

The Hongkong and Shanghai Banking Corporation Limited

**Banking Disclosure Statement at 30 June 2019
(Unaudited)**

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Prefixes contained in the table names, where applicable, represent the reference codes of the standard disclosure templates and tables for the Revised Pillar 3 Framework issued by the Hong Kong Monetary Authority ('HKMA').

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'). 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.

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.

The Banking Disclosure Statement

The group's Banking Disclosure Statement at 30 June 2019 comprises Pillar 3 information required under the framework of the Basel Committee on Banking Supervision ('BCBS'). The disclosures are made in accordance with the latest BDR issued by the HKMA.

According to the BDR, disclosure of comparative information is not required unless otherwise specified in the standard disclosure templates. Prior period disclosures can be found in the Regulatory Disclosure section of our website, www.hsbc.com.hk.

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 at 30 June 2019 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:

- Section 16FE – CCA : Main features of the regulatory capital instruments
-

Table 1: KM1 – Key prudential ratios

		a	b	c	d	e
		30 Jun	31 Mar	31 Dec	30 Sep	30 Jun
	Footnotes	2019	2019	2018	2018	2018
Regulatory capital (HK\$m)						
1	Common Equity Tier 1 ('CET1')	480,610	472,760	463,774	436,665	428,578
2	Tier 1	526,297	510,575	501,503	472,590	464,537
3	Total capital	589,349	572,506	557,180	537,336	529,848
Risk-weighted assets ('RWAs') (HK\$m)						
4	Total RWAs	2,897,902	2,881,842	2,813,912	2,744,189	2,785,568
Risk-based regulatory capital ratios (as a percentage of RWA)						
5	CET1 ratio (%)	16.6	16.4	16.5	15.9	15.4
6	Tier 1 ratio (%)	18.2	17.7	17.8	17.2	16.7
7	Total capital ratio (%)	20.3	19.9	19.8	19.6	19.0
Additional CET1 buffer requirements (as a percentage of RWA)						
8	Capital conservation buffer requirement (%)	2.500	2.500	1.875	1.875	1.875
9	Countercyclical capital buffer requirement (%)	1.27	1.26	0.96	1.09	1.08
10	Higher loss absorbency requirements (%) (applicable only to G-SIBs or D-SIBs)	2.500	2.500	1.875	1.875	1.875
11	Total AI-specific CET1 buffer requirements (%)	6.27	6.26	4.71	4.84	4.83
12	CET1 available after meeting the AI's minimum capital requirements (%)	12.1	11.7	11.8	11.2	10.7
Basel III leverage ratio						
13	Total leverage ratio ('LR') exposure measure (HK\$m)	8,136,588	7,968,614	7,741,301	7,663,757	7,688,762
14	LR (%)	6.5	6.4	6.5	6.2	6.0
Liquidity Coverage Ratio ('LCR')						
15	Total high quality liquid assets ('HQLA') (HK\$m)	1,583,650	1,663,852	1,566,715	1,502,149	1,455,156
16	Total net cash outflows (HK\$m)	1,074,261	1,106,393	974,311	956,466	988,881
17	LCR (%)	147.5	150.5	161.0	157.2	147.2
Net Stable Funding Ratio ('NSFR')						
18	Total available stable funding (HK\$m)	4,902,835	4,829,714	4,789,003	4,675,909	4,693,322
19	Total required stable funding (HK\$m)	3,379,361	3,313,491	3,198,246	3,238,487	3,208,268
20	NSFR (%)	145.1	145.8	149.7	144.4	146.3

1 The regulatory capital, RWAs, risk-based regulatory capital ratios and additional CET1 buffer requirements above are based on or derived from the information 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 Banking (Capital) Rules ('BCR').

2 Effective from 2019, the capital conservation buffer requirement, the jurisdictional CCyB of Hong Kong used in the calculation of the CCyB buffer requirement and the higher loss absorbency requirement all increased from 1.875% to 2.5% in accordance with the phase-in arrangements set out by the HKMA.

3 The Basel III leverage ratios are disclosed in accordance with the information contained in the 'Leverage Ratio' return submitted to the HKMA under the requirements specified in Part 1C of the BCR.

4 The Liquidity Coverage Ratios shown are the simple average values of all working days in the reporting periods and are made in accordance with the requirements specified in the 'Liquidity Position' return submitted to the HKMA under rule 11(1) of the Banking (Liquidity) Rules ('BLR').

5 The Net Stable Funding Ratio disclosures are made in accordance with the information contained in the 'Stable Funding Position' return submitted to the HKMA under the requirements specified in rule 11(1) of the BLR.

Structure of the regulatory group

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 2018*.

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\$55,133m 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 30 June 2019.

There are no subsidiaries that are included within the regulatory scope of consolidation but not included within the accounting scope of consolidation at 30 June 2019.

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 30 June 2019, the effect of this requirement is to reduce the amount of reserves which can be distributed to shareholders by HK\$24,552m.

Table 2: List of subsidiaries outside the regulatory scope of consolidation

	Principal activities	At 30 Jun 2019	
		Total assets	Total equity
		HK\$m	HK\$m
Footnotes			
HSBC Broking Futures (Hong Kong) Ltd	Futures broking	5,482	601
HSBC Broking Services (Asia) Ltd and its subsidiaries	Broking services	12,592	2,907
HSBC Corporate Advisory (Malaysia) Sdn Bhd	Financial services	9	9
HSBC Corporate Finance (Hong Kong) Ltd	Financial services	17	16
HSBC Global Asset Management Holdings (Bahamas) Ltd	Asset management	131	129
HSBC Global Asset Management (Hong Kong) Ltd	Asset management	1,066	649
HSBC Global Asset Management (Japan) K.K.	Asset management	242	133
HSBC Global Asset Management (Singapore) Ltd	Asset management	75	40
HSBC Insurance (Asia-Pacific) Holdings Ltd and its subsidiaries	Insurance	454,228	28,996
HSBC InvestDirect (India) Ltd and its subsidiaries	Financial services	1,040	602
HSBC Investment Funds (Hong Kong) Ltd	Asset management	701	249
HSBC Qianhai Securities Ltd	Securities services	1,797	1,579
HSBC Securities (Asia) Ltd and its subsidiary	Broking services	26	26
HSBC Securities (Japan) Ltd	Broking services	157,732	1,770
HSBC Securities (Singapore) Pte Ltd	Broking services	1,044	72
HSBC Securities Brokers (Asia) Ltd	Broking services	7,032	3,625
Hang Seng Futures Ltd	¹ Futures broking	0	0
Hang Seng Insurance Co. Ltd and its subsidiaries	Insurance	142,069	12,682
Hang Seng Investment Management Ltd	Asset management	1,057	1,025
Hang Seng Investment Services Ltd	Investment services	9	9
Hang Seng Qianhai Fund Management Co. Ltd	Asset management	400	389
Hang Seng Securities Ltd	Broking services	2,241	824

¹ In members' voluntary liquidation.

The approaches used in calculating the group's regulatory capital and 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. For securitisation exposures, the group uses the securitisation internal ratings-based approach, securitisation external ratings-based approach, securitisation standardised approach or securitisation fall-back approach to determine credit risk for its banking book securitisation exposures. For counterparty credit risk, the group uses both the current exposure method and an internal models approach to calculate its default risk 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.

Balance sheet reconciliation

The following table expands the balance sheet under the regulatory scope of consolidation to show separately the

capital components that are reported in the 'Composition of regulatory capital disclosures' template in Table 4. The capital components in this table contain a reference that shows how these amounts are included in Table 4.

Table 3: CC2 – Reconciliation of regulatory capital to balance sheet

	a	b	c
	At 30 Jun 2019		
	Balance sheet as in published financial statements	Under regulatory scope of consolidation	Cross-referenced to definition of Capital Components
	HK\$m	HK\$m	
Assets			
Cash and sight balances at central banks	232,828	232,377	
Items in the course of collection from other banks	44,311	44,311	
Hong Kong Government certificates of indebtedness	284,964	284,964	
Trading assets	614,685	614,659	
<i>of which: significant Loss-absorbing capacity ('LAC') investments in financial sector entities exceeding 10%</i>		522	1
<i>of which: significant LAC investments in financial sector entities</i>		87	2&3
Derivatives	298,197	298,135	
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	148,061	7,793	
<i>of which: significant LAC investments in financial sector entities exceeding 10% threshold</i>		4	4
Reverse repurchase agreements – non-trading	393,760	242,984	
Placings with and advances to banks	418,935	408,409	
Loans and advances to customers	3,698,489	3,694,344	
<i>of which: impairment allowances eligible for inclusion in Tier 2 capital</i>		(3,711)	5
Financial investments	1,783,190	1,393,668	
<i>of which: significant LAC investments in financial sector entities exceeding 10% threshold</i>		1,254	6
Amounts due from Group companies	96,905	208,518	
<i>of which: significant LAC investments in financial sector entities exceeding 10% threshold</i>		1,888	7
<i>of which: significant LAC investments in financial sector entities</i>		6,078	8
Investments in subsidiaries	–	16,869	
<i>of which: significant LAC investments in financial sector entities exceeding 10% threshold</i>		16,869	9
Interests in associates and joint ventures	145,933	142,568	
<i>of which: goodwill</i>		3,747	10
<i>of which: significant LAC investments in financial sector entities exceeding 10% threshold</i>		80,642	11
Goodwill and intangible assets	72,898	16,182	
<i>of which: goodwill</i>		4,886	12
<i>of which: intangible assets</i>		11,296	13
Property, plant and equipment	138,485	132,000	
Deferred tax assets	1,969	1,909	
<i>of which: deferred tax assets net of related tax liabilities</i>		2,030	14
<i>of which: deferred tax liabilities related to goodwill</i>		(92)	15
<i>of which: deferred tax liabilities related to intangible assets</i>		(29)	16
Prepayments, accrued income and other assets	299,183	212,299	
<i>of which: defined benefit pension fund net assets</i>		32	17
Total assets	8,672,793	7,951,989	

