

The Hongkong and Shanghai Banking Corporation Limited

Banking Disclosure Statement at 31 December 2017

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Introduction

Purpose

The information contained in this document is for The Hongkong and Shanghai Banking Corporation Limited ('the Bank') and its subsidiaries (together 'the group'). It should be read in conjunction with the group's *Annual Report and Accounts 2017*. The group's *Annual Report and Accounts 2017*, the Banking Disclosure Statement and the Regulatory Capital Instruments document, taken together, comply with the Banking (Disclosure) Rules ('BDR') made under section 60A of the Banking Ordinance. They also serve to comply with the disclosures on remuneration as required by the Hong Kong Monetary Authority ('HKMA') Supervisory Policy Manual CG-5 'Guideline on a Sound Remuneration System'.

References to 'HSBC', 'the Group' or 'the HSBC Group' within this document mean HSBC Holdings plc 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'. The abbreviations 'HK\$m' and 'HK\$bn' represent millions and billions (thousands of millions) of Hong Kong dollars respectively.

These banking disclosures are governed by the group's disclosure policy, which has been approved by the Board of Directors. The disclosure policy sets out the governance, control and assurance requirements for publication of the document. While the disclosure statement is not required to be externally audited, the document has been subject to independent review in accordance with the group's policies on disclosure and its financial reporting and governance processes.

Basis of preparation

Except where indicated otherwise, the financial information contained in this Banking Disclosure Statement has been prepared on a consolidated basis. The basis of consolidation for regulatory purposes is different from that for accounting purposes. Information regarding subsidiaries that are not included in the consolidation for regulatory purposes is set out in the 'Basis of consolidation' section in this document.

The information in this document is not audited and does not constitute statutory accounts.

Certain financial information in this document is extracted from the statutory accounts for the year ended 31 December 2017 which will be delivered to the Registrar of Companies and the HKMA. The Auditors expressed an unqualified opinion on those statutory accounts in their report dated 20 February 2018. The Auditor's Report did not include a reference to any matters to which the auditor drew any attention by way of emphasis without qualifying their report; and did not contain a statement under sections 406(2), 407(2) or (3) of the Hong Kong Companies Ordinance (Cap.622). The group's *Annual Report and Accounts 2017*, which include the statutory accounts, can be obtained on request from Communications (Asia), The Hongkong and Shanghai Banking Corporation Limited, 1 Queen's Road Central, Hong Kong, and can be viewed on our website: www.hsbc.com.hk.

The Banking Disclosure Statement

The HKMA has implemented the Basel Committee on Banking Supervision ('BCBS') standards on revised Pillar 3 disclosures issued in January 2015. These disclosures are supplemented by specific additional requirements of the HKMA set out in the BDR.

According to the BDR, disclosure of comparative information is not required unless otherwise specified in the standard disclosure templates.

The Banking Disclosure Statement includes the majority of the information required under the BDR. The remainder of the disclosure requirements are covered in the Regulatory Capital Instruments document and the group's *Annual Report and Accounts 2017* which can be found in the Regulatory Disclosure section of our website, www.hsbc.com.hk.

BDR requirements covered in the Regulatory Capital Instruments document:

- The main features of the capital instruments
- The full terms and conditions of the capital instruments

BDR requirements covered in the group's Annual Report and Accounts 2017:

| | References: |
|---|-----------------------|
| • Section 16J - The group's definition of 'Impaired' and 'Renegotiated' and the methods adopted for determining impairments | Page 21 |
| • Section 25(4) - Impaired loans and advances to customers by geographical segment | Note 11 |
| • Section 29 - Net structural foreign currency exposures | Page 28 |
| • Section 46 - The general disclosure of the major business activities and product lines | Pages 9 & 60, Note 34 |
| • Section 51, 51A(6), 51A(7) - Liquidity information | Pages 24–25 |
| • Section 52 - Corporate governance | Pages 3–8 |

Overview of 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 12 of the group's *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 16 of the group's *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.

Risk governance

The Board has ultimate responsibility for the effective management of risk and approves HSBC's risk appetite. It is advised by the Risk Committee on risk appetite and its alignment with strategy, risk governance and internal controls, and high-level risk related matters.

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's Chief Risk Officer, supported by the Risk Management Meeting ('RMM').

Day-to-day responsibility for risk management is delegated to senior managers with individual accountability for decision making. 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.

Our executive risk governance structures ensure appropriate oversight and accountability for risk, which facilitates the reporting and escalation to the RMM.

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. Within 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 group's Risk Committee.

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 13 of the group's *Annual Report and Accounts 2017*. Details on the group's overarching risk appetite are set out on page 13 of the group's *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, as well as internal stress tests. Our stress testing is supported by dedicated teams and infrastructure.

Our testing programme assesses our capital strength through a rigorous examination of our resilience to external shocks. It also helps us understand and mitigate risks, and informs our decision about capital levels.

Global Risk and the group's Risk functions

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. Similarly, the group's Risk function headed by the group's Chief Risk Officer, is independent from the global businesses and responsible for the group's risk management framework.

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 group's Audit Committee has responsibility for oversight of risk management and internal controls over financial reporting, and the group's Risk Committee has responsibility for oversight of risk management and internal controls other than for financial reporting.

The Directors, through the group's Risk Committee and the group's Audit Committee, conduct an annual review of the effectiveness of our system of risk management and internal control. The group's Risk Committee and the group's Audit Committee 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.

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 and the group's Risk functions manage 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. They formulate technical responses to industry developments and regulatory policy in the field of risk analytics, develop HSBC's global risk models, and oversee local model development and use around the Group toward our implementation targets for Internal ratings-based ('IRB') approaches.

Model governance is under the general oversight of the Global Model Oversight Committee ('MOC'). 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.

Linkage to the Annual Report and Accounts 2017

Basis of consolidation

The basis of consolidation for financial accounting purposes is in accordance with Hong Kong Financial Reporting Standards ('HKFRS'), as described in Note 1 on the financial statements in the group's *Annual Report and Accounts 2017*.

The basis of consolidation for regulatory purposes is different from that for accounting purposes. Subsidiaries included in the consolidation for regulatory purposes are specified in a notice from the HKMA in accordance with section 3C(1) of the Banking (Capital) Rules ('BCR'). Subsidiaries not included in consolidation for regulatory purposes are securities and insurance companies that are authorised and supervised by regulators, and are subject to supervisory arrangements regarding the maintenance of adequate capital to support business activities comparable to those prescribed for authorised institutions under the BCR and the Banking Ordinance. The capital invested by the group in these subsidiaries is deducted from the capital base, subject to certain thresholds, as determined in accordance with Part 3 of the BCR.

For insurance entities, the present value of in-force long-term insurance business asset of HK\$44,621m 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 the below table.

There are no subsidiaries that are included within both the accounting scope of consolidation and the regulatory scope of consolidation, but where the method of consolidation differs at 31 December 2017.

There are no subsidiaries that are included within the regulatory scope of consolidation, but not included within the accounting scope of consolidation at 31 December 2017.

The group operates subsidiaries in a number of countries and territories where capital is governed by local rules, and there may be restrictions on the transfer of regulatory capital and funds between members of the banking group.

The Bank and its banking subsidiaries maintain regulatory reserves to satisfy the provisions of the Banking Ordinance and local regulatory requirements for prudential supervision purposes. At 31 December 2017, the effect of this requirement is to reduce the amount of reserves which can be distributed to shareholders by HK\$27,703m.

There are no relevant capital shortfalls in any of the group's subsidiaries at 31 December 2017 which are not included in its consolidation group for regulatory purposes.

Table 1: List of subsidiaries outside the regulatory scope of consolidation

| | Principal activities | At 31 Dec 2017 | |
|---|----------------------|-----------------------|-----------------------|
| | | Total assets HK\$m | Total equity HK\$m |
| HSBC Broking Futures (Hong Kong) Ltd | Futures broking | 3,406 | 597 |
| HSBC Broking Services (Asia) Ltd and its subsidiaries | Broking services | 18,300 | 3,028 |
| HSBC Corporate Advisory (Malaysia) Sdn Bhd | Financial services | 15 | 13 |
| HSBC Global Asset Management Holdings (Bahamas) Ltd | Asset management | 127 | 126 |
| HSBC Global Asset Management (Hong Kong) Ltd | Asset management | 852 | 476 |
| HSBC Investment Funds (Hong Kong) Ltd | Asset management | 675 | 236 |
| HSBC Global Asset Management (Japan) K.K. | Asset management | 198 | 107 |
| HSBC Global Asset Management (Singapore) Ltd | Asset management | 84 | 57 |
| HSBC Insurance (Asia-Pacific) Holdings Ltd and its subsidiaries | Insurance | 402,421 | 31,592 |
| HSBC InvestDirect (India) Ltd and its subsidiaries | Financial services | 721 | 587 |
| HSBC Securities (Asia) Ltd and its subsidiaries | Broking services | 425 | 423 |
| HSBC Securities (Japan) Ltd | Broking services | 150,505 | 1,613 |
| HSBC Securities (Singapore) Pte Ltd | Broking services | 172 | 66 |
| HSBC Securities Brokers (Asia) Ltd | Broking services | 13,323 | 3,553 |
| HSBC Qianhai Securities Ltd ¹ | Broking services | 2,101 | 1,949 |
| Hang Seng Futures Ltd | Futures broking | 102 | 102 |
| Hang Seng Insurance Co. Ltd and its subsidiaries | Insurance | 130,584 | 10,996 |
| Hang Seng Investment Management Ltd | Asset management | 1,553 | 1,535 |
| Hang Seng Investment Services Ltd | Investment services | 9 | 9 |
| Hang Seng Securities Ltd | Broking services | 3,655 | 1,307 |
| Hang Seng Qianhai Fund Management Co. Ltd | Asset management | 179 | 164 |

¹ The entity was established in 2017.

The approaches used in calculating the group's regulatory capital and risk-weighted assets ('RWAs') are in accordance with the BCR. The group uses the advanced internal ratings-based approach to calculate its credit risk for the majority of its non-securitisation exposures and the internal ratings-based (securitisation) approach to determine credit risk for its banking book securitisation exposures. For market risk, the group uses an internal models approach to calculate its general market risk

for the risk categories of interest rate and foreign exchange (including gold) exposures, and equity exposures. The group also uses an internal models approach to calculate its market risk in respect of specific risk for interest rate exposures and equity exposures. The group uses the standardised (market risk) approach for calculating other market risk positions, as well as trading book securitisation exposures, and the standardised (operational risk) approach to calculate its operational risk.

Banking Disclosure Statement at 31 December 2017

Balance sheet reconciliation

The following tables together provide a reconciliation of the group's consolidated statement of financial position, as published in the group's *Annual Report and Accounts 2017*, to the transition disclosures template in Table 6 of this document.

The following table sets out the group's consolidated statement of financial position based on the accounting scope of consolidation and the corresponding balances based on the regulatory scope of consolidation.

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

| | At 31 Dec 2017 | |
|--|---|---|
| | Balance sheet in published financial statements | Under regulatory scope of consolidation |
| | HK\$m | HK\$m |
| Assets | | |
| Cash and sight balances at central banks | 208,073 | 206,009 |
| Items in the course of collection from other banks | 25,714 | 25,714 |
| Hong Kong Government certificates of indebtedness | 267,174 | 267,174 |
| Trading assets | 496,434 | 474,119 |
| Derivatives | 300,243 | 301,168 |
| Financial assets designated at fair value | 122,646 | 463 |
| Reverse repurchase agreements – non-trading | 330,890 | 210,008 |
| Placings with and advances to banks | 433,005 | 418,453 |
| Loans and advances to customers | 3,328,980 | 3,324,224 |
| Financial investments | 1,720,873 | 1,369,959 |
| Amounts due from Group companies | 227,729 | 340,653 |
| Investments in subsidiaries | – | 16,902 |
| Interests in associates and joint ventures | 144,717 | 141,855 |
| Goodwill and intangible assets | 59,865 | 12,466 |
| Property, plant and equipment | 116,336 | 113,327 |
| Deferred tax assets | 2,156 | 2,111 |
| Prepayments, accrued income and other assets | 158,511 | 87,788 |
| Total assets | 7,943,346 | 7,312,393 |
| Liabilities | | |
| Hong Kong currency notes in circulation | 267,174 | 267,174 |
| Items in the course of transmission to other banks | 38,283 | 38,283 |
| Repurchase agreements – non-trading | 47,170 | 47,170 |
| Deposits by banks | 201,697 | 201,528 |
| Customer accounts | 5,138,272 | 5,123,267 |
| Trading liabilities | 231,365 | 231,365 |
| Derivatives | 309,353 | 310,884 |
| Financial liabilities designated at fair value | 49,278 | 11,010 |
| Debt securities in issue | 38,394 | 38,514 |
| Retirement benefit liabilities | 2,222 | 2,222 |
| Amounts due to Group companies | 265,688 | 254,730 |
| Accruals and deferred income, other liabilities and provisions | 110,687 | 67,968 |
| Liabilities under insurance contracts | 438,017 | – |
| Current tax liabilities | 3,242 | 2,535 |
| Deferred tax liabilities | 24,391 | 16,309 |
| Subordinated liabilities | 4,090 | 4,090 |
| Preference shares | 21,037 | 20,930 |
| Total liabilities | 7,190,360 | 6,637,979 |
| Equity | | |
| Share capital | 151,360 | 151,360 |
| Other equity instruments | 14,737 | 14,737 |
| Other reserves | 123,417 | 119,638 |
| Retained earnings | 406,966 | 340,763 |
| Total shareholders' equity | 696,480 | 626,498 |
| Non-controlling interests | 56,506 | 47,916 |
| Total equity | 752,986 | 674,414 |
| Total equity and liabilities | 7,943,346 | 7,312,393 |

The following table expands the balance sheet under the regulatory scope of consolidation to show separately the capital components that are reported in the transition disclosures

template in Table 6. The capital components in this table contain a reference that shows how these amounts are included in Table 6.

Table 3: Detailed reconciliation of balance sheets to transition disclosures template

| | At 31 Dec 2017 | | Cross-referenced to Definition of Capital Components |
|---|--|---|--|
| | Balance sheet in published financial statements | Under regulatory scope of consolidation | |
| | HK\$m | HK\$m | |
| Assets | | | |
| Cash and sight balances at central banks | 208,073 | 206,009 | |
| Items in the course of collection from other banks | 25,714 | 25,714 | |
| Hong Kong Government certificates of indebtedness | 267,174 | 267,174 | |
| Trading assets | 496,434 | 474,119 | |
| <i>of which: significant capital investments in financial sector entities exceeding 10% threshold</i> | | 8 | 1 |
| <i>of which: significant capital investments in financial sector entities</i> | | 4 | 2 |
| Derivatives | 300,243 | 301,168 | |
| Financial assets designated at fair value | 122,646 | 463 | |
| Reverse repurchase agreements – non-trading | 330,890 | 210,008 | |
| Placings with and advances to banks | 433,005 | 418,453 | |
| Loans and advances to customers | 3,328,980 | 3,324,224 | |
| <i>of which: impairment allowances eligible for inclusion in Tier 2 capital</i> | | (2,176) | 3 |
| Financial investments | 1,720,873 | 1,369,959 | |
| <i>of which: significant capital investments in financial sector entities exceeding 10% threshold</i> | | 1,266 | 4 |
| Amounts due from Group companies | 227,729 | 340,653 | |
| <i>of which: significant capital investments in financial sector entities exceeding 10% threshold</i> | | 1,900 | 5 |
| <i>of which: significant capital investments in financial sector entities</i> | | 3,772 | 6 |
| Investments in subsidiaries | – | 16,902 | |
| <i>of which: significant capital investments in financial sector entities exceeding 10% threshold</i> | | 16,902 | 7 |
| Interests in associates and joint ventures | 144,717 | 141,855 | |
| <i>of which: goodwill</i> | | 3,958 | 8 |
| <i>of which: significant capital investments in financial sector entities exceeding 10% threshold</i> | | 85,423 | 9 |
| Goodwill and intangible assets | 59,865 | 12,466 | |
| <i>of which: goodwill</i> | | 5,092 | 10 |
| <i>of which: intangible assets</i> | | 7,374 | 11 |
| Property, plant and equipment | 116,336 | 113,327 | |
| Deferred tax assets | 2,156 | 2,111 | |
| <i>of which: deferred tax assets net of related tax liabilities</i> | | 2,237 | 12 |
| <i>of which: deferred tax liabilities related to goodwill</i> | | (92) | 13 |
| <i>of which: deferred tax liabilities related to intangible assets</i> | | (34) | 14 |
| Prepayments, accrued income and other assets | 158,511 | 87,788 | |
| <i>of which: defined benefit pension fund net assets</i> | | 88 | 15 |
| <i>of which: significant capital investments in financial sector entities exceeding 10% threshold</i> | | 297 | 16 |
| Total assets | 7,943,346 | 7,312,393 | |

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Table 3: Detailed reconciliation of balance sheets to transition disclosures template (continued)

| | At 31 Dec 2017 | | Cross-referenced to Definition of Capital components |
|--|--|---|--|
| | Balance sheet in published financial statements | Under regulatory scope of consolidation | |
| | HK\$m | HK\$m | |
| Liabilities | | | |
| Hong Kong currency notes in circulation | 267,174 | 267,174 | |
| Items in the course of transmission to other banks | 38,283 | 38,283 | |
| Repurchase agreements – non-trading | 47,170 | 47,170 | |
| Deposits by banks | 201,697 | 201,528 | |
| Customer accounts | 5,138,272 | 5,123,267 | |
| Trading liabilities | 231,365 | 231,365 | |
| <i>of which: gains and losses due to changes in own credit risk on fair valued liabilities</i> | | (113) | 17 |
| Derivatives | 309,353 | 310,884 | |
| <i>of which: gains and losses due to changes in own credit risk on fair valued liabilities</i> | | (201) | 18 |
| Financial liabilities designated at fair value | 49,278 | 11,010 | |
| <i>of which: gains and losses due to changes in own credit risk on fair valued liabilities</i> | | 3 | 19 |
| Debt securities in issue | 38,394 | 38,514 | |
| Retirement benefit liabilities | 2,222 | 2,222 | |
| Amounts due to Group companies | 265,688 | 254,730 | |
| <i>of which: qualifying Tier 2 capital instruments</i> | | 17,820 | 20 |
| <i>of which: gains and losses due to changes in own credit risk on fair valued liabilities</i> | | 128 | 21 |
| Accruals and deferred income, other liabilities and provisions | 110,687 | 67,968 | |
| Liabilities under insurance contracts | 438,017 | – | |
| Current tax liabilities | 3,242 | 2,535 | |
| Deferred tax liabilities | 24,391 | 16,309 | |
| <i>of which: deferred tax liabilities related to intangible assets</i> | | 951 | 22 |
| <i>of which: deferred tax liabilities related to defined benefit pension fund net assets</i> | | 9 | 23 |
| Subordinated liabilities | 4,090 | 4,090 | |
| <i>of which: portion eligible for Tier 2 capital instruments, subject to phase-out arrangements</i> | | 3,126 | 24 |
| <i>of which: portion eligible for Tier 2 capital instruments issued by subsidiaries, subject to phase-out arrangements</i> | | 598 | 25 |
| Preference shares | 21,037 | 20,930 | |
| <i>of which: portion eligible for AT1 capital instruments, subject to phase-out arrangements</i> | | 19,367 | 26 |
| <i>of which: portion eligible for Tier 2 capital instruments, subject to phase-out arrangements</i> | | 1,563 | 27 |
| Total liabilities | 7,190,360 | 6,637,979 | |
| Equity | | | |
| Share capital | 151,360 | 151,360 | |
| <i>of which: portion eligible for inclusion in CET1 capital</i> | | 149,906 | 28 |
| <i>of which: revaluation reserve capitalisation issue</i> | | 1,454 | 29 |
| Other equity instruments | 14,737 | 14,737 | |
| <i>of which: qualifying AT1 capital instruments</i> | | 14,737 | 30 |
| Other reserves | 123,417 | 119,638 | 31 |
| <i>of which: fair value gains arising from revaluation of land and buildings</i> | | 58,381 | 32 |
| <i>of which: cash flow hedging reserves</i> | | (135) | 33 |
| <i>of which: valuation adjustment</i> | | 610 | 34 |
| Retained earnings | 406,966 | 340,763 | 35 |
| <i>of which: regulatory reserve for general banking risks</i> | | 27,703 | 36 |
| <i>of which: regulatory reserve eligible for inclusion in Tier 2 capital</i> | | 13,548 | 37 |
| <i>of which: fair value gains arising from revaluation of land and buildings</i> | | 4,704 | 38 |
| <i>of which: valuation adjustment</i> | | 875 | 39 |
| Total shareholders' equity | 696,480 | 626,498 | |
| Non-controlling interests | 56,506 | 47,916 | |
| <i>of which: portion allowable in CET1 capital</i> | | 24,416 | 40 |
| <i>of which: portion allowable in AT1 capital</i> | | 1,630 | 41 |
| <i>of which: portion in AT1 capital, subject to phase-out arrangements</i> | | 3,469 | 42 |
| Total equity | 752,986 | 674,414 | |
| Total equity and liabilities | 7,943,346 | 7,312,393 | |

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

| | a | b | c | d | e | f | g |
|---|---|---|----------------------------------|---|--|----------------------------------|--|
| | Carrying values of items: | | | | | | |
| | Carrying values as reported in published financial statements | Carrying values under scope of regulatory consolidation | subject to credit risk framework | subject to counterparty credit risk framework | subject to securitisation framework ¹ | subject to market risk framework | not subject to capital requirements or subject to deduction from capital |
| Footnotes | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m |
| Assets | | | | | | | |
| Cash and sight balances at central banks | 208,073 | 206,009 | 206,009 | – | – | – | – |
| Items in the course of collection from other banks | 25,714 | 25,714 | 25,714 | – | – | – | – |
| Hong Kong Government certificates of indebtedness | 267,174 | 267,174 | 267,174 | – | – | – | – |
| Trading assets ² | 496,434 | 474,119 | – | 8,953 | – | 447,557 | 26,562 |
| Derivatives ² | 300,243 | 301,168 | – | 301,168 | – | 301,168 | – |
| Financial assets designated at fair value | 122,646 | 463 | 463 | – | – | – | – |
| Reverse repurchase agreements – non-trading | 330,890 | 210,008 | – | 210,008 | – | – | – |
| Placings with and advances to banks | 433,005 | 418,453 | 381,900 | 36,553 | – | – | – |
| Loans and advances to customers | 3,328,980 | 3,324,224 | 3,255,921 | 34,326 | 32,218 | – | 1,759 |
| Financial investments | 1,720,873 | 1,369,959 | 1,368,520 | 126 | 47 | – | 1,266 |
| Amounts due from Group companies ² | 227,729 | 340,653 | 72,808 | 245,045 | – | 17,142 | 5,672 |
| Investments in subsidiaries | – | 16,902 | – | – | – | – | 16,902 |
| Interests in associates and joint ventures | 144,717 | 141,855 | 52,474 | – | – | – | 89,381 |
| Goodwill and intangible assets ⁴ | 59,865 | 12,466 | – | – | – | – | 11,515 |
| Property, plant and equipment | 116,336 | 113,327 | 113,327 | – | – | – | – |
| Deferred tax assets | 2,156 | 2,111 | – | – | – | – | 2,111 |
| Prepayments, accrued income and other assets ^{3, 4} | 158,511 | 87,788 | 76,054 | 8,634 | 35 | – | 3,056 |
| Total assets at 31 Dec 2017 | 7,943,346 | 7,312,393 | 5,820,364 | 844,813 | 32,300 | 765,867 | 158,224 |
| Liabilities | | | | | | | |
| Hong Kong currency notes in circulation | 267,174 | 267,174 | – | – | – | – | 267,174 |
| Items in the course of transmission to other banks | 38,283 | 38,283 | – | – | – | – | 38,283 |
| Repurchase agreements – non-trading | 47,170 | 47,170 | – | 47,170 | – | – | – |
| Deposits by banks | 201,697 | 201,528 | – | 530 | – | – | 200,998 |
| Customer accounts | 5,138,272 | 5,123,267 | – | 240 | – | – | 5,123,027 |
| Trading liabilities ² | 231,365 | 231,365 | – | 687 | – | 204,109 | 27,256 |
| Derivatives ² | 309,353 | 310,884 | – | 310,884 | – | 310,884 | – |
| Financial liabilities designated at fair value | 49,278 | 11,010 | – | – | – | – | 11,010 |
| Debt securities in issue | 38,394 | 38,514 | – | – | – | – | 38,514 |
| Retirement benefit liabilities | 2,222 | 2,222 | – | – | – | – | 2,222 |
| Amounts due to Group companies | 265,688 | 254,730 | – | 2,682 | – | – | 252,048 |
| Accruals and deferred income, other liabilities and provisions ³ | 110,687 | 67,968 | – | 152 | – | – | 67,816 |
| Liabilities under insurance contracts | 438,017 | – | – | – | – | – | – |
| Current tax liabilities | 3,242 | 2,535 | – | – | – | – | 2,535 |
| Deferred tax liabilities | 24,391 | 16,309 | – | – | – | – | 16,309 |
| Subordinated liabilities | 4,090 | 4,090 | – | – | – | – | 4,090 |
| Preference shares | 21,037 | 20,930 | – | – | – | – | 20,930 |
| Total liabilities at 31 Dec 2017 | 7,190,360 | 6,637,979 | – | 362,345 | – | 514,993 | 6,072,212 |

- ¹ The amounts shown in the column 'subject to securitisation framework' only include non-trading book. Trading book securitisation positions are included in the market risk column.
- ² Assets/liabilities arising from derivative contracts held in the regulatory trading book are subject to both market risk and counterparty credit risk because derivative contracts are marked to market and there is a risk that the counterparty may not be able to fulfil the contractual obligations. As a result, the amounts shown in column (b) do not equal the sum of columns (c) to (g).
- ³ The difference in the carrying values reported in the financial statements in column (a) and the scope of regulatory consolidation in column (b) mainly represents the amounts of acceptance and endorsements being included as contingencies in accordance with the BCR, whilst for accounting purposes, acceptances and endorsements are recognised on the balance sheet in accordance with HKAS39 'Financial instruments: Recognition and Measurement'.
- ⁴ The assets disclosed in column (g) are net of any associated deferred tax liability.

