

HSBC Holdings plc

Pillar 3 Disclosures at 30 June 2019

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The Group has adopted the EU's regulatory transitional arrangements for IFRS 9 'Financial instruments'. A number of tables in this document report under this arrangement as follows:

- Some figures have been prepared on an IFRS 9 transitional basis. Footnotes in the tables provide detail.
- All figures have been prepared on an IFRS 9 transitional basis.

All other tables report numbers on the basis of full adoption of IFRS 9.

Certain defined terms

Unless the context requires otherwise, 'HSBC Holdings' means HSBC Holdings plc and 'HSBC', the 'Group', 'we', 'us' and 'our' refer to HSBC Holdings together with its subsidiaries. Within this document the Hong Kong Special Administrative Region of the People's Republic of China is referred to as 'Hong Kong'. When used in the terms 'shareholders' equity' and 'total shareholders' equity', 'shareholders' means holders of HSBC Holdings ordinary shares and those preference shares and capital securities issued by HSBC Holdings classified as equity. The abbreviations '\$m', '\$bn' and '\$tn' represent millions, billions (thousands of millions) and trillions of US dollars, respectively.

Highlights

Common equity tier 1 (\$bn)

Jun 2019	126.9
Dec 2018	121.0
Jun 2018	122.8

Risk-weighted assets (\$bn)

Jun 2019	886.0
Dec 2018	865.3
Jun 2018	865.5

Common equity tier 1 ratio (%)

Jun 2019	14.3
Dec 2018	14.0
Jun 2018	14.2

Leverage ratio (%)

Jun 2019	5.4
Dec 2018	5.5
Jun 2018	5.4

Unless otherwise stated all figures are calculated using the EU's regulatory transitional arrangements for IFRS 9 in article 473a of the Capital Requirements Regulation.

Our leverage ratio at 30 June 2019 is calculated on a CRR II end point basis for capital. Prior period leverage ratios are calculated on the CRD IV end point basis for capital.

Regulatory framework for disclosures

We are supervised on a consolidated basis in the UK by the Prudential Regulation Authority ('PRA'), which receives information on the capital adequacy of, and sets capital requirements for, the Group as a whole. Individual banking subsidiaries are directly regulated by their local banking supervisors who set and monitor their local capital adequacy requirements. In most jurisdictions, non-banking financial subsidiaries are also subject to the supervision and capital requirements of local regulatory authorities.

At a consolidated Group level, capital is calculated for prudential regulatory reporting purposes using the Basel III framework of the Basel Committee on Banking Supervision ('Basel'), as implemented by the European Union ('EU') in the revisions to the Capital Requirements Regulation ('CRR II'), and in the PRA Rulebook for the UK banking industry. The regulators of Group banking entities outside the EU are at varying stages of implementing the Basel III framework, so the Group may have been subject to local regulations in the first half of 2019 that were on the basis of the Basel I, II or III frameworks. Refer to the Regulatory Developments section on page 4 for further detail.

The Basel Committee's framework is structured around three 'pillars': the Pillar 1 minimum capital requirements; the Pillar 2 supervisory review process; and the Pillar 3 on market discipline. The aim of Pillar 3 is to produce disclosures that allow market participants to assess the scope of banks' application of the Basel Committee's framework. It also aims to assess their application of the rules in their jurisdiction, capital conditions, risk exposures and risk management processes, and hence their capital adequacy.

Pillar 3 disclosures

Our *Pillar 3 Disclosures at 30 June 2019* comprises both quantitative and qualitative information required under Pillar 3. They are made in accordance with Part Eight of the Capital Requirements Regulation, as amended by CRR II and the European Banking Authority ('EBA') guidelines on disclosure requirements issued in December 2016. These disclosures are supplemented by specific additional requirements of the PRA and discretionary disclosures on our part.

The Pillar 3 disclosures are governed by the Group's disclosure policy framework as approved by the Group Audit Committee ('GAC').

To give insight into movements during the year, we provide comparative figures for the previous year or period, analytical reviews of variances and flow tables for capital requirements. In all tables where the term 'capital requirements' is used, this represents the minimum total capital charge set at 8% of risk weighted assets ('RWAs') by article 92 of the Capital Requirements Regulation.

Where disclosures have been enhanced, or are new, we do not generally restate or provide prior year comparatives. Wherever specific rows and columns in the tables prescribed by the EBA or Basel are not applicable or immaterial to our activities, we omit them and follow the same approach for comparative disclosures.

Pillar 3 requirements may be met by inclusion in other disclosure media. Where we adopt this approach, references are provided to the relevant pages of the *Interim Report 2019* or to other locations.

We continue to engage in the work of the UK authorities and industry associations to improve the transparency and comparability of UK banks' Pillar 3 disclosures.

Key metrics

Table 1: Key metrics (KM1/IFRS9-FL)

Ref*	Footnotes	At				
		30 Jun 2019	31 Mar 2019	31 Dec 2018	30 Sep 2018	30 Jun 2018
Available capital (\$bn)						
	1					
1	Common equity tier 1 ('CET1') capital	126.9	125.8	121.0	123.1	122.8
2	CET1 capital as if IFRS 9 transitional arrangements had not been applied	126.0	124.9	120.0	122.1	121.8
3	Tier 1 capital	152.8	151.8	147.1	149.3	147.1
4	Tier 1 capital as if IFRS 9 transitional arrangements had not been applied	151.9	150.9	146.1	148.3	146.1
5	Total capital	178.3	177.8	173.2	178.1	176.6
6	Total capital as if IFRS 9 transitional arrangements had not been applied	177.4	176.9	172.2	177.1	175.6
Risk-weighted assets ('RWAs') (\$bn)						
7	Total RWAs	886.0	879.5	865.3	862.7	865.5
8	Total RWAs as if IFRS 9 transitional arrangements had not been applied	885.5	878.9	864.7	862.1	864.9
Capital ratios (%)						
	1					
9	CET1	14.3	14.3	14.0	14.3	14.2
10	CET1 as if IFRS 9 transitional arrangements had not been applied	14.2	14.2	13.9	14.2	14.1
11	Tier 1	17.2	17.3	17.0	17.3	17.0
12	Tier 1 as if IFRS 9 transitional arrangements had not been applied	17.2	17.2	16.9	17.2	16.9
13	Total capital	20.1	20.2	20.0	20.7	20.4
14	Total capital as if IFRS 9 transitional arrangements had not been applied	20.0	20.1	19.9	20.6	20.3
Additional CET1 buffer requirements as a percentage of RWA (%)						
	Capital conservation buffer requirement	2.50	2.50	1.88	1.88	1.88
	Countercyclical buffer requirement	0.68	0.67	0.56	0.45	0.46
	Bank G-SIB and/or D-SIB additional requirements	2.00	2.00	1.50	1.50	1.50
	Total of bank CET1 specific buffer requirements	5.18	5.17	3.94	3.83	3.84
Total capital requirement (%)						
	2					
	Total capital requirement	11.0	11.0	10.9	11.5	11.5
	CET1 available after meeting the bank's minimum capital requirements	8.1	8.1	7.9	7.8	7.7
Leverage ratio						
	3					
15	Total leverage ratio exposure measure (\$bn)	2,786.5	2,735.2	2,614.9	2,676.4	2,664.1
16	Leverage ratio (%)	5.4	5.4	5.5	5.4	5.4
17	Leverage ratio as if IFRS 9 transitional arrangements had not been applied (%)	5.3	5.4	5.5	5.4	5.3
Liquidity coverage ratio ('LCR')						
	4					
	Total high-quality liquid assets (\$bn)	532.8	535.4	567.2	533.2	540.2
	Total net cash outflow (\$bn)	391.0	374.8	368.7	334.1	341.7
	LCR ratio (%)	136.3	142.9	153.8	159.6	158.1

* The references in this and subsequent tables identify the lines prescribed in the relevant EBA template where applicable and where there is a value.

^ Figures have been prepared on an IFRS 9 transitional basis.

1 Capital figures and ratios at 30 June 2019 are reported on a CRR II transitional basis. Prior period capital figures are reported on a CRD IV transitional basis.

2 Total capital requirement is defined as the sum of Pillar 1 and Pillar 2A capital requirements set by the PRA. The minimum requirements represent the total capital requirement to be met by CET1.

3 Leverage ratio at 30 June 2019 is calculated using the CRR II end point basis for capital. Prior period leverage ratios are calculated on the CRD IV end point basis for capital.

4 The EU's regulatory transitional arrangements for IFRS 9 'Financial Instruments' in article 473a of the Capital Requirements Regulation do not apply to liquidity coverage measures. LCR is calculated as at the end of each period rather than using average values. For further details, refer to page 68 of the Interim Report 2019.

The Group has adopted the regulatory transitional arrangements, including paragraph four within article 473a of the Capital Requirements Regulation, published by the EU on 27 December 2017 for IFRS 9 'Financial Instruments'. These permit banks to add back to their capital base a proportion of the impact that IFRS 9 has upon their loan loss allowances during the first five years of use. The proportion that banks may add back starts at 95% in 2018, and reduces to 25% by 2022.

The impact of IFRS 9 on loan loss allowances is defined as:

- the increase in loan loss allowances on day one of IFRS 9 adoption; and

- any subsequent increase in expected credit losses ('ECL') in the non-credit-impaired book thereafter.

The impact is calculated separately for portfolios using the standardised ('STD') and internal ratings based ('IRB') approaches and, for IRB portfolios, there is no add-back to capital unless loan loss allowances exceed regulatory 12-month expected losses. Any add-back must be tax affected and accompanied by a recalculation of capital deduction thresholds, exposure and RWAs.

Table 2 presents a reconciliation recommended by the Disclosing Expected Credit Losses taskforce to further explain the Group's transitional and fully loaded capital measures.

Table 2: Reconciliation of capital with and without IFRS 9 transitional arrangements

	At 30 Jun 2019		
	CET1 \$bn	Tier 1 \$bn	Total own funds \$bn
Reported balance using IFRS 9 transitional arrangements	126.9	152.8	178.3
ECL reversed under transitional arrangements for IFRS 9	(1.0)	(1.0)	(1.0)
– STD approach	(1.0)	(1.0)	(1.0)
Tax impacts	0.2	0.2	0.2
Changes in amounts deducted from CET1 for deferred tax assets and significant investments	(0.1)	(0.1)	(0.1)
– amounts deducted from CET1 for significant investments	(0.1)	(0.1)	(0.1)
Reported balance excluding IFRS 9 transitional arrangements	126.0	151.9	177.4

Regulatory developments

The Basel Committee

In December 2017, Basel published the Basel III Reforms. The final package includes:

- widespread changes to the risk weights under the standardised approach to credit risk;
- a change in the scope of application of the IRB approach to credit risk, together with changes to the IRB methodology;
- the replacement of the operational risk approaches with a single methodology;
- an amended set of rules for the credit valuation adjustment ('CVA') capital framework;
- an aggregate output capital floor that ensures that banks' total RWAs are no lower than 72.5% of those generated by the standardised approaches; and
- changes to the exposure measure for the leverage ratio, together with the imposition of a leverage ratio buffer for global systemically important banks ('G-SIB'). This will take the form of a tier 1 capital buffer set at 50% of the G-SIB's RWA capital buffer.

Following a recalibration, Basel published the final changes to the market risk RWA regime, the Fundamental Review of the Trading Book ('FRTB') in January 2019. The new regime contains a more clearly defined trading book boundary, the introduction of an internal models approach based upon expected shortfall models, capital requirements for risk factors which cannot be modelled, and a more risk-sensitive standardised approach that can serve as a fall-back for the internal models method.

In June 2019, Basel published a revised treatment of client-cleared derivatives for the purposes of the leverage ratio. This will permit both cash and non-cash initial and variation margin to offset derivative exposure in the leverage ratio. At the same time, Basel published revised leverage ratio disclosure requirements that will require banks to disclose their leverage ratios based on quarter-end and on daily average values for securities financing transactions ('SFT').

Basel has announced that the package will be implemented on 1 January 2022, with a five-year transitional provision for the output floor, commencing at a rate of 50%. The final standards will need to be transposed into the relevant local law before coming into effect.

Given that the package contains a significant number of national discretions, the final outcome is uncertain both in impact and timing; however, we currently anticipate a potential for an increase in RWAs. The primary drivers include changes in the market risk, operational risk and CVA methodologies, as well as the potential loss of equivalence for certain investments in funds and the introduction of an output floor.

The Capital Requirements Regulation amendments

In June 2019, the EU enacted the final rules amending the Capital Requirements Regulation, known as the CRR II. This is the first tranche of changes to the EU's legislation to reflect the Basel III Reforms and includes the changes to the market risk rules under

the FRTB, revisions to the standardised approach for measuring counterparty risk ('SA-CCR') and the new leverage ratio rules.

The CRR II rules will follow a phased implementation with significant elements entering into force in 2021, in part in advance of Basel's timeline. The EU's timetable for the FRTB will be finalised once further legislation to reflect Basel's January 2019 amendments has been enacted. It remains uncertain how the elements of the CRR II that come into force after the UK's withdrawal from the EU will be transposed into UK law.

The CRR II also represents the EU's implementation of the Financial Stability Board's ('FSB') requirements for Total Loss Absorbing Capacity ('TLAC'), known in Europe as the Minimum Requirements for Own Funds and Eligible Liabilities ('MREL'). Furthermore, it also includes changes to the own funds regime. These rules applied in June 2019 and are accompanied by related first time Pillar 3 disclosures which are set out on page 40.

In June 2018, the Bank of England ('BoE') published its approach to setting MREL within groups, known as internal MREL, and its final policy on selected outstanding MREL policy matters. These requirements came into effect on 1 January 2019. The BoE will, before the end of 2020, review the calibration of MREL and final compliance date, prior to setting end-state MREL requirements.

The EU's implementation of Basel III Reforms

In July 2019, the EBA issued its report on the implementation of a second tranche of changes to the EU legislation to reflect the remaining Basel III Reforms ('CRR III'). This included recommendations in relation to credit risk, operational risk and the output floor. A further report with recommendations on the reforms to the CVA framework and the FRTB is expected later this year.

The EBA's report is the first stage of the implementation process in the EU. The European Commission will consult upon its view of the policy choices in due course, and is expected to produce draft text in 2020. The package will then be subject to negotiation with the EU Council and Parliament. As a result, the final form of the rules remains unclear.

Given the UK's withdrawal from the EU, it remains uncertain whether the UK will implement the CRR III or its own version of Basel's rules.

The UK's withdrawal from the EU

In August 2018, Her Majesty's Treasury ('HMT') commenced the process of transposing the current EU legislation into UK law to ensure that there is legal continuity in the event of the UK leaving the EU. This includes the Capital Requirements Regulation, Capital Requirements Directive and the Bank Recovery and Resolution Directive. The amendments were made in December 2018 and will come into force in the event that the UK leaves the EU without an agreement on 31 October 2019. A statutory instrument is expected in due course that will detail the transposition into UK law of the elements of the CRR II that are in force on exit day.

The BoE and the PRA have been given the power to grant transitional provisions to delay the implementation of these legislative changes for up to two years, following the UK leaving without an agreement. As part of finalising the changes to their rulebooks if the UK leaves without an agreement, the BoE and the PRA confirmed that they will exercise the transitional provision

which allows firms to delay implementation until 30 June 2020, except in limited circumstances. Given the uncertainty regarding the UK's exit date, the transitional arrangements are being kept under review.

Other developments

In January 2019, the EU published final proposals for a prudential backstop for non-performing loans, which will result in a deduction from CET1 capital when a minimum impairment coverage requirement is not met. The rules entered into force in April. They apply to both the HSBC Group and its European regulated bank subsidiaries. The regime only applies to loans originated after the implementation date.

In July 2019, the EBA published a report marking the end of its 'IRB Repair' review, with the exception of the credit risk mitigation guidelines which remain subject to completion. This followed the publication in March 2019 of final guidelines on the estimation of loss given default ('LGD') appropriate for conditions of an economic downturn. The LGD guidelines are intended to supplement the final draft technical standard that specified the nature, severity and duration of an economic downturn, which was published in November 2018. The report sets out the next steps for implementation, confirming that the LGD guidelines will apply, at the latest, by the end of 2023.

In April 2019, the PRA issued statements setting out its expectations of how firms should manage the financial risks from climate change, focusing on governance, risk management, scenario analysis and disclosure areas. In particular, there is a requirement that the risk associated with climate change should be assessed and captured in firms' Pillar 2 assessments.

Structure of the regulatory group

Assets, liabilities and post-acquisition reserves of subsidiaries engaged in insurance activities are excluded from the regulatory consolidation. Our investments in these insurance subsidiaries are recorded at cost and deducted from CET1 capital, subject to thresholds.

The regulatory consolidation also excludes special purpose entities ('SPEs') where significant risk has been transferred to third parties. Exposures to these SPEs are risk weighted as securitisation positions for regulatory purposes.

Participating interests in banking associates are proportionally consolidated for regulatory purposes by including our share of assets, liabilities, profits and losses, and RWAs in accordance with the PRA's application of EU legislation. Non-participating significant investments along with non-financial associates are deducted from capital, subject to thresholds.

For further explanation of the differences between the accounting and regulatory scope of consolidation and their definition of exposure, please see page 13 of the Pillar 3 Disclosures at 31 December 2018.

Table 3: Reconciliation of balance sheets – financial accounting to regulatory scope of consolidation

Ref [†]	Accounting balance sheet \$m	Deconsolidation of insurance/ other entities \$m	Consolidation of banking associates \$m	Regulatory balance sheet \$m
Assets				
	171,090	(13)	343	171,420
	8,673	–	–	8,673
	36,492	–	–	36,492
	271,424	(1,098)	–	270,326
	41,043	(31,956)	540	9,627
	–	495	–	495
	233,621	(41)	49	233,629
	82,397	(1,259)	1,068	82,206
	1,021,632	(1,875)	12,692	1,032,449
	–	292	–	292
	(6,426)	–	–	(6,426)
	233,079	–	581	233,660
	428,101	(64,865)	4,196	367,432
	–	366	–	366
	–	2,302	–	2,302
	168,880	(5,217)	577	164,240
	8,021	–	–	8,021
	804	(45)	22	781
	23,892	(432)	(5,064)	18,396
	493	(13)	–	480
	25,733	(8,225)	1,174	18,682
	4,412	176	4	4,592
	2,751,273	(112,548)	16,182	2,654,907
Liabilities and equity				
	36,492	–	–	36,492
	71,051	(3)	292	71,340
	1,380,124	2,688	14,722	1,397,534
	184,497	–	–	184,497
	9,178	–	–	9,178
	94,149	–	–	94,149
	165,104	(4,565)	33	160,572
	400	–	–	400
	11,243	–	–	11,243
	229,903	68	56	230,027
	97	–	–	97
	103,663	(1,921)	–	101,742
	152,052	(2,512)	911	150,451
	1,653	(56)	3	1,600
	93,794	(93,794)	–	–
	3,025	(7)	38	3,056
	357	–	–	357
	2,820	(1,238)	9	1,591
	22,894	2	118	23,014
	1,783	–	–	1,783
	19,339	–	–	19,339
	2,550,399	(101,338)	16,182	2,465,243
Equity				
	10,281	–	–	10,281
	13,998	–	–	13,998
	22,367	–	–	22,367
	3,437	1,942	–	5,379
	142,593	(12,114)	–	130,479
	192,676	(10,172)	–	182,504
	8,198	(1,038)	–	7,160
	200,874	(11,210)	–	189,664
	2,751,273	(112,548)	16,182	2,654,907

[†] The references (a)–(r) identify balance sheet components that are used in the calculation of regulatory capital in Table 4: Own funds disclosure.