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Table 3: CC2 – Reconciliation of regulatory capital to balance sheet (continued)

	a	b	c
	At 30 Jun 2019		
	Balance sheet in published financial statements	Under regulatory scope of consolidation	Cross-referenced to definition of Capital Components
	HK\$m	HK\$m	
Liabilities			
Hong Kong currency notes in circulation	284,964	284,964	
Items in the course of transmission to other banks	52,386	52,386	
Repurchase agreements – non-trading	141,685	141,685	
Deposits by banks	220,156	220,156	
Customer accounts	5,289,573	5,286,748	
Trading liabilities	81,600	81,600	
Derivatives	308,835	308,989	
<i>of which: gains and losses due to changes in own credit risk on fair valued liabilities</i>		(326)	18
Financial liabilities designated at fair value	173,152	135,751	
<i>of which: gains and losses due to changes in own credit risk on fair valued liabilities</i>		(73)	19
Debt securities in issue	90,959	90,628	
Retirement benefit liabilities	3,173	3,173	
Amounts due to Group companies	365,506	341,916	
<i>of which: qualifying Tier 2 capital instruments</i>		14,596	20
<i>of which: gains and losses due to changes in own credit risk on fair valued liabilities</i>		1,178	21
Accruals and deferred income, other liabilities and provisions	257,330	197,748	
Liabilities under insurance contracts	502,127	–	
Current tax liabilities	9,044	8,506	
Deferred tax liabilities	29,079	19,367	
<i>of which: deferred tax liabilities related to goodwill</i>		4	22
<i>of which: deferred tax liabilities related to intangible assets</i>		1,695	23
<i>of which: deferred tax liabilities related to defined benefit pension fund net assets</i>		3	24
Subordinated liabilities	4,068	4,068	
<i>of which: portion eligible for Tier 2 capital instruments, subject to phase-out arrangements</i>		3,123	25
Preference shares	98	–	
Total liabilities	7,813,735	7,177,685	
Equity			
Share capital	172,335	172,335	
<i>of which: portion eligible for inclusion in CET1 capital</i>		170,881	26
<i>of which: revaluation reserve capitalisation issue</i>		1,454	27
Other equity instruments	44,615	44,615	
<i>of which: qualifying AT1 capital instruments</i>		44,615	28
Other reserves	135,287	132,044	
<i>of which: fair value gains arising from revaluation of land and buildings</i>		71,029	30
<i>of which: cash flow hedging reserves</i>		(55)	31
<i>of which: valuation adjustment</i>		43	32
Retained earnings	444,500	372,804	
<i>of which: regulatory reserve for general banking risks</i>		24,552	34
<i>of which: regulatory reserve eligible for inclusion in Tier 2 capital</i>		13,053	35
<i>of which: fair value gains arising from revaluation of land and buildings</i>		4,688	36
<i>of which: valuation adjustment</i>		1,603	37
Total shareholders' equity	796,737	721,798	
Non-controlling interests	62,321	52,506	
<i>of which: portion allowable in CET1 capital</i>		27,309	38
<i>of which: portion allowable in Additional Tier1 ('AT1') capital</i>		1,079	39
Total equity	859,058	774,304	
Total Liabilities and equity	8,672,793	7,951,989	

Capital and RWAs

Regulatory capital disclosures

The following table sets out the detailed composition of the group's regulatory capital using the 'Composition of regulatory capital disclosures' template, as specified by the HKMA.

Table 4: CC1 – Composition of regulatory capital

	a	b
	At 30 Jun 2019	
	Component of regulatory capital	Cross-referenced to Table 3
	HK\$m	Source based on reference numbers/ letters of the balance sheet under the regulatory scope of consolidation
CET1 capital: instruments and reserves		
1	170,881	26
2	372,804	33
3	132,044	29
5	27,309	38
6	703,038	
CET1 capital: regulatory deductions		
7	1,646	32+37
8	8,537	10+12+15-22
9	9,572	13+16-23
10	2,030	14
11	(55)	31
14	(779)	-(18+19+21)
15	29	17-24
19	101,179	1+4+6+7+9+11
26	100,269	
26a	75,717	30+36
26b	24,552	34
28	222,428	
29	480,610	
AT1 capital: instruments		
30	44,615	28
31	44,615	28
34	1,079	39
36	45,694	
AT1 capital: regulatory deductions		
40	7	2
43	7	
44	45,687	
45	526,297	
Tier 2 capital: instruments and provisions		
46	14,596	20
47	3,123	25
50	16,764	35-5
51	34,483	
Tier 2 capital: regulatory deductions		
55	6,158	3+8
56	(34,727)	
56a	(34,727)	(27+30+36)×45%
57	(28,569)	
58	63,052	
59	589,349	
60	2,897,902	

Table 4: CC1 – Composition of regulatory capital (continued)

		a	b
		At 30 Jun 2019	
		Component of regulatory capital	Cross-referenced to Table 3
		HK\$m	Source based on reference numbers/ letters of the balance sheet under the regulatory scope of consolidation
Capital ratios (as a percentage of RWA)			
61	CET1 capital ratio	16.58%	
62	Tier 1 capital ratio	18.16%	
63	Total capital ratio	20.34%	
64	Institution-specific buffer requirement (capital conservation buffer plus countercyclical capital buffer plus higher loss absorbency requirements)	6.27%	
65	<i>of which: capital conservation buffer requirement</i>	2.500%	
66	<i>of which: bank specific countercyclical capital buffer requirement</i>	1.27%	
67	<i>of which: higher loss absorbency requirement</i>	2.500%	
68	CET1 (as a percentage of RWA) available after meeting minimum capital requirements	12.08%	
Amounts below the thresholds for deduction (before risk weighting)			
72	Insignificant LAC investments in CET1, AT1 and Tier 2 capital instruments issued by, and non-capital LAC liabilities of, financial sector entities that are outside the scope of regulatory consolidation	20,394	
73	Significant LAC investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	58,179	
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 BSC approach, or the STC approach and SEC-ERBA, SEC-SA and SEC-FBA (prior to application of cap)	3,990	
77	Cap on inclusion of provisions in Tier 2 under the BSC approach, or the STC approach, and SEC-ERBA, SEC-SA and SEC-FBA	3,681	
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the IRB approach and SEC-IRBA (prior to application of cap)	18,150	
79	Cap for inclusion of provisions in Tier 2 under the IRB approach and SEC-IRBA	13,083	
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2018 and 1 Jan 2022)			
84	Current cap on Tier 2 capital instruments subject to phase-out arrangements	13,673	

At 30 June 2019, our CET1 capital ratio was 16.58% compared with 16.48% at 31 December 2018.

CET1 capital increased in the first half of 2019 by HK\$16.8bn, mainly due to:

- HK\$12bn of capital generated through profits, net of dividends;
- a HK\$3bn increase in the value of financial assets at fair value through other comprehensive income;
- a HK\$2.3bn decrease in regulatory reserve and;
- a HK\$1.3bn increase in allowable minority interests, partially offset by
- a HK\$1.8bn increase in threshold deductions primarily due to an increase in the value of our significant capital investments.

AT1 capital increased in the first half of 2019 by HK\$8bn, mainly due to new issuance of an AT1 capital instrument.

Tier 2 capital increased in the first half of 2019 by HK\$7.4bn, primarily due to an increase in the property revaluation reserve eligible for inclusion in Tier 2 capital.

Table 4: CC1 – Composition of regulatory capital (continued)

Notes to the template:

		At 30 Jun 2019	
		Hong Kong basis	Basel III basis
		HK\$m	HK\$m
10	Deferred tax assets (net of associated deferred tax liabilities)	2,030	43

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') 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 or other credit exposures to connected companies) under Basel III.

		At 30 Jun 2019	
		Hong Kong basis	Basel III basis
		HK\$m	HK\$m
19	Significant LAC investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	101,179	99,291

Explanation:

For the purpose of determining the total amount of significant LAC 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% thresholds and 5% threshold mentioned above is calculated based on the amount of CET1 capital determined in accordance with the deduction methods set out in BCR Schedule 4F. The 15% threshold is referring to paragraph 88 of the Basel III text issued by the Basel Committee (December 2010) and has no effect to the Hong Kong regime.

The following is a summary of the group's CET1 capital, AT1 capital and Tier 2 capital instruments.

Table 5: CCA – Capital instruments

		At 30 Jun 2019	
		Total amount	Amount recognised in regulatory capital
			HK\$m
CET1 capital instruments			
	Ordinary shares	HK\$172,335m	170,881
AT1 capital instruments			
	Floating rate perpetual subordinated loans, callable from 2024	US\$2,000m	15,661
	Floating rate perpetual subordinated loans, callable from 2025	US\$2,200m	17,205
	Floating rate perpetual subordinated loans, callable from 2026	US\$900m	7,064
	Floating rate perpetual subordinated loans, callable from 2027	US\$600m	4,685
Tier 2 capital instruments			
	Primary capital undated floating rate notes	US\$400m	3,123
	Subordinated loan due 2030, callable from 2025	US\$1,180m	9,671
	Subordinated loan due 2031, callable from 2026	US\$600m	4,925

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.

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 country of business as the basis of geographical allocation for the majority of its 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.

Table 6: CCyB1 – Geographical distribution of credit exposures used in countercyclical capital buffer

		a	c	d	e
		At 30 Jun 2019			
Geographical breakdown by Jurisdiction (J)	Footnotes	Applicable JCCyB ratio in effect	RWAs used in computation of CCyB ratio	AI-specific CCyB ratio	CCyB amount
		%	HK\$m	%	HK\$m
1	Hong Kong	2.500	1,095,813		
2	Czech Republic	1.250	1		
3	Denmark	0.500	194		
4	Norway	2.000	90		
5	Slovakia	1.250	1		
6	Sweden	2.000	691		
7	United Kingdom	1.000	13,641		
8	Sum		1,110,431		
9	Total		2,166,452	1.27	36,803

1 This represents the sum of RWAs for the private sector credit exposures in jurisdictions with a non-zero countercyclical buffer rate.

2 The total RWAs used in the computation of the CCyB ratio in column (c) represents the total RWAs for the private sector credit exposures in all jurisdictions to which the bank is exposed, including jurisdictions with no countercyclical buffer rate or with a countercyclical buffer rate set at zero. The CCyB amount in column (e) represents the group's total RWAs multiplied by the group specific CCyB ratio in column (d).

The CCyB ratio increased from 0.96% at 31 December 2018 to 1.27% at 30 June 2019 mainly due to the increase in Hong Kong's Jurisdictional countercyclical capital buffer ('JCCyB') ratio from 1.875% to 2.5% in accordance with the phase-in arrangements specified by the HKMA.

Leverage ratio

The following table shows the leverage ratio, Tier 1 capital and total exposure measure as contained in the 'Leverage Ratio' return submitted to the HKMA under the requirements specified in Part 1C of the BCR.