Table 5: LI2 – Main sources of differences between regulatory exposure amounts and carrying values in financial statements

| | a | b | c | d | e | |
|---|---|-----------------------------------|--------------------------------------|---|-----------------------------------|-------------------|
| | | | | | | Items subject to: |
| | Total HK\$m | credit risk framework HK\$m | securitisation framework HK\$m | counterparty credit risk framework HK\$m | market risk framework HK\$m | |
| 1 | Asset carrying value amount under scope of regulatory consolidation (as per template LI1) | 7,154,169 | 5,820,364 | 32,300 | 844,813 | 765,867 |
| 2 | Liabilities carrying value amount under regulatory scope of consolidation (as per template LI1) | 565,767 | – | – | 362,345 | 514,993 |
| 3 | Total net amount under regulatory scope of consolidation | 6,588,402 | 5,820,364 | 32,300 | 482,468 | 250,874 |
| 4 | Off-balance sheet amounts and potential future exposure for counterparty risk | 2,828,048 | 791,320 | 792 | 209,840 | – |
| 5 | Differences in netting rules | 413 | (1,437) | – | 1,850 | – |
| 6 | Differences due to financial collateral on standardised approach | (118,236) | (118,236) | – | – | – |
| 7 | Differences due to impairments on IRB approach | 12,071 | 12,071 | – | – | – |
| 8 | Differences due to credit risk mitigation | (281,834) | – | – | (281,835) | – |
| 9 | Exposure amounts considered for regulatory purposes at 31 Dec 2017 | 9,028,864 | 6,504,082 | 33,092 | 412,323 | 250,874 |

Explanations of differences between accounting and regulatory exposure amounts

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

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

Differences in netting rules

Under HKFRS, netting is only permitted if a legal right of set-off exists and the cash flows are intended to be settled on a net basis. Under the BCR, however, netting is applied when there is a valid bilateral netting agreement. As a consequence, we recognise greater netting under the BCR, 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

The exposure value under the standardised approach is calculated after deducting credit risk mitigation ('CRM'), whereas the 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 the IRB approach is before deducting credit risk adjustments.

Differences due to credit risk mitigation

In CCR, differences arise between accounting carrying values and regulatory exposure as a result of the application of CRM.

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 and that differ 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 spread and funding fair value adjustment ('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.

Capital and RWAs

Regulatory capital disclosures

The following table sets out the detailed composition of the

group's regulatory capital using the transition disclosures template, as specified by the HKMA. The table also shows those items that are currently benefiting from the Basel III transitional arrangements, and are consequently subject to the pre-Basel III treatment, as set out in Schedule 4H to the BCR.

Table 6: Transition disclosures template

| | | At 31 Dec 2017 | | |
|--|---|---------------------------------|---|---|
| | | Component of regulatory capital | Amounts subject to pre-Basel III treatment* | Cross-referenced to Table 3 |
| | | HK\$m | HK\$m | |
| Common equity tier 1 ('CET1') capital: instruments and reserves | | | | |
| 1 | Directly issued qualifying CET1 capital instruments plus any related share premium | 149,906 | | 28 |
| 2 | Retained earnings | 340,763 | | 35 |
| 3 | Disclosed reserves | 119,638 | | 31 |
| 4 | Directly issued capital subject to phase out from CET1 capital (only applicable to non-joint stock companies) | Not applicable | | |
| | Public sector capital injections grandfathered until 1 January 2018 | Not applicable | | |
| 5 | Minority interests arising from CET1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in CET1 capital of the consolidation group) | 24,416 | | 40 |
| 6 | CET1 capital before regulatory deductions | 634,723 | | |
| CET1 capital: regulatory deductions | | | | |
| 7 | Valuation adjustments | 1,485 | | 34+39 |
| 8 | Goodwill (net of associated deferred tax liability) | 8,958 | | 8+10+13 |
| 9 | Other intangible assets (net of associated deferred tax liability) | 6,389 | – | 11+14-22 |
| 10 | Deferred tax assets net of deferred tax liabilities | 2,237 | | 12 |
| 11 | Cash flow hedge reserve | (135) | | 33 |
| 12 | Excess of total EL amount over total eligible provisions under the IRB approach | – | – | |
| 13 | Gain-on-sale arising from securitisation transactions | – | | |
| 14 | Gains and losses due to changes in own credit risk on fair valued liabilities | 183 | – | -(17+18+19+21) |
| 15 | Defined benefit pension fund net assets (net of associated deferred tax liabilities) | 79 | – | 15-23 |
| 16 | Investments in own CET1 capital instruments (if not already netted off paid-in capital on reported balance sheet) | – | – | |
| 17 | Reciprocal cross-holdings in CET1 capital instruments | – | – | |
| 18 | Insignificant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold) | – | – | |
| 19 | Significant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold) | 86,046 | 19,750 | 1+4+5+7+9+16 -43 ^t -44 ^t |
| 20 | Mortgage servicing rights (amount above 10% threshold) | Not applicable | | |
| 21 | Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability) | Not applicable | | |
| 22 | Amount exceeding the 15% threshold | Not applicable | | |
| 23 | <i>of which: significant investments in the common stock of financial sector entities</i> | Not applicable | | |
| 24 | <i>of which: mortgage servicing rights</i> | Not applicable | | |
| 25 | <i>of which: deferred tax assets arising from temporary differences</i> | Not applicable | | |
| 26 | National specific regulatory adjustments applied to CET1 capital | 90,788 | | |
| 26a | Cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties) | 63,085 | | 32+38 |
| 26b | Regulatory reserve for general banking risks | 27,703 | | 36 |
| 27 | Regulatory deductions applied to CET1 capital due to insufficient Additional Tier 1 (AT1) capital and Tier 2 capital to cover deductions | – | | |
| 28 | Total regulatory deductions to CET1 capital | 196,030 | | |
| 29 | CET1 capital | 438,693 | | |
| Additional tier 1 ('AT1') capital: instruments | | | | |
| 30 | Qualifying AT1 capital instruments plus any related share premium | 14,737 | | 30 |
| 31 | <i>of which: classified as equity under applicable accounting standards</i> | 14,737 | | 30 |
| 32 | <i>of which: classified as liabilities under applicable accounting standards</i> | – | | |
| 33 | Capital instruments subject to phase out arrangements from AT1 capital | 19,367 | | 26 |
| 34 | AT1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in AT1 capital of the consolidated group) | 5,099 | | 41+42 |
| 35 | <i>of which: AT1 capital instruments issued by subsidiaries subject to phase out arrangements</i> | 3,469 | | 42 |

^t Cross-referenced within Table 6.

Banking Disclosure Statement at 31 December 2017

Table 6: Transition disclosures template (continued)

| | At 31 Dec 2017 | | Cross-referenced to Table 3 |
|-----|---|---|--------------------------------|
| | Component of regulatory capital | Amounts subject to pre-Basel III treatment* | |
| | HK\$m | HK\$m | |
| 36 | AT1 capital before regulatory deductions | 39,203 | |
| | AT1 capital: regulatory deductions | | |
| 37 | Investments in own AT1 capital instruments | — | |
| 38 | Reciprocal cross-holdings in AT1 capital instruments | — | |
| 39 | Insignificant capital investments in AT1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold) | — | |
| 40 | Significant capital investments in AT1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation | — | |
| 41 | National specific regulatory adjustments applied to AT1 capital | 9,875 | |
| 41a | Portion of deductions applied 50:50 to core capital and supplementary capital based on pre-Basel III treatment which, during transitional period, remain subject to deduction from Tier 1 capital | 9,875 | |
| vii | <i>of which: Significant capital investments in CET1 capital instruments, AT1 capital instruments and Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation</i> | 9,875 | 43 [†] |
| 42 | Regulatory deductions applied to AT1 capital due to insufficient Tier 2 capital to cover deductions | — | |
| 43 | Total regulatory deductions to AT1 capital | 9,875 | |
| 44 | AT1 capital | 29,328 | |
| 45 | Tier 1 capital (Tier 1 = CET1 + AT1) | 468,021 | |
| | Tier 2 capital: instruments and provisions | | |
| 46 | Qualifying Tier 2 capital instruments plus any related share premium | 17,820 | 20 |
| 47 | Capital instruments subject to phase out arrangements from Tier 2 capital | 4,689 | 24+27 |
| 48 | Tier 2 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in Tier 2 capital of the consolidation group) | 598 | 25 |
| 49 | <i>of which: capital instruments issued by subsidiaries subject to phase out arrangements</i> | 598 | 25 |
| 50 | Collective impairment allowances and regulatory reserve for general banking risks eligible for inclusion in Tier 2 capital | 15,724 | 37-3 |
| 51 | Tier 2 capital before regulatory deductions | 38,831 | |
| | Tier 2 capital: regulatory deductions | | |
| 52 | Investments in own Tier 2 capital instruments | — | |
| 53 | Reciprocal cross-holdings in Tier 2 capital instruments | — | |
| 54 | Insignificant capital investments in Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold) | — | |
| 55 | Significant capital investments in Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation | 3,776 | 2 + 6 |
| 56 | National specific regulatory adjustments applied to Tier 2 capital | (19,168) | |
| 56a | Add back of cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties) eligible for inclusion in Tier 2 capital | (29,043) | (29+32+38)×45% |
| 56b | Portion of deductions applied 50:50 to core capital and supplementary capital based on pre-Basel III treatment which, during transitional period, remain subject to deduction from Tier 2 capital | 9,875 | |
| vii | <i>of which: Significant capital investments in CET1 capital instruments, AT1 capital instruments and Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation</i> | 9,875 | 44 [†] |
| 57 | Total regulatory deductions to Tier 2 capital | (15,392) | |
| 58 | Tier 2 capital | 54,223 | |
| 59 | Total capital (Total capital = Tier 1 + Tier 2) | 522,244 | |
| 60 | Total risk weighted assets | 2,758,609 | |
| | Capital ratios (as a percentage of risk-weighted assets) | | |
| 61 | CET1 capital ratio | 15.90% | |
| 62 | Tier 1 capital ratio | 16.97% | |
| 63 | Total capital ratio | 18.93% | |
| 64 | Institution specific buffer requirement (minimum CET1 capital requirement as specified in s.3A, or s.3B, as the case requires, of the BCR plus capital conservation buffer plus countercyclical buffer requirements plus G-SIB or D-SIB requirements) | 7.70% | |
| 65 | <i>of which: capital conservation buffer requirement</i> | 1.25% | |
| 66 | <i>of which: bank specific countercyclical buffer requirement</i> | 0.70% | |
| 67 | <i>of which: G-SIB or D-SIB buffer requirement</i> | 1.25% | |
| 68 | CET1 capital surplus over the minimum CET1 requirement and any CET1 capital used to meet the Tier 1 and Total capital requirement under s.3A, or s.3B, as the case requires, of the BCR | 10.93% | |

[†] Cross-referenced within Table 6.

Table 6: Transition disclosures template (continued)

| | | At 31 Dec 2017 | | Cross-referenced to Table 3 |
|---|--|------------------------------------|---|--------------------------------|
| | | Component of regulatory capital | Amounts subject to pre-BaseI III treatment* | |
| | | HK\$m | HK\$m | |
| National minima (if different from Basel 3 minimum) | | | | |
| 69 | National CET1 minimum ratio | Not applicable | | |
| 70 | National Tier 1 minimum ratio | Not applicable | | |
| 71 | National Total capital minimum ratio | Not applicable | | |
| Amounts below the thresholds for deduction (before risk weighting) | | | | |
| 72 | Insignificant capital investments in CET1 capital instruments, AT1 capital instruments and Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation | 18,367 | | |
| 73 | Significant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation | 52,474 | | |
| 74 | Mortgage servicing rights (net of related tax liability) | Not applicable | | |
| 75 | Deferred tax assets arising from temporary differences (net of related tax liability) | Not applicable | | |
| Applicable caps on the inclusion of provisions in Tier 2 capital | | | | |
| 76 | Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the basic approach and the standardised (credit risk) approach (prior to application of cap) | 4,081 | | |
| 77 | Cap on inclusion of provisions in Tier 2 under the basic approach and the standardised (credit risk) approach | 3,409 | | |
| 78 | Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the IRB approach (prior to application of cap) | 19,776 | | |
| 79 | Cap for inclusion of provisions in Tier 2 under the IRB approach | 12,315 | | |
| Capital instruments subject to phase-out arrangements | | | | |
| 80 | Current cap on CET1 capital instruments subject to phase out arrangements | Not applicable | | |
| 81 | Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities) | Not applicable | | |
| 82 | Current cap on AT1 capital instruments subject to phase out arrangements | 25,785 | | |
| 83 | Amount excluded from AT1 capital due to cap (excess over cap after redemptions and maturities) | – | | |
| 84 | Current cap on Tier 2 capital instruments subject to phase out arrangements | 22,788 | | |
| 85 | Amount excluded from Tier 2 capital due to cap (excess over cap after redemptions and maturities) | – | | |

* This refers to the position under the BCR in force on 31 December 2012.

Banking Disclosure Statement at 31 December 2017

Table 6: Transition disclosures template (continued)

Notes to the template:

Elements where a more conservative definition has been applied in the BCR relative to that set out in Basel III capital standards:

| | | At 31 Dec 2017 | |
|----|---|-----------------|-----------------|
| | | Hong Kong basis | Basel III basis |
| | | HK\$m | HK\$m |
| 10 | Deferred tax assets net of deferred tax liabilities | 2,237 | 99 |

Explanation:

As set out in paragraphs 69 and 87 of the Basel III text issued by the Basel Committee (December 2010), Deferred Tax Assets ('DTAs') that rely on future profitability of the bank to be realised are to be deducted, whereas DTAs which relate to temporary differences may be given limited recognition in CET1 capital (and hence be excluded from deduction from CET1 capital up to the specified threshold). In Hong Kong, an authorised institution ('AI') is required to deduct all DTAs in full, irrespective of their origin, from CET1 capital. Therefore, the amount to be deducted as reported in row 10 may be greater than that required under Basel III.

The amount reported under the column 'Basel III basis' in this box represents the amount reported in row 10 (i.e. the amount reported under the 'Hong Kong basis') adjusted by reducing the amount of DTAs to be deducted which relate to temporary differences to the extent not in excess of the 10% threshold set for DTAs arising from temporary differences and the aggregate 15% threshold set for Mortgage Servicing Rights ('MSRs'), DTAs arising from temporary differences and significant investments in CET1 capital instruments issued by financial sector entities (excluding those that are loans, facilities and other credit exposures to connected companies) under Basel III.

| | | At 31 Dec 2017 | |
|----|---|-----------------|-----------------|
| | | Hong Kong basis | Basel III basis |
| | | HK\$m | HK\$m |
| 19 | Significant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold) | 105,796 | 103,896 |

Explanation:

For the purpose of determining the total amount of significant capital investments in CET1 capital instruments issued by financial sector entities, an AI is required to aggregate any amount of loans, facilities or other credit exposures provided by it to any of its connected companies, where the connected company is a financial sector entity, as if such loans, facilities or other credit exposures were direct holdings, indirect holdings or synthetic holdings of the AI in the capital instruments of the financial sector entity, except where the AI demonstrates to the satisfaction of the Monetary Authority that any such loan was made, any such facility was granted, or any such other credit exposure was incurred, in the ordinary course of the AI's business.

Therefore, the amount to be deducted as reported in row 19 may be greater than that required under Basel III. The amount reported under the column 'Basel III basis' in this box represents the amount reported in row 19 (i.e. the amount reported under the 'Hong Kong basis') adjusted by excluding the aggregate amount of loans, facilities or other credit exposures to the AI's connected companies which were subject to deduction under the Hong Kong approach.

Remarks:

The amount of the 10%/15% thresholds mentioned above is calculated based on the amount of CET1 capital determined under the BCR.

The following is a summary of the group's common equity tier 1 ('CET1') capital, additional tier 1 ('AT1') capital and tier 2 capital instruments.

Table 7: Capital instruments

| | At 31 Dec 2017 | |
|--|----------------|--|
| | Total amount | Amount recognised in regulatory capital HK\$m |
| CET1 capital instruments | | |
| Ordinary shares: | | |
| 46,440,991,798 issued and fully paid ordinary shares | HK\$151,360m | 149,906 |
| AT1 capital instruments | | |
| Floating rate perpetual subordinated loans, callable from 2019 | US\$1,900m | 14,737 |
| Perpetual non-cumulative preference shares | US\$2,478m | 19,367 |
| Tier 2 capital instruments | | |
| Perpetual cumulative preference shares | US\$200m | 1,563 |
| Primary capital undated floating rate notes | US\$400m | 3,126 |
| Subordinated loan due 2023 | US\$500m | 3,908 |
| Subordinated loan due 2024, callable from 2019 | US\$1,600m | 12,505 |
| Subordinated loan due 2025, callable from 2020 | US\$180m | 1,407 |
| Fixed rate (5.05%) subordinated bonds due 2027, callable from 2022 | MYR500m | 598 |

A description of the main features and the full terms and conditions of the group's capital instruments can be found in the Regulatory Disclosures section of our website, www.hsbc.com.hk.

Capital ratios and buffer requirements

The following tables show the capital ratios and capital buffer requirements as contained in the 'Capital Adequacy Ratio' return submitted to the HKMA on a consolidated basis under the requirements of section 3C(1) of the BCR.

Table 8: Capital ratios

| | Footnotes | 31 Dec 2017 % |
|----------------------------|-----------|------------------|
| CET1 capital ratio | 1 | 15.9 |
| Tier 1 capital ratio | 2 | 17.0 |
| Total capital ratio | 3 | 18.9 |
| | | HK\$m |
| CET1 capital | | 438,693 |
| Tier 1 capital | | 468,021 |
| Total capital | | 522,244 |
| Total RWAs | 4 | 2,758,609 |

- 1 CET1 capital ratio equals CET1 capital divided by Total RWAs.
2 Tier 1 capital ratio equals Tier 1 capital divided by Total RWAs.
3 Total capital ratio equals Total capital divided by Total RWAs.
4 The total RWAs is after application of the scaling factor of 1.06.

Table 9: Capital buffer requirements

| | 31 Dec 2017 % |
|--------------------------------------|------------------|
| Capital conservation buffer ratio | 1.25 |
| Countercyclical capital buffer ratio | 0.70 |
| Higher loss absorbency ratio | 1.25 |
| Total | 3.20 |

Countercyclical capital buffer ratio

The countercyclical capital buffer ('CCyB') is calculated as the weighted average of the applicable CCyB ratios in effect in the jurisdictions in which banks have private sector credit exposures. The group uses booking country as the basis of geographical

allocation for credit risk and risk country for market risk, which is defined by considering the country of incorporation, location of guarantor, headquarter domicile, distribution of revenue and booking country. The CCyB ratio remained stable in the second half of 2017.

Table 10: Geographical breakdown of risk-weighted amounts (RWA) in relation to private sector credit exposures

| Jurisdiction (J) | | At 31 Dec 2017 | | | |
|------------------|----------------|----------------------------------|---|------------------|-------------------|
| | | Applicable JCCyB ratio in effect | Total RWA used in computation of CCyB ratio of AI | CCyB ratio of AI | CCyB amount of AI |
| | | % | HK\$m | % | HK\$m |
| 1 | Hong Kong | 1.25 | 1,116,446 | | |
| 2 | Mainland China | — | 267,390 | | |
| 3 | Australia | — | 96,939 | | |
| 4 | Bahamas | — | 26 | | |
| 5 | Bangladesh | — | 15,924 | | |
| 6 | Belgium | — | 135 | | |
| 7 | Brunei | — | 27 | | |
| 8 | Canada | — | 4 | | |
| 9 | Cayman Islands | — | 21 | | |
| 10 | Chinese Taipei | — | 40,010 | | |
| 11 | France | — | 4 | | |
| 12 | Germany | — | 107 | | |
| 13 | India | — | 84,080 | | |
| 14 | Indonesia | — | 54,181 | | |
| 15 | Japan | — | 14,677 | | |
| 16 | Jersey | — | 25 | | |
| 17 | Macau SAR | — | 21,517 | | |
| 18 | Malaysia | — | 75,163 | | |
| 19 | Maldives | — | 743 | | |
| 20 | Mauritius | — | 9,124 | | |
| 21 | Mongolia | — | 299 | | |
| 22 | Netherlands | — | 98 | | |
| 23 | New Zealand | — | 11,456 | | |
| 24 | Philippines | — | 8,835 | | |
| 25 | Singapore | — | 107,006 | | |
| 26 | South Korea | — | 18,514 | | |
| 27 | Sri Lanka | — | 13,325 | | |
| 28 | Switzerland | — | 5 | | |
| 29 | Thailand | — | 16,223 | | |
| 30 | United Kingdom | — | 106 | | |
| 31 | United States | — | 208 | | |
| 32 | Vietnam | — | 14,565 | | |
| 33 | West Indies UK | — | 30 | | |
| Total | | | 1,987,213 | 0.70 | 13,956 |

Leverage ratio

The following table shows the leverage ratio, tier 1 capital and total exposure measure as contained in the 'Quarterly Template

on Leverage Ratio' submitted to the HKMA on a consolidated basis under the requirements specified in the 'Leverage Ratio Framework'.