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Table 3: Reconciliation of balance sheets – financial accounting to regulatory scope of consolidation (continued)

	Ref [†]	Accounting balance sheet \$m	Deconsolidation of insurance/ other entities \$m	Consolidation of banking associates \$m	Regulatory balance sheet \$m
Assets					
Cash and balances at central banks		162,843	(39)	191	162,995
Items in the course of collection from other banks		5,787	–	–	5,787
Hong Kong Government certificates of indebtedness		35,859	–	–	35,859
Trading assets		238,130	(1,244)	–	236,886
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss		41,111	(28,166)	502	13,447
– of which: debt securities eligible as tier 2 issued by Group FSEs that are outside the regulatory scope of consolidation	r	424	(424)	–	–
Derivatives		207,825	(70)	102	207,857
Loans and advances to banks		72,167	(1,264)	1,462	72,365
– of which: lending to FSEs eligible as tier 2	r	52	–	–	52
Loans and advances to customers		981,696	(1,530)	12,692	992,858
– of which:					
lending eligible as tier 2 to Group FSEs outside the regulatory scope of consolidation	r	117	(117)	–	–
expected credit losses on IRB portfolios	h	(6,405)	–	–	(6,405)
Reverse repurchase agreements – non-trading		242,804	(3)	542	243,343
Financial investments		407,433	(61,228)	3,578	349,783
Capital invested in insurance and other entities		–	2,306	–	2,306
Prepayments, accrued income and other assets		110,571	(5,968)	247	104,850
– of which: retirement benefit assets	j	7,934	–	–	7,934
Current tax assets		684	(23)	26	687
Interests in associates and joint ventures		22,407	(398)	(4,144)	17,865
– of which: positive goodwill on acquisition	e	492	(13)	–	479
Goodwill and intangible assets	e	24,357	(7,281)	–	17,076
Deferred tax assets	f	4,450	161	1	4,612
Total assets at 31 Dec 2018		2,558,124	(104,747)	15,199	2,468,576
Liabilities and equity					
Hong Kong currency notes in circulation		35,859	–	–	35,859
Deposits by banks		56,331	1	229	56,561
Customer accounts		1,362,643	2,586	13,790	1,379,019
Repurchase agreements – non-trading		165,884	–	–	165,884
Items in course of transmission to other banks		5,641	–	–	5,641
Trading liabilities		84,431	–	–	84,431
Financial liabilities designated at fair value		148,505	(4,347)	36	144,194
– of which:					
included in tier 1	n	411	–	–	411
included in tier 2	o, q, i	12,499	–	–	12,499
Derivatives		205,835	116	81	206,032
– of which: debit valuation adjustment	i	152	–	–	152
Debt securities in issue		85,342	(1,448)	–	83,894
Accruals, deferred income and other liabilities		97,380	(2,830)	691	95,241
Current tax liabilities		718	(22)	4	700
Liabilities under insurance contracts		87,330	(87,330)	–	–
Provisions		2,920	(9)	44	2,955
– of which: credit-related contingent liabilities and contractual commitments on IRB portfolios	h	395	–	–	395
Deferred tax liabilities		2,619	(1,144)	1	1,476
Subordinated liabilities		22,437	2	323	22,762
– of which:					
included in tier 1	l, n	1,786	–	–	1,786
included in tier 2	o, q	20,584	–	–	20,584
Total liabilities at 31 Dec 2018		2,363,875	(94,425)	15,199	2,284,649
Equity					
Called up share capital	a	10,180	–	–	10,180
Share premium account	a, l	13,609	–	–	13,609
Other equity instruments	k, l	22,367	–	–	22,367
Other reserves	c, g	1,906	1,996	–	3,902
Retained earnings	b, c	138,191	(11,387)	–	126,804
Total shareholders' equity		186,253	(9,391)	–	176,862
Non-controlling interests	d, m, n, p	7,996	(931)	–	7,065
Total equity at 31 Dec 2018		194,249	(10,322)	–	183,927
Total liabilities and equity at 31 Dec 2018		2,558,124	(104,747)	15,199	2,468,576

[†] The references (a)–(r) identify balance sheet components that are used in the calculation of regulatory capital in Table 4: Own funds disclosure.

Capital and RWAs

The Capital and Other TLAC-eligible instruments main features disclosure is published on our website, <https://www.hsbc.com/investors/fixed-income-investors/regulatory-capital-securities>.

For further detail on our management of capital, see page 76 of the Interim Report 2019.

Own funds

Table 4: Own funds disclosure

	Ref ^f	At	
		30 Jun 2019 \$m	31 Dec 2018 \$m
Common equity tier 1 ('CET1') capital: instruments and reserves			
1		22,874	22,384
– ordinary shares	<i>a</i>	22,874	22,384
2	<i>b</i>	125,478	121,180
3	<i>c</i>	3,632	3,368
5	<i>d</i>	5,045	4,854
5a	<i>b</i>	4,319	3,697
6		161,348	155,483
Common equity tier 1 capital: regulatory adjustments			
7		(1,236)	(1,180)
8	<i>e</i>	(18,904)	(17,323)
10	<i>f</i>	(1,113)	(1,042)
11	<i>g</i>	(97)	135
12	<i>h</i>	(1,733)	(1,750)
14	<i>i</i>	1,798	298
15	<i>j</i>	(6,160)	(6,070)
16		(40)	(40)
19		(6,914)	(7,489)
28		(34,399)	(34,461)
29		126,949	121,022
Additional tier 1 ('AT1') capital: instruments			
30		22,367	22,367
31	<i>k</i>	22,367	22,367
33	<i>l</i>	2,297	2,297
34	<i>m, n</i>	1,274	1,516
35	<i>m</i>	1,218	1,298
36		25,938	26,180
Additional tier 1 capital: regulatory adjustments			
37		(60)	(60)
43		(60)	(60)
44		25,878	26,120
45		152,827	147,142
Tier 2 capital: instruments and provisions			
46	<i>o</i>	20,636	20,249
– of which: instruments grandfathered under CRR II		7,018	N/A
48	<i>p, q</i>	5,989	6,480
49	<i>q</i>	832	1,585
– of row 48: instruments issued by subsidiaries grandfathered under CRR II		1,475	N/A
51		26,625	26,729
Tier 2 capital: regulatory adjustments			
52		(40)	(40)
55	<i>r</i>	(1,153)	(593)
57		(1,193)	(633)
58		25,432	26,096
59		178,259	173,238
60		885,971	865,318

Table 4: Own funds disclosure (continued)

		At	
		30 Jun 2019 \$m	31 Dec 2018 \$m
Capital ratios and buffers			
61	Common equity tier 1	14.3%	14.0%
62	Tier 1	17.2%	17.0%
63	Total capital	20.1%	20.0%
64	Institution specific buffer requirement	5.18%	3.94%
65	– capital conservation buffer requirement	2.50%	1.88%
66	– countercyclical buffer requirement	0.68%	0.56%
67a	– Global Systemically Important Institution ('G-SII') buffer	2.00%	1.50%
68	Common equity tier 1 available to meet buffers	8.1%	7.9%
Amounts below the threshold for deduction (before risk weighting)			
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	3,782	2,534
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	13,386	12,851
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability)	4,524	4,956
Applicable caps on the inclusion of provisions in tier 2			
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	2,282	2,200
79	Cap for inclusion of credit risk adjustments in T2 under IRB approach	3,292	3,221
Capital instruments subject to phase out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)			
82	Current cap on AT1 instruments subject to phase out arrangements	5,191	6,921
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	63	–
84	Current cap on T2 instruments subject to phase out arrangements	2,815	5,131

[†] The references (a)–(r) identify balance sheet components in Table 3: Reconciliation of balance sheets – financial accounting to regulatory scope of consolidation which is used in the calculation of regulatory capital.

1 Additional value adjustments are deducted from CET1. These are calculated on all assets measured at fair value.

2 The deduction for holdings of own CET1, T1 and T2 instruments is set by the PRA.

3 Threshold deduction for significant investments relates to balances recorded on numerous lines on the balance sheet and includes: investments in insurance subsidiaries and non-consolidated associates, other CET1 equity held in financial institutions, and connected funding of a capital nature.

4 Eligible instruments issued by subsidiaries previously reported in row 46 'Capital instruments and the related share premium accounts' are now reported here. For comparative purposes, 2018 data have been re-presented to reflect this change.

At 30 June 2019, our CET1 capital ratio increased to 14.3% from 14.0% at 31 December 2018. This was primarily due to CET1 capital growth during the period and was partly offset by the \$20.7bn rise in RWAs.

CET1 capital increased in 1H19 by \$5.9bn, mainly as a result of:

- capital generation of \$4.7bn through profits, net of cash and scrip dividends;
- a \$1.3bn increase in the fair value through other comprehensive income reserve; and
- a \$0.6bn decrease in threshold deductions as a result of an increase in the CET1 capital base.

These increases were partly offset by a \$1.6bn increase in the deduction for goodwill and intangible assets.

As part of a review of the Group's outstanding capital instruments, it was determined that six tier 2 instruments issued by HSBC USA Inc, HSBC Finance Corporation and HSBC Bank Canada should no longer be included in tier 2 capital for the Group. The instruments with a total face value of \$1.7bn were previously designated as grandfathered tier 2 under prevailing regulation and contributed \$0.7bn to the Group's tier 2 capital at 31 March 2019. The local capital treatment of these instruments is unchanged.

The \$20.7bn increase in RWAs was largely driven by lending growth of \$27.8bn and \$1.4bn from changes in asset quality, partly offset by reductions of \$9.6bn from methodology and policy changes.

For further information, a summary of RWA movements is set out in 'Risk-weighted assets' on page 78 of the Interim Report 2019.

Table 5: Leverage ratio common disclosure (LRCom)

		At	
		30 Jun 2019	31 Dec 2018
		\$bn	\$bn
On-balance sheet exposures (excluding derivatives and SFTs)			
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	2,176.3	2,012.5
2	(Asset amounts deducted in determining tier 1 capital)	(34.9)	(33.8)
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)	2,141.4	1,978.7
Derivative exposures			
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	56.9	44.2
5	Add-on amounts for potential future exposure associated with all derivatives transactions (mark-to-market method)	174.1	154.1
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to IFRSs	13.2	5.9
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(47.3)	(21.5)
8	(Exempted central counterparty ('CCP') leg of client-cleared trade exposures)	(55.2)	(38.0)
9	Adjusted effective notional amount of written credit derivatives	191.9	160.9
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(183.9)	(153.4)
11	Total derivative exposures	149.7	152.2
Securities financing transaction exposures			
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	412.7	429.8
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(158.7)	(184.5)
14	Counterparty credit risk exposure for SFT assets	10.6	11.3
16	Total securities financing transaction exposures	264.6	256.6
Other off-balance sheet exposures			
17	Off-balance sheet exposures at gross notional amount	835.2	829.8
18	(Adjustments for conversion to credit equivalent amounts)	(604.4)	(602.4)
19	Total off-balance sheet exposures	230.8	227.4
Capital and total exposures			
20	Tier 1 capital	149.3	143.5
21	Total leverage ratio exposure	2,786.5	2,614.9
22	Leverage ratio (%)	5.4	5.5
EU-23	Choice of transitional arrangements for the definition of the capital measure	Fully phased-in	Fully phased-in

1 At 31 December 2018, netting of \$180.9bn relating to SFT assets was recognised. This had no impact on the total leverage ratio exposure. Comparatives have been restated.

Leverage ratio

Our leverage ratio calculated in accordance with the Capital Requirements Regulation was 5.4% at 30 June 2019, down from 5.5% at 31 December 2018, mainly due to balance sheet growth.

At 30 June 2019 the Group's leverage ratio measured under the PRA's UK leverage framework was 5.8%. This measure excludes qualifying central bank balances from the calculation of exposure.

At 30 June 2019, our UK minimum leverage ratio requirement of 3.25% under the PRA's UK leverage framework was supplemented by an additional leverage ratio buffer of 0.7% and a countercyclical leverage ratio buffer of 0.2%. These additional buffers translate into capital values of \$18.0bn and \$6.1bn, respectively. We exceeded these leverage requirements.

For further details on our leverage ratio under the PRA's UK leverage framework, refer to page 79 of the Interim Report 2019.

The risk of excessive leverage is managed as part of our global risk appetite framework and monitored using a leverage ratio metric within our risk appetite statement ('RAS'). The RAS articulates the aggregate level and types of risk that we are willing to accept in our business activities in order to achieve our strategic business objectives. The RAS measures are monitored via the risk appetite profile report, which includes comparisons of actual performance against the risk appetite and tolerance thresholds assigned to each metric, to ensure that any excessive risk is highlighted, assessed and mitigated appropriately. The risk appetite profile report is presented monthly to the Risk Management Meeting of the Group Management Board ('RMM') and the Group Risk Committee ('GRC').

For further details on our risk appetite, refer to page 69 of the Annual Report and Accounts 2018.

Table 6: Summary reconciliation of accounting assets and leverage ratio exposures (LRSum)

		At	
		30 Jun 2019	31 Dec 2018
		\$bn	\$bn
1	Total assets as per published financial statements	2,751.3	2,558.1
Adjustments for:			
2	- entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(96.4)	(89.5)
4	- derivative financial instruments	(83.9)	(55.6)
5	- SFTs	8.9	(5.1)
6	- off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	230.8	227.4
7	- other	(24.2)	(20.4)
8	Total leverage ratio exposure	2,786.5	2,614.9

Table 7: Leverage ratio – Split of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures) (LRSpl)

		At	
		30 Jun 2019	31 Dec 2018
		\$bn	\$bn
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures)	2,129.0	1,991.0
EU-2	– trading book exposures	248.4	218.5
EU-3	– banking book exposures	1,880.6	1,772.5
	'banking book exposures' comprises:		
EU-4	covered bonds	2.5	1.6
EU-5	exposures treated as sovereigns	530.9	507.3
EU-6	exposures to regional governments, multilateral development banks, international organisations and public sector entities not treated as sovereigns	8.8	9.3
EU-7	institutions	77.4	66.8
EU-8	secured by mortgages of immovable properties	313.2	300.0
EU-9	retail exposures	84.7	82.8
EU-10	corporate	634.9	614.3
EU-11	exposures in default	9.2	9.1
EU-12	other exposures (e.g. equity, securitisations and other non-credit obligation assets)	219.0	181.3

Capital buffers

The geographical breakdown and institution-specific countercyclical capital buffer ('CCyB') disclosure and the G-SIB Indicators Disclosure are published annually on the HSBC website, www.hsbc.com.

Pillar 1 minimum capital requirements and RWA flow

Pillar 1 covers the minimum capital resource requirements for credit risk, counterparty credit risk ('CCR'), equity, securitisation, market risk and operational risk. These requirements are expressed in terms of RWAs.

Risk category	Scope of permissible approaches	Our approach
Credit risk	The Basel Committee's framework applies three approaches of increasing sophistication to the calculation of Pillar 1 credit risk capital requirements. The most basic level, the standardised approach, requires banks to use external credit ratings to determine the risk weightings applied to rated counterparties. Other counterparties are grouped into broad categories and standardised risk weightings are applied to these categories. The next level, the foundation IRB ('FIRB') approach, allows banks to calculate their credit risk capital requirements on the basis of their internal assessment of a counterparty's probability of default ('PD'), but subjects their quantified estimates of exposure at default ('EAD') and loss given default ('LGD') to standard supervisory parameters. Finally, the advanced IRB ('AIRB') approach allows banks to use their own internal assessment in both determining PD and quantifying EAD and LGD.	For consolidated Group reporting, we have adopted the AIRB approach for the majority of our business. Some portfolios remain on the standardised or FIRB approaches: <ul style="list-style-type: none"> pending the issuance of local regulations or model approval; following supervisory prescription of a non-advanced approach; or under exemptions from IRB treatment.
Counterparty credit risk	Four approaches to calculating CCR and determining exposure values are defined by the Basel Committee: mark-to-market, original exposure, standardised and internal model method ('IMM'). These exposure values are used to determine capital requirements under one of the credit risk approaches: standardised, FIRB or AIRB.	We use the mark-to-market and IMM approaches for CCR. Details of the IMM permission we have received from the PRA can be found in the Financial Services Register on the PRA website. Our aim is to increase the proportion of positions on IMM over time.
Equity	For the non-trading book, equity exposures can be assessed under standardised or IRB approaches.	For Group reporting purposes, all non-trading book equity exposures are treated under the standardised approach.
Securitisation	Basel specifies two approaches for calculating credit risk requirements for securitisation positions in non-trading books: the standardised approach and the IRB approach, which incorporates the ratings based method ('RBM'), the internal assessment approach ('IAA') and the supervisory formula method ('SFM'). Securitisation positions in the trading book are treated within the market risk framework, using the CRD IV standard rules. On 1 January 2019, the new securitisation framework came into force in the EU for new transactions. This framework prescribes the following approaches: <ul style="list-style-type: none"> internal ratings-based approach ('SEC-IRBA'); external ratings-based approach ('SEC-ERBA'); internal assessment approach ('IAA'); and standardised approach ('SEC-SA'). From 1 January 2020, all transactions will be subject to the new framework.	For the majority of the non-trading book securitisation positions, we use the IRB approach, and within this principally the RBM, with lesser amounts on the IAA and the SFM. We also use the standardised approach for an immaterial amount of non-trading book positions. We follow the CRD IV standard rules for the securitisation positions in the trading book. Our exposures subject to the new framework in 2019 include exposures under SEC-ERBA, IAA and SEC-SA.

Risk category	Scope of permissible approaches	Our approach
Market risk	Market risk capital requirements can be determined under either the standard rules or the internal models approach ('IMA'). The latter involves the use of internal value at risk ('VaR') models to measure market risks and determine the appropriate capital requirement. In addition to the VaR models, other internal models include stressed VaR ('SVaR'), incremental risk charge ('IRC') and comprehensive risk measure.	The market risk capital requirement is measured using internal market risk models, where approved by the PRA, or under the standard rules. Our internal market risk models comprise VaR, stressed VaR and IRC. Non-proprietary details of the scope of our IMA permission are available in the Financial Services Register on the PRA website. We are in compliance with the requirements set out in articles 104 and 105 of the Capital Requirements Regulation.
Operational risk	The Basel Committee allows firms to calculate their operational risk capital requirement under the basic indicator approach, the standardised approach or the advanced measurement approach.	We currently use the standardised approach in determining our operational risk capital requirement. We have in place an operational risk model that is used for economic capital calculation purposes.

Table 8: Overview of RWAs (OV1)

		At		
		30 Jun 2019	31 Mar 2019	30 Jun 2019
		RWAs	RWAs	Capital ¹
	Footnotes	\$bn	\$bn	\$bn
1	Credit risk (excluding counterparty credit risk)	657.3	649.8	52.6
2	– standardised approach	134.8	130.1	10.8
3	– foundation IRB approach	31.1	30.8	2.5
4	– advanced IRB approach	491.4	488.9	39.3
6	Counterparty credit risk	50.5	50.0	4.0
7	– mark-to-market	26.8	27.0	2.1
10	– internal model method	17.4	16.3	1.4
11	– risk exposure amount for contributions to the default fund of a central counterparty	0.5	0.4	–
12	– credit valuation adjustment	5.8	6.3	0.5
13	Settlement risk	0.1	0.1	–
14	Securitisation exposures in the non-trading book	7.4	8.5	0.6
15	– IRB ratings based method	2.5	3.7	0.2
16	– IRB supervisory formula method	–	–	–
17	– IRB internal assessment approach	1.2	1.4	0.1
18	– standardised approach	2.0	2.2	0.2
14a	– exposures subject to the new securitisation framework	1.7	1.2	0.1
19	Market risk	34.8	35.1	2.8
20	– standardised approach	4.3	5.4	0.4
21	– internal models approach	30.5	29.7	2.4
23	Operational risk	91.1	91.1	7.3
25	– standardised approach	91.1	91.1	7.3
27	Amounts below the thresholds for deduction (subject to 250% risk weight)	44.8	44.9	3.6
29	Total	886.0	879.5	70.9

¹ On 1 January 2019, a new securitisation framework came into force in the EU for new transactions. Existing positions are subject to 'grandfathering' provisions and will transfer to the new framework on 1 January 2020. Our exposures subject to the approaches under the new framework at 30 June 2019 include \$353m under SEC-ERBA, \$952m under IAA, and \$435m under SEC-SA.

Credit risk, including amounts below the thresholds for deduction

RWAs increased by \$7.4bn in the second quarter of 2019, including a decrease in foreign currency translation differences of \$2.1bn. Excluding foreign currency translation differences, the increase of \$9.5bn was primarily driven by lending growth across Asia and Europe in Commercial Banking ('CMB'), Retail Banking and Wealth Management ('RBWM') and Corporate Centre.

Counterparty credit risk

The \$0.5bn increase in RWAs was largely due to mark-to-market movements and new trades in Europe, North America and Asia.

Securitisation in non-trading book

The \$1.1bn RWA decrease arose primarily from the sale of legacy positions.

Market risk

RWAs decreased by \$0.3bn mainly due to increased diversification benefits following regulatory approval to expand the scope of consolidation, partly offset by higher sovereign exposures.

Table 9: RWA flow statements of credit risk exposures under IRB¹ (CR8)

	RWAs \$bn	Capital requirements \$bn
1 RWAs at 1 Apr 2019	519.7	41.6
2 Asset size	7.6	0.6
3 Asset quality	1.5	0.1
5 Methodology and policy	(4.2)	(0.3)
7 Foreign exchange movements	(2.1)	(0.2)
9 RWAs at 30 Jun 2019	522.5	41.8

1 Securitisation positions are not included in this table.

RWAs under the IRB approach increased by \$2.8bn in the second quarter of the year, including a decrease of \$2.1bn due to foreign currency translation differences.

