

HSBC HOLDINGS PLC
Form 6-K
February 21, 2018
FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Report of Foreign Private Issuer

Pursuant to Rule 13a - 16 or 15d - 16 of

the Securities Exchange Act of 1934

Commission File Number: 001-14930

For the month of February 2018

HSBC Holdings plc

42nd Floor, 8 Canada Square, London E14 5HQ, England

(Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F).

Form 20-F Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

(Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934).

Yes No

(If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82-).

Pillar 3 Disclosures at 31 December 2017

Contents

	Page
Introduction	<u>3</u>
Key metrics	<u>3</u>
Regulatory framework for disclosures	<u>3</u>
Pillar 3 disclosures	<u>3</u>
Regulatory developments	<u>3</u>
Risk management	<u>4</u>
Linkage to the Annual Report and Accounts 2017	<u>6</u>
Capital and RWAs	<u>13</u>
Capital management	<u>13</u>
Own funds	<u>14</u>
Leverage ratio	<u>15</u>
Pillar 1 capital requirements and RWA flow	<u>17</u>
Pillar 2 and ICAAP	<u>19</u>
Credit risk	<u>20</u>
Overview and responsibilities	<u>20</u>
Credit risk management	<u>20</u>
Credit risk models governance	<u>20</u>
Credit quality of assets	<u>21</u>
Risk mitigation	<u>30</u>
Global risk	<u>34</u>
Wholesale risk	<u>35</u>
Retail risk	<u>41</u>
Counterparty credit risk	<u>50</u>
Counterparty credit risk management	<u>50</u>
Securitisation	<u>53</u>
HSBC securitisation strategy	<u>53</u>
HSBC securitisation activity	<u>53</u>
Monitoring of securitisation positions	<u>54</u>
Securitisation accounting treatment	<u>54</u>
Securitisation regulatory treatment	<u>54</u>
Analysis of securitisation exposures	<u>54</u>
Market risk	<u>56</u>
Overview of market risk in global businesses	<u>56</u>
Market risk governance	<u>57</u>
Market risk measures	<u>57</u>
Market risk capital models	<u>59</u>
Prudent valuation adjustment	<u>60</u>
Structural foreign exchange exposures	<u>61</u>
Interest rate risk in the banking book	<u>61</u>
Operational risk	<u>61</u>
Overview and objectives	<u>61</u>
Organisation and responsibilities	<u>62</u>
Measurement and monitoring	<u>62</u>
Other risks	<u>63</u>
Pension risk	<u>63</u>
Non-trading book exposures in equities	<u>63</u>

Risk management of insurance operations	<u>63</u>
Liquidity and funding risk	<u>63</u>
Reputational risk	<u>69</u>
Sustainability risk	<u>69</u>
Business risk	<u>69</u>
Dilution risk	<u>69</u>
Remuneration	<u>69</u>

Appendices

	Page
I Additional tables	<u>70</u>
II Asset encumbrance	<u>110</u>
III Summary of disclosures withheld	<u>111</u>
Other Information	
Abbreviations	<u>112</u>
Cautionary statement regarding forward-looking statements	<u>114</u>
Contacts	<u>114</u>
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’ and ‘\$bn’ represent millions and billions (thousands of millions) of US dollars respectively.

1 HSBC Holdings plc Pillar 3 2017

Tables

	Page
1 Key metrics	3
2 Reconciliation of balance sheets – financial accounting to regulatory scope of consolidation	6
3 Principal entities with a different regulatory and accounting scope of consolidation	9
4 Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories	10
with regulatory risk categories	
5 Main sources of differences between regulatory exposure amounts and carrying values in financial statements	12
6 Own funds disclosure	14
7 Summary reconciliation of accounting assets and leverage ratio exposures	16
8 Leverage ratio common disclosure	16
9 Leverage ratio – Split of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures)	16
10 Overview of RWAs	18
11 RWA flow statements of credit risk exposures under the IRB approach	18
12 RWA flow statements of CCR exposures under IMM	19
13 RWA flow statements of market risk exposures under IMA	19
14 Credit quality of exposures by exposure classes and instruments	21
15 Credit quality of exposures by industry or counterparty types	22
16 Credit quality of exposures by geography ¹	22
17 Ageing of past-due unimpaired and impaired exposures	23
18 Non-performing and forborne exposures	23
19 Credit risk exposure – summary	24
20 Geographical breakdown of exposures	25
21 Concentration of exposures by industry or counterparty types	26
22 Maturity of on-balance sheet exposures	28
23 Amount of impaired exposures and related allowances, broken down by geographical region	29
24 Movement in specific credit risk adjustments by industry and geographical region	29
25 Credit risk mitigation techniques – overview ¹	31
26 Standardised approach – credit conversion factor (‘CCF’) and credit risk mitigation (‘CRM’) effects	32
27 Standardised approach – exposures by asset class and risk weight	33
28 IRB – Effect on RWA of credit derivatives used as CRM techniques	33
29 Credit derivatives exposures	34
30 Wholesale IRB credit risk models	37
31 IRB models – estimated and actual values (wholesale) ¹	38
32 IRB models – corporate PD models – performance by CRR grade	38
33 Material retail IRB risk rating systems	41
34 IRB models – estimated and actual values (retail)	44
35 Wholesale IRB exposure – back-testing of probability of default (PD) per portfolio ¹	46
	Page
36 Retail IRB exposure – back-testing of probability of default (PD) per portfolio ¹	48
37 Counterparty credit risk exposure – by exposure class, product and geographical region	51
38 Counterparty credit risk – RWAs by exposure class, product and geographical region	52
39 Securitisation exposure – movement in the year	55
40 Securitisation – asset values and impairments	55
41 Market risk under standardised approach	56
42 Market risk under IMA	56
43 IMA values for trading portfolios	59

44 Prudential valuation adjustments	60
45 Operational risk RWAs	61
46 Non-trading book equity investments	63
47 Level and components of HSBC Group Consolidated Liquidity Coverage Ratio	66
48 Analysis of on-balance sheet encumbered and unencumbered assets	67
49 Wholesale IRB exposure – by obligor grade	70
50 PD, LGD, RWA and exposure by country	72
51 Retail IRB exposure – by internal PD band	86
52 IRB expected loss and CRAs – by exposure class	87
53 Credit risk exposure – by geographical region	88
54 Credit risk RWAs – by geographical region	90
55 IRB exposure – credit risk mitigation	91
56 Standardised exposure – credit risk mitigation	92
57 Standardised exposure – by credit quality step	92
58 Changes in stock of general and specific credit risk adjustments	93
59 Changes in stock of defaulted loans and debt securities	93
60 IRB – Credit risk exposures by portfolio and PD range	94
61 Specialised lending on slotting approach ¹	100
62 Analysis of counterparty credit risk (CCR) exposure by approach (excluding centrally cleared exposures)	100
63 Credit valuation adjustment (CVA) capital charge	100
64 Standardised approach – CCR exposures by regulatory portfolio and risk weights	101
65 IRB – CCR exposures by portfolio and PD scale	102
66 Impact of netting and collateral held on exposure values	104
67 Composition of collateral for CCR exposure	104
68 Exposures to central counterparties	104
69 Securitisation exposures in the non-trading book	105
70 Securitisation exposures in the trading book	105
71 Securitisation exposures in the non-trading book and associated capital requirements – bank acting as originator or sponsor	106
72 Securitisation exposures in the non-trading book and associated capital requirements – bank acting as investor	108
73 Asset encumbrance	110

Pillar 3 Disclosures at 31 December 2017

Introduction

Table 1: Key metrics

	At 31 Dec
	Footnotes 2017
Available capital (\$bn)	1
1 Common equity tier 1 ('CET1') capital	126.1
2 Tier 1 capital	151.0
3 Total regulatory capital	182.4
Risk-weighted assets ('RWAs') (\$bn)	
4 Total RWAs	871.3
Capital ratios (%)	
5 CET1	14.5
6 Total tier 1	17.3
7 Total capital	20.9
Additional CET1 buffer requirements as a percentage of RWA (%)	
8 Capital conservation buffer requirement	1.25
9 Countercyclical buffer requirement	0.22
10 Bank G-SIB and/or D-SIB additional requirements	1.25
11 Total of bank CET1 specific buffer requirements	2.72
12 CET1 available after meeting the bank's minimum capital requirements	8.0
Leverage ratio	
13 Total leverage ratio exposure measure (\$bn)	2,557.1
14 Leverage ratio (%)	2 5.6
Liquidity Coverage Ratio ('LCR')	
15 Total high-quality liquid assets (\$bn)	512.6
16 Total net cash outflow (\$bn)	359.9
17 LCR ratio (%)	3 142.2

1 Capital figures are reported on a transitional basis.

2 Leverage ratio is calculated on a fully phased-in basis.

3 LCR ratio is calculated as at 31 December 2017.

Regulatory framework for disclosures

HSBC is supervised on a consolidated basis in the United Kingdom ('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, we calculated capital for prudential regulatory reporting purposes throughout 2017 using the Basel III framework of the Basel Committee ('Basel') as implemented by the European Union ('EU') in the amended Capital Requirements Directive and Regulation ('CRD IV'), and in the PRA's Rulebook for the UK banking industry. The regulators of Group banking entities outside the EU are at varying stages of implementation of the Basel

Committee's framework, so local regulation in 2017 may have been on the basis of Basel I, II or III.

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

Pillar 3 requires all material risks to be disclosed to provide a comprehensive view of a bank's risk profile.

The PRA's final rules adopted national discretions in order to accelerate significantly the transition timetable to full 'end point' CRD IV compliance.