Table 11: Leverage ratio

| | Footnote | 31 Dec 2017 % |
|--|----------|---------------------|
| Leverage ratio | 1 | 6.3 |
| Capital and leverage ratio exposure measure | | HK\$m |
| Tier 1 capital | | 468,021 |
| Total exposure measure | | 7,477,306 |

1 Leverage ratio equals Tier 1 capital divided by Total exposure measure.

Table 12: Leverage ratio common disclosure template

| | Leverage ratio framework |
|--|-----------------------------|
| | 31 Dec 2017 HK\$m |
| On-balance sheet exposures | |
| 1 On-balance sheet items (excluding derivatives and SFTs, but including collateral) | 6,188,993 |
| 2 Less: Asset amounts deducted in determining Basel III Tier 1 capital (reported as negative amounts) | (207,176) |
| 3 Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 and 2) | 5,981,817 |
| Derivative exposures | |
| 4 Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin) | 58,539 |
| 5 Add-on amounts for PFE associated with all derivatives transactions | 282,239 |
| 6 Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework | – |
| 7 Less: Deductions of receivables assets for cash variation margin provided in derivatives transactions (reported as negative amounts) | – |
| 8 Less: Exempted CCP leg of client-cleared trade exposures (reported as negative amounts) | (2,823) |
| 9 Adjusted effective notional amount of written credit derivatives | 316,348 |
| 10 Less: Adjusted effective notional offsets and add-on deductions for written credit derivatives (reported as negative amounts) | (303,603) |
| 11 Total derivative exposures (sum of lines 4 to 10) | 350,700 |
| Securities financing transaction exposures | |
| 12 Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions | 552,321 |
| 13 Less: Netted amounts of cash payables and cash receivables of gross SFT assets (reported as negative amounts) | – |
| 14 CCR exposure for SFT assets | 16,422 |
| 15 Agent transaction exposures | – |
| 16 Total securities financing transaction exposures (sum of lines 12 to 15) | 568,743 |
| Other off-balance sheet exposures | |
| 17 Off-balance sheet exposures at gross notional amount | 2,828,048 |
| 18 Less: Adjustments for conversion to credit equivalent amounts (reported as negative amounts) | (2,252,002) |
| 19 Off-balance sheet items (sum of lines 17 and 18) | 576,046 |
| Capital and total exposures | |
| 20 Tier 1 capital | 468,021 |
| 21 Total exposures (sum of lines 3, 11, 16 and 19) | 7,477,306 |
| Leverage ratio | |
| 22 Basel III leverage ratio | 6.26% |

The leverage ratio was 6.26% at 31 December 2017, up from 6.09% at 30 June 2017. This was mainly due to an increase in the capital base, partly offset by an increase in the exposure measure driven by loan growth.

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Table 13: Summary comparison table

| Item | Leverage ratio framework |
|--|--------------------------|
| | 31 Dec 2017 HK\$m |
| 1 Total consolidated assets as per published financial statements | 7,943,346 |
| 2 Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation | (593,098) |
| 3 Adjustment for fiduciary assets recognised on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure | — |
| 4 Adjustments for derivative financial instruments | 49,532 |
| 5 Adjustment for securities financing transactions (i.e. repos and similar secured lending) | 16,422 |
| 6 Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures) | 576,046 |
| 7 Other adjustments | (514,942) |
| 8 Leverage ratio exposure | 7,477,306 |

Other adjustments mainly represent the Hong Kong Government certificates of indebtedness and assets deducted in determining Basel III Tier 1 capital.

These are excluded for deriving the leverage ratio exposure in accordance with the 'Leverage Ratio Framework' issued by the HKMA.

Overview of the minimum capital requirements and RWAs

The following table provides an overview of the minimum capital requirements and RWAs by risk type and approach, as contained in the 'Capital Adequacy Ratio' return. Minimum capital requirement represents the Pillar1 capital charge at 8% of RWAs.

Table 14: OV1 – Overview of RWA

| | a | | b | | c | |
|--|----------------------|----------------------|----------------------|----------------------|------------------------------|----------------------|
| | RWA ¹ | | | | Minimum capital requirements | |
| | 31 Dec 2017 HK\$m | 30 Sep 2017 HK\$m | 31 Dec 2017 HK\$m | 30 Sep 2017 HK\$m | 31 Dec 2017 HK\$m | 30 Sep 2017 HK\$m |
| 1 Credit risk for non-securitisation exposures | 1,962,308 | 1,936,399 | 165,117 | | | |
| 2 <i>Of which: standardised credit risk ('STC') approach</i> | 268,303 | 271,773 | 21,464 | | | |
| 3 <i>Of which: internal ratings-based ('IRB') approach</i> | 1,694,005 | 1,664,626 | 143,653 | | | |
| 4 Counterparty credit risk | 130,309 | 152,202 | 10,784 | | | |
| 5 <i>Of which: standardised approach for counterparty credit risk ('SA-CCR')</i> | 73,041 | 80,917 | 6,171 | | | |
| 7 Equity exposures in banking book under the market-based approach | 26,723 | 28,278 | 2,266 | | | |
| 11 Settlement risk | 29 | 23 | 2 | | | |
| 12 Securitisation exposures in banking book | 10,050 | 8,759 | 852 | | | |
| 13 <i>Of which: IRB(S) approach – ratings-based method</i> | 10,050 | 8,759 | 852 | | | |
| 16 Market risk | 115,077 | 125,794 | 9,206 | | | |
| 17 <i>Of which: standardised market risk ('STM') approach</i> | 2,500 | 383 | 200 | | | |
| 18 <i>Of which: internal models ('IMM') approach</i> | 112,577 | 125,411 | 9,006 | | | |
| 19 Operational risk | 302,890 | 300,606 | 24,232 | | | |
| 21 <i>Of which: standardised operational risk ('STO') approach</i> | 302,890 | 300,606 | 24,232 | | | |
| 23 Amounts below the thresholds for deduction (subject to 250% RW) | 131,185 | 126,415 | 11,124 | | | |
| 24a Deduction to RWA | 36,169 | 35,014 | 2,894 | | | |
| 24b <i>Of which: portion of regulatory reserve for general banking risks and collective provisions which is not included in Tier 2 Capital</i> | 672 | 598 | 54 | | | |
| 24c <i>Of which: portion of cumulative fair value gains arising from the revaluation of land and buildings which is not included in Tier 2 Capital</i> | 35,497 | 34,416 | 2,840 | | | |
| 25 Total | 2,642,402 | 2,643,462 | 220,689 | | | |

¹ RWAs in this table are before the application of the 1.06 scaling factor, where applicable.

² Prior to the implementation of SA-CCR, exposures reported here are under the current exposure method.

Credit risk for non-securitisation exposures

RWAs increased by HK\$25,909m in the fourth quarter, including an increase of HK\$12,813m due to foreign currency translation differences. The underlying increase of HK\$13,096m was due to:

- growth in the corporate loan book in Hong Kong and mainland China; partially offset by
- improved asset quality and savings from RWA initiatives.

Counterparty credit risk

RWAs decreased by HK\$21,893m, primarily as a result of savings from RWA initiatives through the increased use of hedging.

Market risk

Market risk RWAs decreased by HK\$10,717m during the fourth quarter mainly from movements in risk levels and model updates.

RWA flow statements

RWA flow statement for credit risk

The following table shows movements in RWAs for credit risk determined under the IRB approach. The analysis is prepared in

accordance with the key drivers as specified in the standard template. For the purposes of this section, any reference to exposures related to 'credit risk' is referring to credit risk for non-securitisation exposures excluding counterparty credit risk.

Table 15: CR8 – RWA flow statement of credit risk exposures under IRB approach

| | a |
|--------------------------------|------------------|
| | HK\$m |
| 1 RWA as at 30 Sep 2017 | 1,664,626 |
| 2 Asset size | 44,970 |
| 3 Asset quality | (11,307) |
| 4 Model updates | (154) |
| 5 Methodology and policy | (14,555) |
| 7 Foreign exchange movements | 10,425 |
| 9 RWA as at 31 Dec 2017 | 1,694,005 |

Credit risk RWAs under the IRB approach increased by HK\$29,379m in the fourth quarter of the year, including an increase of HK\$10,425m due to foreign currency translation differences. The underlying increase was principally due to:

- an increase in asset size of HK\$44,970m, mainly as a result of corporate book growth in Hong Kong and mainland China; partly offset by
- a decrease in RWAs related to changes in methodology and policy of HK\$14,555m, mainly as a result of RWA initiatives.

- a decrease in RWAs due to improvements in asset quality of HK\$11,307m as a result of improved credit ratings in the wholesale portfolios.

RWA flow statement for market risk

The following table shows movements in RWAs for market risk determined under the internal models method ('IMM') approach. The analysis is prepared in accordance with the key drivers as specified in the standard template.

Table 16: MR2 – RWA flow statement of market risk exposures under IMM approach

| | a | b | c | e | f |
|--------------------------------|---------------|--------------------------|----------------|----------------|--------------------|
| | VaR HK\$m | Stressed VaR HK\$m | IRC HK\$m | Other HK\$m | Total RWA HK\$m |
| 1 RWA as at 30 Sep 2017 | 16,188 | 37,989 | 48,544 | 22,690 | 125,411 |
| 2 Movement in risk levels | (273) | (1,741) | (6,574) | (1,522) | (10,110) |
| 3 Model updates/changes | (234) | (649) | (1,915) | – | (2,798) |
| 6 Foreign exchange movements | 10 | 22 | 29 | 13 | 74 |
| 8 RWA as at 31 Dec 2017 | 15,691 | 35,621 | 40,084 | 21,181 | 112,577 |

Market risk RWAs arising from internal models decreased by HK\$12,834m during the fourth quarter mainly from movements in risk levels and model updates.

Credit risk

Credit risk management

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 the group's Risk functions that support the group's Chief Risk Officer in overseeing credit risks. Their major duties comprise undertaking independent review 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 system 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 the group's Risk function; 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 Finance on stress testing.

The credit responsibilities of the group's Risk function are described on page 17 of the group's Annual Report and Accounts 2017.

Within the group, the credit risk functions comprise a network of credit risk management offices reporting within their respective local wholesale and retail credit risk functions, which in turn report to their relevant risk functions at group level. 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 exposures to credit risk arise 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 'Credit risk under internal ratings-based approach' on pages 26 to 29.

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. 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 'Model performance' on page 36.

Credit risk models governance

Model governance is under the general oversight of group Wholesale Model Oversight Committee ('WMOC') and Retail Banking and Wealth Management Risk MOC ('RMOC') and is described more fully on page 26.

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.

Credit quality of assets

Credit quality of exposures

Tables 17 to 21 analyse credit exposures between defaulted and non-defaulted, changes in defaulted loans and debt securities, exposures by geographical locations, industries and residual

maturity on a regulatory consolidation basis. The exposures covered in the tables include loans, debt securities and off-balance sheet exposures. Loans are generally referred to as any on-balance sheet exposures included as credit risk for non-securitisation exposures, covering exposures to customers, banks, sovereigns, etc. Cash items and non-financial assets are excluded.

Table 17: CR1 – Credit quality of exposures

| | a | b | c | d |
|-------------------------------|---------------------------|-------------------------|------------------------|------------------|
| | Gross carrying amounts of | | | |
| | Defaulted exposures | Non-defaulted exposures | Allowances/impairments | Net values |
| | HK\$m | HK\$m | HK\$m | HK\$m |
| 1 Loans | 18,321 | 3,955,456 | 13,045 | 3,960,732 |
| 2 Debt securities | – | 1,354,356 | – | 1,354,356 |
| 3 Off-balance sheet exposures | 1,607 | 2,825,650 | 54 | 2,827,203 |
| 4 Total at 31 Dec 2017 | 19,928 | 8,135,462 | 13,099 | 8,142,291 |

Table 18: CR2 – Changes in defaulted loans and debt securities

| | a |
|---|---------------|
| | Footnote |
| | HK\$m |
| 1 Defaulted loans and debt securities at 30 Jun 2017 | 21,256 |
| 2 Loans and debt securities that have defaulted since 30 Jun 2017 | 5,063 |
| 3 Returned to non-defaulted status | (970) |
| 4 Amounts written off | (2,870) |
| 5 Other changes | 1 (4,158) |
| 6 Defaulted loans and debt securities at 31 Dec 2017 | 18,321 |

1 Other changes included repayment and foreign exchange movements.

Table 19: CRB1 – Exposures by geographical location

| | Gross carrying amounts at |
|----------------|---------------------------|
| | 31 Dec 2017 |
| | Footnote |
| | HK\$m |
| Hong Kong | 4,715,152 |
| Mainland China | 923,663 |
| Others | 1 2,516,575 |
| Total | 8,155,390 |

1 Any segment which constitutes less than 10% of total gross carrying amounts is disclosed on an aggregated basis under the category 'others'.

Table 20: CRB2 – Exposures by industry

| | Gross carrying amounts at |
|-------------------------------------|---------------------------|
| | 31 Dec 2017 |
| | Footnote |
| | HK\$m |
| Property development and investment | 891,844 |
| Financial concerns | 1,585,710 |
| Individuals | 1,951,892 |
| Others | 1 3,725,944 |
| Total | 8,155,390 |

1 Any segment which constitutes less than 10% of total gross carrying amounts is disclosed on an aggregated basis under the category 'others'.

Table 21: CRB3 – Exposures by residual maturity

| | Gross carrying amounts at |
|-----------------------|---------------------------|
| | 31 Dec 2017 |
| | Footnote |
| | HK\$m |
| Less than 1 year | 4,019,989 |
| Between 1 and 5 years | 2,228,159 |
| More than 5 years | 1,819,562 |
| Undated | 87,680 |
| Total | 8,155,390 |

Impaired exposures, past-due but not impaired exposures and renegotiated exposures

Tables 22 to 25 analyse impaired exposures, impairment allowances, past-due but not impaired exposures and renegotiated exposures on a regulatory consolidation basis.

Our approach for determining impairment allowances is explained in Note 1.2(d) of the group's *Annual Report and Accounts 2017*, and the group's definitions for accounting purposes of 'impaired' and 'renegotiated' are set out on page 21. The accounting

definition of impaired and the regulatory definition of default are generally aligned.

For individually assessed customer loans and advances, where the industry sector comprises not less than 10% of the group's total gross loans and advances to customers, the analysis of gross impaired loans and advances and allowances by major industry sectors based on categories and definitions used by the HSBC Group is as follows:

Table 22: CRB4 – Impaired exposures and related allowances and write-offs by industry

| | Footnote | Total gross loans and advances to customers ¹ | Gross impaired advances | Individually assessed allowances | Collectively assessed allowances | Net new impairment allowances | Advances written-off in a year |
|--|----------|--|-------------------------|----------------------------------|----------------------------------|-------------------------------|--------------------------------|
| | | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m |
| At 31 Dec 2017 | | | | | | | |
| Residential mortgages | | 855,788 | 2,205 | (190) | (51) | 22 | 48 |
| Commercial, industrial and international trade | | 911,376 | 8,642 | (5,379) | (2,295) | 1,910 | 1,951 |
| Other property-related lending | | 360,757 | 576 | (210) | (132) | 160 | 74 |
| Others | 2 | 1,209,349 | 6,156 | (2,450) | (2,338) | 3,132 | 2,922 |
| Total | | 3,337,270 | 17,579 | (8,229) | (4,816) | 5,224 | 4,995 |

1 The amounts shown in column 'Total gross loans and advances to customers' represent the loans and advances to customers gross of provisions in the financial statements under regulatory consolidation scope.

2 Any segment which constitutes less than 10% of total gross loans and advances to customers is disclosed on an aggregated basis under the category 'others'.

Impairment is assessed collectively to cover losses that have been incurred but have not yet been identified on loans subject to

individual assessment or for homogeneous groups of loans that are not considered individually significant.

Table 23: CRB5 – Impaired exposures and related allowances and write-offs by geographical location

| | Footnote | Total gross loans and advances to customers ¹ | Gross impaired advances | Individually assessed allowances | Collectively assessed allowances | Net new impairment allowances | Advances written-off in a year |
|-----------------------|----------|--|-------------------------|----------------------------------|----------------------------------|-------------------------------|--------------------------------|
| | | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m |
| At 31 Dec 2017 | | | | | | | |
| Hong Kong | | 2,103,410 | 6,957 | (3,429) | (2,240) | 3,292 | 2,458 |
| Mainland China | | 319,826 | 1,720 | (1,181) | (676) | 576 | 635 |
| Others | 2 | 914,034 | 8,902 | (3,619) | (1,900) | 1,356 | 1,902 |
| Total | | 3,337,270 | 17,579 | (8,229) | (4,816) | 5,224 | 4,995 |

1 The amounts shown in column 'Total gross loans and advances to customers' represent the loans and advances to customers gross of provisions in the financial statements under regulatory consolidation scope.

2 Any segment which constitutes less than 10% of total gross loans and advances to customers is disclosed on an aggregated basis under the category 'others'.

Past-due but not impaired exposures are those loans where, although customers have failed to make payments in accordance with the contractual terms of their facilities, they have not met the impaired loan criteria.

The amounts in the following table reflect exposures designated as past due but not impaired. Examples of exposures designated as

past-due but not impaired include loans that have missed the most recent payment date but on which there is no evidence of impairment, and short-term trade facilities past due more than 90 days for technical reasons, such as delays in documentation, but where there is no concern over the creditworthiness of the counterparty.

Table 24: CRB6 – Ageing analysis of accounting past-due but not impaired exposures

| | Up to 29 days | 30-59 days | 60-89 days | 90-180 days | Over 180 days | Total |
|--|---------------|--------------|--------------|-------------|---------------|---------------|
| | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m |
| At 31 Dec 2017 | | | | | | |
| Loans and advances to customers held at amortised cost | 24,976 | 3,572 | 1,326 | 4 | – | 29,878 |
| – personal | 15,272 | 2,704 | 954 | – | – | 18,930 |
| – corporate and commercial | 7,498 | 868 | 372 | 4 | – | 8,742 |
| – non-bank financial institutions | 2,206 | – | – | – | – | 2,206 |
| Placings with and advances to banks held at amortised cost | – | – | – | – | – | – |
| Other assets | 74 | 28 | 27 | 18 | 103 | 250 |
| Total | 25,050 | 3,600 | 1,353 | 22 | 103 | 30,128 |

Table 25: CRB7 – Breakdown of renegotiated loans between impaired and not impaired

| | 31 Dec 2017 HK\$m |
|-------------------------------|-------------------------|
| Neither past-due nor impaired | 2,341 |
| Past-due but not impaired | 139 |
| Impaired | 4,713 |
| Total | 7,193 |

Loans and advances to customers

Tables 26 to 28 analyse loans and advances to customers by geographical locations, by industries and overdue and rescheduled loans and advances on an accounting consolidation basis which is different from the basis of regulatory consolidation.

As a result, the total gross loans and advances to customers in table 26 and 27 are different from that in tables 22 and 23.

The following analysis of loans and advances to customers by geographical areas is in accordance with the location of counterparties, after recognised risk transfer.

Table 26: Loans and advances to customers by geographical location

| | Hong Kong HK\$m | Rest of Asia-Pacific HK\$m | Other HK\$m | Total HK\$m |
|---------------------------------------|--------------------|----------------------------------|----------------|----------------|
| At 31 Dec 2017 | | | | |
| Gross loans and advances to customers | 1,699,956 | 1,337,057 | 305,012 | 3,342,025 |

Tables 27 and 28 analyse the group's loans and advances to customers based on the categories contained in the 'Quarterly Analysis of Loans and Advances and Provisions – (MA(BS)2A)'

return required to be submitted to the HKMA by branches of the Bank and by banking subsidiaries in Hong Kong.

Table 27: Loans and advances to customers by industry

| | Gross Advances at 31 Dec 2017 HK\$m | Collateral and other security at 31 Dec 2017 HK\$m |
|--|---|--|
| Industrial, commercial and financial | 917,405 | 436,813 |
| – property development | 137,886 | 46,962 |
| – property investment | 305,491 | 194,711 |
| – financial concerns | 86,044 | 58,693 |
| – stockbrokers | 10,633 | 1,542 |
| – wholesale and retail trade | 94,809 | 25,341 |
| – manufacturing | 53,318 | 12,098 |
| – transport and transport equipment | 51,649 | 30,166 |
| – recreational activities | 1,560 | 451 |
| – information technology | 33,840 | 1,837 |
| – others | 142,175 | 65,012 |
| Individuals | 669,679 | 571,725 |
| – advances for the purchase of flats under the Hong Kong Government's Home Ownership Scheme, Private Sector Participation Scheme and Tenants Purchase Scheme | 36,976 | 36,976 |
| – advances for the purchase of other residential properties | 485,927 | 485,927 |
| – credit card advances | 60,204 | – |
| – others | 86,572 | 48,822 |
| Gross loans and advances to customers for use in Hong Kong | 1,587,084 | 1,008,538 |
| Trade Finance | 184,892 | 32,361 |
| Gross loans and advances to customers for use outside Hong Kong | 1,570,049 | 569,535 |
| Gross loans and advances to customers | 3,342,025 | 1,610,434 |

The categories of advances, and the relevant definitions, used by the HKMA differ from those used for internal purposes by the HSBC Group as disclosed in Note 10 in the group's *Annual Report and Accounts 2017*.

The geographical information shown above has been classified by the location of the principal operations of the subsidiary and by the location of the branch responsible for advancing the funds.

Collateral includes any tangible security that has a determinable fair market value and is readily marketable. This includes (but is not limited to) cash and deposits, stocks and bonds, mortgages over properties and charges over other fixed assets, such as plant and equipment. Where collateral values are greater than gross advances, only the amount of collateral up to the gross advance has been included.

Table 28: Overdue and rescheduled loans and advances to customers

| | Hong Kong | | Rest of Asia-Pacific | | Total | |
|---|--------------|----------------|----------------------|----------------|---------------|----------------|
| | HK\$m | % ¹ | HK\$m | % ¹ | HK\$m | % ¹ |
| At 31 Dec 2017 | | | | | | |
| Gross amounts which have been overdue with respect to either principal or interest for: | | | | | | |
| – more than three months but not more than six months | 458 | – | 1,753 | 0.2 | 2,211 | 0.1 |
| – more than six months but not more than one year | 1,090 | 0.1 | 1,194 | 0.1 | 2,284 | 0.1 |
| – more than one year | 3,683 | 0.2 | 4,196 | 0.3 | 7,879 | 0.2 |
| Total | 5,231 | 0.3 | 7,143 | 0.6 | 12,374 | 0.4 |
| Individually assessed impairment allowances made in respect of amounts overdue | (2,420) | | (3,860) | | (6,280) | |
| Fair value of collateral held in respect of amounts overdue | 1,946 | | 2,848 | | 4,794 | |
| Rescheduled loans and advances to customers | 421 | – | 2,564 | 0.2 | 2,985 | 0.1 |

¹ Percentages shown are of gross loans and advances to customers.

Rescheduled loans and advances to customers are those loans and advances that have been restructured or renegotiated because of deterioration in the financial position of the borrower, or because of the inability of the borrower to meet the original repayment schedule. Rescheduled loans and advances to customers are stated net of any loans and advances that have subsequently become overdue for more than three months and which are included in 'Overdue loans and advances to customers'.

Off-balance sheet exposures other than derivative transactions

The following table gives the nominal contract amounts and risk-weighted amounts of contingent liabilities and commitments. The

information is consistent with that in the 'Capital Adequacy Ratio' return submitted to the HKMA by the group.

The return is prepared on a consolidated basis as specified by the HKMA under the requirements of section 3C(1) of the BCR.

For accounting purposes, acceptances and endorsements are recognised on the balance sheet in 'Other assets' in accordance with HKAS 39 'Financial Instruments: Recognition and Measurement'. For the purpose of the BCR, acceptances and endorsements are included in the capital adequacy calculation as if they were contingencies.