The \$4.9bn increase in RWAs excluding foreign currency translation differences was mainly due to:

- a \$7.6bn increase in asset size due to lending growth across Asia and Europe;

- a \$1.5bn increase from changes in asset quality, notably in Asia; and
- a \$4.2bn decrease largely due to management initiatives in Europe and Asia.

Table 10: RWA flow statements of CCR exposures under IMM (CCR7)

	RWAs \$bn	Capital requirements \$bn
1 RWAs at 1 Apr 2019	21.0	1.7
2 Asset size	0.3	–
5 Methodology and policy	0.2	–
9 RWAs at 30 Jun 2019	21.5	1.7

RWAs under the IMM increased by \$0.5bn mainly as a result of a \$0.3bn increase in asset size arising from mark to market movements, and a \$0.2bn increase under methodology and policy driven by LGD updates.

Table 11: RWA flow statements of market risk exposures under IMA (MR2-B)

	VaR \$bn	Stressed VaR \$bn	IRC \$bn	Other \$bn	Total RWAs \$bn	Total capital requirements \$bn
1 RWAs at 1 Apr 2019	6.7	10.7	8.9	3.4	29.7	2.4
2 Movement in risk levels	0.5	0.7	1.9	0.1	3.2	0.2
4 Methodology and policy	(0.7)	(2.0)	0.3	–	(2.4)	(0.2)
8 RWAs at 30 Jun 2019	6.5	9.4	11.1	3.5	30.5	2.4

RWAs under the IMA increased by \$0.8bn mainly as a result of a \$1.9bn increase in incremental risk charge due to sovereign exposures, and growth in VaR and stressed VaR risk level RWAs of \$1.2bn largely due to higher exposure at risk across multiple

portfolios. This was partly offset by a \$2.4bn decrease in methodology and policy, primarily due to increased diversification benefits following regulatory approval to expand the scope of consolidation.

Credit risk

Credit risk is the risk of financial loss if a customer or counterparty fails to meet an obligation under a contract. It arises principally from direct lending, trade finance and leasing business, but also

from other products, such as guarantees and credit derivatives and from holding assets in the form of debt securities. Credit risk represents our largest regulatory capital requirement.

There have been no material changes to our policies and practices, which are described in the Pillar 3 Disclosures at 31 December 2018.

Table 12: Credit risk summary by approach

	At 30 Jun 2019		
	EAD post-CCF and CRM	RWAs [^]	RWA density
	\$bn	\$bn	%
IRB advanced approach	1,538.1	476.4	31
– central governments and central banks	352.9	38.6	11
– institutions	85.3	15.5	18
– corporates	666.2	347.3	52
– total retail	433.7	75.0	17
– of which:			
Secured by mortgages on immovable property SME	3.3	1.7	50
Secured by mortgages on immovable property non-SME	301.3	39.7	13
Qualifying revolving retail	75.5	17.3	23
Other SME	6.3	4.8	76
Other non-SME	47.3	11.5	24
IRB securitisation positions	23.9	3.7	15
IRB non-credit obligation assets	61.7	15.0	24
IRB foundation approach	51.4	31.1	61
– central governments and central banks	0.1	–	21
– institutions	0.6	0.2	28
– corporates	50.7	30.9	61
Standardised approach	382.3	183.3	48
– central governments and central banks	171.0	11.4	7
– regional governments or local authorities	7.7	1.3	17
– public sector entities	12.7	–	–
– multilateral development banks	0.1	–	2
– international organisations	1.5	–	–
– institutions	1.4	0.8	52
– corporates	86.7	81.6	94
– retail	20.1	14.9	74
– secured by mortgages on immovable property	30.2	11.1	37
– exposures in default	3.1	3.6	116
– items associated with particularly high risk	5.2	7.7	150
– securitisation positions	8.8	3.7	42
– collective investment undertakings	0.4	0.4	100
– equity	16.6	36.7	221
– other items	16.8	10.1	60
Total	2,057.4	709.5	34

[^] Figures have been prepared on an IFRS 9 transitional basis.

Credit quality of assets

We are a universal bank with a conservative approach to credit risk. This is reflected in our credit risk profile being diversified

across a number of asset classes and geographies with a credit quality profile concentrated in the higher quality bands.

Table 13: Credit quality of exposures by exposure class and instrument¹ (CR1-A)

		Gross carrying values of					Net carrying values
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustments	Write-offs in the year ²	Credit risk adjustment charges of the period ²	
		\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
1	Central governments and central banks	–	355.4	–	–	–	355.4
2	Institutions	–	93.2	–	–	–	93.2
3	Corporates	6.9	1,038.9	4.0	0.3	0.4	1,041.8
4	– of which: specialised lending	1.1	50.6	0.4	–	–	51.3
6	Retail	3.3	501.4	1.9	0.5	0.6	502.8
7	– secured by real estate property	2.4	301.6	0.3	–	–	303.7
	– of which:						
8	SMEs	0.1	3.5	0.1	–	–	3.5
9	Non-SMEs	2.3	298.1	0.2	–	–	300.2
10	– qualifying revolving retail	0.2	134.5	0.8	0.3	0.2	133.9
11	– other retail	0.7	65.3	0.8	0.2	0.4	65.2
	– of which:						
12	SMEs	0.4	7.8	0.4	0.1	0.2	7.8
13	Non-SMEs	0.3	57.5	0.4	0.1	0.2	57.4
15	Total IRB approach	10.2	1,988.9	5.9	0.8	1.0	1,993.2
16	Central governments and central banks	–	163.1	–	–	–	163.1
17	Regional governments or local authorities	–	7.8	–	–	–	7.8
18	Public sector entities	–	12.9	–	–	–	12.9
19	Multilateral development banks	–	0.1	–	–	–	0.1
20	International organisations	–	1.5	–	–	–	1.5
21	Institutions	–	2.2	–	–	–	2.2
22	Corporates	3.4	193.5	2.2	0.3	–	194.7
24	Retail	1.0	68.5	1.5	0.3	0.4	68.0
25	– of which: SMEs	–	1.3	0.1	–	–	1.2
26	Secured by mortgages on immovable property	0.7	31.4	0.2	–	–	31.9
28	Exposures in default	5.1	–	2.2	0.6	0.5	2.9
29	Items associated with particularly high risk	0.1	5.3	–	–	–	5.4
32	Collective investment undertakings ('CIU')	–	0.4	–	–	–	0.4
33	Equity exposures	–	16.5	–	–	–	16.5
34	Other exposures	–	16.8	–	–	–	16.8
35	Total standardised approach	5.2	520.0	3.9	0.6	0.4	521.3
36	Total at 30 Jun 2019	15.4	2,508.9	9.8	1.4	1.4	2,514.5
	– of which: loans	14.0	1,289.8	9.3	1.4	1.5	1,294.5
	– of which: debt securities	–	363.2	–	–	–	363.2
	– of which: off-balance sheet exposures	1.4	813.9	0.5	–	(0.1)	814.8

Table 13: Credit quality of exposures by exposure class and instrument¹ (CR1-A) (continued)

		Gross carrying values of				Credit risk adjustment charges of the period ²	Net carrying values
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustments	Write-offs in the year ²		
		\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
1	Central governments and central banks	—	315.5	—	—	(0.1)	315.5
2	Institutions	—	92.8	—	—	—	92.8
3	Corporates	7.6	1,022.0	4.3	0.2	0.1	1,025.3
4	– of which: specialised lending	0.9	49.0	0.5	—	0.3	49.4
6	Retail	3.5	470.0	1.7	0.4	0.4	471.8
7	– secured by real estate property	2.5	278.4	0.3	—	—	280.6
	– of which:						
8	SMEs	0.1	3.5	—	—	—	3.6
9	Non-SMEs	2.4	274.9	0.3	—	—	277.0
10	– qualifying revolving retail	0.1	129.0	0.7	0.2	0.2	128.4
11	– other retail	0.9	62.6	0.7	0.2	0.2	62.8
	– of which:						
12	SMEs	0.5	8.3	0.4	0.1	0.1	8.4
13	Non-SMEs	0.4	54.3	0.3	0.1	0.1	54.4
15	Total IRB approach	11.1	1,900.3	6.0	0.6	0.4	1,905.4
16	Central governments and central banks	—	186.2	—	—	—	186.2
17	Regional governments or local authorities	—	7.3	—	—	—	7.3
18	Public sector entities	—	11.8	—	—	—	11.8
19	Multilateral development banks	—	0.2	—	—	—	0.2
20	International organisations	—	2.0	—	—	—	2.0
21	Institutions	—	3.6	—	—	—	3.6
22	Corporates	3.2	177.7	2.0	0.1	0.1	178.9
24	Retail	1.0	67.5	1.6	0.4	0.3	66.9
25	– of which: SMEs	—	1.7	—	—	—	1.7
26	Secured by mortgages on immovable property	0.8	31.9	0.3	—	(0.1)	32.4
27	– of which: SMEs	—	0.1	—	—	—	0.1
28	Exposures in default	5.0	—	2.1	0.5	0.3	2.9
29	Items associated with particularly high risk	0.1	4.3	—	—	—	4.4
32	Collective investment undertakings ('CIU')	—	0.7	—	—	—	0.7
33	Equity exposures	—	15.7	—	—	—	15.7
34	Other exposures	—	13.8	—	—	—	13.8
35	Total standardised approach	5.1	522.7	3.9	0.5	0.3	523.9
36	Total at 30 Jun 2018	16.2	2,423.0	9.9	1.1	0.7	2,429.3
	– of which: loans	14.7	1,266.4	9.4	1.1	0.9	1,271.7
	– of which: debt securities	—	327.4	—	—	—	327.4
	– of which: off-balance sheet exposures	1.5	791.3	0.5	—	(0.2)	792.3

1 Securitisation positions and non-credit obligation assets are not included in this table.

2 Presented on a year-to-date basis.

Pillar 3 Disclosures at 30 June 2019

Table 14: Credit quality of exposures by industry or counterparty types¹ (CR1-B)

	Footnotes	Gross carrying values of					Net carrying values
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustments	Write-offs in the year ²	Credit risk adjustment charges of the period ²	
		\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
1	Agriculture	0.3	9.0	0.2	–	–	9.1
2	Mining and oil extraction	0.3	43.3	0.3	–	–	43.3
3	Manufacturing	1.7	266.5	1.2	0.3	0.2	267.0
4	Utilities	0.2	32.8	0.1	0.1	–	32.9
5	Water supply	–	2.4	–	–	–	2.4
6	Construction	1.3	41.9	0.6	0.1	0.1	42.6
7	Wholesale and retail trade	2.0	203.3	1.3	0.1	0.1	204.0
8	Transportation and storage	0.6	55.0	0.2	–	–	55.4
9	Accommodation and food services	0.3	29.4	0.1	–	–	29.6
10	Information and communication	–	9.8	–	–	–	9.8
11	Financial and insurance	³ 0.7	578.3	0.2	–	–	578.8
12	Real estate	1.0	247.4	0.6	–	–	247.8
13	Professional activities	0.1	18.5	0.1	–	–	18.5
14	Administrative service	1.5	91.7	1.2	0.1	0.2	92.0
15	Public administration and defence	0.3	239.1	0.3	–	–	239.1
16	Education	–	3.6	–	–	–	3.6
17	Human health and social work	0.1	7.5	0.1	–	–	7.5
18	Arts and entertainment	0.1	6.9	0.1	–	0.1	6.9
19	Other services	0.3	16.6	0.1	–	–	16.8
20	Personal	4.6	594.4	3.1	0.7	0.7	595.9
21	Extraterritorial bodies	–	11.5	–	–	–	11.5
22	Total at 30 Jun 2019	15.4	2,508.9	9.8	1.4	1.4	2,514.5
1	Agriculture	0.3	8.0	0.1	–	–	8.2
2	Mining and oil extraction	0.9	39.7	0.4	0.1	(0.1)	40.2
3	Manufacturing	2.1	259.3	1.4	–	0.1	260.0
4	Utilities	0.3	34.0	0.1	–	–	34.2
5	Water supply	–	2.8	–	–	–	2.8
6	Construction	1.4	41.2	0.6	–	0.1	42.0
7	Wholesale and retail trade	2.3	206.1	1.3	0.1	0.1	207.1
8	Transportation and storage	0.3	52.6	0.2	–	0.1	52.7
9	Accommodation and food services	0.3	28.3	0.2	–	–	28.4
10	Information and communication	–	9.3	–	–	–	9.3
11	Financial and insurance	³ 0.4	591.9	0.3	0.1	–	592.0
12	Real estate	1.1	234.1	0.7	–	0.1	234.5
13	Professional activities	0.2	22.5	0.1	–	–	22.6
14	Administrative service	1.0	93.5	1.0	–	0.2	93.5
15	Public administration and defence	0.4	173.7	0.2	–	(0.1)	173.9
16	Education	–	4.3	–	–	–	4.3
17	Human health and social work	0.1	7.2	0.1	–	–	7.2
18	Arts and entertainment	–	5.3	–	0.1	–	5.3
19	Other services	0.3	14.9	0.1	–	0.1	15.1
20	Personal	4.8	556.2	3.1	0.7	0.1	557.9
21	Extraterritorial bodies	–	38.1	–	–	–	38.1
22	Total at 30 Jun 2018	16.2	2,423.0	9.9	1.1	0.7	2,429.3

¹ Securitisation positions and non-credit obligation assets are not included in this table.

² Presented on a year-to-date basis.

³ We have restated the comparative period to include within the Financial and Insurance sector \$22.2bn exposure in the form of non-customer assets that are neither securitisation nor non-credit obligation assets. These non-customer assets were previously excluded from this table.

Table 15: Credit quality of exposures by geography^{1,2} (CR1-C)

		Gross carrying values of					Net carrying values
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustments	Write-offs in the year ³	Credit risk adjustment charges of the period ³	
		\$bn	\$bn	\$bn	\$bn	\$bn	
1	Europe	6.8	800.5	3.7	0.6	0.6	803.6
2	– UK	4.1	495.8	2.5	0.4	0.6	497.4
3	– France	1.3	134.5	0.6	–	0.1	135.2
4	– Other countries	1.4	170.2	0.6	0.2	(0.1)	171.0
5	Asia	2.5	1,049.9	2.0	0.3	0.3	1,050.4
6	– Hong Kong	0.7	523.1	0.7	0.1	0.1	523.1
7	– China	0.3	163.6	0.4	–	0.1	163.5
8	– Singapore	0.1	75.1	0.1	–	–	75.1
9	– Other countries	1.4	288.1	0.8	0.2	0.1	288.7
10	Middle East and North Africa ('MENA')	3.3	142.2	2.4	0.2	0.1	143.1
11	North America	1.9	436.7	0.7	0.1	0.1	437.9
12	– US	1.2	306.9	0.3	0.1	0.1	307.8
13	– Canada	0.3	114.4	0.2	–	–	114.5
14	– Other countries	0.4	15.4	0.2	–	–	15.6
15	Latin America	0.9	64.3	1.0	0.2	0.3	64.2
16	Other geographical areas	–	15.3	–	–	–	15.3
17	Total at 30 Jun 2019	15.4	2,508.9	9.8	1.4	1.4	2,514.5

1	Europe	7.4	811.2	3.9	0.4	0.3	814.7
2	– UK	4.4	498.6	2.4	0.4	0.2	500.6
3	– France	1.1	102.9	0.7	–	–	103.3
4	– Other countries	1.9	209.7	0.8	–	0.1	210.8
5	Asia	2.6	989.2	2.0	0.2	0.3	989.8
6	– Hong Kong	1.0	490.9	0.8	0.1	–	491.1
7	– China	0.3	155.6	0.3	–	0.1	155.6
8	– Singapore	0.2	68.2	0.1	–	–	68.3
9	– Other countries	1.1	274.5	0.8	0.1	0.2	274.8
10	MENA	3.0	134.8	2.3	0.1	0.1	135.5
11	North America	2.4	409.0	0.8	0.1	–	410.6
12	– US	1.5	289.8	0.3	0.1	–	291.0
13	– Canada	0.3	101.7	0.2	–	–	101.8
14	– Other countries	0.6	17.5	0.3	–	–	17.8
15	Latin America	0.8	62.5	0.9	0.3	–	62.4
16	Other geographical areas	–	16.3	–	–	–	16.3
17	Total at 30 Jun 2018	16.2	2,423.0	9.9	1.1	0.7	2,429.3

1 Amounts shown by geographical region and country/territory in this table are based on the country/territory of residence of the counterparty.

2 Securitisation positions and non-credit obligation assets are not included in this table.

3 Presented on a year-to-date basis.

Table 16: Ageing of past-due unimpaired and impaired exposures (CR1-D)

		Gross carrying values					
		Less than 30 days	Between 30 and 60 days	Between 60 and 90 days	Between 90 and 180 days	Between 180 days and 1 year	Greater than 1 year
		\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
1	Loans	9.0	1.4	0.7	2.0	1.0	3.5
2	Debt securities	–	–	–	–	–	–
3	Total exposures at 30 Jun 2019	9.0	1.4	0.7	2.0	1.0	3.5
1	Loans	8.8	1.7	0.8	2.1	0.7	3.8
2	Debt securities	–	–	–	–	–	–
3	Total exposures at 30 Jun 2018	8.8	1.7	0.8	2.1	0.7	3.8

Table 17: Non-performing and forborne exposures (CR1-E)

	Gross carrying values of performing and non-performing exposures								Accumulated impairment and provisions and negative fair value adjustments due to credit risk			Collateral and financial guarantees received		
	of which: performing but past due between 30 and 90 days			of which: non-performing					On performing exposures		On non-performing exposures	On non-performing exposures	of which: forborne	
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn			
												of which: performing forborne	of which: defaulted	of which: impaired
At 30 Jun 2019														
1 Debt securities	363.2	–	–	–	–	–	–	–	–	–	–	–	–	–
2 Loans	1,303.8	1.7	1.6	14.0	14.0	14.0	5.9	(3.8)	(0.1)	(5.5)	(1.8)	4.4	3.3	
3 Off-balance sheet exposures	815.3	–	–	1.4	1.4	1.4	–	(0.4)	–	(0.1)	–	–	–	
At 30 Jun 2018														
1 Debt securities	327.4	–	–	–	–	–	–	–	–	–	–	–	–	
2 Loans	1,281.1	1.9 ¹	1.8	14.7	14.7	14.7	6.9	(3.6)	–	(5.6)	(1.9)	5.0	4.0	
3 Off-balance sheet exposures	792.8	–	0.4	1.5	1.5	1.5 ¹	0.1	(0.4)	–	(0.1)	–	0.2	0.1	

¹ Figures have been restated to align with the current methodology and for comparability.

Defaulted exposures

The accounting definition of impaired and the regulatory definition of default are generally aligned. For specific retail exposures, regulatory default is identified at 180 days past due, while the exposures are identified as impaired at 90 days past due.

In the retail portfolio in the US, a renegotiation would normally trigger identification as 'impaired' for accounting purposes. For regulatory purposes, default is identified mainly based on the 180 days past due criterion.

Table 18: Changes in stock of general and specific credit risk adjustments (CR2-A)

	Footnotes	Half-year to 30 Jun			
		2019		2018	
		Accumulated specific credit risk adjustments	Accumulated general credit risk adjustments	Accumulated specific credit risk adjustments	Accumulated general credit risk adjustments
		\$bn	\$bn	\$bn	\$bn
1 Opening balance at the beginning of the period		9.8	–	10.4	–
2 Increases due to amounts set aside for estimated loan losses during the period	¹	1.2	–	0.7	–
3 Decreases due to amounts reversed for estimated loan losses during the period	¹	–	–	–	–
4 Decreases due to amounts taken against accumulated credit risk adjustments		(1.4)	–	(1.1)	–
6 Impact of exchange rate differences		0.2	–	(0.1)	–
7 Business combinations, including acquisitions and disposals of subsidiaries		–	–	–	–
9 Closing balance at the end of the period		9.8	–	9.9	–
10 Recoveries on credit risk adjustments recorded directly to the statement of profit or loss		0.2	–	0.3	–

¹ Following adoption of IFRS 9 'Financial Instruments', the movement due to amounts set aside for estimated loan losses during the period has been reported on a net basis.

Table 19: Changes in stock of defaulted loans and debt securities (CR2-B)

	Footnotes	Half-year to 30 Jun	
		2019	2018
		Gross carrying value	Gross carrying value
		\$bn	\$bn
1 Defaulted loans and debt securities at the beginning of the period		13.7	15.1
2 Loans and debt securities that have defaulted since the last reporting period		2.9	3.1
3 Returned to non-defaulted status		(0.6)	(0.8)
4 Amounts written off		(1.4)	(1.2)
5 Other changes	¹	0.2	(0.8)
7 Repayments		(0.8)	(0.7)
6 Defaulted loans and debt securities at the end of the period		14.0	14.7

¹ Other changes include foreign exchange movements and changes in assets held for sale in default.