Table 7: LR2 – Leverage ratio

		a	b
		30 Jun 2019	31 Mar 2019
		HK\$m	HK\$m
On-balance sheet exposures			
1	On-balance sheet exposures (excluding those arising from derivative contracts and SFTs, but including collateral)	6,873,253	6,757,886
2	Less: Asset amounts deducted in determining Tier 1 capital	(224,669)	(225,265)
3	Total on-balance sheet exposures (excluding derivative contracts and SFTs)	6,648,584	6,532,621
Exposures arising from derivative contracts			
4	Replacement cost associated with all derivative contracts (where applicable net of eligible cash variation margin and/or with bilateral netting)	40,037	36,999
5	Add-on amounts for PFE associated with all derivative contracts	364,013	356,480
8	Less: Exempted CCP leg of client-cleared trade exposures	(3,200)	(3,210)
9	Adjusted effective notional amount of written credit derivative contracts	524,634	499,376
10	Less: Adjusted effective notional offsets and add-on deductions for written credit derivative contracts	(519,851)	(490,779)
11	Total exposures arising from derivative contracts	405,633	398,866
Exposures arising from SFTs			
12	Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	506,233	471,943
14	CCR exposure for SFT assets	19,639	17,369
16	Total exposures arising from SFTs	525,872	489,312
Other off-balance sheet exposures			
17	Off-balance sheet exposure at gross notional amount	2,998,431	2,975,097
18	Less: Adjustments for conversion to credit equivalent amounts	(2,424,900)	(2,409,890)
19	Off-balance sheet items	573,531	565,207
Capital and total exposures			
20	Tier 1 capital	526,297	510,575
20a	Total exposures before adjustments for specific and collective provisions	8,153,620	7,986,006
20b	Adjustments for specific and collective provisions	(17,032)	(17,392)
21	Total exposures after adjustments for specific and collective provisions	8,136,588	7,968,614
Leverage ratio			
22	Leverage ratio	6.5%	6.4%

On-balance sheet exposures increased by HK\$115,367m in the second quarter of the year mainly due to increase in corporate loans, residential mortgages and money market placements with banks.

Table 8: LR1 – Summary comparison of accounting assets against leverage ratio exposure measure

		a
		Value under the LR framework
		30 Jun 2019
		HK\$m
Item		
1	Total consolidated assets as per published financial statements	8,672,793
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(672,770)
4	Adjustments for derivative contracts	107,498
5	Adjustment for SFTs (i.e. repos and similar secured lending)	19,639
6	Adjustment for off-balance sheet ('OBS') items (i.e. conversion to credit equivalent amounts of OBS exposures)	573,531
6a	Adjustments for collective provisions and specific provisions that are allowed to be excluded from exposure measure	(856)
7	Other adjustments	(563,247)
8	Leverage ratio exposure measure	8,136,588

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

These are excluded for deriving the leverage ratio exposure measure in accordance with the HKMA requirements specified in Part 1C of the BCR.

Overview of RWAs and the minimum capital requirements
Table 9: OV1 – Overview of RWAs

	a	b	c
	RWAs ¹	RWAs ¹	Minimum ² capital requirements
	30 Jun 2019 HK\$m	31 Mar 2019 HK\$m	30 Jun 2019 HK\$m
1 Credit risk for non-securitisation exposures	2,102,564	2,085,415	177,016
2 <i>of which: standardised credit risk ('STC') approach</i>	267,108	272,357	21,369
4 <i>of which: supervisory slotting criteria approach</i>	65,801	61,781	5,580
5 <i>of which: advanced internal ratings-based ('IRB') approach</i>	1,769,655	1,751,277	150,067
6 Counterparty default risk and default fund contributions	59,900	59,420	5,031
7a <i>of which: current exposure method ('CEM')</i>	14,753	15,160	1,242
8 <i>of which: internal models (counterparty credit risk) ('IMM(CCR)') approach</i>	33,447	31,891	2,814
9 <i>of which: Others</i>	11,700	12,369	975
10 Credit valuation adjustment ('CVA') Risk	21,471	26,224	1,718
11 Equity positions in banking book under the simple risk-weight method and the internal models method	27,100	27,066	2,298
15 Settlement risk	5	29	–
16 Securitisation exposures in banking book	18,694	20,032	1,496
18 <i>of which: securitisation external ratings-based approach ('SEC-ERBA') including internal assessment approach ('IAA')</i>	17,924	20,032	1,434
19 <i>Of which securitisation standardised approach ('SEC-SA')</i>	770	–	62
20 Market risk	102,158	106,104	8,173
21 <i>of which: standardised market risk ('STM') approach</i>	3,106	3,804	249
22 <i>of which: internal models ('IMM') approach</i>	99,052	102,300	7,924
24 Operational risk	339,836	332,265	27,187
25 Amounts below the thresholds for deduction (subject to 250% RW)	145,447	144,555	12,334
26a Deduction to RWAs	42,753	41,430	3,421
26b <i>of which: portion of regulatory reserve for general banking risks and collective provisions which is not included in Tier 2 Capital</i>	309	297	25
26c <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>	42,444	41,133	3,396
27 Total	2,774,422	2,759,680	231,832

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

2 Minimum capital requirement represents the Pillar 1 capital charge at 8% of the RWAs after application of the 1.06 scaling factor, where applicable.

Credit risk for non-securitisation exposures

RWAs increased by HK\$17,149m in the second quarter of 2019, including a decrease in foreign currency translation differences of HK\$11,814m. Excluding foreign currency translation differences,

the remaining increase of HK\$28,963m was primarily driven by loan growth in Hong Kong and Mainland China of HK\$36,673m partially offset by management initiatives of HK\$9,400m.

RWA flow statements
RWA flow statement for credit risk
Table 10: CR8 – RWA flow statement of credit risk¹ exposures under IRB approach

	a
	HK\$m
1 RWAs as at 31 Mar 2019	1,813,058
2 Asset size	36,673
3 Asset quality	4,983
5 Methodology and policy	(9,400)
7 Foreign exchange movements	(9,858)
9 RWAs as at 30 Jun 2019	1,835,456

1 Credit risk in this table represents the credit risk for non-securitisation exposures excluding counterparty credit risk.

RWAs under the IRB approach increased by HK\$22,398m in the second quarter of 2019, including a decrease in foreign currency translation differences of HK\$9,858m. Excluding foreign currency translation differences, the remaining increase of HK\$32,256m was mainly due to:

- a HK\$36,673m increase in asset size due to lending growth in Hong Kong and China, partly offset by;
- a HK\$9,400m decrease in methodology and policy from management initiatives.

RWA flow statement for counterparty credit risk

Table 11: CCR7 – RWA flow statement of default risk exposures under IMM(CCR) approach

		a
		HK\$m
1	RWAs as at 31 Mar 2019	31,891
2	Asset size	1,770
3	Credit quality of counterparties	(47)
7	Foreign exchange movements	(167)
9	RWAs as at 30 Jun 2019	33,447

RWA flow statement for market risk

Table 12: MR2 – RWA flow statement of market risk exposures under IMM approach

		a	b	c	e	f
		VaR	Stressed VaR	IRC	Other	Total RWAs
		HK\$m	HK\$m	HK\$m	HK\$m	HK\$m
1	RWAs as at 31 Mar 2019	17,469	21,773	40,015	23,043	102,300
2	Movement in risk levels	132	2,938	536	(6,320)	(2,714)
6	Foreign exchange movements	(91)	(114)	(209)	(120)	(534)
8	RWAs as at 30 Jun 2019	17,510	24,597	40,342	16,603	99,052

Credit risk

Credit quality of assets

Credit quality of exposures

Tables 13 to 16 analyse credit quality of exposures, changes in defaulted loans and debt securities and impairment allowances by

industry and geographical location on a regulatory consolidation basis.

The credit quality of exposures table below includes 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 and others. Cash items and non-financial assets are excluded.

Table 13: CR1 – Credit quality of exposures

	a		b	c	d		e	f	g
	Gross carrying amounts of			Allowances/ impairments	Of which ECL accounting provisions ¹ for credit losses on STC approach exposures		Allocated in regulatory category of collective provisions	Of which ECL accounting provisions for credit losses on IRB approach exposures	Net values (a+b-c)
	Defaulted exposures	Non-defaulted exposures			Allocated in regulatory category of specific provisions	Allocated in regulatory category of collective provisions			
	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	
1 Loans	19,611	4,440,723	16,123	2,009	764	13,350	4,444,211		
2 Debt securities	–	1,358,697	65	–	7	58	1,358,632		
3 Off-balance sheet exposures	2,213	2,994,456	789	1	60	728	2,995,880		
4 Total at 30 Jun 2019	21,824	8,793,876	16,977	2,010	831	14,136	8,798,723		

1 The categorisation of Expected Credit Loss ('ECL') accounting provisions into the regulatory categories of specific and collective provisions follows the treatment specified in the completion instructions of the HKMA Capital Adequacy Ratio – MA(BS)3 return. According to the completion instructions, the ECL accounting provisions classified into Stage 1 and Stage 2 are treated as collective provisions, while those classified under Stage 3 are treated as specific provisions. Provisions made for purchased or originated credit-impaired financial assets, under which any changes in lifetime expected credit losses will be recognised in the profit or loss account as an impairment gain or loss, are treated as specific provisions.

Table 14: CR2 – Changes in defaulted loans and debt securities

	a
	Footnotes
	HK\$m
1 Defaulted loans and debt securities at 31 Dec 2018	20,593
2 Loans and debt securities that have defaulted since 31 Dec 2018	4,187
3 Returned to non-defaulted status	(678)
4 Amounts written off	(2,353)
5 Other changes	(2,138)
6 Defaulted loans and debt securities at 30 Jun 2019	19,611

1 Other changes include repayment and foreign exchange movements.

For 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 15: Credit-impaired exposures and impairment allowances by industry

	Footnotes	Total gross loans and advances to customers	Gross credit-impaired loans and advances	Specific provisions ¹	Collective provisions ¹
		HK\$m	HK\$m	HK\$m	HK\$m
At 30 Jun 2019					
Residential mortgages		998,656	1,926	(213)	(161)
Real Estate		663,851	236	(31)	(630)
Wholesale and retail trade		438,585	5,164	(3,727)	(672)
Manufacturing		439,881	3,460	(2,047)	(609)
Others	2	1,169,447	7,422	(3,236)	(4,750)
Total		3,710,420	18,208	(9,254)	(6,822)

1 The classification of specific and collective provisions follows the treatment specified in the completion instructions of the HKMA Capital Adequacy Ratio – MA(BS)3 return. Details can be found in footnote 1 under table 13 of this document.

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'.

The geographical information shown below 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.

