		1,099		40		3,655	

#### Key points

- Overall ECL reduced slightly over the period. This was mainly due to lower Stage 2 ECL, reflecting a recalibration of the modelled loss rate to align to observed experience. The increase in Stage 3 exposures and ECL reflected the impact of business-as-usual default flows, which have been broadly stable in 2019.
- The portfolio continued to experience cash recoveries after write-off which are reported in other (P&L only items). These benefited the income statement without affecting ECL. The level has reduced compared to prior years reflecting the debt sales executed in 2018.
- Charge-off (analogous to partial write-off) typically occurs after 12 missed payments.

#### UK PB - Other personal unsecured

<b>At 1 January 2019</b>	5,073	54	1,970	239	495	394	7,538	687
Currency translation and other adjustments	217	-	10	-	6	2	233	2
Transfers from Stage 1 to Stage 2	(1,213)	(20)	1,213	20	-	-	-	-
Transfers from Stage 2 to Stage 1	593	40	(593)	(40)	-	-	-	-
Transfers to Stage 3	(6)	-	(161)	(56)	167	56	-	-
Transfers from Stage 3	2	-	18	5	(20)	(5)	-	-
Net re-measurement of ECL on stage transfer		(31)		114		48	-	131
Changes in risk parameters (model inputs)		2		(23)		56	-	35
Other changes in net exposure	736	11	(296)	(17)	(18)	(4)	422	(10)
Other (P&L only items)		-		-		(19)		(19)
<b>Income statement (releases)/charges</b>		(18)		74		81		137
Amounts written off	-	-	-	-	(43)	(43)	(43)	(43)
Other movements	-	-	-	-		(12)		(12)
<b>At 30 June 2019</b>	5,402	56	2,161	242	587	492	8,150	790
<b>Net carrying amount</b>	5,346		1,919		95		7,360	

#### Key points

- The overall increase in ECL was driven by Stage 3 exposures which included the effect of a loss rate model adjustment. Furthermore, the value of new defaults was higher than write-offs and customer debt repayments, and unlike in 2018, there were no debt sales in H1 2019.
- There was a modest increase in the rate of default over the last six months from a low level addressed through the tightening of risk appetite.
- Stage 1 and Stage 2 ECL remained broadly stable.
- The portfolio continued to experience cash recoveries after write-off which are reported in other (P&L only items). These benefited the income statement without affecting ECL. The level has reduced compared to prior years reflecting the debt sales executed in 2018.
- Write-off occurs once recovery activity with the customer has been concluded and there are no further recoveries expected, but no later than six years after default.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Flow statements (Within the scope of EY's review report)

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets £m	ECL £m	Financial assets £m	ECL £m	Financial assets £m	ECL £m	Financial assets £m	ECL £m
<b>Ulster Bank Roi - mortgages</b>								
<b>At 1 January 2019</b>	<b>10,782</b>	<b>11</b>	<b>1,394</b>	<b>75</b>	<b>2,137</b>	<b>516</b>	<b>14,313</b>	<b>602</b>
Currency translation and other adjustments	4	(1)	(8)	(2)	(2)	(1)	(6)	(4)
Transfers from Stage 1 to Stage 2	(739)	(3)	739	3	-	-	-	-
Transfers from Stage 2 to Stage 1	889	14	(889)	(14)	-	-	-	-
Transfers to Stage 3	(35)	(2)	(236)	(25)	271	27	-	-
Transfers from Stage 3	8	-	121	22	(129)	(22)	-	-
Net re-measurement of ECL on stage transfer		(11)		1		-		(10)
Changes in risk parameters (model inputs)		(4)		(40)		23		(21)
Other changes in net exposure	96	1	(64)	-	(177)	(2)	(145)	(1)
Other (P&L only items)		-		-		20		20
<b>Income statement (releases)/charges</b>		(14)		(39)		41		(12)
Amounts written off	-	-	(2)	(2)	(55)	(55)	(57)	(57)
Other movements		-		-		(7)		(7)
<b>At 30 June 2019</b>	<b>11,005</b>	<b>5</b>	<b>1,055</b>	<b>18</b>	<b>2,045</b>	<b>479</b>	<b>14,105</b>	<b>502</b>
<b>Net carrying amount</b>	<b>11,000</b>		<b>1,037</b>		<b>1,566</b>		<b>13,603</b>	

#### Key points

- The overall ECL reduction reflected the completion of the remainder of Ulster Bank Roi's 2018 sale of non-performing loans in H1 2019 and ongoing improvements in underlying portfolio performance.
- The transfers into Stage 3 were reflective of the implementation of an enhanced Stage 3 definition, with £230 million of exposures re-classified as Stage 3 assets under the new definition.
- The reduction in Stage 2 ECL was driven by the implementation of the enhanced Stage 3 definition and the re-allocation of post-model adjustments to Stage 3 assets.
- Write-off generally occurs once the repossessed property has been sold and there is a residual shortfall balance remaining outstanding which has been deemed irrecoverable. There is no set time period within which write-offs can occur.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Flow statements (Within the scope of EY's review report)

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets £m	ECL £m						
<b>Commercial Banking - excluding business banking</b>								
At 1 January 2019	81,485	108	9,393	155	2,358	785	93,236	1,048
Currency translation and other adjustments	86	(3)	(10)	1	94	(3)	170	(5)
Inter-Group transfers	(319)	-	19	-	(1)	13	(301)	13
Transfers from Stage 1 to Stage 2	(5,804)	(10)	5,804	10	-	-	-	-
Transfers from Stage 2 to Stage 1	4,801	43	(4,801)	(43)	-	-	-	-
Transfers to Stage 3	(107)	-	(716)	(11)	823	11	-	-
Transfers from Stage 3	189	10	363	8	(552)	(18)	-	-
Net re-measurement of ECL on stage transfer		(43)		41		185		183
Changes in risk parameters (model inputs)		(5)		(1)		22		16
Other changes in net exposure	2,453	6	(982)	(7)	(403)	1	1,068	-
Other (P&L only items)		-		-		(15)		(15)
<b>Income statement (releases)/charges</b>		(42)		33		193		184
Amounts written off	-	-	-	-	(247)	(247)	(247)	(247)
Other movements	-	-	-	-	-	-	-	-
Unwinding of discount	-	-	-	-	-	(3)	-	(3)
<b>At 30 June 2019</b>	<b>82,784</b>	<b>106</b>	<b>9,070</b>	<b>153</b>	<b>2,072</b>	<b>746</b>	<b>93,926</b>	<b>1,005</b>
<b>Net carrying amount</b>	<b>82,678</b>		<b>8,917</b>		<b>1,326</b>		<b>92,921</b>	

#### Key points

- ECL decreased with write-offs exceeding the level of impairment charges on new into default cases.
- Stage 1 and Stage 2 ECL remained largely unchanged during H1 2019. Changes to risk parameters in Stage 1 and Stage 2 largely reflected improvements in underlying credit risk metrics which were partially offset by regular updates to certain underlying models.
- Growth in Stage 1 assets represented new business during the period. Stage 2 balances reduced as new transfers-in were offset by repayments and loans transferring to Stage 1.
- Stage 3 income statement charges increased during the period compared to 2018. This was due to a small number of individually significant impairment charges which also impacted the transfers to Stage 3 during the period.

#### Commercial - business banking

<b>At 1 January 2019</b>	<b>6,303</b>	<b>22</b>	<b>897</b>	<b>43</b>	<b>235</b>	<b>153</b>	<b>7,435</b>	<b>218</b>
Currency translation and other adjustments	-	-	1	-	-	-	1	-
Transfers from Stage 1 to Stage 2	(483)	(3)	483	3	-	-	-	-
Transfers from Stage 2 to Stage 1	353	10	(353)	(10)	-	-	-	-
Transfers to Stage 3	(9)	-	(70)	(10)	79	10	-	-
Transfers from Stage 3	4	1	13	3	(17)	(4)	-	-
Net re-measurement of ECL on stage transfer		(9)		25		26		42
Changes in risk parameters (model inputs)		(6)		(16)		28		6
Other changes in net exposure	199	2	(130)	(4)	(33)	(5)	36	(7)
Other (P&L only items)		-		-		(21)		(21)
<b>Income statement (releases)/charges</b>		(13)		5		28		20
Amounts written off	-	-	-	-	(29)	(29)	(29)	(29)
Other movements	-	-	-	-	-	(2)	-	(2)
<b>At 30 June 2019</b>	<b>6,367</b>	<b>17</b>	<b>841</b>	<b>34</b>	<b>235</b>	<b>177</b>	<b>7,443</b>	<b>228</b>
<b>Net carrying amount</b>	<b>6,350</b>		<b>807</b>		<b>58</b>		<b>7,215</b>	

#### Key points

- The overall increase in ECL was driven by Stage 3 including the effect of a loss rate model adjustment. The reduction in Stage 1 and Stage 2 ECL was driven by calibrations to the ECL models.
- The flow of new defaults in the period increased slightly compared to 2018. This increase reflected an uplift in default rates within the Business Banking portfolio (in particular for low value, unsecured lending, representing 14% of Business Banking stock), which has been addressed through a tightening of risk appetite.
- The portfolio continues to benefit from cash recoveries post write-off, which are reported as other (P&L only items).
- Write-off occurs once recovery activity with the customer has been concluded and there are no further recoveries expected, but no later than five years after default.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Flow statements (Within the scope of EY's review report)

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets £m	ECL £m	Financial assets £m	ECL £m	Financial assets £m	ECL £m	Financial assets £m	ECL £m
<b>NatWest Markets (1)</b>								
<b>At 1 January 2019</b>	<b>32,758</b>	<b>7</b>	<b>732</b>	<b>14</b>	<b>708</b>	<b>112</b>	<b>34,198</b>	<b>133</b>
Currency translation and other adjustments	38	1	(2)	-	-	(1)	36	-
Inter-Group transfers	(57)	-	8	-	1	(13)	(48)	(13)
Transfers from Stage 1 to Stage 2	(190)	-	190	-	-	-	-	-
Transfers from Stage 2 to Stage 1	281	2	(281)	(2)	-	-	-	-
Net re-measurement of ECL on stage transfer		(2)		1		-		(1)
Changes in risk parameters (model inputs)		(2)		(1)		(6)		(9)
Other changes in net exposure	1,204	2	(193)	(2)	1	-	1,012	-
Other (P&L only items)		-		-		(26)		(26)
<b>Income statement releases</b>		(2)		(2)		(32)		(36)
Amounts written-off	-	-	-	-	(11)	(11)	(11)	(11)
Other movements		-		-		-		-
<b>At 30 June 2019</b>	<b>34,034</b>	<b>8</b>	<b>454</b>	<b>10</b>	<b>699</b>	<b>81</b>	<b>35,187</b>	<b>99</b>
<b>Net carrying amount</b>	<b>34,026</b>		<b>444</b>		<b>618</b>		<b>35,088</b>	

Note:

(1) Reflects NatWest Markets segment and includes NWM N.V..