Risk mitigation

Our approach when granting credit facilities is to do so on the basis of capacity to repay, rather than placing primary reliance on credit risk mitigants. Depending on a customer's standing and the type of product, facilities may be provided unsecured. Mitigation of credit risk is a key aspect of effective risk management and takes many forms. Our general policy is to promote the use of credit risk mitigation, justified by commercial prudence and capital

efficiency. Detailed policies cover the acceptability, structuring and terms with regard to the availability of credit risk mitigation, such as in the form of collateral security. These policies, together with the setting of suitable valuation parameters, are subject to regular review to ensure that they are supported by empirical evidence and continue to fulfil their intended purpose.

Table 20: Credit risk mitigation techniques – overview (CR3)

	Exposures unsecured: carrying amount	Exposures secured: carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
	\$bn	\$bn	\$bn	\$bn	\$bn
1 Loans	672.4	622.1	515.9	105.5	0.7
2 Debt securities	324.9	38.3	32.5	5.8	–
3 Total at 30 Jun 2019	997.3	660.4	548.4	111.3	0.7
4 <i>Of which: defaulted</i>	<i>5.5</i>	<i>3.3</i>	<i>2.9</i>	<i>0.4</i>	<i>–</i>
1 Loans	641.2	596.8	494.0	102.1	0.7
2 Debt securities	316.1	32.4	27.2	5.2	–
3 Total at 31 Dec 2018	957.3	629.2	521.2	107.3	0.7
4 <i>Of which: defaulted</i>	<i>6.3</i>	<i>4.6</i>	<i>4.1</i>	<i>0.4</i>	<i>–</i>

Table 21: Standardised approach – credit conversion factor and credit risk mitigation ('CRM') effects (CR4)

	Exposures before CCF and CRM		Exposures post-CCF and CRM		RWAs and RWA density	
	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWAs	RWA density
	\$bn	\$bn	\$bn	\$bn	\$bn	%
Asset classes¹						
1 Central governments or central banks	161.4	1.5	169.6	1.4	11.4	7
2 Regional governments or local authorities	7.5	0.3	7.6	0.1	1.3	17
3 Public sector entities	12.8	0.1	12.7	–	–	–
4 Multilateral development banks	0.1	–	0.1	–	–	2
5 International organisations	1.5	–	1.5	–	–	–
6 Institutions	2.2	–	1.4	–	0.8	52
7 Corporates	98.9	94.3	74.5	12.2	81.6	94
8 Retail	20.5	47.1	19.7	0.4	14.9	74
9 Secured by mortgages on immovable property	29.8	1.5	29.8	0.4	11.1	37
10 Exposures in default	3.2	0.1	3.1	–	3.6	116
11 Higher risk categories	2.8	2.6	2.7	2.5	7.7	150
14 Collective investment undertakings	0.4	–	0.4	–	0.4	100
15 Equity	16.6	–	16.6	–	36.7	221
16 Other items	16.0	0.8	16.0	0.8	10.1	60
17 Total at 30 Jun 2019	373.7	148.3	355.7	17.8	179.6	48
1 Central governments or central banks	162.7	1.0	170.8	1.1	12.5	7
2 Regional governments or local authorities	7.0	0.3	7.0	0.1	1.3	19
3 Public sector entities	12.1	0.1	12.0	–	–	–
4 Multilateral development banks	0.2	–	0.2	–	–	2
5 International organisations	1.6	–	1.6	–	–	–
6 Institutions	3.3	0.1	2.3	–	1.2	52
7 Corporates	91.2	88.3	72.0	12.2	79.2	94
8 Retail	20.5	43.5	19.7	0.2	14.8	74
9 Secured by mortgages on immovable property	30.6	1.4	30.6	0.3	11.3	37
10 Exposures in default	3.3	0.2	3.3	–	3.8	117
11 Higher risk categories	2.5	2.3	2.4	2.2	6.9	150
14 Collective investment undertakings	0.6	–	0.6	–	0.6	100
15 Equity	15.7	–	15.7	–	35.0	223
16 Other items	10.5	0.8	10.5	0.8	6.6	58
17 Total at 31 Dec 2018	361.8	138.0	348.7	16.9	173.2	47

¹ Securitisation positions are not included in this table.

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Table 22: Standardised approach – exposures by asset classes and risk weights (CR5)

Risk weight ('RW%')												Total credit exposure amount (post-CCF and CRM)	Of which: unrated	
	0%	2%	20%	35%	50%	70%	75%	100%	150%	250%	Deducted			
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	
Asset classes¹														
1	Central governments or central banks	166.3	–	0.1	–	–	–	–	0.1	–	4.5	–	171.0	4.5
2	Regional governments or local authorities	2.9	–	4.1	–	0.5	–	–	0.2	–	–	–	7.7	0.3
3	Public sector entities	12.7	–	–	–	–	–	–	–	–	–	–	12.7	–
4	Multilateral development banks	0.1	–	–	–	–	–	–	–	–	–	–	0.1	–
5	International organisations	1.5	–	–	–	–	–	–	–	–	–	–	1.5	–
6	Institutions	–	–	0.3	–	0.8	–	–	0.3	–	–	–	1.4	0.7
7	Corporates	–	–	3.7	0.2	3.5	0.5	–	78.0	0.8	–	–	86.7	61.8
8	Retail	–	–	–	–	–	–	20.1	–	–	–	–	20.1	20.1
9	Secured by mortgages on immovable property	–	–	–	29.0	0.5	–	–	0.7	–	–	–	30.2	30.2
10	Exposures in default	–	–	–	–	–	–	–	2.1	1.0	–	–	3.1	3.1
11	Higher risk categories	–	–	–	–	–	–	–	–	5.2	–	–	5.2	5.2
14	Collective investment undertakings	–	–	–	–	–	–	–	0.4	–	–	–	0.4	0.4
15	Equity	–	–	–	–	–	–	–	3.2	–	13.4	–	16.6	16.6
16	Other items	0.1	–	8.3	–	–	–	–	8.4	–	–	–	16.8	16.8
17	Total at 30 Jun 2019	183.6	–	16.5	29.2	5.3	0.5	20.1	93.4	7.0	17.9	–	373.5	159.7
1	Central governments or central banks	166.5	–	0.2	–	0.1	–	–	0.1	–	5.0	–	171.9	5.0
2	Regional governments or local authorities	2.8	–	3.5	–	0.5	–	–	0.3	–	–	–	7.1	0.5
3	Public sector entities	12.0	–	–	–	–	–	–	–	–	–	–	12.0	–
4	Multilateral development banks	0.2	–	–	–	–	–	–	–	–	–	–	0.2	–
5	International organisations	1.6	–	–	–	–	–	–	–	–	–	–	1.6	–
6	Institutions	–	0.1	0.4	–	1.4	–	–	0.4	–	–	–	2.3	0.2
7	Corporates	–	–	3.6	0.3	3.4	0.5	–	75.6	0.8	–	–	84.2	59.1
8	Retail	–	–	–	–	–	–	19.9	–	–	–	–	19.9	19.9
9	Secured by mortgages on immovable property	–	–	–	30.2	–	–	–	0.7	–	–	–	30.9	30.9
10	Exposures in default	–	–	–	–	–	–	–	2.2	1.1	–	–	3.3	3.3
11	Higher risk categories	–	–	–	–	–	–	–	–	4.6	–	–	4.6	4.6
14	Collective investment undertakings	–	–	–	–	–	–	–	0.6	–	–	–	0.6	0.6
15	Equity	–	–	–	–	–	–	–	2.8	–	12.9	–	15.7	15.7
16	Other items	–	–	5.9	–	–	–	–	5.4	–	–	–	11.3	11.3
17	Total at 31 Dec 2018	183.1	0.1	13.6	30.5	5.4	0.5	19.9	88.1	6.5	17.9	–	365.6	151.1

¹ Securitisation positions are not included in this table.

Table 23: IRB – Credit risk exposures by portfolio and PD range¹ (CR6)

PD scale	Original on-balance sheet gross exposure \$bn	Off-balance sheet exposures pre-CCF \$bn	Average CCF %	EAD post-CRM and post-CCF \$bn	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWAs \$bn	RWA density %	Expected loss \$bn	Value adjustments and provisions [^] \$bn
AIRB – Central government and central banks												
0.00 to <0.15	337.9	2.0	43.7	338.7	0.02	271	42.1	2.20	28.3	8	–	
0.15 to <0.25	2.2	0.2	3.4	2.2	0.22	9	45.0	1.90	0.9	43	–	
0.25 to <0.50	1.9	–	19.9	1.9	0.37	12	45.0	1.20	0.9	49	–	
0.50 to <0.75	2.9	0.2	49.9	3.2	0.63	15	45.0	1.10	2.0	64	–	
0.75 to <2.50	7.0	0.2	30.6	6.8	1.72	22	44.6	1.20	6.5	96	0.1	
2.50 to <10.00	0.5	0.2	0.2	0.1	7.62	8	7.2	3.80	–	30	–	
10.00 to <100.00	–	0.2	–	–	–	1	–	–	–	–	–	
Sub-total	352.4	3.0	40.8	352.9	0.06	338	42.2	2.10	38.6	11	0.1	–
AIRB – Institutions												
0.00 to <0.15	73.9	8.9	38.0	77.1	0.05	2,550	39.6	1.40	10.9	14	–	
0.15 to <0.25	3.1	1.2	18.9	3.3	0.22	322	40.7	1.10	1.3	38	–	
0.25 to <0.50	2.0	0.2	52.2	2.1	0.37	162	41.5	1.30	1.1	51	–	
0.50 to <0.75	1.1	0.5	52.9	1.3	0.63	140	45.5	1.40	1.0	80	–	
0.75 to <2.50	1.2	0.6	53.0	1.5	1.07	201	40.8	1.50	1.2	84	–	
2.50 to <10.00	–	–	31.5	–	4.43	26	45.9	1.00	–	109	–	
10.00 to <100.00	–	–	21.0	–	13.03	13	54.6	2.50	–	272	–	
100.00 (Default)	–	–	–	–	100.00	1	33.3	1.00	–	500	–	
Sub-total	81.3	11.4	37.7	85.3	0.09	3,415	39.8	1.40	15.5	18	–	–
AIRB – Corporate – specialised lending (excluding slotting)²												
0.00 to <0.15	2.2	1.1	38.9	2.4	0.10	38	29.5	3.40	0.6	26	–	
0.15 to <0.25	1.8	0.5	30.9	2.0	0.22	45	28.3	3.50	0.7	36	–	
0.25 to <0.50	0.7	0.4	34.8	0.8	0.37	21	28.0	4.00	0.4	50	–	
0.50 to <0.75	1.2	0.2	39.5	1.1	0.63	25	27.1	3.60	0.6	56	–	
0.75 to <2.50	1.3	0.4	47.6	1.5	1.44	38	34.6	3.50	1.4	95	–	
2.50 to <10.00	0.5	–	77.1	0.4	5.74	10	26.5	3.00	0.4	96	–	
10.00 to <100.00	0.1	0.1	51.6	0.1	19.00	3	13.9	2.00	0.1	72	–	
100.00 (Default)	0.2	0.2	76.4	0.3	100.00	11	24.5	4.60	0.6	199	0.1	
Sub-total	8.0	2.9	41.0	8.6	4.26	191	29.1	3.50	4.8	56	0.1	0.1
AIRB – Corporate – Other												
0.00 to <0.15	112.4	161.5	37.1	215.1	0.08	10,429	41.2	2.10	47.5	22	0.1	
0.15 to <0.25	49.5	62.9	36.9	81.6	0.22	9,996	40.4	2.00	32.6	40	0.1	
0.25 to <0.50	59.7	55.3	33.8	81.4	0.37	10,685	35.7	2.00	37.0	45	0.1	
0.50 to <0.75	51.4	41.7	32.2	64.6	0.63	10,478	36.7	2.00	38.7	60	0.2	
0.75 to <2.50	147.2	101.5	31.6	137.2	1.37	42,540	37.5	2.00	110.7	81	0.7	
2.50 to <10.00	34.2	22.6	33.9	31.4	4.26	11,367	37.9	1.90	35.4	113	0.5	
10.00 to <100.00	5.1	3.5	38.8	4.9	17.00	1,922	36.7	2.10	8.6	174	0.3	
100.00 (Default)	4.0	0.6	34.9	4.2	100.00	2,249	47.1	1.80	8.8	210	1.8	
Sub-total	463.5	449.6	35.1	620.4	1.50	99,666	38.9	2.00	319.3	52	3.8	3.1
Wholesale AIRB – Total at 30 Jun 2019³												
	966.9	466.9	35.2	1,128.9	0.94	103,610	40.0	2.00	393.2	35	4.0	3.2

Table 23: IRB – Credit risk exposures by portfolio and PD range¹ (CR6) (continued)

PD scale	Original on-balance sheet gross exposure \$bn	Off-balance sheet exposures pre-CCF \$bn	Average CCF %	EAD post-CRM and post-CCF \$bn	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWAs \$bn	RWA density %	Expected loss \$bn	Value adjustments and provisions ^A \$bn
AIRB – Secured by mortgages on immovable property SME												
0.00 to <0.15	0.3	–	22.2	0.3	0.06	1,363	11.9	–	–	3	–	
0.15 to <0.25	0.1	–	36.9	0.2	0.21	2,295	33.5	–	–	13	–	
0.25 to <0.50	0.5	0.1	40.9	0.5	0.35	6,497	26.7	–	0.1	14	–	
0.50 to <0.75	0.3	0.1	38.1	0.4	0.61	5,480	32.7	–	0.1	28	–	
0.75 to <2.50	1.0	0.1	36.1	0.9	1.45	13,248	33.9	–	0.5	48	–	
2.50 to <10.00	0.8	0.1	39.1	0.8	4.56	7,288	31.2	–	0.7	82	–	
10.00 to <100.00	0.1	–	35.9	0.1	16.71	1,163	30.6	–	0.1	130	–	
100.00 (Default)	0.1	–	74.3	0.1	100.00	1,260	33.8	–	0.2	216	0.1	
Sub-total	3.2	0.4	38.0	3.3	5.28	38,594	29.7	–	1.7	50	0.1	0.1
AIRB – Secured by mortgages on immovable property non-SME												
0.00 to <0.15	181.2	11.7	89.5	195.5	0.07	1,091,984	15.5	–	13.9	7	–	
0.15 to <0.25	30.0	1.2	83.9	31.3	0.20	132,797	15.1	–	4.0	13	–	
0.25 to <0.50	26.7	2.9	40.8	28.0	0.36	123,890	17.2	–	5.2	19	–	
0.50 to <0.75	11.1	0.3	90.7	11.4	0.59	49,971	11.2	–	2.0	17	–	
0.75 to <2.50	24.1	1.3	81.1	25.2	1.26	103,230	18.1	–	7.7	31	0.1	
2.50 to <10.00	5.5	0.2	97.7	5.7	4.48	26,372	11.4	–	2.2	38	–	
10.00 to <100.00	1.8	0.1	98.6	1.9	24.64	17,114	21.2	–	2.7	139	0.1	
100.00 (Default)	2.3	–	81.3	2.3	100.00	18,451	23.8	–	2.0	89	0.6	
Sub-total	282.7	17.7	80.7	301.3	1.23	1,563,809	15.7	–	39.7	13	0.8	0.2
AIRB – Qualifying revolving retail exposures												
0.00 to <0.15	5.1	72.8	48.9	40.6	0.07	13,771,680	91.6	–	1.8	4	–	
0.15 to <0.25	1.3	13.1	46.8	7.3	0.21	2,359,687	93.8	–	0.8	11	–	
0.25 to <0.50	2.1	12.7	42.9	7.5	0.36	2,001,516	92.5	–	1.3	17	–	
0.50 to <0.75	2.6	5.3	48.2	5.1	0.62	1,077,189	91.7	–	1.3	26	–	
0.75 to <2.50	5.6	7.5	49.5	9.4	1.44	2,015,365	90.6	–	4.6	49	0.1	
2.50 to <10.00	3.3	1.9	63.7	4.4	4.82	919,606	89.1	–	5.0	112	0.2	
10.00 to <100.00	0.9	0.4	63.1	1.1	29.82	297,798	89.6	–	2.3	215	0.3	
100.00 (Default)	0.1	–	26.4	0.1	100.00	93,196	78.9	–	0.2	174	0.1	
Sub-total	21.0	113.7	48.3	75.5	1.20	22,536,037	91.6	–	17.3	23	0.7	0.8
AIRB – Other SME												
0.00 to <0.15	0.1	0.4	31.8	0.2	0.09	98,699	73.9	–	–	14	–	
0.15 to <0.25	–	0.2	37.2	0.1	0.23	76,469	82.5	–	–	30	–	
0.25 to <0.50	0.1	0.4	48.9	0.4	0.38	135,369	75.7	–	0.1	40	–	
0.50 to <0.75	0.2	0.5	65.1	0.5	0.63	127,764	65.1	–	0.2	44	–	
0.75 to <2.50	1.2	1.1	57.3	1.8	1.61	339,473	65.7	–	1.2	66	–	
2.50 to <10.00	1.9	1.1	59.1	2.5	4.85	193,306	60.6	–	2.1	81	0.1	
10.00 to <100.00	0.4	0.2	46.5	0.5	19.90	81,133	73.8	–	0.7	135	0.1	
100.00 (Default)	0.3	0.1	80.7	0.3	100.00	16,603	40.4	–	0.5	141	0.2	
Sub-total	4.2	4.0	54.1	6.3	9.42	1,068,816	64.1	–	4.8	76	0.4	0.4
AIRB – Other non-SME												
0.00 to <0.15	9.0	6.7	30.5	11.5	0.07	596,991	17.1	–	0.6	5	–	
0.15 to <0.25	6.8	3.6	39.7	8.6	0.21	513,892	27.5	–	1.1	13	–	
0.25 to <0.50	7.2	2.6	28.9	8.2	0.36	409,238	30.1	–	1.6	20	–	
0.50 to <0.75	5.2	1.5	25.4	5.6	0.61	203,166	27.3	–	1.3	23	–	
0.75 to <2.50	8.2	1.2	11.9	8.6	1.36	433,694	37.0	–	3.9	46	0.1	
2.50 to <10.00	3.5	1.2	21.8	3.8	4.41	251,053	34.9	–	2.1	54	0.1	
10.00 to <100.00	0.7	0.1	16.6	0.7	23.05	92,678	45.9	–	0.6	93	0.1	
100.00 (Default)	0.3	–	70.4	0.3	100.00	34,056	43.9	–	0.3	98	0.1	
Sub-total	40.9	16.9	29.8	47.3	1.75	2,534,768	28.1	–	11.5	24	0.4	0.4
Retail AIRB – Total at 30 Jun 2019	352.0	152.7	50.2	433.7	1.43	27,742,024	31.1	–	75.0	17	2.4	1.9

Table 23: IRB – Credit risk exposures by portfolio and PD range¹ (CR6) (continued)

PD scale	Original on-balance sheet gross exposure \$bn	Off-balance sheet exposures pre-CCF \$bn	Average CCF %	EAD post-CRM and post-CCF \$bn	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWAs \$bn	RWA density %	Expected loss \$bn	Value adjustments and provisions [^] \$bn
FIRB – Central government and central banks												
0.00 to <0.15	–	–	75.0	0.1	0.03	1	45.0	3.80	–	22	–	–
Sub-total	–	–	75.0	0.1	0.03	1	45.0	3.80	–	22	–	–
FIRB – Institutions												
0.00 to <0.15	0.5	–	23.7	0.5	0.10	2	45.0	2.00	0.2	25	–	–
0.15 to <0.25	–	–	47.0	0.1	0.22	1	45.0	2.90	–	53	–	–
0.25 to <0.50	–	–	6.9	–	0.37	1	45.0	0.20	–	37	–	–
Sub-total	0.5	–	35.0	0.6	0.11	4	45.0	2.10	0.2	28	–	–
FIRB – Corporate – Other												
0.00 to <0.15	9.2	13.8	45.3	15.9	0.08	1,203	43.9	2.30	4.0	25	–	–
0.15 to <0.25	4.3	4.9	38.9	5.9	0.22	1,297	44.6	2.20	2.8	46	–	–
0.25 to <0.50	3.9	6.1	29.4	5.4	0.37	1,645	43.0	1.90	3.0	56	–	–
0.50 to <0.75	4.8	5.9	36.0	6.8	0.63	1,585	39.8	1.70	4.3	64	–	–
0.75 to <2.50	9.9	10.3	22.9	11.7	1.37	4,424	44.0	1.70	10.9	94	0.1	–
2.50 to <10.00	3.2	2.6	23.5	3.4	4.34	1,115	42.8	1.70	4.6	133	0.1	–
10.00 to <100.00	0.5	0.3	32.0	0.6	15.74	185	44.8	1.60	1.3	202	–	–
100.00 (Default)	1.0	0.2	21.7	1.0	100.00	327	37.9	1.90	–	–	0.4	–
Sub-total	36.8	44.1	34.5	50.7	2.98	11,781	43.2	2.00	30.9	61	0.6	0.5
FIRB – Total at 30 Jun 2019	37.3	44.1	34.5	51.4	2.94	11,786	43.2	2.00	31.1	61	0.6	0.5

[^] Figures have been prepared on an IFRS 9 transitional basis.