Table 29: Off-balance sheet exposures other than derivative transactions

| | 31 Dec 2017 HK\$m |
|---|-------------------------|
| Contract amounts | |
| Direct credit substitutes | 62,760 |
| Transaction-related contingencies | 191,734 |
| Trade-related contingencies | 100,241 |
| Forward asset purchases | 6,312 |
| Forward deposits placed | 447 |
| Commitments that are unconditionally cancellable without prior notice | 2,135,488 |
| Commitments which have an original maturity of not more than one year | 76,692 |
| Commitments which have an original maturity of more than one year | 254,374 |
| Total | 2,828,048 |
| Risk-weighted amounts | 322,676 |

Credit risk under internal ratings-based approach

The internal ratings system and its risk components

Model governance

Model governance is under the general oversight of group WMOC and RMOC. The group WMOC and RMOC are supported by credit risk, businesses, Finance and Independent Model Review team with comparable terms of reference where required.

The group WMOC and RMOC meet regularly and report to both group RMM as well as Global MOC. The Global MOC is chaired by the Global Risk function, and its membership is drawn from Risk, Finance and 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 region, and to oversee the governance of our risk rating models, their consistency, 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.

The MOCs are responsible for model risk management. The approval of models/model changes is the responsibility of individual approvers. Model Owner/Technical Expert ensures that the model is technically sound, has been developed robustly and follows the relevant modelling policies, standards, internal and regulatory requirements. Whereas the Model User/Steward for the function ensures that the model makes sense to the business or function where it will be used and that the model satisfies the requirements from the business, function and regulators.

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

Internal Audit, or a comparable independent model review unit, conducts regular reviews of the risk rating model application by the global businesses.

Nature of exposures within each IRB class

The group uses the advanced IRB approach for the majority of its business under the approval granted by the HKMA. This includes the following major classes of non-securitisation exposures:

- Corporate exposures, including exposures to global and local large corporates, middle-market corporates, non-bank financial institutions and specialised lending.
- Sovereign exposures, including exposures to central governments, central monetary institutions, multilateral development banks and relevant international organisations.
- Bank exposures, including exposures to banks and regulated securities firms.
- Retail exposures, including residential mortgages, qualifying revolving retail exposures and other retail exposures.
- Equity exposures.
- Other exposures, including cash items and other assets.

At 31 December 2017, the portions of exposure at default ('EAD') and RWAs within the group covered by IRB approach are summarised in the following table. The remaining portions not covered by IRB approach are under STC approach.

Table 30: Percentage of total EAD and RWAs covered by IRB approach

| Portfolio | Percentage of total EAD under IRB approach | Percentage of total RWA under IRB approach |
|--|--|--|
| Corporate exposures (includes Small-and-medium sized corporates and other corporates and specialised lending) | 94% | 90% |
| Sovereign exposures | 99% | 100% |
| Bank exposures (including securities firms) | 100% | 99% |
| Residential mortgage loans | 87% | 71% |
| Other retail exposures | 79% | 50% |
| Equity exposures | 100% | 100% |
| Other exposures | 100% | 100% |

The above table covers credit risk for non-securitisation exposures excluding counterparty credit risk. For counterparty credit risk, the percentage of total RWAs covered by models is 90% for corporate exposures and 100% for both bank and sovereign exposures.

Measurement and monitoring – risk rating systems

Exposure to credit risk arises from a very wide range of customers and product types, and the risk rating systems in place to measure and monitor these risks are correspondingly diverse.

Credit risk exposures are generally measured and managed in portfolios of either distinct customer types or product categories. Risk rating systems for the former are designed to assess the default risk of, and loss severity associated with, customers who are typically managed as individual relationships; these rating systems tend to have a higher subjective content. Risk rating systems for the latter are generally more analytical, applying techniques such as behavioural analysis across product portfolios comprising large numbers of homogeneous transactions.

A fundamental principle of the group's policy and approach is that analytical risk rating systems and scorecards are decision tools facilitating management, serving ultimately judgmental decisions for which individual approvers are accountable. In the case of automated decision-making processes, accountability rests with those responsible for the parameters built into those processes/systems and the controls surrounding their use. For distinct customers, the credit process requires at least annual review of facility limits granted. Review may be more frequent, as required by circumstances.

Group standards govern the process through which risk rating systems are initially developed, judged fit for purpose, approved and implemented; the conditions under which individual approvers can override analytical risk model outcomes; and the process of model performance monitoring and reporting. There is emphasis on an effective dialogue between business lines and risk management, appropriate independence of decision takers, and a

good understanding and robust reflection on the part of senior management.

Like other facets of risk management, analytical risk rating systems are not static and are subject to review and modification in the light of the changing environment and the greater availability and quality of data. Structured processes and metrics are in place to capture relevant data and feed it into continuous model improvement.

Application of IRB parameters

The group's credit risk rating framework incorporates the probability of default ('PD') of a borrower and the loss severity, expressed in terms of EAD and loss given default ('LGD'). These measures are used to calculate both expected loss ('EL') and capital requirements, subject to any floors required by the HKMA. They are also used in conjunction with other inputs to inform rating assessments for the purpose of credit approval and many other risk management decisions. The narrative explanations that follow relate to the IRB advanced approaches, that is, IRB advanced for distinct customers and retail IRB for the portfolio-managed retail business.

Wholesale business

PD for wholesale customer segments (Central Governments and Central Banks (Sovereigns), Institutions, Corporates) is estimated using a Customer Risk Rating ('CRR') scale of 23 grades, of which 21 are non-default grades representing varying degrees of strength of financial condition and two are default grades. A score generated by a model for the individual borrower type is mapped to the corresponding CRR. The process through which this, or a judgmentally amended CRR, is then recommended to and reviewed by a credit approver takes into account all additional information relevant to the risk rating determination, including external ratings where available. The approved CRR is mapped to a PD value range of which the 'mid-point' is used in the regulatory capital calculation. PD models are developed where the risk profile of corporate borrowers is specific to a country and sector. For illustration purposes, the CRR is also mapped to external ratings of Standard and Poor's ('S&P'), though we also benchmark against other agencies' ratings in an equivalent manner.

LGD and EAD estimation for the wholesale business is subject to a Group framework of basic principles. EAD is estimated to a 12-month horizon and broadly represents the current exposure, plus an estimate for future increases in exposure, taking into account such factors as available but undrawn facilities and the crystallisation of contingent exposures, post-default. LGD focuses on the facility and collateral structure, involving factors like facility priority/seniority, the type and value of collateral, type of client and variances in experience, and is expressed as a percentage of EAD.

The group uses the Supervisory Slotting Criteria approach in rating its specialised lending exposures. Under this approach, ratings are determined by considering both the borrower and the transaction risk characteristics.

Retail Business

The wide range of application and behavioral information used in the management of retail portfolios has been supplemented with models to derive the measures of PD, EAD and LGD required for Basel framework. For management information and reporting purposes, retail portfolios are segmented according to location and analytically derived PD bands, in nine composite PD grades, facilitating comparability across the group's retail customer segments, business lines and product types.

PD models are developed using statistical estimation generally based on a minimum of five years of historical data. The modelling approach is typically hybrid.

EAD models are also generally developed using at least five years of historical observations and typically adopt one of two approaches:

- Closed-end products without the facility for additional drawdowns, EAD is estimated as the outstanding balance of accounts at the time of observation; or

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- EAD for products with the facility for additional drawdowns is estimated as the outstanding balance of accounts at the time of observation plus a credit conversion factor applied to the undrawn portion of the facility.
- LGD estimates have more variation, particularly in respect of the time period that is used to quantify economic downturn assumptions.

Table 31: Wholesale IRB credit risk models

| Regulatory asset classes measured | Component | Number of significant models | Model description and methodology | Number of years loss data | Regulatory Floors |
|--|-----------|------------------------------|--|---------------------------|---|
| Sovereign/Multilateral development banks | PD | 1 | A shadow rating approach that includes macroeconomic and political factors, constrained with expert judgement. | >10 | No |
| | LGD | 1 | An unsecured model built on assessment of structural factors that influence the country's long-term economic performance. For unsecured LGD, a floor of 45% is applied. | 8 | 45% ¹ |
| | EAD | 1 | A cross-classification model that uses both internal data and expert judgement, as well as information on similar exposure types from other asset classes. | 8 | EAD must be at least equal to the current utilisation of the balance at account level |
| Bank/Securities firms | PD | 2 | Statistical models that combine quantitative analysis on financial information with expert inputs and macroeconomic factors. | 10 | 0.03% |
| | LGD | 1 | A quantitative model that produces both downturn and expected LGD. Several securities types are included in the model to recognise collateral in the LGD calculation. For unsecured LGD, a floor of 45% is applied. | 10 | 45% ² |
| | EAD | 1 | A quantitative model that assigns CCF taking into account product types and committed/uncommitted indicator to calculate EAD using current utilisation and available headroom. | 10 | EAD must be at least equal to the current utilisation of the balance at account level |
| Other Corporate/Small-and medium-sized corporates ³ | PD | 13 | The corporate models use financial information, macroeconomic information and market-driven data, and is complemented by a qualitative assessment. The NBFIs models which are the predominantly statistical models that combine quantitative analysis on financial information with expert inputs. | >= 10 | 0.03% |
| | LGD | 1 | Regional statistical model covering all corporates, developed using historical loss/recovery data and various data inputs, including collateral information, facility seniority and customer geography. | >10 | No |
| | EAD | 1 | Regional statistical model covering all corporates, developed using historical utilisation information and various data inputs, including product type and nature of commitment. | >10 | EAD must be at least equal to the current utilisation of the balance at account level |

¹ LGD floor exempted to the People's Republic of China and Hong Kong Special Administrative Region.

² LGD floor exempted to intra-group entities.

³ Excludes specialised lending exposures subject to supervisory slotting approach.

Table 32: Material retail IRB credit risk models

| Retail Portfolio | Component | Number of significant models | Model description and methodology | Number of years loss data | Regulatory Floors |
|---|-----------|------------------------------|--|---------------------------|---|
| Hong Kong – HSBC Residential Mortgages (Residential mortgage exposures) | PD | 1 | Statistical model built on internal behavioural data and calibrated to a long-run default rate by segment. | >10 | 0.03% |
| | LGD | 3 | 2 statistical models and 1 historical average model based on estimate of loss incurred over a recovery period derived from historical data with downturn adjustment. | >10 | LGD floor of 10% at portfolio level |
| | EAD | 1 | Rule-based calculation based on current balance which continues to be a conservative estimate for EAD. | >10 | EAD must at least be equal to current balance |
| Hong Kong – HSBC Credit Cards (Qualifying revolving retail exposures and Other retail exposures to individuals) | PD | 1 | Statistical model built on internal behavioural data and calibrated to a long-run default rate by segment. | >10 | 0.03% |
| | LGD | 1 | Statistical model based on forecasting the amount of expected losses. Downturn LGD derived using data from the period with highest observed default rate. | >10 | |
| | EAD | 1 | Statistical model which derives a credit limit utilisation which is used to determine the EAD. | >10 | EAD must at least be equal to current balance |
| Hong Kong – HSBC Personal Loans (Qualifying revolving retail exposures and Other retail exposures to individuals) | PD | 1 | Statistical model built on internal behavioural data and calibrated to a long-run default rate. | > 10 | PD floor of 0.03% |
| | LGD | 1 | Statistical model based on forecasting the amount of expected future recoveries. Downturn LGD derived using data from the period with highest observed default rate. | > 10 | |
| | EAD | 1 | Statistical model which derives a credit conversion factor to determine the proportion of undrawn limit to be added to the balance at observation. | > 10 | EAD must at least be equal to current balance |
| Hong Kong – HSBC Overdraft (Qualifying revolving retail exposures and Other retail exposures to individuals) | PD | 1 | Statistical model built on internal behavioural data and calibrated to a long-run default rate by segment. | > 10 | PD floor of 0.03% |
| | LGD | 1 | Statistical model based on forecasting the amount of expected losses. Downturn LGD derived using data from the period with highest observed default rate. | > 10 | |
| | EAD | 1 | Statistical model which derives a credit limit utilisation which is used to determine the EAD. | > 10 | EAD must at least be equal to current balance |
| Hong Kong – Hang Seng Personal Residential Mortgages (Residential mortgage exposures) | PD | 1 | Statistical model built on internal behavioural data and calibrated to a long-run default rate by segment. | >10 | 0.03% |
| | LGD | 3 | 2 statistical models and 1 historical average model based on estimate of loss incurred over a recovery period by different product types derived from historical data with downturn LGD based on the worst observed default rate. | >10 | LGD floor of 10% at portfolio level |
| | EAD | 1 | Rule-based calculation based on current balance which continues to be a conservative estimate for EAD. | >10 | EAD must at least be equal to current balance |
| Hong Kong – Hang Seng Credit Cards (Qualifying revolving retail exposures and Other retail exposures to individuals) | PD | 1 | Statistical model built on internal behavioural data and calibrated to a long-run default rate by segment. | >10 | 0.03% |
| | LGD | 1 | Statistical model based on forecasting the amount of expected future losses with downturn adjustment. | >10 | |
| | EAD | 1 | Statistical model which derives a credit limit utilisation by segment which is used to determine the EAD. | >10 | EAD must at least be equal to current balance |
| Hong Kong – Hang Seng Personal Loans (Qualifying revolving retail exposures and Other retail exposures to individuals) | PD | 1 | Statistical model built on internal behavioural data and calibrated to a long-run default rate by segment. | > 10 | PD floor of 0.03% |
| | LGD | 1 | Statistical model based on forecasting the amount of expected future losses with downturn adjustment. | > 10 | |
| | EAD | 1 | EAD derived by different product types. Statistical model which derives a credit conversion factor to determine the proportion of undrawn limit to be added to the balance at observation for revolving nature while rule based calculation based on current balance for non-revolving nature. | > 10 | EAD must at least be equal to current balance |
| Other Asia Pacific countries – Residential Mortgage (Residential mortgage exposures) | PD | 1 | Statistical model built on internal behavioural data and calibrated to a long-run default rate by segment. | > 10 | PD floor of 0.03% |
| | LGD | 1 | Statistical model or historical average model based on estimate of loss incurred over a recovery period derived from historical data with downturn adjustment. | > 10 | LGD floor of 10% at portfolio level |
| | EAD | 1 | Rule-based calculation based on current balance which continues to be a conservative estimate for EAD or statistical model which derives a credit limit utilisation which is used to determine the EAD. | > 10 | EAD must at least be equal to current balance |

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Table 33.1: CR6 – Credit risk exposures by portfolio and PD range – for IRB approach (Wholesale)

| | a | b | c | d | e | f | g | h | i | j | k | l |
|--|---|--|------------------|------------------------------------|-----------------|--------------------|------------------|---------------------------|----------------|------------------|---------------|---------------------|
| PD scale | Original on-balance sheet gross exposure HK\$m | Off-balance sheet exposures pre-CCF HK\$m | Average CCF % | EAD post-CRM and post-CCF HK\$m | Average PD % | Number of obligors | Average LGD % | Average maturity years | RWA HK\$m | RWA density % | EL HK\$m | Provisions HK\$m |
| Portfolio (i) – Sovereign | | | | | | | | | | | | |
| 0.00 to < 0.15 | 1,493,356 | 710 | 52.1 | 1,493,726 | 0.02 | 524 | 34.8 | 1.39 | 84,884 | 6 | 114 | |
| 0.15 to < 0.25 | – | 34 | 50.0 | 17 | 0.22 | 15 | 45.0 | 5.00 | 12 | 70 | – | |
| 0.25 to < 0.50 | 4,368 | 40 | 30.0 | 4,380 | 0.37 | 17 | 45.0 | 1.04 | 1,949 | 44 | 7 | |
| 0.50 to < 0.75 | 5,703 | – | – | 5,703 | 0.63 | 6 | 45.0 | 1.15 | 3,466 | 61 | 16 | |
| 0.75 to < 2.50 | 16,464 | 494 | 27.1 | 16,598 | 0.90 | 23 | 45.0 | 1.37 | 12,329 | 74 | 67 | |
| 2.50 to < 10.00 | 350 | – | – | 350 | 4.20 | 5 | 45.0 | 5.00 | 602 | 172 | 7 | |
| 10.00 to < 100.00 | – | – | – | – | – | – | – | – | – | – | – | |
| 100.00 (Default) | – | – | – | – | – | – | – | – | – | – | – | |
| Sub-total at 31 Dec 2017 | 1,520,241 | 1,278 | 41.7 | 1,520,774 | 0.03 | 590 | 35.0 | 1.39 | 103,242 | 7 | 211 | 1,450 |
| Portfolio (ii) – Bank | | | | | | | | | | | | |
| 0.00 to < 0.15 | 435,685 | 37,504 | 35.9 | 449,143 | 0.05 | 12,232 | 41.1 | 1.22 | 60,095 | 13 | 87 | |
| 0.15 to < 0.25 | 16,752 | 4,619 | 41.7 | 18,680 | 0.22 | 1,186 | 37.6 | 0.96 | 5,937 | 32 | 15 | |
| 0.25 to < 0.50 | 37,033 | 2,130 | 37.2 | 37,826 | 0.37 | 579 | 38.0 | 1.04 | 17,365 | 46 | 53 | |
| 0.50 to < 0.75 | 6,347 | 777 | 14.0 | 6,457 | 0.63 | 382 | 48.0 | 0.58 | 4,447 | 69 | 20 | |
| 0.75 to < 2.50 | 6,453 | 1,087 | 35.3 | 6,837 | 1.39 | 547 | 44.2 | 0.70 | 5,689 | 83 | 41 | |
| 2.50 to < 10.00 | 1,312 | 1,340 | 27.7 | 1,683 | 3.63 | 157 | 52.8 | 0.49 | 2,242 | 133 | 33 | |
| 10.00 to < 100.00 | 14 | 2 | 20.0 | 14 | 12.57 | 10 | 60.1 | 0.51 | 36 | 249 | 1 | |
| 100.00 (Default) | 203 | – | – | 203 | 100.00 | 2 | 61.1 | 0.55 | – | – | 123 | |
| Sub-total at 31 Dec 2017 | 503,799 | 47,459 | 36.0 | 520,843 | 0.15 | 15,095 | 40.9 | 1.18 | 95,811 | 18 | 373 | 1,600 |
| Portfolio (iii) – Corporate – small and-medium sized corporates | | | | | | | | | | | | |
| 0.00 to < 0.15 | 19,253 | 17,189 | 34.6 | 25,184 | 0.10 | 933 | 30.1 | 2.58 | 4,123 | 16 | 8 | |
| 0.15 to < 0.25 | 22,351 | 14,570 | 32.0 | 27,007 | 0.22 | 1,036 | 26.7 | 2.47 | 6,304 | 23 | 16 | |
| 0.25 to < 0.50 | 49,431 | 14,608 | 29.4 | 53,730 | 0.37 | 1,471 | 28.6 | 2.62 | 17,356 | 32 | 57 | |
| 0.50 to < 0.75 | 39,528 | 18,494 | 28.9 | 44,880 | 0.63 | 1,460 | 30.2 | 2.43 | 18,571 | 41 | 85 | |
| 0.75 to < 2.50 | 106,106 | 44,726 | 26.2 | 117,822 | 1.49 | 4,930 | 28.8 | 2.09 | 61,146 | 52 | 510 | |
| 2.50 to < 10.00 | 13,444 | 10,368 | 21.3 | 15,656 | 3.82 | 965 | 35.0 | 1.45 | 12,537 | 80 | 215 | |
| 10.00 to < 100.00 | 925 | 567 | 18.3 | 1,029 | 21.21 | 60 | 46.9 | 0.87 | 1,804 | 175 | 110 | |
| 100.00 (Default) | 1,075 | 193 | 79.0 | 1,228 | 100.00 | 63 | 55.1 | 1.74 | – | – | 677 | |
| Sub-total at 31 Dec 2017 | 252,113 | 120,715 | 28.5 | 286,536 | 1.52 | 10,918 | 29.4 | 2.28 | 121,841 | 43 | 1,678 | 3,877 |
| Portfolio (iv) – Corporate – other | | | | | | | | | | | | |
| 0.00 to < 0.15 | 560,992 | 584,832 | 33.3 | 755,467 | 0.08 | 21,433 | 46.5 | 2.02 | 181,987 | 24 | 298 | |
| 0.15 to < 0.25 | 176,942 | 217,478 | 31.4 | 245,225 | 0.22 | 4,710 | 43.6 | 1.77 | 93,195 | 38 | 235 | |
| 0.25 to < 0.50 | 162,374 | 189,416 | 30.8 | 220,139 | 0.37 | 3,998 | 43.8 | 1.61 | 107,873 | 49 | 357 | |
| 0.50 to < 0.75 | 144,131 | 140,727 | 27.5 | 182,799 | 0.63 | 3,469 | 43.8 | 1.67 | 118,380 | 65 | 504 | |
| 0.75 to < 2.50 | 359,700 | 322,498 | 24.3 | 437,250 | 1.40 | 10,641 | 41.2 | 1.47 | 349,326 | 80 | 2,493 | |
| 2.50 to < 10.00 | 67,248 | 85,063 | 27.2 | 90,356 | 4.14 | 2,408 | 45.9 | 1.31 | 115,867 | 128 | 1,726 | |
| 10.00 to < 100.00 | 3,067 | 2,811 | 33.1 | 3,998 | 14.25 | 163 | 51.0 | 1.02 | 8,666 | 217 | 286 | |
| 100.00 (Default) | 10,828 | 1,272 | 24.1 | 11,135 | 100.00 | 495 | 49.6 | 1.54 | – | – | 5,527 | |
| Sub-total at 31 Dec 2017 | 1,485,282 | 1,544,097 | 30.0 | 1,946,369 | 1.27 | 47,317 | 44.4 | 1.75 | 975,294 | 50 | 11,426 | 26,266 |