### Key points

- Stage 3 financial assets included £193 million (31 December 2018 - £166 million) purchased or originated credit impaired (POCI) assets. No ECL impairment was held on these positions and a £27 million impairment recovery was recognised on these POCI assets during H1 (included in other (P&L only items)).
- Stage 1 and Stage 2 changes to risk parameters reflected an improvement in underlying credit risk metrics.
- The increase in Stage 1 exposure was due to a combination of new transactions and increased short-term placements with governments and central banks following changes made for ring-fencing.

### Private Banking

<b>At 1 January 2019</b>	<b>13,950</b>	<b>14</b>	<b>519</b>	<b>10</b>	<b>232</b>	<b>19</b>	<b>14,701</b>	<b>43</b>
Currency translation and other adjustments	(3)	-	-	(1)	-	1	(3)	-
Transfers from Stage 1 to Stage 2	(284)	(1)	284	1	-	-	-	-
Transfers from Stage 2 to Stage 1	304	4	(304)	(4)	-	-	-	-
Transfers to Stage 3	(25)	-	(48)	-	73	-	-	-
Transfers from Stage 3	7	-	1	4	(8)	(4)	-	-
Net re-measurement of ECL on stage transfer		(3)		1		-		(2)
Changes in risk parameters (model inputs)		(3)		(1)		6		2
Other changes in net exposure	532	1	(33)	(1)	(86)	(3)	413	(3)
Other (P&L only items)		-		-		-		-
<b>Income statement (releases)/charges</b>		(5)		(1)		3		(3)
Amounts written off	-		-	(1)	(1)	(1)	(1)	(1)
Unwinding of discount	-		-	-	-	-	-	-
<b>At 30 June 2019</b>	<b>14,481</b>	<b>12</b>	<b>419</b>	<b>9</b>	<b>210</b>	<b>19</b>	<b>15,110</b>	<b>40</b>
<b>Net carrying amount</b>	<b>14,469</b>		<b>410</b>		<b>191</b>		<b>15,070</b>	

### Key points

- ECL reduced marginally due to an improvement in underlying Stage 1 and Stage 2 credit quality.
- Stage 1 exposure increased during the period reflecting growth in mortgages with minimal ECL impact due to high credit quality. The reduction in Stage 2 exposure was a result of both repayment of debt and the transfer of assets to Stage 1.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Flow statements (Within the scope of EY's review report)

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets £m	ECL £m						
<b>RBS International</b>								
<b>At 1 January 2019</b>	<b>26,749</b>	<b>6</b>	<b>276</b>	<b>4</b>	<b>95</b>	<b>17</b>	<b>27,120</b>	<b>27</b>
Currency translation and other adjustments	(55)	-	(1)	-	1	-	(55)	-
Inter-Group transfers	(598)	-	(27)	(1)	-	-	(625)	(1)
Transfers from Stage 1 to Stage 2	(342)	(2)	342	2	-	-	-	-
Transfers from Stage 2 to Stage 1	276	3	(276)	(3)	-	-	-	-
Transfers to Stage 3	(10)	-	(17)	-	27	-	-	-
Transfers from Stage 3	8	-	6	-	(14)	-	-	-
Net re-measurement of ECL on stage transfer		(3)		1		-		(2)
Changes in risk parameters (model inputs)		(1)		-		3		2
Other changes in net exposure	1,424	1	132	(1)	(14)	(2)	1,542	(2)
Other (P&L only items)		-		-		(1)		(1)
<b>Income statement releases</b>		(3)		-		-		(3)
Amounts written off	-	-	-	-	(2)	(2)	(2)	(2)
Other movements		-		-		-		-
<b>At 30 June 2019</b>	<b>27,452</b>	<b>4</b>	<b>435</b>	<b>2</b>	<b>93</b>	<b>16</b>	<b>27,980</b>	<b>22</b>
<b>Net carrying amount</b>	<b>27,448</b>		<b>433</b>		<b>77</b>		<b>27,958</b>	

#### Key points

- The level of ECL reduced in all stages during the period.
- In Stage 1, the increase in exposure was partly due to new lending, but mainly due to the management of a liquidity portfolio across banks and sovereign bond holdings, with low credit risk and minimal ECL.
- The increase in Stage 2 exposure was driven by a combination of flows from Stage 1 and balance increases on a small number of individual exposures in the Wholesale portfolio where credit quality deteriorated in the period. Increases in Stage 2 exposures were largely limited to specific sectors.
- Stage 2 ECL reduced in the period because exposure transferring in carried lower ECL than exposure that transferred from Stage 2.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

#### Stage 2 decomposition – arrears status and contributing factors

The tables below show Stage 2 decomposition for the Personal and Wholesale portfolios.

30 June 2019	UK mortgages		RoL mortgages		Other mortgages		Credit cards		Other		Total	
	Loans	ECL	Loans	ECL	Loans	ECL	Loans	ECL	Loans	ECL	Loans	ECL
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
<b>Personal</b>												
Currently in arrears (>30 DPD)	529	12	31	2	-	-	15	5	91	19	666	38
Currently up-to-date	9,973	66	1,016	16	1	-	1,195	95	2,080	232	14,265	409
- PD deterioration	4,058	54	338	11	-	-	765	73	1,324	182	6,485	320
- Up-to-date, PD persistence	1,365	3	40	-	-	-	327	14	465	28	2,197	45
- Other driver (adverse credit, forbearance etc)	4,550	9	638	5	1	-	103	8	291	22	5,583	44
<b>Total Stage 2</b>	<b>10,502</b>	<b>78</b>	<b>1,047</b>	<b>18</b>	<b>1</b>	<b>-</b>	<b>1,210</b>	<b>100</b>	<b>2,171</b>	<b>251</b>	<b>14,931</b>	<b>447</b>
<b>31 December 2018</b>												
<b>Personal</b>												
Currently in arrears (>30 DPD)	658	10	90	10	3	-	17	6	88	22	856	48
Currently up-to-date	9,612	64	1,292	66	-	-	1,226	114	1,985	225	14,115	469
- PD deterioration	3,855	54	680	44	-	-	778	85	1,255	176	6,568	359
- Up-to-date, PD persistence	1,448	5	54	1	-	-	337	17	440	26	2,279	49
- Other driver (adverse credit, forbearance etc)	4,309	5	558	21	-	-	111	12	290	23	5,268	61
<b>Total Stage 2</b>	<b>10,270</b>	<b>74</b>	<b>1,382</b>	<b>76</b>	<b>3</b>	<b>-</b>	<b>1,243</b>	<b>120</b>	<b>2,073</b>	<b>247</b>	<b>14,971</b>	<b>517</b>

#### Key points

- ECL coverage remained higher for accounts that are more than 30 days past due. Also in line with expectations, accounts exhibiting PD deterioration have a higher ECL coverage than accounts in Stage 2 for other reasons.
- The ECL reduction in the Ulster Bank RoL mortgages portfolio reflected the movement of exposures into Stage 3 following a regulatory driven revision to the definition of default in that business.

30 June 2019	Property		Corporate		FI		Other		Total		
	Loans	ECL	Loans	ECL	Loans	ECL	Loans	ECL	Loans	ECL	
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	
<b>Wholesale</b>											
Currently in arrears (>30 DPD)	182	7	316	6	1	-	-	-	-	499	13
Currently up-to-date	1,968	34	7,826	179	475	9	6	-	10,275	222	
- PD deterioration	865	21	4,712	123	384	7	4	-	5,965	151	
- Up-to-date, PD persistence	45	1	152	3	2	-	-	-	199	4	
- Other driver (forbearance, RoCL etc)	1,058	12	2,962	53	89	2	2	-	4,111	67	
<b>Total Stage 2</b>	<b>2,150</b>	<b>41</b>	<b>8,142</b>	<b>185</b>	<b>476</b>	<b>9</b>	<b>6</b>	<b>-</b>	<b>10,774</b>	<b>235</b>	
<b>31 December 2018</b>											
<b>Wholesale</b>											
Currently in arrears (>30 DPD)	255	7	315	5	1	-	-	-	571	12	
Currently up-to-date	1,622	32	8,438	195	473	7	22	-	10,555	234	
- PD deterioration	924	23	5,564	138	281	6	8	-	6,777	167	
- Up-to-date, PD persistence	57	1	170	5	4	-	-	-	231	6	
- Other driver (forbearance, RoCL etc)	641	8	2,704	52	188	1	14	-	3,547	61	
<b>Total Stage 2</b>	<b>1,877</b>	<b>39</b>	<b>8,753</b>	<b>200</b>	<b>474</b>	<b>7</b>	<b>22</b>	<b>-</b>	<b>11,126</b>	<b>246</b>	

#### Key points

- The ECL coverage was broadly consistent in total. Coverage can, however, vary across categories or sectors reflecting the individual characteristics of the customer and exposure type.
- The reduction in Stage 2 exposure was primarily due to improvements in PDs in the corporate portfolio. An increase in the RoCL portfolio, driven by a small number of large cases, increased the other driver category.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Stage 2 decomposition by a significant increase in credit risk trigger