Pillar 3 disclosures

HSBC's Pillar 3 disclosures at December 2017 comprise all information required under Pillar 3, both quantitative and qualitative. They are made in accordance with Part 8 of the Capital Requirements Regulation within CRD IV and the European Banking Authority's ('EBA') final standards on revised Pillar 3 disclosures 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'). Information relating to the rationale for withholding certain disclosures is provided in Appendix III.

In our disclosures, to give insight into movements during the year, we provide comparative figures for the previous year, analytical review of variances and 'flow' tables for capital requirements.

Key ratios and figures are reflected throughout the Pillar 3 disclosures at December 2017 and a summary is presented in Table 1. Where disclosures have been enhanced, or are new, we do not generally restate or provide prior year comparatives. The capital resources tables track the position from a CRD IV transitional to an end point basis.

We publish comprehensive Pillar 3 disclosures annually on the HSBC website www.hsbc.com, concurrently with the release of our Annual Report and Accounts 2017. A separate Pillar 3 document is also published at half-year following our Interim Report disclosure. Quarterly earnings releases also include regulatory information in line with the new requirements on the frequency of regulatory 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 Annual Report and Accounts 2017 or 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.

Regulatory developments

Basel Committee

In December, the Basel Committee ('Basel') published the revisions to the Basel III framework (sometimes referred to as 'Basel IV'). 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 internal ratings based ('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 risk-weighted assets 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 institutions ('G-SIB'). This will take the form of a tier 1 capital buffer set at 50% of the G-SIB's RWAs capital buffer.

Basel has announced that the package will be implemented on 1 January 2022, with a five-year transitional provision for the output floor from that date, commencing at a rate of 50%.

HSBC is currently evaluating the final package. Given that the package contains a significant number of national discretions and that Basel has committed to re-calibrate the market risk elements

of the final framework during 2018, significant uncertainty remains as to the impact.

In all instances, the final standards will have to be transposed into the relevant local law before coming into effect. In addition, during 2017, Basel proposed other revisions to the regulatory capital framework. In particular, it published:

- a discussion paper on the treatment of sovereign exposures;
 - the final guidelines regarding the identification and management of step-in risk;
 - the interim regulatory treatment and transitional requirements for International Financial Reporting Standard 9, Financial Instruments ('IFRS 9') provisions;
 - the final phase 2 Pillar 3 standards;
 - and
- proposals to revise the G-SIB assessment framework.

Financial Stability Board

In July, the Financial Stability Board ('FSB') expanded its resolution reform policy framework with the publication of its 'Guiding Principles on the Internal Total Loss-absorbing Capacity of G-SIBs ('Internal TLAC')'. These guidelines supplement the FSB's TLAC standard published in November 2015. In addition, the FSB published consultations on other outstanding issues related to its resolution framework. Again, these need to be incorporated into the relevant local law before coming into effect.

European Union

In the EU, elements of Basel's and the FSB's reforms are being implemented through revisions to the Capital Requirements Regulation and Capital Requirements Directive (collectively referred to as 'CRR2') and the EU resolution framework. The key components of CRR2 include changes to the market risk framework under the Fundamental Review of the Trading Book, changes to the counterparty credit risk framework and a binding leverage ratio. It also includes details of the minimum requirements for TLAC, which in the EU is known as the 'Minimum Requirements for own funds and Eligible Liabilities' ('MREL'). The CRR2 changes are expected to be finalised in 2018 and apply from 1 January 2021, although certain elements, such as MREL, are expected to apply from 1 January 2019. In December, the EU's IFRS 9 transitional capital arrangements were published formally and the EBA published its final guidelines on the IFRS 9 disclosures. Separately, the final changes to the capital rules on securitisation were also published formally by the EU with implementation expected on 1 January 2019 for new transactions and on 1 January 2020 for existing positions. In addition, during 2017, the EBA published a consultation on the methods of prudential consolidation under the EU's rules.

Also in December, in line with the EU's rules, the requirement to have a Basel I floor lapsed and the PRA confirmed that its application is no longer required. A new output floor will be implemented as part of the Basel IV amendments.

Bank of England

In March, HSBC received from the Bank of England ('BoE') its indicative MREL requirement applicable to HSBC Holdings plc and its European Resolution Group (comprised of HSBC Bank plc and its subsidiaries). This includes interim MREL requirements effective from 1 January 2019 and final requirements effective from 1 January 2022. The BoE also confirmed formally that 'multiple-point-of-entry' ('MPE') is the preferred resolution strategy for HSBC. In May, the BoE published the quantum of MREL requirements for major UK banks.

In addition, during 2017, the BoE and the PRA proposed other revisions to the regulatory capital and MREL frameworks. In particular, they published proposals and/or final rules setting out:

- the approach to setting internal MREL and the setting of MREL for MPE groups;
- the interaction of MREL with both the capital and leverage ratio buffers;
- changes to the groups and double leverage policy;
- the policy refining the PRA's Pillar 2A capital requirements and disclosure; and
- the policy to ensure that valuation processes do not impede resolvability.

The PRA also published its final rules on the exclusion of claims on central banks from the UK leverage ratio framework and the re-calibration of the minimum leverage ratio for HSBC from 3% to 3.25% of tier 1 capital. These changes took effect in October 2017.

Lastly, in June, the Financial Policy Committee raised the countercyclical buffer rate for UK exposures to 0.5%, to apply from June 2018 and in November, increased it further to 1% with binding effect from November 2018.

Risk management

Our risk management framework

We use an enterprise-wide, risk management framework across the organisation and across all risk types. It is underpinned by our risk culture and is reinforced by the HSBC Values and our Global Standards programme. The framework fosters continuous monitoring of the risk environment, and an integrated evaluation of risks and their interactions. It also ensures we have a consistent approach to monitoring, managing and mitigating the risks we accept and incur in our activities. Further information on our risk management framework is set out on page 106 of the Annual Report and Accounts 2017. The management and mitigation of principal risks facing the Group is described in our top and emerging risks on page 95 of the Annual Report and Accounts 2017. Commentary on hedging strategies and associated processes can be found in the Market risk and Securitisation sections of this document. Additionally, a comprehensive overview of this topic can be found in Note 1.2(e) on page 227 of the Annual Report and Accounts 2017.

Risk culture

HSBC has long recognised the importance of a strong risk culture, the fostering of which is a key responsibility of senior executives. Our risk culture is reinforced by the HSBC Values and our Global Standards programme. It is instrumental in aligning the behaviours of individuals with our attitude to assuming and managing risk, which helps to ensure that our risk profile remains in line with our risk appetite.

Our risk culture is further reinforced by our approach to remuneration. Individual awards, including those for senior executives, are based on compliance with the HSBC Values and the achievement of financial and non-financial objectives that are aligned to our risk appetite and strategy.

Further information on risk and remuneration is set out on pages 95 and 203 of the Annual Report and Accounts 2017.

Risk governance

The Board has ultimate responsibility for the effective management of risk and approves HSBC's risk appetite. It is advised on risk-related matters by the Group Risk Committee ('GRC'), the Financial System Vulnerabilities Committee ('FSVC') and the Conduct and Values Committee ('CVC'). The activities of the GRC, FSVC and CVC are set out on pages 175 to 177 of the Annual Report and Accounts 2017.

Executive accountability for the ongoing monitoring, assessment and management of the risk environment and the effectiveness of the risk management framework resides with the Group Chief Risk Officer. He is supported by the Risk Management Meeting ('RMM') of the Group Management Board.

Pillar 3 Disclosures at 31 December 2017

The management of financial crime risk resides with the Group Head of Financial Crime Risk. He is supported by the Financial Crime Risk Management Meeting, as described on page 118 of the Annual Report and Accounts 2017. Day-to-day responsibility for risk management is delegated to senior managers with individual accountability for decision making. These senior managers are supported by global functions. All employees have a role to play in risk management. These roles are defined using the three lines of defence model, which takes into account the Group's business and functional structures (see page 107 of the Annual Report and Accounts 2017).

Our executive risk governance structures ensure appropriate oversight and accountability for risk, which facilitates the reporting and escalation to the RMM (see page 107 of the Annual Report and Accounts 2017).

Risk appetite

Risk appetite is a key component of our management of risk. It describes the aggregate level and risk types that we are willing to accept in achieving our medium to long-term business objectives. In HSBC, risk appetite is managed through a global risk appetite framework and articulated in a risk appetite statement ('RAS'), which is approved biannually by the Board on the advice of the GRC.

The Group's risk appetite informs our strategic and financial planning process, defining the desired forward-looking risk profile of the Group. It is also integrated within other risk management tools, such as the top and emerging risks report and stress testing, to ensure consistency in risk management. Information on our risk management tools is set out on page 107 of the Annual Report and Accounts 2017. Details on the Group's overarching risk appetite are set out on page 95 of the Annual Report and Accounts 2017.

Stress testing

HSBC operates a comprehensive stress testing programme that supports our risk management and capital planning. It includes execution of stress tests mandated by our regulators. Our stress testing is supported by dedicated teams and infrastructure.

Our testing programme assesses our capital strength and enhances our resilience to external shocks. It also helps us understand and mitigate risks, and informs our decision about capital levels. As well as taking part in regulatory driven stress tests, we conduct our own internal stress tests.

The Group stress testing programme is overseen by the GRC, and results are reported, where appropriate, to the RMM and GRC.

Further information on stress testing and details of the Group's regulatory stress test results are set out on page 109 of the Annual Report and Accounts 2017.

