

Standard Chartered Bank
(Hong Kong) Limited

Supplementary Notes to
Consolidated Financial Statements (unaudited)

For period ended
31 December 2017

Standard Chartered Bank (Hong Kong) Limited
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Supplementary Notes to Consolidated Financial Statement (unaudited)

These notes are supplementary to and should be read in conjunction with the 2017 Consolidated Financial Statement (“consolidated financial statement”). The consolidated financial statement and this supplementary notes to consolidated financial statement (unaudited) taken together comply with the Banking (Disclosure) Rules (“Rules”) under section 60A of the Banking Ordinance.

Additional disclosures as required by the Banking (Disclosure) Rules will be available on our website: www.sc.com/hk on or before 30 April 2018.

1 Basis of consolidation and preparation

The consolidated capital ratios were calculated in accordance with the Banking (Capital) Rules of the Hong Kong Banking Ordinance.

The basis of consolidation for accounting purposes is in accordance with Hong Kong Financial Reporting Standards. The principal subsidiaries of the Bank for accounting purposes are Standard Chartered APR Limited, Standard Chartered Leasing Group Limited, Standard Chartered Securities (Hong Kong) Limited and Standard Chartered Trade Support (HK) Limited.

The basis and scope of consolidation for the calculation of capital ratios for regulatory purposes is different from the basis and scope of consolidation 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. Subsidiaries not included in consolidation for regulatory purposes are non-financial companies and the securities companies that are authorized and supervised by a regulator and are subject to supervisory arrangements regarding the maintenance of adequate capital to support business activities comparable to those prescribed for authorized institutions under the Banking (Capital) Rules and the Banking Ordinance.

The Bank’s shareholdings in these subsidiaries are deducted from its capital base subject to the thresholds and transitional arrangements as determined in accordance with Part 3 and Schedule 4H of the Banking (Capital) Rules.

The Bank 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.

1 Basis of consolidation and preparation (continued)

Directly held subsidiaries not included in the consolidation for regulatory purposes are set out below:

Name of company	Principal Activity	At 31 December 2017	
		Total assets HK\$'M	Total equity HK\$'M
Standard Chartered Securities (Hong Kong) Limited	Equity capital markets, corporate finance and institutional brokerage	422	269
SC Learning Limited	Provision of learning solutions in the banking and finance industry	38	(19)
Standard Chartered Trust (HK) Limited	Trustee services	8	6
Standard Chartered Nominees (Western Samoa) Limited	Nominees Services	–	–
Horsford Nominees Limited	Nominees Services	–	–
Standard Chartered Global Trading Investment Limited	Nominees Services	–	–
		468	256

The Bank's shareholdings in the above directly held subsidiaries are deducted from CET1 capital in accordance with the Banking (Capital) Rules. There is no relevant capital shortfall in any of the Bank's subsidiaries which are not included as part of the consolidation group for regulatory purposes.

The Bank uses the advanced internal ratings based ("IRB") approach for both the measurement of credit risk capital and the management of credit risk for the majority of its portfolios. The Bank also uses the standardised (credit risk) approach for certain insignificant portfolios exempted from IRB. The Bank adopts the IRB (securitization) approach to calculate its credit risk for securitization exposures.

For market risk, the Bank uses an internal models approach for two guaranteed funds and the standardized (market risk) approach for other exposures. In addition, the Bank adopts the standardized (operational risk) approach for operational risk.

The Bank applies the Internal Capital Adequacy Assessment Process ("ICAAP") to assess its capital demand on a current, planned and stressed basis. The assessment covers the major risks faced by the Bank, in addition to credit, market and operational risks that are covered under the minimum capital requirements. The ICAAP has been approved by the Asset and Liability Management Committee ("ALCO") and the Board of Directors ("the Board").

2 Key capital ratios disclosures

Capital adequacy ratio and capital base

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

	<i>Consolidated At December 17</i>
Common equity tier 1 (CET1) capital ratio	13.5%
Tier 1 capital ratio	15.0%
Total capital ratio	18.2%
Leverage ratio	5.4%

HK\$'M

Capital base

CET1 capital	51,836
Additional Tier 1 ("AT1") capital	5,830
	<hr/>
Total Tier 1 capital	57,666
Tier 2 capital	12,535
	<hr/>
Total capital base	70,201
	<hr/> <hr/>
Total Risk-weighted amount	385,071
Leverage ratio exposure	1,077,378

Capital buffers requirements

Capital conservation buffer ratio	1.3%
Countercyclical capital buffer ratio	0.9%
Higher loss absorbency ratio	0.8%
	<hr/>
Total capital buffers	3.0%
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3 Reconciliation between accounting and regulatory balance sheets

a. Balance sheet as in published financial statements and under regulatory scope of consolidation

	<i>Consolidated balance sheet as in published financial statements At 31 December 2017 HK\$'M</i>	<i>Under regulatory scope of consolidation At 31 December 2017 HK\$'M</i>
Assets		
Cash and balances with banks, central banks and other financial institutions	18,350	18,350
Placements with banks and other financial institutions	150,256	150,247
Hong Kong SAR Government certificates of indebtedness	42,341	42,341
Trading assets	22,483	22,483
Financial assets designated at fair value	336	336
Investment securities	207,927	207,926
Advances to customers	480,867	480,867
Amounts due from immediate holding company	59,075	59,072
Amounts due from fellow subsidiaries	24,208	24,208
Amounts due from subsidiaries of the Bank	–	28
Investment in subsidiaries of the Bank	–	277
Interests in associates	11,638	4,316
Property, plant and equipment	40,632	40,632
Goodwill and intangible assets	1,392	1,392
Current tax assets	11	–
Deferred tax assets	275	275
Other assets	15,258	13,297
	1,075,049	1,066,047
Liabilities		
Hong Kong SAR currency notes in circulation	42,341	42,341
Deposits and balances of banks and other financial institutions	19,613	19,613
Deposits from customers	833,899	833,899
Trading liabilities	8,301	8,301
Financial liabilities designated at fair value	11,474	11,474
Debt securities in issue	3,066	3,066
Amounts due to immediate holding company	44,246	44,246
Amounts due to fellow subsidiaries	9,477	9,477
Amounts due to subsidiaries of the Bank	–	458
Current tax liabilities	439	436
Deferred tax liabilities	470	56
Other liabilities	21,292	21,543
Subordinated liabilities	6,003	6,003
	1,000,621	1,000,913
Equity		
Share capital	20,256	20,256
Reserves	52,220	42,926
	72,476	63,182
Shareholders' equity	72,476	63,182
Other equity instruments	1,952	1,952
	1,075,049	1,066,047

3 Reconciliation between accounting and regulatory balance sheets (continued)

b. Balance sheet under the regulatory scope of consolidation including components in the “Transition Disclosures Template” with cross references

	At 31 December 2017				Cross reference to Definition of Capital Components
	Consolidated balance sheet as in published financial statements HK\$'M	Under regulatory scope of consolidation			
		HK\$'M	HK\$'M	HK\$'M	
Assets					
Cash and balances with banks, central banks and other financial institutions	18,350	18,350			
Placements with banks and other financial institutions	150,256	150,247			
Hong Kong SAR Government certificates of indebtedness	42,341	42,341			
Trading assets	22,483	22,483			
Financial assets designated at fair value	336	336			
Investment securities	207,927	207,926			
Advances to customers	480,867	480,867			
Amounts due from immediate holding company	59,075	59,072			
Amounts due from fellow subsidiaries	24,208	24,208			
Amounts due from subsidiaries of the Bank	–	28			
– of which: significant capital investments in financial sector entities that are outside the scope of regulatory consolidation			–		(1)
Investment in subsidiaries of the Bank	–	277			
– of which: significant capital investments in financial sector entities that are outside the scope of regulatory consolidation	–		277		(2)
Interests in associates	11,638	4,316			
– of which: significant capital investments in financial sector entities that are outside the scope of regulatory consolidation			4,316		(3)
Property, plant and equipment	40,632	40,632			
Goodwill and intangible assets	1,392	1,392			
– of which: goodwill			729		(4)
– of which: intangible assets			663		(5)
Current tax assets	11	–			
Deferred tax assets	275	275			
– of which: deferred tax liabilities relating to intangible assets			(79)		(6)
– of which: other deferred tax assets			354		(7)
Other assets	15,258	13,297			
	1,075,049	1,066,047			

3 Reconciliation between accounting and regulatory balance sheets (continued)

b. Balance sheet under the regulatory scope of consolidation including components in the “Transition Disclosures Template” with cross references (continued)

	At 31 December 2017				Cross reference to Definition of Capital Components
	Consolidated balance sheet as in published financial statements HK\$'M	Under regulatory scope of consolidation			
	HK\$'M	HK\$'M	HK\$'M	HK\$'M	
Liabilities					
Hong Kong SAR currency notes in circulation	42,341	42,341			
Deposits and balances of banks and other financial institutions	19,613	19,613			
Deposit from customers	833,899	833,899			
Trading liabilities	8,301	8,301			
– of which: gains or losses due to changes in own credit risk				–	(8)
Financial liabilities designated at fair value	11,474	11,474			
– of which: gains or losses due to changes in own credit risk				18	(9)
Debt securities in issue	3,066	3,066			
Amounts due to immediate holding company	44,246	44,246			
– of which: subordinated liabilities eligible for inclusion in regulatory capital				6,252	(10)
Amounts due to fellow subsidiaries	9,477	9,477			
Amounts due to subsidiaries of the Bank	–	458			
Current tax liabilities	439	436			
Deferred tax liabilities	470	56			
Other liabilities	21,292	21,543			
Subordinated liabilities	6,003	6,003			
– of which: subordinated liabilities eligible for inclusion in regulatory capital (subject to phase out arrangements)				3,939	(11)
	1,000,621	1,000,913			

3 Reconciliation between accounting and regulatory balance sheets (continued)

b. Balance sheet under the regulatory scope of consolidation including components in the “Transition Disclosures Template” with cross references (continued)

	At 31 December 2017				Cross reference to Definition of Capital Components
	Consolidated balance sheet as in published financial statements HK\$'M	Under regulatory scope of consolidation			
	HK\$'M	HK\$'M	HK\$'M	HK\$'M	
Equity					
Share capital	20,256	20,256			
– of which: directly issued qualifying CET1 capital instruments			16,378		(12)
– of which: qualifying AT1 capital instruments			3,878		(13)
Reserves	52,220	42,926			
– of which: Cumulative cash flow hedge reserves that relate to the hedging of financial instruments that are not fair valued on the balance sheet			18		(14)
– of which: Cumulative cash flow hedge reserves that relate to the hedging of financial instruments that are fair valued on the balance sheet			–		(15)
– of which: Available-for-sale investment reserve			117		(16)
– of which: Property revaluation reserve			–		(17)
– of which: Exchange reserve			4		(18)
– of which: Merger reserve			154		(19)
– of which: Share option equity reserve			318		(20)
– of which: Own credit adjustments reserves			(18)		(21)
– of which: Retained earnings			42,333		(22)
– of which: cumulative fair value gains arising from the revaluation of land and buildings (audited)				346	(23)
– of which: Regulatory reserve for general banking risks				5,145	(24)
Other equity instruments	1,952	1,952			
– of which: qualifying AT1 capital instruments			1,952		(13)
	74,428	65,134			
	1,075,049	1,066,047			

4 Regulatory capital disclosures

a. Detailed breakdown of capital components – Transition disclosures template

		At 31 December 2017		
		HK\$'M	Amounts subject to pre-Basel III treatment*	Cross-referenced to 3b
		HK\$'M	HK\$'M	
CET1 capital: instruments and reserves				
1	Directly issued qualifying CET1 capital instruments plus any related share premium	16,378		(12)
2	Retained earnings	42,333		(22)
3	Disclosed reserves	593		(14)+(15)+(16)+(17)+(18)+(19)+(20)+(21)
4	Directly issued capital subject to phase out from CET1 capital (only applicable to non-joint stock companies)	NA		
	Public sector capital injections grandfathered until 1 January 2018	NA		
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)	-		
6	CET1 capital before regulatory deductions	59,304		
CET1 capital: regulatory deductions				
7	Valuation adjustments	310		
8	Goodwill (net of associated deferred tax liability)	729		(4)
9	Other intangible assets (net of associated deferred tax liability)	584	-	(5)+(6)
10	Deferred tax assets net of deferred tax liabilities	354		(7)
11	Cash flow hedge reserve	18		(14)
12	Excess of total EL amount over total eligible provisions under the IRB approach	-	-	
13	Gain-on-sale arising from securitization transactions	-		
14	Gains and losses due to changes in own credit risk on fair valued liabilities	(18)	-	(8)+(9)
15	Defined benefit pension fund net assets (net of associated deferred tax liabilities)	-	-	
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)	-	-	(2)+(3)-(25)-(26)-(27)
20	Mortgage servicing rights (amount above 10% threshold)	NA		
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability)	NA		
22	Amount exceeding the 15% threshold	NA		
23	- of which: significant investments in the common stock of financial sector entities	NA		
24	- of which: mortgage servicing rights	NA		
25	- of which: deferred tax assets arising from temporary differences	NA		
26	National specific regulatory adjustments applied to CET1 capital	5,491		
26a	Cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties)	346		(17)+(23)
26b	Regulatory reserve for general banking risks	5,145		(24)
26c	Securitization exposures specified in a notice given by the Monetary Authority	-		
26d	Cumulative losses below depreciated cost arising from the institution's holdings of land and buildings	-		
26e	Capital shortfall of regulated non-bank subsidiaries	-	-	
26f	Capital investment in a connected company which is a commercial entity (amount above 15% of the reporting institution's capital base)	-	-	
27	Regulatory deductions applied to CET1 capital due to insufficient AT1 capital and Tier 2 capital to cover deductions	-		
28	Total regulatory deductions to CET1 capital	7,468		
29	CET1 capital	51,836		
AT1 capital: instruments				
30	Qualifying AT1 capital instruments plus any related share premium	5,830		(13)
31	- of which: classified as equity under applicable accounting standards	-		
32	- of which: classified as liabilities under applicable accounting standards	-		
33	Capital instruments subject to phase out arrangements from AT1 capital	-		

4 Regulatory capital disclosures (continued)

a. Detailed breakdown of capital components – Transition disclosures template (continued)

		At 31 December 2017		
		HK\$'M	Amounts subject to pre-Base I treatment*	Cross-referenced to 3b
		HK\$'M	HK\$'M	
34	AT1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in AT1 capital of the consolidation group)	-		
35	- of which: AT1 capital instruments issued by subsidiaries subject to phase out arrangements	-		
36	AT1 capital before regulatory deductions	5,830		
	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	-		
41a	Portion of deductions applied 50:50 to core capital and supplementary capital based on pre-Base I treatment which, during transitional period, remain subject to deduction from Tier 1 capital	-		(28)
i	- of which: Excess of total EL amount over total eligible provisions under the IRB approach	-		
ii	- of which: Capital shortfall of regulated non-bank subsidiaries	-		
iii	- of which: Investments in own CET1 capital instruments	-		
iv	- of which: Reciprocal cross holdings in CET1 capital instruments issued by financial sector entities	-		
v	- of which: Capital investment in a connected company which is a commercial entity (amount above 15% of the reporting institution's capital base)	-		
vi	- of which: 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	-		
vii	- 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	-		(25)
42	Regulatory deductions applied to AT1 capital due to insufficient Tier 2 capital to cover deductions	-		
43	Total regulatory deductions to AT1 capital	-		
44	AT1 capital	5,830		
45	Tier 1 capital (Tier 1 = CET1 + AT1)	57,666		
	Tier 2 capital: instruments and provisions			
46	Qualifying Tier 2 capital instruments plus any related share premium	6,252		(10)
47	Capital instruments subject to phase out arrangements from Tier 2 capital	3,939		(11)
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)	-		
49	- of which: capital instruments issued by subsidiaries subject to phase out arrangements	-		
50	Collective impairment allowances and regulatory reserve for general banking risks eligible for inclusion in Tier 2 capital	2,188		(29)+(30)
51	Tier 2 capital before regulatory deductions	12,379		
	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	-	-	(1)
56	National specific regulatory adjustments applied to Tier 2 capital	(156)		
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	(156)		[(17)+(23)] x 45%

