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Standard Chartered Bank (Hong Kong) Limited

Supplementary Notes to Consolidated Financial Statements (unaudited)

For period ended
31 December 2018

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 2018 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.

These banking disclosures are governed by the Bank's disclosure policy, which has been approved by the Board of Directors. The disclosure policy sets out the approach to determine the content, appropriateness and frequency of the disclosures, the approach to ensure the relevance and adequacy of the disclosures, and the internal control over the process for making the disclosures. The disclosures have been subject to independent review in accordance to the disclosure policy.

Additional disclosures as required by the Banking (Disclosure) Rules will be available on our website: www.sc.com/hk on or before 30 April 2019.

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 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:

		At 31 December 2018	
Name of company	**Principal Activity**	Total assets HK$'M	Total equity HK$'M
Prunelli Asset Purchaser HK Limited	Asset-backed securitisation	2,644	–
Standard Chartered Securities (Hong Kong) Limited	Equity capital markets, corporate finance and institutional brokerage	207	64
SC Learning Limited	Provision of learning solutions in the banking and finance industry	37	(19)
Standard Chartered Trust (HK) Limited	Trustee services	16	15
Standard Chartered Nominees (Western Samoa) Limited	Nominees Services	–	–
Horsford Nominees Limited	Nominees Services	–	–
Standard Chartered Global Trading Investment Limited	Nominees Services	–	–
		2,904	60

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 securitization external ratings-based approach ("SEC-ERBA") to calculate its credit risk for securitization exposures.

For market risk, the Bank uses a stochastic asset-liability model 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 Committee ("ALCO") and the Board of Directors ("the Board").

2 Key prudential ratios, overview of risk management and RWA

a. Key prudential ratios (KM1)

The following table sets out an overview of the Bank's key prudential ratios.

		(a) At 31 December 2018 HK$'M	(b) At 30 September 2018 HK$'M	(c) At 30 June 2018 HK$'M	(d) At 31 March 2018 HK$'M	(e) At 31 December 2017 HK$'M
	Regulatory capital (amount)					
1	Common Equity Tier 1 (CET1)	57,449	59,131	58,281	55,813	51,835
2	Tier 1	63,279	64,961	64,111	61,643	57,665
3	Total capital	74,520	76,221	75,463	74,206	70,201
	RWA (amount)					
4	Total RWA	414,896	412,880	410,755	410,247	385,071
	Risk-based regulatory capital ratios (as a percentage of RWA)					
5	CET1 ratio (%)#	13.8%	14.3%	14.2%	13.6%	13.5%
6	Tier 1 ratio (%)#	15.3%	15.7%	15.6%	15.0%	15.0%
7	Total capital ratio (%)#	18.0%	18.5%	18.4%	18.1%	18.2%
	Additional CET1 buffer requirements (as a percentage of RWA)					
8	Capital conservation buffer requirement (%)	1.9%	1.9%	1.9%	1.9%	1.3%
9	Countercyclical capital buffer requirement (%)	1.4%	1.4%	1.4%	1.4%	0.9%
10	Higher loss absorbency requirements (%) (applicable only to G-SIBs or D-SIBs)	0.8%	0.8%	0.8%	0.8%	0.8%
11	Total AI-specific CET1 buffer requirements (%)	4.1%	4.1%	4.0%	4.0%	2.9%
12	CET1 available after meeting the AI's minimum capital requirements (%)	9.3%	9.7%	9.6%	9.0%	9.0%
	Basel III leverage ratio					
13	Total leverage ratio (LR) exposure measure	1,184,360	1,119,686	1,213,719	1,103,049	1,077,378
14	LR (%)*	5.3%	5.8%	5.3%	5.6%	5.4%
	Liquidity Coverage Ratio (LCR) / Liquidity Maintenance Ratio (LMR)					
	Applicable to category 1 institutions only:					
15	Total high quality liquid assets (HQLA)	212,300	208,141	212,712	195,214	180,528
16	Total net cash outflows	137,500	118,162	123,669	123,350	115,416
17	LCR (%)$^{\Delta}$	155%	177%	174%	160%	158%
	Applicable to category 2 institutions only:					
17a	LMR (%)	NA	NA	NA	NA	NA
	Net Stable Funding Ratio (NSFR) / Core Funding Ratio (CFR)					
	Applicable to category 1 institutions only:					
18	Total available stable funding	725,282	696,341	693,240	677,803	NA
19	Total required stable funding	536,758	516,340	534,668	503,339	NA
20	NSFR (%)$^{\Delta}$	135%	135%	130%	135%	NA
	Applicable to category 2A institutions only:					
20a	CFR (%)	NA	NA	NA	NA	NA

Decrease in regulatory capital ratios in Q4 2018 was mainly due to the dividend payment.
* Decrease in leverage ratio was mainly driven by increase in on-balance sheet exposures and securities financing transactions.
$^{\Delta}$ Please refer to sections 7b and 7c for the key drivers of LCR% and NSFR% changes respectively.

b. Overview of risk management (OVA)

Note 34 on pages 91 to 98 of the 2018 consolidated financial statements 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.

2 Key prudential ratios, overview of risk management and RWA (continued)

c. Overview of risk-weighted amount ("RWA") (OV1)

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 31 December 2018 HK$'M	*At 30 September 2018 (restated) HK$'M*	*At 31 December 2018## HK$'M*
1	**Credit risk for non-securitization exposures**	**304,788**	**303,065**	**25,720**
2	Of which STC approach	26,238	27,059	2,099
2a	Of which BSC approach	–	–	–
3	Of which foundation IRB approach	–	–	–
4	Of which supervisory slotting criteria approach	4,952	5,342	420
5	Of which advanced IRB approach	273,598	270,664	23,201
6	**Counterparty default risk and default fund contributions**	**9,655**	**9,538**	**1,056**
7	Of which SA-CCR*	N/A	N/A	N/A
7a	Of which CEM@	6,650	7,141	816
8	Of which IMM(CCR) approach	–	–	–
9	Of which others@	3,005	2,397	240
10	**CVA risk**	**4,181**	**4,096**	**334**
11	Equity positions in banking book under the simple risk-weight method and internal models method	–	–	–
12	Collective investment scheme ("CIS") exposures – LTA*	N/A	N/A	N/A
13	CIS exposures – MBA*	N/A	N/A	N/A
14	CIS exposures – FBA*	N/A	N/A	N/A
14a	CIS exposures – combination of approaches*	N/A	N/A	N/A
15	**Settlement risk**	**9**	**–**	**1**
16	**Securitization exposures in banking book**	**4,171**	**3,419**	**334**
17	Of which SEC-IRBA	–	–	–
18	Of which SEC-ERBA	4,171	3,419	334
19	Of which SEC-SA	–	–	–
19a	Of which SEC-FBA	–	–	–
20	**Market risk**	**23,532**	**24,912**	**1,883**
21	Of which STM approach$^{\gamma}$	23,532	24,912	1,883
22	Of which IMM approach	–	–	–
23	Capital charge for switch between exposures in trading book and banking book (not applicable before the revised market risk framework takes effect)*	N/A	N/A	N/A
24	**Operational risk**	**43,475**	**41,717**	**3,478**
25	**Amounts below the thresholds for deduction (subject to 250% RW)**	**8,165**	**9,394**	**653**
26	**Capital floor adjustment**	**–**	**–**	**–**
26a	**Deduction to RWA**	**332**	**344**	**27**
26b	Of which portion of regulatory reserve for general banking risks and collective provisions which is not included in Tier 2 Capital	161	153	13
26c	Of which portion of cumulative fair value gains arising from the revaluation of land and buildings which is not included in Tier 2 Capital	171	191	14
27	**Total**	**397,644**	**395,797**	**33,432**

* Items marked with * will be applicable only after their respective policy frameworks takes effect. Until then, "Not applicable" should be reported in the rows.

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

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

@ 30 September 2018 amount for Item 7a and 9 was restated due to the reclassification of SFT from item 7a to item 9.

$^{\gamma}$ Increase in market risk RWA against 31 December 2017 position was driven by increase in net open position in US interest rate derivative.

3 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 (LI1)

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)	(b)	(c)	(d)	(e)	(f)	(g)
			Carrying values of items:				
At 31 December 2018	*Carrying values as reported in published financial statements HK$'M*	*Carrying values under scope of regulatory consolidation HK$'M*	*subject to credit risk framework HK$'M*	*subject to counterparty credit risk framework HK$'M*	*subject to the securitization framework HK$'M*	*subject to market risk framework HK$'M*	*not subject to capital requirements or subject to deduction from capital HK$'M*
Assets							
Cash and balances with banks, central banks and other financial institutions	13,748	13,748	13,748	–	–	–	–
Placements with banks and other financial institutions	153,503	153,487	144,947	8,327	–	–	213
Hong Kong SAR Government certificate of indebtedness	46,691	46,691	46,691	–	–	–	–
Financial assets at fair value through profit or loss	36,891	36,891	7,620	2,851	1,889	27,382	–
Investment securities	241,545	241,545	229,966	–	11,579	–	–
Advances to customers	505,538	505,538	500,798	4,532	–	–	208
Amounts due from immediate holding company	85,479	85,478	16,629	68,823	–	16,240	4
Amounts due from fellow subsidiaries	23,714	23,714	22,192	1,522	–	1,522	–
Amounts due from subsidiaries of the Bank	–	25	25	–	–	–	–
Amounts due from SCBHK	–	–	–	–	–	–	–
Investment in subsidiaries of the Bank	–	98	98	–	–	–	–
Investment in associates	12,144	3,168	3,168	–	–	–	–
Property, plant and equipment	37,142	37,142	37,142	–	–	–	–
Goodwill and intangible assets	1,601	1,601	–	–	–	–	1,601
Current tax assets	–	–	–	–	–	–	–
Deferred tax assets	–	–	–	–	–	–	–
Other assets	18,238	18,234	18,078	–	–	156	–
Total assets	**1,176,234**	**1,167,360**	**1,041,102**	**86,055**	**13,468**	**45,300**	**2,026**

3 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 (LI1) (continued)

At 31 December 2018	(a) Carrying values as reported in published financial statements HK$'M	(b) Carrying values under scope of regulatory consolidation HK$'M	(c) Carrying values of items: subject to credit risk framework 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	(g) not subject to capital requirements or subject to deduction from capital HK$'M
Liabilities							
Hong Kong SAR currency notes in circulation	46,691	46,691	–	–	–	–	46,691
Deposits and balances of banks and other financial institutions	21,652	21,652	–	–	–	–	21,652
Deposits from customers	907,083	907,083	–	–	–	–	907,083
Financial liabilities at fair value through profit or loss	26,981	26,981	–	3,512	–	16,565	10,416
Debt securities in issue	–	–	–	–	–	–	–
Amounts due to immediate holding company	41,536	41,536	–	18,836	–	18,836	22,700
Amounts due to fellow subsidiaries	11,937	9,293	–	779	–	779	7,735
Amount due to subsidiaries of the Bank	–	2,889	–	–	–	–	2,889
Amount due to SCBHK	–	–	–	–	–	–	–
Current tax liabilities	1,663	1,663	–	–	–	–	1,663
Deferred tax liabilities	572	572	–	–	–	–	572
Other liabilities	32,459	32,322	–	–	–	–	32,322
Subordinated liabilities	5,906	5,906	–	–	–	–	5,906
Total Liabilities	**1,096,480**	**1,096,588**	**–**	**23,127**	**–**	**36,180**	**1,059,629**

3 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.

		(a)	*(b)*	*(c)*	*(d)*	*(e)*
			Items subject to:			
	At 31 December 2018	*Total HK$'M*	*credit risk framework HK$'M*	*counterparty credit risk framework HK$'M*	*securitization framework HK$'M*	*market risk framework HK$'M*
1	**Asset Carrying value amount under scope of regulatory consolidation (as per template LI1)**	**1,165,334**	**1,041,102**	**86,055**	**13,468**	**45,300**
2	Liabilities Carrying value amount under scope of regulatory consolidation (as per template LI1)	36,180	–	23,127	–	36,180
3	Total net amount under regulatory scope of consolidation	1,129,154	1,041,102	62,928	13,468	9,120
4	Off balance sheet amounts and potential future exposures for counterparty credit risk	443,517	110,023	24,562	–	–
5	Difference due to financial collateral on standardised approach	-30,889	-30,889	–	–	–
6	Difference due to impairments on exposures under IRB approach	1,428	1,428	–	–	–
7	Difference due to regulatory exposures adjustments	2,510	2,510	–	–	–
8	**Exposure amounts considered for regulatory purposes**	1,545,720	1,124,174	87,490	13,468	9,120

3 Linkages between financial statements and regulatory exposures (continued)

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

Off-balance sheet amounts and potential future exposure for counterparty credit 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').