Global Risk function

We have a dedicated Global Risk function, headed by the Group Chief Risk Officer, which is responsible for the Group's risk management framework. This includes establishing global policy, monitoring risk profiles, and forward-looking risk identification and management. Global Risk is made up of sub-functions covering all risks to our operations. It is independent from the global businesses, including sales and trading functions, helping to ensure balance in risk/return decisions. The Global Risk function operates in line with the three lines of defence model (see page 107 of the Annual Report and Accounts 2017).

Risk management and internal control systems

The Directors are responsible for maintaining and reviewing the effectiveness of risk management and internal control systems, and for determining the aggregate level and risk types they are willing to accept in achieving the Group's business objectives. On behalf of the Board, the GAC has responsibility for oversight of risk management and internal controls over financial reporting, and the GRC has responsibility for oversight of risk management and internal controls other than for financial reporting.

The Directors, through the GRC and the GAC, conduct an annual review of the effectiveness of our system of risk management and internal control. The GRC and the GAC received confirmation that executive management has taken or is taking the necessary actions to remedy any failings or weaknesses identified through the operation of our framework of controls.

HSBC's key risk management and internal control procedures are described on page 178 of the Annual Report and Accounts 2017, where the Directors' Report on the effectiveness of internal controls can also be found.

Risk measurement and reporting systems

Our risk measurement and reporting systems are designed to help ensure that risks are comprehensively captured with all the attributes necessary to support well-founded decisions, that those attributes are accurately assessed, and that information is delivered in a timely manner for those risks to be successfully managed and mitigated.

Risk measurement and reporting systems are also subject to a governance framework designed to ensure that their build and implementation are fit-for-purpose and functioning appropriately. Risk information systems development is a key responsibility of the Global Risk function, while the development and operation of risk rating and management systems and processes are ultimately subject to the oversight of the Board.

We continue to invest significant resources in IT systems and processes in order to maintain and improve our risk management capabilities. A number of key initiatives and projects to enhance consistent data aggregation, reporting and management, and work towards meeting our Basel Committee data obligations are in progress. Group policy promotes the deployment of preferred technology where practicable. Group standards govern the procurement and operation of systems used in our subsidiaries to process risk information within business lines and risk functions. Risk measurement and reporting structures deployed at Group level are applied throughout global businesses and major operating subsidiaries through a common operating model for integrated risk management and control. This model sets out the respective responsibilities of Group, global business, region and country level risk functions in respect of such matters as risk governance and oversight, compliance risks, approval authorities and lending guidelines, global and local scorecards, management information and reporting, and relations with third parties, including regulators, rating agencies and auditors.

Risk analytics and model governance

The Global Risk function manages a number of analytics disciplines supporting model development and management, including rating, scoring, economic capital and stress testing models for different risk types and business segments. It formulates technical responses to industry developments and regulatory policy in the field of risk analytics, develops HSBC's global risk models, and oversees local model development and use around the Group toward our implementation targets for IRB approaches.

Model governance is under the general oversight of the Global Model Oversight Committee ('MOC'). The Global MOC is supported by specific global functional MOCs for wholesale credit risk, market risk, Retail Banking and Wealth Management ('RBWM'), Global Private Banking ('GPB'), Finance, regulatory compliance, operational risk, fraud risk and financial intelligence, pensions risk and financial crime risk, and has functional and/or regional and entity-level counterparts with comparable terms of reference where required.

The Global MOC meets regularly and reports to RMM. It is chaired by the Global Risk function, and its membership is drawn from Risk, Finance and global businesses. Its primary responsibilities are to oversee the framework for the management of model risk, bring a strategic approach to model-related issues across the Group, and to oversee the governance of our risk rating models, their consistency and approval, within the regulatory framework. Through its oversight of the functional MOCs, it identifies emerging risks for all aspects of the risk rating system, ensuring that model risk is managed within our risk appetite statement, and formally advises RMM on any material model-related issues.

Models are also subject to an independent model review and validation process led by the Independent Model Review team within Global Risk. The Independent Model Review team provides robust challenge to the modelling approaches used across the Group, and ensures that the performance of those models is transparent and that their limitations are visible to key stakeholders.

The development and use of data and models to meet local requirements are the responsibility of global businesses or functions, as well as regional and/or local entities under the governance of their own management, subject to overall Group policy and oversight.

Linkage to the Annual Report and Accounts

2017

Structure of the regulatory group

Subsidiaries engaged in insurance activities are excluded from the regulatory consolidation by excluding assets, liabilities and post-acquisition reserves. The Group's 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, profit and loss, and risk-weighted assets 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).

Table 2: Reconciliation of balance sheets – financial accounting to regulatory scope of consolidation

	Accounting balance sheet Ref \$m	Deconsolidation of insurance/ other entities \$m	Consolidation of banking associates \$m	Regulatory balance sheet \$m
Assets				
Cash and balances at central banks	180,624	(38	)1,174	181,760
Items in the course of collection from other banks	6,628	—	2	6,630
Hong Kong Government certificates of indebtedness	34,186	—	—	34,186
Trading assets	287,995	(359	)1	287,637
Financial assets designated at fair value	29,464	(28,674	)—	790
Derivatives	219,818	(128	)57	219,747
Loans and advances to banks	90,393	(2,024	)1,421	89,790
Loans and advances to customers	962,964	(3,633	)12,835	972,166
– of which: impairment allowances on IRB portfolios h	(5,004	)—	—	(5,004
Reverse repurchase agreements – non-trading	201,553	—	1,854	203,407
Financial investments	389,076	(61,480	)3,325	330,921
Capital invested in insurance and other entities	—	2,430	—	2,430
Prepayments, accrued income and other assets	67,191	(4,202	)267	63,256
– of which: retirement benefit assets	i 8,752	—	—	8,752
Current tax assets	1,006	(5	)—	1,001
Interests in associates and joint ventures	22,744	(370	)4,064	)18,310
– of which: positive goodwill on acquisition	e 521	(14	)1	)506

Edgar Filing: HSBC HOLDINGS PLC - Form 6-K

Goodwill and intangible assets	e	23,453	(6,937	)—	16,516
Deferred tax assets	f	4,676	170	—	4,846
Total assets at 31 Dec 2017		2,521,771	(105,250	)16,872	2,433,393

HSBC Holdings plc Pillar 3 2017 6

Pillar 3 Disclosures at 31 December 2017

	Ref †	Accounting balance sheet \$m	Deconsolidation of insurance/ other entities \$m	Consolidation of banking associates \$m	Regulatory balance sheet \$m
Liabilities and equity					
Liabilities					
Hong Kong currency notes in circulation		34,186	—	—	34,186
Deposits by banks		69,922	(86	)695	70,531
Customer accounts		1,364,462	(64	)14,961	1,379,359
Repurchase agreements – non-trading		130,002	—	—	130,002
Items in course of transmission to other banks		6,850	—	—	6,850
Trading liabilities		184,361	867	—	185,228
Financial liabilities designated at fair value		94,429	(5,622	)—	88,807
– of which:					
included in tier 1	m	459	—	—	459
included in tier 2	n, q	23,831	—	—	23,831
Derivatives		216,821	69	51	216,941
Debt securities in issue		64,546	(2,974	)320	61,892
Accruals, deferred income and other liabilities		45,907	(211	)622	46,318
Current tax liabilities		928	(81	)—	847
Liabilities under insurance contracts		85,667	(85,667)—	—
Provisions		4,011	(17	)223	4,217
– of which: credit-related contingent liabilities and contractual commitments on IRB portfolios	h	220	—	—	220
Deferred tax liabilities		1,982	(1,085	)—	897
Subordinated liabilities		19,826	1	—	19,827
– of which:					
included in tier 1	k, m	1,838	—	—	1,838
included in tier 2	n, o, q	17,561	—	—	17,561
Total liabilities at 31 Dec 2017		2,323,900	(94,870	)16,872	2,245,902
Equity					
Called up share capital	a	10,160	—	—	10,160
Share premium account	a, k	10,177	—	—	10,177
Other equity instruments	j, k	22,250	—	—	22,250
Other reserves	c, g	7,664	1,236	—	8,900
Retained earnings	b, c	139,999	(10,824	)—	129,175
Total shareholders' equity		190,250	(9,588	)—	180,662
Non-controlling interests	d, l, m, p	7,621	(792	)—	6,829
– of which: non-cumulative preference shares issued by subsidiaries	m	—	—	—	—
included in tier 1 capital					
Total equity at 31 Dec 2017		197,871	(10,380	)—	187,491
Total liabilities and equity at 31 Dec 2017		2,521,771	(105,250	)16,872	2,433,393

† The references (a) – (q) identify balance sheet components that are used in the calculation of regulatory capital on page 14.