4 Regulatory capital disclosures (continued)

a. Detailed breakdown of capital components – Transition disclosures template (continued)

		At 31 December 2017		
		HK\$'M	Amounts subject to pre-Basel III treatment*	Cross-referenced to 3b
		HK\$'M		
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	-		(28)
i	- of which: Excess of total EL amount over total eligible provisions under the IRB approach	-		
ii	- of which: Capital shortfall of regulated non-bank subsidiaries	-		
iii	- of which: Investments in own CET1 capital instruments	-		
iv	- of which: Reciprocal cross holdings in CET1 capital instruments issued by financial sector entities	-		
v	- of which: Capital investment in a connected company which is a commercial entity (amount above 15% of the reporting institution's capital base)	-		
vi	- of which: 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	-		
vii	- 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	-		(26)
57	Total regulatory deductions to Tier 2 capital	(156)		
58	Tier 2 capital	12,535		
59	Total capital (Total capital = Tier 1 + Tier 2)	70,201		
59a	Deduction items under Basel III which during transitional period remain subject to risk-weighting, based on pre-Basel III treatment			
i	- of which: Mortgage servicing rights	-		
ii	- of which: Defined benefit pension fund net assets	-		
iii	- of which: Investments in own CET1 capital instruments, AT1 capital instruments and Tier 2 capital instruments	-		
iv	- of which: Capital investment in a connected company which is a commercial entity	-		
v	- of which: 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	-		
vi	- 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	-		
60	Total risk weighted assets	385,071		
	Capital ratios (as a percentage of risk weighted assets)			
61	CET1 capital ratio	13.46%		
62	Tier 1 capital ratio	14.98%		
63	Total capital ratio	18.23%		
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)	7.41%		
65	- of which: capital conservation buffer requirement	1.25%		
66	- of which: bank specific countercyclical buffer requirement	0.91%		
67	- of which: G-SIB or D-SIB buffer requirement	0.75%		
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	8.96%		
	National minima (if different from Basel 3 minimum)			
69	National CET1 minimum ratio	NA		
70	National Tier 1 minimum ratio	NA		
71	National Total capital minimum ratio	NA		
	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	21		
73	Significant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	4,593		(27)
74	Mortgage servicing rights (net of related tax liability)	NA		
75	Deferred tax assets arising from temporary differences (net of related tax liability)	NA		

4 Regulatory capital disclosures (continued)

a. Detailed breakdown of capital components – Transition disclosures template (continued)

		At 31 December 2017		
		Amounts subject to pre-Basel III treatment*		Cross-referenced to 3b
		HK\$'M	HK\$'M	
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 standardized (credit risk) approach (prior to application of cap)	819		
77	Cap on inclusion of provisions in Tier 2 under the basic approach and the standardized (credit risk) approach	486		(29)
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the IRB approach (prior to application of cap)	2,391		
79	Cap for inclusion of provisions in Tier 2 under the IRB approach	1,702		(30)
Capital instruments subject to phase-out arrangements				
80	Current cap on CET1 capital instruments subject to phase out arrangements	NA		
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	NA		
82	Current cap on AT1 capital instruments subject to phase out arrangements	-		
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	3,939		(11)
85	Amount excluded from Tier 2 capital due to cap (excess over cap after redemptions and maturities)	2,064		

* This refers to the position under the Banking (Capital) Rules in force on 31 December 2012.

Transition Disclosures Template

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 December 2017	
		Hong Kong basis	Basel III basis
		HK\$'M	HK\$'M
9	Other intangible assets (net of associated deferred tax liability)	584	584

Explanation

As set out in paragraph 87 of the Basel III text issued by the Basel Committee (December 2010), mortgage servicing rights (MSRs) 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 AI is required to follow the accounting treatment of including MSRs as part of intangible assets reported in the AI's financial statements and to deduct MSRs in full from CET1 capital. Therefore, the amount to be deducted as reported in row 9 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 9 (i.e. the amount reported under the "Hong Kong basis") adjusted by reducing the amount of MSRs to be deducted to the extent not in excess of the 10% threshold set for MSRs and the aggregate 15% threshold set for 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.

4 Regulatory capital disclosures (continued)

a. Detailed breakdown of capital components – Transition disclosures template (continued)

Description	At 31 December 2017	
	Hong Kong	Basel III
	basis	basis
	HK\$'M	HK\$'M
10 Deferred tax assets net of deferred tax liabilities	354	56

Explanation

As set out in paragraphs 69 and 87 of the Basel III text issued by the Basel Committee (December 2010), DTAs that rely on future profitability of the bank to be realized 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 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 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.

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)	–	–
---	---	---

Explanation

For the purpose of determining the total amount of insignificant 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 18 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 18 (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.

4 Regulatory capital disclosures (continued)

a. Detailed breakdown of capital components – Transition disclosures template (continued)

Description	At 31 December 2017	
	Hong Kong	Basel III
	basis	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)	–	–

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.

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)	–	–
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Explanation

The effect of treating loans, facilities or other credit exposures to connected companies which are financial sector entities as CET1 capital instruments for the purpose of considering deductions to be made in calculating the capital base (see note re row 18 to the template above) will mean the headroom within the threshold available for the exemption from capital deduction of other insignificant capital investments in AT1 capital instruments may be smaller. Therefore, the amount to be deducted as reported in row 39 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 39 (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.

4 Regulatory capital disclosures (continued)

a. Detailed breakdown of capital components – Transition disclosures template (continued)

Description	At 31 December 2017	
	Hong Kong basis HK\$'M	Basel III basis HK\$'M
54 Insignificant capital investments in Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	–	–

Explanation

The effect of treating loans, facilities or other credit exposures to connected companies which are financial sector entities as CET1 capital instruments for the purpose of considering deductions to be made in calculating the capital base (see note re row 18 to the template above) will mean the headroom within the threshold available for the exemption from capital deduction of other insignificant capital investments in Tier 2 capital instruments may be smaller. Therefore, the amount to be deducted as reported in row 54 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 54 (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 Banking (Capital) Rules.

Abbreviations:

CET1: Common Equity Tier 1

AT1: Additional Tier 1

Note:

Cross-references (1) to (24) are referenced to 'Reconciliation between accounting and regulatory balance sheets'.

Cross-references (25) to (30) are referenced within the 'transition Disclosures Templates'.

4 Regulatory capital disclosures (continued)

b. Capital instruments

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.

	<i>At December 2017</i>	
	<i>Total amount</i>	<i>Amount recognised in regulatory capital HK\$'M</i>
CET1 capital instruments		
Ordinary shares:		
1,937,138,640 issued and fully paid ordinary shares	HK\$16,378m	16,378
AT1 capital instruments		
Perpetual non-cumulative convertible preference shares	US\$500m	3,878
Perpetual non-cumulative capital securities	US\$250m	1,952
Tier 2 capital instruments		
Subordinated loan due 2020	US\$750m	3,939
Fixed rate (4.30%) subordinated loan due 2026, callable from 2021	US\$800m	6,252

The full terms and conditions of the Bank's capital instruments can be found in the Regulatory Disclosures section of our website, www.sc.com/hk.

4 Regulatory capital disclosures (continued)

b. Capital instruments (continued)

Ordinary Shares

1	Issuer	Standard Chartered Bank (Hong Kong) Limited
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	N/A
3	Governing law(s) of the instrument	Hong Kong Law
	<i>Regulatory treatment</i>	
4	Transitional Basel III rules [#]	N/A
5	Post-transitional Basel III rules [*]	Common Equity Tier 1
6	Eligible at solo*/group/group & solo	Group & solo
7	Instrument type (types to be specified by each jurisdiction)	Ordinary Shares
8	Amount recognised in regulatory capital (Currency in million, as of most recent reporting date)	HKD16,378 Million
9	Par value of instrument	N/A
10	Accounting classification	Shareholders' equity
11	Original date of issuance	1 July 2004 (780 Million shares) 29 June 2005 (451 Million shares) 29 October 2010 (706 Million shares)
12	Perpetual or dated	Perpetual
13	Original maturity date	Undated
14	Issuer call subject to prior supervisory approval	No
15	Optional call date, contingent call dates and redemption amount	The Board may from time to time make calls upon the members in respect of any moneys unpaid on their shares. A call shall be deemed to have been made at the time when the resolution of the Board authorising the call was passed.
16	Subsequent call dates, if applicable	N/A
	<i>Coupons / dividends</i>	
17	Fixed or floating dividend/coupon	Floating
18	Coupon rate and any related index	N/A
19	Existence of a dividend stopper	No
20	Fully discretionary, partially discretionary or mandatory	Fully discretionary
21	Existence of step up or other incentive to redeem	No
22	Noncumulative or cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible
24	If convertible, conversion trigger (s)	N/A
25	If convertible, fully or partially	N/A
26	If convertible, conversion rate	N/A
27	If convertible, mandatory or optional conversion	N/A
28	If convertible, specify instrument type convertible into	N/A
29	If convertible, specify issuer of instrument it converts into	N/A
30	Write-down feature	No
31	If write-down, write-down trigger(s)	N/A
32	If write-down, full or partial	N/A
33	If write-down, permanent or temporary	N/A
34	If temporary write-down, description of write-up mechanism	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Preference Shares are immediately senior to Ordinary Shares
36	Non-compliant transitioned features	No
37	If yes, specify non-compliant features	N/A

Footnote:

[#] Regulatory treatment of capital instruments subject to transitional arrangements provided for in Schedule 4H of the Banking (Capital) Rules

^{*} Regulatory treatment of capital instruments not subject to transitional arrangements provided for in Schedule 4H of the Banking (Capital) Rules

* Include solo-consolidated

4 Regulatory capital disclosures (continued)

b. Capital instruments (continued)

Perpetual non-cumulative convertible preference shares

1	Issuer	Standard Chartered Bank (Hong Kong) Limited
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	N/A
3	Governing law(s) of the instrument	Hong Kong Law
<i>Regulatory treatment</i>		
4	Transitional Basel III rules [#]	N/A
5	Post-transitional Basel III rules ⁺	Additional Tier 1
6	Eligible at solo*/group/group & solo	Group & solo
7	Instrument type (types to be specified by each jurisdiction)	Preference Shares
8	Amount recognised in regulatory capital (Currency in million, as of most recent reporting date)	HKD 3,878 Million
9	Par value of instrument	10 perpetual non-cumulative convertible preference shares at aggregate issue price of USD500 Million and a Liquidation Preference of USD500 Million
10	Accounting classification	Shareholders' equity
11	Original date of issuance	30 December 2014
12	Perpetual or dated	Perpetual
13	Original maturity date	Undated
14	Issuer call subject to prior supervisory approval	Yes
15	Optional call date, contingent call dates and redemption amount	First Call Date: 31 December 2019 Included tax and regulatory redemption options Redemption at 100% of the prevailing Liquidation Preference together with uncanceled but unpaid dividends
16	Subsequent call dates, if applicable	Each dividend payment date after the First Call Date
<i>Coupons / dividends</i>		
17	Fixed or floating dividend/coupon	Fixed
18	Coupon rate and any related index	6.25 per cent per annum payable semi-annually in arrears
19	Existence of a dividend stopper	Yes
20	Fully discretionary, partially discretionary or mandatory	Fully discretionary
21	Existence of step up or other incentive to redeem	No
22	Noncumulative or cumulative	Non-cumulative
23	Convertible or non-convertible	Convertible
24	If convertible, conversion trigger (s)	If a Non-Viability Event occurs and is continuing, "Non-Viability Event" means the earlier of: (a) the Monetary Authority notifying the Bank in writing that the Monetary Authority is of the opinion that a write-off or conversion is necessary, without which the Bank would become non-viable; and (b) the Monetary Authority notifying the Bank in writing that a decision has been made by the government body, a government officer or other relevant regulatory body with the authority to make such a decision, that a public sector injection of capital or equivalent support is necessary, without which the Bank would become non-viable.
25	If convertible, fully or partially	Fully
26	If convertible, conversion rate	Each Preference Share to 12,500,000 A Shares at the USD4.00 per A Share "A Shares" means Class A Ordinary Shares in the share capital of the Bank
27	If convertible, mandatory or optional conversion	Mandatory
28	If convertible, specify instrument type convertible into	Common Equity Tier 1
29	If convertible, specify issuer of instrument it converts into	Standard Chartered Bank (Hong Kong) Limited
30	Write-down feature	No
31	If write-down, write-down trigger(s)	N/A
32	If write-down, full or partial	N/A
33	If write-down, permanent or temporary	N/A
34	If temporary write-down, description of write-up mechanism	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	The Dated Subordinated Notes are immediately senior to Preference Shares
36	Non-compliant transitioned features	No
37	If yes, specify non-compliant features	N/A

Footnote:

[#] Regulatory treatment of capital instruments subject to transitional arrangements provided for in Schedule 4H of the Banking (Capital) Rules

⁺ Regulatory treatment of capital instruments not subject to transitional arrangements provided for in Schedule 4H of the Banking (Capital) Rules

* Include solo-consolidated

4 Regulatory capital disclosures (continued)

b. Capital instruments (continued)

Perpetual non-cumulative capital securities

1	Issuer	Standard Chartered Bank (Hong Kong) Limited
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	N/A
3	Governing law(s) of the instrument	Hong Kong Law
<i>Regulatory treatment</i>		
4	Transitional Basel III rules [#]	N/A
5	Post-transitional Basel III rules ⁺	Additional Tier 1
6	Eligible at solo*/group/group & solo	Group & solo
7	Instrument type (types to be specified by each jurisdiction)	Perpetual debt instrument
8	Amount recognised in regulatory capital (Currency in million, as of most recent reporting date)	HKD 1,952 Million
9	Par value of instrument	Issue price at 100 per cent of the Aggregate Nominal Amount of USD250 Million
10	Accounting classification	Shareholders' equity
11	Original date of issuance	13 December 2017
12	Perpetual or dated	Perpetual
13	Original maturity date	Undated
14	Issuer call subject to prior supervisory approval	Yes
15	Optional call date, contingent call dates and redemption amount	First Call Date: 13 December 2024 Included tax and regulatory redemption options Redemption at 100% of the Capital Securities at their outstanding principal amount together with the distribution accrued but unpaid to the date fixed for redemption.
16	Subsequent call dates, if applicable	Each dividend payment date after the First Call Date
<i>Coupons / dividends</i>		
17	Fixed or floating dividend/coupon	Fixed
18	Coupon rate and any related index	5.00 per cent per annum payable semi-annually in arrears
19	Existence of a dividend stopper	Yes
20	Fully discretionary, partially discretionary or mandatory	Full discretionary
21	Existence of step up or other incentive to redeem	No
22	Noncumulative or cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible
24	If convertible, conversion trigger (s)	N/A
25	If convertible, fully or partially	N/A
26	If convertible, conversion rate	N/A
27	If convertible, mandatory or optional conversion	N/A
28	If convertible, specify instrument type convertible into	N/A
29	If convertible, specify issuer of instrument it converts into	N/A
30	Write-down feature	Yes
31	If write-down, write-down trigger(s)	If a Non-Viability Event occurs and is continuing, "Non-Viability Event" means the earlier of: (a) the Monetary Authority notifying the Bank in writing that the Monetary Authority is of the opinion that a write-off or conversion is necessary, without which the Bank would become non-viable; and (b) the Monetary Authority notifying the Bank in writing that a decision has been made by the government body, a government officer or other relevant regulatory body with the authority to make such a decision, that a public sector injection of capital or equivalent support is necessary, without which the Bank would become non-viable.
32	If write-down, full or partial	Full or Partial
33	If write-down, permanent or temporary	Permanent
34	If temporary write-down, description of write-up mechanism	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	The Dated Subordinated Notes are immediately senior to Capital Securities
36	Non-compliant transitioned features	No
37	If yes, specify non-compliant features	N/A