Table 16: Credit-impaired exposures and impairment allowances by geographical location

	Footnotes	Total gross loans and advances to customers	Gross credit-impaired loans and advances	Overdue loans and advances	Specific provisions ¹	Collective provisions ¹
		HK\$m	HK\$m	HK\$m	HK\$m	HK\$m
At 30 Jun 2019						
Hong Kong		2,381,589	7,344	10,340	(4,165)	(3,375)
Mainland China		335,363	1,407	2,339	(1,126)	(1,128)
Others	2	993,468	9,457	16,125	(3,963)	(2,319)
Total		3,710,420	18,208	28,804	(9,254)	(6,822)

1 The classification of specific and collective provisions follows the treatment specified in the completion instructions of the HKMA Capital Adequacy Ratio – MA(BS)3 return. Details can be found in footnote 1 under table 13 of this document.

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

Loans and advances to customers

Tables 17 to 19 analyse loans and advances to customers by geographical locations, by industries and by which are overdue and rescheduled on an accounting consolidation basis. The accounting consolidation basis is different from the regulatory

consolidation basis as explained in the 'Basis of consolidation' section of this document.

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 17: Loans and advances to customers by geographical location

	Hong Kong	Rest of Asia-Pacific	Other	Total
	HK\$m	HK\$m	HK\$m	HK\$m
At 30 Jun 2019				
Gross loans and advances to customers	1,962,563	1,462,175	289,830	3,714,568

Tables 18 and 19 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 banking subsidiaries in Hong Kong.

Table 18: Loans and advances to customers by industry

	Gross Advances at	Collateral and other security at
	30 Jun 2019	30 Jun 2019
	HK\$m	HK\$m
Industrial, commercial and financial	1,071,135	498,119
– property development	183,561	56,454
– property investment	316,894	205,978
– financial concerns	121,965	75,983
– stockbrokers	9,383	2,079
– wholesale and retail trade	116,094	27,056
– manufacturing	61,039	12,566
– transport and transport equipment	53,978	31,139
– recreational activities	1,749	736
– information technology	29,721	1,589
– others	176,751	84,539
Individuals	811,475	710,799
– advances for the purchase of flats under the Hong Kong Government's Home Ownership Scheme, Private Sector Participation Scheme and Tenants Purchase Scheme	49,312	49,312
– advances for the purchase of other residential properties	588,603	588,603
– credit card advances	58,593	–
– others	114,967	72,884
Gross loans and advances to customers for use in Hong Kong	1,882,610	1,208,918
Trade Finance	162,232	33,686
Gross loans and advances to customers for use outside Hong Kong	1,669,726	614,124
Gross loans and advances to customers	3,714,568	1,856,728

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 3 in the group's *Interim Report 2019*.

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 19: Overdue and rescheduled loans and advances to customers

	Footnotes	Hong Kong		Rest of Asia-Pacific		Total	
		HK\$m	% ¹	HK\$m	% ¹	HK\$m	% ¹
At 30 Jun 2019							
Gross amounts which have been overdue with respect to either principal or interest for:							
– more than three months but not more than six months		727	–	1,115	0.1	1,842	–
– more than six months but not more than one year		785	0.1	1,769	0.1	2,554	0.1
– more than one year		3,056	0.1	3,272	0.3	6,328	0.2
Total		4,568	0.2	6,156	0.5	10,724	0.3
Specific provisions made in respect of amounts overdue	2	(2,160)		(3,692)		(5,852)	
Fair value of collateral held in respect of amounts overdue		1,364		2,351		3,715	
Rescheduled loans and advances to customers		480	–	2,308	0.2	2,788	0.1

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

2 The classification of specific provisions follows the treatment specified in the completion instructions of the HKMA Capital Adequacy Ratio – MA(BS)3 return. Details can be found in footnote 1 under table 13 of this document.

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'. For the purpose of the BCR, acceptances and endorsements are included in the capital adequacy calculation as if they were contingencies.

Table 20: Off-balance sheet exposures other than derivative transactions

	30 Jun 2019 HK\$m
Contract amounts	
Direct credit substitutes	56,554
Transaction-related contingencies	208,756
Trade-related contingencies	110,227
Forward asset purchases	6,198
Forward forward deposits placed	110
Commitments that are unconditionally cancellable without prior notice	2,262,774
Commitments which have an original maturity of not more than one year	64,311
Commitments which have an original maturity of more than one year	289,501
Total	2,998,431
Risk-weighted amounts	297,312

Credit risk under internal ratings-based approach

Table 21.1: 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
	Original on-balance sheet gross exposure	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Provisions
PD scale	HK\$m	HK\$m	%	HK\$m	%		%	years	HK\$m	%	HK\$m	HK\$m
Portfolio (i) – Sovereign												
0.00 to < 0.15	1,458,557	2,738	35.3	1,459,522	0.02	563	36.1	1.54	89,578	6	111	
0.15 to < 0.25	–	34	50.0	17	0.22	22	45.0	4.99	12	70	–	
0.25 to < 0.50	1,937	–	20.0	1,937	0.37	10	45.0	1.00	852	44	3	
0.50 to < 0.75	12,304	1,446	80.8	13,472	0.63	17	45.0	1.16	8,193	61	38	
0.75 to < 2.50	7,169	1,257	30.0	7,546	1.10	18	43.8	1.89	6,284	83	36	
2.50 to < 10.00	266	–	–	266	4.20	4	45.0	2.83	387	146	5	
10.00 to < 100.00	–	–	–	–	–	–	–	–	–	–	–	
100.00 (Default)	–	–	–	–	–	–	–	–	–	–	–	
Sub-total at 30 Jun 2019	1,480,233	5,475	46.2	1,482,760	0.03	634	36.3	1.53	105,306	7	193	1,530
Portfolio (ii) – Bank												
0.00 to < 0.15	526,385	52,873	33.6	544,132	0.04	12,743	40.1	1.12	64,478	12	95	
0.15 to < 0.25	22,160	5,813	43.4	24,681	0.22	1,184	44.0	0.91	9,812	40	24	
0.25 to < 0.50	16,497	1,523	36.6	17,054	0.37	412	29.8	0.85	5,949	35	19	
0.50 to < 0.75	5,739	449	30.4	5,875	0.63	308	48.0	0.66	4,097	70	18	
0.75 to < 2.50	4,248	1,384	43.8	4,855	1.20	412	45.2	0.55	3,652	75	25	
2.50 to < 10.00	1,485	783	23.1	1,666	3.25	107	60.6	0.46	2,388	143	33	
10.00 to < 100.00	8	–	–	8	13.00	8	50.3	1.00	16	218	–	
100.00 (Default)	207	–	–	207	100.00	2	61.0	0.54	1	–	163	
Sub-total at 30 Jun 2019	576,729	62,825	34.6	598,478	0.12	15,176	40.2	1.09	90,393	15	377	1,380
Portfolio (iii) – Corporate – small- and medium-sized corporates												
0.00 to < 0.15	25,222	27,158	39.2	35,723	0.08	895	36.8	2.68	6,248	17	11	
0.15 to < 0.25	24,600	14,258	30.8	28,992	0.22	1,071	30.4	2.20	7,394	26	19	
0.25 to < 0.50	50,556	20,168	28.6	56,328	0.37	1,516	24.8	2.37	15,384	27	52	
0.50 to < 0.75	56,352	16,503	28.3	61,018	0.63	1,566	29.0	2.50	24,355	40	111	
0.75 to < 2.50	124,284	53,531	24.9	137,599	1.44	5,123	30.6	2.02	73,646	54	606	
2.50 to < 10.00	17,851	9,266	25.2	20,183	3.87	1,048	35.1	1.62	16,449	82	282	
10.00 to < 100.00	852	844	31.4	1,116	13.49	64	31.7	1.59	1,319	118	50	
100.00 (Default)	1,331	75	17.9	1,345	100.00	80	49.4	1.15	1,912	142	676	
Sub-total at 30 Jun 2019	301,048	141,803	29.2	342,304	1.44	11,363	30.3	2.22	146,707	43	1,807	3,398
Portfolio (iv) – Corporate – other												
0.00 to < 0.15	636,303	589,460	32.2	826,472	0.08	15,525	47.0	1.93	194,865	24	326	
0.15 to < 0.25	200,874	210,588	31.6	267,365	0.22	4,760	44.6	1.69	102,237	38	262	
0.25 to < 0.50	182,495	199,227	28.1	238,473	0.37	4,334	43.9	1.66	116,551	49	387	
0.50 to < 0.75	175,874	136,409	25.5	210,710	0.63	3,506	41.6	1.67	129,398	61	552	
0.75 to < 2.50	361,495	293,501	24.4	424,069	1.42	8,902	42.1	1.47	348,698	82	2,508	
2.50 to < 10.00	58,117	61,328	25.6	73,809	4.14	2,359	45.3	1.18	93,135	126	1,401	
10.00 to < 100.00	4,389	4,903	24.3	5,581	16.79	180	45.6	1.09	11,080	199	427	
100.00 (Default)	9,930	1,012	18.3	10,115	100.00	468	51.4	1.24	21,394	212	5,733	
Sub-total at 30 Jun 2019	1,629,477	1,496,428	29.1	2,056,594	1.15	40,034	44.7	1.72	1,017,358	49	11,596	23,460