Table 2: Reconciliation of balance sheets – financial accounting to regulatory scope of consolidation (continued)

Accounting Deconsolidation Consolidation Regulatory

Edgar Filing: HSBC HOLDINGS PLC - Form 6-K

	balance sheet Ref \$m	of insurance/ other entities \$m	of banking associates \$m	balance sheet \$m
Assets				
Cash and balances at central banks	128,009	(27	)1,197	129,179
Items in the course of collection from other banks	5,003	—	26	5,029
Hong Kong Government certificates of indebtedness	31,228	—	—	31,228
Trading assets	235,125	(198	)1	234,928
Financial assets designated at fair value	24,756	(24,481	)—	275
Derivatives	290,872	(145	)77	290,804
Loans and advances to banks	88,126	(1,845	)922	87,203
Loans and advances to customers	861,504	(3,307	)12,897	871,094
– of which: impairment allowances on IRB portfolios h	(5,096	)—	—	(5,096)
Reverse repurchase agreements – non-trading	160,974	344	1,444	162,762
Financial investments	436,797	(54,904	)3,500	385,393
Capital invested in insurance and other entities	—	2,214	—	2,214
Prepayments, accrued income and other assets	63,909	(3,073	)306	61,142
– of which: retirement benefit assets	i 4,714	—	—	4,714
Current tax assets	1,145	(118	)—	1,027
Interests in associates and joint ventures	20,029	—	(4,195	)15,834
– of which: positive goodwill on acquisition	e 488	—	(475	)13
Goodwill and intangible assets	e 21,346	(6,651	)481	15,176
Deferred tax assets	f 6,163	176	5	6,344
Total assets at 31 Dec 2016	2,374,986	(92,015	)16,661	2,299,632

7HSBC Holdings plc Pillar 3 2017

Edgar Filing: HSBC HOLDINGS PLC - Form 6-K

	Accounting balance sheet	Deconsolidation of insurance/ other entities	Consolidation of banking associates	Regulatory balance sheet
Ref †	\$m	\$m	\$m	\$m
Liabilities and equity				
Liabilities				
Hong Kong currency notes in circulation	31,228	—	—	31,228
Deposits by banks	59,939	(50	)441	60,330
Customer accounts	1,272,386	(44	)14,997	1,287,339
Repurchase agreements – non-trading	88,958	—	—	88,958
Items in course of transmission to other banks	5,977	—	—	5,977
Trading liabilities	153,691	643	1	154,335
Financial liabilities designated at fair value	86,832	(6,012	)—	80,820
– of which:				
included in tier 1	m 411	—	—	411
included in tier 2	n, q 23,172	—	—	23,172
Derivatives	279,819	193	64	280,076
Debt securities in issue	65,915	(3,547	)662	63,030
Accruals, deferred income and other liabilities	44,291	1,810	495	46,596
Current tax liabilities	719	(26	)—	693
Liabilities under insurance contracts	75,273	(75,273)—	—
Provisions	4,773	(18	)—	4,755
– of which: credit-related contingent liabilities and contractual commitments on IRB portfolios	h 267	—	—	267
Deferred tax liabilities	1,623	(981	)1	643
Subordinated liabilities	20,984	1	—	20,985
– of which:				
included in tier 1	k, m 1,754	—	—	1,754
included in tier 2	n, o, q 18,652	—	—	18,652
Total liabilities at 31 Dec 2016	2,192,408	(83,304	)16,661	2,125,765
Equity				
Called up share capital	a 10,096	—	—	10,096
Share premium account	a, k 12,619	—	—	12,619
Other equity instruments	j, k 17,110	—	—	17,110
Other reserves	c, g (1,234	)1,735	—	501
Retained earnings	b, c 136,795	(9,442	)—	127,353
Total shareholders' equity	175,386	(7,707	)—	167,679
Non-controlling interests	d, l, m, p 7,192	(1,004	)—	6,188
– of which: non-cumulative preference shares issued by subsidiaries	m 260	—	—	260
included in tier 1 capital				
Total equity at 31 Dec 2016	182,578	(8,711	)—	173,867
Total liabilities and equity at 31 Dec 2016	2,374,986	(92,015	)16,661	2,299,632

† The references (a) – (q) identify balance sheet components that are used in the calculation of regulatory capital on page 14.

Pillar 3 Disclosures at 31 December 2017

Table 3: Principal entities with a different regulatory and accounting scope of consolidation

				At 31 Dec 2017		At 31 Dec 2016		
	Principal activities	Method of accounting consolidation	Method of regulatory consolidation	Footnote	Total assets \$m	Total equity \$m	Total assets \$m	Total equity \$m
Principal associates								
The Saudi British Bank	Banking services	Equity	Proportional consolidation		50,417	8,752	49,784	8,202
Principal insurance entities excluded from the regulatory consolidation								
HSBC Life (International) Ltd	Life insurance manufacturing	Fully consolidated	N/A		45,083	3,679	39,346	2,838
HSBC Assurances Vie (France)	Life insurance manufacturing	Fully consolidated	N/A		27,713	843	23,418	721
Hang Seng Insurance Company Ltd	Life insurance manufacturing	Fully consolidated	N/A		16,411	1,403	15,225	1,107
HSBC Insurance (Singapore) Pte Ltd	Life insurance manufacturing	Fully consolidated	N/A		4,425	706	3,589	360
HSBC Life (UK) Ltd	Life insurance manufacturing	Fully consolidated	N/A		2,115	196	1,678	158
HSBC Life Assurance (Malta) Ltd	Life insurance manufacturing	Fully consolidated	N/A		1,681	61	1,747	54
HSBC Life Insurance Company Ltd	Life insurance manufacturing	Fully consolidated	N/A		1,113	87	864	85
HSBC Seguros S.A. (Mexico)	Life insurance manufacturing	Fully consolidated	N/A		785	120	716	118
Principal SPEs excluded from the regulatory consolidation								
Regency Assets Ltd	Securitisation	Fully consolidated	N/A		7,466	—	7,380	—
Mazarin Funding Ltd	Securitisation	Fully consolidated	N/A		852	48	1,117	12
Barion Funding Ltd	Securitisation	Fully consolidated	N/A		424	78	653	56
Metrix Portfolio Distribution Plc	Securitisation	Fully consolidated	N/A		326	—	333	—

1 These SPEs issued no or de minimis share capital.

Table 3 also presents the total assets and total equity, on a stand-alone IFRS basis, of the entities which are included in the Group consolidation on different bases for accounting and regulatory purposes. The figures shown therefore include intra-Group balances. For associates, table 3 shows the total assets and total equity of the entity as a whole rather than HSBC's share in the entities' balance sheets.

For insurance entities, the present value of the in-force long-term insurance business asset of \$6.6bn and the related deferred tax liability are only recognised on consolidation in financial reporting, and are therefore not included in the asset or equity positions for the stand-alone entities presented in table 3. In addition, these figures exclude any deferred acquisition cost assets that may be recognised in the entities' stand-alone financial reporting.

Measurement of regulatory exposures

This section sets out the main reasons why the measurement of regulatory exposures is not directly comparable with the financial information presented in the Annual Report and Accounts 2017.

The Pillar 3 Disclosures at December 2017 are prepared in accordance with regulatory capital adequacy concepts and rules, while the Annual Report and Accounts 2017 are prepared in accordance with IFRSs. The purpose of the regulatory balance sheet is to provide a point-in-time ('PIT') value of all on-balance sheet assets.

The regulatory exposure value includes an estimation of risk, and is expressed as the amount expected to be outstanding if and when the counterparty defaults.

Moreover, regulatory exposure classes are based on different criteria from accounting asset types and are therefore not comparable on a line by line basis.

The following tables show in two steps how the accounting values in the regulatory balance sheet link to regulatory exposure at default ('EAD').

In a first step, table 4 shows the difference between the accounting and regulatory scope of consolidation, and a breakdown of the accounting balances into the risk types that form the basis for regulatory capital requirements. Table 5 then shows the main differences between the accounting balances and regulatory exposures by regulatory risk type.

9HSBC Holdings plc Pillar 3 2017

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

	Carrying value of items						
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation ¹	Subject to the credit risk framework	Subject to the counter-party credit risk framework ²	Subject to the securitisation framework ³	Subject to the market risk framework	Subject to deduction from capital or not subject to regulatory capital requirements
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
Assets							
Cash and balances at central banks	180.6	181.8	164.7	—	—	—	—
Items in the course of collection from other banks	6.6	6.6	6.6	—	—	—	—
Hong Kong Government certificates of indebtedness	34.2	34.2	34.2	—	—	—	—
Trading assets	288.0	287.6	2.0	17.1	—	270.4	15.2
Financial assets designated at fair value	29.5	0.8	0.8	—	—	—	—
Derivatives	219.8	219.7	—	218.5	1.2	219.7	—
Loans and advances to banks	90.4	89.8	98.6	6.6	0.6	—	1.1
Loans and advances to customers	963.0	972.2	943.7	10.4	13.1	—	5.0
Reverse repurchase agreements – non-trading	201.6	203.4	—	203.4	—	—	—
Financial investments	389.1	330.9	324.1	—	6.5	—	0.3
Capital invested in insurance and other entities	—	2.4	1.6	—	—	—	0.8
Current tax assets	1.0	1.0	1.0	—	—	—	—
	67.1	63.4	42.0	3.8	0.1	13.3	6.0

Edgar Filing: HSBC HOLDINGS PLC - Form 6-K

Prepayments, accrued income and other assets							
Interests in associates and joint ventures	22.7	18.3	12.9	—	—	—	5.4
Goodwill and intangible assets	23.5	16.5	—	—	—	—	16.4
Deferred tax assets	4.7	4.8	6.3	—	—	—	(1.5)
Total assets at 31 Dec 2017	2,521.8	2,433.4	1,638.5	459.8	21.5	503.4	48.7
Liabilities							
Hong Kong currency notes in circulation	34.2	34.2	—	—	—	—	34.2
Deposits by banks	69.9	70.5	—	—	—	—	70.5
Customer accounts	1,364.5	1,379.4	—	—	—	—	1,379.4
Repurchase agreements – non trading	130.0	130.0	—	130.0	—	—	—
Items in course of transmission to other banks	6.9	6.9	—	—	—	—	6.9
Trading liabilities	184.4	185.2	—	10.6	—	172.2	13.0
Financial liabilities designated at FV	94.4	88.8	—	—	—	—	88.8
Derivatives	216.8	216.9	—	216.9	—	216.9	—
Debt securities in issue	64.5	61.9	—	—	—	—	61.9
Current tax liabilities	0.9	0.8	—	—	—	—	0.8
Liabilities under insurance contract	85.7	—	—	—	—	—	—
Accruals, deferred income, and other liabilities	45.9	46.3	—	—	—	—	46.3
Provisions	4.0	4.2	0.3	—	—	—	3.9
	2.0	0.9	1.3	—	—	—	1.7