Footnote:

[#] Regulatory treatment of capital instruments subject to transitional arrangements provided for in Schedule 4H of the Banking (Capital) Rules

⁺ Regulatory treatment of capital instruments not subject to transitional arrangements provided for in Schedule 4H of the Banking (Capital) Rules

* Include solo-consolidated

4 Regulatory capital disclosures (continued)

b. Capital instruments (continued)

Subordinated loan due 2020

1	Issuer	Standard Chartered Bank (Hong Kong) Limited
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	XS0520042416 (ISIN Code)
3	Governing law(s) of the instrument	The Notes are governed by and construed in accordance with English Law, except for the provisions relating to the subordination of Subordinated Notes to be issued by SCBHK which will be governed by, and construed in accordance with, Hong Kong Law
<i>Regulatory treatment</i>		
4	Transitional Basel III rules [#]	Tier 2
5	Post-transitional Basel III rules ⁺	Ineligible
6	Eligible at solo*/group/group & solo	Group & solo
7	Instrument type (types to be specified by each jurisdiction)	Other Tier 2 instruments
8	Amount recognised in regulatory capital (Currency in million, as of most recent reporting date)	HKD 3,939 Million
9	Par value of instrument	Issue price at 99.485 per cent of the Aggregate Nominal Amount of USD750 Million
10	Accounting classification	Liability – amortised cost
11	Original date of issuance	24 June 2010
12	Perpetual or dated	Dated
13	Original maturity date	24 June 2020
14	Issuer call subject to prior supervisory approval	Yes
15	Optional call date, contingent call dates and redemption amount	The notes may, at any time, be redeemed at par for taxation reasons
16	Subsequent call dates, if applicable	N/A
<i>Coupons / dividends</i>		
17	Fixed or floating dividend/coupon	Fixed
18	Coupon rate and any related index	5.875 per cent per annum payable semi-annually in arrears
19	Existence of a dividend stopper	No
20	Fully discretionary, partially discretionary or mandatory	Mandatory
21	Existence of step up or other incentive to redeem	No
22	Noncumulative or cumulative	Cumulative
23	Convertible or non-convertible	Non-convertible
24	If convertible, conversion trigger (s)	N/A
25	If convertible, fully or partially	N/A
26	If convertible, conversion rate	N/A
27	If convertible, mandatory or optional conversion	N/A
28	If convertible, specify instrument type convertible into	N/A
29	If convertible, specify issuer of instrument it converts into	N/A
30	Write-down feature	No
31	If write-down, write-down trigger(s)	N/A
32	If write-down, full or partial	N/A
33	If write-down, permanent or temporary	N/A
34	If temporary write-down, description of write-up mechanism	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior Creditors are immediately senior to the Dated Subordinated Notes
36	Non-compliant transitioned features	Yes
37	If yes, specify non-compliant features	The terms and conditions do not have a provision that requires the instrument to fully absorb losses at the point of non-viability

Footnote:

[#] Regulatory treatment of capital instruments subject to transitional arrangements provided for in Schedule 4H of the Banking (Capital) Rules

⁺ Regulatory treatment of capital instruments not subject to transitional arrangements provided for in Schedule 4H of the Banking (Capital) Rules

* Include solo-consolidated

4 Regulatory capital disclosures (continued)

b. Capital instruments (continued)

Fixed rate (4.30%) subordinated loan due 2026, callable from 2021

1	Issuer	Standard Chartered Bank (Hong Kong) Limited
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	N/A
3	Governing law(s) of the instrument	Hong Kong Law
<i>Regulatory treatment</i>		
4	Transitional Basel III rules [#]	N/A
5	Post-transitional Basel III rules [*]	Tier 2
6	Eligible at solo*/group/group & solo	Group & solo
7	Instrument type (types to be specified by each jurisdiction)	Other Tier 2 instruments
8	Amount recognised in regulatory capital (Currency in million, as of most recent reporting date)	HKD 6,252 Million
9	Par value of instrument	Issue price at 100 per cent of the Aggregate Nominal Amount of USD800 Million
10	Accounting classification	Liability – amortised cost
11	Original date of issuance	19 December 2016
12	Perpetual or dated	Dated
13	Original maturity date	19 December 2026
14	Issuer call subject to prior supervisory approval	Yes
15	Optional call date, contingent call dates and redemption amount	First Call Date: 20 December 2021 Included tax and regulatory redemption options Redemption at 100% of the Subordinated Notes at their outstanding principal amount together with interest accrued but unpaid to the date fixed for redemption.
16	Subsequent call dates, if applicable	Each interest payment date after the First Call Date
<i>Coupons / dividends</i>		
17	Fixed or floating dividend/coupon	Fixed
18	Coupon rate and any related index	4.30 per cent per annum payable quarterly in arrears
19	Existence of a dividend stopper	No
20	Fully discretionary, partially discretionary or mandatory	Mandatory
21	Existence of step up or other incentive to redeem	No
22	Noncumulative or cumulative	Cumulative
23	Convertible or non-convertible	Non-convertible
24	If convertible, conversion trigger (s)	N/A
25	If convertible, fully or partially	N/A
26	If convertible, conversion rate	N/A
27	If convertible, mandatory or optional conversion	N/A
28	If convertible, specify instrument type convertible into	N/A
29	If convertible, specify issuer of instrument it converts into	N/A
30	Write-down feature	Yes
31	If write-down, write-down trigger(s)	If a Non-Viability Event occurs and is continuing, "Non-Viability Event" means the earlier of: (a) the Monetary Authority notifying the Bank in writing that the Monetary Authority is of the opinion that a write-off or conversion is necessary, without which the Bank would become non-viable; and (b) the Monetary Authority notifying the Bank in writing that a decision has been made by the government body, a government officer or other relevant regulatory body with the authority to make such a decision, that a public sector injection of capital or equivalent support is necessary, without which the Bank would become non-viable.
32	If write-down, full or partial	Full or Partial
33	If write-down, permanent or temporary	Permanent
34	If temporary write-down, description of write-up mechanism	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior Creditors are immediately senior to the Dated Subordinated Notes
36	Non-compliant transitioned features	No
37	If yes, specify non-compliant features	N/A

Footnote:

[#] Regulatory treatment of capital instruments subject to transitional arrangements provided for in Schedule 4H of the Banking (Capital) Rules

^{*} Regulatory treatment of capital instruments not subject to transitional arrangements provided for in Schedule 4H of the Banking (Capital) Rules

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5 Countercyclical capital buffer (CCyB) ratio standard disclosure template

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

At 31 December 2017

Jurisdiction (J)	Applicable JCCyB ratio in effect	Total RWA used in computation of CCyB ratio of AI HK\$'M	Jurisdiction (J)	Applicable JCCyB ratio in effect	Total RWA used in computation of CCyB ratio of AI HK\$'M
Hong Kong	1.250%	207,115	Malaysia	–	1,496
China	–	18,314	Marshall islands	–	101
Argentina	–	14	Mauritius	–	517
Australia	–	1,392	Mongolia	–	2
Bahrain	–	1,440	Netherland	–	661
Bangladesh	–	1	New Zealand	–	84
Belgium	–	13	Nigeria	–	135
Bermuda	–	149	Oman	–	527
Brunei	–	4	Pakistan	–	2
Canada	–	169	Panama	–	720
Cayman Island	–	779	Philippines	–	49
Chile	–	2	Poland	–	38
Chinese Taipei	–	752	Qatar	–	2,996
Cyprus	–	1	Samoa	–	31
Denmark	–	26	Scycheles	–	109
Finland	–	5	Singapore	–	8,044
France	–	759	South Africa	–	1,137
Germany	–	186	South Korea	–	3,018
Guernsey	–	466	Spain	–	758
Honduras	–	1	Sri Lanka	–	2
Hungary	–	302	Sweden	2.000%	390
India	–	2,438	Switzerland	–	202
Indonesia	–	1,316	Tanzania	–	408
Ireland	–	920	Thailand	–	344
Israel	–	1	Turkey	–	1,840
Italy	–	4	Uganda	–	57
Japan	–	83	United Arab Emirates	–	6,423
Jersey	–	148	United Kingdom	–	3,449
Kuwait	–	398	United States	–	3,683
Luxembourg	–	204	Vietnam	–	2,874
Macau	–	450	West Indies UK	–	6,338
Total RWA used in computation of CCyB ratio of AI					284,287
CCyB ratio of AI					0.913%
CCyB amount of AI					2,597

6 Leverage Ratio

Leverage Ratio Common Disclosure Template

Leverage ratio
framework
At 31 December 2017
HK\$'M

On-balance sheet exposures		
1	On-balance sheet items (excluding derivatives and SFTs, but including collateral)	955,799
2	Less: Asset amounts deducted in determining Basel III Tier 1 capital (reported as negative amounts)	(7,487)
3	Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 and 2)	948,312
Derivative exposures		
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	2,156
5	Add-on amounts for PFE associated with all derivatives transactions	13,713
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)	–
9	Adjusted effective notional amount of written credit derivatives	4,142
10	Less: Adjusted effective notional offsets and add-on deductions for written credit derivatives (reported as negative amounts)	(4,142)
11	Total derivative exposures (sum of lines 4 to 10)	15,869
Securities financing transaction exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	52,439
13	Less: Netted amounts of cash payables and cash receivables of gross SFT assets (reported as negative amounts)	–
14	CCR exposure for SFT assets	58
15	Agent transaction exposures	–
16	Total securities financing transaction exposures (sum of lines 12 to 15)	52,497
Other off-balance sheet exposures		
17	Off-balance sheet exposure at gross notional amount	376,778
18	Less: Adjustments for conversion to credit equivalent amounts (reported as negative amounts)	(316,078)
19	Off-balance sheet items (sum of lines 17 and 18)	60,700
Capital and total exposures		
20	Tier 1 capital	57,666
21	Total exposures (sum of lines 3, 11, 16 and 19)	1,077,378
Leverage ratio		
22	Basel III leverage ratio	5.35%

6 Leverage Ratio (continued)

Leverage Ratio Summary Comparison Table

		<i>Leverage ratio framework Aa at 31 December 2017 HK\$'M</i>
1	Total consolidated assets as per published financial statements	1,075,049
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(9,006)
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	(7,580)
5	Adjustment for securities financing transactions (i.e. repos and similar secured lending)	7,855
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	60,700
7	Other adjustments	(49,640)
8	Leverage ratio exposure	1,077,378

7 Liquidity Coverage Ratio

Liquidity Coverage Ratio Current Period

Number of data points used in calculating the average value of the Liquidity Coverage Ratio (LCR) and related components set out in this Template for the quarter ending on 31 Mar 2017, 30 Jun 2017, 30 Sep 2017 & 31 Dec 2017 are 73, 71, 78 and 73.		Q4 2017 Currency: (HK\$mil)		Q3 2017 Currency: (HK\$mil)		Q2 2017 Currency: (HK\$mil)		Q1 2017 Currency: (HK\$mil)	
		UNWEIGHTED AMOUNT (Average Value)	WEIGHTED AMOUNT (Average Value)						
Basis of disclosure: Consolidated									
A. HIGH QUALITY LIQUID ASSETS									
1	Total high quality liquid assets (HQLA)		180,528		162,938		175,318		184,656
B. CASH OUTFLOWS									
2	Retail deposits and small business funding, of which:	424,717	34,097	414,268	33,263	403,822	32,507	390,514	31,354
3	Stable retail deposits and stable small business funding	109,496	5,475	108,150	5,408	105,937	5,297	102,371	5,119
4	Less stable retail deposits and less stable small business funding	257,225	25,723	251,001	25,100	246,310	24,631	236,563	23,656
5	Retail term deposits and small business term funding	57,995	2,900	55,118	2,756	51,576	2,579	51,579	2,579
6	Unsecured wholesale funding (other than small business funding) and debt securities and prescribed instruments issued by the institution, of which:	396,641	175,976	383,730	167,587	380,592	170,511	373,329	171,279
7	Operational deposits	187,759	46,602	183,171	45,463	174,645	43,336	156,886	38,903
8	Unsecured wholesale funding (other than small business funding) not covered in Row 7	207,510	128,001	200,447	122,011	205,863	127,092	216,425	132,358
9	Debt securities and prescribed instruments issued by the institution and redeemable within the LCR period	1,372	1,372	112	112	83	83	18	18
10	Secured funding transactions (including securities swap transactions)		–		837		0		–
11	Additional requirements, of which:	164,795	16,588	170,584	18,064	164,848	16,307	163,290	16,208
12	Cash outflows arising from derivative contracts and other transactions, and additional liquidity needs arising from related collateral requirements	6,628	6,628	6,955	6,955	5,069	5,069	4,498	4,498
13	Cash outflows arising from obligations under structured financing transactions and repayment of funding obtained from such transactions	160	160	110	110	286	286	139	139
14	Potential drawdown of undrawn committed facilities (including committed credit facilities and committed liquidity facilities)	158,007	9,800	163,519	10,999	159,492	10,952	158,654	11,571
15	Contractual lending obligations (not otherwise covered in Section B) and other contractual cash outflows	21,971	21,971	25,766	25,766	21,954	21,954	24,502	24,502
16	Other contingent funding obligations (whether contractual or non-contractual)	282,879	1,367	254,352	1,481	239,110	1,343	228,908	1,069
17	TOTAL CASH OUTFLOWS		250,038		246,999		242,622		244,412
C. CASH INFLOWS									
18	Secured lending transactions (including securities swap transactions)	12,348	361	11,342	1,198	20,553	1,998	19,183	1,932
19	Secured and unsecured loans (other than secured lending transactions covered in Row 18) and operational deposits placed at other financial institutions	199,724	119,252	177,460	101,661	168,370	95,197	159,315	90,493
20	Other cash inflows	18,788	15,010	20,829	16,468	17,904	13,656	14,947	10,426
21	TOTAL CASH INFLOWS	230,860	134,623	209,632	119,327	206,826	110,851	193,445	102,852
D. LIQUIDITY COVERAGE RATIO									
22	TOTAL HQLA		180,528		162,938		175,318		184,656
23	TOTAL NET CASH OUTFLOWS		115,416		127,672		131,771		141,560
24	LCR (%)		158%		129%		134%		131%

7 Liquidity Coverage Ratio (continued)

Liquidity Coverage Ratio Current Period (continued)