¹ Securitisation positions are not included in this table.

² Slotting exposures are disclosed in Table 25: Specialised lending on slotting approach (CR10). The number of obligors for the comparative period have been restated to exclude slotting.

³ The 'Wholesale AIRB – Total' includes non-credit obligation assets ('NCOA') amounting to \$61.7bn of original exposure and EAD, and \$15.0bn of RWAs.

Pillar 3 Disclosures at 30 June 2019

Table 23: IRB – Credit risk exposures by portfolio and PD range¹ (CR6) (continued)

PD scale	Original on-balance sheet gross exposure \$bn	Off-balance sheet exposures pre-CCF \$bn	Average CCF %	EAD post-CRM and post-CCF \$bn	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWAs \$bn	RWA density %	Expected loss \$bn	Value adjustments and provisions ^A \$bn
AIRB – Central government and central banks												
0.00 to <0.15	313.5	2.7	52.6	315.6	0.02	258	42.4	2.10	26.0	8	–	
0.15 to <0.25	2.5	–	18.2	2.5	0.22	10	45.0	1.80	1.1	42	–	
0.25 to <0.50	2.1	–	98.9	2.3	0.37	14	45.1	1.30	1.1	50	–	
0.50 to <0.75	3.3	0.2	78.3	3.4	0.63	16	45.0	1.10	2.2	64	–	
0.75 to <2.50	6.8	0.2	70.8	6.6	1.72	22	45.0	1.20	6.4	97	0.1	
2.50 to <10.00	0.4	0.1	41.0	–	7.49	9	45.1	4.60	0.1	210	–	
Sub-total	328.6	3.2	55.0	330.4	0.06	329	42.5	2.10	36.9	11	0.1	0.1
AIRB – Institutions												
0.00 to <0.15	60.7	9.7	39.3	65.0	0.05	2,574	39.5	1.40	9.3	14	–	
0.15 to <0.25	3.1	0.7	22.0	3.3	0.22	323	44.7	0.90	1.2	37	–	
0.25 to <0.50	2.6	0.3	59.1	2.2	0.37	182	41.5	1.20	1.1	52	–	
0.50 to <0.75	1.4	0.2	45.8	1.4	0.63	140	41.5	1.30	1.1	74	–	
0.75 to <2.50	1.2	0.5	50.6	1.5	1.10	242	45.1	1.20	1.4	96	–	
2.50 to <10.00	0.1	–	24.7	–	6.19	22	46.4	0.80	–	169	–	
10.00 to <100.00	–	0.1	25.6	–	13.00	17	55.0	1.00	0.1	253	–	
100.00 (Default)	–	–	–	–	100.00	1	64.8	1.00	–	807	–	
Sub-total	69.1	11.5	39.2	73.4	0.11	3,501	39.9	1.40	14.2	19	–	–
AIRB – Corporate – specialised lending (excluding slotting)²												
0.00 to <0.15	1.8	1.3	38.0	2.1	0.10	39	30.4	3.40	0.6	27	–	
0.15 to <0.25	1.9	0.4	33.4	2.0	0.22	40	28.6	3.40	0.7	37	–	
0.25 to <0.50	0.6	0.3	35.8	0.7	0.37	18	28.9	4.40	0.4	55	–	
0.50 to <0.75	1.3	0.2	34.4	1.0	0.63	25	24.5	3.50	0.5	51	–	
0.75 to <2.50	1.2	0.5	49.7	1.5	1.38	38	32.1	3.80	1.3	91	–	
2.50 to <10.00	0.6	0.1	51.1	0.5	5.34	13	27.4	3.20	0.5	101	–	
10.00 to <100.00	0.3	0.1	48.1	0.3	24.05	7	23.2	3.40	0.4	130	–	
100.00 (Default)	0.1	0.1	87.5	0.2	100.00	10	37.9	4.80	0.5	258	0.1	
Sub-total	7.8	3.0	41.3	8.3	3.68	190	29.1	3.60	4.9	59	0.1	0.1
AIRB – Corporate – Other												
0.00 to <0.15	109.3	160.4	38.0	212.4	0.08	10,036	41.1	2.20	48.2	23	0.1	
0.15 to <0.25	49.8	62.5	37.6	81.1	0.22	10,191	39.1	2.00	31.2	38	0.1	
0.25 to <0.50	51.1	54.7	33.9	73.3	0.37	10,304	37.3	2.10	35.4	48	0.1	
0.50 to <0.75	56.9	42.1	33.8	69.9	0.63	10,348	34.3	1.90	39.5	57	0.2	
0.75 to <2.50	146.2	102.1	32.2	137.6	1.37	42,602	37.6	2.00	111.3	81	0.7	
2.50 to <10.00	30.5	23.2	35.7	29.8	4.10	11,510	38.0	2.00	34.3	115	0.5	
10.00 to <100.00	5.1	3.3	43.0	4.5	19.20	1,967	38.6	2.00	8.3	185	0.3	
100.00 (Default)	4.2	0.9	46.6	4.5	100.00	2,473	46.0	1.90	9.9	221	1.9	
Sub-total	453.1	449.2	35.9	613.1	1.55	99,431	38.7	2.10	318.1	52	3.9	3.1
Wholesale AIRB – Total at 31 Dec 2018³												
	915.5	466.9	36.1	1,082.1	0.98	103,451	39.9	2.00	384.9	37	4.1	3.3

Table 23: IRB – Credit risk exposures by portfolio and PD range¹ (CR6) (continued)

PD scale	Original on-balance sheet gross exposure \$bn	Off-balance sheet exposures pre-CCF \$bn	Average CCF %	EAD post-CRM and post-CCF \$bn	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWAs \$bn	RWA density %	Expected loss \$bn	Value adjustments and provisions ^A \$bn
AIRB – Secured by mortgages on immovable property SME												
0.00 to <0.15	0.3	–	31.4	0.3	0.08	1,321	16.2	–	–	4	–	–
0.15 to <0.25	0.2	–	39.8	0.2	0.21	2,557	29.5	–	–	12	–	–
0.25 to <0.50	0.4	0.1	35.2	0.4	0.36	6,478	28.8	–	0.1	16	–	–
0.50 to <0.75	0.3	0.1	44.5	0.3	0.61	5,000	32.2	–	0.1	27	–	–
0.75 to <2.50	0.9	0.2	33.8	1.0	1.47	13,728	35.2	–	0.5	51	–	–
2.50 to <10.00	0.8	0.1	40.2	0.9	4.57	7,963	31.2	–	0.7	82	–	–
10.00 to <100.00	0.1	–	39.8	0.1	17.19	1,312	31.6	–	0.1	138	–	–
100.00 (Default)	0.1	–	55.7	0.1	100.00	1,266	33.9	–	0.3	227	0.1	–
Sub-total	3.1	0.5	37.5	3.3	5.78	39,625	30.8	–	1.8	54	0.1	0.1
AIRB – Secured by mortgages on immovable property non-SME												
0.00 to <0.15	172.1	11.4	89.8	185.9	0.06	1,066,724	15.4	–	12.4	7	–	–
0.15 to <0.25	27.7	1.3	81.6	28.9	0.20	122,304	15.7	–	3.6	13	–	–
0.25 to <0.50	24.5	2.9	43.8	25.8	0.35	117,856	17.4	–	4.6	18	–	–
0.50 to <0.75	10.5	0.3	92.3	10.9	0.58	51,235	11.2	–	1.8	16	–	–
0.75 to <2.50	23.8	1.2	79.7	24.9	1.26	105,656	18.1	–	7.5	30	0.1	–
2.50 to <10.00	5.8	0.2	96.7	6.0	4.51	27,556	11.7	–	2.3	39	–	–
10.00 to <100.00	2.1	0.1	97.4	2.2	25.15	18,895	21.1	–	3.0	138	0.1	–
100.00 (Default)	2.3	–	76.1	2.3	100.00	18,777	24.6	–	2.0	89	0.6	–
Sub-total	268.8	17.4	81.0	286.9	1.31	1,529,003	15.7	–	37.2	13	0.8	0.3
AIRB – Qualifying revolving retail exposures												
0.00 to <0.15	5.4	70.8	49.3	40.1	0.07	13,591,739	91.3	–	1.8	4	–	–
0.15 to <0.25	1.4	12.5	47.9	7.3	0.21	2,415,087	93.5	–	0.8	11	–	–
0.25 to <0.50	2.2	12.1	43.1	7.4	0.36	1,989,811	92.3	–	1.3	18	–	–
0.50 to <0.75	2.2	5.0	48.8	4.6	0.61	987,590	92.1	–	1.2	26	–	–
0.75 to <2.50	5.9	9.0	46.5	10.1	1.42	2,052,818	90.0	–	4.8	48	0.1	–
2.50 to <10.00	3.2	1.8	62.0	4.3	4.74	890,646	89.0	–	4.8	112	0.2	–
10.00 to <100.00	0.9	0.3	66.5	1.1	28.46	294,570	89.4	–	2.4	216	0.3	–
100.00 (Default)	0.1	–	22.8	0.1	100.00	72,485	79.6	–	0.2	160	0.1	–
Sub-total	21.3	111.5	48.5	75.0	1.17	22,294,746	91.3	–	17.3	23	0.7	0.7
AIRB – Other SME												
0.00 to <0.15	0.1	0.3	35.0	0.2	0.09	98,383	75.0	–	–	14	–	–
0.15 to <0.25	–	0.2	38.3	0.1	0.22	72,510	80.8	–	–	29	–	–
0.25 to <0.50	0.1	0.4	48.7	0.3	0.38	124,508	74.4	–	0.1	39	–	–
0.50 to <0.75	0.2	0.5	63.4	0.5	0.63	155,864	68.4	–	0.2	46	–	–
0.75 to <2.50	1.1	1.2	58.7	1.8	1.60	358,362	66.9	–	1.3	67	–	–
2.50 to <10.00	1.8	1.0	69.1	2.6	4.87	181,027	59.5	–	2.1	80	0.1	–
10.00 to <100.00	0.4	0.2	48.6	0.5	19.39	79,791	73.9	–	0.6	133	0.1	–
100.00 (Default)	0.3	–	96.8	0.3	100.00	15,015	38.7	–	0.5	160	0.2	–
Sub-total	4.0	3.8	57.8	6.3	9.05	1,085,460	64.1	–	4.8	76	0.4	0.3
AIRB – Other non-SME												
0.00 to <0.15	8.1	6.3	30.7	10.6	0.08	574,137	18.7	–	0.6	5	–	–
0.15 to <0.25	6.5	3.5	36.4	8.1	0.21	491,674	27.8	–	1.1	13	–	–
0.25 to <0.50	6.6	2.6	28.4	7.5	0.37	386,099	30.4	–	1.5	20	–	–
0.50 to <0.75	4.9	1.4	24.9	5.3	0.60	196,811	28.2	–	1.2	24	–	–
0.75 to <2.50	7.9	0.9	17.1	8.2	1.35	421,600	35.4	–	3.5	43	–	–
2.50 to <10.00	3.8	1.1	23.0	4.1	4.39	246,174	32.8	–	2.1	51	0.1	–
10.00 to <100.00	0.6	0.1	15.7	0.7	25.06	92,869	45.5	–	0.6	92	0.1	–
100.00 (Default)	0.3	0.1	7.7	0.3	100.00	40,274	43.9	–	0.3	103	0.2	–
Sub-total	38.7	16.0	29.6	44.8	1.91	2,449,638	28.3	–	10.9	24	0.4	0.4
Retail AIRB – Total at 31 Dec 2018												
	335.9	149.2	50.5	416.3	1.50	27,398,472	31.5	–	72.0	17	2.4	1.8

Pillar 3 Disclosures at 30 June 2019

Table 23: IRB – Credit risk exposures by portfolio and PD range¹ (CR6) (continued)

PD scale	Original on-balance sheet gross exposure	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	Expected loss	Value adjustments and provisions [^]
	\$bn	\$bn	%	\$bn	%		%	years	\$bn	%	\$bn	\$bn
FIRB – Central government and central banks												
0.00 to <0.15	–	–	–	0.1	0.03	1	45.0	4.60	–	25	–	–
Sub-total	–	–	–	0.1	0.03	1	45.0	4.60	–	25	–	–
FIRB – Institutions												
0.00 to <0.15	0.5	–	23.5	0.6	0.10	2	45.0	2.70	0.2	33	–	–
0.15 to <0.25	–	–	63.3	0.1	0.22	1	45.0	3.60	–	60	–	–
0.25 to <0.50	–	–	1.1	–	0.37	1	45.0	0.10	–	36	–	–
Sub-total	0.5	–	40.6	0.7	0.12	4	45.0	2.80	0.2	35	–	–
FIRB – Corporate – Other												
0.00 to <0.15	9.9	13.5	46.4	16.3	0.08	1,186	44.5	2.20	4.0	24	–	–
0.15 to <0.25	3.5	5.9	33.5	5.4	0.22	1,269	44.4	2.30	2.5	47	–	–
0.25 to <0.50	4.0	4.8	33.1	5.4	0.37	1,594	44.1	1.70	3.0	55	–	–
0.50 to <0.75	4.8	5.6	29.9	6.0	0.63	1,573	45.5	1.80	4.4	74	–	–
0.75 to <2.50	9.5	10.1	22.5	11.5	1.37	4,387	43.9	1.70	10.8	93	0.1	–
2.50 to <10.00	3.0	2.1	22.8	3.2	4.59	1,050	43.4	1.80	4.4	140	0.1	–
10.00 to <100.00	0.5	0.2	37.3	0.6	17.09	166	44.3	1.70	1.2	207	–	–
100.00 (Default)	0.8	0.2	23.3	0.9	100.00	348	44.4	1.90	–	–	0.4	–
Sub-total	36.0	42.4	33.9	49.3	2.72	11,573	44.4	1.90	30.3	61	0.6	0.5
FIRB – Total at 31 Dec 2018	36.5	42.4	33.9	50.1	2.67	11,578	44.4	1.90	30.5	61	0.6	0.5

[^] Figures have been prepared on an IFRS 9 transitional basis.

¹ Securitisation positions are not included in this table.

² Slotting exposures are disclosed in Table 25: Specialised lending on slotting approach (CR10). The number of obligors at 31 December 2018 have been restated to exclude slotting.

³ The 'Wholesale AIRB – Total' includes NCOA amounting to \$56.9bn of original exposure and EAD, and \$10.8bn of RWAs.

Table 24: IRB – Effect on RWA of credit derivatives used as CRM techniques (CR7)

	Footnotes	At			
		30 Jun 2019		31 Dec 2018	
		Pre-credit derivatives RWAs	Actual RWAs	Pre-credit derivatives RWAs	Actual RWAs
		\$bn	\$bn	\$bn	\$bn
1	Exposures under FIRB	31.1	31.1	30.5	30.5
3	Institutions	0.2	0.2	0.2	0.2
6	Corporates – other	30.9	30.9	30.3	30.3
7	Exposures under AIRB	492.2	491.4	480.0	479.0
8	Central governments and central banks	38.6	38.6	36.9	36.9
9	Institutions	15.5	15.5	14.2	14.2
11	Corporates – specialised lending	28.0	28.0	27.0	27.0
12	Corporates – other	320.1	319.3	319.1	318.1
13	Retail – secured by real estate SMEs	1.7	1.7	1.8	1.8
14	Retail – secured by real estate non-SMEs	39.7	39.7	37.2	37.2
15	Retail – qualifying revolving	17.3	17.3	17.3	17.3
16	Retail – other SMEs	4.8	4.8	4.8	4.8
17	Retail – other non-SMEs	11.5	11.5	10.9	10.9
19	Other non-credit obligation assets	15.0	15.0	10.8	10.8
20	Total	523.3	522.5	510.5	509.5

¹ Securitisation positions are not included in this table.

Table 25: Specialised lending on slotting approach (CR10)

Regulatory categories	Remaining maturity	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWAs	Expected loss
		\$bn	\$bn	%	\$bn	\$bn	\$bn
Category 1	Less than 2.5 years	15.3	2.7	50	16.3	8.2	–
	Equal to or more than 2.5 years	12.3	2.5	70	13.3	9.3	0.1
Category 2	Less than 2.5 years	3.4	0.4	70	3.6	2.5	–
	Equal to or more than 2.5 years	2.3	0.5	90	2.5	2.3	–
Category 3	Less than 2.5 years	0.3	–	115	0.4	0.4	–
	Equal to or more than 2.5 years	0.2	–	115	0.2	0.2	–
Category 4	Less than 2.5 years	0.1	–	250	0.1	0.2	–
	Equal to or more than 2.5 years	–	–	250	–	0.1	–
Category 5	Less than 2.5 years	0.4	–	–	0.6	–	0.3
	Equal to or more than 2.5 years	0.2	–	–	0.2	–	0.1
Total at 30 Jun 2019	Less than 2.5 years	19.5	3.1	–	21.0	11.3	0.3
	Equal to or more than 2.5 years	15.0	3.0	–	16.2	11.9	0.2
Category 1	Less than 2.5 years	14.8	2.7	50	15.9	8.0	–
	Equal to or more than 2.5 years	11.7	2.6	70	12.7	8.8	0.1
Category 2	Less than 2.5 years	2.7	0.4	70	2.9	2.0	–
	Equal to or more than 2.5 years	2.0	0.5	90	2.2	2.0	–
Category 3	Less than 2.5 years	0.4	–	115	0.4	0.5	–
	Equal to or more than 2.5 years	0.5	0.1	115	0.5	0.6	–
Category 4	Less than 2.5 years	0.1	–	250	0.1	0.1	–
	Equal to or more than 2.5 years	–	–	250	–	0.1	–
Category 5	Less than 2.5 years	0.3	–	–	0.5	–	0.2
	Equal to or more than 2.5 years	0.1	–	–	0.1	–	0.1
Total at 31 Dec 2018	Less than 2.5 years	18.3	3.1	–	19.8	10.6	0.2
	Equal to or more than 2.5 years	14.3	3.2	–	15.5	11.5	0.2

Counterparty credit risk

Counterparty credit risk ('CCR') risk arises for derivatives and securities financing transactions ('SFT'). It is calculated in both the trading and non-trading books, and is the risk that a counterparty may default before settlement of the transaction. CCR is generated primarily in our wholesale global businesses.

Four approaches may be used under CRD IV to calculate exposure values for CCR: mark-to-market, original exposure, standardised and IMM. Exposure values calculated under these approaches are used to determine RWAs. Across the Group, we use the mark-to-market and IMM approaches.

For further information, a summary of our current policies and practices for the management of counterparty credit risk is set out in 'Counterparty credit risk' on page 55 of the Pillar 3 Disclosures at 31 December 2018.