Edgar Filing: HSBC HOLDINGS PLC - Form 6-K

Deferred tax liabilities							
Subordinated liabilities	19.8	19.9	—	—	—	—	19.9
Total liabilities at 31 Dec 2017	12,323.9	2,245.9	1.6	357.5	—	389.1	1,727.3

HSBC Holdings plc Pillar 3 2017 10

Pillar 3 Disclosures at 31 December 2017

Table 4: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories (continued)

	Carrying value of items						
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation ¹	Subject to the credit risk framework	Subject to the counter-party credit risk framework ²	Subject to the securitisation framework ³	Subject to the market risk framework	Subject to deduction from capital or not subject to regulatory capital requirements
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
Assets							
Cash and balances at central banks	128.0	129.2	129.2	—	—	—	—
Items in the course of collection from other banks	5.0	5.0	5.0	—	—	—	—
Hong Kong Government certificates of indebtedness	31.2	31.2	31.2	—	—	—	—
Trading assets	235.1	234.9	8.4	11.3	—	208.7	17.6
Financial assets designated at fair value	24.8	0.3	0.3	—	—	—	—
Derivatives	290.9	290.8	—	289.9	0.9	290.8	—
Loans and advances to banks	88.1	87.2	76.3	2.0	1.2	—	7.7
Loans and advances to customers	861.5	871.1	847.4	8.9	10.8	—	4.0
Reverse repurchase agreements – non-trading	161.0	162.8	—	162.4	0.4	—	—
Financial investments	436.8	385.4	375.8	—	9.5	—	0.1
Capital invested in insurance and other entities	—	2.2	1.4	—	—	—	0.8
	1.1	1.0	1.0	—	—	—	—

Edgar Filing: HSBC HOLDINGS PLC - Form 6-K

Current tax assets							
Prepayments, accrued income and other assets	63.9	61.2	42.4	3.9	—	8.2	6.7
Interests in associates and joint ventures	20.0	15.8	10.3	—	—	—	5.5
Goodwill and intangible assets	21.3	15.2	—	—	—	—	15.2
Deferred tax assets	6.2	6.3	5.2	—	—	—	1.1
Total assets at 31 Dec 2016	2,374.9	2,299.6	1,533.9	478.4	22.8	507.7	58.7
Liabilities							
Hong Kong currency notes in circulation	31.2	31.2	—	—	—	—	31.2
Deposits by banks	59.9	60.3	—	—	—	—	60.3
Customer accounts	1,272.4	1,287.3	—	—	—	—	1,287.3
Repurchase agreements – non trading	89.0	89.0	—	89.0	—	—	—
Items in course of transmission to other banks	6.0	6.0	—	—	—	—	6.0
Trading liabilities	153.7	154.3	—	5.1	—	139.1	15.2
Financial liabilities designated at FV	86.8	80.8	—	—	—	—	80.8
Derivatives	279.8	280.1	—	280.1	—	280.1	—
Debt securities in issue	65.9	63.0	—	—	—	—	63.0
Current tax liabilities	0.7	0.7	—	—	—	—	0.7
Liabilities under insurance contract	75.3	0.0	—	—	—	—	—
Accruals, deferred income, and other liabilities	44.3	46.7	—	—	—	—	46.7

Edgar Filing: HSBC HOLDINGS PLC - Form 6-K

Provisions	4.8	4.8	0.3	—	—	—	4.5
Deferred tax liabilities	1.6	0.6	0.6	—	—	—	—
Subordinated liabilities	21.0	21.0	—	—	—	—	21.0
Total liabilities at 31 Dec 2016	2,192.4	2,125.8	0.9	374.2	—	419.2	1,616.7

1 The amounts shown in the column ‘Carrying values under scope of regulatory consolidation’ do not equal the sum of the amounts shown in the remaining columns of this table for line items ‘Derivatives’ and ‘Trading assets’, as some of the assets included in these items are subject to regulatory capital charges for both CCR and market risk.

2 The amounts shown in the column ‘Subject to the counterparty credit risk framework’ include both non-trading book and trading book.

3 The amounts shown in the column ‘Subject to the securitisation framework’ only include non-trading book. Trading book securitisation positions are included in the market risk column.

11 HSBC Holdings plc Pillar 3 2017

Table 5: Main sources of differences between regulatory exposure amounts and carrying values in financial statements

	Total \$bn	Items subject to:		
		Credit risk framework \$bn	CCR framework \$bn	Securitisation framework \$bn
Carrying value of assets within scope of regulatory consolidation ¹	2,384.7	1,638.5	459.8	21.5
Carrying value of liabilities within scope of regulatory consolidation ¹	520.7	1.6	357.5	—
Net carrying value within scope of regulatory consolidation	1,864.0	1,636.9	102.3	21.5
Off-balance sheet amounts and potential future exposure for counterparty risk	801.7	271.0	135.2	15.3
Differences in netting rules	10.4	9.3	1.1	
Differences due to financial collateral on standardised approach	(14.7)	(14.7)		
Differences due to impairments on IRB approach	4.7	4.7		
Differences due to EAD modelling and other differences	3.3	5.0		(1.7)
Differences due to credit risk mitigation	(71.1)		(71.1)	
Exposure values considered for regulatory purposes at 31 Dec 2017	2,598.3	1,912.2	167.5	35.1

¹ Excludes amounts subject to deduction from capital or not subject to regulatory capital requirements.

Explanations of differences between accounting and regulatory exposure amounts

Off-balance sheet amounts and potential future exposure for counterparty risk (CCR)

Off-balance sheet amounts subject to credit risk and securitisation regulatory frameworks include undrawn portions of committed facilities, various trade finance commitments and guarantees, by applying a credit conversion factor ('CCF') to these items and consideration of potential future exposures ('PFE') for counterparty risk.

Differences in netting rules

Under IFRS, netting is only permitted if legal right of set-off exists and the cash flows are intended to be settled on a net basis. Under the PRA's regulatory rules, however, netting is applied for capital calculations if there is legal certainty and the positions are managed on a net collateralised basis. As a consequence, we recognise greater netting under the PRA's rules, reflecting the close-out provisions that would take effect in the event of default of a counterparty rather than just those transactions that are actually settled net in the normal course of business.

Differences due to financial collateral

Exposure value under the standardised approach is calculated after deducting credit risk mitigation whereas accounting value is before such deductions.

Differences due to impairments

The carrying value of assets is net of credit risk adjustments. The regulatory exposure value under IRB approaches is before deducting credit risk adjustments.

Differences due to EAD modelling

The carrying value of assets is usually measured at amortised cost or fair value as at the balance sheet date. For certain IRB models, the exposure value used as EAD is the projected value one year hence.

Differences due to credit risk adjustments

In counterparty credit risk, differences arise between accounting carrying values and regulatory exposure as a result of the application of credit risk mitigation and the use of modelled exposures.

Explanation of differences between accounting fair value and regulatory prudent valuation

Fair value is defined as the best estimate of the price that would be received to sell an asset or be paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Some fair value adjustments already reflect valuation uncertainty to some degree. These are market data uncertainty, model uncertainty and concentration adjustments.

However, it is recognised that a variety of valuation techniques using stressed assumptions and combined with the range of plausible market parameters at a given point in time may still generate unexpected uncertainty beyond fair value.

A series of additional valuation adjustments ('AVAs') are therefore required to reach a specified degree of confidence (the 'Prudent Value') set by regulators that differs both in terms of scope and measurement from HSBC's own quantification for disclosure purposes.

AVAs should consider at the minimum: market price uncertainty, bid/offer (close out) uncertainty, model risk, concentration, administrative cost, unearned credit spreads ('CVA') and investing and funding costs ('FFVA').

AVAs are not limited to level 3 exposures, for which a 95% uncertainty range is already computed and disclosed, but must also be calculated for any exposure for which the exit price cannot be determined with a high degree of certainty.

Pillar 3 Disclosures at 31 December 2017

Capital and RWAs

Capital management

Approach and policy

Our approach to capital management is driven by our strategic and organisational requirements, taking into account the regulatory, economic and commercial environment. We aim to maintain a strong capital base to support the risks inherent in our business and invest in accordance with our strategy, meeting both consolidated and local regulatory capital requirements at all times.

Our capital management process culminates in the annual Group capital plan, which is approved by the Board. HSBC Holdings is the primary provider of equity capital to its subsidiaries and also provides them with non-equity capital where necessary. These investments are substantially funded by HSBC Holdings' issuance of equity and non-equity capital and by profit retention. As part of its capital management process, HSBC Holdings seeks to maintain a balance between the composition of its capital and its investment in subsidiaries. Subject to the above, there is no current or foreseen impediment to HSBC Holdings' ability to provide such investments.

Each subsidiary manages its own capital to support its planned business growth and meet its local regulatory requirements within the context of the Group capital plan. Capital generated by subsidiaries in excess of planned requirements is returned to HSBC Holdings, normally by way of dividends, in accordance with the Group's capital plan.