Number of data points used in calculating the average value of the Liquidity Coverage Ratio (LCR) and related components set out in this Template for the quarter ending on 31 Mar 2016, 30 Jun 2016, 30 Sep 2016 & 31 Dec 2016: (3)		Q4 2016 Currency: (HK\$mil)		Q3 2016 Currency: (HK\$mil)		Q2 2016 Currency: (HK\$mil)		Q1 2016 Currency: (HK\$mil)	
		UNWEIGHTED AMOUNT (Average Value)	WEIGHTED AMOUNT (Average Value)						
Basis of disclosure: Consolidated									
A. HIGH QUALITY LIQUID ASSETS									
1	Total high quality liquid assets (HQLA)		184,506		184,986		187,902		216,860
B. CASH OUTFLOWS									
2	Retail deposits and small business funding, of which:	383,144	30,654	372,151	29,656	360,983	28,671	351,790	28,032
3	Stable retail deposits and stable small business funding	100,685	5,034	98,655	4,933	95,676	4,784	95,037	4,752
4	Less stable retail deposits and less stable small business funding	229,940	22,994	220,959	22,096	212,428	21,243	208,846	20,885
5	Retail term deposits and small business term funding	52,519	2,626	52,538	2,627	52,879	2,644	47,907	2,395
6	Unsecured wholesale funding (other than small business funding) and debt securities and prescribed instruments issued by the institution, of which:	389,140	175,148	380,672	167,727	365,340	166,711	384,088	171,862
7	Operational deposits	156,932	39,192	167,979	41,954	145,750	36,304	148,924	36,914
8	Unsecured wholesale funding (other than small business funding) not covered in Row 7	232,208	135,956	211,273	124,353	219,590	130,407	235,164	134,948
9	Debt securities and prescribed instruments issued by the institution and redeemable within the LCR period	-	-	1,420	1,420	-	-	-	-
10	Secured funding transactions (including securities swap transactions)		0		0		0		0
11	Additional requirements, of which:	163,032	15,752	157,000	14,011	154,713	14,685	144,473	13,916
12	Cash outflows arising from derivative contracts and other transactions, and additional liquidity needs arising from related collateral requirements	4,380	4,380	4,560	4,560	8,652	5,235	7,544	4,856
13	Cash outflows arising from obligations under structured financing transactions and repayment of funding obtained from such transactions	51	51	10	10	305	305	155	155
14	Potential drawdown of undrawn committed facilities (including committed credit facilities and committed liquidity facilities)	158,601	11,321	152,430	9,441	145,757	9,145	136,773	8,905
15	Contractual lending obligations (not otherwise covered in Section B) and other contractual cash outflows	27,713	27,713	12,796	12,796	17,133	17,133	17,122	17,122
16	Other contingent funding obligations (whether contractual or non-contractual)	230,980	1,042	234,678	1,034	222,870	977	233,712	903
17	TOTAL CASH OUTFLOWS		250,308		225,225		228,177		231,835
C. CASH INFLOWS									
18	Secured lending transactions (including securities swap transactions)	21,731	1,667	22,432	1,293	27,816	661	32,495	152
19	Secured and unsecured loans (other than secured lending transactions covered in Row 18) and operational deposits placed at other financial institutions	165,571	92,336	144,914	77,791	152,917	82,023	152,432	81,653
20	Other cash inflows	28,636	17,127	11,611	9,585	11,113	8,941	13,999	10,467
21	TOTAL CASH INFLOWS	215,938	111,129	178,957	88,668	191,845	91,625	198,926	92,271
D. LIQUIDITY COVERAGE RATIO									
22	TOTAL HQLA		184,506		184,986		187,902		216,860
23	TOTAL NET CASH OUTFLOWS		139,179		136,556		136,551		139,563
24	LCR (%)		134%		137%		138%		156%

7 Liquidity Coverage Ratio (continued)

Key Drivers

Liquidity Coverage Ratio (LCR) measures the short-term resilience of the Bank's liquidity risk profile, and is sensitive to balance sheet movement and composition. The Bank has maintained a strong liquidity position and well above the regulatory requirement of 80% throughout the year of 2017. Average LCR remained stable in the first three quarters of the year. The increase in the fourth quarter was mainly driven by growth of quality client deposits and shortening of the tenor on interbank lending.

Composition of High Quality Liquid Asset ("HQLA")

The Bank holds significant levels of high quality unencumbered liquid assets that can be liquefied, repo-ed or used as collateral in the event of a liquidity stress.

The liquid assets consist predominately of Level 1 assets, including mainly cash and central bank reserves, Hong Kong exchange fund bills and notes, US treasuries and other marketable debt securities issued or guaranteed by other central banks and governments. In addition, the Bank also holds level 2 assets such as high quality covered bonds, corporate bonds and bonds issued by public sector entities.

Concentration of Funding Sources

Our assets are primarily funded by customer deposits, largely made up of low cost and stable current and savings accounts. This forms a stable base for the Bank's funding requirement. In addition, wholesale funding is widely diversified by client type and maturity which helps managing liquidity mismatches as required.

The Asset and Liability Management Committee ("ALCO") monitors trends in the balance sheet and ensures that any concerns that might impact the stability of deposits are addressed in an effective and timely manner. ALCO also reviews balance sheet plans to ensure that projected asset growth is matched by growth in customer deposits.

Derivatives Exposure

The use of derivatives for hedging and sale to customers as risk management products is an important part of the Bank's business activities. These instruments are also used to manage the Bank's own exposures to market risk. The principal derivative instruments used by the Bank are foreign exchange related and interest rate related contracts. Derivative positions are mark-to-market on a daily basis.

7 Liquidity Coverage Ratio (continued)

Currency Mismatch on LCR

Customer assets are as far as possible funded in the same currency. Where mismatches arise, they are controlled by limits on the amount of foreign currency that can be swapped to local currency and vice versa. Such limits are therefore a means of controlling reliance on foreign exchange markets, which minimizes the risk that obligations could not be met in the required currency in the event that access to foreign exchange markets becomes restricted.

Majority of the Bank's customer deposits are denominated in HKD, USD and CNY. The Bank holds higher USD and other foreign currency denominated HQLA due to its significant market depth and ease of conversion in the event of liquidity stress. This is in line with the Alternative Liquidity Approach option prescribed by HKMA. During this period, the Bank maintained an amount of HKD-denominated level 1 assets well above the regulatory requirement of 20% of its HKD-denominated total net cash outflows.

Liquidity management

Treasury-Markets is responsible for managing the Bank's liquidity position within the approved liquidity and funding risk limits and thresholds. Oversight under the liquidity and funding framework resides with ALCO, supported by Treasury-Markets. The Bank would ensure it operates within predefined liquidity limits and remain in compliance with Group liquidity policies and practices, as well as local regulatory requirements.

It is the Bank's policy to manage liquidity without presumption of the Bank's parent support. ALCO is responsible for ensuring that the Bank is able to maintain adequate liquidity at all times and be in a position to meet all obligations as they fall due; repay depositors and fulfil all commitments to lend.

8 Overview of risk management and RWA

a. Overview of risk management (OVA)

The following table sets out a description of risk management objectives and policies and how the Board of Directors and senior management assess and manage risks, enabling users to gain a clear understanding of the risk tolerance and appetite in relation to the main activities and all significant risks.

b. Overview of risk-weighted amount ("RWA") (OVI)

The following table sets out an overview of capital requirements in terms of a detailed breakdowns of RWAs for various risks.

	(a)	(b)	(c)
	Consolidated RWA		Minimum capital requirements
	At December 17 HK\$'M	At September 17 HK\$'M	At December 17 HK\$'M
1 Credit risk for non-securitization exposures	288,742	299,165	24,356
2 – Of which STC approach	26,878	27,413	2,150
2a – Of which BSC approach	–	–	–
3 – Of which IRB approach	261,864	271,752	22,206
4 Counterparty credit risk	8,239	7,293	681
5 – Of which SA-CCR	–	–	–
5a – Of which CEM	8,239	7,293	681
6 – Of which IMM(CCR) approach	–	–	–
7 Equity exposures in banking book under the market-based approach	–	–	–
8 CIS exposures – LTA	–	–	–
9 CIS exposures – MBA	–	–	–
10 CIS exposures – FBA	–	–	–
11 Settlement risk	10	–	1
12 Securitization exposures in banking book	1,186	1,387	101
13 Of which IRB(S) approach – ratings-based method	1,186	1,387	101
14 Of which IRB(S) approach – supervisory formula method	–	–	–
15 Of which STC(S) approach	–	–	–

8 Overview of risk management and RWA (continued)

b. Overview of risk-weighted amount ("RWA") (OVI) (continued)

	(a)	(b)	(c)
	Consolidated RWA		Minimum capital requirements
	At December 17 HK\$'M	At September 17 HK\$'M	At December 17 HK\$'M
16 Market risk	18,654	20,446	1,492
17 – Of which STM approach	17,993	19,787	1,439
18 – Of which IMM approach	661	659	53
19 Operational risk	41,224	41,706	3,298
20 – Of which BIA approach	–	–	–
21 – Of which STO approach	41,224	41,706	3,298
21a – Of which ASA approach	–	–	–
22 – Of which AMA approach	N/A	N/A	N/A
23 Amounts below the thresholds for deduction (subject to 250% RW)	11,483	11,483	919
24 Capital floor adjustment	–	–	–
24a Deduction to RWA	523	597	42
24b – Of which portion of regulatory reserve for general banking risks and collective provisions which is not included in Tier 2 Capital	333	356	27
24c – Of which portion of cumulative fair value gains arising from the revaluation of land and buildings which is not included in Tier 2 Capital	190	241	15
25 Total	369,015	380,883	30,806

9 Linkages between financial statements and regulatory exposures

a. Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories (L11)

The following table sets out an information on assets and liabilities to enable users to identify the differences between the scope of accounting consolidation and the scope of regulatory consolidation, with a breakdown into regulatory risk categories of every item of the assets and liabilities reported in financial statements based on the scope of accounting consolidation.

	(a) Carrying values as reported in published financial statements HK\$'M	(b) Carrying values under scope of regulatory consolidation HK\$'M	(c) subject to credit risk framework HK\$'M	Carrying values of items:			(g) not subject to capital requirements or subject to deduction from capital HK\$'M
				(d) subject to counterparty credit risk framework HK\$'M	(e) subject to the securitization framework HK\$'M	(f) subject to market risk framework HK\$'M	
At 31 December 2017							
Assets							
Cash and balances with banks, central banks and other financial institutions	18,350	18,350	18,350	-	-	-	-
Placements with banks and other financial institutions	150,256	150,247	131,335	18,912	-	-	-
Hong Kong SAR Government certificate of indebtedness	42,341	42,341	42,341	-	-	-	-
Trading assets	22,483	22,483	-	1,272	-	22,483	-
Financial assets designated at fair value	336	336	-	-	336	-	-
Investment securities	207,927	207,926	196,769	-	11,156	-	-
Advances to customers	480,867	480,867	472,578	8,289	-	-	-
Amounts due from immediate holding company	59,075	59,072	18,264	40,801	-	23,367	-
Amounts due from fellow subsidiaries	24,208	24,208	24,208	-	-	-	-
Amounts due from subsidiaries of the Bank	-	28	28	-	-	-	-
Investment in subsidiaries of the Bank	-	277	277	-	-	-	-
Investment in associates	11,638	4,316	4,316	-	-	-	-
Property, plant and equipment	40,632	40,632	40,632	-	-	-	-
Goodwill and intangible assets	1,392	1,392	-	-	-	-	1,392
Current tax assets	11	-	-	-	-	-	-
Deferred tax assets	275	275	-	-	-	-	275
Other assets	15,258	13,297	13,119	-	-	179	-
Total assets	1,075,049	1,066,047	962,217	69,274	11,492	46,029	1,667

9 Linkages between financial statements and regulatory exposures (continued)

a. Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories (L11) (continued)

At 31 December 2017	(a) Carrying values as reported in published financial statements HK\$'M	(b) Carrying values under scope of regulatory consolidation HK\$'M	(c) subject to credit risk framework HK\$'M	Carrying values of items:			(g) not subject to capital requirements or subject to deduction from capital HK\$'M
				(d) subject to counterparty credit risk framework HK\$'M	(e) subject to the securitization framework HK\$'M	(f) subject to market risk framework HK\$'M	
Liabilities							
Hong Kong SAR currency notes in circulation	42,341	42,341	-	-	-	-	42,341
Deposits and balances of banks and other financial institutions	19,613	19,613	-	-	-	-	19,613
Deposits from customers	833,899	833,899	-	-	-	-	833,899
Trading liabilities	8,301	8,301	-	1,537	-	8,301	-
Financial liabilities designated at fair value	11,474	11,474	-	-	-	-	11,474
Debt securities in issue	3,066	3,066	-	-	-	-	3,066
Amounts due to immediate holding company	44,246	44,246	-	24,567	-	24,567	19,679
Amounts due to fellow subsidiaries	9,477	9,477	-	-	-	-	9,477
Amount due to subsidiaries of the Bank	-	458	-	-	-	-	458
Current tax liabilities	439	436	-	-	-	-	436
Deferred tax liabilities	470	56	-	-	-	-	56
Other liabilities	21,292	21,543	-	-	-	-	21,543
Subordinated liabilities	6,003	6,003	-	-	-	-	6,003
Total liabilities	1,000,621	1,000,913	-	26,104	-	32,868	968,045

9 Linkages between financial statements and regulatory exposures (continued)

b. Main sources of differences between regulatory exposure amounts and carrying values in financial statements (LI2)

The following table sets out information on the main sources of differences between the carrying values in financial statements and the exposure amounts used for the calculation of regulatory capital in respect of the assets and liabilities based on the scope of regulatory consolidation.

At 31 December 2017	(a) Total HK\$'M	(c) credit risk framework HK\$'M	(d) counterparty credit risk framework HK\$'M	(e) securitization framework HK\$'M	(e) market risk framework HK\$'M
			Items subject to:		
1 Asset carrying value amount under scope of regulatory consolidation (as per template LI1)	1,064,380	962,217	69,274	11,492	46,029
2 Liabilities carrying value amount under scope of regulatory consolidation (as per template LI1)	32,868	–	26,104	–	32,868
3 Total net amount under regulatory scope of consolidation	1,031,512	962,217	43,170	11,492	13,161
4 Off balance sheet amounts and potential future exposure for counterparty risk	381,650	118,309	22,108	–	–
5 Difference due to financial collateral on standardised approach	(21,071)	(21,071)	–	–	–
6 Difference due to impairments on IRB approach	243	243	–	–	–
7 Difference due to credit risk adjustments	2,294	2,294	–	–	–
8 Exposure amounts considered for regulatory purposes	1,394,628	1,061,992	65,278	11,492	13,161

c. Explanations of differences between accounting and regulatory exposure amounts (LIA)

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

Off-balance sheet amounts subject to credit risk 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').

9 Linkages between financial statements and regulatory exposures (continued)

c. Explanations of differences between accounting and regulatory exposure amounts (LIA) (continued)

Difference due to financial collateral under standardised approach

The exposure value is calculated after deducting credit risk mitigation ('CRM'), whereas the accounting value is before such deductions.

Difference due to impairments on IRB approach

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.

Difference due to credit risk adjustments

Credit risk adjustments is the differences arise between accounting carrying values and regulatory Exposure at Default (EAD) as a result of the application of CRM and CCF.

Explanation of differences between accounting fair value and regulatory prudent valuation

Standard Chartered Bank (the Bank) has implemented various systems and controls to ensure that valuations are prudent and reliable.

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. All fair value positions are tested using independently sourced inputs. Where material price testing differences exist, the Bank calculates respective adjustments through the Independent Price Testing process. Material price testing adjustments are charged to the Profit and Loss account.

The Bank also calculates fair value adjustments in order to ensure the appropriate level of conservativeness. Additional fair value adjustments are made to reflect risks such as credit risk and funding risk of the portfolios for uncollateralised trades or exit costs due to bid-offer spreads.

Furthermore the Bank also calculates Prudent Valuation Adjustments which arise due to valuation uncertainties inherent in fair value positions such as market price uncertainty, close-out costs, model risk, unearned credit spreads, investing and funding costs, concentrated positions, early termination, operational risk and future administrative costs. The excesses of the Prudent Valuation Adjustments over the respective Fair Value Adjustments are referred to as Additional Valuation Adjustments (AVAs) and their aggregate is deducted from Common Equity Tier 1 capital.

All valuation adjustments are governed by internal methodology documents which are approved regularly by the relevant valuation governance committee.