30 June 2019	UK mortgages		Roi mortgages		Other mortgages		Credit cards		Other		Total	
	£m	%	£m	%	£m	%	£m	%	£m	%	£m	%
<b>Personal trigger (1)</b>												
PD movement	4,458	42.5	362	34.5	-	-	780	64.5	1,379	63.5	6,979	46.7
PD persistence	1,366	13.0	40	3.8	-	-	328	27.1	467	21.5	2,201	14.7
Adverse credit bureau recorded with credit reference agency	3,124	29.7	-	-	-	-	58	4.8	96	4.4	3,278	22.0
Forbearance support provided	189	1.8	4	0.4	-	-	-	-	13	0.6	206	1.4
Customers in collections	147	1.4	96	9.2	-	-	3	0.2	34	1.6	280	1.9
Other reasons (2)	1,110	10.6	545	52.1	1	100	41	3.4	157	7.2	1,854	12.4
Days past due >30	108	1.0	-	-	-	-	-	-	25	1.2	133	0.9
	<b>10,502</b>	<b>100</b>	<b>1,047</b>	<b>100</b>	<b>1</b>	<b>100</b>	<b>1,210</b>	<b>100</b>	<b>2,171</b>	<b>100</b>	<b>14,931</b>	<b>100</b>
<b>31 December 2018</b>												
<b>Personal trigger (1)</b>												
PD movement	4,273	41.6	767	55.6	-	-	793	63.8	1,307	63.0	7,140	47.7
PD persistence	1,450	14.1	54	3.9	-	-	338	27.2	440	21.2	2,282	15.2
Adverse credit bureau recorded with credit reference agency	2,996	29.2	-	-	-	-	61	4.9	101	4.9	3,158	21.1
Forbearance support provided	206	2.0	2	0.1	-	-	-	-	13	0.6	221	1.5
Customers in collections	144	1.4	57	4.1	-	-	5	0.4	36	1.7	242	1.6
Other reasons (2)	982	9.6	502	36.3	-	-	46	3.7	151	7.3	1,681	11.2
Days past due >30	219	2.1	-	-	3	100	-	-	25	1.2	247	1.6
	<b>10,270</b>	<b>100</b>	<b>1,382</b>	<b>100</b>	<b>3</b>	<b>100</b>	<b>1,243</b>	<b>100</b>	<b>2,073</b>	<b>100</b>	<b>14,971</b>	<b>100</b>

### Key point

- PD remained the primary driver of credit deterioration, which including persistence, accounted for the majority of movements to Stage 2. High risk back-stops, for example, forbearance and adverse credit bureau, provide additional valuable discrimination particularly in mortgages.

30 June 2019	Property		Corporate		FI		Other		Total	
	£m	%	£m	%	£m	%	£m	%	£m	%
<b>Wholesale trigger (1)</b>										
PD movement	883	40.9	4,756	58.3	384	80.7	4	66.7	6,027	55.9
PD persistence	45	2.1	153	1.9	2	0.4	-	-	200	1.9
Risk of Credit Loss	767	35.7	2,162	26.6	66	13.9	-	-	2,995	27.8
Forbearance support provided	62	2.9	159	2.0	-	-	-	-	221	2.1
Customers in collections	10	0.5	44	0.5	-	-	-	-	54	0.5
Other reasons (3)	227	10.6	634	7.8	23	4.8	2	33.3	886	8.2
Days past due >30	156	7.3	234	2.9	1	0.2	-	-	391	3.6
	<b>2,150</b>	<b>100</b>	<b>8,142</b>	<b>100</b>	<b>476</b>	<b>100</b>	<b>6</b>	<b>100</b>	<b>10,774</b>	<b>100</b>
<b>31 December 2018</b>										
<b>Wholesale trigger (1)</b>										
PD movement	940	50.1	5,617	64.2	281	59.3	8	36.4	6,845	61.5
PD persistence	57	3.0	171	2.0	4	0.8	-	-	232	2.1
Risk of Credit Loss	321	17.1	1,964	22.4	103	21.7	-	-	2,388	21.5
Forbearance support provided	65	3.5	209	2.4	-	-	-	-	274	2.5
Customers in collections	9	0.5	43	0.5	-	-	-	-	52	0.5
Other reasons (3)	251	13.4	525	6.0	85	17.9	14	63.6	875	7.9
Days past due >30	234	12.5	224	2.6	1	0.2	-	-	460	4.1
	<b>1,877</b>	<b>100</b>	<b>8,753</b>	<b>100</b>	<b>474</b>	<b>100</b>	<b>22</b>	<b>100</b>	<b>11,126</b>	<b>100</b>

### Notes:

- The table is produced on a hierarchical basis from top to bottom, for example, accounts with PD deterioration may also trigger backstop(s) but are only reported under PD deterioration.
- Includes customers that have accessed payday lending, interest only mortgages past end of term, a small number of mortgage customers on a highly flexible mortgage significantly behind outline repayment plan and customers breaching risk appetite thresholds for new business acquisition. In the Roi mortgage portfolio, this reflected customers who remained in probation following the conclusion of forbearance support, exposures breaching risk appetite thresholds for new business acquisition and exposures classified as non-performing exposures under European Banking Authority requirements.
- Includes customers where a PD assessment cannot be undertaken due to missing PDs.

### Key point

- PD remained the primary driver of credit deterioration, which including persistence, accounted for 58% of Stage 2 exposure. The Risk of Credit Loss framework accounted for a further 28%, an increase from 22% at 31 December 2018, driven by a small number of large cases.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

#### Stage 3 vintage analysis

The table below shows estimated vintage analysis of the material Stage 3 portfolios totalling 90% of the Stage 3 loans of £7.3 billion.

	30 June 2019			31 December 2018		
	UK PB mortgages	Ulster Bank Rol mortgages	Wholesale	UK PB mortgages	Ulster Bank Rol mortgages	Wholesale
<b>Stage 3 loans (£bn)</b>	<b>1.3</b>	<b>2.0</b>	<b>3.2</b>	<b>1.2</b>	<b>2.1</b>	<b>3.4</b>
Vintage (time in default):						
<1 year	28%	16%	30%	26%	7%	22%
1-3 years	22%	27%	13%	21%	12%	19%
3-5 years	12%	12%	8%	14%	14%	9%
5-10 years	32%	41%	49%	35%	63%	50%
>10 years	6%	4%	-	4%	4%	-
	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

#### Key points

- Mortgages – The proportion of the Stage 3 defaulted population which have been in default for over five years reflected RBS's support for customers in financial difficulty. When customers continue to engage constructively with RBS making regular payments, RBS continues to support them. RBS's provisioning approach can retain customers in Stage 3 for a lifetime loss provisioning calculation even when their arrears status reverts to below 90 days past due.
- Wholesale – The value of Stage 3 loans in default for 5-10 years mainly reflects customers in a protracted formal insolvency process or subject to litigation or a complaints process.

#### Asset quality (Within the scope of EY's review report)

The table below shows asset quality bands of gross loans and ECL by stage for the Personal portfolio.

30 June 2019	Gross loans				ECL provisions				ECL provisions coverage			
	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total £m	Stage 1 %	Stage 2 %	Stage 3 %	Total %
<b>UK mortgages</b>												
AQ1-AQ4	95,880	3,640		99,520	5	10		15	0.01	0.27		0.02
AQ5-AQ8	44,773	6,053		50,826	5	46		51	0.01	0.76		0.10
AQ9	44	809		853	-	22		22	-	2.72		2.58
AQ10			1,316	1,316			148	148			11.25	11.25
	<b>140,697</b>	<b>10,502</b>	<b>1,316</b>	<b>152,515</b>	<b>10</b>	<b>78</b>	<b>148</b>	<b>236</b>	<b>0.01</b>	<b>0.74</b>	<b>11.25</b>	<b>0.15</b>
<b>Rol mortgages</b>												
AQ1-AQ4	5,356	161		5,517	2	1		3	0.04	0.62		0.05
AQ5-AQ8	5,730	598		6,328	4	11		15	0.07	1.84		0.24
AQ9	3	288		291	-	6		6	-	2.08		2.06
AQ10 (1)			1,983	1,983			479	479			24.16	24.16
	<b>11,089</b>	<b>1,047</b>	<b>1,983</b>	<b>14,119</b>	<b>6</b>	<b>18</b>	<b>479</b>	<b>503</b>	<b>0.05</b>	<b>1.72</b>	<b>24.16</b>	<b>3.56</b>
<b>Other mortgages</b>												
AQ1-AQ4	698	1		699	-	-		-	-	-		-
AQ5-AQ8	163	-		163	-	-		-	-	-		-
AQ9	-	-		-	-	-		-	-	-		-
AQ10			3	3			-	-	-	-		-
	<b>861</b>	<b>1</b>	<b>3</b>	<b>865</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Credit cards</b>												
AQ1-AQ4	24	-		24	-	-		-	-	-		-
AQ5-AQ8	2,803	1,152		3,955	36	85		121	1.28	7.38		3.06
AQ9	4	58		62	-	15		15	-	25.86		24.19
AQ10			140	140			88	88			62.86	62.86
	<b>2,831</b>	<b>1,210</b>	<b>140</b>	<b>4,181</b>	<b>36</b>	<b>100</b>	<b>88</b>	<b>224</b>	<b>1.27</b>	<b>8.26</b>	<b>62.86</b>	<b>5.36</b>
<b>Other personal</b>												
AQ1-AQ4	1,014	56		1,070	4	6		10	0.39	10.71		0.93
AQ5-AQ8	6,046	1,889		7,935	54	185		239	0.89	9.79		3.01
AQ9	84	226		310	3	60		63	3.57	26.55		20.32
AQ10			628	628			512	512			81.53	81.53
	<b>7,144</b>	<b>2,171</b>	<b>628</b>	<b>9,943</b>	<b>61</b>	<b>251</b>	<b>512</b>	<b>824</b>	<b>0.85</b>	<b>11.56</b>	<b>81.53</b>	<b>8.29</b>
<b>Total personal</b>												
AQ1-AQ4	102,972	3,858		106,830	11	17		28	0.01	0.44		0.03
AQ5-AQ8	59,515	9,692		69,207	99	327		426	0.17	3.37		0.62
AQ9	135	1,381		1,516	3	103		106	2.22	7.46		6.99
AQ10			4,070	4,070			1,227	1,227			30.15	30.15
	<b>162,622</b>	<b>14,931</b>	<b>4,070</b>	<b>181,623</b>	<b>113</b>	<b>447</b>	<b>1,227</b>	<b>1,787</b>	<b>0.07</b>	<b>2.99</b>	<b>30.15</b>	<b>0.98</b>

For the notes to this table refer to the following page.