Table 26: Analysis of counterparty credit risk exposure by approach (excluding centrally cleared exposures)¹ (CCR1)

	Replacement cost	Potential future exposure	Effective expected positive exposure	Multiplier	EAD post-CRM	RWAs
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
1 Mark-to-market	10.5	27.2	–	–	37.7	15.4
4 Internal model method	–	–	30.3	1.4	42.4	17.4
6 – of which: derivatives and long settlement transactions ²	–	–	30.3	1.4	42.4	17.4
9 Financial collateral comprehensive method (for SFTs)	–	–	–	–	51.8	10.8
11 Total at 30 Jun 2019	10.5	27.2	30.3		131.9	43.6
1 Mark-to-market	12.6	21.5	–	–	34.1	13.9
4 Internal model method	–	–	29.9	1.4	41.8	16.2
6 – of which: derivatives and long settlement transactions ²	–	–	29.9	1.4	41.8	16.2
9 Financial collateral comprehensive method (for SFTs)	–	–	–	–	49.3	10.2
11 Total at 31 Dec 2018	12.6	21.5	29.9		125.2	40.3

1 As the Group does not use the original exposure method, notional values are not reported.

2 Prior to the implementation of SA-CCR, exposures reported here will be those under the mark-to-market method.

Table 27: Credit valuation adjustment capital charge (CCR2)

	At			
	30 Jun 2019		31 Dec 2018	
	EAD post-CRM	RWAs	EAD post-CRM	RWAs
	\$bn	\$bn	\$bn	\$bn
1 Total portfolios subject to the Advanced CVA capital charge	20.6	4.1	21.4	4.9
2 – VaR component (including the 3 × multiplier)		0.7		0.9
3 – stressed VaR component (including the 3 × multiplier)		3.4		4.0
4 All portfolios subject to the Standardised CVA capital charge	15.6	1.7	13.6	1.0
5 Total subject to the CVA capital charge	36.2	5.8	35.0	5.9

Table 28: Standardised approach – CCR exposures by regulatory portfolio and risk weights (CCR3)

Risk weight	0%	10%	20%	50%	75%	100%	150%	Others	Total credit exposure	Of which: unrated
1 Central governments and central banks	6.4	–	0.1	–	–	0.1	–	–	6.6	0.1
2 Regional government or local authorities	1.4	–	–	–	–	–	–	–	1.4	–
6 Institutions	–	–	–	–	–	0.1	–	–	0.1	–
7 Corporates	–	–	–	–	–	2.0	–	–	2.0	1.7
Total at 30 Jun 2019	7.8	–	0.1	–	–	2.2	–	–	10.1	1.8
1 Central governments and central banks	7.4	–	0.1	–	–	–	–	–	7.5	–
2 Regional government or local authorities	1.0	–	–	–	–	–	–	–	1.0	0.1
6 Institutions	–	–	–	–	–	0.1	–	–	0.1	–
7 Corporates	–	–	–	–	–	1.9	–	–	1.9	1.6
Total at 31 Dec 2018	8.4	–	0.1	–	–	2.0	–	–	10.5	1.7

Table 29: IRB – CCR exposures by portfolio and PD scale (CCR4)

PD scale	Footnotes	EAD post-CRM \$bn	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWAs \$bn	RWA density %
AIRB – Central government and central banks								
0.00 to <0.15		8.6	0.03	98	44.8	1.06	0.6	7
0.15 to <0.25		0.2	0.22	11	45.0	3.01	0.1	54
0.25 to <0.50		0.1	0.37	7	45.0	2.45	0.1	63
0.50 to <0.75		0.1	0.63	3	45.0	1.00	–	62
0.75 to <2.50		0.9	1.47	7	45.0	1.04	0.9	103
2.50 to <10.00		–	6.47	1	45.0	3.85	–	192
Sub-total		9.9	0.23	127	44.9	1.10	1.7	17
AIRB – Institutions								
0.00 to <0.15		45.5	0.07	4,523	44.6	1.14	9.1	20
0.15 to <0.25		3.8	0.22	437	45.2	1.39	1.8	48
0.25 to <0.50		0.6	0.37	87	46.4	1.20	0.4	55
0.50 to <0.75		0.8	0.63	60	44.3	0.61	0.6	74
0.75 to <2.50		0.3	1.30	128	46.1	2.26	0.4	117
2.50 to <10.00		0.1	5.95	18	47.0	1.11	0.1	165
10.00 to <100.00		0.2	12.95	6	55.0	0.36	0.4	243
100.00 (Default)		–	100.00	1	45.0	1.00	–	–
Sub-total		51.3	0.15	5,260	44.6	1.15	12.8	25
AIRB – Corporates								
0.00 to <0.15		31.9	0.07	5,352	43.9	1.75	7.1	22
0.15 to <0.25		8.7	0.22	1,851	46.7	1.75	3.9	45
0.25 to <0.50		4.4	0.37	1,093	45.2	1.65	2.7	61
0.50 to <0.75		3.5	0.63	995	43.9	1.61	2.8	80
0.75 to <2.50		6.5	1.36	7,211	46.4	1.33	6.8	105
2.50 to <10.00		0.8	3.87	573	48.6	1.59	1.3	152
10.00 to <100.00		0.1	23.64	54	52.8	1.34	0.1	260
100.00 (Default)		–	100.00	13	35.9	2.69	–	–
Sub-total		55.9	0.40	17,142	44.9	1.68	24.7	44
AIRB – Total at 30 Jun 2019	¹	117.1	0.28	22,529	44.8	1.31	39.2	33
FIRB – Corporates								
0.00 to <0.15		3.0	0.07	732	45.0	2.00	0.7	23
0.15 to <0.25		0.4	0.22	135	45.0	1.60	0.2	40
0.25 to <0.50		0.3	0.37	158	45.0	1.40	0.1	58
0.50 to <0.75		0.1	0.63	104	45.0	1.40	0.1	76
0.75 to <2.50		0.8	1.65	611	45.0	1.61	0.8	108
2.50 to <10.00		0.1	4.45	88	45.0	2.31	0.2	155
100.00 (Default)		–	100.00	6	45.0	3.97	–	–
FIRB – Total at 30 Jun 2019		4.7	0.55	1,851	45.0	1.86	2.1	45
Total (all portfolios) at 30 Jun 2019		121.8	0.29	24,380	44.8	1.58	41.3	34

¹ AIRB Corporates include specialised lending exposures totalling \$1.1bn EAD (31 December 2018: \$1.2bn) and \$0.3bn RWAs (31 December 2018: \$0.6bn).

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Table 29: IRB – CCR exposures by portfolio and PD scale (CCR4) (continued)

PD scale	Footnotes	EAD post-CRM \$bn	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWAs \$bn	RWA density %
AIRB – Central government and central banks								
0.00 to <0.15		10.1	0.02	90	44.9	0.95	0.5	5
0.15 to <0.25		0.1	0.22	12	45.0	3.07	0.1	54
0.25 to <0.50		0.1	0.37	6	44.8	3.36	0.1	74
0.50 to <0.75		0.1	0.63	1	45.0	1.00	–	60
0.75 to <2.50		1.2	2.25	7	45.0	1.29	1.2	100
2.50 to <10.00		–	7.85	1	45.0	5.00	–	218
Sub-total		11.6	0.22	117	45.0	1.02	1.9	17
AIRB – Institutions								
0.00 to <0.15		40.5	0.06	4,629	44.3	1.17	7.8	19
0.15 to <0.25		3.5	0.22	477	43.9	1.40	1.6	46
0.25 to <0.50		1.7	0.37	75	45.0	1.19	0.9	50
0.50 to <0.75		0.7	0.63	64	44.9	1.06	0.4	67
0.75 to <2.50		0.4	1.37	106	46.2	2.08	0.5	117
2.50 to <10.00		0.1	4.94	20	44.9	1.60	0.1	149
10.00 to <100.00		0.4	12.98	12	55.0	1.20	0.8	241
100.00 (Default)		–	100.00	1	45.0	1.00	–	–
Sub-total		47.3	0.21	5,384	44.7	1.18	12.1	26
AIRB – Corporates								
0.00 to <0.15		30.2	0.07	4,934	43.5	1.71	6.4	21
0.15 to <0.25		6.7	0.22	1,796	46.9	1.75	3.2	48
0.25 to <0.50		3.8	0.37	1,029	44.6	1.69	2.1	56
0.50 to <0.75		3.8	0.63	1,018	43.8	1.23	2.8	73
0.75 to <2.50		6.3	1.34	7,375	46.1	1.38	6.6	104
2.50 to <10.00		0.7	3.92	569	46.9	1.62	1.1	150
10.00 to <100.00		0.1	21.77	61	43.6	1.34	0.1	237
100.00 (Default)		–	100.00	17	41.1	2.60	–	–
Sub-total		51.6	0.42	16,799	44.4	1.64	22.3	43
AIRB – Total at 31 Dec 2018	¹	110.5	0.28	22,300	49.2	1.38	36.3	33
FIRB – Corporates								
0.00 to <0.15		2.5	0.07	522	37.9	1.73	0.6	24
0.15 to <0.25		0.4	0.22	146	45.0	1.78	0.2	42
0.25 to <0.50		0.2	0.37	130	45.0	1.66	0.1	59
0.50 to <0.75		0.2	0.63	84	45.0	0.82	0.1	74
0.75 to <2.50		0.7	1.59	533	45.0	1.56	0.8	105
2.50 to <10.00		0.1	5.00	82	45.0	2.20	0.1	155
10.00 to <100.00		–	11.95	11	45.0	1.03	–	192
100.00 (Default)		–	100.00	7	45.0	1.02	–	–
FIRB – Total at 31 Dec 2018		4.1	0.54	1,515	45.0	1.82	1.9	45
Total (all portfolios) at 31 Dec 2018		114.6	0.32	23,815	44.6	1.40	38.2	33

Table 30: Impact of netting and collateral held on exposure values (CCR5-A)

		Gross positive fair value or net carrying amount \$bn	Netting benefits \$bn	Netted current credit exposure \$bn	Collateral held \$bn	Net credit exposure \$bn
1	Derivatives	673.5	518.4	155.1	47.9	107.2
2	SFTs	1,012.3	–	1,012.3	959.5	52.8
4	Total at 30 Jun 2019	1,685.8	518.4	1,167.4	1,007.4	160.0
1	Derivatives	579.7	431.8	147.9	42.4	105.5
2	SFTs	983.8	–	983.8	933.1	50.7
4	Total at 31 Dec 2018	1,563.5	431.8	1,131.7	975.5	156.2

Table 31: Composition of collateral for CCR exposure (CCR5-B)

	Collateral used in derivative transactions				Collateral used in SFTs		
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral	
	Segregated	Unsegregated	Segregated	Unsegregated			
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	
1	Cash – domestic currency	–	7.8	1.5	4.9	55.4	101.9
2	Cash – other currencies	–	43.4	6.1	38.0	377.6	429.6
3	Domestic sovereign debt	–	6.4	–	6.4	87.2	66.1
4	Other sovereign debt	–	8.8	–	15.8	388.2	340.3
5	Government agency debt	–	0.1	–	0.9	13.4	18.2
6	Corporate bonds	–	1.1	–	0.4	38.8	17.0
7	Equity securities	–	0.2	–	–	40.0	36.1
8	Other collateral	–	0.2	–	1.4	2.5	3.1
9	Total at 30 Jun 2019	–	68.0	7.6	67.8	1,003.1	1,012.3
1	Cash – domestic currency	–	5.6	1.6	4.9	75.9	118.9
2	Cash – other currencies	–	37.6	5.5	32.6	344.1	402.0
3	Domestic sovereign debt	–	5.5	–	5.2	107.7	84.6
4	Other sovereign debt	–	5.8	–	9.5	352.4	323.8
5	Government agency debt	–	0.1	–	0.2	13.4	4.4
6	Corporate bonds	–	0.7	–	0.3	36.4	16.5
7	Equity securities	–	–	–	–	36.8	32.3
8	Other collateral	–	0.3	–	1.2	1.4	0.5
9	Total at 31 Dec 2018	–	55.6	7.1	53.9	968.1	983.0

Table 32: Exposures to central counterparties (CCR8)

	At				
	30 Jun 2019		31 Dec 2018		
	EAD post-CRM	RWAs	EAD post-CRM	RWAs	
	\$bn	\$bn	\$bn	\$bn	
1	Exposures to qualifying central counterparties ('QCCPs') (total)				
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions)				
3	– OTC derivatives	11.9	0.2	9.8	0.2
4	– exchange-traded derivatives	5.2	0.1	9.2	0.2
5	– securities financing transactions	5.7	0.1	5.8	0.1
7	Segregated initial margin	7.6	–	7.1	–
8	Non-segregated initial margin	9.9	0.2	10.4	0.2
9	Pre-funded default fund contributions	–	0.5	–	0.4

Table 33: Credit derivatives exposures (CCR6)

	At			
	30 Jun 2019		31 Dec 2018	
	Protection bought	Protection sold	Protection bought	Protection sold
	\$bn	\$bn	\$bn	\$bn
Notionals				
Credit derivative products used for own credit portfolio				
– index credit default swaps	7.4	2.9	2.3	–
Total notionals used for own credit portfolio	7.4	2.9	2.3	–
Credit derivative products used for intermediation				
– index credit default swaps	194.9	179.1	168.6	154.0
– total return swaps	15.8	9.9	14.6	6.9
Total notionals used for intermediation	210.7	189.0	183.2	160.9
Total credit derivative notionals	218.1	191.9	185.5	160.9
Fair values				
– Positive fair value (asset)	2.5	2.9	2.6	1.2
– Negative fair value (liability)	(3.3)	(2.7)	(1.4)	(2.4)

1 These are products where we act as an intermediary for our clients, enabling them to take a position in the underlying securities. These do not increase risk for HSBC.

Securitisation

We act as originator, sponsor, liquidity provider and derivative counterparty to our own originated and sponsored securitisations, as well as those of third parties. Our strategy is to use securitisation to meet our needs for aggregate funding or capital management, to the extent that market, regulatory treatments and other conditions are suitable, and for customer facilitation.

We do not provide support to any of our originated or sponsored securitisations, and it is not our policy to do so.

We have senior and junior exposures to Mazarin Funding Limited, which is a securities investment conduit ('SIC'). We also hold all of the commercial paper issued by Solitaire Funding Limited. These are considered legacy businesses, and exposures are being repaid as the securities they hold amortise or are sold.

On 1 January 2019, the new securitisation framework came into force.

For further details of the new securitisation framework, see page 11.

Table 34: Securitisation exposures in the non-trading book (SEC1)

	Bank acts as originator			Bank acts as sponsor			Bank acts as investor		
	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
1 Retail (total)	–	–	–	14.3	–	14.3	7.9	–	7.9
2 – residential mortgage	–	–	–	4.3	–	4.3	4.4	–	4.4
3 – credit card	–	–	–	1.0	–	1.0	1.0	–	1.0
4 – other retail exposures	–	–	–	9.0	–	9.0	2.5	–	2.5
6 Wholesale (total)	–	2.5	2.5	5.7	–	5.7	2.2	–	2.2
7 – loans to corporates	–	2.5	2.5	–	–	–	0.1	–	0.1
8 – commercial mortgage	–	–	–	0.1	–	0.1	1.6	–	1.6
9 – lease and receivables	–	–	–	5.4	–	5.4	0.4	–	0.4
10 – other wholesale	–	–	–	0.2	–	0.2	0.1	–	0.1
11 – resecuritisation	–	–	–	–	–	–	–	–	–
Total at 30 Jun 2019	–	2.5	2.5	20.0	–	20.0	10.1	–	10.1
– of which:									
<i>securitisations under the new framework</i>	–	–	–	4.6	–	4.6	2.1	–	2.1
<i>securitisations under the pre-existing framework</i>	–	2.5	2.5	15.4	–	15.4	8.0	–	8.0
1 Retail (total)	0.4	–	0.4	13.6	–	13.6	6.8	–	6.8
2 – residential mortgage	–	–	–	4.3	–	4.3	3.8	–	3.8
3 – credit card	–	–	–	0.7	–	0.7	0.5	–	0.5
4 – other retail exposures	0.4	–	0.4	8.6	–	8.6	2.5	–	2.5
6 Wholesale (total)	–	3.2	3.2	6.3	–	6.3	2.1	–	2.1
7 – loans to corporates	–	3.2	3.2	–	–	–	0.1	–	0.1
8 – commercial mortgage	–	–	–	0.1	–	0.1	1.5	–	1.5
9 – lease and receivables	–	–	–	5.6	–	5.6	0.4	–	0.4
10 – other wholesale	–	–	–	0.2	–	0.2	0.1	–	0.1
11 – resecuritisation	–	–	–	0.4	–	0.4	–	–	–
Total at 31 Dec 2018	0.4	3.2	3.6	19.9	–	19.9	8.9	–	8.9

Table 35: Securitisation exposures in the trading book (SEC2)

	At					
	30 Jun 2019			31 Dec 2018		
	Bank acts as investor ¹			Bank acts as investor ¹		
	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	
1 Retail (total)	1.7	–	1.7	2.0	–	2.0
2 – residential mortgage	1.1	–	1.1	1.1	–	1.1
3 – credit card	0.1	–	0.1	0.2	–	0.2
4 – other retail exposures	0.5	–	0.5	0.7	–	0.7
6 Wholesale (total)	1.1	–	1.1	0.9	–	0.9
8 – commercial mortgage	0.9	–	0.9	0.7	–	0.7
10 – other wholesale	0.2	–	0.2	0.2	–	0.2
Total (all portfolios)	2.8	–	2.8	2.9	–	2.9
– of which:						
<i>securitisations under the new framework</i>	0.1	–	0.1	N/A	N/A	N/A
<i>securitisations under the pre-existing framework</i>	2.7	–	2.7	2.9	–	2.9

¹ HSBC does not act as originator or sponsor for securitisation exposures in the trading book.

The following tables present the Group's exposure in the non-trading book and associated regulatory capital requirements where the Group acts as originator or as sponsor. Table 36i presents the Group's exposures under the pre-existing

securitisation framework, whereas Table 36ii presents the exposures the Group has taken on since 1 January 2019 under the new securitisation framework.

Table 36i: Securitisation exposures in the non-trading book and associated regulatory capital requirements – bank acting as originator or as sponsor (under the pre-existing framework) (SEC3)

	Exposure values (by risk weight bands)					Exposure values (by regulatory approach)			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to 1,250% RW	1,250% RW	IRB RBA (including IAA)	IRB SFA	SA	1,250%
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
2 Traditional securitisation	14.6	0.1	0.1	0.6	–	14.8	–	0.6	–
3 Securitisation	14.6	0.1	0.1	0.6	–	14.8	–	0.6	–
4 – retail underlying	10.3	0.1	–	0.6	–	10.4	–	0.6	–
5 – wholesale	4.3	–	0.1	–	–	4.4	–	–	–
6 Resecuritisation	–	–	–	–	–	–	–	–	–
8 – non-senior	–	–	–	–	–	–	–	–	–
9 Synthetic securitisation	2.1	–	–	0.4	–	2.5	–	–	–
10 Securitisation	2.1	–	–	0.4	–	2.5	–	–	–
12 – wholesale	2.1	–	–	0.4	–	2.5	–	–	–
1 Total at 30 Jun 2019	16.7	0.1	0.1	1.0	–	17.3	–	0.6	–

2 Traditional securitisation	19.0	0.2	0.8	0.2	0.1	19.5	–	0.7	0.1
3 Securitisation	19.0	–	0.8	0.1	–	19.2	–	0.7	–
4 – retail underlying	13.2	–	0.7	0.1	–	13.3	–	0.7	–
5 – wholesale	5.8	–	0.1	–	–	5.9	–	–	–
6 Resecuritisation	–	0.2	–	0.1	0.1	0.3	–	–	0.1
8 – non-senior	–	0.2	–	0.1	0.1	0.3	–	–	0.1
9 Synthetic securitisation	2.9	–	–	0.3	–	3.2	–	–	–
10 Securitisation	2.9	–	–	0.3	–	3.2	–	–	–
12 – wholesale	2.9	–	–	0.3	–	3.2	–	–	–
1 Total at 31 Dec 2018	21.9	0.2	0.8	0.5	0.1	22.7	–	0.7	0.1

	RWAs (by regulatory approach)				Capital charge after cap			
	IRB RBA (including IAA)	IRB SFA	SA	1,250%	IRB RBA (including IAA)	IRB SFA	SA	1,250%
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
2 Traditional securitisation	1.7	–	0.9	–	0.1	–	0.1	–
3 Securitisation	1.6	–	0.9	–	0.1	–	0.1	–
4 – retail underlying	1.1	–	0.9	–	0.1	–	0.1	–
5 – wholesale	0.5	–	–	–	–	–	–	–
6 Resecuritisation	0.1	–	–	–	–	–	–	–
8 – non-senior	0.1	–	–	–	–	–	–	–
9 Synthetic securitisation	0.7	–	–	0.2	0.1	–	–	–
10 Securitisation	0.7	–	–	0.2	0.1	–	–	–
12 – wholesale	0.7	–	–	0.2	0.1	–	–	–
1 Total at 30 Jun 2019	2.4	–	0.9	0.2	0.2	–	0.1	–

2 Traditional securitisation	2.5	–	0.7	1.4	0.2	–	0.1	0.1
3 Securitisation	2.0	–	0.7	0.6	0.2	–	0.1	–
4 – retail underlying	1.5	–	0.7	0.5	0.2	–	0.1	–
5 – wholesale	0.5	–	–	0.1	–	–	–	–
6 Resecuritisation	0.5	–	–	0.8	–	–	–	0.1
8 – non-senior	0.5	–	–	0.8	–	–	–	0.1
9 Synthetic securitisation	0.8	–	–	0.2	0.1	–	–	–
10 Securitisation	0.8	–	–	0.2	0.1	–	–	–
12 – wholesale	0.8	–	–	0.2	0.1	–	–	–
1 Total at 31 Dec 2018	3.3	–	0.7	1.6	0.3	–	0.1	0.1

The reduction in RWAs was principally driven by the continued disposal of exposures in the legacy book.