10 Credit risk for non-securitization exposures

Our approach to credit risk can be found in the Risk management approach section in note 37(a) on pages 79 to 88 of the 2017 consolidated financial statements.

The following table sets out the main characteristics and elements of credit risk management, including the business model, credit risk profile, organisation and functions involved in credit risk management, and risk management reporting.

a. Credit quality of exposures (CR1)

The following table sets out an overview of the credit quality of on- and off-balance sheet exposures.

At 31 December 2017		(a)	(b)	(c)	(d)
		<i>Gross carrying amounts of Defaulted exposures</i> HK\$'M	<i>Non-defaulted exposures</i> HK\$'M	<i>Allowances/ impairments</i> HK\$'M	<i>Net values</i> HK\$'M
1	Loans	3,831	649,895	1,150	652,576
2	Debt securities	–	213,580	–	213,580
3	Off-balance sheet exposures	277	375,909	–	376,186
4	Total	4,108	1,239,384	1,150	1,242,342

b. Changes in defaulted loans and debt securities (CR2)

The following table sets out an information on the changes in defaulted loans and debt securities, including any changes in the amount of defaulted exposures, movements between non-defaulted and defaulted exposures, and reductions in the defaulted exposures due to write-offs.

		(a)
		HK\$'M
1	Defaulted loans and debt securities at end of the previous reporting period (30 June 2017)	3,452
2	Loans and debt securities that have defaulted since the last reporting period	1,666
3	Returned to non-defaulted status	(9)
4	Amounts written off	(484)
5	Other changes	(794)
6	Defaulted loans and debt securities at end of the current reporting period (31 December 2017)	3,831

10 Credit risk for non-securitization exposures (continued)

c. Additional disclosure related to credit quality of exposures (CRB)

The following table sets out an additional qualitative and quantitative information on the credit quality of exposures to supplement the quantitative information provided under templates CR1 and CR2.

I. Exposures by geographical location (CRB1)

At 31 December 2017		<i>Gross carrying amount HK\$'M</i>
1	Hong Kong	837,267
2	China	160,410
3	Others ¹	245,815
4	Total	1,243,492

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

II. Exposures by Industry (CRB2)

At 31 December 2017		<i>Gross carrying amount HK\$'M</i>
1	Individuals	428,911
2	Financial concerns	340,422
3	Property development and investment	67,063
4	Others ¹	407,096
5	Total	1,243,492

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

III. Exposures by residual maturity (CRB3)

At 31 December 2017		<i>Repayable on demand to 1 year HK\$'M</i>	<i>Due between 1 year to 5 years HK\$'M</i>	<i>Due after 5 years HK\$'M</i>	<i>Total HK\$'M</i>
1	Loans	350,587	123,813	179,326	653,726
2	Debt securities	155,574	50,909	7,097	213,580
3	Off-balance sheet exposures	347,920	23,604	4,662	376,186
4	Total	854,081	198,326	191,085	1,243,492

10 Credit risk for non-securitization exposures (continued)

c. Additional disclosure related to credit quality of exposures (CRB) (continued)

IV. Impaired exposures and related allowances and write-offs by geographical location (CRB4)

At 31 December 2017		<i>Gross impaired advances</i> HK\$'M	<i>Individual assessed allowances</i> HK\$'M	<i>Write-off</i> HK\$'M
1	Hong Kong	3,126	844	206
2	China	112	63	–
3	Others ¹	40	–	–
4	Total	3,278	907	206

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

V. Impaired exposures and related allowances and write-offs by Industry (CRB5)

At 31 December 2017		<i>Gross impaired advances</i> HK\$'M	<i>Individual assessed allowances</i> HK\$'M	<i>Write-off</i> HK\$'M
1	Individuals	248	52	–
2	Financial concerns	111	63	–
3	Property development and investment	835	10	–
4	Others ¹	2,084	782	206
5	Total	3,278	907	206

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

VI. Aging analysis of accounting past due exposures (CRB6)

Please refer to note 37(a)(i) of the 2017 Consolidated Financial Statements for analysis of past due exposures.

VII. Breakdown of restructured exposures (CRB7)

At 31 December 2017	HK\$'M
Impaired	855
Not impaired	12
	867

10 Credit risk for non-securitization exposures (continued)

d. Qualitative disclosures related to credit risk mitigation (CRC)

Potential credit losses from any given account, customer or portfolio are mitigated using a range of tools such as collateral, netting agreements, credit insurance, credit derivatives and guarantees. The reliance that can be placed on these mitigants is carefully assessed in light of issues such as legal certainty and enforceability, market valuation, correlation and counterparty risk of the guarantor. The presence of credit risk mitigation is not a substitute for the ability to pay, which is the primary consideration for any credit limit decision, but may influence credit limit sizing, for example eligible financial collateral taken under eligible master netting agreements supported by a legal opinion may be netted against exposures. Where appropriate, credit derivatives are used to reduce credit risks in the portfolio. Due to their potential impact on income volatility, such derivatives are used in a controlled manner with reference to their expected volatility. Collateral is held to mitigate credit risk exposures and risk mitigation policies determine the eligibility of collateral types. Collateral concentrations are monitored. The Group uses credit limits to record guarantees taken against individual guarantors where a capital benefit is taken. The Group uses netting in the case of financial market's transactions under master netting agreements supported by a legal opinion but otherwise the Group makes very limited use of on and off-balance sheet netting.

Our approach to credit risk mitigation can be found in the Risk management approach section in notes 37(a) on pages 81 to 83 of the 2017 consolidated financial statements.

e. Overview of recognized credit risk mitigation (CR3)

The following table sets out the extent of credit risk exposures covered by different types of recognized CRM.

	(a)	(b1)	(b)	(d)	(f)
	Exposures unsecured: carrying amount HK\$'M	Exposures to be secured HK\$'M	Exposures secured by recognized collateral HK\$'M	Exposures secured by recognized guarantees HK\$'M	Exposures secured by recognized credit derivative contracts HK\$'M
At 31 December 2017					
1 Loans	354,953	297,623	280,825	16,798	–
2 Debt securities	204,820	8,760	8,315	445	–
3 Total	559,773	306,383	289,140	17,243	–
4 – Of which defaulted	2,905	926	924	2	–

f. Qualitative disclosures on use of ECAI ratings under STC approach (CRD)

External ratings, where available, are used to assign risk weights for standardised approach (SA) exposures. These external ratings must come from External Credit Assessment Institutions (ECAI), which currently include Moody's, Standard & Poor's and Fitch. The Group uses the ECAI ratings from these agencies in its day-to-day business, which are tracked and kept updated.

10 Credit risk for non-securitization exposures (continued)

g. Credit risk exposures and effects of recognized credit risk mitigation – for STC approach (CR4)

The following table sets out the effect of any recognized CRM (including recognized collateral under both comprehensive and simple approaches) on the calculation of capital requirements. RWA density provides a synthetic metric on riskiness of each portfolio.

	(a) Exposures pre-CCF and pre-CRM		(b) Off-balance sheet amount		(c) Exposures post-CCF and post-CRM		(d) Off-balance sheet amount		(e) RWA and RWA density		(f) RWA density %
	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA HK\$'M	RWA HK\$'M	
	HK\$'M	HK\$'M	HK\$'M	HK\$'M	HK\$'M	HK\$'M	HK\$'M	HK\$'M	HK\$'M	HK\$'M	
At 31 December 2017											
<i>Exposure classes</i>											
1	-	-	-	-	-	-	-	-	-	-	0%
2	-	-	-	-	-	-	-	-	-	-	0%
2a	-	-	-	-	-	-	-	-	-	-	0%
2b	-	-	-	-	-	-	-	-	-	-	0%
3	4,208	-	-	4,208	-	-	-	-	-	-	0%
4	2,191	-	-	2,208	-	-	-	-	443	-	20%
5	-	-	-	-	-	-	-	-	-	-	0%
6	25,496	1,943	-	15,548	418	-	-	-	15,547	-	97%
7	-	-	-	-	-	-	-	-	-	-	0%
8	-	-	-	-	-	-	-	-	-	-	0%
9	-	-	-	-	-	-	-	-	-	-	0%
10	5,121	-	-	5,121	-	-	-	-	3,841	-	75%
11	716	-	-	716	-	-	-	-	705	-	98%
12	16,544	39,973	-	5,405	-	-	-	-	5,405	-	100%
13	625	-	-	625	-	-	-	-	937	-	150%
14	-	-	-	-	-	-	-	-	-	-	0%
15	54,901	41,916	-	33,831	418	-	-	-	26,878	-	78%

10 Credit risk for non-securitization exposures (continued)

h. Credit risk exposures by asset classes and by risk weights – for STC approach (CR5)

The following table sets out a breakdown of credit risk exposures by asset classes and by risk weights (corresponding to the classification of exposures according to the approaches used).

At 31 December 2017

Risk Weight Exposure class	(a) 0% HK\$'M	(b) 10% HK\$'M	(c) 20% HK\$'M	(d) 35% HK\$'M	(e) 50% HK\$'M	(f) 75% HK\$'M	(g) 100% HK\$'M	(h) 150% HK\$'M	(ha) 250% HK\$'M	(i) Others HK\$'M	(j) Total credit risk exposures amount (post CCF and post CRM) HK\$'M
1 Sovereign exposures	-	-	-	-	-	-	-	-	-	-	-
2 PSE exposures	-	-	-	-	-	-	-	-	-	-	-
2a – Of which: domestic PSEs	-	-	-	-	-	-	-	-	-	-	-
2b – Of which: foreign PSEs	-	-	-	-	-	-	-	-	-	-	-
3 Multilateral development bank exposures	4,208	-	-	-	-	-	-	-	-	-	4,208
4 Bank exposures	-	-	2,203	-	5	-	-	-	-	-	2,208
5 Securities firm exposures	-	-	-	-	-	-	-	-	-	-	0
6 Corporate exposures	-	-	230	-	470	-	15,266	-	-	-	15,966
7 CIS exposures	-	-	-	-	-	-	-	-	-	-	-
8 Cash items	-	-	-	-	-	-	-	-	-	-	-
9 Exposures in respect of failed delivery on transactions entered into on a basis other than a delivery-versus-payment basis	-	-	-	-	-	-	-	-	-	-	-
10 Regulatory retail exposures	-	-	-	-	-	5,121	-	-	-	-	5,121
11 Residential mortgage loans	-	-	-	17	-	-	699	-	-	-	716
12 Other exposures which are not past due exposures	-	-	-	-	-	-	5,405	-	-	-	5,405
13 Past due exposures	-	-	-	-	-	-	-	625	-	-	625
14 Significant exposures to commercial entities	-	-	-	-	-	-	-	-	-	-	-
15 Total	4,208	-	2,433	17	475	5,121	21,370	625	-	-	34,249

10 Credit risk for non-securitization exposures (continued)

i. Qualitative disclosures related to internal models for measuring credit risk under IRB approach (CRE)

Probability of Default

Probability of Default (PD) is estimated based on one of three industry standard approaches, namely the good-bad approach where a sufficient number of internal defaults is available, the shadow-bond approach where there are no sufficient internal defaults but there are external ratings for a large number of obligors, or the constrained expert judgement approach where neither internal defaults nor external ratings are available.

In Corporate and Institutional Banking (CIB) and Commercial Banking (CB), the largest portfolios are rated based on the shadow bond approach (Sovereigns, Banks, Large Corporates) or the good-bad approach (Mid Corporates). Central governments and central banks are rated using the sovereign model. Non-bank financial institutions are rated using one of six constrained expert judgement models depending on their line of business, with the largest being Funds, Finance & Leasing, and Broker Dealers. Corporate clients are differentiated by their annual sales turnover and rated using one of the corporate models, unless they are commodity traders (for which a separate model has been developed) or are classified under specialised lending. CIB and CB internal rating-based (IRB) PD models are subject to the 0.03 percent regulatory floor.

PD models for retail portfolios under each asset class are developed following the good-bad approach. The approach is based on using the product specific application scores for new to bank clients and behaviour scores for existing clients. The scorecards are built using demographic information, financial information, observed client performance data (for behaviour scores), and where available, credit bureau data. Statistical techniques are used to develop a relationship between this information and the probability of default. The scorecards are used to make credit decisions. In addition, the PD models are segmented by delinquency status. All retail client PD models are built and validated using internal default data and are subject to the 0.03 per cent regulatory floor.

10 Credit risk for non-securitization exposures (continued)

i. Qualitative disclosures related to internal models for measuring credit risk under IRB approach (CRE) (continued)

Loss Given Default

The CIB and CB loss given default (LGD) models are the parameter-based models reflecting the Bank's recovery and workout process, which takes into account risk drivers such as portfolio segment, product, credit grade of the obligor and collateral attached to the exposure. The model is calibrated based on downturn experience, if that is more conservative than the long-run experience.

The calculation of realised versus predicted LGD is affected by the fact that it may take a number of years for the workout process to be completed. As such, an observed recovery value cannot be assigned to the majority of the 2017 defaults, making it meaningless to compare realised versus predicted outcomes in a manner similar to that for PD and exposure at default (EAD).

To address this for 'Sovereign', 'Banks' and 'Corporates' asset classes we have adopted an approach based on a four-year rolling period of predicted and realised LGD, which for the current reporting year includes 2014 to 2017 defaults that have completed their workout process as at the end of 2017. This approach compares the four-year rolling predicted LGD, providing the predicted outcome of these resolved defaults one year prior to default, against the realised LGD for the same set of defaults. These two figures are fully comparable, thereby providing a meaningful assessment of the LGD model's performance. There were no defaults in the previous four years for sovereign and banks. LGD for corporates reflects one completed workout during the four-year rolling period for which actual loss was significantly below predicted loss. This is explained by the regulatory guidance to calibrate LGD models to downturn conditions.

LGDs for retail portfolios follow two approaches:

- LGDs for unsecured products are based on historical loss experience of defaults during a downturn; these are portfolio-specific LGD estimates segmented by default status (including restructuring).
- LGDs for secured products are parameter-based estimates mainly driven by how the default is resolved (cure, sale or charge-off). Key LGD parameters are differentiated by segments such as loan- to-value, property type and default status. These parameters are calibrated based on the portfolio's downturn experience.

Exposure at Default

EAD takes into consideration the potential drawdown of a commitment as an obligor moves towards default by estimating the Credit Conversion Factor (CCF) of undrawn commitments.

The CIB and CB EAD model has adopted the momentum approach to estimate the CCF, with the type of facility and the level of utilisation being key drivers of CCF. The model is calibrated based on the Bank's internal downturn experience.

EAD for retail portfolios differs between revolving products and term products. For revolving products, EAD is computed by estimating the CCF of undrawn commitments. For term products, EAD is set at the outstanding balance plus any undrawn portion. All the retail portfolio EAD models are built and validated using internal default data.

10 Credit risk for non-securitization exposures (continued)

j. Credit risk exposures by portfolio and PD ranges – for IRB approach (CR6)

The following table sets out the main parameters of internal models used for the calculation of credit risk capital requirements under the IRB approach, for the purpose of enhancing the transparency of RWA calculations and the reliability of regulatory measures.