Table 33.2: CR6 – Credit risk exposures by portfolio and PD range – for IRB approach (Retail)

| | a | b | c | d | e | f | g | h | i | j | k | l |
|---|--|-------------------------------------|-------------|---------------------------|-------------|--------------------|--------------|------------------|----------------|-------------|--------------|--------------|
| | Original on-balance sheet gross exposure | Off-balance sheet exposures pre-CCF | Average CCF | EAD post-CRM and post-CCF | Average PD | Number of obligors | Average LGD | Average maturity | RWA | RWA density | EL | Provisions |
| PD scale | HK\$m | HK\$m | % | HK\$m | % | | % | years | HK\$m | % | HK\$m | HK\$m |
| Portfolio (v) – Retail – qualifying revolving retail exposures | | | | | | | | | | | | |
| 0.00 to < 0.15 | 18,346 | 272,931 | 43.1 | 136,084 | 0.07 | 3,274,276 | 102.2 | – | 5,935 | 4 | 94 | |
| 0.15 to < 0.25 | 4,016 | 53,286 | 43.7 | 27,277 | 0.20 | 649,046 | 101.5 | – | 2,958 | 11 | 56 | |
| 0.25 to < 0.50 | 9,505 | 54,394 | 39.7 | 31,079 | 0.37 | 635,005 | 99.1 | – | 5,370 | 17 | 113 | |
| 0.50 to < 0.75 | 8,733 | 20,364 | 48.4 | 18,593 | 0.59 | 261,966 | 97.5 | – | 4,617 | 25 | 107 | |
| 0.75 to < 2.50 | 19,344 | 36,649 | 40.9 | 34,319 | 1.39 | 500,419 | 96.1 | – | 15,961 | 47 | 458 | |
| 2.50 to < 10.00 | 10,564 | 8,163 | 49.6 | 14,615 | 4.91 | 176,488 | 95.7 | – | 16,479 | 113 | 687 | |
| 10.00 to < 100.00 | 3,229 | 1,673 | 49.7 | 4,060 | 25.99 | 55,332 | 95.2 | – | 8,710 | 215 | 990 | |
| 100.00 (Default) | 65 | 5 | 9.6 | 65 | 100.00 | 1,099 | 92.3 | – | – | – | 60 | |
| Sub-total at 31 Dec 2017 | 73,802 | 447,465 | 43.0 | 266,092 | 1.01 | 5,553,631 | 100.2 | – | 60,030 | 23 | 2,565 | 1,498 |
| Portfolio (vi) – Retail – Residential mortgage exposures | | | | | | | | | | | | |
| 0.00 to < 0.15 | 335,148 | 27,876 | 63.3 | 352,782 | 0.07 | 176,081 | 10.4 | – | 47,061 | 13 | 25 | |
| 0.15 to < 0.25 | 109,223 | 3,473 | 56.2 | 111,175 | 0.20 | 45,169 | 10.5 | – | 12,911 | 12 | 23 | |
| 0.25 to < 0.50 | 110,555 | 1,752 | 62.4 | 111,648 | 0.36 | 57,320 | 10.2 | – | 15,227 | 14 | 40 | |
| 0.50 to < 0.75 | 60,654 | 408 | 100.6 | 61,065 | 0.64 | 29,368 | 17.0 | – | 12,847 | 21 | 70 | |
| 0.75 to < 2.50 | 108,562 | 2,240 | 86.1 | 110,492 | 1.32 | 57,644 | 10.4 | – | 19,517 | 18 | 152 | |
| 2.50 to < 10.00 | 32,231 | 98 | 96.8 | 32,326 | 4.46 | 13,237 | 11.2 | – | 11,284 | 35 | 165 | |
| 10.00 to < 100.00 | 3,705 | 862 | 99.9 | 4,566 | 16.43 | 8,474 | 11.7 | – | 2,851 | 62 | 90 | |
| 100.00 (Default) | 2,410 | 20 | – | 2,410 | 100.00 | 2,886 | 12.4 | – | – | – | 298 | |
| Sub-total at 31 Dec 2017 | 762,488 | 36,729 | 65.3 | 786,464 | 0.93 | 390,179 | 11.0 | – | 121,698 | 15 | 863 | 2,040 |
| Portfolio (vii) – Retail – small business retail exposures | | | | | | | | | | | | |
| 0.00 to < 0.15 | 3,318 | – | – | 3,318 | 0.07 | 1,121 | 5.7 | – | 37 | 1 | – | |
| 0.15 to < 0.25 | 323 | – | – | 323 | 0.17 | 99 | 15.2 | – | 18 | 6 | – | |
| 0.25 to < 0.50 | 169 | – | – | 169 | 0.36 | 30 | 24.1 | – | 24 | 14 | – | |
| 0.50 to < 0.75 | 361 | – | – | 361 | 0.54 | 137 | 0.8 | – | 2 | 1 | – | |
| 0.75 to < 2.50 | 489 | – | – | 489 | 1.18 | 202 | 6.1 | – | 32 | 7 | – | |
| 2.50 to < 10.00 | 448 | – | – | 448 | 5.22 | 165 | 7.0 | – | 47 | 10 | 2 | |
| 10.00 to < 100.00 | – | – | – | – | – | – | – | – | – | – | – | |
| 100.00 (Default) | – | – | – | – | – | – | – | – | – | – | – | |
| Sub-total at 31 Dec 2017 | 5,108 | – | – | 5,108 | 0.68 | 1,754 | 6.7 | – | 160 | 3 | 2 | 1 |
| Portfolio (viii) – Other retail exposures to individuals | | | | | | | | | | | | |
| 0.00 to < 0.15 | 6,031 | 40,860 | 30.0 | 18,276 | 0.08 | 181,097 | 5.7 | – | 232 | 1 | 1 | |
| 0.15 to < 0.25 | 2,593 | 26,364 | 33.5 | 11,428 | 0.21 | 121,172 | 18.5 | – | 953 | 8 | 5 | |
| 0.25 to < 0.50 | 4,071 | 12,016 | 36.4 | 8,439 | 0.37 | 66,384 | 21.9 | – | 1,137 | 13 | 7 | |
| 0.50 to < 0.75 | 6,066 | 6,052 | 44.6 | 8,766 | 0.63 | 43,677 | 31.3 | – | 2,059 | 23 | 15 | |
| 0.75 to < 2.50 | 4,594 | 1,857 | 32.6 | 5,200 | 1.62 | 39,837 | 62.8 | – | 3,954 | 76 | 57 | |
| 2.50 to < 10.00 | 6,703 | 3,805 | 42.2 | 8,306 | 3.46 | 49,114 | 32.4 | – | 3,918 | 47 | 121 | |
| 10.00 to < 100.00 | 661 | 24 | 43.5 | 672 | 15.93 | 9,223 | 72.9 | – | 957 | 142 | 79 | |
| 100.00 (Default) | 84 | 25 | 21.5 | 89 | 100.00 | 1,610 | 104.1 | – | – | – | 93 | |
| Sub-total at 31 Dec 2017 | 30,803 | 91,003 | 33.4 | 61,176 | 1.14 | 512,114 | 23.3 | – | 13,210 | 22 | 378 | 207 |

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Table 33.3: CR6 – Credit risk exposures by portfolio and PD range – for IRB approach (Total)

| | a | b | c | d | e | f | g | h | i | j | k | l |
|---|--|-------------------------------------|-------------|---------------------------|-------------|--------------------|-------------|-------------------------------|------------------|-------------|---------------|---------------|
| | Original on-balance sheet gross exposure | Off-balance sheet exposures pre-CCF | Average CCF | EAD post-CRM and post-CCF | Average PD | Number of obligors | Average LGD | Average ¹ maturity | RWA | RWA density | EL | Provisions |
| | HK\$m | HK\$m | % | HK\$m | % | | % | years | HK\$m | % | HK\$m | HK\$m |
| Total (sum of all portfolios) at 31 Dec 2017 | 4,633,636 | 2,288,746 | 33.3 | 5,393,362 | 0.76 | 6,531,598 | 38.2 | 1.59 | 1,491,286 | 28 | 17,496 | 36,939 |

¹ The average maturity is relevant to wholesale portfolios only.

The average PD decreased from 0.86% to 0.76% in the second half of 2017, mainly due to improved credit ratings in the corporate portfolio.

Table 34: CR10 – Specialised Lending under supervisory slotting criteria approach – Other than HVCRE

| Supervisory Rating Grade | Remaining Maturity | a | b | c | d(i) | d(ii) | d(iv) | d(v) | e | f |
|-----------------------------|---------------------------------|----------------------------------|-----------------------------------|-----|---------------|------------|---------------|---------------|---------------|----------------------|
| | | On-balance sheet exposure amount | Off-balance sheet exposure amount | SRW | EAD amount | | | | RWA | Expected loss amount |
| | | HK\$m | HK\$m | | PF | OF | IPRE | Total | | |
| | | | | % | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m |
| Strong [^] | Less than 2.5 years | 18,787 | 2,061 | 50 | 2,752 | – | 16,742 | 19,494 | 9,747 | – |
| Strong | Less than 2.5 years | 5,002 | 3,509 | 70 | 2,419 | – | 3,924 | 6,343 | 4,440 | 25 |
| Strong [^] | Equal to or more than 2.5 years | 4,559 | 973 | 50 | 4,024 | – | 884 | 4,908 | 2,454 | – |
| Strong | Equal to or more than 2.5 years | 32,113 | 1,254 | 70 | 8,404 | – | 24,172 | 32,576 | 22,803 | 130 |
| Good [^] | Less than 2.5 years | 4,740 | 624 | 70 | 241 | 63 | 4,710 | 5,014 | 3,510 | 20 |
| Good | Less than 2.5 years | 4,514 | 685 | 90 | – | – | 4,720 | 4,720 | 4,247 | 38 |
| Good [^] | Equal to or more than 2.5 years | 3,660 | 232 | 70 | 3,762 | – | – | 3,762 | 2,633 | 15 |
| Good | Equal to or more than 2.5 years | 4,114 | 76 | 90 | – | 194 | 3,947 | 4,141 | 3,727 | 33 |
| Satisfactory | | 3,578 | 275 | 115 | 3,017 | – | 658 | 3,675 | 4,226 | 103 |
| Weak | | 324 | 70 | 250 | 349 | – | – | 349 | 872 | 28 |
| Default | | 172 | – | – | 172 | – | – | 172 | – | 86 |
| Total at 31 Dec 2017 | | 81,563 | 9,759 | | 25,140 | 257 | 59,757 | 85,154 | 58,659 | 478 |

[^] Use of preferential risk-weights.

Table 35: CR10 – Equity exposures under the simple risk-weight method

| | a | c | d | e |
|----------------------------------|----------------------------------|-----|--------------|---------------|
| | On-balance sheet exposure amount | SRW | EAD amount | RWA |
| | HK\$m | % | HK\$m | HK\$m |
| Categories | | | | |
| Publicly traded equity exposures | 77 | 300 | 77 | 230 |
| All other equity exposures | 6,623 | 400 | 6,623 | 26,493 |
| Total at 31 Dec 2017 | 6,700 | | 6,700 | 26,723 |

Credit risk under standardised approach

Use of external credit ratings under the standardised approach for credit risk

The standardised (credit risk) approach is applied where exposures do not qualify for use of an IRB approach and/or where an exemption from IRB has been granted. The standardised (credit risk) approach requires banks to use risk assessments prepared by External Credit Assessment Institutions ('ECAI') to determine the risk weightings applied to rated counterparties.

ECAI risk assessments are used within the group as part of the determination of risk weightings for the following classes of exposure:

- public sector entity exposures;

- bank or corporate exposures (those without an internal CRR); and
- collective investment scheme ('CIS') exposures.

The group uses external credit ratings from the following ECAIs:

- Fitch Ratings;
- Moody's Investors Service; and
- Standard & Poor's Ratings Services.

The group determines ECAI issuer ratings or ECAI issue-specific ratings in the banking book in a process consistent with Part 4 of the BCR.

All other exposure classes are assigned risk weightings as prescribed in the HKMA's BCR.

Table 36: CR5 – Credit risk exposures by asset classes and by risk weights – for STC approach

| | a | c | d | e | f | g | h | j |
|---|---------|--------|---------|--------|--------|---------|-------|--|
| Risk Weight | 0% | 20% | 35% | 50% | 75% | 100% | 150% | Total credit risk exposures amount (post CCF and post CRM) |
| Exposure class | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m |
| 1 Sovereign exposures | 16,387 | 27 | – | 46 | – | – | – | 16,460 |
| 2 PSE exposures | 85,639 | 20,658 | – | 10,551 | – | 3,771 | – | 120,619 |
| 2a Of which: domestic PSEs | – | 10,163 | – | – | – | – | – | 10,163 |
| 2b Of which: foreign PSEs | 85,639 | 10,495 | – | 10,551 | – | 3,771 | – | 110,456 |
| 4 Bank exposures | – | 908 | – | 855 | – | 99 | – | 1,862 |
| 5 Securities firm exposures | – | – | – | – | – | – | – | – |
| 6 Corporate exposures | – | 17,095 | – | 4,285 | – | 125,138 | 259 | 146,777 |
| 10 Regulatory retail exposures | – | – | – | – | 71,747 | – | – | 71,747 |
| 11 Residential mortgage loans | 17 | – | 100,157 | 6,377 | 6,891 | 5,941 | – | 119,383 |
| 12 Other exposures which are not past due exposures | – | – | – | – | – | 16,391 | – | 16,391 |
| 13 Past due exposures | 159 | 9 | – | 1 | – | 272 | 2,315 | 2,756 |
| 15 Total at 31 Dec 2017 | 102,202 | 38,697 | 100,157 | 22,115 | 78,638 | 151,612 | 2,574 | 495,995 |

Credit risk mitigation

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

Our general policy is to promote the use of credit risk mitigation, justified by commercial prudence and capital efficiency. Specifically, detailed policies cover the acceptability, structuring and terms with regard to the availability of credit risk mitigation; for example in the form of collateral security. These policies, together with the setting of suitable valuation parameters, are subject to regular review to ensure that they are supported by empirical evidence and continue to fulfil their intended purpose.

Collateral

The most common method of mitigating credit risk is to take collateral. In our retail residential and commercial real estate ('CRE') businesses, a mortgage over the property is usually taken to help secure claims. Physical collateral is also taken in various forms of specialised lending and leasing transactions where income from the physical assets that are financed is also the principal source of facility repayment. In the commercial and industrial sectors, charges are created over business assets such as premises, stock and debtors. Loans to private banking clients may be made against a pledge of eligible marketable securities, cash or real estate. Facilities to SMEs are commonly granted against guarantees given by their owners and/or directors.

For credit risk mitigants comprising immovable property, the key determinant of concentration is geographic. Use of immovable property mitigants for risk management purposes is predominantly in Asia.

Financial collateral

Charges over financial instruments, such as cash, debt securities and equities are taken in some instances. It must be ensured that these financial instruments are liquid, tangible and documentation and processes provide adequate protection and the ability to realise the value of security with certainty and within a reasonable timeframe.

In the non-trading book, we provide customers with working capital management products. Some of these products have loans and advances to customers, and customer accounts where we have rights of offset and comply with the regulatory requirements for on-balance sheet netting. Under on-balance sheet netting, the customer accounts are treated as cash collateral and the effects of this collateral are incorporated in our LGD estimates. For risk management purposes, the net amounts of such exposures are subject to limits and the relevant customer agreements are subject to review to ensure the legal right of offset remains appropriate.

Other forms of credit risk mitigation

Our Global Banking and Markets ('GB&M') business utilises credit risk mitigation to manage the credit risk of its portfolios, with the goal of reducing concentrations in individual names, sectors or portfolios. The techniques in use include credit default swap ('CDS') purchases, structured credit notes and securitisation structures. Buying credit protection creates credit exposure against the protection provider, which is monitored as part of the

overall credit exposure to them. Where applicable, the transaction is entered into directly with a central clearing house counterparty, otherwise our exposure to CDS protection providers is diversified among mainly banking counterparties with strong credit ratings. In our corporate lending, we also take guarantees from corporates and Export Credit Agencies ('ECA'). Corporates would normally provide guarantees as part of a parent/subsidiary or common parent relationship and would span a number of credit grades. The ECAs will normally be investment grade.

Policy and procedures

Policies and procedures govern the protection of our position from the outset of a customer relationship; for instance, in requiring standard terms and conditions or specifically agreed documentation permitting the offset of credit balances against debt obligations, and through controls over the integrity, current valuation and, if necessary, realisation of collateral security.

Valuing collateral

Valuation strategies are established to monitor collateral mitigants to ensure that they will continue to provide the anticipated secure secondary repayment source. Where collateral is subject to high volatility, valuation is frequent; where stable, less so. For residential mortgages, policy prescribes revaluation at intervals of up to three years, or more frequently as the need arises; for example, where the loan is in distress or where market conditions are subject to significant change. Residential property collateral values are determined through a combination of professional appraisals, house price indices or statistical analysis.

Local market conditions determine the frequency of valuation for CRE. Revaluations are sought where, for example, material concerns arise in relation to the performance of the collateral. CRE revaluation also occurs commonly in circumstances where an obligor's credit quality has declined sufficiently to cause concern that the principal payment source may not fully meet the obligation.

Recognition of risk mitigation under the IRB approach

Within an IRB approach, risk mitigants are considered in two broad categories:

- those which reduce the intrinsic PD of an obligor and therefore operate as determinants of PD; and
- those which affect the estimated recoverability of obligations and require adjustment of LGD or, in certain limited circumstances, EAD.

The first category typically includes full parental guarantees – where one obligor within a group guarantees another. It is assumed that the guarantor's performance materially informs the PD of the guaranteed entity. PD estimates are also subject to a 'sovereign ceiling', constraining the risk ratings assigned to obligors in countries of higher risk, and where only partial parental support exists. In certain jurisdictions, certain types of third-party guarantee are recognised by substituting the obligor's PD with that of the guarantor.

In the second category, LGD estimates are affected by a wider range of collateral, including cash, charges over real estate property, fixed assets, trade goods, receivables and floating charges such as mortgage debentures. Unfunded mitigants, such as third-party guarantees, are also considered in LGD estimates where there is evidence that they reduce loss expectation.

The main types of provider of guarantees are banks, other financial institutions and corporates. The creditworthiness of providers of unfunded credit risk mitigation is taken into consideration as part of the guarantor's risk profile. Internal limits for such contingent exposure are approved in the same way as direct exposures.

EAD and LGD values, in the case of individually assessed exposures, are determined by reference to regionally approved internal risk parameters based on the nature of the exposure. For retail portfolios, credit risk mitigation data is incorporated into the internal risk parameters for exposures and feeds into the calculation of the EL band value summarising both customer delinquency and product or facility risk. Credit and credit risk mitigation data form inputs submitted by all Group offices to centralised databases. A range of collateral recognition approaches are applied to IRB capital treatments:

- unfunded protection, which includes credit derivatives and guarantees, is reflected through adjustment or determination of PD or LGD. Under the IRB advanced approach, recognition may be through PD or LGD;
- eligible financial collateral under the IRB advanced approach is recognised in LGD models; and
- for all other types of collateral, including real estate, the LGD for exposures calculated under the IRB advanced approach are calculated by models.

Recognition of risk mitigation under the standardised approach

Where credit risk mitigation is available in the form of an eligible guarantee, non-financial collateral or credit derivatives, the exposure is divided into covered and uncovered portions. The covered portion, which is determined after applying an appropriate 'haircut' for currency and maturity mismatches (and for omission of restructuring clauses for credit derivatives, where appropriate) to the amount of the protection provided, attracts the risk weight of the protection provider. The uncovered portion attracts the risk weight of the obligor. For exposures fully or partially covered by eligible financial collateral, the value of the exposure is adjusted under the financial collateral comprehensive method using supervisory volatility adjustments, including those arising from currency mismatch, which are determined by the specific type of collateral (and, in the case of eligible debt securities, their credit quality) and its liquidation period. The adjusted exposure value is subject to the risk weight of the obligor.

Table 37: CR3 – Overview of recognised credit risk mitigation

| | a | b1 | b | d | f | |
|---|--------------------------------------|-------------------------|--|--|---|------------|
| | Exposures unsecured: carrying amount | Exposures to be secured | Exposures secured by recognised collateral | Exposures secured by recognised guarantees | Exposures secured by recognised credit derivative contracts | |
| | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | |
| 1 | Loans | 1,895,194 | 2,065,538 | 1,519,430 | 416,719 | 400 |
| 2 | Debt securities | 1,331,955 | 22,401 | – | 22,201 | – |
| 3 | Total at 31 Dec 2017 | 3,227,149 | 2,087,939 | 1,519,430 | 438,920 | 400 |
| 4 | <i>Of which: defaulted</i> | <i>4,487</i> | <i>5,904</i> | <i>5,291</i> | <i>138</i> | <i>–</i> |

Secured exposures increased from HK\$1,941,823m to HK\$2,087,939m in the second half of 2017, driven by overall loan growth.

Table 38: CR7 – Effects on RWA of recognised credit derivative contracts used as recognised credit risk mitigation – for IRB approach

| | a | b | |
|----|---|------------------|------------------|
| | Pre-credit derivatives RWA | Actual RWA | |
| | HK\$m | HK\$m | |
| 1 | Corporate – Specialised lending under supervisory slotting criteria approach (project finance) | 18,107 | 18,107 |
| 2 | Corporate – Specialised lending under supervisory slotting criteria approach (object finance) | 219 | 219 |
| 4 | Corporate – Specialised lending under supervisory slotting criteria approach (income-producing real estate) | 40,333 | 40,333 |
| 6 | Corporate – Small-and-medium sized corporates | 121,841 | 121,841 |
| 7 | Corporate – Other corporates | 975,338 | 975,294 |
| 8 | Sovereigns | 99,631 | 99,631 |
| 10 | Multilateral development banks | 3,611 | 3,611 |
| 11 | Bank exposures – Banks | 91,028 | 91,028 |
| 12 | Bank exposures – Securities firms | 4,783 | 4,783 |
| 14 | Retail – Small business retail exposures | 160 | 160 |
| 15 | Retail – Residential mortgages to individuals | 117,846 | 117,846 |
| 16 | Retail – Residential mortgages to property-holding shell companies | 3,852 | 3,852 |
| 17 | Retail – Qualifying revolving retail exposures (QRRE) | 60,030 | 60,030 |
| 18 | Retail – Other retail exposures to individuals | 13,210 | 13,210 |
| 19 | Equity – Equity exposures under market-based approach (simple risk-weight method) | 26,723 | 26,723 |
| 26 | Other – Cash items | 1,675 | 1,675 |
| 27 | Other – Other items | 142,414 | 142,414 |
| 28 | Total (under the IRB calculation approaches) at 31 Dec 2017 | 1,720,801 | 1,720,757 |

Credit risk mitigation effects from credit derivative contracts are recognised through LGD adjustments. Covered exposures are subject to lower risk-weights as a result of reduced LGDs.

Table 39: CR4 – Credit risk exposures and effects of recognised credit risk mitigation – for STC approach

| | a | b | c | d | e | f |
|-------------------------|--|--------------------------|---------------------------------|--------------------------|---------------------|----------------|
| | Exposures pre-CCF and pre-CRM | | Exposures post-CCF and post-CRM | | RWA and RWA density | |
| | On-balance sheet amount | Off-balance sheet amount | On-balance sheet amount | Off-balance sheet amount | RWA | RWA density |
| | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | % |
| Exposure classes | | | | | | |
| 1 | Sovereign exposures | 959 | 1 | 16,359 | 101 | 28 |
| 2 | PSE exposures | 150,378 | 11,307 | 117,227 | 3,392 | 13,179 |
| 2a | <i>Of which: domestic PSEs</i> | <i>8,974</i> | <i>2,830</i> | <i>8,976</i> | <i>1,187</i> | <i>2,033</i> |
| 2b | <i>Of which: foreign PSEs</i> | <i>141,404</i> | <i>8,477</i> | <i>108,251</i> | <i>2,205</i> | <i>11,146</i> |
| 4 | Bank exposures | 1,224 | 204 | 1,754 | 108 | 708 |
| 5 | Securities firm exposures | – | 15 | – | – | 50 |
| 6 | Corporate exposures | 200,006 | 218,282 | 139,345 | 7,432 | 131,088 |
| 10 | Regulatory retail exposures | 74,464 | 245,420 | 70,483 | 1,264 | 53,810 |
| 11 | Residential mortgage loans | 116,756 | 11,143 | 116,684 | 2,699 | 49,353 |
| 12 | Other exposures which are not past due exposures | 47,444 | 35,974 | 14,805 | 1,586 | 16,391 |
| 13 | Past due exposures | 2,743 | 92 | 2,743 | 13 | 3,746 |
| 15 | Total at 31 Dec 2017 | 593,974 | 522,438 | 479,400 | 16,595 | 268,303 |

Model performance

The disclosure covers wholesale and retail models which have been approved by regulators. It compares the PD estimated by our IRB models against actual default experience and shows our IRB models are generally conservative.