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 exposures under 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 regulatory exposures adjustment

Regulatory exposures adjustments is the differences arise between accounting carrying values and regulatory Exposure at Default (EAD) on leasing transactions.

Explanation of differences between accounting fair value and regulatory prudent valuation

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.

3 Linkages between financial statements and regulatory exposures (continued)

d. Prudent valuation adjustments (PV1)

The following table sets out a detailed breakdown of the constituent elements of valuation adjustment.

		(a) Equity HK$'M	*(b)* Interest rates HK$'M	*(c)* FX HK$'M	*(d)* Credit HK$'M	*(e)* Commodities HK$'M	*(f)* Total HK$'M	*(g)* Of which: In the trading book HK$'M	*(h)* Of which: In the banking book HK$'M
1	Close-out uncertainty, of which:	80	339	4	26	–	**449**	95	354
2	*Mid-market value*	–	161	3	20	–	**184**	59	125
3	*Close-out costs*	–	33	1	–	–	**34**	34	–
4	*Concentration*	80	145	–	6	–	**231**	2	229
5	Early termination	–	–	–	–	–	**–**	–	–
6	Model risk	–	–	–	–	–	**–**	–	–
7	Operational risks	2	19	–	2	–	**23**	9	14
8	Investing and funding costs	–	1	–	–	–	**1**	1	–
9	Unearned credit spreads	–	–	–	9	–	**9**	9	–
10	Future administrative costs	1	20	27	11	7	**66**	15	51
11	Other adjustments*	–	75	–	–	–	**75**	75	–
12	**Total adjustments**	**83**	**454**	**31**	**48**	**7**	**623**	**204**	**419**

* Other adjustments amount is mainly generated by the 'fallback approach' calculation which is defined in the Regulatory Technical Standards under European Commission Delegated Regulation 2016/101.

Concentrated positions PVA increased during the year driven by a methodology change pertaining to debt securities.

The largest contributions to the aggregate PVA came from debt securities.

4 Composition of regulatory capital

a. Composition of regulatory capital (CC1)

The following table sets out a breakdown of the constituent elements of Total regulatory capital.

	At 31 December 2018	*(a)* HK$'M	*(b)* Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation in note 4b (CC2)
	CET1 capital: instruments and reserves		
1	Directly issued qualifying CET1 capital instruments plus any related share premium	16,378	(11)
2	Retained earnings	47,005	(22)
3	Disclosed reserves	1,559	(14)+(15)+(16)+(17)+(18)+(19)+(20)+(21)

4 Composition of regulatory capital (continued)

a. Composition of regulatory capital (CC1) (continued)

	At 31 December 2018	*(a)* HK$'M	*(b)* Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation in note 4b (CC2)
4	*Directly issued capital subject to phase out arrangements from CET1 (only applicable to non-joint stock companies)*	Not applicable	Not applicable
5	Minority interests arising from CET1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in CET1 capital of the consolidation group)	–	
6	**CET1 capital before regulatory adjustments**	64,942	
	CET1 capital: regulatory deductions		
7	Valuation adjustments	623	
8	Goodwill (net of associated deferred tax liabilities)	729	(4)-(8)
9	Other intangible assets (net of associated deferred tax liabilities)	759	(5)-(9)
10	Deferred tax assets (net of associated deferred tax liabilities)	113	(9)
11	Cash flow hedge reserve	290	(14)
12	Excess of total EL amount over total eligible provisions under the IRB approach	–	
13	Credit-enhancing interest-only strip, and any gain-on-sale and other increase in the CET1 capital arising from securitization transactions	–	
14	Gains and losses due to changes in own credit risk on fair valued liabilities	715	-(6)
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)
20	Mortgage servicing rights (net of associated deferred tax liabilities)	–	Not applicable
21	Deferred tax assets arising from temporary differences (net of associated deferred tax liabilities)	–	Not applicable
22	Amount exceeding the 15% threshold	–	Not applicable
23	of which: significant investments in the ordinary share of financial sector entities	–	Not applicable
24	of which: mortgage servicing rights	–	Not applicable

4 Composition of regulatory capital (continued)

a. Composition of regulatory capital (CC1) (continued)

	At 31 December 2018	*(a)* HK$'M	*(b)* *Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation in note 4b (CC2)*
25	of which: deferred tax assets arising from temporary differences	–	Not applicable
26	National specific regulatory adjustments applied to CET1 capital	4,264	
26a	Cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties)	310	(23)
26b	Regulatory reserve for general banking risks	3,954	(24)
26c	Securitization exposures specified in a notice given by the MA	–	
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**	7,493	
29	**CET1 capital**	57,449	
	AT1 capital: instruments		
30	Qualifying AT1 capital instruments plus any related share premium	5,830	(12)+(13)
31	of which: classified as equity under applicable accounting standards	5,830	
32	of which: classified as liabilities under applicable accounting standards	–	
33	*Capital instruments subject to phase-out arrangements from AT1 capital*	–	
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	–	

4 Composition of regulatory capital (continued)

a. Composition of regulatory capital (CC1) (continued)

	At 31 December 2018	*(a)* *HK$'M*	*(b)* *Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation in note 4b (CC2)*
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	–	
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 (T1 = CET1 + AT1)**	63,279	
	Tier 2 capital: instruments and provisions		
46	Qualifying Tier 2 capital instruments plus any related share premium	6,263	(7)
47	*Capital instruments subject to phase-out arrangements from Tier 2 capital*	2,626	(10)
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 provisions and regulatory reserve for general banking risks eligible for inclusion in Tier 2 capital	2,213	(26)+(27)
51	**Tier 2 capital before regulatory deductions**	11,102	
	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 (net of eligible short positions)	–	(1)
56	National specific regulatory adjustments applied to Tier 2 capital	(139)	(23)x45%
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	(139)	(23)x45%

4 Composition of regulatory capital (continued)

a. Composition of regulatory capital (CC1) (continued)

	At 31 December 2018	*(a)* HK$'M	*(b)* Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation in note 4b (CC2)
57	**Total regulatory adjustments to Tier 2 capital**	(139)	
58	**Tier 2 capital (T2)**	11,241	
59	**Total regulatory capital (TC = T1 + T2)**	74,520	
60	**Total RWA**	414,896	
	Capital ratios (as a percentage of RWA)		
61	**CET1 capital ratio**	13.85%	
62	**Tier 1 capital ratio**	15.25%	
63	**Total capital ratio**	17.96%	
64	**Institution-specific buffer requirement (capital conservation buffer plus countercyclical buffer plus higher loss absorbency requirements)**	4.05%	
65	of which: capital conservation buffer requirement	1.88%	
66	of which: bank specific countercyclical buffer requirement	1.43%	
67	of which: G-SIB or D-SIB buffer requirement	0.75%	
68	CET1 (as a percentage of RWA) available after meeting minimum capital requirements	9.25%	
	National minima (if different from Basel 3 minimum)		
69	National CET1 minimum ratio	Not applicable	Not applicable
70	National Tier 1 minimum ratio	Not applicable	Not applicable
71	National Total capital minimum ratio	Not applicable	Not applicable
	Amounts below the thresholds for deduction (before risk weighting)		
72	Insignificant capital investments in CET1, AT1 and Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	105	–
73	Significant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	3,266	(25)
74	Mortgage servicing rights (net of associated deferred tax liabilities)	Not applicable	Not applicable
75	Deferred tax assets arising from temporary differences (net of associated deferred tax liabilities)	Not applicable	Not applicable
	Applicable caps on the inclusion of provisions in Tier 2 capital		
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the BSC approach, or the STC approach and SEC-ERBA, SEC-SA and SEC-FBA (prior to application of cap)	652	

4 Composition of regulatory capital (continued)

a. Composition of regulatory capital (CC1) (continued)

	At 31 December 2018	*(a)* *HK$'M*	*(b)* *Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation in note 4b (CC2)*
77	Cap on inclusion of provisions in Tier 2 under the BSC approach, or the STC approach, and SEC-ERBA, SEC-SA and SEC-FBA	491	(26)
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the IRB approach and SEC-IRBA (prior to application of cap)	1,722	(27)
79	Cap for inclusion of provisions in Tier 2 under the IRB approach and SEC-IRBA	1,829	–
	Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2018 and 1 Jan 2022)		
80	*Current cap on CET1 capital instruments subject to phase-out arrangements*	Not applicable	Not applicable
81	*Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)*	Not applicable	Not applicable
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*	2,626	(10)
85	*Amount excluded from Tier 2 capital due to cap (excess over cap after redemptions and maturities)*	3,280	

4 Composition of regulatory capital (continued)

a. Composition of regulatory capital (CC1) (continued)

Notes to the template:

(on elements where a more conservative definition has been applied in the BCR relative to that set out in the Basel III capital standards.)

	Description	At 31 December 2018 Hong Kong basis HK$'M	Basel III basis HK$'M
9	**Other intangible assets (net of associated deferred tax liability)**	759	759

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.

10	**Deferred tax assets (net of associated deferred tax liabilities)**	113	–

Explanation
As set out in paragraphs 69 and 87 of the Basel III text issued by the Basel Committee (December 2010), DTAs 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 or other credit exposures to connected companies) under Basel III.

4 Composition of regulatory capital (continued)

a. Composition of regulatory capital (CC1) (continued)

	Description	At 31 December 2018 Hong Kong basis HK$'M	Basel III basis HK$'M
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 MA 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.

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 MA 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.

4 Composition of regulatory capital (continued)

a. Composition of regulatory capital (CC1) (continued)

	Description	At 31 December 2018 Hong Kong basis HK$'M	Basel III basis HK$'M
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)**	–	–

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.

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)**	–	–

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.

4 Composition of regulatory capital (continued)

a. Composition of regulatory capital (CC1) (continued)

Remarks:

The amount of the 10% threshold mentioned above is calculated based on the amount of CET1 capital determined in accordance with the deduction methods set out in BCR Schedule 4F. The 15% threshold is referring to paragraph 88 of the Basel III text issued by the Basel Committee (December 2010) and has no effect to the Hong Kong regime.

Abbreviations:
CET1: Common Equity Tier 1
AT1: Additional Tier 1

Note:
Cross-references (1) to (24) are referenced to Reconciliation of regulatory capital to balance sheet (CC2).
Cross-references (25) to (27) are referenced within the Composition of regulatory capital (CC1).

b. Reconciliation of regulatory capital to balance sheet (CC2)

	(a) *Consolidated balance sheet as in published financial statements (At 31 December 2018) HK$'M*	*(b)* *Under regulatory scope of consolidation (At 31 December 2018) HK$'M*	*(c)* *Cross reference to note – 4a (CC1)*
Assets			
Cash and balances with banks, central banks and other financial institutions	13,748	13,748	–
Placements with banks and other financial institutions	153,503	153,487	–
Hong Kong SAR Government certificates of indebtedness	46,691	46,691	–
Financial assets at fair value through profit or loss	36,891	36,891	–
Investment securities	241,545	241,545	–
Advances to customers	505,538	505,538	–
Amounts due from immediate holding company	85,479	85,478	–
Amounts due from fellow subsidiaries	23,714	23,714	–
Amounts due from subsidiaries of the Bank	–	25	–
of which: significant capital investments in financial sector entities that are outside the scope of regulatory consolidation	–	–	(1)
Investment in subsidiaries of the Bank	–	98	–
of which: significant capital investments in financial sector entities that are outside the scope of regulatory consolidation	–	98	(2)
Interests in associates	12,144	3,168	–
of which: significant capital investments in financial sector entities that are outside the scope of regulatory consolidation	–	3,168	(3)

4 Composition of regulatory capital (continued)

b. Reconciliation of regulatory capital to balance sheet (CC2) (continued)