Pillar 3 Disclosures at 30 June 2019

Table 36ii: Securitisation exposures in the non-trading book and associated regulatory capital requirements – bank acting as originator or as sponsor (under the new framework) (SEC3)

	Exposure values (by risk weight bands)					Exposure values (by regulatory approach)				
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to 1,250% RW	1,250% RW	SEC-IRBA	SEC-ERBA	SEC IAA	SEC-SA	1,250%
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
2	Traditional securitisation	2.9	1.5	0.2	–	–	–	3.8	0.8	–
3	Securitisation	2.9	1.5	0.2	–	–	–	3.8	0.8	–
4	– retail underlying	1.7	1.4	0.2	–	–	–	2.5	0.8	–
5	– wholesale	1.2	0.1	–	–	–	–	1.3	–	–
1	Total at 30 Jun 2019	2.9	1.5	0.2	–	–	–	3.8	0.8	–

	RWAs (by regulatory approach)					Capital charge after cap					
	SEC-IRBA	SEC-ERBA	SEC IAA	SEC-SA	1,250%	SEC-IRBA	SEC-ERBA	SEC IAA	SEC-SA	1,250%	
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	
2	Traditional securitisation	–	–	0.9	0.2	–	–	–	0.1	–	–
3	Securitisation	–	–	0.9	0.2	–	–	–	0.1	–	–
4	– retail underlying	–	–	0.7	0.2	–	–	–	0.1	–	–
5	– wholesale	–	–	0.2	–	–	–	–	–	–	–
1	Total at 30 Jun 2019	–	–	0.9	0.2	–	–	–	0.1	–	–

The following tables present the Group's exposure in the non-trading book and associated regulatory capital requirements where the Group acts as an investor. Table 37i presents the Group's exposures under the pre-existing securitisation framework, whereas Table 37ii presents the exposures the Group has taken on since 1 January 2019 under the new securitisation framework.

Table 37i: Securitisation exposures in the non-trading book and associated capital requirements – bank acting as investor (under the pre-existing framework) (SEC4)

	Exposure values (by risk weight bands)						Exposure values (by regulatory approach)			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to 1,250% RW	1,250% RW	IRB RBA (including IAA)	IRB SFA	SA	1,250%	
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	
2	Traditional securitisation	6.4	0.7	0.9	–	–	6.5	–	1.5	–
3	Securitisation	6.4	0.7	0.9	–	–	6.5	–	1.5	–
4	– retail underlying	4.2	0.7	0.9	–	–	4.3	–	1.5	–
5	– wholesale	2.2	–	–	–	–	2.2	–	–	–
1	Total at 30 Jun 2019	6.4	0.7	0.9	–	–	6.5	–	1.5	–

2	Traditional securitisation	7.0	0.6	1.3	–	–	6.9	–	2.0	–
3	Securitisation	7.0	0.6	1.3	–	–	6.9	–	2.0	–
4	– retail underlying	5.0	0.6	1.2	–	–	4.8	–	2.0	–
5	– wholesale	2.0	–	0.1	–	–	2.1	–	–	–
1	Total at 31 Dec 2018	7.0	0.6	1.3	–	–	6.9	–	2.0	–

	RWAs (by regulatory approach)					Capital charge after cap			
	IRB RBA (including IAA)	IRB SFA	SA	1,250%	IRB RBA (including IAA)	IRB SFA	SA	1,250%	
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	
2	Traditional securitisation	0.8	–	1.1	0.3	0.1	–	0.1	–
3	Securitisation	0.8	–	1.1	0.3	0.1	–	0.1	–
4	– retail underlying	0.4	–	1.1	0.2	–	–	0.1	–
5	– wholesale	0.4	–	–	0.1	0.1	–	–	–
1	Total at 30 Jun 2019	0.8	–	1.1	0.3	0.1	–	0.1	–

2	Traditional securitisation	0.9	–	1.5	0.4	0.1	–	0.1	–
3	Securitisation	0.9	–	1.5	0.4	0.1	–	0.1	–
4	– retail underlying	0.5	–	1.5	0.3	–	–	0.1	–
5	– wholesale	0.4	–	–	0.1	0.1	–	–	–
1	Total at 31 Dec 2018	0.9	–	1.5	0.4	0.1	–	0.1	–

Table 37ii: Securitisation exposures in the non-trading book and associated capital requirements – bank acting as investor (under the new framework) (SEC4)

		Exposure values (by risk weight bands)					Exposure values (by regulatory approach)				
		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to 1,250% RW	1,250% RW	SEC-IRBA	SEC-ERBA	SEC IAA	SEC-SA	1,250%
		\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
2	Traditional securitisation	1.4	0.4	–	0.3	–	–	0.7	–	1.4	–
3	Securitisation	1.4	0.4	–	0.3	–	–	0.7	–	1.4	–
4	– retail underlying	1.4	0.4	–	0.3	–	–	0.7	–	1.4	–
1	Total at 30 Jun 2019	1.4	0.4	–	0.3	–	–	0.7	–	1.4	–

		RWAs (by regulatory approach)					Capital charge after cap				
		SEC-IRBA	SEC-ERBA	SEC IAA	SEC-SA	1,250%	SEC-IRBA	SEC-ERBA	SEC IAA	SEC-SA	1,250%
		\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
2	Traditional securitisation	–	0.3	–	0.3	–	–	–	–	–	–
3	Securitisation	–	0.3	–	0.3	–	–	–	–	–	–
4	– retail underlying	–	0.3	–	0.3	–	–	–	–	–	–
1	Total at 30 Jun 2019	–	0.3	–	0.3	–	–	–	–	–	–

Market risk

Market risk is the risk that movements in market factors, such as foreign exchange rates, interest rates, credit spreads, equity prices and commodity prices, will reduce our income or the value of our portfolios.

Exposure to market risk is separated into two portfolios:

- trading portfolios: these comprise positions arising from market-making; and

- non-trading portfolios: these comprise positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities, financial investments measured at fair value through other comprehensive income, debt instruments measured at amortised cost, and exposures arising from our insurance operations.

There were no material changes to the policies and practices for the management of market risk.

For further information, a summary of our current policies and practices for the management of market risk is set out in 'Market risk' on page 61 of the Pillar 3 Disclosures at 31 December 2018.

Table 38: Market risk under standardised approach (MR1)

		At		
		30 Jun 2019	31 Dec 2018	30 Jun 2019
		RWAs	RWAs	Capital requirements
		\$bn	\$bn	\$bn
Outright products				
1	Interest rate risk (general and specific)	2.1	2.5	0.2
2	Equity risk (general and specific)	0.1	0.1	—
3	Foreign exchange risk	0.2	1.4	—
Options				
6	Delta-plus method	0.1	0.1	—
8	Securitisation (specific risk)	1.8	1.6	0.2
9	Total	4.3	5.7	0.4

Market risk RWAs under the standardised approach decreased in the current year largely due to increased hedging on foreign currency exposures.

Table 39: Market risk under IMA (MR2-A)

		At 30 Jun 2019		At 31 Dec 2018	
		RWAs	Capital requirements	RWAs	Capital requirements
		\$bn	\$bn	\$bn	\$bn
1	VaR (higher of values a and b)	6.5	0.5	7.1	0.6
(a)	Previous day's VaR		0.1		0.1
(b)	Average daily VaR		0.5		0.6
2	Stressed VaR (higher of values a and b)	9.4	0.7	12.1	1.0
(a)	Latest stressed VaR		0.1		0.2
(b)	Average stressed VaR		0.7		1.0
3	Incremental risk charge (higher of values a and b)	11.1	0.9	6.4	0.5
(a)	Most recent IRC value		0.8		0.4
(b)	Average IRC value		0.9		0.5
5	Other	3.5	0.3	4.5	0.3
6	Total	30.5	2.4	30.1	2.4

Under the IMA approach, incremental risk charge RWAs increased by \$4.7bn, largely due to higher volumes of sovereign exposures and a fall in diversification benefits. Partly offsetting this was a \$2.7bn decrease in stressed VaR RWAs, which was primarily due to increased diversification benefits following regulatory approval to expand the scope of consolidation and lower equity and rates exposures.

Table 40: IMA values for trading portfolios¹ (MR3)

		At	
		30 Jun 2019	31 Dec 2018
		\$m	\$m
VaR (10 day 99%)			
1	Maximum value	201.3	210.0
2	Average value	169.9	182.9
3	Minimum value	138.5	160.3
4	Period end	168.2	193.2
Stressed VaR (10 day 99%)			
5	Maximum value	327.3	408.5
6	Average value	236.5	256.8
7	Minimum value	156.9	194.9
8	Period end	156.9	408.5
Incremental risk charge (99.9%)			
9	Maximum value	1,089.2	743.7
10	Average value	815.1	603.9
11	Minimum value	573.7	424.9
12	Period end	785.2	492.7

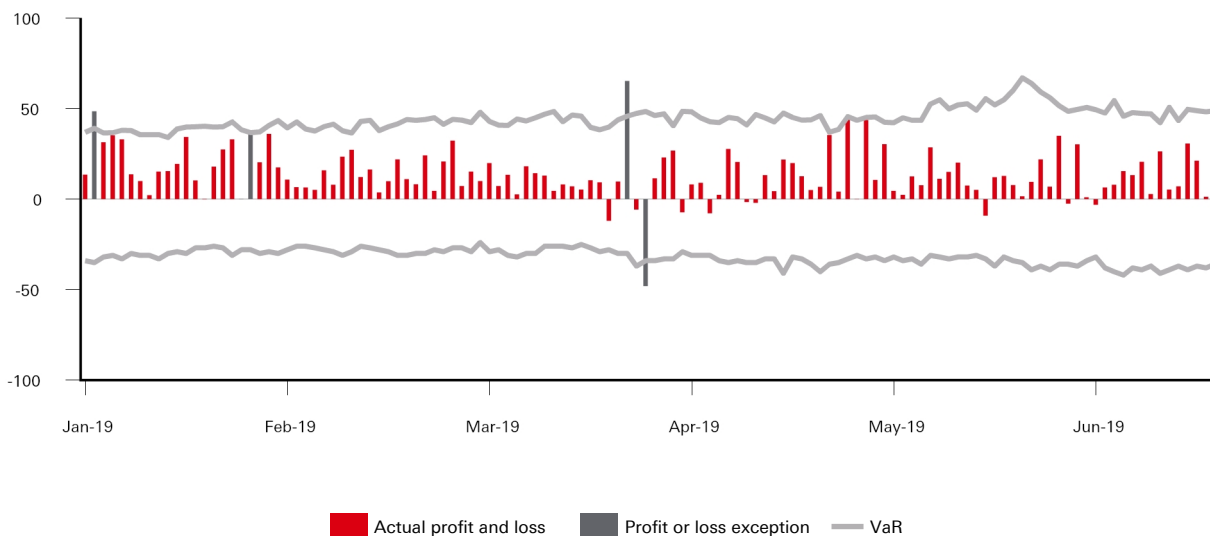
¹ Comparatives as at 31 December 2018 for averages, maximums and minimums were restated in compliance with EBA guidance.

In 1H19, the period end values for the three market risk capital models changed as follows:

- The decrease in VaR was driven mainly by lower contributions from equity correlation and dividend risks captured in the risk-not-in-VaR ('RNIV') framework, which covers risks in our trading book that are not fully captured by the VaR model.
- Stressed VaR reduction was primarily due to lower contributions from foreign exchange and rates activities and increased diversification benefits following regulatory approval to expand the scope of consolidation.
- The increase in incremental risk charge was mainly due to a larger contribution predominantly from Brazil, US and China sovereigns.

Table 41: Comparison of VaR estimates with gains/losses (MR4)

VaR back-testing exceptions against actual profit and loss (\$m)

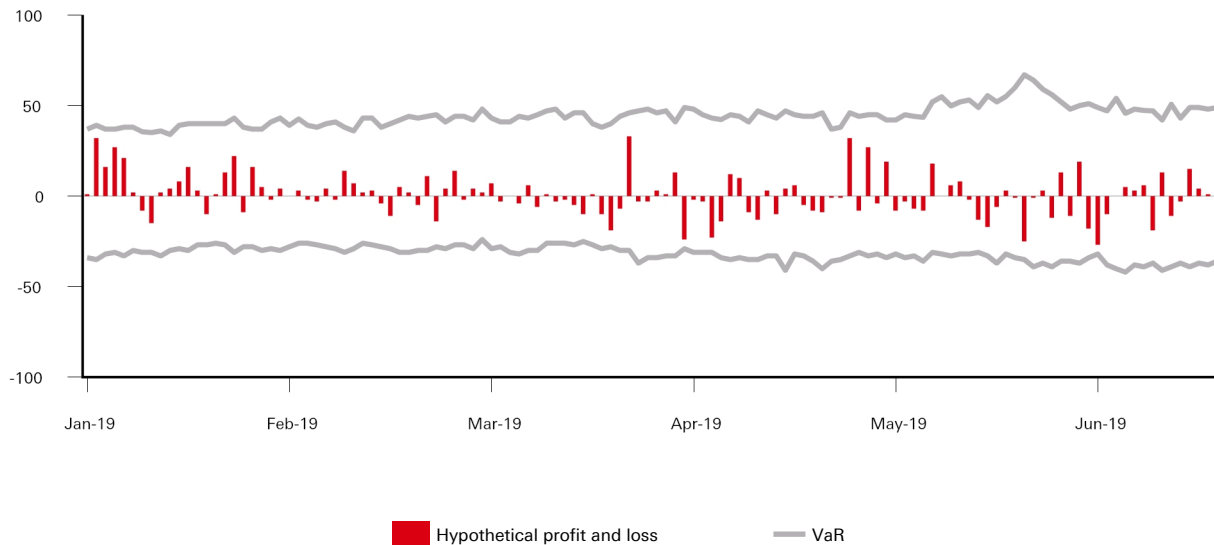


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In 1H19, the Group experienced three profit and one loss back-testing exceptions against actual profit and loss. These comprised;

- a profit exception in early January 2019, driven by gains across most asset classes, as interest rates rose and equity markets rebounded;
- a profit exception in late January 2019, mainly due to gains from new transactions in the rates business and lower equity volatilities;
- a profit exception in March 2019, driven by increased volatility in some emerging markets currencies and interest rates; and
- a loss exception in March 2019, attributable to month-end valuation adjustments driven by portfolio and spread changes.

VaR back-testing exceptions against hypothetical profit and loss (\$m)



In 1H19, the Group did not experience any back-testing exceptions against hypothetical profit and loss.

Minimum requirement for own funds and eligible liabilities

From 1 January 2019, a requirement for total loss-absorbing capacity ('TLAC') was introduced, as defined in the final standards adopted by the Financial Stability Board. In the EU, TLAC requirements were implemented via the Capital Requirements Regulation ('CRR II'), which came into force in June 2019 and includes a new framework on minimum requirement for own funds and eligible liabilities ('MREL').

MREL includes own funds and liabilities that can be written down or converted into capital resources in order to absorb losses or recapitalise a bank in the event of its failure. The new framework is complemented with new disclosure requirements. As the specific EU format for disclosure is yet to be agreed, the disclosures are based on the formats provided in the Basel Committee Standards for Pillar 3 disclosures requirements.

The preferred resolution strategy for the Group, as confirmed by the BoE, is a multiple point of entry ('MPE') strategy – allowing each individual resolution group to be resolved by its respective local resolution authority. Aligned with this strategy, the Group issues TLAC to the market from HSBC Holdings only, and then downstream the proceeds to its subsidiaries as necessary and in accordance with requirements set by our regulators. This approach gives host authorities the option to recapitalise local subsidiaries through the write-down of internal TLAC resources, with the BoE applying bail-in powers at the HSBC Holdings level where necessary and subsequently conducting any necessary restructuring and separation of the Group in coordination with host authorities.

In line with the existing structure and business model of the Group, we have three resolution groups – namely the European resolution group, the Asian resolution group and the US resolution group. There are some smaller entities that fall outside of the resolution groups, and can be separately resolved.

The table below lists the resolution groups, the related resolution entities and their material subsidiaries subject to TLAC requirements as currently agreed with the BoE.

The external MREL requirement for the Group as a whole is currently the highest of:

- 16% of the Group's consolidated RWAs;
- 6% of the Group's consolidated leverage exposure; and
- the sum of all loss-absorbing capacity requirements and other capital requirements relating to Group entities or sub-groups.

We expect the indicative, external MREL requirements applying to the Group from 2020 to 2021 to follow the same calibration. The indicative, external MREL requirement applicable in 2022 is expected to be the highest of:

- 18% of the Group's consolidated RWAs;
- 6.75% of the Group's consolidated leverage exposure; and
- the sum of all loss-absorbing capacity requirements and other capital requirements relating to other Group entities or sub-groups.

These indicative requirements remain subject to the BoE's confirmation and its review of the MREL framework in 2020.

Further details of our approach to capital management may be found in 'Capital management' on page 76 of the Interim Report 2019.

Resolution group	Resolution entity	Material entity/subgroup
European resolution group	HSBC Holdings plc	HSBC UK Holdings Limited
		HSBC Bank plc
		HSBC UK Bank plc
		HSBC France
Asian resolution group	HSBC Asia Holdings Limited	The Hongkong and Shanghai Banking Corporation Limited Hang Seng Bank Limited
US resolution group	HSBC North America Holdings Inc	N/A

The table below summarises key metrics for each of the Group's three resolution groups.

Table 42: Key metrics of the resolution groups (KM2)

		At 30 June 2019		
		Resolution group		
		European ¹	Asian ²	US ³
1	Total loss absorbing capacity ('TLAC') available (\$m)	97,256	97,040	31,739
1a	Fully loaded ECL accounting model TLAC available (\$m)	97,055	97,040	N/A
2	Total RWA at the level of the resolution group (\$m)	321,149	371,100	140,762
3	TLAC as a percentage of RWA (row1/row2) (%)	30.3%	26.1%	22.5%
3a	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model RWA (%)	30.2%	26.1%	N/A
4	Leverage exposure measure at the level of the resolution group (\$m)	1,176,134	1,041,168	362,621
5	TLAC as a percentage of leverage exposure measure (row1/row4) (%)	8.3%	9.3%	8.8%
5a	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model Leverage exposure measure (%)	8.3%	9.3%	N/A
6a	Does the subordination exemption in the antepenultimate paragraph of Section 11 of the FSB TLAC Term Sheet apply?	No	No	No
6b	Does the subordination exemption in the penultimate paragraph of Section 11 of the FSB TLAC Term Sheet apply?	No	No	No
6c	If the capped subordination exemption applies, the amount of funding issued that ranks <i>pari passu</i> with excluded liabilities and that is recognised as external TLAC, divided by funding issued that ranks <i>pari passu</i> with excluded liabilities and that would be recognised as external TLAC if no cap was applied (%)	N/A	N/A	N/A

1 The European resolution group reports in accordance with the applicable provisions of the Capital Requirements Regulation as amended by CRR II. Unless otherwise stated, all figures are calculated using the EU's regulatory transitional arrangements for IFRS 9 in article 473a of the Capital Requirements Regulation.

2 Reporting for the Asian resolution group follows the Hong Kong Monetary Authority ('HKMA') regulatory rules. IFRS 9 has been implemented but no regulatory transitional arrangements apply.

3 Reporting for the US resolution group is prepared in accordance with local regulatory rules. The US accounting standard for current expected credit losses ('CECL') corresponding to IFRS 9 is not yet effective. Leverage exposure and ratio are calculated under the US supplementary leverage ratio rules.

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Given the preferred MPE resolution strategy and the fact that the Bank of England framework includes requirements set on the basis of HSBC group consolidated position, the table below presents data for both the consolidated Group and the resolution groups. The difference between Group CET1 and the aggregate of resolution groups' CET1 is driven by entities that fall outside of the resolution groups and by differences in regulatory frameworks.