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Table 21.2: 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
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	RWAs HK\$m	RWA density %	EL HK\$m	Provisions HK\$m
Portfolio (v) – Retail – qualifying revolving retail exposures												
0.00 to < 0.15	25,862	399,703	34.8	165,001	0.06	3,949,130	100.9	–	6,422	4	101	
0.15 to < 0.25	2,976	17,356	46.4	11,022	0.22	254,978	100.3	–	1,295	12	25	
0.25 to < 0.50	10,150	34,536	36.8	22,852	0.39	411,672	95.8	–	4,012	18	86	
0.50 to < 0.75	7,359	8,440	48.7	11,468	0.58	114,746	96.8	–	2,799	24	65	
0.75 to < 2.50	20,260	39,928	38.1	35,467	1.36	402,315	96.2	–	16,347	46	465	
2.50 to < 10.00	11,844	6,678	57.5	15,681	4.57	154,084	90.7	–	16,177	103	656	
10.00 to < 100.00	4,799	1,702	59.6	5,812	20.60	60,178	87.5	–	11,336	195	1,066	
100.00 (Default)	169	51	1.2	170	100.00	2,178	98.5	–	297	175	144	
Sub-total at 30 Jun 2019	83,419	508,394	36.2	267,473	1.07	5,349,281	98.7	–	58,685	22	2,608	3,380
Portfolio (vi) – Retail – Residential mortgage exposures												
0.00 to < 0.15	377,461	23,203	55.5	390,331	0.09	144,807	13.3	–	63,831	16	46	
0.15 to < 0.25	167,309	13,492	90.4	179,509	0.19	108,203	12.0	–	23,696	13	41	
0.25 to < 0.50	119,927	1,156	59.9	120,619	0.35	48,896	10.1	–	19,907	17	42	
0.50 to < 0.75	89,505	1,361	94.7	90,795	0.58	44,350	11.7	–	15,073	17	62	
0.75 to < 2.50	112,787	1,113	98.2	113,881	1.09	56,962	14.7	–	24,461	21	168	
2.50 to < 10.00	35,713	238	109.1	35,973	4.59	19,169	11.9	–	13,405	37	198	
10.00 to < 100.00	6,167	79	105.4	6,250	17.40	6,381	13.4	–	4,437	71	148	
100.00 (Default)	3,160	19	–	3,160	100.00	4,740	16.1	–	2,873	91	281	
Sub-total at 30 Jun 2019	912,029	40,661	70.1	940,518	0.93	433,508	12.6	–	167,683	18	986	2,376
Portfolio (vii) – Retail – small business retail exposures												
0.00 to < 0.15	2,554	6	100.0	2,559	0.08	1,044	8.7	–	49	2	–	
0.15 to < 0.25	555	3	100.0	558	0.19	154	14.5	–	31	6	–	
0.25 to < 0.50	372	–	–	372	0.32	64	34.5	–	72	19	–	
0.50 to < 0.75	737	1	100.0	738	0.54	223	10.8	–	61	8	–	
0.75 to < 2.50	155	1	100.0	157	1.38	36	17.8	–	32	20	–	
2.50 to < 10.00	479	1	100.0	480	5.62	173	6.2	–	45	9	2	
10.00 to < 100.00	–	–	–	–	–	–	–	–	–	–	–	
100.00 (Default)	59	–	–	59	100.00	4	35.1	–	–	–	29	
Sub-total at 30 Jun 2019	4,911	12	100.0	4,923	1.96	1,698	12.0	–	290	6	31	33
Portfolio (viii) – Other retail exposures to individuals												
0.00 to < 0.15	5,360	44,510	29.4	18,437	0.09	177,923	6.9	–	265	1	1	
0.15 to < 0.25	3,086	30,896	33.1	13,312	0.21	117,185	17.1	–	1,031	8	5	
0.25 to < 0.50	5,768	13,459	35.2	10,500	0.38	74,489	29.8	–	1,991	19	13	
0.50 to < 0.75	7,992	6,045	43.2	10,604	0.63	45,635	30.6	–	2,434	23	18	
0.75 to < 2.50	7,578	2,036	32.1	8,231	1.80	49,430	65.8	–	6,792	83	106	
2.50 to < 10.00	7,022	4,075	43.2	8,782	3.54	47,310	31.6	–	4,056	46	130	
10.00 to < 100.00	882	29	50.8	897	15.78	7,198	66.3	–	1,156	129	96	
100.00 (Default)	85	26	23.1	91	100.00	1,500	87.3	–	149	164	69	
Sub-total at 30 Jun 2019	37,773	101,076	32.7	70,854	1.19	520,670	26.5	–	17,874	25	438	465

Table 21.3: 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	RWAs	RWA density	EL	Provisions ²
	HK\$m	HK\$m	%	HK\$m	%		%	years	HK\$m	%	HK\$m	HK\$m
Total (sum of all portfolios) at 30 Jun 2019	5,025,619	2,356,674	31.7	5,763,904	0.73	6,372,364	38.2	1.61	1,604,296	28	18,036	36,022

¹ The average maturity is relevant to wholesale portfolios only.

² Provisions in this table represent the eligible provisions as defined under Division 1, Part 6 of the BCR which include the regulatory reserves for general banking risks and the impairment allowances reported under IRB approach.

The total average PD decreased from 0.77% at 31 December 2018 to 0.73% at 30 June 2019 mainly due to an increase in customers with better credit quality and the exit of customers with lower credit quality.

Table 22: CR10 – Specialised Lending under supervisory slotting criteria approach – Other than HVCRE

Supervisory Rating Grade	Remaining Maturity	a	b	c	EAD amount			e	f
		On-balance sheet exposure amount	Off-balance sheet exposure amount	SRW	PF	IPRE	Total	RWAs	Expected loss amount
		HK\$m	HK\$m	%	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m
Strong [^]	Less than 2.5 years	22,645	4,012	50	756	23,217	23,973	11,987	–
Strong	Less than 2.5 years	7,964	1,769	70	1,930	6,796	8,726	6,108	35
Strong [^]	Equal to or more than 2.5 years	5,006	1,622	50	5,583	–	5,583	2,791	–
Strong	Equal to or more than 2.5 years	31,427	549	70	9,338	22,296	31,634	22,144	127
Good [^]	Less than 2.5 years	6,480	525	70	202	6,418	6,620	4,634	26
Good	Less than 2.5 years	3,529	445	90	–	3,690	3,690	3,321	29
Good [^]	Equal to or more than 2.5 years	2,727	31	70	2,738	–	2,738	1,917	11
Good	Equal to or more than 2.5 years	4,598	2,585	90	–	5,693	5,693	5,124	46
Satisfactory		3,851	298	115	3,213	779	3,992	4,591	112
Weak		1,221	147	250	1,154	120	1,274	3,184	102
Default		227	–	–	227	–	227	–	113
Total at 30 Jun 2019		89,675	11,983		25,141	69,009	94,150	65,801	601

[^] Use of preferential risk-weights.

Table 23: CR10 – Equity exposures under the simple risk-weight method

	a	c	d	e
	On-balance sheet exposure amount	SRW	EAD amount	RWAs
	HK\$m	%	HK\$m	HK\$m
Categories				
Publicly traded equity exposures	75	300	75	225
All other equity exposures	6,719	400	6,719	26,875
Total at 30 Jun 2019	6,794		6,794	27,100

Credit risk under standardised approach

Table 24: CR5 – Credit risk exposures by asset classes and by risk weights – for STC approach

Risk Weight	Exposure class	a	c	d	e	f	g	h	j
		0% HK\$m	20% HK\$m	35% HK\$m	50% HK\$m	75% HK\$m	100% HK\$m	150% HK\$m	Total credit risk exposures amount (post CCF and post CRM) HK\$m
1	Sovereign exposures	55,761	319	–	382	–	–	–	56,462
2	PSE exposures	108,912	16,372	–	11,473	–	4,815	–	141,572
2a	Of which: domestic PSEs	–	2,656	–	–	–	–	–	2,656
2b	Of which: foreign PSEs	108,912	13,716	–	11,473	–	4,815	–	138,916
4	Bank exposures	–	836	–	649	–	117	7	1,609
5	Securities firm exposures	–	–	–	312	–	–	–	312
6	Corporate exposures	–	12,560	–	3,192	–	133,128	–	148,880
10	Regulatory retail exposures	–	–	–	–	56,962	–	–	56,962
11	Residential mortgage loans	–	–	100,717	–	7,401	6,471	–	114,589
12	Other exposures which are not past due exposures	–	–	–	–	–	20,530	–	20,530
13	Past due exposures	94	467	–	–	–	207	2,794	3,562
15	Total at 30 Jun 2019	164,767	30,554	100,717	16,008	64,363	165,268	2,801	544,478

Credit risk mitigation

Table 25: CR3 – Overview of recognised credit risk mitigation

	a	b1	b	d	f	
						Exposures unsecured: carrying amount HK\$m
1	Loans	2,045,785	2,398,426	1,930,542	467,494	390
2	Debt securities	1,298,916	59,716	–	59,716	–
3	Total at 30 Jun 2019	3,344,701	2,458,142	1,930,542	527,210	390
4	Of which defaulted	4,306	6,668	5,709	959	–

Total secured exposures increased from HK\$2,284,632m at 31 December 2018 to HK\$2,458,142m at 30 June 2019 driven by overall loan growth.

Table 26: CR7 – Effects on RWAs of recognised credit derivative contracts used as recognised credit risk mitigation – for IRB approach

	a	b	
			Pre-credit derivatives RWAs HK\$m
1	Corporate – Specialised lending under supervisory slotting criteria approach (project finance)	19,695	19,695
4	Corporate – Specialised lending under supervisory slotting criteria approach (income-producing real estate)	46,106	46,106
6	Corporate – Small- and medium-sized corporates	146,707	146,707
7	Corporate – Other corporates	1,017,367	1,017,358
8	Sovereigns	101,532	101,532
10	Multilateral development banks	3,774	3,774
11	Bank exposures – Banks	85,143	85,143
12	Bank exposures – Securities firms	5,250	5,250
14	Retail – Small business retail exposures	290	290
15	Retail – Residential mortgages to individuals	163,358	163,358
16	Retail – Residential mortgages to property-holding shell companies	4,325	4,325
17	Retail – Qualifying revolving retail exposures ('QRRE')	58,685	58,685
18	Retail – Other retail exposures to individuals	17,874	17,874
19	Equity – Equity exposures under market-based approach (simple risk-weight method)	27,100	27,100
26	Other – Cash items	1,829	1,829
27	Other – Other items	163,535	163,535
28	Total (under the IRB calculation approaches) at 30 Jun 2019	1,862,570	1,862,561

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 27: 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		RWAs and RWA density	
	On-balance sheet amount HK\$m	Off-balance sheet amount HK\$m	On-balance sheet amount HK\$m	Off-balance sheet amount HK\$m	RWAs HK\$m	RWA density %
Exposure classes						
1 Sovereign exposures	1	–	55,916	546	255	0
2 PSE exposures	201,451	11,388	137,969	3,603	13,826	10
2a <i>Of which: domestic PSEs</i>	739	4,251	747	1,909	531	20
2b <i>Of which: foreign PSEs</i>	200,712	7,137	137,222	1,694	13,295	10
4 Bank exposures	969	1,687	1,453	156	620	39
5 Securities firm exposures	312	18	312	–	156	50
6 Corporate exposures	228,691	249,157	139,026	9,854	137,236	92
10 Regulatory retail exposures	60,668	275,346	56,423	539	42,722	75
11 Residential mortgage loans	112,724	10,442	112,636	1,953	47,272	41
12 Other exposures which are not past due exposures	72,921	72,746	18,728	1,802	20,530	100
13 Past due exposures	3,074	1,031	3,074	488	4,491	126
15 Total at 30 Jun 2019	680,811	621,815	525,537	18,941	267,108	49

Counterparty credit risk exposures

Counterparty default risk exposures

Counterparty credit risk ('CCR') arises from 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. An economic loss occurs if the transaction or portfolio of transactions with the counterparty has a positive economic value at the time of default. CCR is generated primarily in our wholesale global businesses.