	(a) *Consolidated balance sheet as in published financial statements (At 31 December 2018) HK$'M*	*(b)* *Under regulatory scope of consolidation (At 31 December 2018) HK$'M*	*(c)* *Cross reference to note – 4a (CC1)*
Property, plant and equipment	37,142	37,142	–
Goodwill and intangible assets	1,601	1,601	–
of which: goodwill	–	729	(4)
of which: other intangible assets	–	872	(5)
Current tax assets	–	–	–
Deferred tax assets	–	–	–
Other assets	18,238	18,234	–
	1,176,234	**1,167,360**	**–**
Liabilities			
Hong Kong SAR currency notes in circulation	46,691	46,691	–
Deposits and balances of banks and other financial institutions	21,652	21,652	–
Deposit from customers	907,083	907,083	–
Financial liabilities at fair value through profit loss	26,981	26,981	–
of which: gains or losses due to changes in own credit risk	–	(715)	(6)
Debt securities in issue	–	–	–
Amounts due to immediate holding company	41,536	41,536	–
of which: subordinated liabilities eligible for inclusion in regulatory capital	–	6,263	(7)
Amounts due to fellow subsidiaries	11,937	9,293	–
Amounts due to subsidiaries of the Bank	–	2,889	–
Current tax liabilities	1,663	1,663	–
Deferred tax liabilities	572	572	–
of which: deferred tax liabilities relating to goodwill	–	–	(8)
of which: deferred tax liabilities relating to intangible assets	–	113	(9)
of which: other deferred tax liabilities	–	459	–
Other liabilities	32,459	32,322	–
Subordinated liabilities	5,906	5,906	–
of which: subordinated liabilities eligible for inclusion in regulatory capital (subject to phase out arrangements)	–	2,626	(10)
	1,096,480	**1,096,588**	

4 Composition of regulatory capital (continued)

b. Reconciliation of regulatory capital to balance sheet (CC2) (continued)

	(a) *Consolidated balance sheet as in published financial statements (At 31 December 2018) HK$'M*	*(b)* *Under regulatory scope of consolidation (At 31 December 2018) HK$'M*	*(c)* *Cross reference to note – 4a (CC1)*
Equity			
Share capital	20,256	20,256	–
of which: amount eligible for CET1	–	16,378	(11)
of which: amount eligible for AT1	–	3,878	(12)
Other equity instruments	1,952	1,952	–
of which: amount eligible for AT1	–	1,952	(13)
Reserves	57,546	48,564	–
of which: Cumulative cash flow hedge reserves that relate to the hedging of financial instruments that are not fair valued on the balance sheet	–	290	(14)
of which: Cumulative cash flow hedge reserves that relate to the hedging of financial instruments that are fair valued on the balance sheet	–	(4)	(15)
of which: FVOCI reserves – Equity	–	253	(16)
of which: FVOCI reserves – Debt	–	(85)	(17)
of which: Exchange reserve	–	(10)	(18)
of which: Merger reserve	–	154	(19)
of which: Share option equity reserve	–	246	(20)
of which: Own credit adjustments reserves	–	715	(21)
of which: Retained earnings	–	47,005	(22)
of which: Cumulative fair value gains arising from the revaluation of land and buildings (audited)	–	310	(23)
of which: Regulatory reserve for general banking risks	–	3,954	(24)
	79,754	**70,772**	
	–	**–**	
	1,176,234	**1,167,360**	

4 Composition of regulatory capital (continued)

c. Main features of regulatory capital instruments (CCA)

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

	At 31 December 2018	
	Total amount	*Amount recognised in regulatory capital HK$'M*
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	2,626
Fixed rate (4.30%) subordinated loan due 2026, callable from 2021	US$800m	6,263

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 Composition of regulatory capital (continued)

c. Main features of regulatory capital instruments (CCA) (continued)

Ordinary Shares

1	Issuer	Standard Chartered Bank (Hong Kong) Limited
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	N/A
3	Governing law(s) of the instrument	Hong Kong Law
	Regulatory treatment	
4	Transitional Basel III rules[1]	N/A
5	Post-transitional Basel III rules[2]	Common Equity Tier 1
6	Eligible at solo[3]/group/solo and group	Group & solo
7	Instrument type (types to be specified by each jurisdiction)	Ordinary Shares
8	Amount recognised in regulatory capital (currency in millions, 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
	Coupons / dividends	
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	Non-cumulative 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:

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

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

[3] Include solo-consolidated.

4 Composition of regulatory capital (continued)

c. Main features of regulatory capital instruments (CCA) (continued)

Perpetual non-cumulative convertible preference shares

1	Issuer	Standard Chartered Bank (Hong Kong) Limited
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	N/A
3	Governing law(s) of the instrument	Hong Kong Law
	Regulatory treatment	
4	Transitional Basel III rules[1]	N/A
5	Post-transitional Basel III rules[2]	Additional Tier 1
6	Eligible at solo[3]/group/solo and group	Group & solo
7	Instrument type (types to be specified by each jurisdiction)	Preference Shares
8	Amount recognised in regulatory capital (currency in millions, 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 uncancelled but unpaid dividends
16	Subsequent call dates, if applicable	Each dividend payment date after the First Call Date
	Coupons / dividends	
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	Non-cumulative 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

Footnote:

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

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

3 Include solo-consolidated.

4 Composition of regulatory capital (continued)

c. Main features of regulatory capital instruments (CCA) (continued)

Perpetual non-cumulative convertible preference shares (continued)

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:

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

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

[3] Include solo-consolidated.

4 Composition of regulatory capital (continued)

c. Main features of regulatory capital instruments (CCA) (continued)

Perpetual non-cumulative capital securities

1	Issuer	Standard Chartered Bank (Hong Kong) Limited
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	N/A
3	Governing law(s) of the instrument	Hong Kong Law
	Regulatory treatment	
4	Transitional Basel III rules[1]	N/A
5	Post-transitional Basel III rules[2]	Additional Tier 1
6	Eligible at solo[3]/group/solo and group	Group & solo
7	Instrument type (types to be specified by each jurisdiction)	Perpetual debt instrument
8	Amount recognised in regulatory capital (currency in millions, 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
	Coupons / dividends	
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	Non-cumulative 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

Footnote:

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

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

[3] Include solo-consolidated.

4 Composition of regulatory capital (continued)

c. Main features of regulatory capital instruments (CCA) (continued)

Perpetual non-cumulative capital securities (continued)

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:

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

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

[3] Include solo-consolidated.

4 Composition of regulatory capital (continued)

c. Main features of regulatory capital instruments (CCA) (continued)

Subordinated loan due 2020

1	Issuer	Standard Chartered Bank (Hong Kong) Limited
2	Unique identifier (e.g. 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
	Regulatory treatment	
4	Transitional Basel III rules[1]	Tier 2
5	Post-transitional Basel III rules[2]	Ineligible
6	Eligible at solo[3]/group/solo and group	Group & solo
7	Instrument type (types to be specified by each jurisdiction)	Other Tier 2 instruments
8	Amount recognised in regulatory capital (currency in millions, as of most recent reporting date)	HKD 2,626 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
	Coupons / dividends	
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	Non-cumulative 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

Footnote:

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

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

[3] Include solo-consolidated.

4 Composition of regulatory capital (continued)

c. Main features of regulatory capital instruments (CCA) (continued)

Subordinated loan due 2020 (continued)

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:

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

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

[3] Include solo-consolidated.

4 Composition of regulatory capital (continued)

c. Main features of regulatory capital instruments (CCA) (continued)

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

1	Issuer	Standard Chartered Bank (Hong Kong) Limited
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	N/A
3	Governing law(s) of the instrument	Hong Kong Law
	Regulatory treatment	
4	Transitional Basel III rules[1]	N/A
5	Post-transitional Basel III rules[2]	Tier 2
6	Eligible at solo[3]/group/solo and group	Group & solo
7	Instrument type (types to be specified by each jurisdiction)	Other Tier 2 instruments
8	Amount recognised in regulatory capital (currency in millions, as of most recent reporting date)	HKD 6,263 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
	Coupons / dividends	
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	Non-cumulative 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

Footnote:

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

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

[3] Include solo-consolidated.

4 Composition of regulatory capital (continued)

c. Main features of regulatory capital instruments (CCA) (continued)

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

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:

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

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

[3] Include solo-consolidated.

5 Macroprudential supervisory measures

Geographical distribution of credit exposures used in countercyclical capital buffer (CCyB1)

The following table sets out an overview of the geographical distribution of private sector credit exposures relevant for the calculation of the Bank's CCyB ratio.

At 31 December 2018

	Jurisdiction (J)	*Applicable JCCyB ratio in effect*	*Total RWA used in computation of CCyB ratio of AI*	*CCyB ratio of AI*	*CCyB amount of AI[3] HK$'M*
1	Hong Kong	1.875%	213,521		
2	Norway	2.000%	0		
3	Sweden	2.000%	385		
4	United Kingdom	1.000%	3,630		
5	Sum[1]	–	217,536		
6	**Total[2]**		**283,858**	**1.426%**	**5,916**

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

[2] The total RWAs used in the computation of the CCyB ratio in row (6) represents the total RWAs for the private sector credit exposures in all jurisdictions to which the bank is exposed, including jurisdictions with no countercyclical buffer rate or with a countercyclical buffer rate set at zero.

[3] The CCyB amount represents the total RWA multiplied by the Bank specific CCyB ratio.

6 Leverage Ratio

Summary comparison of accounting assets against leverage ratio exposure measure (LR1)

The following table reconcile the total assets in the published financial statements to the LR exposure measure.

	At 31 December 2018	*(a)* *Value under the Leverage Ratio framework HK$'M*
1	Total consolidated assets as per published financial statements	1,176,234
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(8,878)
3	Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting standard but excluded from the LR exposure measure	–
4	Adjustments for derivative contracts	2,130
5	Adjustment for securities financing transactions (i.e. repos and similar secured lending)	10
6	Adjustment for off-balance sheet ("OBS") items (i.e. conversion to credit equivalent amounts of OBS exposures)	68,325
6a	Adjustment for specific and collective provisions that are allowed to be excluded from exposure measure	(1,675)
7	Other adjustments	(51,786)
8	**Leverage ratio exposure measure**	**1,184,360**

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

These are excluded for deriving the leverage ratio exposure in accordance with the HKMA requirements specified in part 1C of Banking (Capital) Rules.

6 Leverage Ratio (continued)

Leverage ratio (LR2)

The following table sets out a detailed breakdown of the components of the LR denominator.

		(a) At 31 December 2018 HK$'M	*(b)* At 30 September 2018 HK$'M
On-balance sheet exposures			
1	On-balance sheet items (excluding derivative contracts and SFTs, but including collateral)	1,036,869	988,284
2	Less: Asset amounts deducted in determining Basel III Tier 1 capital	(6,779)	(7,678)
3	**Total on-balance sheet exposures (excluding derivative and SFTs)**	**1,030,090**	**980,606**
Exposures arising from derivative contracts			
4	Replacement cost associated with all derivative contracts (where applicable net of eligible cash variation margin and/or with bilateral netting)	4,647	5,760
5	Add-on amounts for PFE associated with all derivative contracts	17,381	17,139
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	–	–
7	Less: Deductions of receivables assets for cash variation margin provided under derivative contracts	–	–
8	Less: Exempted CCP leg of client-cleared trade exposures	–	–
9	Adjusted effective notional amount of written credit derivative#	626	4,176
10	Less: Adjusted effective notional offsets and add-on deductions for written credit derivative#	(509)	(3,872)
11	**Total exposures arising from derivative contracts**	**22,145**	**23,203**
Exposures arising from SFTs			
12	Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	65,476	43,462
13	Less: Netted amounts of cash payables and cash receivables of gross SFT assets	–	–
14	CCR exposure for SFT assets	–	91
15	Agent transaction exposures	–	–
16	**Total exposures arising from SFTs***	**65,476**	**43,553**
Other off-balance sheet exposures			
17	Off-balance sheet exposure at gross notional amount	431,755	433,543
18	Less: Adjustments for conversion to credit equivalent amounts	(363,431)	(359,645)
19	**Off-balance sheet items**	**68,324**	**73,898**
Capital and total exposures			
20	**Tier 1 capital**	63,279	64,961
20a	**Total exposures before adjustments for specific and collective provisions**	1,186,035	1,121,260
20b	**Adjustments for specific and collective provisions**	(1,675)	(1,574)
21	**Total exposures after adjustments for specific and collective provisions**	1,184,360	1,119,686
Leverage ratio			
22	**Leverage ratio##**	**5.34%**	**5.80%**

* Total exposures arising from SFTs increased mainly driven by repo and reverse repo transactions.
# Notional amount of written credit derivative decreased due to decrease in number of transactions.
Decrease in leverage ratio in Q4 2018 was mainly driven by the balance sheet growth.