During 2017, consistent with the Group's capital plan, the Group's subsidiaries did not experience any significant restrictions on

paying dividends or repaying loans and advances, and none are envisaged with regard to planned dividends or payments. However, the ability of subsidiaries to pay dividends or advance monies to HSBC Holdings depends on, among other things, their respective local regulatory capital and banking requirements, exchange controls, statutory reserves, and financial and operating performance. None of our subsidiaries that are excluded from the regulatory consolidation have capital resources below their minimum regulatory requirement. HSBC Holdings has not entered into any Group Financial Support Agreements pursuant to the application of early intervention measures under the Bank Recovery and Resolution Directive.

All capital securities included in the capital base of HSBC have either been issued as fully compliant CRD IV securities (on an end point basis) or in accordance with the rules and guidance in the PRA's previous General Prudential Sourcebook, which are included in the capital base by virtue of application of the CRD IV grandfathering provisions. The main features of capital securities issued by the Group, categorised as tier 1 ('T1') capital and tier 2 ('T2') capital, are set out on the HSBC website, www.hsbc.com.

The values disclosed are the IFRS balance sheet carrying amounts, not the amounts that these securities contribute to regulatory capital. For example, the IFRS accounting and the regulatory treatments differ in their approaches to issuance costs, regulatory amortisation and regulatory eligibility limits prescribed in the grandfathering provisions under CRD IV.

A list of the features of our capital instruments in accordance with Annex III of Commission Implementing Regulation 1423/2013 is also published on our website with reference to our balance sheet on 31 December 2017. This is in addition to the full terms and conditions of our securities, also available on our website.

For further details of our approach to capital management, please see page 162 of the Annual Report and Accounts 2017.

Own funds

Table 6: Own funds disclosure

		At 31 Dec 2017	CRD IV prescribed residual amount	Final CRD IV text
Ref ^{ns*}	Ref [†]	\$m	\$m	\$m
1		18,932		18,932
2		124,679		124,679
3		9,433		9,433
5		4,905		4,905
5a		608		608
6		158,557		158,557
7		(1,146)		(1,146)
8		(16,872)		(16,872)
10		(1,181)		(1,181)
11		208		208
12		(2,820)		(2,820)
14		3,731		3,731
15		(6,740)		(6,740)
16		(40)		(40)
19		(7,553)		(7,553)
28		(32,413)		(32,413)
29		126,144		126,144
30		16,399		16,399
31		16,399		16,399
33		6,622	(6,622)	—
34		1,191	(1,709)	192
35		1,374	(1,374)	—
36		24,922	(8,331)	16,591
37		(60)		(60)
41b		(52)	52	—
		(52)	52	—

Edgar Filing: HSBC HOLDINGS PLC - Form 6-K

– direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities

43	Total regulatory adjustments to additional tier 1 capital		(112)	52		(60)
44	Additional tier 1 capital		24,810	(8,279)		16,531
45	Tier 1 capital (T1 = CET1 + AT1)		150,954	(8,279)		142,675
	Tier 2 capital: instruments and provisions					
46	Capital instruments and the related share premium accounts	n	16,880			16,880
	Amount of qualifying items and the related share premium accounts subject to					
47	phase out from T2	o	4,746	(4,746)		—
	Qualifying own funds instruments included in consolidated T2 capital					
48	(including minority interests and AT1 instruments not included in CET1 or AT1) issued by subsidiaries and held by third parties	p, q	10,306	(10,218)		88
49	– of which: instruments issued by subsidiaries subject to phase out	q	10,236	(10,236)		—
51	Tier 2 capital before regulatory adjustments		31,932	(14,964)		16,968
	Tier 2 capital: regulatory adjustments					
52	Direct and indirect holdings of own T2 instruments		(40)			(40)
	Direct and indirect holdings by the institution of the T2 instruments and					
55	subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions)		(463)	(52)		(515)
57	Total regulatory adjustments to tier 2 capital		(503)	(52)		(555)
58	Tier 2 capital		31,429	(15,016)		16,413
59	Total capital (TC = T1 + T2)		182,383	(23,295)		159,088

HSBC Holdings plc Pillar 3 2017 14

Pillar 3 Disclosures at 31 December 2017

Table 6: Own funds disclosure (continued)

Ref**	At 31 Dec 2017	CRD IV prescribed residual amount	Final CRD IV text
Ref†	\$m	\$m	\$m
60	871,337	—	871,337
Capital ratios and buffers			
61	14.5%		14.5%
62	17.3%		16.4%
63	20.9%		18.3%
64	2.72%		
65	1.25%		
66	0.22%		
67a	1.25%		
68	8.0%		
Amounts below the threshold for deduction (before risk weighting)			
72	4,473		
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)			
73	13,370		
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)			
75	5,004		
Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability)			
Applicable caps on the inclusion of provisions in tier 2			
77	2,193		
Cap on inclusion of credit risk adjustments in T2 under standardised approach			
79	3,150		
Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach			
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)			
82	8,652		
Current cap on AT1 instruments subject to phase out arrangements			
83	1,526		
Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)			
84	14,982		
Current cap on T2 instruments subject to phase out arrangements			
85	5,290		
Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)			

* The references identify the lines prescribed in the European Banking Authority ('EBA') template. Lines represented in this table are those lines which are applicable and where there is a value.

† The references (a) – (q) identify balance sheet components on page 6 which are used in the calculation of regulatory capital.

CET1 capital increased during the year by \$9.5bn, due to:

\$3.7bn of capital generated through profits, net of dividends and scrip;

\$6.3bn of favourable foreign currency translation differences;

regulatory netting of \$1.5bn;

a decrease of \$1.3bn in the deduction for excess expected loss; and

an increase of \$1.0bn in the value of minority interests allowed in CET1.

These increases were partly offset by:

the \$3.0bn share buy-back; and

a \$1.2bn decrease as a result of the change in US tax legislation; this change also reduces RWAs by \$3.1bn.

Leverage ratio

Our leverage ratio calculated in accordance with CRD IV was 5.6% at 31 December 2017, up from 5.4% at 31 December 2016. Growth in tier 1 capital was partly offset by a rise in exposure, primarily due to growth in customer advances, balances at central banks and trading assets.

In October 2017, the PRA increased the minimum requirement of the UK leverage ratio from 3% to 3.25%.

At 31 December 2017, our UK minimum leverage ratio requirement of 3.25% was supplemented by an additional leverage ratio buffer of 0.4% and a countercyclical leverage ratio buffer of 0.1%.

These additional buffers translate into capital values of \$10.3bn and \$1.8bn respectively. We comfortably exceeded these leverage requirements.

The risk of excessive leverage is managed as part of HSBC's 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 HSBC is willing to accept in its business activities in order to achieve its strategic business objectives. The RAS is 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 RMM and the GRC. Our approach to risk appetite is described on page 95 of the Annual Report and Accounts 2017.

15HSBC Holdings plc Pillar 3 2017

Table 7: Summary reconciliation of accounting assets and leverage ratio exposures

Ref*		At 31 Dec	
		2017	2016
		\$bn	\$bn
1	Total assets as per published financial statements	2,521.8	2,375.0
	Adjustments for:		
2	– entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(88.4)	(75.4)
4	– derivative financial instruments	(91.0)	(158.6)
5	– securities financing transactions ('SFT')	12.2	10.1
6	– off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	227.4	223.1
7	– other	(24.9)	(19.8)
8	Total leverage ratio exposure	2,557.1	2,354.4

* The references identify the lines prescribed in the EBA template. Lines represented in this table are those lines which are applicable and where there is a value.

Table 8: Leverage ratio common disclosure

Ref*		At 31 Dec	
		2017	2016
		\$bn	\$bn
	On-balance sheet exposures (excluding derivatives and SFT)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	1,998.7	1,844.4
2	(Asset amounts deducted in determining tier 1 capital)	(35.3)	(34.4)
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)	1,963.4	1,810.0
	Derivative exposures		
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	29.0	43.7
5	Add-on amounts for potential future exposure ('PFE') associated with all derivatives transactions (mark-to-market method)	125.5	110.2
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to IFRSs	5.2	5.9
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(23.6)	(30.6)
8	(Exempted central counterparty ('CCP') leg of client-cleared trade exposures)	(14.0)	(4.1)
9	Adjusted effective notional amount of written credit derivatives	188.2	216.4
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(181.6)	(209.3)
11	Total derivative exposures	128.7	132.2
	Securities financing transaction exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	331.2	266.6
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(105.8)	(87.9)
14	Counterparty credit risk exposure for SFT assets	12.2	10.4
16	Total securities financing transaction exposures	237.6	189.1
	Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	801.7	757.7
18	(Adjustments for conversion to credit equivalent amounts)	(574.3)	(534.6)
19	Total off-balance sheet exposures	227.4	223.1

Capital and total exposures			
20	Tier 1 capital	142.7	127.3
21	Total leverage ratio exposure	2,557.1	2,354.4
22	Leverage ratio (%)	5.6	5.4
EU-23	Choice of transitional arrangements for the definition of the capital measure	Fully phased-in	Fully phased-in

* The references identify the lines prescribed in the EBA template. Lines represented in this table are those lines which are applicable and where there is a value.

Table 9: Leverage ratio – Split of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

Ref*		At 31 Dec	
		2017	2016
		\$bn	\$bn
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures)	1,998.7	1,844.4
EU-2	– trading book exposures	268.6	267.5
EU-3	– banking book exposures	1,730.1	1,576.9
	'banking book exposures' comprises:		
EU-4	covered bonds	1.3	1.1
EU-5	exposures treated as sovereigns	504.8	504.4
EU-6	exposures to regional governments, multilateral development banks ('MDB'), international organisations and public sector entities not treated as sovereigns	9.8	6.0
EU-7	institutions	77.0	67.6
EU-8	secured by mortgages of immovable properties	283.4	254.6
EU-9	retail exposures	89.3	84.6
EU-10	corporate	586.0	532.4
EU-11	exposures in default	9.7	12.4
EU-12	other exposures (e.g. equity, securitisations and other non-credit obligation assets)	168.8	113.8

* The references identify the lines prescribed in the EBA template. Lines represented in this table are those lines which are applicable and where there is a value.