At 31 December 2017		(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	RWA HK\$M	RWA density	EL HK\$M	Provisions HK\$M	
Portfolio (i) – Sovereign													
0.00 to < 0.15	149,988	18	63.63%	151,515	0.02%	35	32.32%	1.17	5,793	3.82%	8		
0.15 to < 0.25	-	-	-	-	-	-	-	-	-	-	-	-	
0.25 to < 0.50	-	-	-	-	-	-	-	-	-	-	-	-	
0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	-	
0.75 to < 2.50	781	-	-	782	0.89%	1	55.21%	1.94	779	99.71%	4		
2.50 to < 10.00	-	-	-	-	-	-	-	-	-	-	-	-	
10.00 to < 100.00	-	-	-	-	-	-	-	-	-	-	-	-	
100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	134	
Sub-total	150,769	18	63.63%	152,297	0.02%	36	32.44%	1.17	6,572	4.32%	12	134	
Portfolio (ii) – Bank													
0.00 to < 0.15	209,848	38,965	17.29%	231,380	0.04%	127	27.87%	1.03	17,136	7.41%	24		
0.15 to < 0.25	1,291	157	4.94%	785	0.22%	18	34.81%	0.29	197	25.10%	1		
0.25 to < 0.50	11,972	5,688	19.62%	10,199	0.39%	27	35.50%	1.41	4,722	46.29%	14		
0.50 to < 0.75	3,248	4,537	25.92%	3,796	0.54%	46	33.96%	1.06	1,622	42.73%	7		
0.75 to < 2.50	2,609	5,400	21.56%	2,642	1.32%	75	32.41%	0.64	1,697	64.22%	11		
2.50 to < 10.00	76	608	30.52%	253	2.95%	30	33.11%	0.78	222	88.09%	2		
10.00 to < 100.00	-	16	13.00%	2	13.77%	3	41.20%	1.00	4	210.32%	-		
100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	584	
Sub-total	229,044	55,371	18.76%	249,057	0.08%	326	28.35%	1.04	25,600	10.28%	59	584	

10 Credit risk for non-securitization exposures (continued)

j. Credit risk exposures by portfolio and PD ranges – for IRB approach (CR6) (continued)

PD scale	(a) Original on-balance sheet gross exposure HK\$M	(b) Off-balance sheet exposures pre-CCF HK\$M	(c) Average CCF	(d) EAD post-CRM and post-CCF HK\$M	(e) Average PD	(f) Number of obligors	(g) Average LGD	(h) Average maturity	(i) RWA HK\$M	(j) RWA density	(k) EL HK\$M	(l) Provisions HK\$M
Portfolio (iii) –												
Corporate – other	50,868	60,632	27.41%	81,865	0.08%	354	52.27%	1.77	20,132	24.59%	35	
	26,530	22,758	29.47%	27,538	0.22%	251	48.83%	1.84	11,302	41.04%	30	
	15,290	8,244	39.87%	18,142	0.39%	130	29.08%	2.78	6,462	35.62%	21	
	24,830	17,761	31.44%	27,819	0.58%	393	44.89%	1.59	16,032	57.63%	70	
	41,092	16,878	29.40%	33,359	1.37%	687	38.17%	1.93	23,898	71.64%	173	
	20,079	10,766	32.70%	14,764	4.43%	530	32.54%	1.44	13,355	90.46%	213	
	5,615	1,104	46.93%	4,938	57.11%	216	28.87%	2.58	12,660	256.38%	133	
	2,127	240	100.00%	2,246	100.00%	132	47.72%	1.86	5,209	231.94%	621	2,585
Sub-total	186,431	138,383	29.95%	210,671	3.10%	2,693	44.64%	1.86	109,050	51.76%	1,296	2,585
Portfolio (iv) –												
Corporate –	25	5	33.12%	26	0.13%	2	44.37%	0.24	4	15.20%	–	
small-and-medium	9	162	15.30%	34	0.21%	20	20.23%	1.18	4	11.69%	–	
sized corporates	316	67	85.97%	342	0.45%	204	62.77%	2.20	244	71.51%	1	
	338	445	11.88%	391	0.63%	138	53.50%	1.60	256	65.37%	1	
	2,924	2,298	16.15%	3,301	1.48%	656	31.35%	1.42	1,794	54.35%	15	
	3,896	2,284	14.67%	4,228	4.45%	355	22.18%	1.22	2,250	53.23%	41	
	642	495	12.27%	701	22.96%	72	33.01%	1.64	1,202	171.54%	27	
	252	33	3.33%	222	100.00%	116	52.13%	1.74	340	152.99%	104	212
Sub-total	8,402	5,789	15.63%	9,245	6.75%	1,563	29.88%	1.39	6,094	65.92%	189	212

10 Credit risk for non-securitization exposures (continued)

j. Credit risk exposures by portfolio and PD ranges – for IRB approach (CR6) (continued)

PD scale	(a) Original on-balance sheet gross exposure HK\$M	(b) Off-balance sheet exposures pre-CCF HK\$M	(c) Average CCF	(d) EAD post-CRM and post-CCF HK\$M	(e) Average PD	(f) Number of obligors	(g) Average LGD	(h) Average maturity	(i) RWA HK\$M	(j) RWA density	(k) EL HK\$M	(l) Provisions HK\$M
Portfolio (v) – Retail – QRRE												
0.00 to < 0.15	4,513	81,367	46.61%	42,300	0.07%	650,584	90.00%	-	1,757	4.15%	28	
0.15 to < 0.25	-	-	0.00%	-	0.00%	-	0.00%	-	-	0.00%	-	
0.25 to < 0.50	985	8,848	49.04%	5,309	0.29%	74,893	90.00%	-	696	13.10%	14	
0.50 to < 0.75	1,462	17,243	48.25%	9,768	0.68%	130,853	90.00%	-	2,498	25.57%	60	
0.75 to < 2.50	1,250	4,717	52.18%	3,711	1.49%	44,896	90.00%	-	1,710	46.08%	50	
2.50 to < 10.00	2,062	2,389	63.33%	3,603	5.09%	38,582	90.00%	-	3,827	106.24%	165	
10.00 to < 100.00	712	178	87.29%	893	21.56%	8,648	90.00%	-	1,922	215.17%	173	
100.00 (Default)	94	-	0.00%	94	100.00%	1,073	53.43%	-	61	64.77%	45	261
Sub-total	11,078	114,742	47.69%	65,678	0.97%	949,529	89.95%	-	12,471	18.99%	535	261
Portfolio (vi) – Retail – Residential mortgage exposures												
0.00 to < 0.15	159,389	209	100.00%	158,714	0.08%	56,680	10.99%	-	24,046	15.15%	15	
0.15 to < 0.25	40,600	1,989	100.00%	42,218	0.21%	12,105	11.80%	-	8,086	19.15%	11	
0.25 to < 0.50	4,577	7	100.00%	4,561	0.36%	1,596	11.47%	-	689	15.11%	2	
0.50 to < 0.75	6,496	6	100.00%	6,469	0.54%	2,255	11.38%	-	989	15.29%	4	
0.75 to < 2.50	7,147	152	100.00%	7,259	1.39%	2,436	12.42%	-	1,565	21.56%	13	
2.50 to < 10.00	1,190	1	100.00%	1,185	3.90%	400	11.33%	-	377	31.78%	5	
10.00 to < 100.00	145	-	100.00%	145	26.10%	53	11.11%	-	89	61.75%	4	
100.00 (Default)	134	-	100.00%	133	100.00%	152	10.58%	-	109	81.68%	5	756
Sub-total	219,678	2,364	100.00%	220,684	0.27%	75,677	11.22%	-	35,950	16.29%	59	756

10 Credit risk for non-securitization exposures (continued)

j. Credit risk exposures by portfolio and PD ranges – for IRB approach (CR6) (continued)

PD scale	(a) Original on-balance sheet gross exposure HK\$M	(b) Off-balance sheet exposures pre-CCF HK\$M	(c) Average CCF	(d) EAD post-CRM and post-CCF HK\$M	(e) Average PD	(f) Number of obligors	(g) Average LGD	(h) Average maturity	(i) RWA HK\$M	(j) RWA density	(k) EL HK\$M	(l) Provisions HK\$M
Portfolio (vii) –												
Retail – small	2	-	0.00%	2	0.19%	1	86.67%	-	1	33.95%	-	-
business retail	290	-	0.00%	289	0.46%	400	86.13%	-	171	59.16%	1	1
exposures	142	-	0.00%	142	0.63%	198	86.08%	-	99	69.88%	1	1
	1,471	-	0.00%	1,469	1.48%	1,751	86.40%	-	1,471	100.15%	19	19
	614	-	100.00%	612	4.11%	758	86.50%	-	762	124.35%	22	22
	80	-	0.00%	79	37.40%	125	86.67%	-	117	147.33%	26	26
	13	-	0.00%	13	100.00%	234	89.70%	-	23	182.35%	9	55
Sub-total	2,612	-	100.00%	2,606	3.51%	3,467	86.40%	-	2,644	101.42%	78	55
Portfolio (viii) –												
Other retail	168	3,069	45.89%	1,577	0.07%	2,854	90.18%	-	277	17.55%	1	1
exposures to	812	717	0.09%	812	0.23%	3,220	97.00%	-	348	42.86%	2	2
individuals	2,630	4,284	55.07%	5,014	0.37%	19,433	91.08%	-	2,769	55.23%	17	17
	361	1,310	41.61%	908	0.68%	1,973	92.00%	-	708	78.04%	6	6
	3,816	3,623	37.02%	5,167	1.19%	18,891	92.95%	-	5,156	99.78%	58	58
	6,082	4,235	63.10%	8,800	3.37%	28,600	91.50%	-	11,271	128.07%	273	273
	707	384	42.40%	883	18.63%	3,758	92.26%	-	1,618	183.13%	153	153
	35	-	0.00%	35	100.00%	283	63.98%	-	30	86.47%	20	483
Sub-total	14,611	17,622	48.18%	23,196	2.53%	79,012	91.84%	-	22,177	95.60%	530	483
Total (sum of all portfolios)	822,625	334,289	35.39%	933,434	1.00%	1,112,303	34.73%	0.90	220,558	23.63%	2,758	5,070

10 Credit risk for non-securitization exposures (continued)

k. Effects on RWA of recognized credit derivative contracts used as recognized credit risk mitigation – for IRB approach (CR7)

The following table sets out the effect of recognized credit derivative contracts on the calculation of credit risk capital requirements under the IRB approach. The hypothetical RWA before taking into account the mitigation effect of recognized credit derivative contracts (column (a) below) is disclosed to evaluate the impact of recognized credit derivative contracts on RWA. This is irrespective of the extent that recognized CRM are taken into account in calculating the RWA.

At 31 December 2017		(a) Pre-credit derivatives RWA HK\$'M	(b) Actual RWA HK\$'M
1	Corporate – Specialized lending under supervisory slotting criteria approach (project finance)	–	–
2	Corporate – Specialized lending under supervisory slotting criteria approach (object finance)	5,946	5,946
3	Corporate – Specialized lending under supervisory slotting criteria approach (commodities finance)	–	–
4	Corporate – Specialized lending under supervisory slotting criteria approach (income-producing real estate)	–	–
5	Corporate – Specialized lending (high-volatility commercial real estate)	–	–
6	Corporate – Small-and-medium sized corporates	6,104	6,104
7	Corporate – Other corporates	110,474	110,474
8	Sovereigns	6,378	6,378
9	Sovereign foreign public sector entities	195	195
10	Multilateral development banks	–	–
11	Bank exposures – Banks	24,257	24,257
12	Bank exposures – Securities firms	3,931	3,931
13	Bank exposures – Public sector entities (excluding sovereign foreign public sector entities)	537	537
14	Retail – Small business retail exposures	2,644	2,644
15	Retail – Residential mortgages to individuals	33,850	33,850
16	Retail – Residential mortgages to property-holding shell companies	2,101	2,101
17	Retail – Qualifying revolving retail exposures (QRRE)	12,470	12,470
18	Retail – Other retail exposures to individuals	22,178	22,178
19	Equity – Equity exposures under market-based approach (simple risk-weight method)	–	–
20	Equity – Equity exposures under market-based approach (internal models method)	–	–
21	Equity – Equity exposures under PD/LGD approach (publicly traded equity exposures held for long-term investment)	–	–
22	Equity – Equity exposures under PD/LGD approach (privately owned equity exposures held for long-term investment)	–	–
23	Equity – Equity exposures under PD/LGD approach (other publicly traded equity exposures)	–	–
24	Equity – Equity exposures under PD/LGD approach (other equity exposures)	–	–
25	Equity – Equity exposures associated with equity investments in funds (CIS exposures)	–	–
26	Other – Cash items	13	13
27	Other – Other items	35,355	35,355
28	Total (under the IRB calculation approaches)	266,433	266,433

There is no effect in RWA as the Bank does not have credit derivative contracts used as recognised credit risk mitigation.

10 Credit risk for non-securitization exposures (continued)

I. RWA flow statements of credit risk exposures under IRB approach (CR8)

The following table sets out a flow statement explaining variations in the RWA for credit risk determined under the IRB approach.

	(a) Amount HK\$'M
1 RWA as at end of previous reporting period (30 September 2017)	271,752
2 Asset size	(16,890)
3 Asset quality	3,148
4 Model updates	458
5 Methodology and policy	5,356
6 Acquisitions and disposals	–
7 Foreign exchange movements	177
8 Other	(2,137)
9 RWA as at end of reporting period (31 December 2017)	261,864

IRB credit RWAs reduced HK\$9,888m in the fourth quarter of the year driven by

- a decrease in asset size of HK\$16,890m, mainly as a result of corporate and leasing business book reduction
- a decrease in RWAs HK\$2,137m in Other is related to reclassification of asset class

partly offset by

- an increase in RWAs HK\$5,356m related to change in methodology and policy, mainly as a result of tighten criteria of credit risk mitigation recognition.

10 Credit risk for non-securitization exposures (continued)

m. Back-testing of PD per portfolio – for IRB approach (CR9)

The following table sets out a back-testing data to validate the reliability of PD calculations, including a comparison of the PD used to calculate capital requirements with the effective default rates of obligors under the IRB approach.

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
	PD Range (as of 31 December 2016)	External rating equivalent	Weighted average PD	Arithmetic average PD by obligors	Number of obligors 31 December 2016	Number of obligors 31 December 2017	Defaulted obligors in the year	Of which: new defaulted obligors in the year	Average historical annual default rate ¹
Portfolio (i) – Sovereign			0.02%	0.02%	29	35	–	–	0.00%
	0.00 to < 0.15	AAA to BBB-			29	26			
	0.15 to < 0.25	BBB, BBB-			–	–			
	0.25 to < 0.50	BBB-, BB+, BB			–	–			
	0.50 to < 0.75	BB+, BB			–	–			
	0.75 to < 2.50	BB, BB-, B+, B			–	–			
	2.50 to < 10.00	B, B-, CCC, C			–	–			
	10.00 to < 100.00	CCC, C			–	–			
	New obligors acquired during the year	D				9			
Portfolio (ii) – Bank			0.10%	0.78%	352	339	–	–	0.00%
	0.00 to < 0.15	AAA to BBB-			140	108			
	0.15 to < 0.25	BBB, BBB-			22	12			
	0.25 to < 0.50	BBB-, BB+, BB			32	21			
	0.50 to < 0.75	BB+, BB			43	33			
	0.75 to < 2.50	BB, BB-, B+, B			89	60			
	2.50 to < 10.00	B, B-, CCC, C			24	16			
	10.00 to < 100.00	CCC, C			2	1			
	New obligors acquired during the year	D				88			

¹ The average historical annual default rate contains past 5-year experience.