**Appendix 1 Capital and risk management**  
**Credit risk – Banking activities** continued  
Asset quality (Within the scope of EY's review report)

31 December 2018	Gross loans				ECL Provisions				ECL provisions coverage			
	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total £m	Stage 1 %	Stage 2 %	Stage 3 %	Total %
<b>UK mortgages</b>												
AQ1-AQ4	95,618	3,621		99,239	6	11		17	0.01	0.30		0.02
AQ5-AQ8	42,771	5,845		48,616	6	46		52	0.01	0.79		0.11
AQ9	32	804		836	-	17		17	-	2.11		2.03
AQ10			1,541	1,541		-	151	151	-	-	9.80	9.80
	138,421	10,270	1,541	150,232	12	74	151	237	0.01	0.72	9.80	0.16
<b>Rol mortgages</b>												
AQ1-AQ4	5,164	226		5,390	4	5		9	0.08	2.21		0.17
AQ5-AQ8	5,668	717		6,385	7	32		39	0.12	4.46		0.61
AQ9	12	439		451	-	39		39	-	8.88		8.65
AQ10 (1)			2,124	2,124			515	515			24.25	24.25
	10,844	1,382	2,124	14,350	11	76	515	602	0.10	5.50	24.25	4.20
<b>Other mortgages</b>												
AQ1-AQ4	359	1		360	-	-		-	-	-		-
AQ5-AQ8	136	2		138	-	-		-	-	-		-
AQ10			1	1			-		-	-		-
	495	3	1	499	-	-	-	-	-	-	-	-
<b>Credit cards</b>												
AQ1-AQ4	34	1		35	-	-		-	-	-		-
AQ5-AQ8	2,810	1,180		3,990	38	103		141	1.35	8.73		3.53
AQ9	7	62		69	-	17		17	-	27.42		24.64
AQ10			122	122			72	72			59.02	59.02
	2,851	1,243	122	4,216	38	120	72	230	1.33	9.65	59.02	5.46
<b>Other personal</b>												
AQ1-AQ4	997	43		1,040	4	5		9	0.40	11.63		0.87
AQ5-AQ8	5,889	1,847		7,736	55	186		241	0.93	10.07		3.12
AQ9	56	183		239	2	56		58	3.57	30.60		24.27
AQ10			563	563			420	420			74.60	74.60
	6,942	2,073	563	9,578	61	247	420	728	0.88	11.92	74.60	7.60
<b>Total personal</b>												
AQ1-AQ4	102,172	3,892		106,064	14	21		35	0.01	0.54		0.03
AQ5-AQ8	57,274	9,591		66,865	106	367		473	0.19	3.83		0.71
AQ9	107	1,488		1,595	2	129		131	1.87	8.67		8.21
AQ10			4,351	4,351			1,158	1,158			26.61	26.61
	159,553	14,971	4,351	178,875	122	517	1,158	1,797	0.08	3.45	26.61	1.00

Note:

(1) AQ10 includes £0.7 billion (31 December 2018 – £0.6 billion) Rol mortgages which are not currently considered defaulted for capital calculation purposes for Rol but included in Stage 3.

**Key points**

- Overall credit quality remained broadly stable with some movements at product level. Mortgage exposures have a higher proportion in AQ1-AQ4 than unsecured borrowing.
- The relatively high level of Stage 3 impaired assets (AQ10) in Rol mortgages reflected their legacy mortgage portfolio and the residual effects from the financial crisis. For UK mortgages, the reduction in value of Stage 3 exposures included the effect of a methodology change.
- In other personal, the relatively high level of exposures in AQ10 reflected the fact that impaired assets can be held on balance sheet with commensurate ECL provision for up to six years after default. The increase in ECL included the effect of a loss rate model adjustment. Furthermore, the value of new defaults was higher than write-offs and customer debt repayments, and unlike in 2018, there were no debt sales in H1 2019.
- ECL provisions coverage shows the expected pattern with higher coverage in the poorer asset quality bands, and also by stage.
- In Ulster Bank Rol mortgages, the reduction in Stage 1 and Stage 2 ECL was driven by the movement of exposures into Stage 3 following a regulatory driven revision to the definition of default in that business. The corresponding increase in Stage 3 ECL was offset by the completion of the remainder of Ulster Bank Rol's 2018 sale of non-performing loans in H1 2019.

## Appendix 1 Capital and risk management

### Credit risk – Banking activities continued

Asset quality (Within the scope of EY's review report)

The table below shows asset quality bands of gross loans and ECL by stage for the Wholesale portfolio.

30 June 2019	Gross loans				ECL provisions				ECL provisions coverage			
	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total £m	Stage 1 %	Stage 2 %	Stage 3 %	Total %
<b>Property</b>												
AQ1-AQ4	15,375	365	15,740	7	8		15	0.05	2.19		0.10	
AQ5-AQ8	17,838	1,710	19,548	37	27		64	0.21	1.58		0.33	
AQ9	39	75	114	-	6		6	-	8.00		5.26	
AQ10			1,516	1,516		339	339			22.36	22.36	
	33,252	2,150	1,516	36,918	44	41	339	424	0.13	1.91	22.36	1.15
<b>Corporate</b>												
AQ1-AQ4	22,324	837	23,161	11	15		26	0.05	1.79		0.11	
AQ5-AQ8	39,298	6,932	46,230	91	156		247	0.23	2.25		0.53	
AQ9	232	373	605	1	14		15	0.43	3.75		2.48	
AQ10			1,712	1,712		762	762			44.51	44.51	
	61,854	8,142	1,712	71,708	103	185	762	1,050	0.17	2.27	44.51	1.46
<b>Financial institutions</b>												
AQ1-AQ4	25,527	265	25,792	5	7		12	0.02	2.64		0.05	
AQ5-AQ8	1,010	209	1,219	6	1		7	0.59	0.48		0.57	
AQ9	-	2	2	-	1		1	-	50.00		50.00	
AQ10			22	22		12	12			54.55	54.55	
	26,537	476	22	27,035	11	9	12	32	0.04	1.89	54.55	0.12
<b>Sovereign</b>												
AQ1-AQ4	7,570	4	7,574	9	-		9	0.12	-		0.12	
AQ5-AQ8	148	2	150	-	-		-	-	-		-	
AQ9	1	-	1	-	-		-	-	-		-	
AQ10			5	5		-	-	-	-		-	
	7,719	6	5	7,730	9	-	-	9	0.12	-	-	0.12
<b>Total</b>												
AQ1-AQ4	70,796	1,471	72,267	32	30		62	0.05	2.04		0.09	
AQ5-AQ8	58,294	8,853	67,147	134	184		318	0.23	2.08		0.47	
AQ9	272	450	722	1	21		22	0.37	4.67		3.05	
AQ10			3,255	3,255		1,113	1,113			34.19	34.19	
	129,362	10,774	3,255	143,391	167	235	1,113	1,515	0.13	2.18	34.19	1.06
<b>31 December 2018</b>												
<b>Property</b>												
AQ1-AQ4	15,740	393	16,133	8	9		17	0.05	2.29		0.11	
AQ5-AQ8	17,397	1,418	18,815	35	26		61	0.20	1.83		0.32	
AQ9	8	66	74	-	4		4	-	6.06		5.41	
AQ10			1,685	1,685		506	506			30.03	30.03	
	33,145	1,877	1,685	36,707	43	39	506	588	0.13	2.08	30.03	1.60
<b>Corporate</b>												
AQ1-AQ4	21,814	773	22,587	13	14		27	0.06	1.81		0.12	
AQ5-AQ8	40,004	7,647	47,651	93	171		264	0.23	2.24		0.55	
AQ9	26	333	359	1	15		16	3.85	4.50		4.46	
AQ10			1,643	1,643		634	634			38.59	38.59	
	61,844	8,753	1,643	72,240	107	200	634	941	0.17	2.28	38.59	1.30
<b>Financial institutions</b>												
AQ1-AQ4	22,150	247	22,397	5	5		10	0.02	2.02		0.04	
AQ5-AQ8	2,352	222	2,574	7	2		9	0.30	0.90		0.35	
AQ9	-	5	5	-	-		-	-	-		-	
AQ10			35	35		22	22			62.86	62.86	
	24,502	474	35	25,011	12	7	22	41	0.05	1.48	62.86	0.16
<b>Sovereign</b>												
AQ1-AQ4	6,780	22	6,802	1	-		1	0.01	-		0.01	
AQ5-AQ8	161	-	161	-	-		-	-	-		-	
AQ10			4	4		-	-	-	-		-	
	6,941	22	4	6,967	1	-	-	1	0.01	-	-	0.01
<b>Total</b>												
AQ1-AQ4	66,484	1,435	67,919	27	28		55	0.04	1.95		0.08	
AQ5-AQ8	59,914	9,287	69,201	135	199		334	0.23	2.14		0.48	
AQ9	34	404	438	1	19		20	2.94	4.70		4.57	
AQ10			3,367	3,367		1,162	1,162			34.51	34.51	
	126,432	11,126	3,367	140,925	163	246	1,162	1,571	0.13	2.21	34.51	1.11

### Key points

- Across the Wholesale portfolio, the asset quality band distribution differed reflecting the diverse nature of differing sectors, but remained broadly unchanged during the first half of 2019.
- The reduction in Stage 3 provision coverage in property was driven by the write-off of defaulted debt that carried a higher than average level of impairment compared to the rest of the portfolio. The lower coverage level in this sector reflected the secured nature of the exposure.

## Appendix 1 Capital and risk management

### Credit risk – Trading activities

This section covers the credit risk profile of RBS's trading activities.

#### Securities funding transactions and collateral (Within the scope of EY's review report)

The table below shows securities funding transactions in NWM and Treasury. Balance sheet captions include balances held at all classifications under IFRS 9.