Table 28: CCR1 – Analysis of counterparty default risk exposures (other than those to CCPs) by approaches

	a	b	c	d	e	f
	Replacement cost ('RC')	PFE	Effective expected positive exposures (EPE)	Alpha (α) used for computing default risk exposure	Default risk exposure after CRM	RWAs
	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m
1a CEM	10,296	37,006		N/A	47,293	14,753
2 IMM (CCR) approach			64,313	1.4	90,039	33,447
4 Comprehensive Approach (for SFTs)					62,762	9,478
6 Total at 30 Jun 2019						57,678

Table 29: CCR2 – CVA capital charge

	a	b
	EAD post CRM	RWAs
	HK\$m	HK\$m
Netting sets for which CVA capital charge is calculated by the advanced CVA method	88,120	16,846
1 (i) VaR (after application of multiplication factor if applicable)		2,737
2 (ii) Stressed VaR (after application of multiplication factor if applicable)		14,109
3 Netting sets for which CVA capital charge is calculated by the standardised CVA method	42,150	4,625
4 Total at 30 Jun 2019	130,270	21,471

Table 30: CCR6 – Credit-related derivatives contracts

	a	b
	Protection bought	Protection sold
	HK\$m	HK\$m
At 30 Jun 2019		
Notional amounts		
Single-name credit default swaps	380,699	356,951
Index credit default swaps	174,715	168,673
Total return swaps	8,389	–
Total notional amounts	563,803	525,624
Fair values		
Positive fair value (asset)	389	9,728
Negative fair value (liability)	(10,487)	(264)

The increase in credit default swaps compared to 31 December 2018 was due to business growth.

Table 31: 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		
	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m
Cash – domestic currency	–	2,108	–	2,064	73,885	40,822
Cash – other currencies	–	50,384	–	42,355	451,164	344,047
Domestic sovereign debt	–	6	–	11	34	40,248
Other sovereign debt	–	5,930	6,074	34,272	47,431	178,569
Government agency debt	–	385	–	266	–	–
Corporate bonds	9,046	2,626	10,279	58	30,026	19,660
Equity securities	–	–	–	–	2,390	42,044
Other collateral	–	–	–	–	–	–
Total at 30 Jun 2019	9,046	61,439	16,353	79,026	604,930	665,390

Table 32: CCR8 – Exposures to CCPs

	a	b
	Exposure after CRM HK\$m	RWAs HK\$m
At 30 Jun 2019		
1 Exposures of the AI as clearing member or client to qualifying CCPs (total)		1,890
2 Default risk exposures to qualifying CCPs (excluding items disclosed in rows 7 to 10), of which:	11,756	235
3 (i) OTC derivative transactions	5,874	117
4 (ii) exchange-traded derivative contracts	5,882	118
7 Segregated initial margin	6,074	
8 Unsegregated initial margin	8,852	1,031
9 Funded default fund contributions	2,083	624
11 Exposures of the AI as clearing member or client to non-qualifying CCPs (total)		332
12 Default risk exposures to non-qualifying CCPs (excluding items disclosed in rows 17 to 20), of which:	3	3
14 (ii) exchange-traded derivative contracts	3	3
18 Unsegregated initial margin	49	49
19 Funded default fund contributions	22	280

Counterparty default risk under internal ratings-based approach

Table 33: CCR4 – Counterparty default risk exposures (other than those to CCPs) by portfolio and PD range – for IRB approach

	a	b	c	d	e	f	g
	EAD post-CRM HK\$m	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWAs HK\$m	RWA density %
PD scale							
Portfolio (i) – Sovereign							
0.00 to < 0.15	22,129	0.02	48	44.7	0.41	786	4
0.15 to < 0.25	140	0.22	1	45.0	3.93	84	60
0.25 to < 0.50	25	0.37	1	45.0	1.00	11	44
0.50 to < 0.75	85	0.63	2	48.0	2.59	71	83
0.75 to < 2.50	14	1.20	1	45.0	1.00	11	79
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 30 Jun 2019	22,393	0.02	53	44.7	0.45	963	4
Portfolio (ii) – Bank							
0.00 to < 0.15	102,201	0.05	1,497	36.3	1.18	14,471	14
0.15 to < 0.25	6,922	0.22	225	48.8	1.01	3,144	45
0.25 to < 0.50	4,424	0.37	77	47.9	0.66	2,389	54
0.50 to < 0.75	2,462	0.63	37	41.9	1.18	1,800	73
0.75 to < 2.50	369	1.16	40	46.4	1.17	346	94
2.50 to < 10.00	14	3.05	5	46.2	1.21	19	140
10.00 to < 100.00	–	0.00	–	0.0	–	–	–
100.00 (Default)	–	0.00	–	0.0	–	–	–
Sub-total at 30 Jun 2019	116,392	0.09	1,881	37.6	1.15	22,169	19
Portfolio (iii) – Corporate							
0.00 to < 0.15	24,662	0.09	1,358	48.9	2.43	7,657	31
0.15 to < 0.25	6,831	0.22	536	51.1	1.20	2,995	44
0.25 to < 0.50	4,847	0.37	452	51.1	1.59	3,039	63
0.50 to < 0.75	2,371	0.63	307	51.5	1.96	2,029	86
0.75 to < 2.50	7,085	1.32	765	52.4	1.40	7,412	105
2.50 to < 10.00	889	3.55	192	50.7	1.62	1,262	142
10.00 to < 100.00	11	12.76	9	83.6	1.00	41	363
100.00 (Default)	–	0.00	–	0.0	–	–	–
Sub-total at 30 Jun 2019	46,696	0.42	3,619	50.1	1.97	24,435	52
Total (sum of all portfolios) at 30 Jun 2019	185,481	0.17	5,553	41.6	1.27	47,567	26

At 30 June 2019, the percentage of total RWAs covered by IRB models is 100% for sovereign exposures, 98% for bank exposures and 77% for corporate exposures. Details on the scope of models for each of the regulatory portfolios can be found in the 'Credit risk under internal ratings-based approach' section from pages 23 to 26 of the Banking Disclosure Statement at 31 December 2018.

The increase in average RW% from 24% at 31 December 2018 to 26% at 30 June 2019 was mainly due to an increase in the average PD in the counterparty credit risk exposures within the corporate portfolio.

Counterparty default risk under standardised approach

Table 34: CCR3 – Counterparty default risk exposures (other than those to CCPs) by asset classes and by risk weights – for STC approach

	a	c	d	e	f	j
	0%	20%	50%	75%	100%	Total default risk exposure after CRM
Risk Weight	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m
Exposure class						
2 PSE exposures	1,160	1,247	516	–	–	2,923
2a <i>Of which: domestic PSEs</i>	–	196	–	–	–	196
2b <i>Of which: foreign PSEs</i>	1,160	1,051	516	–	–	2,727
4 Bank exposures	–	754	330	–	57	1,141
5 Securities firm exposures	–	–	119	–	–	119
6 Corporate exposures	–	1	–	–	7,687	7,688
8 Regulatory retail exposures	–	–	–	35	–	35
12 Total at 30 Jun 2019	1,160	2,002	965	35	7,744	11,906

Securitisation

Analysis of securitisation exposures

Table 35: SEC1 – Securitisation exposures in banking book

	a	b	c	g	h	i
	Acting as originator (excluding sponsor)			Acting as investor		
	Traditional HK\$m	Synthetic HK\$m	Sub-total HK\$m	Traditional HK\$m	Synthetic HK\$m	Sub-total HK\$m
At 30 Jun 2019						
1 Retail (total) – of which:	38,441	–	38,441	36,528	–	36,528
2 <i>residential mortgage</i>	38,441	–	38,441	17,615	–	17,615
3 <i>credit card</i>	–	–	–	8,314	–	8,314
4 <i>other retail exposures</i>	–	–	–	10,599	–	10,599
6 Wholesale (total) – of which:	–	–	–	9,256	–	9,256
10 <i>other wholesale</i>	–	–	–	9,256	–	9,256

Table 36: SEC4 – Securitisation exposures in banking book and associated capital requirements – where AI acts as investor

	a	b	c	d	g	h	k	l	o	p
	Exposure values (by RW bands)				Exposure values (by regulatory approach)		RWAs (by regulatory approach)		Capital charges after cap	
	≤20% RW HK\$m	>20% to 50% RW HK\$m	>50% to 100% RW HK\$m	>100% to <1250% RW HK\$m	SEC-ERBA (including IAA) HK\$m	SEC-SA HK\$m	SEC-ERBA (including IAA) HK\$m	SEC-SA HK\$m	SEC-ERBA (including IAA) HK\$m	SEC-SA HK\$m
At 30 Jun 2019										
1 Total exposures	30,933	5,415	1,294	7,261	43,508	1,395	17,924	770	1,433	62
2 Traditional securitisation	30,933	5,415	1,294	7,261	43,508	1,395	17,924	770	1,433	62
3 <i>of which: securitisation</i>	30,933	5,415	1,294	7,261	43,508	1,395	17,924	770	1,433	62
4 <i>of which: retail</i>	30,933	4,319	–	395	35,647	–	8,132	–	651	–
5 <i>of which: wholesale</i>	–	1,096	1,294	6,866	7,861	1,395	9,792	770	782	62

Market risk

Market risk under standardised approach

Table 37: MR1 – Market risk under STM approach

		a
		RWAs HK\$m
Outright product exposures		
1	Interest rate exposures (general and specific risk)	1,025
2	Equity exposures (general and specific risk)	1,957
4	Commodity exposures	65
8	Securitisation exposures	59
9	Total at 30 Jun 2019	3,106

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 38: MR3 – IMM approach values for market risk exposures

		Footnotes	a
			HK\$m
At 30 Jun 2019			
VaR (10 day – one-tailed 99% confidence interval)			
		1	
1	Maximum Value		548
2	Average Value		450
3	Minimum Value		347
4	Period End		508
Stressed VaR (10 day – one-tailed 99% confidence interval)			
		1	
5	Maximum Value		648
6	Average Value		473
7	Minimum Value		323
8	Period End		336
Incremental risk charge (IRC) (99.9% confidence interval)			
9	Maximum Value		3,475
10	Average Value		2,919
11	Minimum Value		2,098
12	Period End		3,046