7 Liquidity

a. Liquidity Risk Management (LIQA)

The following Liquidity Risk Management related information, together with the disclosure in section 7b (LIQ1), provides the supplement to the Liquidity Risk Section in note 34(f) on pages 122 to 132 of the 2018 consolidated financial statements.

LCRs and NSFRs of Hong Kong Office and Consolidated basis	LCR	NSFR
As at 31 Dec 2018	**%**	**%**
Hong Kong Office	163	136
Consolidated	161	135

Following table is an extraction from Part 4 of Liquidity Monitoring Tools return, which sets out the details of the Bank's maturity profile covering on-and off-balance sheet items, broken down into maturity buckets and the resultant liquidity gaps.

Basis of disclosure: consolidated Currency : (HK$ mil)	2018 Within 1 month	1 - 3 months	3 months - 1 year	1 - 5 years	Over 5 years	Balancing amount
On-balance sheet assets						
Currency notes and coins	2,301	–	–	–	–	–
Amount receivable arising from securities financing transactions	58,862	949	–	1,126	–	–
Amount receivable arising from derivative contracts	4,327	5,682	30,690	29,527	4,661	–
Due from MA for a/c of Exchange Fund	677	–	–	–	–	–
Due from overseas central banks	4	–	244	–	–	–
Due from banks	99,821	38,259	46,741	3,797	1,419	12
Debt securities, prescribed instruments and structured financial instruments held (net of short positions)	191,277	4,002	26,813	15,774	17,106	–
Acceptances and bills of exchange held	5,038	5,610	13,729	6	–	115
Loans and advances to non-bank customers	120,834	21,297	37,387	96,729	228,863	3,203
Other assets (including provisions)	13,448	7,534	445	1,952	4,947	82,577
Total	**496,589**	**83,333**	**156,049**	**148,911**	**256,996**	**85,907**
On-balance sheet liabilities						
Deposits from non-bank customers						
Pledged deposits	13,287	–	–	–	–	–
Demand, savings and current account deposits	647,053	–	–	–	–	–
Term, call and notice deposits	82,163	64,017	79,161	2,080	–	–
Amount payable arising from securities financing transactions	12	–	–	–	–	–
Amount payable arising from derivative contracts	4,299	5,720	30,130	29,684	4,563	–
Due to MA for a/c of Exchange Fund	9,288	–	–	–	–	–
Due to overseas central banks	8,394	1,709	–	–	–	–
Due to banks	53,088	1,164	7	301	–	–
Debt securities, prescribed instruments and structured financial instruments issued and outstanding	3,758	524	2,353	612	481	–
Other liabilities (including provisions)	38,571	6,923	3,411	22	868	47,024
Capital and reserves	–	–	–	12,183	1,959	69,950
Total	**859,913**	**80,057**	**115,062**	**44,882**	**7,871**	**116,974**
Off-balance sheet claims						
Irrevocable loan commitments or facilities received	2,276	–	–	–	–	–
Off-balance sheet obligations						
Irrevocable loan commitments or facilities granted	165,875	–	–	–	–	–
Other off-balance sheet obligations	29,652	–	–	–	–	–
Total	**195,527**	**–**	**–**	**–**	**–**	**–**
Funding gaps						
Contractual Maturity Mismatch	(556,575)	3,276	40,987	104,029	249,125	
Cumulative Contractual Maturity Mismatch	(556,575)	(553,299)	(512,312)	(408,283)	(159,158)	

7 Liquidity (continued)

b. Liquidity Coverage Ratio – for category 1 institution (LIQ1)

The following table sets out the details of LCR, high quality liquid assets ("HQLA"), and a breakdown of cash outflows and inflows.

	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 2018, 30 Jun 2018, 30 Sep 2018 and 31 Dec 2018 are 72, 73, 76 and 75.	Q4 2018 Currency: (HK$mil)		Q3 2018 Currency: (HK$mil)		Q2 2018 Currency: (HK$mil)		Q1 2018 Currency: (HK$mil)	
	Basis of disclosure: Consolidated	**UNWEIGHTED AMOUNT (Average Value)**	**WEIGHTED AMOUNT (Average Value)**	**UNWEIGHTED AMOUNT (Average Value)**	**WEIGHTED AMOUNT (Average Value)**	**UNWEIGHTED AMOUNT (Average Value)**	**WEIGHTED AMOUNT (Average Value)**	**UNWEIGHTED AMOUNT (Average Value)**	**WEIGHTED AMOUNT (Average Value)**
A. HIGH QUALITY LIQUID ASSETS									
1	Total high quality liquid assets (HQLA)		212,300		208,141		212,712		195,214
B. CASH OUTFLOWS									
2	Retail deposits and small business funding, of which:	473,440	36,809	454,869	35,284	444,814	35,408	433,222	34,643
3	Stable retail deposits and stable small business funding	112,074	5,604	108,850	5,443	111,382	5,569	111,144	5,557
4	Less stable retail deposits and less stable small business funding	262,730	26,273	250,786	25,079	263,336	26,334	259,628	25,963
4a	Retail term deposits and small business term funding	98,636	4,932	95,233	4,762	70,096	3,505	62,450	3,123
5	Unsecured wholesale funding (other than small business funding), and debt securities and prescribed instruments issued by the AI, of which:	378,785	163,004	388,231	168,346	399,757	171,478	395,503	172,490
6	Operational deposits	181,457	45,013	180,688	44,822	190,810	47,352	186,640	46,321
7	Unsecured wholesale funding (other than small business funding) not covered in row 6	196,843	117,506	207,076	123,057	208,569	123,748	208,684	125,990
8	Debt securities and prescribed instruments issued by the AI and redeemable within the LCR period	485	485	467	467	378	378	179	179
9	Secured funding transactions (including securities swap transactions)		36		–		–		–
10	Additional requirements, of which:	176,388	23,574	170,771	22,249	179,564	21,860	162,460	18,444
11	Cash outflows arising from derivative contracts and other transactions, and additional liquidity needs arising from related collateral requirements	8,361	8,361	8,495	8,495	6,363	6,363	6,750	6,750
12	Cash outflows arising from obligations under structured financing transactions and repayment of funding obtained from such transactions	10	10	8	8	7	7	29	29
13	Potential drawdown of undrawn committed facilities (including committed credit facilities and committed liquidity facilities)	168,017	15,203	162,268	13,746	173,194	15,490	155,681	11,665
14	Contractual lending obligations (not otherwise covered in Section B) and other contractual cash outflows	21,075	21,075	20,124	20,124	22,751	22,751	27,106	27,106
15	Other contingent funding obligations (whether contractual or non-contractual)	260,722	935	255,491	900	245,492	995	238,246	1,037
16	TOTAL CASH OUTFLOWS		245,433		246,903		252,492		253,720
C. CASH INFLOWS									
17	Secured lending transactions (including securities swap transactions)	31,167	2,427	21,672	1,339	22,272	1,068	10,977	1,017
18	Secured and unsecured loans (other than secured lending transactions covered in row 17) and operational deposits placed at other financial institutions	182,651	90,995	201,597	111,737	203,568	112,556	198,736	112,004
19	Other cash inflows	18,754	14,511	18,861	15,665	18,764	15,199	21,649	17,349
20	TOTAL CASH INFLOWS	232,572	107,933	242,130	128,741	244,604	128,823	231,362	130,370
D. LIQUIDITY COVERAGE RATIO			**ADJUSTED VALUE**		**ADJUSTED VALUE**		**ADJUSTED VALUE**		**ADJUSTED VALUE**
21	TOTAL HQLA		212,300		208,141		212,712		195,214
22	TOTAL NET CASH OUTFLOWS		137,500		118,162		123,669		123,350
23	LCR (%)		155%		177%		174%		160%

7 Liquidity (continued)

b. Liquidity Coverage Ratio – for category 1 institution (LIQ1) (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 2017, 30 Jun 2017, 30 Sep 2017 and 31 Dec 2017 are 73, 71, 72 and 73.	Q4 2017 Currency: (HK$mil)		Q3 2017 Currency: (HK$mil)		Q2 2017 Currency: (HK$mil)		Q1 2017 Currency: (HK$mil)	
	Basis of disclosure: Consolidated	UNWEIGHTED AMOUNT (Average Value)	WEIGHTED AMOUNT (Average Value)	UNWEIGHTED AMOUNT (Average Value)	WEIGHTED AMOUNT (Average Value)	UNWEIGHTED AMOUNT (Average Value)	WEIGHTED AMOUNT (Average Value)	UNWEIGHTED AMOUNT (Average Value)	WEIGHTED AMOUNT (Average Value)
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:	424,716	34,098	414,269	33,264	403,823	32,507	390,513	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
4a	Retail term deposits and small business term funding	57,995	2,900	55,118	2,756	51,576	2,579	51,579	2,579
5	Unsecured wholesale funding (other than small business funding), and debt securities and prescribed instruments issued by the AI, of which:	396,641	175,975	383,730	167,586	380,591	170,511	373,329	171,279
6	Operational deposits	187,759	46,602	183,171	45,463	174,645	43,336	156,886	38,903
7	Unsecured wholesale funding (other than small business funding) not covered in row 6	207,510	128,001	200,447	122,011	205,863	127,092	216,425	132,358
8	Debt securities and prescribed instruments issued by the AI and redeemable within the LCR period	1,372	1,372	112	112	83	83	18	18
9	Secured funding transactions (including securities swap transactions)		40		837		–		–
10	Additional requirements, of which:	164,795	16,588	170,584	18,064	164,847	16,307	163,291	16,208
11	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
12	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
13	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
14	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
15	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
16	TOTAL CASH OUTFLOWS		250,039		246,998		242,622		244,412
C. CASH INFLOWS									
17	Secured lending transactions (including securities swap transactions)	12,348	361	11,342	1,198	20,553	1,998	19,183	1,932
18	Secured and unsecured loans (other than secured lending transactions covered in row 17) and operational deposits placed at other financial institutions	199,724	119,252	177,460	101,661	168,370	95,197	159,315	90,493
19	Other cash inflows	18,788	15,010	20,829	16,468	17,904	13,656	14,947	10,426
20	TOTAL CASH INFLOWS	230,860	134,623	209,631	119,327	206,827	110,851	193,445	102,851
D. LIQUIDITY COVERAGE RATIO			**ADJUSTED VALUE**		**ADJUSTED VALUE**		**ADJUSTED VALUE**		**ADJUSTED VALUE**
21	TOTAL HQLA		180,528		162,938		175,318		184,656
22	TOTAL NET CASH OUTFLOWS		115,416		127,671		131,771		141,561
23	LCR (%)		158%		129%		134%		131%

7 Liquidity (continued)

b. Liquidity Coverage Ratio – for category 1 institution (LIQ1) (continued)

LCR 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 90% throughout the year of 2018. The average LCR decreased from 174% for the quarter ending 30 June 2018 to 155% for the quarter ending 31 December 2018 mainly as a result of increase in longer tenor assets.

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 Bank has various internal quantitative limits and metrics in place to monitor deposit concentrations, as well as HQLA Issuer concentrations.

The Asset and Liability 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.

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.

7 Liquidity (continued)

b. Liquidity Coverage Ratio – for category 1 institution (LIQ1) (continued)

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.

7 Liquidity (continued)

c. Net Stable Funding Ratio – for category 1 institution (LIQ2)

The following table sets out the details of NSFR and details of ASF and RSF components.