Table 40: CR9 – Back-testing of PD per portfolio

| b | c(i) | c(ii) | c(iii) | d | e | f | | g | h | i |
|---|----------------------------------|--------------------------------------|------------------------------------|-----------------------|-------------------------------------|------------------------------------|-----------------|--------------------------------|--|--|
| | | | | | | Number of obligors ^{1, 2} | | | | |
| PD range | External rating equivalent (S&P) | External rating equivalent (Moody's) | External rating equivalent (Fitch) | Weighted average PD % | Arithmetic average PD by obligors % | End of previous year | End of the year | Defaulted obligors in the year | of which: new defaulted obligors in the year | Average historical annual default rate % |
| Sovereigns | | | | | | | | | | |
| 0.00 to <0.15 | AAA to BBB | Aaa to Baa2 | AAA to BBB | 0.02 | 0.03 | 40 | 42 | – | – | – |
| 0.15 to <0.25 | BBB- | Baa3 | BBB- | 0.22 | 0.22 | 4 | – | – | – | – |
| 0.25 to <0.50 | BBB- | Baa3 | BBB- | 0.37 | 0.37 | 1 | 2 | – | – | – |
| 0.50 to <0.75 | BB+ to BB | Ba1 to Ba2 | BB+ to BB | 0.63 | 0.63 | 2 | 1 | – | – | – |
| 0.75 to <2.50 | BB- to B+ | Ba3 to B2 | BB- to B- | 1.64 | 1.58 | 4 | 3 | – | – | – |
| 2.5 to <10.00 | B to B- | B2 to Caa1 | CCC+ to CCC | 5.75 | 5.75 | 1 | 1 | – | – | – |
| 10.00 to <100.00 | B- to C | Caa1 to C | CCC to C | 0.00 | – | – | – | – | – | – |
| Banks | | | | | | | | | | |
| 0.00 to <0.15 | AAA to A- | Aaa to Baa1 | AAA to BBB+ | 0.05 | 0.08 | 168 | 164 | – | – | – |
| 0.15 to <0.25 | BBB+ | Baa2 | BBB | 0.22 | 0.22 | 46 | 36 | – | – | – |
| 0.25 to <0.50 | BBB | Baa3 | BBB- | 0.37 | 0.37 | 40 | 30 | – | – | – |
| 0.50 to <0.75 | BBB- | Baa3 | BBB- | 0.63 | 0.63 | 29 | 28 | – | – | – |
| 0.75 to <2.50 | BB+ to BB- | Ba1 to B1 | BB+ to B+ | 1.27 | 1.31 | 50 | 45 | – | – | 0.19 |
| 2.5 to <10.00 | B+ to B- | B2 to Caa1 | B to CCC+ | 4.35 | 4.88 | 34 | 27 | – | – | 0.19 |
| 10.00 to <100.00 | CCC+ to C | Caa1 to C | CCC to C | 11.48 | 11.00 | 6 | 4 | – | – | – |
| Corporate – small- and medium sized corporates | | | | | | | | | | |
| 0.00 to <0.15 | AAA to A- | Aaa to Baa1 | AAA to BBB+ | 0.11 | 0.11 | 400 | 714 | – | – | 0.02 |
| 0.15 to <0.25 | BBB+ | Baa2 | BBB | 0.22 | 0.22 | 403 | 845 | 2 | – | 0.19 |
| 0.25 to <0.50 | BBB | Baa3 | BBB- | 0.37 | 0.37 | 509 | 1,266 | 2 | – | 0.29 |
| 0.50 to <0.75 | BBB- | Baa3 | BBB- | 0.63 | 0.63 | 487 | 1,270 | 2 | – | 0.40 |
| 0.75 to <2.50 | BB+ to BB- | Ba1 to B1 | BB+ to B+ | 1.49 | 1.52 | 2,003 | 4,287 | 8 | 1 | 0.51 |
| 2.5 to <10.00 | B+ to B- | B2 to Caa1 | B to CCC+ | 4.13 | 4.28 | 447 | 813 | 11 | – | 1.45 |
| 10.00 to <100.00 | CCC+ to C | Caa1 to C | CCC to C | 17.79 | 20.34 | 41 | 51 | 5 | – | 10.00 |
| Corporate – other³ | | | | | | | | | | |
| 0.00 to <0.15 | AAA to A- | Aaa to Baa1 | AAA to BBB+ | 0.09 | 0.10 | 4,101 | 3,806 | – | – | 0.01 |
| 0.15 to <0.25 | BBB+ | Baa2 | BBB | 0.22 | 0.22 | 2,556 | 2,157 | 2 | – | 0.05 |
| 0.25 to <0.50 | BBB | Baa3 | BBB- | 0.37 | 0.37 | 3,108 | 2,189 | 1 | – | 0.15 |
| 0.50 to <0.75 | BBB- | Baa3 | BBB- | 0.63 | 0.63 | 2,759 | 2,016 | 7 | 1 | 0.29 |
| 0.75 to <2.50 | BB+ to BB- | Ba1 to B1 | BB+ to B+ | 1.39 | 1.49 | 8,087 | 5,434 | 27 | – | 0.58 |
| 2.5 to <10.00 | B+ to B- | B2 to Caa1 | B to CCC+ | 4.32 | 4.34 | 1,928 | 1,348 | 25 | – | 1.21 |
| 10.00 to <100.00 | CCC+ to C | Caa1 to C | CCC to C | 16.54 | 15.93 | 122 | 68 | 19 | 1 | 8.75 |

1 The number of obligors represents the obligor rated by key wholesale IRB models directly.

2 The number of obligors for corporates is being reported at counterparty level, while the number of obligors for banks and multilateral development banks is being reported at entity level. Sovereigns are reported at country level based on local currency and foreign currency ratings.

3 Specialised lending exposures are excluded.

Table 40: CR9 – Back-testing of PD per portfolio (continued)

| b | d | e | f | | g | h | i |
|---|-----------------------|-------------------------------------|---------------------------------|-----------------|--------------------------------|--|--|
| | | | Number of obligors ¹ | | | | |
| PD range | Weighted average PD % | Arithmetic average PD % by obligors | End of previous year | End of the year | Defaulted obligors in the year | of which: new defaulted obligors in the year | Average historical annual default rate % |
| Retail – QRRE | | | | | | | |
| 0.00 to < 0.15 | 0.07 | 0.07 | 3,389,146 | 3,531,206 | 1,369 | 57 | 0.05 |
| 0.15 to < 0.25 | 0.20 | 0.20 | 614,924 | 656,319 | 457 | 17 | 0.09 |
| 0.25 to < 0.50 | 0.37 | 0.37 | 627,374 | 647,425 | 836 | 44 | 0.17 |
| 0.50 to < 0.75 | 0.59 | 0.60 | 261,727 | 265,028 | 785 | 45 | 0.35 |
| 0.75 to < 2.50 | 1.39 | 1.32 | 658,867 | 634,338 | 3,249 | 134 | 0.74 |
| 2.50 to < 10.00 | 4.86 | 4.71 | 208,686 | 197,549 | 5,166 | 112 | 2.85 |
| 10.00 to < 100.00 | 24.97 | 25.68 | 67,007 | 59,422 | 8,076 | 24 | 12.99 |
| Retail – Residential mortgage exposures | | | | | | | |
| 0.00 to < 0.15 | 0.07 | 0.06 | 184,668 | 188,195 | 115 | 1 | 0.07 |
| 0.15 to < 0.25 | 0.20 | 0.20 | 48,879 | 49,282 | 69 | 4 | 0.11 |
| 0.25 to < 0.50 | 0.34 | 0.35 | 56,935 | 61,315 | 188 | 3 | 0.31 |
| 0.50 to < 0.75 | 0.61 | 0.60 | 35,871 | 31,865 | 238 | – | 0.68 |
| 0.75 to < 2.50 | 1.33 | 1.34 | 60,086 | 61,656 | 334 | 2 | 0.60 |
| 2.50 to < 10.00 | 4.68 | 4.62 | 13,472 | 14,185 | 156 | 2 | 1.06 |
| 10.00 to < 100.00 | 15.41 | 15.93 | 8,652 | 8,624 | 1,450 | 1 | 14.14 |
| Retail – small business retail exposures | | | | | | | |
| 0.00 to < 0.15 | 0.07 | 0.07 | 1,426 | 1,350 | – | – | 0.05 |
| 0.15 to < 0.25 | 0.17 | 0.17 | 193 | 137 | – | – | – |
| 0.25 to < 0.50 | 0.34 | 0.34 | 10 | 17 | – | – | – |
| 0.50 to < 0.75 | 0.61 | 0.61 | 169 | 160 | – | – | – |
| 0.75 to < 2.50 | 1.14 | 1.14 | 258 | 248 | – | – | 0.18 |
| 2.50 to < 10.00 | 5.57 | 5.55 | 196 | 206 | – | – | 0.35 |
| 10.00 to < 100.00 | – | – | – | – | – | – | – |
| Other retail exposures to individuals | | | | | | | |
| 0.00 to < 0.15 | 0.09 | 0.09 | 94,209 | 92,879 | 41 | 4 | 0.09 |
| 0.15 to < 0.25 | 0.20 | 0.21 | 49,680 | 61,228 | 29 | 1 | 0.17 |
| 0.25 to < 0.50 | 0.34 | 0.35 | 47,326 | 38,684 | 58 | 1 | 0.33 |
| 0.50 to < 0.75 | 0.66 | 0.62 | 23,337 | 32,286 | 75 | 2 | 1.24 |
| 0.75 to < 2.50 | 1.48 | 1.56 | 21,090 | 32,071 | 181 | 10 | 1.54 |
| 2.50 to < 10.00 | 3.43 | 4.29 | 39,029 | 40,969 | 832 | 44 | 2.83 |
| 10.00 to < 100.00 | 16.61 | 16.68 | 9,740 | 8,676 | 965 | 5 | 11.20 |

¹ The number of obligors is based on account level information for all IRB portfolios except for the Hong Kong overdraft portfolio, which is presented at an aggregated level by consolidating savings and current account information.

Counterparty credit risk exposures

Counterparty credit risk management

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

The group uses current exposure method ('CEM') to calculate exposure value for CCR RWAs. Under the CEM approach, the EAD is calculated as current exposure plus regulatory add-ons.

The potential future exposure ('PFE') measures used for CCR management are calibrated to the 95th percentile. The measures consider volatility, trade maturity and the counterparty legal documentation covering netting and collateral.

Limits for CCR exposures are assigned within the overall credit process. The credit risk function assigns a limit against each counterparty to cover derivatives exposure which may arise as a result of a counterparty default. The magnitude of this limit will depend on the overall risk appetite and type of derivatives trading undertaken with the counterparty.

Credit valuation adjustment

Credit valuation adjustment ('CVA') risk is the risk of adverse moves in the credit valuation adjustments taken for expected credit losses on derivative transactions. The group uses the standardised approach to calculate the CVA capital charge.

Collateral arrangements

Our policy is to revalue all traded transactions and associated collateral positions on a daily basis. An independent collateral management function manages the collateral process including pledging and receiving collateral and investigating disputes and non-receipts.

Eligible collateral types are controlled under a policy to ensure price transparency, price stability, liquidity, enforceability, independence, reusability and eligibility for regulatory purposes. A valuation 'haircut' policy reflects the fact that collateral may fall in value between the date the collateral was called and the date of liquidation or enforcement. At least 99% of collateral held as credit risk mitigation under CSA's is either cash or liquid government securities.

Credit ratings downgrade

A credit rating downgrade clause in a Master Agreement or a credit rating downgrade threshold clause in a Credit Support Annex ('CSA') is designed to trigger an action if the credit rating

of the affected party falls below a specified level. These actions may include the requirement to pay or increase collateral, the termination of transactions by the non-affected party or the assignment of transactions by the affected party.

At 31 December 2017, the potential value of the additional collateral pertaining to International Swaps and Derivatives Association ('ISDA') CSA downgrade thresholds that we would need to post with counterparties in the event of a one-notch downgrade of our rating was HK\$148m and for a two-notch downgrade was HK\$242m.

Wrong-way risk

Wrong-way risk occurs when a counterparty's exposures are adversely correlated with its credit quality.

There are two types of wrong-way risk.

- General wrong-way risk occurs when the probability of counterparty default is positively correlated with general risk factors, for example, where a counterparty is resident and/or incorporated in a higher-risk country and seeks to sell a non-domestic currency in exchange for its home currency.
- Specific wrong-way risk occurs in self-referencing transactions. These are transactions in which exposure is driven by capital or financing instruments issued by the counterparty and occurs where exposure from HSBC's perspective materially increases as the value of the counterparty's capital or financing instruments referenced in the contract decreases. It is HSBC policy that specific wrong-way risk transactions are approved on a case-by-case basis.

We use a range of tools to monitor and control wrong-way risk, including requiring the business to obtain prior approval before undertaking wrong-way risk transactions outside pre-agreed guidelines. The regional Traded Risk functions are responsible for the control and monitoring process within an overarching Group framework and limit framework.

Central counterparties

While exchange traded derivatives have been cleared through Central counterparties ('CCP') for many years, recent regulatory initiatives designed to reduce systemic risk in the banking system are directing increasing volumes of OTC derivatives to be cleared through CCPs.

A dedicated CCP risk team has been established to manage the interface with CCPs and undertake in-depth due diligence of the unique risks associated with these organisations. This is to address an implication of the regulations that the Group's risk will be transferred from being distributed among individual, bilateral counterparties to a significant level of risk concentration on CCPs. We have developed a risk appetite framework to manage risk accordingly, on an individual CCP and global basis.

Table 41: CCR1 – Analysis of counterparty default risk exposures (other than those to CCPs) by approaches

| | | a | b | e | f |
|---|-----------------------------------|-----------------------|---------|---------------------------------|---------------|
| | | Replacement cost (RC) | PFE | Default risk exposure after CRM | |
| | | HK\$m | HK\$m | HK\$m | RWA |
| | | | | HK\$m | HK\$m |
| 1 | SA-CCR (for derivative contracts) | 92,903 | 189,660 | 281,994 | 71,708 |
| 4 | Comprehensive Approach (for SFTs) | | | 81,959 | 7,035 |
| 6 | Total at 31 Dec 2017 | | | | 78,743 |

¹ Prior to the implementation of SA-CCR, exposures reported here are under the current exposure method.

Table 42: CCR2 – CVA capital charge

| | | a | b |
|---|--|----------------|---------------|
| | | EAD post CRM | RWA |
| | | HK\$m | HK\$m |
| 3 | Netting sets for which CVA capital charge is calculated by the standardised CVA method | 241,132 | 49,231 |
| 4 | Total at 31 Dec 2017 | 241,132 | 49,231 |

Table 43: CCR6 – Credit-related derivatives contracts

| | | a | b |
|-------------------------|----------------------------------|-------------------|-----------------|
| | | Protection bought | Protection sold |
| | | HK\$m | HK\$m |
| At 31 Dec 2017 | | | |
| Notional amounts | | | |
| | Single-name credit default swaps | 244,741 | 225,362 |
| | Index credit default swaps | 94,995 | 90,009 |
| | Total return swaps | 6,058 | 1,022 |
| | Total notional amounts | 345,794 | 316,393 |
| Fair values | | | |
| | Positive fair value (asset) | 102 | 5,589 |
| | Negative fair value (liability) | (5,925) | (47) |

Table 44: CCR5 – Composition of collateral for counterparty default risk exposures (including those for contracts or transactions cleared through CCPs)

| | a | b | | c | | d | e | f |
|-----------------------------|--|---------------|---------------------------------|--------------|--|----------------|---------------------------------|--------------|
| | Derivative contracts | | | | SFTs | | | |
| | Fair value of recognised collateral received | | Fair value of posted collateral | | Fair value of recognised collateral received | | Fair value of posted collateral | |
| | Segregated | Unsegregated | Segregated | Unsegregated | Segregated | Unsegregated | Segregated | Unsegregated |
| | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m |
| Cash – domestic currency | – | 3,472 | – | 130 | 30,959 | 67,564 | | |
| Cash – other currencies | – | 34,869 | – | 7,874 | 315,648 | 482,115 | | |
| Domestic sovereign debt | – | – | – | – | – | 3,017 | | |
| Other sovereign debt | – | 3,725 | 5,710 | 438 | 69,281 | 92,944 | | |
| Corporate bonds | – | – | – | 60 | 195,195 | 33,140 | | |
| Equity securities | – | – | – | – | 24,553 | 38,815 | | |
| Total at 31 Dec 2017 | – | 42,066 | 5,710 | 8,502 | 635,636 | 717,595 | | |

Table 45: CCR8 – Exposures to CCPs

| | | a | b |
|-----------------------|---|--------------------|--------------|
| | | Exposure after CRM | RWA |
| | | HK\$m | HK\$m |
| At 31 Dec 2017 | | | |
| 1 | Exposures of the AI as clearing member or client to qualifying CCPs (total) | | 2,019 |
| 2 | Default risk exposures to qualifying CCPs (excluding items disclosed in rows 7 to 10), of which: | 38,659 | 773 |
| 3 | (i) OTC derivative transactions | 34,814 | 696 |
| 4 | (ii) exchange-traded derivative contracts | 3,845 | 77 |
| 7 | Segregated initial margin | 5,710 | |
| 8 | Unsegregated initial margin | 8,458 | 513 |
| 9 | Funded default fund contributions | 1,183 | 733 |
| 11 | Exposures of the AI as clearing member or client to non-qualifying CCPs (total) | | 316 |
| 12 | Default risk exposures to non-qualifying CCPs (excluding items disclosed in rows 17 to 20), of which: | 5 | 5 |
| 13 | (i) OTC derivative transactions | – | – |
| 14 | (ii) exchange-traded derivative contracts | 5 | 5 |
| 18 | Unsegregated initial margin | 44 | 43 |
| 19 | Funded default fund contributions | 21 | 268 |

Counterparty default risk under internal ratings-based approach

Table 46: CCR4 – Counterparty default risk exposures (other than those to CCPs) by portfolio and PD range – for IRB approach¹

| PD scale | a | b | c | d | e | f | g |
|---|-----------------------|-----------------|--------------------|------------------|---------------------------|---------------|------------------|
| | EAD post-CRM HK\$m | Average PD % | Number of obligors | Average LGD % | Average maturity years | RWA HK\$m | RWA density % |
| Portfolio (i) – Sovereign | | | | | | | |
| 0.00 to < 0.15 | 30,648 | 0.01 | 37 | 43.3 | 0.35 | 661 | 2 |
| 0.15 to < 0.25 | – | 0.00 | – | 0.0 | – | – | – |
| 0.25 to < 0.50 | 9 | 0.37 | 1 | 45.0 | 2.18 | 6 | 75 |
| 0.50 to < 0.75 | – | 0.00 | – | 0.0 | – | – | – |
| 0.75 to < 2.50 | 82 | 2.18 | 3 | 47.9 | 4.81 | 128 | 156 |
| 2.50 to < 10.00 | – | 0.00 | – | 0.0 | – | – | – |
| 10.00 to < 100.00 | – | 0.00 | – | 0.0 | – | – | – |
| 100.00 (Default) | – | 0.00 | – | 0.0 | – | – | – |
| Sub-total at 31 Dec 2017 | 30,739 | 0.02 | 41 | 43.3 | 0.36 | 795 | 3 |
| Portfolio (ii) – Bank | | | | | | | |
| 0.00 to < 0.15 | 242,531 | 0.06 | 1,414 | 31.3 | 1.39 | 32,256 | 13 |
| 0.15 to < 0.25 | 14,102 | 0.22 | 209 | 34.8 | 1.52 | 5,168 | 37 |
| 0.25 to < 0.50 | 2,735 | 0.37 | 59 | 40.1 | 1.08 | 1,407 | 51 |
| 0.50 to < 0.75 | 1,646 | 0.63 | 37 | 42.0 | 0.93 | 1,129 | 69 |
| 0.75 to < 2.50 | 2,405 | 1.08 | 68 | 45.1 | 1.08 | 2,241 | 93 |
| 2.50 to < 10.00 | 167 | 5.52 | 6 | 44.4 | 1.00 | 226 | 136 |
| 10.00 to < 100.00 | – | 0.00 | – | 0.0 | – | – | – |
| 100.00 (Default) | 150 | 100.00 | 11 | 55.8 | 1.67 | – | – |
| Sub-total at 31 Dec 2017 | 263,736 | 0.14 | 1,804 | 31.8 | 1.39 | 42,427 | 16 |
| Portfolio (iii) – Corporate | | | | | | | |
| 0.00 to < 0.15 | 34,380 | 0.08 | 1,215 | 45.4 | 2.41 | 9,640 | 28 |
| 0.15 to < 0.25 | 8,107 | 0.22 | 484 | 50.7 | 1.42 | 3,810 | 47 |
| 0.25 to < 0.50 | 4,214 | 0.37 | 359 | 48.9 | 1.62 | 2,458 | 58 |
| 0.50 to < 0.75 | 2,672 | 0.63 | 318 | 49.5 | 1.62 | 2,073 | 78 |
| 0.75 to < 2.50 | 9,341 | 1.31 | 816 | 50.4 | 1.59 | 9,684 | 104 |
| 2.50 to < 10.00 | 1,150 | 4.47 | 210 | 55.3 | 1.81 | 1,846 | 161 |
| 10.00 to < 100.00 | 2 | 16.99 | 4 | 60.5 | 1.00 | 5 | 283 |
| 100.00 (Default) | 46 | 100.00 | 4 | 61.7 | 3.90 | – | – |
| Sub-total at 31 Dec 2017 | 59,912 | 0.46 | 3,410 | 47.5 | 2.03 | 29,516 | 49 |
| Total (sum of all portfolios) at 31 Dec 2017 | 354,387 | 0.18 | 5,255 | 35.5 | 1.41 | 72,738 | 21 |

¹ Details on the scope of models and percentage of RWAs covered by models for each of the regulatory portfolios can be found in the 'Credit risk under internal ratings-based approach' section of this document.

Counterparty default risk under standardised approach

Table 47: CCR3 – Counterparty default risk exposures (other than those to CCPs) by asset classes and by risk weights – for STC approach

| Risk Weight | Exposure class | a | c | e | f | g | k |
|-------------|--|--------------|--------------|--------------|--------------|---------------|--|
| | | 0% HK\$m | 20% HK\$m | 50% HK\$m | 75% HK\$m | 100% HK\$m | Total default risk exposure after CRM HK\$m |
| 2 | PSE exposures | 1,440 | 2,039 | 593 | – | 2 | 4,074 |
| 2a | Of which: domestic PSEs | – | 286 | – | – | – | 286 |
| 2b | Of which: foreign PSEs | 1,440 | 1,753 | 593 | – | 2 | 3,788 |
| 4 | Bank exposures | – | 39 | 47 | – | 10 | 96 |
| 5 | Securities firm exposures | – | – | 14 | – | – | 14 |
| 6 | Corporate exposures | – | – | – | – | 3,580 | 3,580 |
| 8 | Regulatory retail exposures | – | – | – | 18 | – | 18 |
| 10 | Other exposures which are not past due exposures | – | – | – | – | 37 | 37 |
| 12 | Total at 31 Dec 2017 | 1,440 | 2,078 | 654 | 18 | 3,629 | 7,819 |

Securitisation

Group securitisation strategy

The group acts as originator to our own originated securitisations. Our strategy is to use securitisation to meet our needs for aggregate funding or capital management, to the extent that market, regulatory treatments and other conditions are suitable, and for customer facilitation. We do not provide support to any of our originated securitisations, and it is not our policy to do so.

Group securitisation activity

Our roles in the securitisation process are as follows:

- Originator: where we originate the assets being securitised, either directly or indirectly;
- Sponsor: where we establish and manage a securitisation programme that purchases exposures from third parties; and
- Investor: where we invest in a securitisation transaction directly or provide derivatives or liquidity facilities to a securitisation.

The group as originator

We use special purpose entities ('SPEs') to securitise customer loans and advances and other debt that we have originated in order to diversify our sources of funding for asset origination and for capital efficiency purposes. In such cases, we transfer the loans and advances to the SPEs for cash, and the SPEs issue debt securities to investors to fund the cash purchases.

In addition, we use SPEs to mitigate the capital absorbed by some of the customer loans and advances we have originated. Credit derivatives are used to transfer the credit risk associated with such customer loans and advances to an SPE, using an approach commonly known as synthetic securitisation by which the SPE writes CDS protection for the group.

The group as sponsor

There were no outstanding underlying exposures in securitisation transactions where the group acted as a sponsor.

The group as investor

We have exposure to third-party securitisations across a wide range of sectors in the form of investments, liquidity facilities and as a derivative counterparty. These are primarily legacy exposures.