30 June 2019	Reverse repos			Repos		
	Total £m	Of which can be offset £m	Outside netting arrangements £m	Total £m	Of which can be offset £m	Outside netting arrangements £m
Gross	80,146	75,389	4,757	85,931	83,534	2,397
IFRS offset	(49,125)	(49,125)	-	(49,125)	(49,125)	-
Carrying value	31,021	26,264	4,757	36,806	34,409	2,397
Master netting arrangements	(1,191)	(1,191)	-	(1,191)	(1,191)	-
Securities collateral	(24,808)	(24,808)	-	(33,078)	(33,078)	-
Potential for offset not recognised under IFRS	(25,999)	(25,999)	-	(34,269)	(34,269)	-
Net	5,022	265	4,757	2,537	140	2,397
<b>31 December 2018</b>						
Gross	68,044	65,057	2,987	70,097	68,940	1,157
IFRS offset	(39,737)	(39,737)	-	(39,737)	(39,737)	-
Carrying value	28,307	25,320	2,987	30,360	29,203	1,157
Master netting arrangements	(762)	(762)	-	(762)	(762)	-
Securities collateral	(24,548)	(24,548)	-	(28,441)	(28,441)	-
Potential for offset not recognised under IFRS	(25,310)	(25,310)	-	(29,203)	(29,203)	-
Net	2,997	10	2,987	1,157	-	1,157

## Appendix 1 Capital and risk management

### Credit risk – Trading activities continued

Derivatives (Within the scope of EY's review report)

The table below shows derivatives by type of contract. The master netting agreements and collateral shown below do not result in a net presentation on the balance sheet under IFRS 9. A significant proportion (more than 90%) of the derivatives relate to trading activities in NatWest Markets. The table below also includes hedging derivatives in Treasury.

	30 June 2019					31 December 2018					
	Notional					Assets £m	Liabilities £m	Notional £bn	Assets £m	Liabilities £m	
	GBP £bn	USD £bn	Euro £bn	Other £bn	Total £bn						
Gross exposure						153,424	151,725		138,390	135,673	
IFRS offset						(7,830)	(10,028)		(5,041)	(6,776)	
Carrying value	3,014	6,317	5,214	1,942	16,487	145,594	141,697	13,979	133,349	128,897	
Of which:											
<b>Interest rate (1)</b>											
Interest rate swaps						91,365	88,255		81,855	74,004	
Options purchased						18,124	-		14,481	-	
Options written						-	15,847		-	16,371	
Futures and forwards						68	73		74	69	
<b>Total</b>	2,627	4,550	4,603	872	12,652	109,557	104,175	10,536	96,410	90,444	
<b>Exchange rate</b>											
Spot, forwards and futures						19,350	20,177		17,904	18,610	
Currency swaps						10,079	10,453		11,322	12,062	
Options purchased						6,329	-		7,319	-	
Options written						-	6,617		-	7,558	
<b>Total</b>	386	1,760	600	1,070	3,816	35,758	37,247	3,426	36,545	38,230	
Credit	1	6	11	-	18	266	254	16	346	208	
Equity and commodity	-	1	-	-	1	13	21	1	48	15	
<b>Carrying value</b>						16,487	145,594	141,697	13,979	133,349	128,897
Counterparty mark-to-market netting						(116,595)	(116,595)		(106,762)	(106,762)	
Cash collateral						(19,927)	(17,592)		(17,937)	(15,227)	
Securities collateral						(3,997)	(3,364)		(4,469)	(3,466)	
<b>Net exposure</b>						5,075	4,146		4,181	3,442	
Of which outside netting arrangements						1,891	3,874		2,061	1,708	
Banks (2)						258	903		362	443	
Other financial institutions (3)						1,472	1,311		1,054	1,144	
Corporate (4)						2,994	1,832		2,510	1,817	
Government (5)						351	100		255	38	
<b>Net exposure</b>						5,075	4,146		4,181	3,442	
UK						2,635	1,332		1,935	1,304	
Europe						1,280	2,460		1,308	1,465	
US						844	80		588	298	
RoW						316	274		350	375	
<b>Net exposure</b>						5,075	4,146		4,181	3,442	

Notes:

- (1) The notional amount of interest rate derivatives includes £7,843 billion (31 December 2018 – £5,952 billion) in respect of contracts cleared through central clearing counterparties.
- (2) Transactions with certain counterparties with whom RBS has netting arrangements but collateral is not posted on a daily basis; certain transactions with specific terms that may not fall within netting and collateral arrangements; derivative positions in certain jurisdictions for example China where the collateral agreements are not deemed to be legally enforceable.
- (3) Transactions with securitisation vehicles and funds where collateral posting is contingent on RBS's external rating.
- (4) Mainly large corporates with whom RBS may have netting arrangements in place, but operational capability does not support collateral posting.
- (5) Sovereigns and supranational entities with one-way collateral agreements in their favour.

## Appendix 1 Capital and risk management

### Credit risk – Trading Activities continued

Debt securities (Within the scope of EY's review report)

The table below shows debt securities held at mandatory fair value through profit or loss by issuer as well as ratings based on the lowest of Standard & Poor's, Moody's and Fitch. A significant proportion (more than 95%) of these positions are trading securities in NatWest Markets.

30 June 2019	Central and local government			Financial institutions £m	Corporate £m	Total £m
	UK £m	US £m	Other £m			
AAA	-	-	3,198	1,928	4	5,130
AA to AA+	5,365	6,093	3,686	811	95	16,050
A to AA-	-	-	4,508	628	46	5,182
BBB- to A-	-	-	4,861	818	467	6,146
Non-investment grade	-	-	88	517	294	899
Unrated	-	-	-	505	121	626
Total	5,365	6,093	16,341	5,207	1,027	34,033
Short positions	(5,589)	(1,773)	(15,811)	(1,652)	(189)	(25,014)
31 December 2018						
AAA	-	-	2,093	1,459	7	3,559
AA to AA+	6,834	4,689	3,161	773	120	15,577
A to AA-	-	-	4,571	482	51	5,104
BBB- to A-	-	-	3,592	802	285	4,679
Non-investment grade	-	-	81	832	237	1,150
Unrated	-	-	-	572	8	580
Total	6,834	4,689	13,498	4,920	708	30,649
Short positions	(6,394)	(2,008)	(13,500)	(1,724)	(201)	(23,827)

### Credit risk – Cross border exposure

Cross border exposures comprise both banking and trading activities, including reverse repurchase agreements. Exposures comprise loans, including finance leases and instalment credit receivables, and other monetary assets, such as debt securities. The geographical breakdown is based on the country of domicile of the borrower or guarantor of ultimate risk. Cross border exposures include non-local currency claims of overseas offices on local residents but exclude exposures to local residents in local currencies. The table below shows cross border exposures greater than 0.05% of RBS's total assets.

30 June 2019	Government £m	Banks £m	Other £m	Total £m	Short positions	Net of short positions
					£m	£m
Western Europe	22,879	10,801	21,062	54,742	16,480	38,262
Of which: France	3,892	2,363	2,471	8,726	3,982	4,744
Of which: Germany	7,535	3,790	1,401	12,726	3,892	8,834
Of which: Netherlands	1,858	663	5,157	7,678	1,454	6,224
Of which: Italy	2,965	720	1,759	5,444	2,405	3,039
Of which: Spain	1,587	522	1,917	4,026	1,947	2,079
United States	14,093	5,657	8,582	28,332	1,868	26,464
Japan	4,611	3,512	431	8,554	13	8,541
Jersey	-	-	3,858	3,858	1	3,857
31 December 2018						
Western Europe	21,121	19,003	16,741	56,865	14,103	42,762
Of which: France	3,396	10,209	1,579	15,184	1,626	13,558
Of which: Germany	8,023	3,086	1,145	12,254	5,397	6,857
Of which: Netherlands	1,142	675	3,739	5,556	985	4,571
Of which: Italy	2,179	248	584	3,011	1,796	1,215
Of which: Spain	891	450	1,848	3,189	1,164	2,025
United States	13,558	5,458	8,379	27,395	2,103	25,292
Japan	4,857	2,327	405	7,589	11	7,578
Jersey	-	5	3,064	3,069	2	3,067

## Appendix 1 Capital and risk management

### Non-traded market risk

Non-traded market risk is the risk to the value of assets or liabilities outside the trading book, or the risk to income, that arises from changes in market prices such as interest rates, foreign exchange rates and equity prices, or from changes in managed rates.

#### Key developments

- Non-traded market risk is now managed separately on both sides of the ring-fence. However, it continues to be aggregated and monitored against risk appetite at RBS level.
- Five- and ten-year sterling interest-rate swap rates fell by 0.35%-0.40% in H1 2019. The structural hedge provides some protection against volatility in interest rates and the yield remained stable, falling by only 0.02% in H1 2019 from 1.23% to 1.21%.
- Following the Alawwal bank merger, RBS holds a minority equity holding in SABB. This investment in the newly-merged entity is held in NWM Plc. The investment is held at fair value. Changes in value are recognised in reserves. This exposure is now captured in the VaR table below.
- By 30 June 2019, the disposal of the lender-option/borrower-option loan portfolio was materially complete, reducing RBS's exposure to changes in the credit spread compared to the 2018 year-end.

#### Value-at-risk (Within the scope of EY's review report)

The following table shows one-day internal banking book VaR at a 99% confidence level, split by risk type.