10 Credit risk for non-securitization exposures (continued)

m. Back-testing of PD per portfolio – for IRB approach (CR9) (continued)

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
	PD Range (as of 31 December 2016)	External rating equivalent	Weighted average PD	Arithmetic average PD by obligors	Number of obligors 31 December 2016	Number of obligors 31 December 2017	Defaulted obligors in the year	Of which: new defaulted obligors in the year	Average historical annual default rate ²
Portfolio (iii) –			0.36%	0.33%	12	27	–	–	3.70% ²
Corporate -	0.00 to < 0.15	AAA to BBB-			–	–			
Specialized	0.15 to < 0.25	BBB, BBB-			4	–			
Lending	0.25 to < 0.50	BBB-, BB+, BB			8	8			
under	0.50 to < 0.75	BB+, BB			–	–			
supervisory	0.75 to < 2.50	BB, BB-, B+, B			–	–			
slotting	2.50 to < 10.00	B, B-, CCC, C			–	–			
criteria	10.00 to < 100.00	CCC, C			–	–			
approach									
(object									
finance)	New obligors acquired during the year	D				19			
Portfolio (iv) –			3.12%	2.62%	1,706	1,361	26	1	1.73%
Corporate --	0.00 to < 0.15	AAA to BBB-			3	3			
Small-and-	0.15 to < 0.25	BBB, BBB-			27	21			
medium	0.25 to < 0.50	BBB-, BB+, BB			207	152			
sized	0.50 to < 0.75	BB+, BB			163	117			
corporates	0.75 to < 2.50	BB, BB-, B+, B			839	574			
	2.50 to < 10.00	B, B-, CCC, C			405	263			
	10.00 to < 100.00	CCC, C			62	34			
	New obligors acquired during the year	D				197			

² For Corporate – Specialized Lending under supervisory slotting criteria approach (object finance), the average historical annual default rate contributes by one default case in year 2015 only.

10 Credit risk for non-securitization exposures (continued)

m. Back-testing of PD per portfolio – for IRB approach (CR9) (continued)

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
	PD Range (as of 31 December 2016)	External rating equivalent	Weighted average PD	Arithmetic average PD by obligors	Number of obligors 31 December 2016	31 December 2017	Defaulted obligors in the year	Of which: new defaulted obligors in the year	Average historical annual default rate ¹
Portfolio (v) –			1.48%	2.92%	2,434	2,559	38	2	1.23%
Corporate –	0.00 to < 0.15	AAA to BBB-			367	333			
Other corporates	0.15 to < 0.25	BBB, BBB-			220	185			
	0.25 to < 0.50	BBB-, BB+, BB			116	99			
	0.50 to < 0.75	BB+, BB			321	266			
	0.75 to < 2.50	BB, BB-, B+, B			632	472			
	2.50 to < 10.00	B, B-, CCC, C			583	416			
	10.00 to < 100.00	CCC, C			195	99			
	New obligors acquired during the year	D				689			
Portfolio (vi) –			3.09%	0.54%	919,411	944,087	3,386	28	0.34%
Retail –	0.00 to < 0.15				721,760	669,576			
Qualifying revolving retail exposures	0.15 to < 0.25				–	–			
	0.25 to < 0.50				67,860	64,717			
	0.50 to < 0.75				59,955	55,688			
	0.75 to < 2.50				25,201	23,556			
	2.50 to < 10.00				36,891	32,709			
	10.00 to < 100.00				7,744	6,120			
	New obligors acquired during the year					91,721			

10 Credit risk for non-securitization exposures (continued)

m. Back-testing of PD per portfolio – for IRB approach (CR9) (continued)

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
	PD Range (as of 31 December 2016)	External rating equivalent	Weighted average PD	Arithmetic average PD by obligors	Number of obligors 31 December 2016	31 December 2017	Defaulted obligors in the year	Of which: new defaulted obligors in the year	Average historical annual default rate ¹
Portfolio (vii) –			0.27%	0.28%	79,044	75,557	22	–	0.04%
Retail –					59,426	45,974			
Residential	0.00 to < 0.15				1,621	1,241			
mortgage	0.25 to < 0.50				10,597	8,860			
exposures	0.50 to < 0.75				1,022	819			
	0.75 to < 2.50				5,435	3,821			
	2.50 to < 10.00				833	665			
	10.00 to < 100.00				110	78			
	New obligors acquired during the year					14,099			
Portfolio (viii) –			2.69%	3.08%	2,694	2,556	62	–	2.46%
Retail – Small	0.00 to < 0.15				–	–			
business retail	0.15 to < 0.25				–	–			
exposures	0.25 to < 0.50				352	281			
	0.50 to < 0.75				182	145			
	0.75 to < 2.50				1,487	1,251			
	2.50 to < 10.00				576	500			
	10.00 to < 100.00				97	70			
	New obligors acquired during the year					309			

10 Credit risk for non-securitization exposures (continued)

m. Back-testing of PD per portfolio – for IRB approach (CR9) (continued)

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
	PD Range (as of 31 December 2016)	External rating equivalent	Weighted average PD	Arithmetic average PD by obligors	Number of obligors 31 December 2016	31 December 2017	Defaulted obligors in the year	Of which: new defaulted obligors in the year	Average historical annual default rate ¹
Portfolio (x) –			2.74%	2.61%	89,465	83,466	1,128	3	1.92%
Retail –	0.00 to < 0.15				3,387	3,057			
Other retail	0.15 to < 0.25				913	513			
exposures	0.25 to < 0.50				23,566	21,257			
to individuals	0.50 to < 0.75				6,304	4,258			
	0.75 to < 2.50				20,542	17,608			
	2.50 to < 10.00				29,573	27,256			
	10.00 to < 100.00				5,180	3,852			
	New obligors acquired during the year					5,665			

10 Credit risk for non-securitization exposures (continued)

n. Specialized lending under supervisory slotting criteria approach – for IRB approach (CR10)

The following table sets out the quantitative information in respect of Specialized Lending under the supervisory slotting criteria approach.

Specialized Lending under supervisory slotting criteria approach – Other than HVCRE

At 31 December 2017		(a)	(b)	(c)	(d)(i)	(d)(ii)	(d)(iii)	(d)(iv)	(d)(v)	(e)	(f)
Supervisory Rating Grade	Remaining Maturity	On-balance sheet exposure amount HK\$'M	Off-balance sheet exposure amount HK\$'M	SRW	PF HK\$'M	OF HK\$'M	CF HK\$'M	IPRE HK\$'M	Total HK\$'M	RWA HK\$'M	Expected loss amount HK\$'M
Strong [^]	Less than 2.5 years	560	34	50%	-	576	-	-	576	288	-
Strong	Equal to or more than 2.5 years	2,321	224	70%	-	2,418	-	-	2,418	1,693	10
Good [^]	Less than 2.5 years	148	5	70%	-	149	-	-	149	104	1
Good	Equal to or more than 2.5 years	904	91	90%	-	954	-	-	954	858	8
Satisfactory		2,540	219	115%	-	2,611	-	-	2,611	3,003	73
Weak		-	-	250%	-	-	-	-	-	-	-
Default		-	-	0%	-	-	-	-	-	-	-
Total		6,473	573		-	6,708	-	-	6,708	5,946	92

[^] Use of preferential risk-weights.

11 Counterparty Credit risk

a. Qualitative disclosures related to counterparty credit risk (including those arising from clearing through CCPs) (CCRA)

Counterparty credit risk (CCR) is the risk that the Group's counterparty in foreign exchange, interest rate, commodity, equity or credit derivative or repo contract defaults prior to the maturity date of the contract and that the Group at the time has a claim on the counterparty. CCR arises predominantly in the trading book, but also arises in the non-trading book due to hedging of external funding.

CCR is managed within the overall credit risk appetite for corporate and financial institutions and CCR limits are set for individual counterparties, including central clearing counterparties, and specific portfolio concentrations. Such limits take into account the credit quality and nature of the counterparty and are set in exposure value terms.

The Group reduces its credit exposures to counterparties by entering into contractual netting agreements which result in a single amount owed by or to the counterparty. The amount is calculated by netting the Mark-To-Market (MTM) owed by the counterparty to the Group and the MTM owed by the Group to the counterparty on the transactions covered by the netting agreement. Following International Accounting Standard (IAS) 32 (Financial Instruments: Presentation) requirements the Group is permitted to offset assets and liabilities and present these net on the Group's balance sheet, only if there is a legally enforceable right of set off and the Group intends to settle on a net basis or realise the asset and liability simultaneously.

Wrong-way risk

Wrong-way risk occurs when an exposure increase is coupled with a decrease in the credit quality of the obligor. Specifically, as the MTM on a derivative or repo contract increases in favour of the Group, the driver of this MTM change also reduces the ability of the counterparty to meet its payment, margin call or collateral posting requirements. The Group employs various policies and procedures to ensure that wrong-way risk exposures are recognised upfront, monitored, and where required, contained by limits on tenor, collateral type, collateral concentration, and markets-based collateral top-up mechanisms. The majority of the wrong-way risk transactions are with investment grade counterparties.

Exposure value calculation

Exposure values for regulatory capital requirement purposes on over-the-counter traded products are calculated according to the Current Exposure Method. Exposure values are the sum of the current replacement cost and the potential future credit exposure.

Derivatives valuation adjustments

The Group makes credit valuation adjustments (CVA) to the fair value of derivative contracts to reflect the creditworthiness of the counterparties.

11 Counterparty Credit risk (continued)

b. Analysis of counterparty default risk exposures (other than those to CCPs) by approaches (CCR1)

The following table sets out a comprehensive breakdown of default risk exposures (other than those to CCPs), RWAs, and, where applicable, main parameters under the approaches used to calculate default risk exposures in respect of derivative contracts and SFTs.

At 31 December 2017		(a) Replacement cost (RC) HK\$'M	(b) PFE	(c) Effective EPE %	(d) Alpha (α) used for computing default risk exposure	(e) Default risk exposure after CRM HK\$'M	(f) RWA HK\$'M
1	SA-CCR (for derivative contracts)	–	–		1.4	–	–
1a	CEM	2,156	13,668		0.0	15,824	3,235
2	IMM (CCR) approach					–	–
3	Simple Approach (for SFTs)					–	–
4	Comprehensive Approach (for SFTs)					49,454	1,850
5	VaR (for SFTs)					–	–
6	Total						5,085

c. CVA capital charge (CCR2)

The following table sets out an information on portfolios subject to the CVA capital charge and the CVA calculations based on standardized CVA method and advanced CVA method.

At 31 December 2017		(a) EAD post CRM HK\$'M	(b) RWA HK\$'M
Netting sets for which CVA capital charge is calculated by the advanced CVA method		–	–
1	(i) VaR (after application of multiplication factor if applicable)		–
2	(ii) Stressed VaR (after application of multiplication factor if applicable)		–
3	Netting sets for which CVA capital charge is calculated by the standardized CVA method	15,824	3,154
4	Total	15,824	3,154

11 Counterparty Credit risk (continued)

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

The following table sets out a breakdown of default risk exposures, other than those to CCPs, in respect of derivative contracts and SFTs that are subject to the STC approach by asset classes and risk-weights.

Exposure class	At 31 December 2017											Total default risk exposure after CRM HK\$'M	
	(a) 0% HK\$'M	(b) 10% HK\$'M	(c) 20% HK\$'M	(ca) 35% HK\$'M	(d) 50% HK\$'M	(e) 75% HK\$'M	(f) 100% HK\$'M	(g) 150% HK\$'M	(ga) 250% HK\$'M	(h) Others HK\$'M	(i)		
1 Sovereign exposures	-	-	-	-	-	-	-	-	-	-	-	-	-
2 PSE exposures	-	-	-	-	-	-	-	-	-	-	-	-	-
2a – Of which: domestic PSEs	-	-	-	-	-	-	-	-	-	-	-	-	-
2b – Of which: foreign PSEs	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Multilateral development bank exposures	-	-	-	-	-	-	-	-	-	-	-	-	-
4 Bank exposures	-	-	-	-	233	-	-	-	-	-	-	-	233
5 Securities firm exposures	-	-	-	-	-	-	-	-	-	-	-	-	-
6 Corporate exposures	-	-	-	-	-	-	411	-	-	-	-	-	411
7 CIS exposures	-	-	-	-	-	-	-	-	-	-	-	-	-
8 Regulatory retail exposures	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Residential mortgage loans	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Other exposures which are not past due exposures	-	-	-	-	-	-	-	-	-	-	-	-	-
11 Significant exposures to commercial entities	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Total	-	-	-	-	233	-	411	-	-	-	-	-	644

11 Counterparty Credit risk (continued)

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

The following table sets out all the relevant parameters used for the calculation of counterparty default risk capital requirements for IRB exposures (other than those to CCPs).

At 31 December 2017	PD scale	(a) EAD post-CRM HK\$M	(b) Average PD	(c) Number of obligors	(d) Average LGD	(e) Average maturity	(f) RWA HK\$M	(g) RWA density %
Portfolio (i) – Sovereign	0.00 to < 0.15	-	-	-	-	-	-	-
	0.15 to < 0.25	-	-	-	-	-	-	-
	0.25 to < 0.50	-	-	-	-	-	-	-
	0.50 to < 0.75	-	-	-	-	-	-	-
	0.75 to < 2.50	-	-	-	-	-	-	-
	2.50 to < 10.00	-	-	-	-	-	-	-
	10.00 to < 100.00	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-
Sub-total	-	-	-	-	-	-	-	-
Portfolio (ii) – Bank	0.00 to < 0.15	42,265	0.04%	21	14.33%	0.38	1,504	3.56%
	0.15 to < 0.25	12,006	0.22%	4	6.57%	0.13	564	4.69%
	0.25 to < 0.50	1,380	0.39%	8	6.53%	1.00	107	7.74%
	0.50 to < 0.75	2,819	0.57%	13	8.05%	1.00	316	11.19%
	0.75 to < 2.50	4,199	1.03%	8	7.50%	1.00	613	14.59%
	2.50 to < 10.00	150	2.67%	3	6.20%	1.00	22	14.55%
	10.00 to < 100.00	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-
Sub-total	62,819	0.18%	57	11.92%	0.41	3,126	4.97%	

11 Counterparty Credit risk (continued)

e. Counterparty default risk exposures (other than those to CCPs) by portfolio and PD range – for IRB approach (CCR4) (continued)

At 31 December 2017	PD scale	(a) EAD post-CRM HK\$'M	(b) Average PD	(c) Number of obligors	(d) Average LGD	(e) Average maturity	(f) RWA HK\$'M	(g) RWA density %
Portfolio (iii) – Corporate	0.00 to < 0.15	953	0.09%	25	62.64%	1.73	287	30.10%
	0.15 to < 0.25	43	0.22%	9	69.67%	1.44	29	66.99%
	0.25 to < 0.50	10	0.39%	4	70.00%	1.82	8	84.63%
	0.50 to < 0.75	404	0.62%	22	67.61%	1.53	396	98.06%
	0.75 to < 2.50	295	1.55%	24	69.88%	1.55	453	153.88%
	2.50 to < 10.00	88	4.34%	18	70.00%	1.01	171	192.99%
	10.00 to < 100.00	21	13.74%	4	70.00%	4.42	89	419.28%
	100.00 (Default)	-	-	-	-	-	-	-
	Sub-total	1,814	0.82%	106	65.57%	1.65	1,433	79.00%
	Total (all portfolios subject to the IRB approaches)	64,633	0.20%	163	13.43%	0.45	4,559	7.05%

11 Counterparty Credit risk (continued)

f. Composition of collateral for counterparty default risk exposures (including those for contracts or transactions cleared through CCPs) (CCR5)

The following table sets out a breakdown of all types of collateral posted or recognized collateral received to support or reduce the exposures to counterparty default risk exposures in respect of derivative contracts or SFTs entered into, including contracts or transactions cleared through a CCP.