1 The total VaR excludes Risks not in VaR ('RNIV').

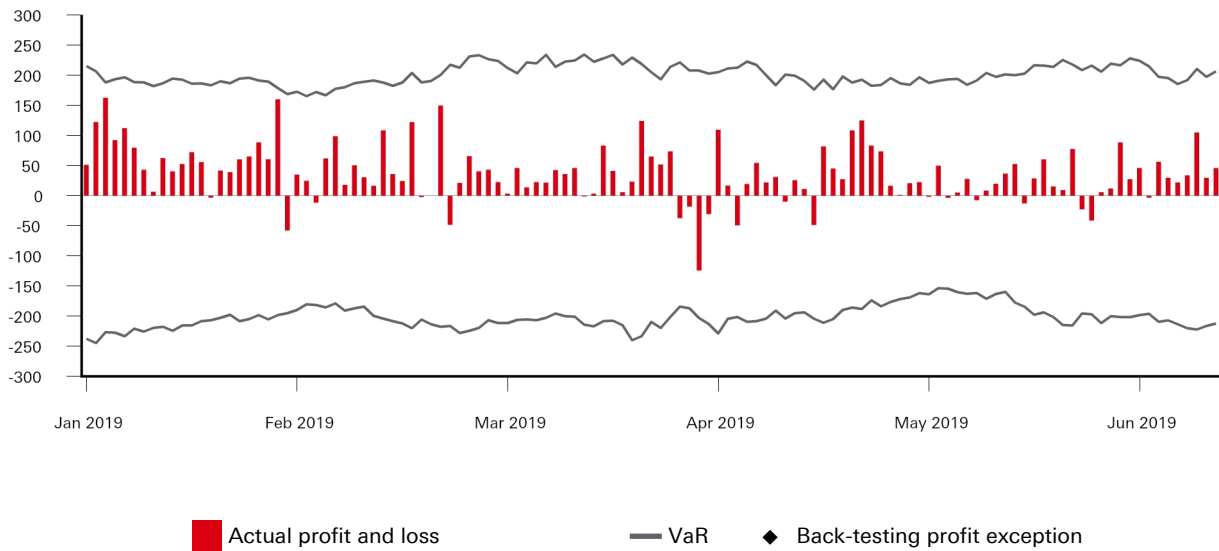
The group's trading VaR was predominantly driven by the Interest Rate ('IR') and Foreign exchange ('FX') asset classes.

The decrease in trading Stressed VaR at 30 June 2019 compared with 31 December 2018 was mainly driven by the change in Stressed VaR period.

Trading IRC at 30 June 2019 increased compared with 31 December 2018 due to an increase in the trading bond inventory.

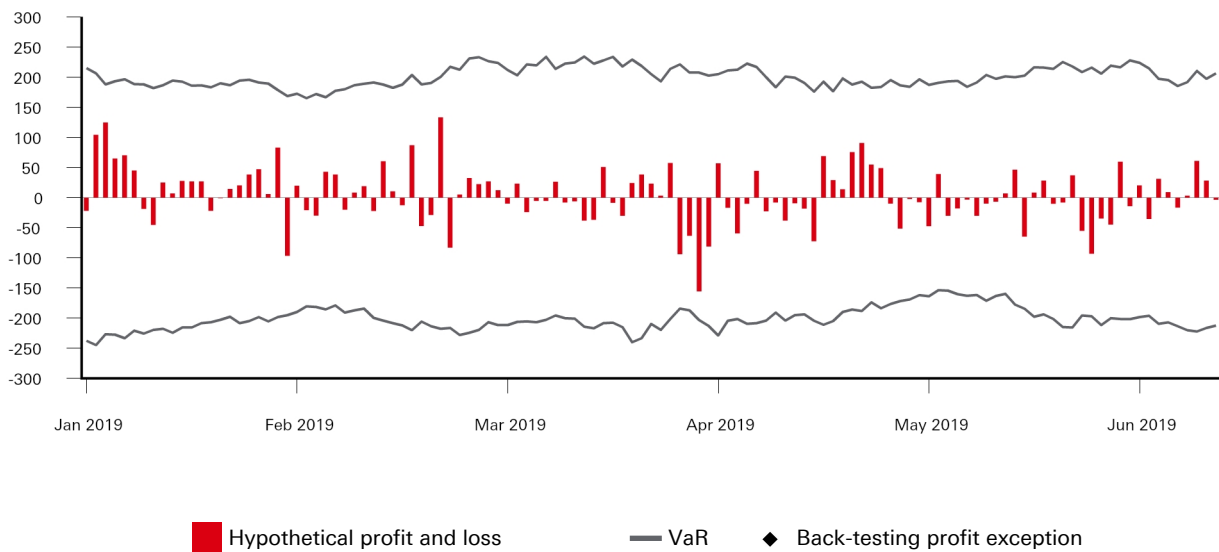
Table 39: MR4 – Comparison of VaR estimates with gains or losses

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



There was no VaR back-testing exception against actual profit and loss in the first half year of 2019.

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



There was no VaR back-testing exception against hypothetical profit and loss in the first half year of 2019.

Liquidity information

The group is required to calculate its Liquidity Coverage Ratio ('LCR') and Net Stable Funding Ratio ('NSFR') on a consolidated

basis in accordance with rule 11(1) of the Banking (Liquidity) Rules ('BLR'). The group is required to maintain both LCR and NSFR of not less than 100%.

Table 40: Average liquidity coverage ratio

	Quarter ended
	30 Jun 2019
	%
Average liquidity coverage ratio	147.5

The liquidity position of the group remained strong in the second quarter of 2019. The average LCR decreased slightly from 150.5% for the quarter ending 31 March 2019 to 147.5% for the quarter ending 30 June 2019.

The majority of high quality liquid assets ('HQLA') included in the LCR are Level 1 assets as defined in the BLR and consist mainly of government debt securities.

Table 41: Total weighted amount of high-quality liquid assets

	Weighted amount (average value for the quarter ended)
	30 Jun 2019
	HK\$m
Level 1 assets	1,490,645
Level 2A assets	80,956
Level 2B assets	12,049
Total weighted amount of HQLA	1,583,650

Table 42: Net stable funding ratio

	Quarter ended
	30 Jun 2019
	%
Net stable funding ratio	145.1

The funding position of the group remained strong in the second quarter of 2019. The NSFR decreased marginally from 145.8% for the quarter ending 31 March 2019 to 145.1% for the quarter ending 30 June 2019.

Interdependent assets and liabilities included in the group's NSFR are certificates of indebtedness held and legal tender notes issued.

Our primary sources of funding are customer current accounts and customer savings deposits payable on demand or at short notice. We also issue wholesale securities (secured or unsecured) to supplement our customer deposits and change the currency mix, maturity profile or location of our liabilities.

In times of stress it cannot automatically be assumed that one currency can always be converted for another, even if those currencies are 'hard' currencies. LCR is therefore assessed by single currency for those that are material. In some currencies, convertibility is restricted by regulators and central banks and this restriction results in local currency not being convertible offshore or even onshore. All operating entities are required to monitor material single currency LCR. Limits are approved and monitored by local Asset and Liability Management Committee.

Most of the group's derivative transactions are exchange rate contracts and interest rate contracts. Under the terms of our current collateral obligations under derivative contracts (which are International Swaps and Derivatives Association ('ISDA') compliant Credit Support Annex ('CSA') contracts), the additional collateral required to post in the event of a one-notch and two-notch downgrade in credit ratings is immaterial.

Information relating to the Bank's approach to liquidity risk management and its interaction with the HSBC Group's Asset, Liability and Capital Management function can be found in the Risk Report of the group's *Annual Report and Accounts 2018*.

Table 43: LIQ1 – Liquidity coverage ratio – for category 1 institution

		a	b
Number of data points used in calculating the average value of the LCR and related components set out in this table for the quarters ending on 30 June 2019 was 71.		Quarter ended	
Basis of disclosure: consolidated		30 Jun 2019	
		Unweighted value (average)	Weighted value (average)
		HK\$m	HK\$m
A	HQLA		
1	Total HQLA		1,583,650
B	Cash outflows		
2	Retail deposits and small business funding, of which:	3,220,945	300,130
3	<i>Stable retail deposits and stable small business funding</i>	322,242	10,259
4	<i>Less stable retail deposits and less stable small business funding</i>	2,898,703	289,871
5	Unsecured wholesale funding (other than small business funding) and debt securities and prescribed instruments issued by the AI, of which:	2,128,446	1,070,663
6	<i>Operational deposits</i>	548,503	133,573
7	<i>Unsecured wholesale funding (other than small business funding) not covered in row 6</i>	1,571,126	928,273
8	<i>Debt securities and prescribed instruments issued by the AI and redeemable within the LCR period</i>	8,817	8,817
9	Secured funding transactions (including securities swap transactions)		4,634
10	Additional requirements, of which:	477,204	169,019
11	<i>Cash outflows arising from derivative contracts and other transactions, and additional liquidity needs arising from related collateral requirements</i>	120,236	119,956
12	<i>Cash outflows arising from obligations under structured financing transactions and repayment of funding obtained from such transactions</i>	571	571
13	<i>Potential drawdown of undrawn committed facilities (including committed credit facilities and committed liquidity facilities)</i>	356,397	48,492
14	Contractual lending obligations (not otherwise covered in Section B) and other contractual cash outflows	206,578	206,578
15	Other contingent funding obligations (whether contractual or non-contractual)	2,878,895	19,823
16	Total cash outflows		1,770,847
C	Cash inflows		
17	Secured lending transactions (including securities swap transactions)	319,686	63,139
18	Secured and unsecured loans (other than secured lending transactions covered in row 17) and operational deposits placed at other financial institutions	612,801	395,087
19	Other cash inflows	266,515	238,360
20	Total cash inflows	1,199,002	696,586
D	Liquidity coverage ratio (adjusted value)		
21	Total HQLA		1,583,650
22	Total net cash outflows		1,074,261
23	LCR (%)		147.5%