Table 1: LIQ2 for Quarter ending 31st December 2018

		(a)	(b)	(c)	(d)	(e)
		Unweighted value by residual maturity				
Basis of disclosure: consolidated		*No specified term to maturity*	*<6 months or repayable on demand*	*6 months to < 12 months*	*12 months or more*	*Weighted amount*
A. Available stable funding ("ASF") item						
1	Capital:	72,083	–	–	8,889	80,972
2	Regulatory capital	72,083	–	–	6,263	78,346
2a	Minority interests not covered by row 2	–	–	–	–	–
3	Other capital instruments	–	–	–	2,626	2,626
4	Retail deposits and small business funding:	–	470,003	30,619	6,466	462,596
5	Stable deposits		111,404	–	–	105,834
6	Less stable deposits		358,599	30,619	6,466	356,762
7	Wholesale funding:		441,266	7,140	1,879	175,095
8	Operational deposits		178,572	–	–	89,286
9	Other wholesale funding	–	262,694	7,140	1,879	85,809
10	Liabilities with matching interdependent assets	46,691	–	–	–	–
11	Other liabilities:	37,307	17,447	683	6,277	6,619
12	Net derivative liabilities	1,195				
13	All other funding and liabilities not included in the above categories	36,112	17,447	683	6,277	6,619
14	**Total ASF**					725,282
B. Required stable funding ("RSF") item						
15	Total HQLA for NSFR purposes				205,731	9,603
16	Deposits held at other financial institutions for operational purposes	–	12,329	–	–	6,164
17	Performing loans and securities:	54,473	339,364	81,053	352,062	458,625
18	Performing loans to financial institutions secured by Level 1 HQLA	–	56,074	–	–	5,607
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	13,470	144,344	32,107	36,713	88,166
20	Performing loans, other than performing residential mortgage, to non-financial corporate clients, retail and small business customers, sovereigns, the Monetary Authority for the account of the Exchange Fund, central banks and PSEs, of which:	41,003	113,744	23,187	84,096	213,029
21	With a risk-weight of less than or equal to 35% under the STC approach	–	–	–	–	–
22	Performing residential mortgages, of which:	–	9,058	3,761	204,157	109,720
23	With a risk-weight of less than or equal to 35% under the STC approach	–	8,019	3,384	159,969	109,682
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	–	16,144	21,998	27,096	42,103
25	Assets with matching interdependent liabilities	46,691	–	–	–	–
26	Other assets:	58,812	8,101	–	–	54,072
27	Physical traded commodities, including gold	–				–
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	–				–
29	Net derivative assets	–				–
30	Total derivative liabilities before deduction of variation margin posted	4,740				N/A
31	All other assets not included in the above categories	54,072	8,101	–	–	54,072
32	Off-balance sheet items				435,033	8,294
33	**Total RSF**					536,758
34	**Net Stable Funding Ratio (%)**					135%

7 Liquidity (continued)

c. Net Stable Funding Ratio – for category 1 institution (LIQ2) (continued)

Table 2: LIQ2 for Quarter ending 30th September 2018

		(a)	(b)	(c)	(d)	(e)
		Unweighted value by residual maturity				
Basis of disclosure: consolidated		*No specified term to maturity*	*<6 months or repayable on demand*	*6 months to < 12 months*	*12 months or more*	*Weighted amount*
A. Available stable funding ("ASF") item						
1	Capital:	74,343	–	–	8,884	83,228
2	Regulatory capital	74,343	–	–	6,258	80,602
2a	Minority interests not covered by row 2	–	–	–	–	–
3	Other capital instruments	–	–	–	2,626	2,626
4	Retail deposits and small business funding:	–	463,859	26,503	5,547	452,553
5	Stable deposits		113,613	–	–	107,932
6	Less stable deposits		350,246	26,503	5,547	344,621
7	Wholesale funding:		388,031	4,383	1,797	154,099
8	Operational deposits		172,684	–	–	86,342
9	Other wholesale funding	–	215,347	4,383	1,797	67,757
10	Liabilities with matching interdependent assets	45,181	–	–	–	–
11	Other liabilities:	39,010	9,941	1,289	5,817	6,461
12	Net derivative liabilities	–				
13	All other funding and liabilities not included in the above categories	39,010	9,941	1,289	5,817	6,461
14	**Total ASF**					696,341
B. Required stable funding ("RSF") item						
15	Total HQLA for NSFR purposes				203,744	8,996
16	Deposits held at other financial institutions for operational purposes	–	6,694	–	–	3,347
17	Performing loans and securities:	55,641	303,633	63,212	339,686	436,882
18	Performing loans to financial institutions secured by Level 1 HQLA	–	30,803	–	–	3,080
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	13,403	131,988	20,246	40,483	83,808
20	Performing loans, other than performing residential mortgage, to non-financial corporate clients, retail and small business customers, sovereigns, the Monetary Authority for the account of the Exchange Fund, central banks and PSEs, of which:	42,238	118,063	19,724	65,756	199,319
21	With a risk-weight of less than or equal to 35% under the STC approach	–	–	–	–	–
22	Performing residential mortgages, of which:	–	8,765	3,822	205,050	109,821
23	With a risk-weight of less than or equal to 35% under the STC approach	–	7,244	3,441	160,676	109,782
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	–	14,014	19,420	28,397	40,854
25	Assets with matching interdependent liabilities	45,181	–	–	–	–
26	Other assets:	63,610	4,910	–	–	58,692
27	Physical traded commodities, including gold	–				–
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	–				–
29	Net derivative assets	737				737
30	Total derivative liabilities before deduction of variation margin posted	4,918				N/A
31	All other assets not included in the above categories	57,955	4,910	–	–	57,955
32	Off-balance sheet items				430,908	8,423
33	**Total RSF**					516,340
34	**Net Stable Funding Ratio (%)**					135%

7 Liquidity (continued)

c. Net Stable Funding Ratio – for category 1 institution (LIQ2) (continued)

Table 3: LIQ2 for Quarter ending 30th June 2018

		(a)	(b)	(c)	(d)	(e)
		Unweighted value by residual maturity				
Basis of disclosure: consolidated		*No specified term to maturity*	*<6 months or repayable on demand*	*6 months to < 12 months*	*12 months or more*	*Weighted amount*
A. Available stable funding (“ASF”) item						
1	Capital:	72,161	–	–	8,903	81,064
2	Regulatory capital	72,161	–	–	6,277	78,438
2a	Minority interests not covered by row 2	–	–	–	–	–
3	Other capital instruments	–	–	–	2,626	2,626
4	Retail deposits and small business funding:	–	448,338	27,420	804	434,405
5	Stable deposits		108,384	–	–	102,965
6	Less stable deposits		339,954	27,420	804	331,440
7	Wholesale funding:		472,804	5,072	2,344	171,568
8	Operational deposits		177,800	–	–	88,900
9	Other wholesale funding	–	295,004	5,072	2,344	82,668
10	Liabilities with matching interdependent assets	44,751	–	–	–	–
11	Other liabilities:	35,044	11,888	843	5,782	6,203
12	Net derivative liabilities	83				
13	All other funding and liabilities not included in the above categories	34,961	11,888	843	5,782	6,203
14	**Total ASF**					693,240
B. Required stable funding (“RSF”) item						
15	Total HQLA for NSFR purposes				202,975	9,762
16	Deposits held at other financial institutions for operational purposes	–	11,217	–	–	5,609
17	Performing loans and securities:	56,354	363,485	45,519	352,965	454,650
18	Performing loans to financial institutions secured by Level 1 HQLA	–	57,303	–	–	5,730
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	15,011	142,871	16,998	39,262	84,202
20	Performing loans, other than performing residential mortgage, to non-financial corporate clients, retail and small business customers, sovereigns, the Monetary Authority for the account of the Exchange Fund, central banks and PSEs, of which:	41,343	131,480	15,071	81,951	211,731
21	With a risk-weight of less than or equal to 35% under the STC approach	–	–	–	–	–
22	Performing residential mortgages, of which:	–	8,757	3,863	203,958	113,032
23	With a risk-weight of less than or equal to 35% under the STC approach	–	8,019	3,562	164,935	112,998
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	–	23,074	9,587	27,794	39,955
25	Assets with matching interdependent liabilities	44,751	–	–	–	–
26	Other assets:	60,823	6,057	–	–	56,868
27	Physical traded commodities, including gold	–				–
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	–				–
29	Net derivative assets	–				–
30	Total derivative liabilities before deduction of variation margin posted	3,955				N/A
31	All other assets not included in the above categories	56,868	6,057	–	–	56,868
32	Off-balance sheet items				404,331	7,779
33	**Total RSF**					534,668
34	**Net Stable Funding Ratio (%)**					130%

7 Liquidity (continued)

c. Net Stable Funding Ratio – for category 1 institution (LIQ2) (continued)

Table 4: LIQ2 for Quarter ending 31st March 2018

		(a)	(b)	(c)	(d)	(e)
		Unweighted value by residual maturity				
Basis of disclosure: consolidated		*No specified term to maturity*	*<6 months or repayable on demand*	*6 months to < 12 months*	*12 months or more*	*Weighted amount*
A. Available stable funding ("ASF") item						
1	Capital:	69,398	–	–	10,220	79,618
2	Regulatory capital	69,398	–	–	6,281	75,679
2a	Minority interests not covered by row 2	–	–	–	–	–
3	Other capital instruments	–	–	–	3,939	3,939
4	Retail deposits and small business funding:	–	451,031	17,832	1,701	429,387
5	Stable deposits		114,193	–	–	108,483
6	Less stable deposits		336,838	17,832	1,701	320,904
7	Wholesale funding:		413,205	7,367	2,535	162,324
8	Operational deposits		178,454	–	–	89,227
9	Other wholesale funding	–	234,751	7,367	2,535	73,097
10	Liabilities with matching interdependent assets	44,141	–	–	–	–
11	Other liabilities:	38,594	10,293	768	6,090	6,474
12	Net derivative liabilities	1,038				
13	All other funding and liabilities not included in the above categories	37,556	10,293	768	6,090	6,474
14	**Total ASF**					677,803
B. Required stable funding ("RSF") item						
15	Total HQLA for NSFR purposes				188,903	10,269
16	Deposits held at other financial institutions for operational purposes	–	9,169	–	–	4,584
17	Performing loans and securities:	58,332	338,183	46,397	322,738	421,772
18	Performing loans to financial institutions secured by Level 1 HQLA	–	31,390	–	–	3,139
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	15,617	156,531	21,743	23,068	73,036
20	Performing loans, other than performing residential mortgage, to non-financial corporate clients, retail and small business customers, sovereigns, the Monetary Authority for the account of the Exchange Fund, central banks and PSEs, of which:	42,715	119,236	12,394	71,504	197,348
21	With a risk-weight of less than or equal to 35% under the STC approach	–	–	–	–	–
22	Performing residential mortgages, of which:	–	10,134	3,816	204,436	113,411
23	With a risk-weight of less than or equal to 35% under the STC approach	–	9,443	3,533	164,443	113,376
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	–	20,892	8,444	23,730	34,838
25	Assets with matching interdependent liabilities	44,141	–	–	–	–
26	Other assets:	61,975	8,498	–	–	58,751
27	Physical traded commodities, including gold	–				–
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	–				–
29	Net derivative assets	–				–
30	Total derivative liabilities before deduction of variation margin posted	3,224				N/A
31	All other assets not included in the above categories	58,751	8,498	–	–	58,751
32	Off-balance sheet items				399,396	7,963
33	**Total RSF**					503,339
34	**Net Stable Funding Ratio (%)**					135%

7 Liquidity (continued)

c. Net Stable Funding Ratio – for category 1 institution (LIQ2) (continued)

NSFR Key Drivers

Net Stable Funding Ratio (NSFR) requires the bank to maintain sufficient stable funding relative to required stable funding. It reflects a bank's long-term funding profile and compliment Liquidity Coverage Ratio (LCR) which measures short-term resilience to liquidity risk. The bank has continuously maintained a healthy NSFR ratio during the first half of 2018, and well above the regulatory requirement minimum of 100%.

NSFR remained steady at 135% in the last two quarters of 2018. NSFR decreased slightly from 135% in the first quarter 2018 to 130% in the second quarter 2018 as a result of increased medium term loans partially being offset by higher client stable deposits.

Composition of AI's interdependent assets and liabilities

Complying with HKMA Banking Liquidity Rules, the Bank's interdependent assets and liabilities consist of legal tender notes and certificates of indebtedness, being one of the note-issuing bank in Hong Kong.

8 Credit risk for non-securitization exposures

a. General information about credit risk (CRA)

Our approach to credit risk can be found in the Risk management approach section in notes 34 on pages 91 to 117 of the 2018 consolidated financial statements.

b. Credit quality of exposures (CR1)

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

		(a)	*(b)*	*(c)*	*(d)*
		Gross carrying amounts of			
	At 31 December 2018	*Defaulted exposures HK$'M*	*Non-defaulted exposures HK$'M*	*Allowances/ impairments HK$'M*	*Net values HK$'M*
1	Loans	2,527	698,071	1,684	698,914
2	Debt securities	–	230,907	–	230,907
3	Off-balance sheet exposures	300	431,454	82	431,672
4	**Total**	2,827	1,360,432	1,766	1,361,493

Defaulted exposures include the exposures under IRB approach with 100% probability of default and the exposures under STC approach which was past due for more than 90 days.