Monitoring of securitisation positions

Securitisation positions are managed by a dedicated team that uses a combination of market standard systems and third-party data providers to monitor performance data and manage market and credit risks.

In the case of re-securitisation positions, similar processes are conducted in respect of the underlying securitisations.

Liquidity risk of securitised assets is consistently managed as part of the group's liquidity and funding risk management framework and further details are provided on page 24 of the *Annual Report and Accounts 2017*.

Valuation of securitisation positions

The process of valuing our investments in securitisation exposures primarily focuses on quotations from third parties, observed trade levels and calibrated valuations from market standard models.

Our hedging and credit risk mitigation strategy, with regards to retained securitisation and re-securitisation exposures, is to continually review our positions.

Securitisation accounting treatment

For accounting purposes, we consolidate structured entities (including SPEs) when the substance of the relationship indicates that we control them; that is, we are exposed, or have rights, to variable returns from our involvement with the structured entity and have the ability to affect those returns through our power over the entity.

Full details of these assessments and our accounting policy on structured entities may be found in Note 38 on the Financial Statements of the Annual Report and Accounts 2017.

We reassess the need to consolidate whenever there is a change in the substance of the relationship between the group and a structured entity.

The group enters into transactions in the normal course of business by which it transfers financial assets to structured entities. Depending on the circumstances, these transfers may either result in these financial assets being fully or partly derecognised, or continuing to be recognised in their entirety.

Full derecognition occurs when we transfer our contractual right to receive cash flows from the financial assets, or assume an obligation to pass on the cash flows from the assets, and transfer substantially all the risks and rewards of ownership. Only in the event that derecognition is achieved are sales and any resultant gains recognised in the financial statements.

Partial derecognition occurs when we sell or otherwise transfer financial assets in such a way that some but not substantially all of the risks and rewards of ownership are transferred and control is retained. These financial assets are recognised on the balance sheet to the extent of our continuing involvement and an associated liability is also recognised. The net carrying amount of the financial asset and associated liability will be based on the measurement basis of the financial asset, either the amortised cost or the fair value of the rights and obligations retained by the entity.

Securitisation regulatory treatment

For regulatory purposes, any reduction in RWAs that would be achieved by our own originated securitisations must satisfy section 229 (1) of the BCR. If achieved, the associated SPEs and underlying assets are not consolidated but exposures to them, including derivatives or liquidity facilities, are risk-weighted as securitisation positions.

For our securitisation banking book positions, we use the internal ratings-based (securitisation) approach to calculate the credit risk for its securitisation exposures. Securitisation positions in the trading book are under the standardised (market risk) approach, which calculates the market risk capital charge for specific risk interest rate exposures using the same methodology as the internal ratings-based (securitisation) approach.

The group uses Standard & Poor's Rating Services, Moody's Investors Service and Fitch Ratings as the ECAs for each and all classes of securitisation exposures.

Banking Disclosure Statement at 31 December 2017

Analysis of securitisation exposures

The group's involvement in securitisation activities in the second half of 2017 reflects the following:

- as an investor, the group's securitisation activities mainly consisted of changes to the existing portfolio mix in the normal

course of business; and

- as an originator, the group securitised HK\$13,058m of additional residential mortgages in the banking book into an existing SPE.

Table 48: SEC1 – Securitisation exposures in banking book

| | a | c | g | i |
|--|--|--------------------|----------------------|--------------------|
| | Acting as originator (excluding sponsor) | | Acting as investor | |
| | Traditional HK\$m | Sub-total HK\$m | Traditional HK\$m | Sub-total HK\$m |
| At 31 Dec 2017 | | | | |
| 1 Retail (total) – of which: | 33,429 | 33,429 | 23,395 | 23,395 |
| 2 <i>residential mortgage</i> | 33,429 | 33,429 | 4,608 | 4,608 |
| 3 <i>credit card</i> | – | – | 5,680 | 5,680 |
| 4 <i>other retail exposures</i> | – | – | 13,107 | 13,107 |
| 6 Wholesale (total) – of which: | – | – | 9,697 | 9,697 |
| 9 <i>lease and receivables</i> | – | – | 47 | 47 |
| 10 <i>other wholesale</i> | – | – | 9,650 | 9,650 |

Table 49: SEC2 – Securitisation exposures in trading book

| | g | i |
|-------------------------------------|----------------------|--------------------|
| | Acting as investor | |
| | Traditional HK\$m | Sub-total HK\$m |
| At 31 Dec 2017 | | |
| 1 Retail (total) – of which: | 5 | 5 |
| 2 <i>residential mortgage</i> | 5 | 5 |

Table 50: SEC4 – Securitisation exposures in banking book and associated capital requirements – where AI acts as investor

| | a | b | c | f | j | n |
|-------------------------------------|-------------------------------|----------------|-----------------|--|-------------------------------|---------------------------|
| | Exposure values (by RW bands) | | | Exposure values (by regulatory approach) | RWAs (by regulatory approach) | Capital charges after cap |
| | ≤20% RW | >20% to 50% RW | >50% to 100% RW | IRB(S) RBM | IRB(S) RBM | IRB(S) RBM |
| | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m | HK\$m |
| At 31 Dec 2017 | | | | | | |
| 1 Total exposures | 24,244 | 402 | 8,446 | 33,092 | 10,050 | 852 |
| 2 Traditional securitisation | 24,244 | 402 | 8,446 | 33,092 | 10,050 | 852 |
| 3 <i>Of which: securitisation</i> | 24,244 | 402 | 8,446 | 33,092 | 10,050 | 852 |
| 4 <i>Of which: retail</i> | 23,103 | – | 292 | 23,395 | 1,926 | 163 |
| 5 <i>Of which: wholesale</i> | 1,141 | 402 | 8,154 | 9,697 | 8,124 | 689 |

Market risk

Overview and governance

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

Exposures to market risk

Exposure to market risk is separated into two portfolios:

- Trading portfolios comprise positions arising from market-making and the warehousing of customer derived positions.
- Non-trading portfolios comprise positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities, financial investments designated as available-for-sale ('AFS') and held to maturity, and exposures arising from our insurance operations.

The diagram below illustrates the main business areas where trading and non-trading market risks reside and market risk measures to monitor and limit exposures.

| Risk Types | Trading Risk | Non-Trading Risk | | | |
|-----------------|--|---|------------------------------------|-----|------|
| | <ul style="list-style-type: none"> – Foreign exchange & Commodities – Interest rates – Credit spreads – Equities | <ul style="list-style-type: none"> – Structural foreign exchange – Interest rates – Credit spreads | | | |
| Global Business | GB&M, incl BSM | GB&M, incl BSM | GPB | CMB | RBWM |
| Risk Measure | VaR / Sensitivity / Stress testing | | VaR / Sensitivity / Stress testing | | |

Balance Sheet Management ('BSM') department, for external reporting purposes, forms part of Corporate Centre while daily operations and risk are managed within GB&M.

Where appropriate, the group applies similar risk management policies and measurement techniques to both trading and non-trading portfolios. The group's objective is to manage and control market risk exposures in order to optimise return on risk while maintaining a market profile consistent with the status as one of the world's largest banking and financial services organisations.

The nature of the hedging and risk mitigation strategies performed across the Group corresponds to the market risk management instruments available within each operating jurisdiction. These strategies range from the use of traditional market instruments, such as interest rate swaps, to more sophisticated hedging strategies to address a combination of risk factors arising at portfolio level.

Market risk governance

Market risk is managed and controlled through limits approved by the Risk Management Meeting of the Group Management Board ('GMB') for HSBC Holdings plc and the various global businesses. These limits are allocated across business lines and to the Group's legal entities. The management of market risk is principally undertaken in Global Markets through risk limits. Value at Risk ('VaR') limits are set for portfolios, products and risk types, with market liquidity and business need being the primary factors in determining the level of limits set.

Each major operating entity has an independent market risk management and control function that is responsible for measuring market risk exposures in accordance with the policies defined by Group Risk, and monitoring and reporting these exposures against the prescribed limits on a daily basis.

Each operating entity is required to assess the market risks arising on each product in its business and to transfer them to either its local Markets unit for management, or to separate books managed

under the supervision of the local Asset and Liability Management Committee ('ALCO').

Our aim is to ensure that all market risks are consolidated within operations that have the necessary skills, tools, management and governance to manage them. In certain cases where the market risks cannot be fully transferred, we identify the impact of varying scenarios on valuations or on net interest income resulting from any residual risk positions.

Model risk is governed through MOCs at the regional and global level. These Committees have direct oversight and approval responsibility for all traded risk models utilised for risk measurement and management and stress testing. The MOCs prioritise the development of models, methodologies and practices used for traded risk management and ensure that they remain within our risk appetite and business plans. The Regional MOC reports into the Group MOC, which oversees all risk types at Group level. Group MOC informs the RMM of the GMB about material issues at least on a bi-annual basis. The RMM is the Group's 'Designated Committee' according to the regulatory rules and it has delegated day-to-day governance of all traded risk models to the Global Market Risk MOC.

Our control of market risk in the trading and non-trading portfolios is based on a policy of restricting individual operations to trading within a list of permissible instruments authorised for each site by Group Risk, of enforcing new product approval procedures, and of restricting trading in the more complex derivative products only to sites with appropriate levels of product expertise and robust control systems.

Market risk measures

Monitoring and limiting market risk exposures

Our objective is to manage and control market risk exposures while maintaining a market profile consistent with our risk appetite.

We use a range of tools to monitor and limit market risk exposures, including sensitivity analysis, VaR and stress testing.

Sensitivity analysis

We use sensitivity measures to monitor the market risk positions within each risk type. Sensitivity limits are set for portfolios, products and risk types, with the depth of the market being one of the principal factors in determining the level of limits set.

Value at risk

VaR is a technique that estimates the potential losses on risk positions in the trading portfolio as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence. The use of VaR is integrated into market risk management and is calculated for all trading positions regardless of how the Group capitalises those exposures. Where there is no approved internal model, the Group uses the appropriate local rules to capitalise exposures locally.

In addition, we calculate VaR for non-trading portfolios to have a complete picture of risk. Our models are predominantly based on historical simulation. VaR is calculated at a 99% confidence level for a one-day holding period. Where we do not calculate VaR explicitly, we use alternative tools as described in the Stress testing section below.

Our VaR models derive plausible future scenarios from past series of recorded market rates and prices, taking into account inter-relationships between different markets and rates such as interest rates and foreign exchange rates.

We use the past two years as the data set in our VaR models, which is updated on a fortnightly basis and these scenarios are then applied to the market baselines and trading positions on a daily basis. The models also incorporate the effect of option features on the underlying exposures.

The valuation approach used in our models values uses a mixture of sensitivity based approach and full revaluation approach.

The nature of the VaR models means that an increase in observed market volatility will lead to an increase in VaR even without any changes in the underlying positions.

VaR model limitations

Although a valuable guide to risk, VaR should always be viewed in the context of its limitations. For example:

- the use of historical data as a proxy for estimating future events may not encompass all potential events, particularly those which are extreme in nature;
- the use of a holding period assumes that all positions can be liquidated or the risks offset during that period. This may not fully reflect the market risk arising at times of severe illiquidity, when the holding period may be insufficient to liquidate or hedge all positions fully;
- the use of a 99% confidence level, by definition does not take into account losses that might occur beyond this level of confidence; and
- VaR is calculated on the basis of exposures outstanding at the close of business and therefore does not necessarily reflect intra-day exposures.

Risk not in VaR framework

The Risks not in VaR ('RNIV') framework captures risks from exposures in the HSBC trading book that are not captured well by the VaR model. Our VaR model is designed to capture significant basis risk, such as CDS versus bond, asset swap spreads and cross-currency basis. Other basis risks which are not completely covered in VaR, such as the London interbank offered rate ('Libor') tenor basis, are complemented by our RNIV calculations and are integrated into our capital framework.

Risk factors are reviewed on a regular basis and either incorporated directly in the VaR models, where possible, or quantified through the VaR-based RNIV approach or a stress test approach within the RNIV framework. The outcome of the VaR-based RNIV is included in the VaR calculation and back-testing; a stressed VaR RNIV is also computed for the risk factors considered in the VaR-based RNIV approach.

Stress-type RNIVs are also included where appropriate.

Back-testing

We routinely validate the accuracy of our VaR models by back-testing them against both actual, and hypothetical profit and loss against the trading VaR numbers. Hypothetical profit and loss excludes non-modelled items, such as fees, commissions and revenues of intra-day transactions.

We back-test our VaR, which reflect the full scope of group entities.

Stress testing

Stress testing is an important procedure that is integrated into our market risk management tool to evaluate the potential impact on portfolio values of more extreme, although plausible, events or movements in a set of financial variables. In such scenarios, losses can be much greater than those predicted by VaR modelling.

Stress testing is implemented at legal entity, regional and overall Group levels. A standard set of scenarios is utilised consistently across all regions within the Group. Scenarios are tailored to capture the relevant events or market movements at each level. The risk appetite around potential stress losses for the region is set and monitored against referral limits.

Market risk reverse stress tests are undertaken based on the premise that there is a fixed loss. The stress testing process identifies which scenarios lead to this loss. The rationale behind the reverse stress test is to understand scenarios that are beyond normal business settings that could have contagion and systemic implications.

Stressed VaR and stress testing, together with reverse stress testing and the management of gap risk, provide management with insights regarding the 'tail risk' beyond VaR for which HSBC's appetite is limited.

Market risk under standardised approach

Table 51: MR1 – Market risk under STM approach

| | | a |
|-----------------------------------|---|--------------|
| | | RWA HK\$m |
| Outright product exposures | | |
| 1 | Interest rate exposures (general and specific risk) | 893 |
| 2 | Equity exposures (general and specific risk) | 1,533 |
| 4 | Commodity exposures | 14 |
| 8 | Securitisation exposures | 60 |
| 9 | Total at 31 Dec 2017 | 2,500 |

Market risk capital models

There are a number of measures that HSBC has permission to use in calculating regulatory capital, which are listed below.

For regulatory purposes, the trading book comprises all positions in financial instruments and commodities that are held with trading intent.

HSBC maintains a Trading Book Policy that defines the minimum requirements for trading book positions and the process for

classifying positions as trading or banking book. Positions in the trading book are subject to market risk-based rules, i.e. market risk capital, computed using regulatory approved models. Otherwise, the market risk capital is calculated using the Standardised approach.

If any of the policy criteria are not met, then the position is categorised as a banking book exposure.

VaR

VaR used for regulatory purposes differs from VaR used for management purpose with key differences listed below.

| VaR | Regulatory | Management |
|---------------------|---------------------|--|
| Scope | Regulatory approval | Broader population of trading and banking book positions |
| Confidence interval | 99% | 99% |
| Liquidity horizon | 10-day | 1-day |
| Data set | Past 2 years | Past 2 years |

The trading books that received approval from the regulator to be covered via an internal model are used to calculate VaR for regulatory purposes. Regulatory VaR levels contribute to the calculation of market risk RWAs.

Stressed VaR

Stressed VaR ('SVaR') is primarily used for regulatory capital purposes and is integrated into the risk management process to ensure prudent capital management. Stressed VaR complements other risk measures by providing the potential losses under stressed market conditions. Calculations are based on a continuous one-year period of stress for the trading portfolio, based on the assessment at the Group level.

Stress VaR modelling follows the same approach as our VaR risk measure, except for the following:

- potential market movements employed for stressed VaR calculations are based on a continuous one-year period of stress for the trading portfolio;
- it is calculated to a 99% confidence using a 10-day holding period;
- it is based on an actual 10-day holding period, whereas Regulatory VaR is based on a one-day holding period scaled to 10 days.

Incremental Risk Charge

The IRC measures the default and migration risk of issuers of traded instruments.

IRC risk factors include credit migration, default, product basis, concentration, hedge mismatch, recovery rate and liquidity. The PDs are floored to reflect the lack of historical data on defaults and a period of stress is used to calibrate the spread changes for the relevant ratings. The IRC model is validated quarterly by stressing key model parameters and reviewing the response of the model.

The IRC is a stand-alone charge generating no diversification benefit with other charges. We do not use weighted averages for calculating the liquidity horizon for the IRC measure. IRC relies on a range of liquidity horizons from three months, corresponding to the regulatory floor, to one year. A wide range of criteria can indicate the liquidity of a position. The liquidity horizon for the IRC measure depends on a set of factors, such as issuer features, including rating, sector, geography, and size of positions, including product, maturity and concentration.

The IRC transition matrices are calibrated using transition and default data published by three rating agencies (Standard & Poor's, Moody's and Fitch Ratings) as the starting point, in combination with internal rules for flooring. The average of the three matrices is computed for each sector, ignoring zero transition probabilities. The PDs are then floored: sovereign PDs are consistent with IRB, while a 3bp floor is applied to corporates' and banks' PDs.

The IRC correlation matrix is derived from historical CDS spreads data, covering the latest two-year VaR period. The returns estimation window is set equal to either three, or 12 months, depending on the liquidity horizon of each obligor. First, each obligor is mapped to six sector/rating categories; then the correlation matrix is obtained by computing the arithmetic mean of correlations for each category.

Analysis of VaR, stressed VaR and incremental risk charge measures

The following table is prepared in accordance with the basis of preparation used to calculate the group's market risk capital charge under the IMM approach.

Table 52: MR3 – IMM approach values for market risk exposures

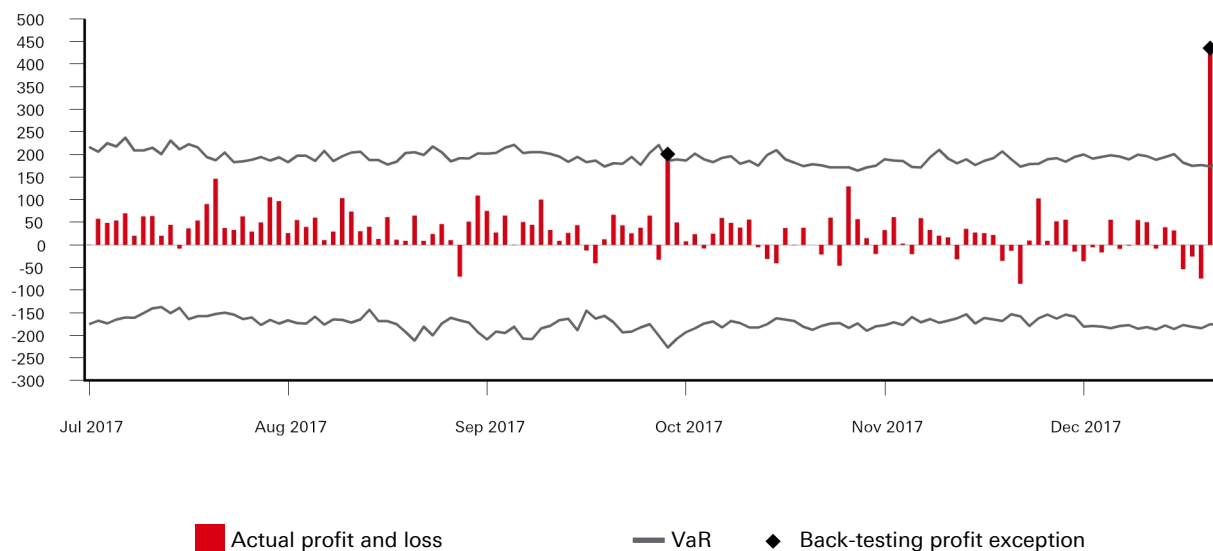
| | | a |
|---|---------------|-------|
| | | HK\$m |
| At 31 Dec 2017 | | |
| VaR (10 day – one-tailed 99% confidence interval) | | |
| 1 | Maximum Value | 584 |
| 2 | Average Value | 397 |
| 3 | Minimum Value | 279 |
| 4 | Period End | 489 |
| Stressed VaR (10 day – one-tailed 99% confidence interval) | | |
| 5 | Maximum Value | 1,050 |
| 6 | Average Value | 555 |
| 7 | Minimum Value | 217 |
| 8 | Period End | 751 |
| Incremental risk charge (IRC) (99.9% confidence interval) | | |
| 9 | Maximum Value | 4,249 |
| 10 | Average Value | 3,340 |
| 11 | Minimum Value | 2,406 |
| 12 | Period End | 3,207 |

The 2017 period end trading VaR was higher compared to 2016 due to increases in credit trading VaR and interest rate trading VaR, which were driven by increased inventory positions. The SVaR increase was mainly driven by a decrease of the

diversification benefit across asset classes due to changes in portfolio composition and changes in the historic SVaR period. The 2017 period end IRC was higher compared to 2016 due to increased bond inventory.

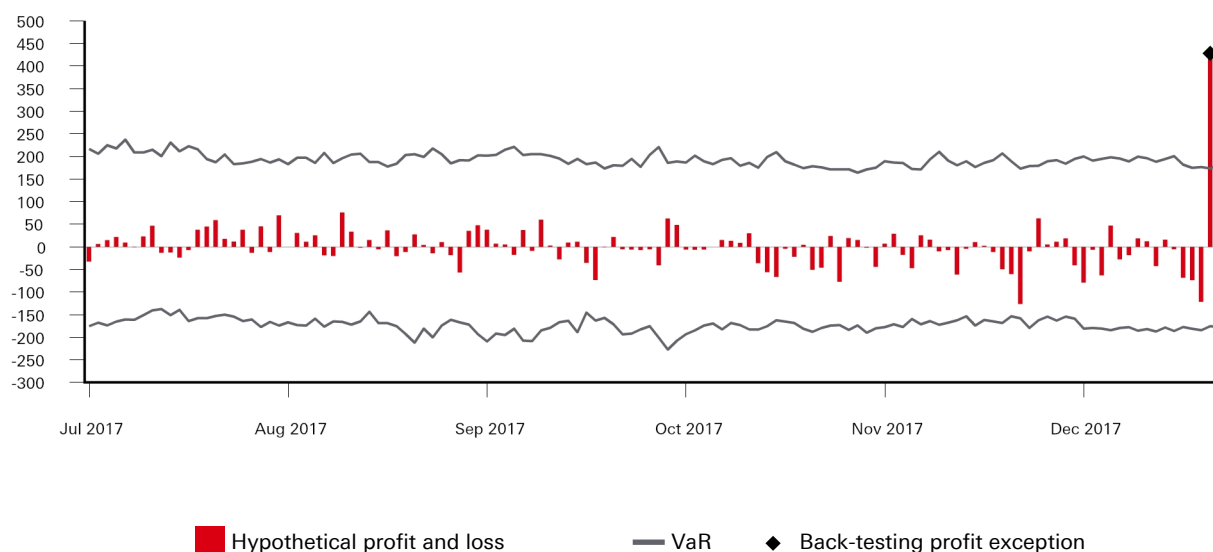
Table 53: MR4 – Comparison of VaR estimates with gains or losses

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



The gain in September was driven by Fair Value Adjustments and the gain in December was driven by market movements in short term Asian cross currency positions.

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



The gain in December was driven by market movements in short term Asian cross currency positions.

Other disclosures

Interest rate exposures in the banking book

A principal part of our management of market risk in non-trading portfolios is to monitor the sensitivity of projected net interest income at least quarterly under varying interest rate scenarios (simulation modelling), where all other economic variables are held constant.

The sensitivity analysis is based on local business assumptions and standard scenarios which are required throughout HSBC Group. The analysis is consolidated to illustrate the combined pro forma effect on the group's consolidated net interest income.