Table 43: TLAC composition (TLAC1)

	Footnotes	Group ¹	At 30 June 2019		
			Resolution group		
			European ¹	Asian ²	US ³
Regulatory capital elements of TLAC and adjustments (\$m)					
		126,949	116,222	61,561	18,649
		–	102,699	–	–
1		126,949	13,523	61,561	18,649
2		25,878	25,089	5,837	2,240
3		–	–	–	–
4		–	7,940	–	–
5		25,878	17,149	5,837	2,240
6		25,432	25,167	8,074	5,503
7		1,257	302	–	–
8		–	–	400	–
9		–	7,947	–	2,653
10		26,689	17,522	7,674	2,850
11		179,516	48,194	75,072	23,739
Non-regulatory capital elements of TLAC (\$m)					
12		80,046	49,062	21,970	8,000
13		–	–	–	–
14		–	–	–	–
15		–	–	–	–
16		–	–	–	–
17		80,046	49,062	21,970	8,000
Non-regulatory capital elements of TLAC: adjustments (\$m)					
18		259,562	97,256	97,042	31,739
19		–	–	2	–
20		43	–	–	–
21		–	–	–	–
22		259,519	97,256	97,040	31,739
Risk-weighted assets and leverage exposure measure for TLAC purposes (\$m)					
23		885,971	321,149	371,100	140,762
24		2,786,468	1,176,134	1,041,168	362,621
TLAC ratios and buffers (%)					
25		29.3%	30.3%	26.1%	22.5%
26		9.3%	8.3%	9.3%	8.8%
27		8.1%	N/A	N/A	4.5%
28		5.2%	N/A	N/A	2.5%
29		2.5%	N/A	N/A	2.5%
30		0.7%	N/A	N/A	N/A
31		2.0%	N/A	N/A	N/A

- The Group and European resolution group reports in accordance with the applicable provisions of the Capital Requirements Regulation as amended by CRR II. Unless otherwise stated all figures are calculated using the EU's regulatory transitional arrangements for IFRS 9 in article 473a of the Capital Requirements Regulation. Investments by the European resolution group in the regulatory capital or TLAC of other group companies are deducted from the corresponding form of capital in rows 1, 4 & 9. Buffer requirements are reported as 'Not applicable' as none have yet been set for the European resolution group.
- Reporting for the Asian resolution group follows HKMA regulatory rules. IFRS 9 has been implemented but no regulatory transitional arrangements apply.
- Reporting for the US resolution group is prepared in accordance with local regulatory rules. The US accounting standard for current expected credit losses ('CECL') corresponding to IFRS 9 is not yet effective. Leverage exposure and ratio are calculated under the US supplementary leverage ratio rules. Other adjustments for the US resolution group relate to allowances for loan and lease losses that are not TLAC eligible and Tier 2 instruments that currently do not qualify as TLAC. Under the US Final TLAC rules, in addition to the risk-weighted assets component of the TLAC requirement, the US resolution group is subject to an external 2.5% TLAC buffer that is similar to the capital conservation buffer.
- For the Group, minimum capital requirement is defined as the sum of Pillar 1 and Pillar 2A capital requirements set by the PRA. The minimum requirements represent the total capital requirement to be met by CET1.

Creditor ranking at legal entity level

The following tables present information regarding the ranking of creditors in the liability structure of legal entities at 30 June 2019. The tables present the ranking of creditors of HSBC Holdings plc, its resolution entities, and their material sub-group entities. Nominal values are disclosed.

The main features of capital instruments disclosure for the Group, Asia and US resolution groups is published on our website, <https://www.hsbc.com/investors/fixed-income-investors/regulatory-capital-securities>.

European resolution group

The European resolution group comprises HSBC Holdings plc, the designated resolution entity, together with its material operating entities – namely HSBC Bank plc and its subsidiaries, and HSBC UK Bank plc and its subsidiaries. The following tables present information regarding the ranking of creditors of HSBC Holdings plc, HSBC Bank plc and HSBC UK Bank plc.

Table 44: HSBC Holdings plc creditor ranking (TLAC3)

		Creditor ranking (\$m)				Sum of 1 to 4
		1	2	3	4	
		(most junior)			(most senior)	
		Ordinary shares ¹	Preference shares and AT1 instruments	Subordinated notes	Senior notes and other pari passu liabilities	
1	Description of creditor ranking					
2	Total capital and liabilities net of credit risk mitigation	10,281	23,634	20,709	78,759	133,383
3	– of row 2 that are excluded liabilities	–	–	–	293	293
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	10,281	23,634	20,709	78,466	133,090
5	– of row 4 that are potentially eligible as TLAC	10,281	23,634	20,709	77,304	131,928
6	– of row 5 with 1 year ≤ residual maturity < 2 years	–	–	–	12,000	12,000
7	– of row 5 with 2 years ≤ residual maturity < 5 years	–	–	2,000	29,635	31,635
8	– of row 5 with 5 years ≤ residual maturity < 10 years	–	–	7,500	28,965	36,465
9	– of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities	–	–	10,309	6,704	17,013
10	– of row 5 that are perpetual securities	10,281	23,634	900	–	34,815

¹ Excludes the value of share premium and reserves attributable to ordinary shareholders.

² Excluded liabilities are defined in CRR II Article 72a (2). The balance mainly relates to accruals for service company recharges.

Table 45: HSBC UK Bank plc creditor ranking (TLAC2)

		Creditor ranking (\$m)				Sum of 1 to 4
		1	2	3	4	
		(most junior)			(most senior)	
		Ordinary shares ²	AT1 instruments	Subordinated loans	Senior subordinated loans	
1	Is the resolution entity the creditor/investor?	No	No	No	No	
2	Description of creditor ranking					
3	Total capital and liabilities net of credit risk mitigation	–	2,793	3,766	7,770	14,329
4	– of row 3 that are excluded liabilities	–	–	–	–	–
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	–	2,793	3,766	7,770	14,329
6	– of row 5 that are eligible as TLAC	–	2,793	3,766	7,770	14,329
7	– of row 6 with 1 year ≤ residual maturity < 2 years	–	–	–	–	–
8	– of row 6 with 2 years ≤ residual maturity < 5 years	–	–	–	–	–
9	– of row 6 with 5 years ≤ residual maturity < 10 years	–	–	1,667	2,544	4,211
10	– of row 6 with residual maturity ≥ 10 years, but excluding perpetual securities	–	–	2,099	5,226	7,325
11	– of row 6 that are perpetual securities	–	2,793	–	–	2,793

¹ The entity's capital and TLAC are owned by HSBC UK Holdings Limited.

² The nominal value of ordinary shares is £50,002. This excludes the value of share premium and reserves attributable to ordinary shareholders.

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Table 46: HSBC Bank plc creditor ranking (TLAC2)

	Footnotes	Creditor ranking (\$m)				Sum of 1 to 4
		1 (most junior)	2	3	4 (most senior)	
1	Is the resolution entity the creditor/investor?	No	No	No	No	
2	Description of creditor ranking	Ordinary shares ²	Third Dollar preference shares and AT1 instruments	Undated primary capital notes	Subordinated notes and subordinated loans	
3	Total capital and liabilities net of credit risk mitigation	1,014	4,581	1,550	18,364	25,509
4	– of row 3 that are excluded liabilities	–	–	–	–	–
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	1,014	4,581	1,550	18,364	25,509
6	– of row 5 that are eligible as TLAC	1,014	4,581	1,550	18,364	25,509
7	– of row 6 with 1 year ≤ residual maturity < 2 years	–	–	–	450	450
8	– of row 6 with 2 years ≤ residual maturity < 5 years	–	–	–	4,839	4,839
9	– of row 6 with 5 years ≤ residual maturity < 10 years	–	–	–	9,672	9,672
10	– of row 6 with residual maturity ≥ 10 years, but excluding perpetual securities	–	–	–	2,131	2,131
11	– of row 6 that are perpetual securities	1,014	4,581	1,550	1,272	8,417

1 The entity's ordinary shares are owned by HSBC UK Holdings Limited. Other instruments are either owned by HSBC UK Holdings Limited or by third parties.

2 Excludes the value of share premium and reserves attributable to ordinary shareholders.

Asian resolution group

The Asian resolution group comprises HSBC Asia Holdings Ltd, The Hongkong & Shanghai Banking Corporation Limited, Hang Seng Bank Limited and their subsidiaries. HSBC Asia Holdings Ltd

is the designated resolution entity. The following table presents information regarding the ranking of creditors of HSBC Asia Holdings Limited.

Table 47: HSBC Asia Holdings Ltd creditor ranking¹ (TLAC3)

	Footnotes	Creditor ranking (\$m)				Sum of 1 to 4
		1 (most junior)	2	3	4 (most senior)	
1	Description of creditor ranking	Ordinary shares ²	AT1 instruments	Tier 2 instruments	LAC loans	
2	Total capital and liabilities net of credit risk mitigation	56,587	5,700	1,780	21,187	85,254
3	– of row 2 that are excluded liabilities	–	–	–	–	–
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	56,587	5,700	1,780	21,187	85,254
5	– of row 4 that are potentially eligible as TLAC	56,587	5,700	1,780	21,187	85,254
6	– of row 5 with 1 year ≤ residual maturity < 2 years	–	–	–	–	–
7	– of row 5 with 2 years ≤ residual maturity < 5 years	–	–	–	8,521	8,521
8	– of row 5 with 5 years ≤ residual maturity < 10 years	–	–	–	10,666	10,666
9	– of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities	–	–	1,780	2,000	3,780
10	– of row 5 that are perpetual securities	56,587	5,700	–	–	62,287

1 The entity's capital and TLAC are held by HSBC Holdings plc.

2 Excludes the value of share premium and reserves attributable to ordinary shareholders.

Within the Asian resolution group, the identified material sub-group entities are The Hongkong & Shanghai Banking Corporation Ltd and Hang Seng Bank Ltd. The following tables presents the make-up of their issued MREL and its ranking on a legal entity basis.

Table 48: The Hongkong and Shanghai Banking Corporation Ltd creditor ranking (TLAC2)

	Creditor ranking (\$m)					Sum of 1 to 5	
	1 (most junior)	2	3	4	5 (most senior)		
1	Is the resolution entity the creditor/investor?	Yes	Yes	No ¹	Yes	Yes	
2	Description of creditor ranking	Ordinary shares ²	AT1 instruments	Primary capital notes	Tier 2 instruments	LAC loans	
3	Total capital and liabilities net of credit risk mitigation	22,069	5,700	400	1,780	21,187	51,136
4	– of row 3 that are excluded liabilities	–	–	–	–	–	–
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	22,069	5,700	400	1,780	21,187	51,136
6	– of row 5 that are eligible as TLAC	22,069	5,700	–	1,780	21,187	50,736
7	– of row 6 with 1 year ≤ residual maturity < 2 years	–	–	–	–	–	–
8	– of row 6 with 2 years ≤ residual maturity < 5 years	–	–	–	–	8,521	8,521
9	– of row 6 with 5 years ≤ residual maturity < 10 years	–	–	–	–	10,666	10,666
10	– of row 6 with residual maturity ≥ 10 years, but excluding perpetual securities	–	–	–	1,780	2,000	3,780
11	– of row 6 that are perpetual securities	22,069	5,700	–	–	–	27,769

1 The company's primary capital notes are held by third parties.

2 Excludes the value of share premium and reserves attributable to ordinary shareholders.

Table 49: Hang Seng Bank Ltd creditor ranking (TLAC2)

	Footnotes	Creditor ranking (\$m)			Sum of 1 to 3	
		1 (most junior)	2	3 (most senior)		
1	1	Is the resolution entity the creditor/investor?	No	No	No	
2		Description of creditor ranking	Ordinary shares ²	AT1 instruments	LAC loans	
3		Total capital and liabilities net of credit risk mitigation	1,237	1,500	2,498	5,235
4		– of row 3 that are excluded liabilities	–	–	–	–
5		Total capital and liabilities less excluded liabilities (row 3 minus row 4)	1,237	1,500	2,498	5,235
6		– of row 5 that are eligible as TLAC	1,237	1,500	2,498	5,235
7		– of row 6 with 1 year ≤ residual maturity < 2 years	–	–	–	–
8		– of row 6 with 2 years ≤ residual maturity < 5 years	–	–	–	–
9		– of row 6 with 5 years ≤ residual maturity < 10 years	–	–	2,098	2,098
10		– of row 6 with residual maturity ≥ 10 years, but excluding perpetual securities	–	–	400	400
11		– of row 6 that are perpetual securities	1,237	1,500	–	2,737

1 62.14% of Hang Seng Bank Limited's ordinary share capital is owned by The Hongkong and Shanghai Banking Corporation Limited. Hang Seng Bank Limited's other TLAC eligible securities are directly held by The Hongkong and Shanghai Banking Corporation Limited.

2 Excludes the value of reserves attributable to ordinary shareholders.

US resolution group

The US resolution group comprises HSBC North America Holdings Inc. and its subsidiaries. HSBC North America Holdings Inc. is the

designated resolution entity. The following table presents information regarding the ranking of creditors of HSBC North America Holdings Inc.

Table 50: HSBC North America Holdings Inc. creditor ranking¹ (TLAC3)

	Footnotes	Creditor ranking (\$m)				Sum of 1 to 4	
		1 (most junior)	2	3	4 (most senior)		
1		Description of creditor ranking	Common stock ²	Preferred stock	Subordinated loans	Senior unsecured loans and other pari passu liabilities	
2		Total capital and liabilities net of credit risk mitigation	–	2,240	2,850	8,530	13,620
3	3	– of row 2 that are excluded liabilities	–	–	–	377	377
4		Total capital and liabilities less excluded liabilities (row 2 minus row 3)	–	2,240	2,850	8,153	13,243
5		– of row 4 that are potentially eligible as TLAC	–	2,240	2,850	8,000	13,090
6		– of row 5 with 1 year ≤ residual maturity < 2 years	–	–	–	–	–
7		– of row 5 with 2 years ≤ residual maturity < 5 years	–	–	–	3,500	3,500
8		– of row 5 with 5 years ≤ residual maturity < 10 years	–	–	2,850	4,500	7,350
9		– of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities	–	–	–	–	–
10		– of row 5 that are perpetual securities	–	2,240	–	–	2,240

1 The entity's capital and TLAC are held by HSBC Overseas Holdings (UK) Limited.

2 The nominal value of common stock is \$2. This excludes the value of share premium and reserves attributable to ordinary shareholders.

3 Excluded liabilities consists of 'unrelated liabilities' as defined in the Final US TLAC rules. This mainly represents accrued employee benefit obligations.

Other information

Abbreviations

The following abbreviated terms are used throughout this document.

Currencies

\$	US dollar
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A

AIRB	Advanced IRB
AT1 capital	Additional tier 1 capital

B

BCBS/Basel Committee	Basel Committee on Banking Supervision
BoE	Bank of England

C

CCF ¹	Credit conversion factor
CCP	Central counterparty
CCR ¹	Counterparty credit risk
CCyB ¹	Countercyclical capital buffer
CDS ¹	Credit default swap
CET1 ¹	Common equity tier 1
CIU	Collective investment undertakings
CMB	Commercial Banking, a global business
CRD IV ¹	Capital Requirements Regulation and Directive
CRM	Credit risk mitigation/mitigant
CRR II	Revisions to Capital Requirements Regulation
CRR III	Revisions to EU legislation for Basel III reforms
CVA	Credit valuation adjustment

E

EAD ¹	Exposure at default
EBA	European Banking Authority
ECL	Expected credit loss
EU	European Union

F

FIRB	Foundation IRB
FRTB	Fundamental review of the trading book
FSB	Financial Stability Board
FSEs	Financial Sector Entities

G

GAC	Group Audit Committee
GRC	Group Risk Committee
Group	HSBC Holdings together with its subsidiary undertakings
G-SIB ¹	Global systemically important bank
G-SII	Global systemically important institution

H

HKMA	Hong Kong Monetary Authority
HMT	Her Majesty's Treasury
Hong Kong	The Hong Kong Special Administrative Region of the People's Republic of China
HSBC	HSBC Holdings together with its subsidiary undertakings

I

IAA ¹	Internal assessment approach
IFRSs	International Financial Reporting Standards
IMA	Internal models approach
IMM ¹	Internal model method
IRB ¹ /RBA	Internal ratings based approach

IRC ¹	Incremental risk charge
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L

LCR	Liquidity coverage ratio
LGD ¹	Loss given default

M

MENA	Middle East and North Africa
MREL	Minimum requirement for own funds and eligible liabilities

N

NCOA	Non-credit obligation asset
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O

OTC ¹	Over-the-counter
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P

PD ¹	Probability of default
PRA ¹	Prudential Regulation Authority (UK)

Q

QCCPs	Qualifying central counterparties
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R

RAS	Risk appetite statement
RBM ¹	Ratings based method
RBWM	Retail Banking and Wealth Management, a global business
RMM	Risk Management Meeting of the Group Management Board
RNIV	Risks not in VaR
RW	Risk weights
RWA ¹	Risk-weighted asset

S

SA/STD ¹	Standardised approach
SA-CCR	Standardised approach for counterparty credit risk
SFM ¹	Supervisory formula method
SFT ¹	Securities financing transactions
SIC	Securities Investment Conduit
SME	Small-and medium-sized enterprise
SPE ¹	Special purpose entity
SSFA/SFA	Simplified supervisory formula approach
SVaR	Stressed value at risk

T

TLAC ¹	Total loss absorbing capacity
T1 capital	Tier 1 capital
T2 capital	Tier 2 capital

U

UK	United Kingdom
US	United States

V

VaR ¹	Value at risk
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¹ Full definition included in the Glossary published on HSBC website www.hsbc.com/investor-relations/group-results-and-reporting.

Cautionary statement regarding forward-looking statements

These *Pillar 3 Disclosures at 30 June 2019* contain certain forward-looking statements with respect to HSBC's financial condition, results of operations and business, including the strategic priorities and 2020 financial, investment and capital targets described herein.

Statements that are not historical facts, including statements about HSBC's beliefs and expectations, are forward-looking statements. Words such as 'expects', 'targets', 'anticipates', 'intends', 'plans', 'believes', 'seeks', 'estimates', 'potential' and 'reasonably possible', variations of these words and similar expressions are intended to identify forward-looking statements. These statements are based on current plans, estimates and projections, and therefore undue reliance should not be placed on them. Forward-looking statements speak only as of the date they are made. HSBC makes no commitment to revise or update any forward-looking statements to reflect events or circumstances occurring or existing after the date of any forward-looking statements.

Written and/or oral forward-looking statements may also be made in the periodic reports to the US Securities and Exchange Commission, summary financial statements to shareholders, proxy statements, offering circulars and prospectuses, press releases and other written materials, and in oral statements made by HSBC's Directors, officers or employees to third parties, including financial analysts.

Forward-looking statements involve inherent risks and uncertainties. Readers are cautioned that a number of factors could cause actual results to differ, in some instances materially, from those anticipated or implied in any forward-looking statement. These include, but are not limited to:

- changes in general economic conditions in the markets in which we operate, such as continuing or deepening recessions and fluctuations in employment beyond those factored into consensus forecasts; changes in foreign exchange rates and interest rates; volatility in equity markets; lack of liquidity in wholesale funding markets; illiquidity and downward price pressure in national real estate markets; adverse changes in central banks' policies with respect to the provision of liquidity support to financial markets; heightened market concerns over sovereign creditworthiness in over-indebted

countries; adverse changes in the funding status of public or private defined benefit pensions; consumer perception as to the continuing availability of credit and price competition in the market segments we serve; and deviations from the market and economic assumptions that form the basis for our ECL measurements;

- changes in government policy and regulation, including the monetary, interest rate and other policies of central banks and other regulatory authorities; initiatives to change the size, scope of activities and interconnectedness of financial institutions in connection with the implementation of stricter regulation of financial institutions in key markets worldwide; revised capital and liquidity benchmarks, which could serve to deleverage bank balance sheets and lower returns available from the current business model and portfolio mix; imposition of levies or taxes designed to change business mix and risk appetite; the practices, pricing or responsibilities of financial institutions serving their consumer markets; expropriation, nationalisation, confiscation of assets and changes in legislation relating to foreign ownership; changes in bankruptcy legislation in the principal markets in which we operate and the consequences thereof; general changes in government policy that may significantly influence investor decisions; extraordinary government actions as a result of current market turmoil; other unfavourable political or diplomatic developments producing social instability or legal uncertainty, which in turn may affect demand for our products and services; the costs, effects and outcomes of product regulatory reviews, actions or litigation, including any additional compliance requirements; and the effects of competition in the markets where we operate including increased competition from non-bank financial services companies, including securities firms; and
- factors specific to HSBC, including our success in adequately identifying the risks we face, such as the incidence of loan losses or delinquency, and managing those risks (through account management, hedging and other techniques). Effective risk management depends on, among other things, our ability through stress testing and other techniques to prepare for events that cannot be captured by the statistical models it uses; our success in addressing operational, legal and regulatory, and litigation challenges; and the other risks and uncertainties we identify in 'Top and emerging risks' on pages 16 and 17 of the *Interim Report 2019*.

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