8 Credit risk for non-securitization exposures (continued)

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

The following table sets out 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 2018)**	2,409
2	Loans and debt securities that have defaulted since the last reporting period	1,036
3	Returned to non-defaulted status	–
4	Amounts written off	(236)
5	Other changes[1]	(682)
6	**Defaulted loans and debt securities at end of the current reporting period (31 December 2018)**	2,527

[1] Other changes included repayment and foreign exchange movement.

d. 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 2018	*Gross carrying amount* *HK$'M*
1	Hong Kong	897,819
2	China	160,637
3	Others[1]	304,803
4	**Total**	1,363,259

[1] "Others" constitutes segment less than 10% of total RWA and is disclosed on an aggregated basis.

8 Credit risk for non-securitization exposures (continued)

II. Exposures by Industry (CRB2)

	At 31 December 2018	*Gross carrying amount HK$'M*
1	Individuals	457,804
2	Financial concerns	406,222
3	Manufacturing	71,035
4	Others[1]	428,198
5	**Total**	1,363,259

[1] "Others" constitutes segment less than 10% of total RWA and is disclosed on an aggregated basis.

III. Exposures by residual maturity (CRB3)

	At 31 December 2018	*Repayable on demand to 1 year HK$'M*	*Due between 1 year to 5 years HK$'M*	*Due after 5 years HK$'M*	*Total HK$'M*
1	Loans	362,855	106,025	231,718	700,598
2	Debt securities	174,250	56,657	–	230,907
3	Off-balance sheet exposures	402,633	26,395	2,726	431,754
4	**Total**	939,738	189,077	234,444	1,363,259

8 Credit risk for non-securitization exposures (continued)

d. 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 2018	*Gross impaired advances* *HK$'M*	*Individual assessed allowances* *HK$'M*	*Write-off* *HK$'M*
1	Hong Kong SAR	2,340	763	35
2	China	25	1	–
3	Singapore	123	118	–
4	Others[1]	39	39	–
5	**Total**	2,527	921	35

[1] "Others" constitutes segment less than 10% of total RWA and is disclosed on an aggregated basis.

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

	At 31 December 2018	*Gross impaired advances* *HK$'M*	*Individual assessed allowances* *HK$'M*	*Write-off* *HK$'M*
1	Individuals	389	102	–
2	Financial concerns	68	53	–
3	Manufacturing	1,211	371	14
4	Wholesale and retail trade	608	318	21
5	Others[1]	251	77	–
6	**Total**	2,527	921	35

[1] "Others" constitutes segment less than 10% of total RWA and is disclosed on an aggregated basis.

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

Please refer to note 34(a) of the 2018 Consolidated Financial Statements for analysis of past due exposures.

VII. Breakdown of restructured exposures (CRB7)

At 31 December 2018	*HK$`M*
Impaired	710
Not impaired	4
	714

8 Credit risk for non-securitization exposures (continued)

e. 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 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 and reported to the relevant risk committees. The Bank uses credit limits to record guarantees taken against individual guarantors where a capital benefit is taken. The Bank uses netting in the case of financial market's transactions under master netting agreements supported by a legal opinion.

Our approach to credit risk mitigation can be found in the Risk management approach section in notes 34(a) on pages 101 to 102 of the 2018 consolidated financial statements.

f. 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.

	At 31 December 2018	*(a)* *Exposures unsecured: carrying amount* *HK$'M*	*(b1)* *Exposures to be secured* *HK$'M*	*(b)* *Exposures secured by recognized collateral* *HK$'M*	*(d)* *Exposures secured by recognized guarantees* *HK$'M*	*(f)* *Exposures secured by recognized credit derivative contracts* *HK$'M*
1	Loans	384,459	314,455	283,616	15,664	–
2	Debt securities	215,157	15,750	13,287	235	–
3	**Total**	599,616	330,205	296,903	15,899	–
4	*– Of which defaulted*	*2,021*	*506*	*403*	*–*	*–*

There was no material change in the percentage of exposures to be secured.

g. 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 under the following exposure classes: Multilateral development bank exposures, certain Bank, Corporate and Retail exposures which exempt from IRB Approach.

These external ratings must come from External Credit Assessment Institutions (ECAI); which currently include Moody's, Standard & Poor's and Fitch. The Bank uses the ECAI ratings from these agencies in its day-to-day business, which are tracked and kept updated.

The Bank determines ECAI issuer ratings or ECAI issue-specific ratings in a process consistent with Part 4 of BCR and the exposures classes are assigned risk weightings as prescribed in the BCR.

8 Credit risk for non-securitization exposures (continued)

h. 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.

	At 31 December 2018	(a)	(b)	(c)	(d)	(e)	(f)
		Exposures pre-CCF and pre-CRM		*Exposures post-CCF and post-CRM*		*RWA and RWA density*	
	Exposure classes	*On-balance sheet amount HK$'M*	*Off-balance sheet amount HK$'M*	*On-balance sheet amount HK$'M*	*Off-balance sheet amount HK$'M*	*RWA HK$'M*	*RWA density %*
1	Sovereign exposures	–	–	–	–	–	0%
2	PSE exposures	–	–	–	–	–	0%
2a	*– Of which: domestic PSEs*	–	–	–	–	–	0%
2b	*– Of which: foreign PSEs*	–	–	–	–	–	0%
3	Multilateral development bank exposures	11,327	–	11,327	–	–	0%
4	Bank exposures	1,725	–	1,742	–	348	20%
5	Securities firm exposures	–	–	–	–	–	0%
6	Corporate exposures	23,546	3,537	13,284	498	13,183	96%
7	CIS exposures	–	–	–	–	–	0%
8	Cash items	–	–	–	–	–	0%
9	Exposures in respect of failed delivery on transactions entered into on a basis other than a delivery-versus-payment basis	–	–	–	–	–	0%
10	Regulatory retail exposures	9,049	–	5,291	–	3,968	75%
11	Residential mortgage loans	1,327	–	1,327	–	1,318	99%
12	Other exposures which are not past due exposures	23,298	51,156	6,901	–	6,901	100%
13	Past due exposures	366	–	366	–	520	142%
14	Significant exposures to commercial entities	–	–	–	–	–	0%
15	**Total**	70,638	54,693	40,238	498	26,238	64%

The movement in the exposures was driven by the balance sheet movement and change in customer mix.

8 Credit risk for non-securitization exposures (continued)

i. 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 2018 *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	11,327	–	–	–	–	–	–	–	–	–	11,327
4 Bank exposures	–	–	1,742	–	–	–	–	–	–	–	1,742
5 Securities firm exposures	–	–	–	–	–	–	–	–	–	–	–
6 Corporate exposures	–	–	262	–	780	–	12,740	–	–	–	13,782
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	–	–	–	–	–	5,291	–	–	–	–	5,291
11 Residential mortgage loans	–	–	–	14	–	–	1,313	–	–	–	1,327
12 Other exposures which are not past due exposures	–	–	–	–	–	–	6,901	–	–	–	6,901
13 Past due exposures	–	–	23	–	–	–	–	343	–	–	366
14 Significant exposures to commercial entities	–	–	–	–	–	–	–	–	–	–	–
15 **Total**	11,327	–	2,027	14	780	5,291	20,954	343	–	–	40,736

There was no material movement across risk weight buckets by exposure class.

8 Credit risk for non-securitization exposures (continued)

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

Model Governance

All IRB models are developed by Enterprise Risk Analytics (ERA). Both new and existing models, as well as changes to the existing models, are subject to independent validation by Group Model Validation (GMV) and are reviewed and approved by the Hong Kong Model Assessment Forum (MAF) and the Hong Kong Executive Risk Committee (ERC) after the Group's internal model governance. ERA and GMV are separate departments within Group Risk.

The performance of existing IRB models, including actual against predicted metrics, is monitored regularly by Hong Kong Model Risk Management (MRM) based on applicable standards and reported to the Hong Kong MAF on a quarterly basis. In addition, existing models are subject to annual independent validation by GMV. The Group Credit Model Assessment Committee (CMAC) sets out internal standards for model development, validation and performance monitoring.

Group Internal Audit is responsible for carrying out independent audit reviews of the model governance process.

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 & 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. Excluding the Sovereign model, the CIB and CB internal rating-based (IRB) PD models are subject to the 0.03 per cent 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.

Estimates of PD are computed as of 31 December 2017 and are compared with default observations through 31 December 2018.

Our historical default experience for sovereigns and banks is minimal, so the predicted PD reflects a particularly low number of defaults. We experienced no defaults for sovereigns and banks during 2018. The actual default rates for 'Corporates', 'Residential mortgages', 'Qualifying revolving retail', 'Small Business Retail' and 'Other retail' asset classes in 2018 remained below IRB model predictions as at the December 2017, based on the arithmetic average PD by obligors.

8 Credit risk for non-securitization exposures (continued)

j. 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) model is a parameter-based model 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 2018 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 2015 to 2018 defaults that have completed their workout process as at the end of 2018. 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.

Retail LGD model development considers defaults from a cohort and the actual recoveries up to the end of the workout window which is typically two to three years. For 'Qualifying revolving retail exposures', 'Other retail exposures to individuals' and 'Small business retail exposures', the observed LGD from the December 2014 cohort (existing defaults and those defaulted in the next 12 months) was calculated based on actual recoveries observed from January 2015 until December 2018. For 'Residential mortgage exposures', the observed LGD from the December 2015 cohort (existing defaults and those defaulted in the next 12 months) was calculated based on actual recoveries observed from January 2016 until December 2018. This is compared to the predicted outcome of the same set of defaults. Under this approach, realised LGD values for all retail asset classes are lower than predicted, primarily due to the regulatory guidance to calibrate LGD models to downturn conditions.

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.

8 Credit risk for non-securitization exposures (continued)

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

Exposure At Default (continued)

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.

The comparison of realised versus predicted EAD is summarised as ratio of the sum of outstanding amount at time of default to the sum of predicted EAD of assets of each defaulted client in 2018. The ratios for all models are smaller than one, indicating that the predicted EAD is higher than the realised outstanding amount at default. This is explained by the regulatory guidance to assign conservatism to the CCF of certain exposure types and to calibrate the models to downturn conditions, as well as by the impact of management action leading to a reduction in actual exposure prior to default.

At 31 December 2018, the portion of exposure at default ("EAD") and RWA within the Bank covered by IRB apporach are summarised in the following table. The remaining portions not covered by IRB approach are under STC approach.

Percentage of total EAD and RWA covered by IRB approach

At 31 December 2018 Portfolio	*Percentage of total EAD under IRB approach*	*Percentage of total RWA under IRB approach*
Corporate exposures (includes SME and other corporates and specialised lending)	94%	89%
Sovereign exposures	93%	100%
Bank exposures (including securities firms)	99%	99%
Residential mortgage loans	99%	97%
Other retail exposures	90%	81%
Equity exposures	100%	100%
Other exposures	100%	100%

The above table covers credit risk for non-securitisation exposures excluding counterparty credit risk.