	Half year ended											
	30 June 2019				30 June 2018				31 December 2018			
	Average £m	Maximum £m	Minimum £m	Period end £m	Average £m	Maximum £m	Minimum £m	Period end £m	Average £m	Maximum £m	Minimum £m	Period end £m
Interest rate	11.9	14.0	9.3	9.9	19.4	28.2	8.9	19.2	9.3	11.6	7.3	11.6
Euro	1.2	1.8	0.7	1.8	2.7	3.9	1.3	2.9	1.4	2.4	1.0	1.0
Sterling	11.5	14.1	9.5	9.9	18.7	26.0	11.2	19.9	10.3	13.7	7.9	13.3
US dollar	4.7	6.0	3.8	3.8	5.6	6.8	1.5	1.5	3.7	8.7	1.4	8.7
Other	0.3	0.4	0.2	0.4	0.4	0.7	0.3	0.3	0.5	0.7	0.3	0.7
Credit spread	54.9	58.0	49.2	56.6	56.9	60.8	49.4	49.4	62.4	77.8	53.9	77.8
Foreign exchange	20.0	23.8	7.2	7.2	12.8	32.7	5.9	16.6	14.0	16.4	12.2	13.0
Equity	38.6	38.6	38.6	38.6	-	-	-	-	-	-	-	-
Pipeline risk	0.3	0.5	0.2	0.3	0.6	1.3	0.3	0.4	0.6	0.8	0.4	0.4
Diversification (1)	(70.5)		(50.7)	(29.3)				(22.6)	(20.6)			(20.5)
Total	55.2	61.9	48.1	61.9	60.4	69.8	54.9	63.0	65.7	82.3	61.4	82.3

Note:

(1) RBS benefits from diversification across various financial instrument types, currencies and markets. The extent of the diversification benefit depends on the correlation between the assets and risk factors in the portfolio at a particular time. The diversification factor is the sum of the VaR on individual risk types less the total portfolio VaR.

#### Key point

- The increase in total VaR at the end of June 2019 compared to the average, reflected the equity exposure to SABB following the Alawwal bank merger in June 2019. The inclusion of this exposure outweighed the decrease in the foreign exchange VaR at 30 June 2019 resulting from lower sensitivity to the Saudi Riyal exchange rate following the merger.

## Appendix 1 Capital and risk management

### Non-traded market risk continued

#### Structural hedging

RBS has the benefit of a significant pool of stable, non and low interest-bearing liabilities, principally comprising equity and money transmission accounts. These balances are usually hedged, either by investing directly in longer-term fixed-rate assets (such as fixed-rate mortgages or UK government gilts) or by using interest rate swaps, which are generally booked as cash flow hedges or floating rate assets, in order to provide a consistent and predictable revenue stream.

After hedging the net interest rate exposure of the bank externally, RBS allocates income to equity or products in structural hedges by reference to the relevant interest rate swap curve. Over time, this approach has provided a basis for stable income attribution to products and interest rate returns. The programme aims to track a time series of medium-term swap rates, but the yield will be affected by changes in product volumes and RBS's capital composition.

The table below shows the incremental income allocation (above three-month LIBOR), total income allocation (including three-month LIBOR), the period end and average notional balances and the total yield (including three-month LIBOR) associated with the structural hedges managed by RBS.

	Half year ended														
	30 June 2019				30 June 2018				31 December 2018						
	Incremental income £m	Total income £m	Spot notional £bn	Average notional £bn	Overall yield %	Incremental income £m	Total income £m	Spot notional £bn	Average notional £bn	Overall yield %	Incremental income £m	Total income £m	Spot notional £bn	Average notional £bn	Overall yield %
Equity	197	332	29	29	2.31	257	335	29	28	2.40	212	338	29	30	2.28
Product (1)	82	558	111	111	1.01	225	545	108	108	1.01	143	558	110	109	1.03
Other	27	84	21	21	0.79	50	80	21	21	0.75	39	86	22	22	0.78
Total	306	974	161	161	1.21	532	960	158	157	1.22	394	982	161	161	1.23

Note:

(1) Refer to the next table for a segmental split.

#### Key points

- The five year sterling swap rate fell to 0.83% at the end of June 2019 from 1.22% at December 2018. The ten-year sterling swap rate also fell to 0.97% from 1.35%. However, the yield of the structural hedge was relatively stable. At 1.21% the overall yield was also higher than market swap rates at 30 June 2019.
- Incremental income in excess of three-month LIBOR fell in H1 2019 compared to H2 2018. This was primarily due to higher three-month LIBOR fixings, resulting in less income benefit from the hedge.

Equity structural hedges refer to income attributed to the hedging of equity and reserves, primarily in NatWest Markets Plc and NatWest Holdings. Product structural hedges refer to income allocated to customer products, for example current accounts, in NatWest Holdings. Other structural hedges refer to hedges managed by the subsidiaries. Approximately 37% of other structural hedges are euro-denominated.

The following table presents the incremental income associated with product structural hedges at segment level.

	Half year ended		
	30 June 2019 £m	30 June 2018* £m	31 December 2018* £m
UK Personal Banking	38	101	65
Commercial and Business Banking	44	122	78
Other	-	2	-
Total	82	225	143

Note:

(1) For further detail on incremental income related to product structural hedges refer to the table below.

\*Restated. Refer to Note 1 of the main announcement for further details.

## Appendix 1 Capital and risk management

### Non-traded market risk continued

#### Sensitivity of net interest earnings

Net interest earnings are sensitive to changes in the level of interest rates because changes to coupons on some customer products do not always match changes in market rates of interest or central bank policy rates.

The sensitivity of the net interest income table shows the expected impact, over 12 months, to an immediate upward or downward change of 25 and 100 basis points to all interest rates. Yield curves are expected to move in parallel, though interest rates are assumed to floor at zero per cent or, for euro rates, at the current negative rate.

The methodology, assumptions and limitations relating to the following two earnings sensitivity tables did not change materially in H1 2019. For further details, refer to pages 154-155 of the 2018 Annual Report and Accounts.

	Parallel shifts in yield curve			
	+25 basis points £m	-25 basis points £m	+100 basis points £m	-100 basis points £m
<b>30 June 2019</b>				
Euro	23	5	88	9
Sterling	201	(142)	707	(706)
US dollar	15	(9)	51	(52)
Other	(2)	2	(9)	15
<b>Total</b>	<b>237</b>	<b>(144)</b>	<b>837</b>	<b>(734)</b>
<b>30 June 2018</b>				
Euro	6	4	26	4
Sterling	156	(173)	673	(674)
US dollar	9	(6)	43	(29)
Other	4	(3)	16	(7)
<b>Total</b>	<b>175</b>	<b>(178)</b>	<b>758</b>	<b>(706)</b>
<b>31 December 2018</b>				
Euro	29	(3)	114	(1)
Sterling	152	(201)	651	(717)
US dollar	15	(8)	63	(42)
Other	1	2	2	3
<b>Total</b>	<b>197</b>	<b>(210)</b>	<b>830</b>	<b>(757)</b>

Refer to the key points under the next table for analysis.

## Appendix 1 Capital and risk management

### Non-traded market risk continued

The table below shows the net interest earnings sensitivity on a one-year, two-year and three-year forward-looking basis to a parallel upward or downward shift in interest rates of 25 basis points. The projection is a simplified sensitivity in which the balance sheet is assumed to be constant, with no change in customer behaviour or margin management strategy as a result of rate changes. The impact of the rate shock on structural hedges increases as maturing hedges are replaced at higher or lower rates through the three-year period.

	+25 basis points parallel upward shift			-25 basis points parallel downward shift		
	Year 1 £m	Year 2 (1) £m	Year 3 (1) £m	Year 1 £m	Year 2 (1) £m	Year 3 (1) £m
<b>30 June 2019</b>						
Structural hedges	32	99	171	(30)	(97)	(168)
Managed margin (2)	213	241	243	(129)	(104)	(108)
Other	(8)	-	-	15	-	-
<b>Total</b>	<b>237</b>	<b>340</b>	<b>414</b>	<b>(144)</b>	<b>(201)</b>	<b>(276)</b>
<b>31 December 2018</b>						
Structural hedges	32	98	170	(32)	(98)	(167)
Managed margin (2)	150	171	170	(177)	(189)	(163)
Other	15	-	-	(2)	-	-
<b>Total</b>	<b>197</b>	<b>269</b>	<b>340</b>	<b>(210)</b>	<b>(287)</b>	<b>(330)</b>

#### Notes:

(1) The projections for Year 2 and Year 3 consider only the main drivers of earnings sensitivity, namely structural hedging and margin management.

(2) Primarily current accounts and savings accounts.

#### Key points

- Changes to earnings sensitivity to rate shocks between December 2018 and June 2019 were mainly driven by changes to estimates of how product pricing will respond to interest rate shocks. These estimates are regularly reviewed and are influenced by the overall level of interest rates, the Group's competitive position and other strategic considerations.
- Sensitivity to a 100 basis point downward shift in yield curves was also affected by the changes in the level of interest rates. In the shock scenario, rates fell less at 30 June 2019 before hitting an assumed zero per cent floor compared to 31 December 2018. This resulted in a slightly lower adverse impact at 30 June 2019.

## Appendix 1 Capital and risk management

### Non-traded market risk continued

Foreign exchange risk (Within the scope of EY's review report)

The table below shows structural foreign currency exposures.

	Net investments in foreign operations		Net investments in foreign operations excluding NCI	Net investment hedges	Structural foreign currency exposures pre-economic hedges		Economic hedges (2)	Residual structural foreign currency exposures
	£m	NCI (1)			£m	£m		
<b>30 June 2019</b>								
US dollar	1,412	-	1,412	(33)	1,379	(1,379)	-	-
Euro	6,935	3	6,932	(1,711)	5,221	-	5,221	
Other non-sterling	1,492	-	1,492	(145)	1,347	-	1,347	
Total	9,839	3	9,836	(1,889)	7,947	(1,379)	6,568	
<b>31 December 2018</b>								
US dollar	553	-	553	(4)	549	(549)	-	-
Euro	6,428	33	6,395	(853)	5,542	-	5,542	
Other non-sterling	2,600	710	1,890	(1,249)	641	(81)	560	
Total	9,581	743	8,838	(2,106)	6,732	(630)	6,102	

Notes:

- (1) Non-controlling interests (NCI) represents the structural foreign exchange exposure not attributable to owners' equity.
- (2) Economic hedges of US dollar net investments in foreign operations represent US dollar equity securities that do not qualify as net investment hedges for accounting purposes. They provide an offset to structural foreign exchange exposures to the extent that there are net assets in overseas operations available. Economic hedges of other currency net investments in foreign operations represent monetary liabilities that are not booked as net investment hedges.