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Table 44: LIQ2 – Net stable funding ratio – for category 1 institution

		a	b	c	d	e
		Quarter ended 30 Jun 2019				
		Unweighted value by residual maturity				
Basis of disclosure: consolidated	Footnotes	No specified term to maturity	<6 months or repayable on demand	6 months to < 12 months	12 months or more	Weighted amount
		HK\$m	HK\$m	HK\$m	HK\$m	HK\$m
A	Available stable funding ('ASF') item					
1	Capital:	754,610	–	–	19,665	774,275
2	Regulatory capital	754,610	–	–	14,596	769,206
3	Other capital instruments	–	–	–	5,069	5,069
4	Retail deposits and small business funding:		3,238,017	–	–	2,930,423
5	Stable deposits		324,150	–	–	307,943
6	Less stable deposits		2,913,867	–	–	2,622,480
7	Wholesale funding:	–	2,714,564	35,697	16,882	946,317
8	Operational deposits		553,659	–	–	276,829
9	Other wholesale funding	–	2,160,905	35,697	16,882	669,488
10	Liabilities with matching interdependent assets	284,964	–	–	–	–
11	Other liabilities:	198,457	240,593	30,686	236,477	251,820
13	All other funding and liabilities not included in the above categories	198,457	240,593	30,686	236,477	251,820
14	Total ASF					4,902,835
B	Required stable funding ('RSF') item					
15	Total HQLA for NSFR purposes		1,636,900			65,402
17	Performing loans and securities:	308,674	2,043,197	379,480	2,375,472	2,923,357
18	Performing loans to financial institutions secured by Level 1 HQLA	–	315,363	8,404	7,807	43,545
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	9,691	412,150	93,637	146,778	265,111
20	Performing loans, other than performing residential mortgage, to non-financial corporate clients, retail and small business customers, sovereigns, the Monetary Authority for the account of the Exchange Fund, central banks and PSEs, of which:	132,979	1,044,038	231,125	1,306,874	1,821,469
21	With a risk-weight of less than or equal to 35% under the STC approach	131	4,381	525	10,477	9,348
22	Performing residential mortgages, of which:	–	18,083	17,905	833,266	567,474
23	With a risk-weight of less than or equal to 35% under the STC approach	–	17,146	17,022	793,978	533,170
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	166,004	253,563	28,409	80,747	225,758
25	Assets with matching interdependent liabilities	284,964	–	–	–	–
26	Other assets:	686,405	166,775	159	1,528	372,183
27	Physical traded commodities, including gold	13,229				11,245
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	47,497				40,373
29	Net derivative assets	16,042				16,042
30	Total derivative liabilities before deduction of variation margin posted	226,645				N/A
31	All other assets not included in the above categories	382,992	166,775	159	1,528	304,523
32	Off-balance sheet items			2,983,806		18,419
33	Total RSF					3,379,361
34	Net Stable Funding Ratio (%)					145.1

Table 44: LIQ2 – Net stable funding ratio – for category 1 institution (continued)

		a	b	c	d	e
		Quarter ended 31 Mar 2019				
		Unweighted value by residual maturity				
Basis of disclosure: consolidated	Footnotes	No specified term to maturity	<6 months or repayable on demand	6 months to < 12 months	12 months or more	Weighted amount
		HK\$m	HK\$m	HK\$m	HK\$m	HK\$m
A	Available stable funding ('ASF') item					
1	Capital:	740,341	—	—	19,047	759,388
2	Regulatory capital	740,341	—	—	13,973	754,314
3	Other capital instruments	—	—	—	5,074	5,074
4	Retail deposits and small business funding:		3,221,299	—	—	2,915,525
5	Stable deposits		327,110	—	—	310,755
6	Less stable deposits		2,894,189	—	—	2,604,770
7	Wholesale funding:	—	2,707,658	32,657	193,296	1,083,755
8	Operational deposits		553,085	—	—	276,543
9	Other wholesale funding	—	2,154,573	32,657	193,296	807,212
10	Liabilities with matching interdependent assets	287,874	—	—	—	—
11	Other liabilities:	217,890	202,554	19,736	61,178	71,046
13	All other funding and liabilities not included in the above categories	217,890	202,554	19,736	61,178	71,046
14	Total ASF					4,829,714
B	Required stable funding ('RSF') item					
15	Total HQLA for NSFR purposes	¹	1,709,871			69,463
17	Performing loans and securities:	288,662	1,978,220	367,738	2,301,332	2,851,947
18	Performing loans to financial institutions secured by Level 1 HQLA	—	342,360	164	15,552	49,869
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	13,793	351,921	90,380	145,489	257,261
20	Performing loans, other than performing residential mortgage, to non-financial corporate clients, retail and small business customers, sovereigns, the Monetary Authority for the account of the Exchange Fund, central banks and PSEs, of which:	127,694	1,054,784	234,800	1,260,707	1,784,985
21	With a risk-weight of less than or equal to 35% under the STC approach	115	4,482	1,580	10,517	9,942
22	Performing residential mortgages, of which:	—	17,439	17,182	804,648	548,753
23	With a risk-weight of less than or equal to 35% under the STC approach	—	16,431	16,255	762,542	511,995
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	147,175	211,716	25,212	74,936	211,079
25	Assets with matching interdependent liabilities	287,874	—	—	—	—
26	Other assets:	658,739	144,142	51	1,661	374,805
27	Physical traded commodities, including gold	13,172				11,197
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	39,205				33,324
29	Net derivative assets	17,384				17,384
30	Total derivative liabilities before deduction of variation margin posted	187,198				N/A
31	All other assets not included in the above categories	401,780	144,142	51	1,661	312,900
32	Off-balance sheet items			2,952,491		17,276
33	Total RSF					3,313,491
34	Net Stable Funding Ratio (%)					145.8

¹ The unweighted values disclosed in these rows are not required to be split by residual maturity.

Other disclosures

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.

Mainland activities

The analysis of mainland activities is based on the categories of non-bank counterparties and the type of direct exposures defined

Table 45: Mainland activities

		On-balance sheet exposure	Off-balance sheet exposure	Total exposures
		HK\$m	HK\$m	HK\$m
At 30 Jun 2019				
Types of counterparties				
1	Central government, central government-owned entities and their subsidiaries and joint ventures ('JVs')	250,222	15,859	266,081
2	Local governments, local government-owned entities and their subsidiaries and JVs	54,722	5,022	59,744
3	People's Republic of China ('PRC') nationals residing in mainland China or other entities incorporated in mainland China and their subsidiaries and JVs	372,157	70,152	442,309
4	Other entities of central government not reported in item 1 above	10,786	4,327	15,113
5	Other entities of local governments not reported in item 2 above	5,188	596	5,784
6	PRC nationals residing outside mainland China or entities incorporated outside mainland China where the credit is granted for use in mainland China	36,857	5,055	41,912
7	Other counterparties where the exposures are considered by the reporting institution to be non-bank mainland China exposures	49,400	4,795	54,195
Total		779,332	105,806	885,138
Total assets after provision		5,228,650		
On-balance sheet exposures as percentage of total assets		14.91%		

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 46: International claims

	Banks	Official sector	Non-bank financial institutions	Non-financial private sector	Others	Total
	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m
At 30 Jun 2019						
Developed countries	492,285	403,309	326,011	418,486	198	1,640,289
– of which: Japan	166,100	136,358	33,530	38,925	–	374,913
– of which: United States	46,491	211,414	80,175	133,656	–	471,736
Offshore centres	110,125	38,937	116,607	449,451	2,858	717,978
– of which: Hong Kong	72,495	2,407	49,837	261,728	2,810	389,277
Developing Asia and Pacific	498,225	107,622	103,311	436,015	–	1,145,173
– of which: Mainland China	379,579	60,841	55,214	245,107	–	740,741

Foreign currency positions

The group's foreign exchange exposures in the tables below are prepared in accordance with the HKMA return 'Foreign Currency Position Return – (MA(BS)6)'.

The group had the following net structural foreign currency exposures that were not less than 10% of total net structural foreign currency positions at 30 June 2019:

Table 47: Net structural foreign currency exposures

	Net structural position	
	LCYm	HK\$m
At 30 Jun 2019		
Renminbi	191,366	217,557

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 30 June 2019:

Table 48: Non-structural foreign currency positions

	United States dollars HK\$m	Renminbi HK\$m	Rupiah HK\$m
At 30 Jun 2019			
Spot assets	2,036,857	712,022	33,229
Spot liabilities	(2,422,116)	(692,415)	(30,249)
Forward purchases	12,217,577	2,137,465	76,107
Forward sales	(11,799,941)	(2,173,130)	(76,980)
Net options positions	(17,892)	18,152	1
Net long (net short) position	14,485	2,094	2,108

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

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
LCYm	Millions of local currency
US\$m	Millions of United States dollars

A

AI	Authorised institution
ASF	Available stable funding
AT1	Additional tier 1

B

BCBS	Basel Committee on Banking Supervision
BCR	Banking (Capital) Rules
BDR	Banking (Disclosure) Rules
BLR	Banking (Liquidity) Rules
BSC	Basic approach

C

CCF	Credit conversion factor
CCP	Central counterparty
CCR ¹	Counterparty credit risk
CCyB ¹	Countercyclical capital buffer
CEM	Current exposure method
CET1 ¹	Common equity tier 1
CRM	Credit risk mitigation/mitigant
CSA	Credit Support Annex
CVA	Credit valuation adjustment

D

D-SIB	Domestic systemically important authorised institution
DTAs	Deferred tax assets

E

EAD ¹	Exposure at default
ECL	Expected credit loss
EL ¹	Expected loss
EPE	Effective expected positive exposures

F

FX	Foreign exchange
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G

Group	HSBC Holdings together with its subsidiary
group	The Hongkong and Shanghai Banking Corporation Limited together with its subsidiary undertakings
G-SIB ¹	Global systemically important authorised institution

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
HVCRE	High volatility commercial real estate

I

IAA	Internal assessment approach
IMM ¹	Internal Models Method
IMM(CCR)	Internal models (counterparty credit risk)
IPRE	Income producing real estate
IRB ¹	Internal ratings-based approach
IRC	Incremental risk charge
ISDA	International Swaps and Derivatives Association

J

JCCyB	Jurisdictional countercyclical capital buffer
JVs	Joint ventures

L

LAC	Loss-absorbing capacity
LCR	Liquidity Coverage Ratio
LGD ¹	Loss given default
LR	Leverage ratio

M

MSRs	Mortgage servicing rights
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N

NSFR	Net stable funding ratio
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O

OBS	Off-balance sheet
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

Q

QRRE	Qualifying revolving retail exposures
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R

RC	Replacement cost
RNIV	Risks not in VaR
RSF	Required stable funding
RW	Risk-weight
RWA ¹	Risk-weighted asset/risk-weighted amount

S

SEC-ERBA	Securitisation external ratings-based approach
SEC-FBA	Securitisation fall-back approach
SEC-IRBA	Securitisation internal ratings-based approach
SEC-SA	Securitisation standardised approach
SFT ¹	Securities Financing Transactions
SRW	Supervisory risk-weight
STC	Standardised (credit risk) approach
STM	Standardised (market risk) approach

T

T1	Tier 1
T2	Tier 2
TC	Total regulatory capital

V

VaR ¹	Value at risk
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¹ Full definition included in the Glossary published on HSBC website www.hsbc.com

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