At 31 December 2017	(a)		(b)		(c)		(d)		(e)		(f)
			Derivative contracts						SFTs		
			Fair value of recognized collateral received		Fair value of posted collateral				Fair value of recognized collateral received		Fair value of posted collateral
	Exposure classes		Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated	Segregated
		HK\$'M	HK\$'M	HK\$'M	HK\$'M	HK\$'M	HK\$'M	HK\$'M	HK\$'M	HK\$'M	HK\$'M
Cash – domestic currency		–	–	–	–	–	–	–	–	–	6,692
Cash – other currencies		–	–	–	–	–	–	–	15	–	37,983
Domestic sovereign debt		–	–	–	–	–	–	–	–	–	–
Other sovereign debt		–	–	–	–	–	–	–	22,831	–	3,422
Government agency debt		–	–	–	–	–	–	–	–	–	–
Corporate bonds		–	–	–	–	–	–	–	10,647	–	1,357
Equity securities		–	–	–	–	–	–	–	6,461	–	–
Other collateral		–	–	–	–	–	–	–	–	–	–
Total		–	–	–	–	–	–	–	39,954	–	49,454

11 Counterparty Credit risk (continued)

g. Credit-related derivatives contracts (CCR6)

The following table sets out the amount of credit-related derivative contracts, broken down into credit protection bought and credit protection sold.

At 31 December 2017	(a) Protection bought HK\$'M	(b) Protection sold HK\$'M
Notional amounts		
Single-name credit default swaps	–	–
Index credit default swaps		
Total return swaps	–	1,924
Credit-related options		
Other credit-related derivative contracts		
Total notional amounts	–	1,924
Fair values		
Positive fair value (asset)	–	–
Negative fair value (liability)	–	(720)

h. Exposures to CCPs (CCR8)

The following table sets out a comprehensive breakdown of exposures to both qualifying and non-qualifying CCPs and the respective RWAs, covering all types of credit risk exposures (including default risk exposures to the CCPs, credit risk exposures arising from initial margins posted, and default fund contributions made, to the CCPs).

At 31 December 2017	(a) Exposure after CRM HK\$'M	(b) RWA HK\$'M
1 Exposures of the AI as clearing member or client to qualifying CCPs (total)		0
2 Default risk exposures to qualifying CCPs (excluding items disclosed in rows 7 to 10), – of which:	–	–
3 (i) OTC derivative transactions	–	–
4 (ii) Exchange-traded derivative contracts	–	–
5 (iii) Securities financing transactions	–	–
6 (iv) Netting sets subject to valid cross-product netting agreements	–	–
7 Segregated initial margin	–	
8 Unsegregated initial margin	–	–
9 Funded default fund contributions	0	0
10 Unfunded default fund contributions	–	–
11 Exposures of the AI as clearing member or client to non-qualifying CCPs (total)		–
12 Default risk exposures to non-qualifying CCPs (excluding items disclosed in rows 17 to 20), – of which:	–	–
13 (i) OTC derivative transactions	–	–
14 (ii) Exchange-traded derivative contracts	–	–
15 (iii) Securities financing transactions	–	–
16 (iv) Netting sets subject to valid cross-product netting agreements	–	–
17 Segregated initial margin	–	
18 Unsegregated initial margin	–	–
19 Funded default fund contributions	–	–
20 Unfunded default fund contributions	–	–

13 Market risk

For the calculation of the capital requirement for market risk, the Bank uses an internal models approach for two guaranteed retirement funds and the standardised (market risk) approach for other exposures.

Further information regarding market risk governance and management is set out in note 37 (c) on pages 89 to 91 of the 2017 consolidated financial statements.

a. Market risk under STM approach (MR1)

The following table sets out the components of the market risk capital requirements calculated using the standardized (market risk) approach (STM approach).

At 31 December 2017		(a) RWA HK\$'M
Outright product exposures		
1	Interest rate exposures (general and specific risk)	16,199
2	Equity exposures (general and specific risk)	5
3	Foreign exchange (including gold) exposures	393
4	Commodity exposures	1,235
Option exposures		
5	Simplified approach	–
6	Delta-plus approach	–
7	Other approach	–
8	Securitization exposures	161
9	Total	17,993

b. RWA flow statements of market risk exposures under IMM approach (MR2)

The following table sets out a flow statement explaining variations in the RWA for market risk determined under the IMM approach.

	(a) VaR HK\$'M	(b) Stressed VaR HK\$'M	(c) IRC HK\$'M	(d) CRC HK\$'M	(e) Other HK\$'M	(f) Total RWA HK\$'M
1	RWA as at end of previous reporting period (30 September 2017)					
	–	–	–	–	659	659
2	Movement in risk levels					
	–	–	–	–	–	–
3	Model updates/changes					
	–	–	–	–	–	–
4	Methodology and policy					
	–	–	–	–	–	–
5	Acquisitions and disposals					
	–	–	–	–	–	–
6	Foreign exchange movements					
	–	–	–	–	–	–
7	Other					
	–	–	–	–	2	2
8	RWA as at end of reporting period (31 December 2017)					
	–	–	–	–	661	661

13 Market risk (continued)

b. RWA flow statements of market risk exposures under IMM approach (MR2) (continued)

The capital requirement for the Bank's guaranteed retirement funds is calculated based on the potential shortfall between the estimated returns from the funds and the guaranteed returns. The projected returns are estimated using a simulation approach with a 99% confidence level. The model is back-tested against actual results.

14 Operational risk

The Bank adopts the standardised (operational risk) approach for assessing capital requirements for operational risk.

Further information regarding operational risk governance and management is set out in note 37(g) on pages 103 to 104 of the 2017 consolidated financial statements.

15 Equity exposures in the banking book

Investments in equity shares which are intended to be held on a continuing basis, but which do not comprise investments in associates, jointly controlled entities or subsidiaries, are classified as available-for-sale securities and are reported on the balance sheet as "Investment securities". Available-for-sale securities are measured at fair value as described in note 2(i) of the 2017 consolidated financial statements. Included within this category are investments made by the Bank for strategic purposes, which are subject to additional internal procedures and approvals to ensure that the investments are in accordance with the Bank's strategy and to ensure compliance with all relevant regulatory and legal restrictions. In some cases, additional investments may be made later such that the investee becomes an associate, jointly controlled entity or subsidiary, at which point the investment is reclassified in accordance with the Bank's accounting policies.

	<i>2017</i>	<i>2016</i>
	<i>HK\$'M</i>	<i>HK\$'M</i>
Cumulative realised (loss)/gains on disposal	(1)	52
Unrealised gains recognised in reserves but not through the income statement	133	38
	<u>133</u>	<u>38</u>

16 Interest rate exposure in the banking book

As at the balance sheet date, the variation in the Bank's earnings for a 200 basis points interest rate increase, broken down by currency, is shown as follows (in HK\$ million):

	HKD	USD	CNY	EUR	SGD
2017	762	301	(20)	268	13

The above analysis is based on the methodology as set out by the HKMA in the completion instructions for the "Return of Interest Rate Risk Exposure" and is compiled on a quarterly basis.

In addition, the analysis is based on the following assumptions:

- (i) there is a parallel shift in the yield curve and in interest rates;
- (ii) positions are assumed to run to maturity and reprice according to the earliest interest repricing date; and
- (iii) no loan prepayment is assumed as the majority of loans are on a floating rate basis.

17 Analysis of fee and commission income

The products constituting not less than 10% of the total amount of fee and commission income are as follows:

	2017 HK\$'M	2016 HK\$'M
Insurance services	1,311	1,309
Financial market products	2,500	1,796
Investment services	1,125	1,482

18 International claims

International claims are on-balance sheet exposures of counterparties based on the location of those counterparties after taking into account the transfer of risk. Recognized risk transfer refers to the reduction of exposure to a particular country by an effective transfer of credit risk to a different country. For a claim on the branch of a bank or other financial institution, the risk will be transferred to the country where its head office is situated.

International claims on individual countries or segments, after risk transfer, amounting to 10% or more of the aggregated international claims are shown as below:

At 31 December 2017	Banks HK\$'M	Official Sector HK\$'M	Non-bank Financial institution HK\$'M	Non-financial private sector HK\$'M	Total HK\$'M
Developed countries	93,492	25,783	5,038	27,829	152,142
Offshore centres	9,626	1,774	13,413	88,089	112,902
– of which Hong Kong	4,174	927	11,557	61,912	78,570
Developing Asia and Pacific	170,600	16,127	2,735	28,039	217,501
– of which China	128,919	9,410	1,024	21,761	161,114

19 Advances to customers analysed by industry sector

The analysis of gross advances to customers by industry sector is based on the categories used by the HKMA.

	At 31 December 2017 HK\$'M	% of advances covered by collateral or other securities
Gross advances for use in Hong Kong		
<i>Industrial, commercial and financial</i>		
– Property development	14,235	21%
– Property investment	29,544	81%
– Financial concerns	19,752	52%
– Stockbrokers	11,689	56%
– Wholesale and retail trade	14,932	28%
– Manufacturing	21,152	15%
– Transport and transport equipment	8,586	4%
– Recreational activities	988	19%
– Information technology	3,413	–
– Others	24,688	9%
<i>Individuals</i>		
– Advances for the purchase of flats in the Home Ownership Scheme, Private Sector Participation Scheme and Tenants Purchase Scheme	459	100%
– Advances for the purchase of other residential properties	206,010	100%
– Credit card advances	19,191	–
– Others	26,161	43%
<i>Total gross advances for use in Hong Kong</i>	400,800	
Trade finance	35,361	2%
Trade bills	1,779	5%
Gross advances for use outside Hong Kong	44,077	5%
Gross advances to customers	482,017	57%

As at 31 December 2017, approximately 82 per cent of the Bank's advances to customers were classified under Hong Kong.

Except for Hong Kong, none of the remaining geographical segments represents more than 10% of the Bank's gross loans and advances to customers after taking into account the transfer of risk.

The above balances do not include inter-company loans and advances.

19 Advances to customers analysed by industry sector (continued)

The amount of impaired and overdue advances to customers and individually and collectively assessed impairment provision for industry sectors which constitute not less than 10% of the Bank and its subsidiaries' total advances to customers are as follows:

	<i>Impaired advances to customers HK\$'M</i>	<i>Overdue advances to customers HK\$'M</i>	<i>Individually assessed impairment provision HK\$'M</i>	<i>Collectively assessed impairment provision HK\$'M</i>	<i>New provision charge HK\$'M</i>
At 31 December 2017					
Advances for the purchase of other residential properties	40	40	–	2	–

20 Overdue advances to customers

	<i>At 31 December 2017</i>	
	<i>HK\$'M</i>	<i>% of advances to customers</i>
Gross advances to customers which have been overdue with respect to either principal or interest for periods of:		
6 months or less but over 3 months	161	0.03%
1 year or less but over 6 months	45	0.01%
Over 1 year	970	0.20%
	<u>1,176</u>	<u>0.24%</u>
		<i>At 31 December 2017 HK\$'M</i>
Fair value of collateral held against the covered portion of overdue advances to customers		<u>597</u>
Covered portion of overdue advances to customers		520
Uncovered portion of overdue advances to customers		<u>656</u>

20 Overdue advances to customers (continued)

The covered portion of overdue advances to customers represents the amount of collateral held against outstanding balances. It does not include any collateral held over and above outstanding exposures.

The collateral held in respect of overdue advances to customers consists of cash, properties, securities and government guarantee.

	<i>At 31 December 2017 HK\$'M</i>
Individually assessed impairment provision against advances to customers overdue more than 3 months	<u>582</u>

As at 30 June 2017 and 31 December 2016, there were no overdue advances to banks and other financial institutions.

21 Rescheduled advances to customers

	<i>At 31 December 2017</i>	
	<i>HK\$'M</i>	<i>% of advances to customers</i>
Rescheduled advances to customers	<u>518</u>	<u>0.11%</u>

Rescheduled advances are those advances, which have been restructured or renegotiated because of a deterioration in the financial position of the borrowers, or the inability of the borrowers to meet the original repayment schedule and for which the revised repayment terms are non-commercial to the Bank. Rescheduled advances to customers are stated net of any advances that have subsequently become overdue for over 3 months and reported as overdue advances in note 20.

As at 31 December 2017, there were no rescheduled advances to banks and other financial institutions.

22 Mainland Activities

	<i>On-balance sheet exposure HK\$'M</i>	<i>Off-balance sheet exposure HK\$'M</i>	<i>Total HK\$'M</i>
At 31 December 2017			
(i) Central government, central government-owned entities and their subsidiaries and joint ventures ("JVs")	41,692	654	42,346
(ii) Local governments, local government-owned entities and their subsidiaries and JVs	1,436	654	2,090
(iii) PRC nationals residing in Mainland China or other entities incorporated in Mainland China and their subsidiaries and JVs	26,982	3,178	30,160
(iv) Other entities of central government not reported in item (i) above	1,280	271	1,551
(v) Other entities of local governments not reported in item (ii) above	510	–	510
(vi) PRC nationals residing outside Mainland China or entities incorporated outside Mainland China where the credit is granted for use in Mainland China	32,261	3,362	35,623
(vii) Other counterparties where the exposures are considered by the reporting institution to be non-bank Mainland China exposures	16,336	2,322	18,658
	<hr/>	<hr/>	<hr/>
Total	120,497	10,441	130,938
Total assets after provision	<u>1,069,668</u>		
On-balance sheet exposures as percentage of total assets	<u>11.26%</u>		

The off-balance sheet exposure represents the amount at risk should the contract be fully drawn upon and the client defaults. As the facilities may expire without being drawn upon, the contractual amounts do not represent expected future cash flows.

Acronyms

AI	Authorised institution	LCR	Liquidity coverage ratio
AIRB	Advance internal ratings-based approach	LGD	Loss given default
ALCO	Asset and Liability Management Committee	LTA	Look through approach
AMA	Advanced measurement approach	MBA	Mandate-based approach
ASA	Alternative standardised approach	MSRs	Mortgage servicing rights
AT1	Additional tier 1	N/A	Not applicable
Bank	Standard Chartered Bank (Hong Kong) Limited	OF	Object finance
BCBS	Basel Committee on Banking Supervision	OTC	Over-the-counter
BCR	Banking (Capital) Rules	PD	Probability of default
BDR	Banking (Disclosure) Rules	PF	Project finance
BIA	Basic indicator approach	PFE	Potential future exposure
BSC	Basic approach	PRC	People's Republic of China
CCF	Credit conversion factor	PSE	Public sector entity
CCP	Central counterparty	QRRE	Qualifying revolving retail exposures
CCR	Counterparty credit risk	RC	Replacement cost
CCyB	Countercyclical capital buffer	RW	Risk-weight
CEM	Current exposure method	RWA	Risk-weighted asset/risk-weighted amount
CET1	Common equity tier 1	S	Securitisation
CF	Commodities finance	SA-CCR	Standardised approach for counterparty credit risk
CIS	Collective investment scheme	SFT	Securities financing transaction
CRC	Comprehensive risk charge	SME	Small and Medium Enterprises
CRM	Credit risk mitigation	SRW	Supervisory risk-weighted
CVA	Credit valuation adjustment	STC	Standardised (credit risk) approach
D-SIB	Domestic systematically important authorised institution	STC(S)	Standardised (securitisation) approach
DTAs	Deferred tax assets	STM	Standardised (market risk) approach
EAD	Exposure at default	STO	Standardised (operational risk) approach
EL	Expected loss	VaR	Value at risk
EPE	Expected positive exposure		
FBA	Fall-back approach		
G-SIB	Global systematically important authorised institution		
HKMA	Hong Kong Monetary Authority		
HVCRE	High-volatility commercial real estate		
HQLA	High quality liquid assets		
IMM	Internal models approach		
IMM (CCR)	Internal models (counterparty credit risk) approach		
ICAAP	Internal Capital Adequacy Assessment Process		
IPRE	Income-producing real estate		
IRB	Internal ratings-based approach		
IRB(S)	Internal ratings-based (securitisation) approach		
IRC	Incremental risk charge		
JCCyB	Jurisdictional countercyclical capital buffer		
JVs	Joint ventures		