Pillar 3 Disclosures at 31 December 2017

Capital buffers

Our geographical breakdown and institution specific countercyclical capital buffer ('CCyB') disclosure and our G-SIB Indicator 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	Approach adopted by HSBC
Credit risk	<p>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 EAD and loss given in default ('LGD') to standard supervisory parameters. Finally, the advanced IRB ('AIRB') approach allows banks to use their own internal assessment in determining PD and in quantifying EAD and LGD.</p>	<p>For consolidated Group reporting, we have adopted the advanced IRB approach for the majority of our business. Some portfolios remain on the standardised or foundation IRB approaches:</p> <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	<p>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 three approaches to credit risk: standardised, foundation IRB or advanced IRB.</p>	<p>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.</p>
Equity	<p>For the non-trading book, equity exposures can be assessed under standardised or IRB approaches.</p>	<p>For Group reporting purposes, all non-trading book equity exposures are treated under the standardised approach.</p>
Securitisation	<p>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.</p>	<p>For the majority of non-trading book securitisation positions we use the IRB approach and, within this, principally the RBM with lesser amounts on the IAA and</p>

		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 securitisation positions in the trading book.
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 requirements. 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

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.	requirements set out in Articles 104 and 105 of the Capital Requirements Regulation. 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 10: Overview of RWAs

	At		
	31 Dec 2017	30 Sep 2017	31 Dec 2017
	RWAs	RWAs	Capital ¹ required
	\$bn	\$bn	\$bn
1 Credit risk (excluding counterparty credit risk)	623.9	615.9	50.0
2 – standardised approach	126.9	129.8	10.2
3 – foundation IRB approach	28.4	27.7	2.3
4 – advanced IRB approach	468.6	458.4	37.5
6 Counterparty credit risk	54.1	59.8	4.4
7 – mark-to-market	34.2	37.2	2.7
10– internal model method	9.7	10.0	0.8
11– risk exposure amount for contributions to the default fund of a central counterparty	0.7	0.7	0.1
12– credit valuation adjustment	9.5	11.9	0.8
13 Settlement risk	0.4	0.7	—
14 Securitisation exposures in the non-trading book	15.3	22.8	1.2
15– IRB ratings based method	12.0	20.0	1.0
16– IRB supervisory formula method	0.2	0.2	—
17– IRB internal assessment approach	1.5	1.5	0.1
18– standardised approach	1.6	1.1	0.1
19 Market risk	38.9	42.6	3.1
20– standardised approach	4.4	4.4	0.3
21– internal models approach	34.5	38.2	2.8
23 Operational risk	92.7	98.0	7.4
25– standardised approach	92.7	98.0	7.4
27 Amounts below the thresholds for deduction (subject to 250% risk weight)	46.0	48.8	3.7
29 Total	871.3	888.6	69.8

¹ ‘Capital requirements’ here and in all tables where the term is used, represents the Pillar 1 capital charge at 8% of RWAs.

Credit risk (including amounts below the thresholds for deduction)

RWAs increased by \$5.2bn in the fourth quarter, including an increase of \$2.8bn due to foreign currency translation differences. The remaining increase of \$2.4bn (excluding foreign currency translation differences) was due to:

- an increase in asset size of \$8.2bn, mainly as a result of corporate and mortgage book growth in Asia;
- increases from model updates of \$5.6bn, mainly in the UK corporate models; less
- savings from RWA initiatives of \$11.9bn, principally from process improvements of \$4.7bn, refined calculations of \$3.3bn, US Consumer and Mortgage Lending (‘CML’) run-off of \$2.2bn and exposure reductions of \$1.7bn.

Counterparty credit risk

RWAs decreased by \$5.7bn, primarily as a result of \$4.5bn savings from RWA initiatives through the increased use of economic hedging.

Securitisation

RWAs decreased by \$7.5bn, mainly as a result of RWA initiatives in the legacy book.

Market risk

RWAs decreased by \$3.7bn, primarily as a result of savings achieved from increased diversification in the IMA book.

Operational risk

RWAs decreased by \$5.3bn at year-end, mainly as a result of \$3.1bn savings realised from RWA initiatives.

Table 11: RWA flow statements of credit risk exposures under the IRB approach^{1, 2}

	RWAs	Capital required
	\$bn	\$bn
1 At 1 Oct 2017	486.1	38.9
2 Asset size	5.6	0.4
3 Asset quality	0.1	—
4 Model updates	6.5	0.6
5 Methodology and policy	(4.2	)(0.3
6 Acquisitions and disposals	—	—
7 Foreign exchange movements	2.9	0.2
8 Other	—	—
9 At 31 Dec 2017	497.0	39.8

1 This table includes RWA initiatives of \$6.8bn allocated across the RWA flow layers to which they relate.

2 Securitisation positions are not included in this table.

RWAs under the IRB approach increased by \$10.9bn in the fourth quarter of the year, including an increase of \$2.9bn due to foreign currency translation differences.

The remaining increase of \$8.0bn (excluding foreign currency translation differences) was principally due to:

• an increase in asset size of \$5.6bn, principally as a result of corporate and mortgage book growth in Asia;

• an increase in model updates of \$6.5bn, mainly due to corporate model updates in the UK; less

• a decrease in methodology and policy of \$4.2bn, mainly as a result of RWA initiatives.

Pillar 3 Disclosures at 31 December 2017

Table 12: RWA flow statements of CCR exposures under the IMM¹

	RWAs	Capital required
	\$bn	\$bn
1 At 1 Oct 2017	13.3	1.1
2 Asset size	(0.1))—
3 Asset quality	(0.1))—
5 Methodology and policy	(0.6))—
9 At 31 Dec 2017	12.5	1.1

¹ This table includes RWA initiatives of \$0.7bn allocated across the RWA flow layers to which they relate. RWAs decreased by \$0.8bn mainly as a result of a change in internal policy.

Table 13: RWA flow statements of market risk exposures under the IMA¹

	VaR	Stressed VaR	IRC	Other	Total RWAs	Total capital required
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
1 At 1 Oct 2017	8.0	15.2	12.8	2.2	38.2	3.1
2 Movement in risk levels	1.5	1.4	(1.9)	(0.3)	0.7	0.1
3 Model updates/changes	—	(0.1)	)—	—	(0.1))—
4 Methodology and policy	(1.2)	(2.2)	(0.9)	)—	(4.3)	(0.4)
8 At 31 Dec 2017	8.3	14.3	10.0	1.9	34.5	2.8

¹ This table includes RWA initiatives of \$1.9bn allocated across the RWA flow layers to which they relate. RWAs decreased by \$3.7bn due to:

- savings of \$4.3bn achieved from increased diversification; less
- increased risk levels of \$0.7bn, mainly as a result of rises in volatility.

Pillar 2 and ICAAP

Pillar 2

We conduct an Internal Capital Adequacy Assessment Process ('ICAAP') to determine a forward-looking assessment of our capital requirements given our business strategy, risk profile, risk appetite and capital plan. This process incorporates the Group's risk management processes and governance framework. Our base capital plan undergoes stress testing. This, coupled with our economic capital framework and other risk management practices, is used to assess our internal capital adequacy requirements and inform our view of our internal capital planning buffer. The ICAAP is formally approved by the Board, which has the ultimate responsibility for the effective management of risk and approval of HSBC's risk appetite.

The ICAAP is reviewed by the PRA and by a college of EEA supervisors, as part of the Joint Risk Assessment and Decision process, during the supervisory review and evaluation process. This process occurs periodically to enable the regulator to define the Individual Capital Guidance ('ICG') or minimum capital requirements for HSBC, and the PRA to define the PRA buffer, where required. Under the revised Pillar 2 PRA regime, which came into effect from 1 January 2017, the capital planning buffer has been replaced with a PRA buffer. This is not intended to duplicate the CRD IV buffers and, where necessary, will be set according to vulnerability in a stress scenario, as assessed through the annual PRA stress testing exercise.

The processes of internal capital adequacy assessment and supervisory review lead to a final determination by the PRA of the ICG and any PRA buffer that may be required.

Within Pillar 2, Pillar 2A considers, in addition to the minimum capital requirements for Pillar 1 risks described above, any supplementary requirements for those risks and any requirements for risk categories not captured by Pillar 1. The risk categories to be covered under Pillar 2A depend on the specific circumstances of a firm and the nature and scale of its business.

Pillar 2B consists of guidance from the PRA on the capital buffer a firm would require in order to remain above its ICG in adverse circumstances that may be largely outside the firm's normal and direct control; for example, during a period of severe but plausible

downturn stress, when asset values and the firm's capital surplus may become strained. This is quantified via any PRA buffer requirement the PRA may consider necessary. The assessment of this is informed by stress tests and a rounded judgement of a firm's business model, also taking into account the PRA's view of a firm's options and capacity to protect its capital position under stress; for instance, through capital generation. Where the PRA assesses that a firm's risk management and governance are significantly weak, it may also increase the PRA buffer to cover the risks posed by those weaknesses until they are addressed. The PRA buffer is intended to be drawn upon in times of stress, and its use is not of itself a breach of capital requirements that would trigger automatic restrictions on distributions. In specific circumstances, the PRA should agree a plan with a firm for its restoration over an agreed timescale.