### Key points

- Other non-sterling net investments in foreign operations fell. This reflected the Alawwal bank merger. The minority equity stake in Saudi British Bank is too small to be consolidated as a net investment in a foreign operation. The increase in euro net investments in foreign operations also partly resulted from the gain on the sale of NWM N.V.'s equity stake in SABB to NWM Plc. NWM Plc has increased the capitalisation of its US branch. This has reduced the branch's debt funding and NWM Plc's regulatory exposure to fluctuations in the US dollar exchange rate against sterling.
- Changes in exchange rates affect equity in proportion to structural foreign currency exposures. At 30 June 2019, a 5% strengthening in all foreign currencies against sterling would result in a £0.4 billion increase in equity reserves, while a 5% weakening in all foreign currencies against sterling would result in a £0.4 billion reduction in equity reserves.

### Traded market risk

Traded market risk is the risk arising from changes in fair value on positions, assets, liabilities or commitments in trading portfolios as a result of fluctuations in market prices.

Traded internal VaR (Within the scope of EY's review report)

The table below shows one-day internal value-at-risk (VaR) for RBS's trading portfolios, split by exposure type.

Traded VaR (1-day 99%)	Half year ended											
	30 June 2019			30 June 2018			31 December 2018			Period end	Period end	
	Average £m	Maximum £m	Minimum £m	Period end £m	Average £m	Maximum £m	Minimum £m	Period end £m	Average £m	Maximum £m	Minimum £m	Period end £m
Interest rate	10.3	16.9	6.9	9.8	15.0	27.3	10.4	16.5	13.6	19.9	9.2	13.0
Credit spread	9.4	12.7	7.0	9.9	13.2	24.2	9.1	10.4	8.9	14.6	6.9	8.2
Currency	3.6	5.8	2.0	3.8	3.2	7.6	1.4	3.5	3.0	6.3	1.7	5.3
Equity	0.7	2.2	0.3	0.5	0.6	0.9	0.3	0.8	1.0	1.6	0.5	0.8
Commodity	0.2	0.5	-	0.2	0.4	1.0	0.1	0.5	0.2	0.6	-	0.1
Diversification (1)	(9.3)			(10.6)	(11.2)			(11.9)	(9.9)			(8.8)
Total	14.9	21.5	12.1	13.6	21.2	35.6	15.4	19.8	16.8	26.8	11.7	18.6

Note:

- (1) RBS benefits from diversification across various financial instrument types, currencies and markets. The extent of the diversification benefit depends on the correlation between the assets and risk factors in the portfolio at a particular time. The diversification factor is the sum of the VaR on individual risk types less the total portfolio VaR.

### Key points

- Traded VaR remained broadly unchanged on an average basis during H1 2019 compared to H2 2018.
- The decrease, on an average basis compared to H1 2018, is attributed to peaks in H1 2018 due to long euro rates positioning and bond syndication activity.

## Appendix 1 Capital and risk management

### Other risks

#### Operational risk

- RBS continues to develop its cyber risk management and defence strategies, including tracking prominent threat groups and working with the National Cyber Security Centre through its Industry 100 initiative.
- There was also continued oversight of the Group's preparations for the UK's exit from the EU to ensure that processes and systems are in place to ensure continuity of service for customers. Additionally, continuing improvements to the Group's control environment, including further embedding of the operational risk management framework and refresh of the risk appetite framework, were also a focus.

#### Compliance and Conduct risk

- Embedding the compliance and conduct risk framework across RBS was a key focus in H1 2019. The complementary compliance and conduct risk manual was also launched to support this work. Training was completed across all three lines of defence, supported by business-specific case studies.
- Work continued on concluding most of RBS's material remediation projects in 2019. Some material projects remain under active management, with plans in place to conclude the majority by the end of the year. Meeting the PPI closure deadline of 29 August 2019, and ensuring the effective and timely management of residual work thereafter, remains a key focus with the current timeline being end of Q2 2020.

#### Climate risk

- RBS reclassified climate change as a top risk and work continued on integrating climate-related financial risks into the core risk framework. This included work on scenario-based analysis for both physical and transition risks. In March 2019, RBS also joined the Climate Financial Risk Forum, established by the FCA and PRA to develop practical tools to address climate-related financial risks.



## Appendix 2

### Non-IFRS financial measures

## Appendix 2 Non-IFRS financial measures

As described in Note 1 on page 23, RBS prepares its financial statements in accordance with IFRS as issued by the IASB which constitutes a body of generally accepted accounting principles (GAAP). The Interim Results contain a number of adjusted or alternative performance measures, also known as non-GAAP or non-IFRS performance measures. These measures are adjusted for certain items which management believe are not representative of the underlying performance of the business and which distort period-on-period comparison. These non-IFRS measures are not measures within the scope of IFRS and are not a substitute for IFRS measures. These measures include:

### Non-IFRS financial measures

Measure	Basis of preparation	Additional analysis or reconciliation
RBS return on tangible equity	Annualised profit for the period attributable to ordinary shareholders divided by average tangible equity. Average tangible equity is total equity less intangible assets and other owners' equity.	Note 1
Segmental return on tangible equity	Segmental operating profit adjusted for tax and for preference share dividends divided by average notional equity, allocated at an operating segment specific rate, of the monthly average of segmental risk-weighted assets incorporating the effect of capital deductions (RWAs).	Note 1
Operating expenses analysis – management view	The management analysis of strategic disposals in other income and operating expenses shows strategic costs and litigation and conduct costs in separate lines, these amounts are included in staff, premises and equipment and other administrative expenses in the statutory analysis.	Note 2
Cost:income ratio	Total operating expenses less operating lease depreciation divided by total income less operating lease depreciation.	Note 3
Commentary – adjusted periodically for specific items	Group and segmental business performance commentary have been adjusted for the impact of specific items such as the Alawwal bank merger, additional authorised push payments fraud costs, notable items(detailed on Page 3), strategic, litigation and conduct costs(detailed on Page 14 to 18).	Notable items - Page 3 Strategic, litigation and conduct costs – Pages 14 to 18.
Aggregation of business segments into franchises	Personal & Ulster franchise results, combining the reportable segments of UK Personal Banking (UK PB) and Ulster Bank RoI, Commercial & Private Banking (CPB) franchise results, combining the reportable segments of Commercial Banking and Private Banking.	Page 26 Note 4
Bank net interest margin (NIM)	Net interest income of the banking business less the NatWest Markets element as a percentage of interest-earning assets of the banking business less the NatWest Markets element.	Note 4

### Performance metrics not defined under IFRS<sup>(1)</sup>

Measure	Basis of preparation	Additional analysis or reconciliation
Loan:deposit ratio	Net customer loans held at amortised cost divided by total customer deposits.	Note 5
Tangible net asset value	Tangible equity divided by the number of ordinary shares in issue. Tangible equity is ordinary shareholders' interest less intangible assets.	Page 2
NIM	Net interest income of the banking business as a percentage of interest-earning assets of the banking business.	Pages 14 -18.
Funded assets	Total assets less derivatives.	Page 14 -18.
ECL loss rate	The annualised loan impairment charge divided by gross customer loans.	Pages 35.

Note:

(1) Metric based on GAAP measures, included as not defined under IFRS and reported for compliance with ESMA adjusted performance measure rules.

## Appendix 2 Non-IFRS financial measures

### 1. Return on tangible equity

	Half year ended and as at		Quarter ended and as at		
	30 June 2019	30 June 2018	30 June 2019	31 March 2019	30 June 2018
<b>RBS return on tangible equity</b>					
Profit attributable to ordinary shareholders (£m)	2,038	888	1,331	707	96
Adjustment for Alawwal bank merger gain (£m)	764	-	-	-	-
Adjusted profit attributable to ordinary shareholders (£m)	1,274	-	-	-	-
Annualised profit attributable to ordinary shareholders (£m)	4,076	1,776	5,324	2,828	384
Annualised adjusted profit attributable to ordinary shareholders (£m)	2,548	-	-	-	-
Average total equity (£m)	46,310	48,773	46,179	46,516	48,578
Adjustment for other owners equity and intangibles (£m)	(12,528)	(15,019)	(12,410)	(12,581)	(15,056)
Adjusted total tangible equity (£m)	33,782	33,754	33,769	33,935	33,522
Return on tangible equity (%)	12.1%	5.3%	15.8%	8.3%	1.1%
Return on tangible equity adjusting for impact of Alawwal bank merger (%)	7.5%				

	UK Personal Banking	Ulster Bank Rpl	Commercial & Private		RBS International	NatWest Markets
			Commercial Banking	Private Banking		
<b>Half year ended 30 June 2019</b>						
Operating profit (£m)	1,037	23	701	155	194	300
Adjustment for tax (£m)	(290)	-	(196)	(43)	(27)	(84)
Preference share cost allocation (£m)	(36)	-	(82)	(8)	-	(30)
Adjusted attributable profit (£m)	711	23	423	104	167	186
Annualised adjusted attributable profit (£m)	1,422	46	846	207	334	372
Adjustment for Alawwal merger gain (£m)	-	-	-	-	-	(299)
Annualised adjusted profit attributable to ordinary shareholders (£m)	1,422	46	846	207	334	73
Monthly average RWAe (£bn)	37.0	14.3	79.6	9.6	7.0	49.2
Equity factor	15.0%	15.0%	12.0%	13.0%	16.0%	15.0%
RWAe applying equity factor (£bn)	5.5	2.1	9.6	1.2	1.1	7.4
Return on equity (%)	25.6%	2.1%	8.8%	16.6%	29.7%	1.0%
<b>Half year ended 30 June 2018*</b>						
Operating profit (£m)	1,129	86	1,215	156	173	46
Adjustment for tax (£m)	(316)	-	(340)	(44)	(24)	(13)
Preference share cost allocation (£m)	(40)	-	(94)	(12)	(8)	(54)
Adjusted attributable profit (£m)	773	86	781	100	141	(21)
Annualised adjusted attributable profit (£m)	1,546	172	1,562	200	282	(42)
Monthly average RWAe (£bn)	32.8	17.7	86.5	9.4	6.9	56.4
Equity factor	15.0%	14.0%	12.0%	13.5%	16.0%	15.0%
RWAe applying equity factor (£bn)	4.9	2.5	10.4	1.3	1.1	8.5
Return on equity	31.4%	7.0%	15.1%	15.8%	25.7%	-0.5%

\* Restated. Refer to Note 1 for further details.