For counterparty credit risk,the percentage of total RWA covered by models is 98% for corporate exposures and 81% for bank exposures.

k. 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 2018 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 (i) – Sovereign												
0.00 to < 0.15	151,483	1,307	37.29%	152,731	0.01%	28	46.07%	1.28	8,569	6%	10	
0.15 to < 0.25	–	–	0.00%	–	0.00%	–	0.00%	–	–	0%	–	
0.25 to < 0.50	–	–	0.00%	–	0.00%	–	0.00%	–	–	0%	–	
0.50 to < 0.75	–	–	0.00%	–	0.00%	–	0.00%	–	–	0%	–	
0.75 to < 2.50	783	–	0.00%	588	2.03%	1	54.07%	1.00	680	116%	6	
2.50 to < 10.00	–	–	0.00%	–	0.00%	–	0.00%	–	–	0%	–	
10.00 to < 100.00	–	–	0.00%	–	0.00%	–	0.00%	–	–	0%	–	
100.00 (Default)	–	–	0.00%	–	0.00%	–	0.00%	–	–	0%	–	
Sub-total	152,266	1,307	37.29%	153,319	0.02%	29	46.10%	1.28	9,249	6%	16	154
Portfolio (ii) – Bank												
0.00 to < 0.15	256,679	47,184	9.49%	272,889	0.04%	139	45.07%	1.08	33,080	12%	46	
0.15 to < 0.25	2,010	2,138	5.88%	1,642	0.22%	17	39.67%	0.51	468	28%	1	
0.25 to < 0.50	3,055	7,161	25.12%	4,824	0.39%	23	39.00%	1.62	2,491	52%	7	
0.50 to < 0.75	6,823	10,958	22.59%	7,348	0.55%	40	35.58%	0.84	3,676	50%	14	
0.75 to < 2.50	3,314	4,586	22.67%	3,489	1.29%	80	36.39%	2.00	2,930	84%	16	
2.50 to < 10.00	72	614	26.82%	237	3.28%	17	38.31%	0.91	257	109%	3	
10.00 to < 100.00	–	16	13.00%	3	13.77%	3	20.62%	1.00	3	105%	–	
100.00 (Default)	–	–	0.00%	–	0.00%	–	0.00%	–	–	0%	–	
Sub-total	271,953	72,657	13.88%	290,432	0.08%	319	44.59%	1.09	42,905	15%	87	810
Portfolio (iii) – Corporate – Other												
0.00 to < 0.15	63,252	73,835	29.24%	95,640	0.08%	426	48.34%	1.86	23,121	24%	38	
0.15 to < 0.25	22,356	15,114	19.54%	23,743	0.22%	232	48.10%	1.99	10,029	42%	25	
0.25 to < 0.50	15,178	8,544	36.70%	18,332	0.39%	215	26.00%	2.50	5,876	32%	19	
0.50 to < 0.75	17,061	19,119	16.73%	22,737	0.60%	287	36.88%	2.07	11,700	51%	49	
0.75 to < 2.50	29,993	16,065	17.36%	27,904	1.41%	586	37.91%	1.72	20,509	74%	149	
2.50 to < 10.00	24,909	16,057	21.27%	13,547	4.44%	381	36.42%	1.61	13,936	103%	213	
10.00 to < 100.00	7,292	1,820	15.88%	6,561	28.85%	447	34.20%	2.58	11,519	176%	390	
100.00 (Default)	1,594	107	4.97%	1,600	100.00%	90	34.38%	2.80	2,930	183%	443	
Sub-total	181,635	150,661	24.81%	210,064	2.30%	2,664	42.42%	1.95	99,620	47%	1,326	2,083

8 Credit risk for non-securitization exposures (continued)

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

At 31 December 2018 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 (iv) – Corporate – Small-and-medium sized corporates												
0.00 to < 0.15	–	–	0.00%	–	–	–	0.00%	–	–	0%	–	
0.15 to < 0.25	231	221	15.80%	266	0.21%	134	60.51%	2.19	126	47%	–	
0.25 to < 0.50	431	400	19.69%	510	0.30%	103	26.41%	1.51	126	25%	–	
0.50 to < 0.75	1,743	524	17.23%	1,833	0.60%	161	20.67%	1.36	461	25%	2	
0.75 to < 2.50	3,949	1,961	15.42%	4,250	1.39%	733	29.22%	1.90	2,189	52%	17	
2.50 to < 10.00	1,712	1,559	22.06%	2,046	4.11%	306	24.18%	1.27	1,208	59%	21	
10.00 to < 100.00	658	283	18.34%	706	36.32%	80	32.36%	1.16	1,333	189%	53	
100.00 (Default)	181	74	0.09%	181	100.00%	110	58.43%	1.35	105	58%	140	
Sub-total	8,905	5,022	17.96%	9,792	6.06%	1,627	28.04%	1.59	5,548	57%	233	239
Portfolio (v) – Retail – QRRE												
0.00 to < 0.15	5,414	89,313	46.91%	47,312	0.08%	690,803	90.00%	–	1,998	4%	32	
0.15 to < 0.25	–	–	0.00%	–	0.00%	–	0.00%	–	–	0%	–	
0.25 to < 0.50	1,095	9,512	49.30%	5,785	0.29%	76,291	90.00%	–	750	13%	15	
0.50 to < 0.75	1,691	18,581	48.52%	10,706	0.68%	134,539	90.00%	–	2,736	26%	65	
0.75 to < 2.50	1,478	5,253	52.59%	4,241	1.49%	46,652	90.00%	–	1,952	46%	57	
2.50 to < 10.00	2,057	2,517	62.50%	3,630	5.11%	35,934	90.00%	–	3,862	106%	167	
10.00 to < 100.00	673	218	75.39%	837	23.47%	7,505	90.00%	–	1,816	217%	177	
100.00 (Default)	87	–	0.00%	87	100.00%	921	60.12%	–	62	71%	48	
Sub-total	12,495	125,394	47.93%	72,598	0.91%	992,645	89.96%	–	13,176	18%	561	218
Portfolio (vi) – Retail – Residential mortgage exposures												
0.00 to < 0.15	151,534	247	100.00%	151,781	0.09%	53,037	11.03%	–	25,554	17%	14	
0.15 to < 0.25	43,191	3,127	100.00%	46,318	0.21%	12,343	13.43%	–	9,663	21%	13	
0.25 to < 0.50	4,560	4	100.00%	4,564	0.36%	1,573	11.65%	–	764	17%	2	
0.50 to < 0.75	6,606	14	100.00%	6,620	0.55%	2,265	11.54%	–	1,122	17%	4	
0.75 to < 2.50	6,275	34	100.00%	6,309	1.25%	2,131	11.61%	–	1,236	20%	9	
2.50 to < 10.00	1,450	1	100.00%	1,451	3.78%	428	11.33%	–	456	31%	6	
10.00 to < 100.00	193	–	100.00%	194	25.64%	63	13.23%	–	139	72%	7	
100.00 (Default)	172	–	100.00%	172	100.00%	127	10.00%	–	157	92%	5	
Sub-total	213,981	3,427	100.00%	217,409	0.29%	71,967	11.59%	–	39,091	18%	60	648

8 Credit risk for non-securitization exposures (continued)

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

At 31 December 2018 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 business retail exposures												
0.00 to < 0.15	–	–	0.00%	–	–	–	0.00%	–	–	0%	–	
0.15 to < 0.25	174	–	0.00%	174	0.20%	251	86.45%	1.63	61	35%	–	
0.25 to < 0.50	170	–	0.00%	170	0.38%	214	85.86%	1.91	88	52%	1	
0.50 to < 0.75	195	–	0.00%	195	0.63%	270	86.67%	1.76	137	70%	1	
0.75 to < 2.50	1,434	–	0.00%	1,434	1.44%	1,672	86.57%	1.90	1,415	99%	18	
2.50 to < 10.00	501	–	100.00%	501	4.08%	655	86.56%	1.81	623	124%	18	
10.00 to < 100.00	97	–	0.00%	97	38.11%	213	86.67%	1.63	160	165%	32	
100.00 (Default)	3	–	0.00%	3	100.00%	237	89.70%	1.38	6	182%	2	
Sub-total	2,574	–	100.00%	2,574	3.24%	3,512	86.53%	1.84	2,490	97%	72	41
Portfolio (viii) – Other retail exposures to individuals												
0.00 to < 0.15	160	3,350	45.97%	1,700	0.08%	3,085	90.05%	–	307	18%	1	
0.15 to < 0.25	591	715	0.12%	592	0.23%	2,807	97.00%	–	255	43%	1	
0.25 to < 0.50	2,804	4,514	56.85%	5,370	0.37%	19,219	90.87%	–	2,949	55%	18	
0.50 to < 0.75	363	1,453	42.97%	988	0.68%	2,044	91.72%	–	768	78%	6	
0.75 to < 2.50	4,209	3,505	42.23%	5,689	1.21%	17,420	92.77%	–	5,689	100%	64	
2.50 to < 10.00	6,785	4,092	70.63%	9,675	3.33%	26,913	91.29%	–	12,347	128%	295	
10.00 to < 100.00	825	349	52.23%	1,007	18.40%	3,591	92.20%	–	1,842	183%	171	
100.00 (Default)	30	–	0.00%	30	100.00%	225	68.55%	–	29	96%	18	
Sub-total	15,767	17,978	51.64%	25,051	2.54%	75,304	91.61%	–	24,186	97%	574	401
Total (all portfolios subject to the IRB approaches)	859,576	376,446	32.32%	981,239	0.78%	1,148,067	41.55%	0.96	236,265	24%	2,929	4,594

The increase in risk weights in Sovereign and Bank in second half of 2018 was mainly driven by the model updates.

8 Credit risk for non-securitization exposures (continued)

I. 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 2018	*(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)	4,952	4,952
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	5,548	5,548
7	Corporate – Other corporates	99,622	99,622
8	Sovereigns	9,039	9,039
9	Sovereign foreign public sector entities	210	210
10	Multilateral development banks	–	–
11	Bank exposures – Banks	37,422	37,422
12	Bank exposures – Securities firms	4,398	4,398
13	Bank exposures – Public sector entities (excluding sovereign foreign public sector entities)	1,084	1,084
14	Retail – Small business retail exposures	2,491	2,491
15	Retail – Residential mortgages to individuals	37,025	37,025
16	Retail – Residential mortgages to property-holding shell companies	2,066	2,066
17	Retail – Qualifying revolving retail exposures (QRRE)	13,175	13,175
18	Retail – Other retail exposures to individuals	24,185	24,185
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	10	10
27	Other – Other items	37,332	37,332
28	**Total (under the IRB calculation approaches)**	278,559	278,559

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

8 Credit risk for non-securitization exposures (continued)

m. 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. There was no material change in credit risk RWA under IRB approach during the period.

		(a) *Amount* *HK$'M*
1	**RWA as at end of previous reporting period (30 September 2018)**	276,006
2	Asset size	825
3	Asset quality	1,755
4	Model updates	–
5	Methodology and policy	–
6	Acquisitions and disposals	–
7	Foreign exchange movements	(36)
8	Other	–
9	**RWA as at end of reporting period (31 December 2018)**	**278,550**

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

The following table sets out the comparison between observed and predicted PD, LGD and EAD.

Observed vs. Predicted PD, LGD and EAD

2018	PD (%)		LGD (%)		EAD Ratio
Asset Class	Observed	Predicted	Observed	Predicted	Observed /Predicted)
Sovereigns	0.00	0.04	N/A	N/A	N/A
Banks	0.00	0.86	N/A	N/A	N/A
Corporates	1.02	2.55	13.57	35.55	0.90
Qualifying revolving retail exposures (QRRE)	0.25	0.69	62.79	71.63	0.87
Residential mortgages	0.03	0.20	4.92	14.25	0.99
Small business retail exposures	2.58	3.42	84.97	86.40	0.95
Other retail exposures to individuals	1.23	2.50	83.87	90.19	0.83

2017	PD (%)		LGD (%)		EAD Ratio
Asset Class	Observed	Predicted	Observed	Predicted	Observed /Predicted)
Sovereigns	0.00	0.02	N/A	N/A	N/A
Banks	0.00	0.78	N/A	N/A	N/A
Corporates	1.47	2.79	48.68	64.57	0.88
Qualifying revolving retail exposures (QRRE)	0.37	0.54	67.83	65.55	0.90
Residential mortgages	0.03	0.28	2.40	17.77	0.98
Small business retail exposures	2.30	3.08	83.72	87.21	0.92
Other retail exposures to individuals	1.26	2.61	85.93	85.01	0.85

8 Credit risk for non-securitization exposures (continued)

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

The following table sets out 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)* PD Range (as of 31 December 2017)	*(c)* External rating equivalent	*(d)* Weighted average PD	*(e)* Arithmetic average PD by obligors	*(f)* Number of obligors 31 December 2017	Number of obligors 31 December 2018	*(g)* Defaulted obligors in the year	*(h)* Of which: new defaulted obligors in the year	*(i)* Average historical annual default rate[1]
Portfolio (i) – Sovereign			0.02%	0.04%	36	37	–	–	0.00%
	0.00 to < 0.15	AAA to BBB-			35	27			
	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			1	1			
	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%	0.86%	336	399	–	–	0.00%
	0.00 to < 0.15	AAA to BBB-			129	105			
	0.15 to < 0.25	BBB, BBB-			21	12			
	0.25 to < 0.50	BBB-, BB+, BB			31	25			
	0.50 to < 0.75	BB+, BB			47	35			
	0.75 to < 2.50	BB, BB-, B+, B			75	50			
	2.50 to < 10.00	B, B-, CCC, C			30	15			
	10.00 to < 100.00	CCC, C			3	1			
	New obligors acquired during the year	D				156			
Portfolio (iii) – Corporate - Specialized Lending under supervisory slotting criteria approach (object finance)			0.64%	0.61%	72	73	–	–	2.78%[2]
	0.00 to < 0.15	AAA to BBB-			16	11			
	0.15 to < 0.25	BBB, BBB-			17	17			
	0.25 to < 0.50	BBB-, BB+, BB			2	2			
	0.50 to < 0.75	BB+, BB			13	13			
	0.75 to < 2.50	BB, BB-, B+, B			23	22			
	2.50 to < 10.00	B, B-, CCC, C			1	–			
	10.00 to < 100.00	CCC, C			–	–			
	New obligors acquired during the year	D				8			

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

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.