The table below sets out the effect on future net interest income of an incremental 25 basis points parallel rise or fall in all yield curves at the beginning of each quarter during the 12 months from 1 January. Assuming no management actions and all other non-interest rate risk variables remain constant, the sensitivity of projected net interest income is as follows:

Table 54: Change in projected net interest income arising from a shift in yield curves

| | 2018 Projections | | | | 2017 Projections |
|---|------------------|-----------|---------|----------|------------------|
| | HK\$m | | | | HK\$m |
| | HK dollar | US dollar | Others | Total | Total |
| +25 basis points at the beginning of each quarter | 3,990 | 3,471 | 3,069 | 10,530 | 9,347 |
| -25 basis points at the beginning of each quarter | (6,169) | (5,527) | (2,575) | (14,271) | (14,234) |

The main drivers of the year-on-year changes in the group's projected net interest income were due to higher implied Hong Kong dollar and US dollar yield curves under a reducing interest rate scenario, wider margins in a rising interest rate scenario and a decrease in the funding requirements of the trading book.

Projected net interest income sensitivity figures represent the effect of the pro forma movements in projected yield curves based on a static balance sheet size and structure assumption, other than instances where the size of the balances or re-pricing is deemed interest rate sensitive (non-interest bearing current account migration and fixed rate loan early prepayment). This effect, however, does not incorporate actions which would probably be taken by BSM or in the business units to mitigate the effect of interest rate risk. In reality, BSM proactively seeks to change the interest rate risk profile to optimise net revenues. The net interest income sensitivity calculations assume that interest rates of all maturities move by the same amount in the 'up-shock' scenario. Rates are not assumed to become negative in the 'down-shock' scenario unless the central bank rate is already negative and then not assumed to go further negative, which may, in certain currencies, effectively result in non-parallel shock. In addition, the net interest income sensitivity calculations take account of the effect on net interest income of anticipated differences in changes between interbank interest rates and interest rates over which the entity has discretion in terms of the timing and extent of rate changes.

Sites include business line interest rate pass-on assumptions, re-investment of maturing assets and liabilities at market rates per shock scenario and prepayment risk. BSM is modelled based on no management actions i.e. the risk profile at the month end is assumed to remain constant throughout the forecast horizon. The projections make other assumptions, including that contractually fixed term positions run to maturity, managed rate products and non-interest bearing balances, such as interest-free current accounts, are subject to interest rate risk behaviouralisation, and any material effect from the extent to which movements in interest rates will alter the demand for the group's products and how customers' behaviour may change with movements in interest rates, such as loan repayments are incorporated.

Mainland activities

The analysis of Mainland activities is based on the categories of non-bank counterparties and the type of direct exposures defined by the HKMA under the BDR with reference to the HKMA's 'Return of Mainland Activities – (MA(BS)20)', which includes the Mainland exposures extended by the Bank's Hong Kong offices and wholly-owned banking subsidiaries in Mainland China.

Table 55: Mainland activities

| | | On-balance sheet exposure | Off-balance sheet exposure | Total exposures |
|--|---|---------------------------|----------------------------|-----------------|
| | | HK\$m | HK\$m | HK\$m |
| At 31 Dec 2017 | | | | |
| Types of counterparties | | | | |
| 1 | Central government, central government-owned entities and their subsidiaries and joint ventures ('JVs') | 235,753 | 11,891 | 247,644 |
| 2 | Local governments, local government-owned entities and their subsidiaries and JVs | 36,608 | 4,979 | 41,587 |
| 3 | People's Republic of China ('PRC') nationals residing in Mainland China or other entities incorporated in Mainland China and their subsidiaries and JVs | 300,862 | 35,571 | 336,433 |
| 4 | Other entities of central government not reported in item 1 above | 9,808 | 2,571 | 12,379 |
| 5 | Other entities of local governments not reported in item 2 above | 4,490 | 961 | 5,451 |
| 6 | PRC nationals residing outside Mainland China or entities incorporated outside Mainland China where the credit is granted for use in Mainland China | 43,948 | 3,723 | 47,671 |
| 7 | Other counterparties where the exposures are considered by the reporting institution to be non-bank Mainland China exposures | 79,685 | 19,560 | 99,245 |
| Total | | 711,154 | 79,256 | 790,410 |
| Total assets after provision | | 4,785,747 | | |
| On-balance sheet exposures as percentage of total assets | | 14.86% | | |

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International claims

The group's country risk exposures in the table below are prepared in accordance with the HKMA Return of International Banking Statistics – (MA(BS)21) guidelines. International claims are on-balance sheet exposures to counterparties based on the

location of the counterparties, after taking into account the transfer of risk, and represent the sum of cross-border claims in all currencies and local claims in foreign currencies.

The table shows claims on individual countries and territories or areas, after recognised risk transfer, amounting to not less than 10% of the group's total international claims.

Table 56: International claims

| | Banks HK\$m | Official sector HK\$m | Non-bank financial institutions HK\$m | Non-financial private sector HK\$m | Others HK\$m | Total HK\$m |
|-----------------------------|----------------|--------------------------|--|--|-----------------|----------------|
| At 31 Dec 2017 | | | | | | |
| Developed countries | 588,150 | 385,837 | 255,277 | 360,707 | 54 | 1,590,025 |
| – of which: Japan | 164,165 | 138,634 | 16,574 | 21,436 | – | 340,809 |
| – of which: United Kingdom | 216,460 | 35,874 | 42,239 | 55,281 | 54 | 349,908 |
| Offshore centres | 75,951 | 11,926 | 89,855 | 424,750 | 1,228 | 603,710 |
| – of which: Hong Kong | 47,916 | 1,502 | 46,092 | 259,187 | 1,224 | 355,921 |
| Developing Asia and Pacific | 435,424 | 108,112 | 61,874 | 390,461 | 113 | 995,984 |
| – of which: Mainland China | 345,274 | 67,243 | 26,669 | 218,602 | 113 | 657,901 |

Foreign currency positions

The group had the following non-structural foreign currency positions that were not less than 10% of the net non-structural positions in all foreign currencies at 31 December 2017:

Table 57: Non-structural foreign currency positions

| | United States dollars HK\$m | Renminbi HK\$m |
|--------------------------------------|-----------------------------------|-------------------|
| At 31 Dec 2017 | | |
| Spot assets | 2,053,034 | 647,081 |
| Spot liabilities | (2,241,893) | (630,161) |
| Forward purchases | 10,278,954 | 1,962,311 |
| Forward sales | (10,059,573) | (1,994,967) |
| Net options positions | (12,815) | 13,107 |
| Net long (net short) position | 17,707 | (2,629) |

The net options positions reported above are calculated using the delta-weighted positions of the options contracts.

Assets pledged and secured liabilities

Table 58: Assets pledged and secured liabilities

| | 2017 HK\$m |
|--|----------------|
| Financial assets pledged as collateral | |
| Treasury bills, debt securities, equities and deposits | 225,590 |
| Amount of liabilities secured | 169,722 |

The above shows assets where a charge has been granted to secure liabilities on a legal and contractual basis. These transactions are conducted under terms that are usual and customary to collateralised transactions including, where relevant, standard securities lending, repurchase agreements and derivative margining.

Amount of liabilities secured included deposit of assets, including assets pledged in respect of sale and repurchase agreements, to cover short positions, and to facilitate settlement processes with clearing houses. These assets comprise of treasury bills, debt securities, equities and deposits. Hong Kong currency notes in circulation are secured by the deposit of funds in respect of which the Hong Kong Government certificates of indebtedness are held.

Liquidity information

The following table sets out the required disclosure items under the Liquidity Coverage Ratio ('LCR') standard disclosure template as specified by the HKMA. The number of data points used in

calculating the average value of the LCR and related components, as set out in the following table for the quarters ending on 31 December 2017, 30 September 2017, 30 June 2017 and 31 March 2017 was 73, 77, 71 and 73 respectively.

Table 59: Liquidity coverage ratio standard disclosure template

| | | Quarter ended | | | |
|----------|--|---|---|---|--|
| | | 31 Dec 2017 | | 30 Sep 2017 | |
| | | Unweighted amount (Average Value) HK\$m | Weighted amount (Average Value) HK\$m | Unweighted amount (Average Value) HK\$m | Weighted amount (Average Value) HK\$m |
| A | High quality liquid assets | | | | |
| 1 | Total high quality liquid assets ('HQLA') | | 1,491,318 | | 1,474,709 |
| B | Cash outflows | | | | |
| 2 | Retail deposits and small business funding, of which: | 3,166,309 | 292,221 | 3,162,962 | 289,549 |
| 3 | <i>Stable retail deposits and stable small business funding</i> | 356,417 | 11,232 | 404,852 | 13,738 |
| 4 | <i>Less stable retail deposits and less stable small business funding</i> | 2,809,892 | 280,989 | 2,758,110 | 275,811 |
| 5 | <i>Retail term deposits and small business term funding</i> | | | | |
| 6 | Unsecured wholesale funding (other than small business funding) and debt securities and prescribed instruments issued by the institution, of which: | 2,189,854 | 1,098,856 | 2,120,119 | 1,097,295 |
| 7 | <i>Operational deposits</i> | 645,308 | 155,628 | 557,815 | 134,884 |
| 8 | <i>Unsecured wholesale funding (other than small business funding) not covered in Row 7</i> | 1,537,549 | 936,231 | 1,558,625 | 958,732 |
| 9 | <i>Debt securities and prescribed instruments issued by the institution and redeemable within the LCR period</i> | 6,997 | 6,997 | 3,679 | 3,679 |
| 10 | Secured funding transactions (including securities swap transactions) | | 2,391 | | 4,650 |
| 11 | Additional requirements, of which: | 492,880 | 160,874 | 477,207 | 155,553 |
| 12 | <i>Cash outflows arising from derivative contracts and other transactions, and additional liquidity needs arising from related collateral requirements</i> | 113,478 | 113,402 | 111,100 | 111,093 |
| 13 | <i>Cash outflows arising from obligations under structured financing transactions and repayment of funding obtained from such transactions</i> | 781 | 781 | 858 | 858 |
| 14 | <i>Potential drawdown of undrawn committed facilities (including committed credit facilities and committed liquidity facilities)</i> | 378,621 | 46,691 | 365,249 | 43,602 |
| 15 | Contractual lending obligations (not otherwise covered in Section B) and other contractual cash outflows | 135,385 | 135,385 | 121,639 | 121,639 |
| 16 | Other contingent funding obligations (whether contractual or non-contractual) | 2,438,801 | 16,456 | 2,428,062 | 15,620 |
| 17 | Total cash outflows | | 1,706,183 | | 1,684,306 |
| C | Cash inflows | | | | |
| 18 | Secured lending transactions (including securities swap transactions) | 365,140 | 84,521 | 364,940 | 92,843 |
| 19 | Secured and unsecured loans (other than secured lending transactions covered in Row 18) and operational deposits placed at other financial institutions | 661,816 | 493,081 | 694,011 | 520,749 |
| 20 | Other cash inflows | 188,626 | 157,112 | 161,977 | 137,271 |
| 21 | Total cash inflows | 1,215,582 | 734,714 | 1,220,928 | 750,863 |
| D | Liquidity coverage ratio (adjusted value) | | | | |
| 22 | Total HQLA | | 1,491,318 | | 1,474,709 |
| 23 | Total net cash outflows | | 971,469 | | 933,443 |
| 24 | LCR (%) | | 153.6% | | 158.0% |

Banking Disclosure Statement at 31 December 2017

Table 59: Liquidity coverage ratio standard disclosure template (continued)

| | Quarter ended | | | |
|---|--------------------------------------|------------------------------------|--------------------------------------|------------------------------------|
| | 30 Jun 2017 | | 31 Mar 2017 | |
| | Unweighted amount (Average Value) | Weighted amount (Average Value) | Unweighted amount (Average Value) | Weighted amount (Average Value) |
| | HK\$m | HK\$m | HK\$m | HK\$m |
| A High quality liquid assets | | | | |
| 1 Total high quality liquid assets ('HQLA') | | 1,450,509 | | 1,568,984 |
| B Cash outflows | | | | |
| 2 Retail deposits and small business funding, of which: | 3,111,318 | 279,536 | 3,087,516 | 277,432 |
| 3 <i>Stable retail deposits and stable small business funding</i> | <i>506,133</i> | <i>19,018</i> | <i>500,820</i> | <i>18,762</i> |
| 4 <i>Less stable retail deposits and less stable small business funding</i> | <i>2,605,185</i> | <i>260,518</i> | <i>2,586,696</i> | <i>258,670</i> |
| 5 <i>Retail term deposits and small business term funding</i> | | | | |
| 6 Unsecured wholesale funding (other than small business funding) and debt securities and prescribed instruments issued by the institution, of which: | 2,051,089 | 1,054,163 | 2,029,476 | 1,056,837 |
| 7 <i>Operational deposits</i> | <i>561,336</i> | <i>135,005</i> | <i>542,498</i> | <i>131,289</i> |
| 8 <i>Unsecured wholesale funding (other than small business funding) not covered in Row 7</i> | <i>1,487,087</i> | <i>916,492</i> | <i>1,485,736</i> | <i>924,306</i> |
| 9 Debt securities and prescribed instruments issued by the institution and redeemable within the LCR period | 2,666 | 2,666 | 1,242 | 1,242 |
| 10 Secured funding transactions (including securities swap transactions) | | 8,640 | | 7,997 |
| 11 Additional requirements, of which: | 475,999 | 152,920 | 411,245 | 146,903 |
| 12 <i>Cash outflows arising from derivative contracts and other transactions, and additional liquidity needs arising from related collateral requirements</i> | <i>106,123</i> | <i>106,083</i> | <i>107,527</i> | <i>107,479</i> |
| 13 <i>Cash outflows arising from obligations under structured financing transactions and repayment of funding obtained from such transactions</i> | <i>1,484</i> | <i>1,484</i> | <i>983</i> | <i>983</i> |
| 14 <i>Potential drawdown of undrawn committed facilities (including committed credit facilities and committed liquidity facilities)</i> | <i>368,392</i> | <i>45,353</i> | <i>302,735</i> | <i>38,441</i> |
| 15 Contractual lending obligations (not otherwise covered in Section B) and other contractual cash outflows | 141,139 | 141,139 | 162,755 | 162,755 |
| 16 Other contingent funding obligations (whether contractual or non-contractual) | 2,408,357 | 14,940 | 2,318,962 | 14,022 |
| 17 Total cash outflows | | 1,651,338 | | 1,665,946 |
| C Cash inflows | | | | |
| 18 Secured lending transactions (including securities swap transactions) | 367,410 | 80,264 | 377,725 | 91,713 |
| 19 Secured and unsecured loans (other than secured lending transactions covered in Row 18) and operational deposits placed at other financial institutions | 745,511 | 546,132 | 715,336 | 540,249 |
| 20 Other cash inflows | 162,781 | 129,589 | 135,327 | 111,223 |
| 21 Total cash inflows | 1,275,702 | 755,985 | 1,228,388 | 743,185 |
| D Liquidity coverage ratio (adjusted value) | | | | |
| 22 Total HQLA | | 1,450,509 | | 1,568,984 |
| 23 Total net cash outflows | | 895,353 | | 922,761 |
| 24 LCR (%) | | 162.1% | | 170.9% |

Senior management compensation and benefits

Remuneration of senior management and key personnel

The following tables show the remuneration paid to senior management and key personnel. These disclosures are in compliance with the guideline in Part 3 (Disclosure on remuneration) of the HKMA Supervisory Policy Manual CG-5 'Guideline on a Sound Remuneration System'. Senior management is defined as those persons responsible for oversight of the group's strategy, activities or material business lines. This includes the Executive Directors, Executive Committee members, Chief Executive, Alternative Chief Executive and Managers as registered with the HKMA. There were 32 members of senior management during 2017. This includes one member who is a Director of, and is remunerated by, HSBC Holdings Plc and is consequently not included in the disclosures below.

Key personnel is defined as individual employees whose duties or activities involve the assumption of material risk or the taking on of material exposures on behalf of the group. Under the provisions of the UK Prudential Regulation Authority's Remuneration Rules, HSBC is required to identify individuals who will be considered as 'Identified Staff and Material Risk Takers' (collectively referred to as 'Material Risk Takers' or 'MRTs') based on the qualitative and quantitative criteria specified in the Regulatory Technical Standard issued by the European Banking Authority. Based on the criteria applicable to the Group, the identified number of MRTs, and, in turn, key personnel, in 2017 were 296 members.

The group follows the remuneration system of HSBC Holdings plc. Please refer to the HSBC remuneration practices and governance at <http://www.hsbc.com/about-hsbc/corporate-governance> and the Capital and Risk Management Pillar 3 Disclosures of HSBC Holdings plc for details of the governance structure and the major design characteristics of the remuneration system.

Table 60: Analysis of remuneration between fixed, variable, deferred and non-deferred amounts

| | Footnote | 2017 | | |
|---------------------------|----------|-------------------|---------------|-------|
| | | Senior management | Key personnel | Total |
| Number of people | | 31 | 296 | 327 |
| | | HK\$m | HK\$m | HK\$m |
| Fixed | | | | |
| Cash-based | | 261 | 1,238 | 1,499 |
| Shares-based | | – | – | – |
| Total fixed pay | | 261 | 1,238 | 1,499 |
| Variable | 1 | | | |
| Cash | | 52 | 286 | 338 |
| Non-deferred shares | | 52 | 271 | 323 |
| Deferred cash | | 73 | 268 | 341 |
| Deferred shares | | 82 | 286 | 368 |
| Total variable pay | | 259 | 1,111 | 1,370 |

1 The forms of variable remuneration and the proportion deferred are based on the seniority, role and responsibilities of employees and their level of total variable compensation.

Table 61: Analysis of deferred remuneration

| | Footnotes | 2017 | | |
|--|-----------|-------------------|---------------|-------|
| | | Senior management | Key personnel | Total |
| Number of people | | 31 | 296 | 327 |
| | | HK\$m | HK\$m | HK\$m |
| Deferred remuneration at 31 Dec | | | | |
| Outstanding, unvested | 1, 2 | 501 | 1,085 | 1,586 |
| – outstanding, cash | | 148 | 393 | 541 |
| – outstanding, shares | 3 | 353 | 692 | 1,045 |
| Awarded during the year | | 149 | 500 | 649 |
| Paid out | | 247 | 769 | 1,016 |
| – deferred shares paid out | | 172 | 603 | 775 |
| – deferred cash paid out | | 75 | 166 | 241 |
| Reduced through performance adjustment | | – | – | – |

1 Outstanding, unvested, deferred remuneration is exposed to ex-post explicit adjustments.

2 There is no reduction of deferred remuneration and retained remuneration due to ex-post explicit adjustments during 2017 via the application of malus and/or clawback.

3 Outstanding, unvested, deferred shares are exposed to ex-post implicit adjustments. The total value of these shares in 2017 and 2016 are calculated based on the closing market share price of HSBC Holdings plc as at 31 December of the respective financial years. HSBC's share price is 16.7% higher as at 31 December 2017 when compared to that of 31 December 2016.

Other information

Abbreviations

The following abbreviated terms are used throughout this document.

Currencies

| | |
|-------|---|
| HK\$m | Millions of Hong Kong dollars |
| HK\$b | Billions (thousands of millions) of Hong Kong dollars |
| MYRm | Millions of Malaysian ringgit |
| US\$m | Millions of United States dollars |

A

| | |
|------|--|
| AFS | Available-for-sale |
| AI | Authorised institution |
| ALCO | Asset and Liability Management Committee |
| AT1 | Additional tier 1 |
| AVA | Additional value adjustment |

B

| | |
|------|--|
| BCBS | Basel Committee on Banking Supervision |
| BCR | Banking (Capital) Rules |
| BDR | Banking (Disclosure) Rules |
| BLR | Banking (Liquidity) Rules |
| BSM | Balance Sheet Management |

C

| | |
|-------------------|---------------------------------------|
| CCF | Credit conversion factor |
| CCP | Central counterparty |
| CCR ¹ | Counterparty credit risk |
| CCyB ¹ | Countercyclical capital buffer |
| CDS ¹ | Credit default swap |
| CEM | Current exposure method |
| CET1 ¹ | Common equity tier 1 |
| CF | Commodity finance |
| CIS | Collective investment scheme |
| CMB | Commercial Banking, a global business |
| CRC | Comprehensive risk charge |
| CRE ¹ | Commercial real estate |
| CRM | Credit risk mitigation/mitigant |
| CRR ¹ | Customer risk rating |
| CSA | Credit Support Annex |
| CVA | Credit valuation adjustment |

D

| | |
|-------|--------------------------------------|
| D-SIB | Domestic systemically important bank |
| DTAs | Deferred tax assets |

E

| | |
|------------------|--|
| EAD ¹ | Exposure at default |
| ECA | Export Credit Agency |
| ECAI | External Credit Assessment Institution |
| EL ¹ | Expected loss |

F

| | |
|------|-------------------------------|
| FFVA | Funding Fair Value Adjustment |
|------|-------------------------------|

G

| | |
|--------------------|---|
| GB&M | Global Banking and Markets, a global business |
| GMB | Group Management Board |
| GPB | Global Private Banking, a global business |
| Group | HSBC Holdings together with its subsidiary undertakings |
| group | The Hongkong and Shanghai Banking Corporation Limited together with its subsidiary undertakings |
| G-SIB ¹ | Global systemically important bank |

H

| | |
|-----------|---|
| HKFRS | Hong Kong Financial Reporting Standards |
| HKMA | Hong Kong Monetary Authority |
| Hong Kong | The Hong Kong Special Administrative Region of the People's Republic of China |
| HQLA | High-quality liquid assets |

| | |
|-------|---|
| HSBC | HSBC Holdings together with its subsidiary undertakings |
| HVCRE | High volatility commercial real estate |

I

| | |
|------------------|--|
| IMM ¹ | Internal Model Method |
| IPRE | Income producing real estate |
| IRB ¹ | Internal ratings-based approach |
| IRB(S) | Internal ratings-based (securitisation) approach |
| IRC | Incremental risk charge |
| ISDA | International Swaps and Derivatives Association |

J

| | |
|-------|---------------------------------------|
| JCCyB | Jurisdictional countercyclical buffer |
| JVs | Joint ventures |

L

| | |
|------------------|-------------------------------|
| LCR | Liquidity Coverage Ratio |
| LGD ¹ | Loss given default |
| Libor | London interbank offered rate |

M

| | |
|------|---|
| MOC | Model Oversight Committee |
| MRTs | Identified Staff and Material Risk Takers |
| MSRs | Mortgage servicing rights |

O

| | |
|------------------|------------------|
| OF | Object finance |
| OTC ¹ | Over-the-counter |

P

| | |
|-----------------|----------------------------|
| PD ¹ | Probability of default |
| PF | Project finance |
| PFE | Potential future exposure |
| PRC | People's Republic of China |
| PSE | Public sector entities |

R

| | |
|------------------|---|
| RAS | Risk appetite statement |
| RBM | Ratings Based Method |
| RBWM | Retail Banking and Wealth Management, a global business |
| RMM | Risk Management Meeting |
| RMOC | Retail Banking and Wealth Management Risk Model Oversight Committee |
| RNIV | Risks not in VaR |
| RW | Risk-weight |
| RWA ¹ | Risk-weighted asset/risk-weighted amount |

S

| | |
|------------------|--|
| SA-CCR | Standardised approach for counterparty credit risk |
| S&P | Standard and Poor's rating agency |
| SFT | Securities Financing Transactions |
| SME | Small and medium-sized enterprise |
| SPE ¹ | Special Purpose Entity |
| SRW | Supervisory risk-weight |
| STC | Standardised (credit risk) approach |
| STC(S) | Standardised (securitisation) approach |
| STM | Standardised (market risk) approach |
| STO | Standardised (operational risk) approach |
| SVaR | Stressed Value at risk |

V

| | |
|------------------|---------------|
| VaR ¹ | Value at risk |
|------------------|---------------|

W

| | |
|------|-------------------------------------|
| WMOC | Wholesale Model Oversight Committee |
|------|-------------------------------------|

¹ Full definition included in the Glossary published on HSBC website www.hsbc.com

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