## Appendix 2 Non-IFRS financial measures

### 1. Return on tangible equity continued

	UK Personal Banking	Ulster Bank Rpl	Commercial & Private		RBS International	NatWest Markets
			Commercial Banking	Private Banking		
<b>Quarter ended 30 June 2019</b>						
Operating profit (£m)	539	3	264	75	101	362
Adjustment for tax (£m)	(151)	-	(74)	(21)	(14)	(101)
Preference share cost allocation (£m)	(18)	-	(41)	(4)	-	(30)
Adjusted attributable profit (£m)	370	3	149	50	87	231
Annualised adjusted attributable profit (£m)	1,480	12	596	199	345	924
Adjustment for Alawwal merger gain (£m)	-	-	-	-	-	(598)
Annualised adjusted profit attributable to ordinary shareholders (£m)	1,480	12	596	199	345	326
Monthly average RWAe (£bn)	37.2	14.3	80.1	9.6	7.0	49.1
Equity factor	15.0%	15.0%	12.0%	13.0%	16.0%	15.0%
RWAe applying equity factor (£bn)	5.6	2.1	9.6	1.2	1.1	7.4
Return on equity	26.5%	0.6%	6.2%	15.9%	30.8%	4.4%
<b>Quarter ended 31 March 2019</b>						
Operating profit (£m)	498	20	437	80	93	(62)
Adjustment for tax (£m)	(139)	-	(122)	(23)	(13)	17
Preference share cost allocation (£m)	(18)	-	(41)	(4)	-	-
Adjusted attributable profit (£m)	341	20	274	53	80	(45)
Annualised adjusted attributable profit (£m)	1,364	80	1,096	212	320	(180)
Monthly average RWAe (£bn)	36.8	14.2	79.1	9.6	7.0	49.4
Equity factor	15.0%	15.0%	12.0%	13.0%	16.0%	15.0%
RWAe applying equity factor (£bn)	5.5	2.1	9.5	1.2	1.1	7.4
Return on equity	24.7%	3.8%	11.5%	17.1%	28.6%	-2.4%
<b>Quarter ended 30 June 2018*</b>						
Operating profit (£m)	585	76	664	94	95	(51)
Adjustment for tax (£m)	(164)	-	(186)	(26)	(13)	14
Preference share cost allocation (£m)	(20)	-	(47)	(6)	(4)	(27)
Adjusted attributable profit (£m)	401	76	431	62	78	(64)
Annualised adjusted attributable profit (£m)	1,604	304	1,724	248	310	(256)
Monthly average RWAe (£bn)	32.4	17.4	87.4	9.5	6.9	56.4
Equity factor	15.0%	14.0%	12.0%	13.5%	16.0%	15.0%
RWAe applying equity factor (£bn)	4.9	2.4	10.5	1.3	1.1	8.5
Return on equity	33.0%	12.5%	16.4%	19.3%	27.9%	-3.0%

\*Restated. Refer to Note 1 for further details.

## Appendix 2 Non-IFRS performance measures

### 2. Operating expenses analysis

#### Statutory analysis (1,2)

	Half year ended		Quarter ended		
	30 June 2019	30 June 2018	30 June 2019	31 March 2019	30 June 2018
	£m	£m	£m	£m	£m
<b>Operating expenses</b>					
Staff expenses	2,028	2,086	1,017	1,011	1,031
Premises and equipment	558	644	293	265	274
Other administrative expenses	863	1,636	445	418	1,237
Administrative expenses	3,449	4,366	1,755	1,694	2,542
Depreciation and amortisation	621	338	377	244	175
Write down of other intangible assets	30	31	30	-	7
<b>Total operating expenses</b>	<b>4,100</b>	<b>4,735</b>	<b>2,162</b>	<b>1,938</b>	<b>2,724</b>

#### Non-statutory analysis

	Half year ended		Quarter ended		
	30 June 2019	30 June 2018	30 June 2019	31 March 2019	30 June 2018
	£m	£m	£m	£m	£m
<b>Operating expenses</b>					
Staff expenses	1,841	1,903	905	936	939
Premises and equipment	493	574	245	248	288
Other administrative expenses	673	760	318	355	413
Strategic costs (1)	629	350	434	195	141
Litigation and conduct costs (2)	60	801	55	5	782
Administrative expenses	3,696	4,388	1,957	1,739	2,563
Depreciation and amortisation	399	316	200	199	154
Write down of other intangible assets	5	31	5	-	7
<b>Total</b>	<b>4,100</b>	<b>4,735</b>	<b>2,162</b>	<b>1,938</b>	<b>2,724</b>

Notes:

(1) On a statutory, or GAAP, basis, strategic costs are included within staff, premises and equipment, depreciation and amortisation, write-down of other intangible assets and other administrative expenses.

(2) On a statutory, or GAAP, basis, litigation and conduct costs are included within other administrative expenses.

### 3. Cost:income ratio

	UK		Commercial & Private			RBS International £m	NatWest Markets £m	Central items & other £m	RBS Group £m
	Personal Banking £m	Ulster Bank ROI £m	Commercial Banking £m	Private Banking £m					
<b>Half year ended 30 June 2019</b>									
Operating expenses	(1,229)	(281)	(1,262)	(232)	(119)	(678)	(299)	(4,100)	68
Operating lease depreciation	-	-	68	-	-	-	-	-	
Adjusted operating expenses	(1,229)	(281)	(1,194)	(232)	(119)	(678)	(299)	(4,032)	
Total income	2,447	283	2,165	384	310	942	586	7,117	(68)
Operating lease depreciation	-	-	(68)	-	-	-	-	-	
Adjusted total income	2,447	283	2,097	384	310	942	586	7,049	
Cost:income ratio (%)	50.2%	99.3%	56.9%	60.4%	38.4%	72.0%	nm	57.2%	
<b>Half year ended 30 June 2018 *</b>									
Operating expenses	(1,291)	(252)	(1,140)	(225)	(114)	(671)	(1,042)	(4,735)	57
Operating lease depreciation	-	-	57	-	-	-	-	-	
Adjusted operating expenses	(1,291)	(252)	(1,083)	(225)	(114)	(671)	(1,042)	(4,678)	
Total income	2,551	312	2,390	382	284	721	62	6,702	
Operating lease depreciation	-	-	(57)	-	-	-	-	-	(57)
Adjusted total income	2,551	312	2,333	382	284	721	62	6,645	
Cost:income ratio (%)	50.6%	80.8%	46.4%	58.9%	40.1%	93.1%	nm	70.4%	

\* Restated. Refer to Note 1 for further details.

## Appendix 2 Non-IFRS performance measures

### 3. Cost:income ratio continued

	UK		Commercial & Private			RBS International £m	NatWest Markets £m	Central items & others £m	RBS Group £m
	Personal Banking £m	Ulster Bank Rö £m	Commercial Banking £m	Private Banking £m					
<b>Quarter ended 30 June 2019</b>									
Operating expenses	(594)	(145)	(622)	(115)		(60)	(344)	(282)	(2,162)
Operating lease depreciation	-	-	34	-		-	-	-	34
Adjusted operating expenses	(594)	(145)	(588)	(115)		(60)	(344)	(282)	(2,128)
Total income	1,202	138	1,083	191		159	686	621	4,080
Operating lease depreciation	-	-	(34)	-		-	-	-	(34)
Adjusted total income	1,202	138	1,049	191		159	686	621	4,046
Cost:income ratio	49.4%	105.1%	56.1%	60.2%		37.7%	50.1%	nm	52.6%
<b>Quarter ended 31 March 2019</b>									
Operating expenses	(635)	(136)	(640)	(117)		(59)	(334)	(17)	(1,938)
Operating lease depreciation	-	-	34	-		-	-	-	34
Adjusted operating expenses	(635)	(136)	(606)	(117)		(59)	(334)	(17)	(1,904)
Total income	1,245	145	1,082	193		151	256	(35)	3,037
Operating lease depreciation	-	-	(34)	-		-	-	-	(34)
Adjusted total income	1,245	145	1,048	193		151	256	(35)	3,003
Cost:income ratio	51.0%	93.8%	57.8%	60.6%		39.1%	130.5%	nm	63.4%
<b>Quarter ended 30 June 2018 *</b>									
Operating expenses	(605)	(124)	(545)	(104)		(55)	(322)	(969)	(2,724)
Operating lease depreciation	-	-	26	-		-	-	-	26
Adjusted operating expenses	(605)	(124)	(519)	(104)		(55)	(322)	(969)	(2,698)
Total income	1,253	166	1,232	198		147	284	120	3,400
Operating lease depreciation	-	-	(26)	-		-	-	-	(26)
Adjusted total income	1,253	166	1,206	198		147	284	120	3,374
Cost:income ratio	48.3%	74.7%	43.0%	52.5%		37.4%	113.4%	nm	80.0%

\* Restated. Refer to Note 1 for further details.

### 4. Net interest margin

	Half year ended		Quarter ended		
	30 June 2019 £m	30 June 2018 £m	30 June 2019 £m	31 March 2019 £m	30 June 2018 £m
RBS net interest income	4,004	4,326	1,971	2,033	2,180
NWM net interest income	122	(67)	91	31	(31)
Net interest income excluding NWM	4,126	4,259	2,062	2,064	2,149
Annualised net interest income	8,074	8,724	7,906	8,245	8,744
Annualised net interest income excluding NWM	8,320	8,589	8,271	8,371	8,620
Average interest earning assets (IEA)	440,309	431,211	444,800	435,768	434,928
NWM average IEA	33,261	27,134	34,436	32,072	26,981
Average IEA excluding NWM	407,048	404,077	410,364	403,696	407,947
Net interest margin	1.83%	2.02%	1.78%	1.89%	2.01%
Bank net interest margin (excluding NWM)	2.04%	2.13%	2.02%	2.07%	2.11%

### 5. Loan:deposit ratio

	As at		
	30 June 2019 £bn	31 March 2019 £bn	31 December 2018 £bn
Loans to customers - amortised cost	310.6	306.4	305.1
Customer deposits	361.6	355.2	360.9
Loan:deposit ratio (%)	86%	86%	85%

Legal Entity Identifier: 2138005O9XJIN4JPN90