Internal capital adequacy assessment

The Board manages the Group ICAAP, and together with RMM and GRC, it examines the Group's risk profile from both regulatory and economic capital viewpoints, aiming to ensure that capital resources:

- remain sufficient to support our risk profile and outstanding commitments;
- meet current regulatory requirements, and that HSBC is well placed to meet those expected in the future;
- allow the bank to remain adequately capitalised in the event of a severe economic downturn stress scenario; and
- remain consistent with our strategic and operational goals, and our shareholder and investor expectations.

The minimum regulatory capital that we are required to hold is determined by the rules and guidance established by the PRA for the consolidated Group and by local regulators for individual Group companies. These capital requirements are a primary influence shaping the business planning process, in which RWA targets are established for our global businesses in accordance with the Group's strategic direction and risk appetite.

Economic capital is the internally calculated capital requirement that we deem necessary to support the risks to which we are exposed. The economic capital assessment is a more risk-sensitive measure than the regulatory minimum, and takes account of the substantial diversification of risk accruing from our operations. Both the regulatory and the economic capital assessments rely upon the use of models that are integrated into our management of risk. Our economic capital models are calibrated to quantify the level of capital that is sufficient to absorb potential losses over a one-year time horizon to a 99.95% level of confidence for our

banking and trading activities, to a 99.5% level of confidence for our insurance activities and pension risks, and to a 99.9% level of confidence for our operating risks.

The ICAAP and its constituent economic capital calculations are examined by the PRA as part of its supervisory review and evaluation process. This examination informs the regulator's view of our Pillar 2 capital requirements. Preserving our strong capital position remains a priority, and the level of integration of our risk and capital management helps to optimise our response to business demand for regulatory and economic capital. Risks that are explicitly assessed through economic capital are credit risk, including CCR, market and operational risk, interest rate risk in the banking book, insurance risk, pension risk, residual risk and structural foreign exchange risk.

Credit risk

Overview and responsibilities

Credit risk represents our largest regulatory capital requirement.

The principal objectives of our credit risk management function are:

- to maintain across HSBC a strong culture of responsible lending and a robust credit risk policy and control framework;
- to both partner and challenge our businesses in defining, implementing and continually re-evaluating our credit risk appetite under actual and stress scenario conditions; and
- to ensure there is independent, expert scrutiny of credit risks, their costs and their mitigation.

The credit risk functions within Wholesale Credit and Market Risk and RBWM are the constituent parts of Global Risk that support the Group Chief Risk Officer in overseeing credit risks. Their major duties comprise undertaking independent reviews of large and high-risk credit proposals, overseeing large exposure policy and reporting on our wholesale and retail credit risk management disciplines, owning our credit policy and credit systems programmes, overseeing portfolio management and reporting on risk matters to senior executive management and to regulators. These credit risk functions work closely with other parts of Global Risk; for example, with Operational Risk on the internal control framework and with Risk Strategy on the risk appetite process. In addition, they work jointly with Risk Strategy and Global Finance on stress testing.

The credit responsibilities of Global Risk are described on page 107 of the Annual Report and Accounts 2017.

Group-wide, the credit risk functions comprise a network of credit risk management offices reporting within regional risk functions. They fulfil an essential role as independent risk control units distinct from business line management in providing objective scrutiny of risk rating assessments, credit proposals for approval and other risk matters.

Credit risk operates through a hierarchy of personal credit limit approval authorities. Operating company chief executives, acting under authorities delegated by their boards and Group standards, are accountable for credit risk and other risks in their business. In turn, chief executives delegate authority to operating company chief risk officers and management teams on an individual basis. Each operating company is responsible for the quality and performance of its credit portfolios in accordance with Group standards. Above these thresholds of delegated personal credit limited approval authorities, approval must be sought from the regional and, as appropriate, global credit risk function.

Credit risk management

Our exposure to credit risk arises from a wide range of customer and product types, and the risk rating systems in place to measure and monitor these risks are correspondingly diverse. Senior management receives a variety of reports on our credit risk exposures including loan impairments, total exposures and RWAs,

as well as updates on specific portfolios that are considered to have heightened credit risk.

Credit risk exposures are generally measured and managed in portfolios of either customer types or product categories. Risk rating systems are designed to assess the default propensity of, and loss severity associated with, distinct customers who are typically managed as individual relationships or, in the case of retail business exposures, on a product portfolio basis.

Risk rating systems for retail exposures are generally quantitative in nature, applying techniques such as behavioural analysis across product portfolios comprising large numbers of homogeneous transactions. Rating systems for

individually managed relationships typically use customer financial statements and market data analysis, but also qualitative elements and a final subjective overlay to better reflect any idiosyncratic elements of the customer's risk profile. See 'Application of the IRB Approach' on page 34.

A fundamental principle of our policy and approach is that analytical risk rating systems and scorecards are all valuable tools at the disposal of management.

The credit process provides for at least an annual review of facility limits granted. Review may be more frequent, as required by circumstances such as the emergence of adverse risk factors.

We constantly seek to improve the quality of our risk management. Group IT systems that process credit risk data continue to be enhanced in order to deliver both comprehensive management information in support of business strategy and solutions to evolving regulatory reporting requirements.

Group standards govern the process through which risk rating systems are initially developed, judged fit for purpose, approved and implemented. They also govern the conditions under which analytical risk model outcomes can be overridden by decision-takers and the process of model performance monitoring and reporting. The emphasis is on an effective dialogue between business line and risk management, suitable independence of decision-takers, and a good understanding and robust challenge on the part of senior management.

Like other facets of risk management, analytical risk rating systems are not static; they are subject to review and modification in light of the changing environment, the greater availability and quality of data, and any deficiencies identified through internal and external regulatory review. Structured processes and metrics are in place to capture relevant data and feed this into continuous model improvement. See also the comments on 'Model performance' on page 46.

Credit risk models governance

All new or materially changed IRB capital models require the PRA's approval, as set out in more detail on page 34, and throughout HSBC such models fall directly under the remit of the global functional MOCs, operating in line with HSBC's model risk policy, and under the oversight of the Global MOC. Additionally, the global functional MOCs are responsible for the approval of stress testing models used for regulatory stress testing exercises such as those carried out by the EBA and the BoE.

Both the Wholesale and RBWM MOCs require all credit risk models for which they are responsible to be approved by delegated senior managers with notification to the committees that retain the responsibility for oversight.

Global Risk sets internal standards for the development, validation, independent review, approval, implementation and performance monitoring of credit risk rating models. Independent reviews of our models are performed by our Independent Model Review (IMR) function which is separate from our Risk Analytics functions that are responsible for the development of models.

Compliance with Group standards is subject to examination by Risk oversight and review from within the Risk function itself, and by Internal Audit.

Pillar 3 Disclosures at 31 December 2017

IFRS 9

IFRS 9 introduces new accounting concepts and measures such as significant credit deterioration and lifetime loss measurement. Existing stress testing and regulatory models, skills and expertise were harnessed and leveraged in order to meet the IFRS 9 requirements. Data from various client, finance and risk systems are integrated and validated. As a result of IFRS 9 adoption, management has additional insight and measures not previously

available which, over time, may influence our risk appetite and risk management processes.

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 mainly concentrated in the higher quality bands.

Table 14: Credit quality of exposures by exposure classes and instruments

	Gross carrying values of		Specific credit risk adjustments	Write-offs in the year	Credit risk adjustment charges of the period	Net carrying values ¹
	Defaulted exposures	Non-defaulted exposures				
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
1 Central governments and central banks	—	308.1	—	—	—	308.1
2 Institutions	—	94.5	—	—	—	94.5
3 Corporates	8.1	987.5	4.2	1.0	0.7	991.4
– of which:						
4 specialised lending	1.2	47.5	0.3	—	—	48.4
6 Retail	3.6	465.0	1.0	0.7	0.3	467.6
7 – secured by real estate property	2.5	274.3	0.3	—	—	276.5
– of which:						
8 SMEs	—	1.5	—	—	—	1.5
9 Non-SMEs	2.5	272.8	0.3	—	—	275.0
10 – qualifying revolving retail	0.1	125.4	0.2	0.3	0.2	125.3
11 – other retail	1.0	65.3	0.5	0.4	0.1	65.8
– of which:						
12 SMEs	0.6	10.6	0.3	—	—	10.9
13 Non-SMEs	0.4	54.7	0.2	0.4	0.1	54.9
15 Total IRB approach	11.7	1,855.1	5.2	1.7	1.0	1,861.6
16 Central governments and central banks	—	198.1	—	—	—	198.1
Regional						
17 governments or local authorities	—	3.8	—	—	—	3.8
18 Public sector entities	—	0.4	—	—	—	0.4
19 Multilateral development banks	—	0.3	—	—	—	0.3
20 International organisations	—	2.2	—	—	—	2.2
21 Institutions	—	3.5	—	—	—	3.5
22 Corporates	—	172.8	0.5	—	0.1	172.3
23 – of which: SMEs	—	1.1	—	—	—	1.1

Edgar Filing: HSBC HOLDINGS PLC - Form 6-K

24	Retail	—	71.0	0.4	—	0.2	70.6
25	– of which: SMEs	—	1.7	—	—	—	1.7
	Secured by mortgages						
26	on immovable	—	29.0	—	—	—	29.0
	property						
27	– of which: SMEs	—	0.1	—	—	—	0.1
28	Exposures in default ²	5.4	—	2.0	1.5	0.7	3.4
29	Items associated with	—	3.9	—	—	—	3.9
	particularly high risk						
32	Collective investment	—	0.6	—	—	—	0.6
	undertakings ('CIU')						
33	Equity exposures	—	16.0	—			