8 Credit risk for non-securitization exposures (continued)

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

(a)	(b) PD Range (as of 31 December 2017)	(c) External rating equivalent	(d) Weighted average PD	(e) Arithmetic average PD by obligors	(f) Number of obligors 31 December 2017	Number of obligors 31 December 2018	(g) Defaulted obligors in the year	(h) Of which: new defaulted obligors in the year	(i) Average historical annual default rate[1]
Portfolio (iv) – Corporate – Small-and-medium sized corporates			3.56%	2.57%	1,420	1,293	17	1	1.68%
	0.00 to < 0.15	AAA to BBB-			2	2			
	0.15 to < 0.25	BBB, BBB-			16	11			
	0.25 to < 0.50	BBB-, BB+, BB			202	164			
	0.50 to < 0.75	BB+, BB			132	108			
	0.75 to < 2.50	BB, BB-, B+, B			653	556			
	2.50 to < 10.00	B, B-, CCC, C			351	277			
	10.00 to < 100.00	CCC, C			64	41			
	New obligors acquired during the year	D				134			
Portfolio (v) – Corporate – Other corporates			0.94%	2.59%[3]	2,432	3,453	25	1	1.33%
	0.00 to < 0.15	AAA to BBB-			363	324			
	0.15 to < 0.25	BBB, BBB-			243	220			
	0.25 to < 0.50	BBB-, BB+, BB			128	113			
	0.50 to < 0.75	BB+, BB			363	304			
	0.75 to < 2.50	BB, BB-, B+, B			673	558			
	2.50 to < 10.00	B, B-, CCC, C			487	388			
	10.00 to < 100.00	CCC, C			175	75			
	New obligors acquired during the year	D				1,471			
Portfolio (vi) – Retail – Qualifying revolving retail exposures			0.84%	0.69%	948,456	993,792	2,449	55	0.32%
	0.00 to < 0.15				650,584	609,289			
	0.15 to < 0.25				–	–			
	0.25 to < 0.50				74,893	71,601			
	0.50 to < 0.75				130,853	124,324			
	0.75 to < 2.50				44,896	42,845			
	2.50 to < 10.00				38,582	34,708			
	10.00 to < 100.00				8,648	7,038			
	New obligors acquired during the year					103,987			

3 Decrease in PD is due to change in customer mix.

8 Credit risk for non-securitization exposures (continued)

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

(a)	(b) PD Range (as of 31 December 2017)	(c) External rating equivalent	(d) Weighted average PD	(e) Arithmetic average PD by obligors	(f) Number of obligors 31 December 2017	Number of obligors 31 December 2018	(g) Defaulted obligors in the year	(h) Of which: new defaulted obligors in the year	(i) Average historical annual default rate[1]
Portfolio (vii) – Retail – Residential mortgage exposures			0.21%	0.20%	75,525	72,748	26	–	0.04%
	0.00 to < 0.15				56,680	47,844			
	0.15 to < 0.25				12,105	10,579			
	0.25 to < 0.50				1,596	1,343			
	0.50 to < 0.75				2,255	1,855			
	0.75 to < 2.50				2,436	2,040			
	2.50 to < 10.00				400	323			
	10.00 to < 100.00				53	38			
	New obligors acquired during the year					8,726			
Portfolio (viii) – Retail – Small business retail exposures			3.05%	3.42%[4]	3,182	2,866	84	2	2.58%
	0.00 to < 0.15				–	–			
	0.15 to < 0.25				1	1			
	0.25 to < 0.50				399	300			
	0.50 to < 0.75				193	140			
	0.75 to < 2.50				1,736	1,419			
	2.50 to < 10.00				728	598			
	10.00 to < 100.00				125	91			
	New obligors acquired during the year					317			
Portfolio (ix) – Retail – Other retail exposures to individuals			2.34%	2.50%	78,729	74,662	982	13	1.66%
	0.00 to < 0.15				2,854	2,692			
	0.15 to < 0.25				3,220	1,417			
	0.25 to < 0.50				19,433	18,069			
	0.50 to < 0.75				1,973	1,630			
	0.75 to < 2.50				18,891	15,334			
	2.50 to < 10.00				28,600	26,012			
	10.00 to < 100.00				3,758	2,906			
	New obligors acquired during the year					6,602			

4 Increase in PD is due to downgrade of a few clients during the period.

Please refer to note 8j (CRE) for the explanation on back-testing results.

8 Credit risk for non-securitization exposures (continued)

o. Specialized lending under supervisory slotting criteria approach and equities under simple risk-weight method – for IRB approach (CR10)

The following table sets out the quantitative information in respect of specialized lending under the supervisory slotting criteria approach. Decrease in RWA under supervisory slotting criteria approach in second half of 2018 was driven by change in customer mix.

Specialized Lending under supervisory slotting criteria approach – Other than HVCRE

At 31 December 2018		(a)	(b)	(c)	(d)(i)	(d)(ii)	(d)(iii)	(d)(iv)	(d)(v)	(e)	(f)
		On-balance sheet exposure amount	*Off-balance sheet exposure amount*		*EAD amount*						*Expected loss amount*
Supervisory Rating Grade	*Remaining Maturity*	*HK$'M*	*HK$'M*	*SRW*	*PF HK$'M*	*OF HK$'M*	*CF HK$'M*	*IPRE HK$'M*	*Total HK$'M*	*RWA HK$'M*	*HK$'M*
Strong^	Less than 2.5 years	526	51	50%	–	544	–	–	544	272	–
Strong	Equal to or more than 2.5 years	3,620	496	70%	–	3,776	–	–	3,776	2,644	15
Good^	Less than 2.5 years	290	5	70%	–	290	–	–	290	203	1
Good	Equal to or more than 2.5 years	1,090	39	90%	–	1,090	–	–	1,090	981	9
Satisfactory		741	27	115%	–	741	–	–	741	852	21
Weak		–	–	250%	–	–	–	–	–	–	–
Default		–	–	0%	–	–	–	–	–	–	–
Total		6,267	618		–	6,441	–	–	6,441	4,952	46

^ Use of preferential risk-weights.

9 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 a 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 Bank at the time has a claim on the counterparty. CCR arises predominantly in the trading book, but also arises in the non-trading book when hedging with external counterparties is required.

CCR is managed within the overall credit risk appetite for corporate and financial institutions. CCR limits are set for individual counterparties, including central clearing counterparties, and for specific portfolios. Individual limits are calibrated to the credit grade and business model of the counterparties, and are set on Potential Future Exposure (PFE). Portfolio limits are set to contain concentration risk across multiple dimensions, and are set on PFE or other equivalent measures.

The Bank reduces its credit exposures to counterparties by entering into contractual netting agreements where feasible. This results 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 Bank and the MTM owed by the Bank to the counterparty on the transactions covered by the netting agreement. In line with the International Accounting Standard (IAS) 32 principles, the Bank's balance sheet will present assets and liabilities on a net basis provided there is a legally enforceable right to set off assets and liabilities, and the Bank intends to settle on a net basis or realise the asset and liability simultaneously.

9 Counterparty Credit risk (continued)

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

The Bank seeks to negotiate Credit Support Annexes (CSAs) with counterparties when collateral is deemed a necessary or desirable mitigant to the exposure.

The MTM of all trades captured under CSAs is calculated daily. Additional collateral will be called from the counterparty if total uncollateralised MTM exposure exceeds the threshold and minimum transfer amount specified in the CSA. Additional collateral may be required from the counterparty to provide an extra buffer to the daily variation margin process.

The Bank does not negotiate CSA terms where thresholds related to each party are dependent on their ECAI long-term rating. As a result, a downgrade in the Bank's rating would not result in counterparties seeking additional collateral calls to cover negative MTM portfolios where thresholds are lowered.

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 Bank, the driver of this MTM change also reduces the ability of the counterparty to meet its payment, margin call or collateral posting requirements. Wrong-way risk mostly arises from FX transactions and financing transactions. The Bank employs various policies and procedures to ensure that wrong-way risk exposures are recognised upfront, monitored, and where required, contained by limits on country, tenor, collateral type and counterparty.

Stress Testing

Stress testing is an integral part of CCR management, complementing PFE or other portfolio limits. Single and multi-factor scenarios are regularly applied to the CCR portfolio to identify and quantify exposures that could become a concern for the Bank. The stressed exposures are monitored monthly at regional and global counterparty credit risk exposure forums. The relevance and severity of the stress scenarios are periodically reviewed with cross functional stakeholders.

Exposure value calculation

Exposure calculation used for risk management is based on PFE. The PFE is mostly calculated from simulation models, and from PFE add-ons for the non-simulated products.

Derivatives exposures are calculated using the Mark-to-Market Method. Individual transactions are measured using the sum of current replacement cost and potential future credit exposure, and the benefit of master netting agreements is applied using the Net-Gross Ratio. Exposure for repurchase transactions and securities lending or borrowing transactions is calculated using the Financial Collateral Comprehensive Method. Supervisory volatility adjustments are applied to both collateral and exposure legs and the benefit of master netting agreements is taken into consideration.

The Bank has credit policies and procedures setting out the criteria for collateral to be recognised as a credit risk mitigant, including requirements concerning legal certainty, priority, concentration, correlation, liquidity and valuation parameters such as frequency of review and independence.

The Bank also has policies and procedures in place setting out the criteria for guarantees to be recognised as a credit risk mitigant. Where guarantees meet regulatory criteria, the Bank treats the exposure as guarantor risk from counterparty credit risk capital standpoint.

9 Counterparty Credit risk (continued)

Credit valuation adjustments

Credit valuation adjustments (CVA) measures potential MTM loss associated with the deterioration in the creditworthiness of the counterparty. The Bank applies standardised approach to calculate CVA capital charge on over-the-counter derivative contracts.

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.

		(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
		Replacement cost (RC)	*PFE*	*Effective EPE*	*Alpha (α) used for computing default risk exposure*	*Default risk exposure after CRM*	*RWA*
	At 31 December 2018	*HK$'M*		*%*		*HK$'M*	*HK$'M*
1	SA-CCR (for derivative contracts)				1.4	–	–
1a	CEM	4,647	17,344		0.0	21,992	6,650
2	IMM (CCR) approach					–	–
3	Simple Approach (for SFTs)					–	–
4	Comprehensive Approach (for SFTs)					65,498	3,005
5	VaR (for SFTs)					–	–
6	**Total**						**9,655**

Decrease in default risk exposure after CRM under comprehensive approach for SFTs in second half of 2018 was driven by less repo transactions. Increase in RWA in second half of 2018 was mainly driven by the model changes.

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.

		(a)	*(b)*
		EAD post CRM	*RWA*
	At 31 December 2018	*HK$'M*	*HK$'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	21,992	4,181
4	**Total**	**21,992**	**4,181**

There was no material change in portfolios subject to the CVA capital charge in the second half of 2018.

9 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 (the latter representing the riskiness attributed to the exposure according to the respective approaches), irrespective of the approach used to determine the amount of default risk exposures.

	At 31 December 2018	*(a)*	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*	*(g)*	*(h)*	*(i)*	*(j)*	*(k)*
	Risk Weight	*0%*	*10%*	*20%*	*35%*	*50%*	*75%*	*100%*	*150%*	*250%*	*Others*	*Total default risk exposure after CRM*
	Exposure class	*HK$'M*	*HK$'M*	*HK$'M*	*HK$'M*	*HK$'M*	*HK$'M*	*HK$'M*	*HK$'M*	*HK$'M*	*HK$'M*	*HK$'M*
1	Sovereign exposures	–	–	–	–	–	–	–	–	–	–	–
2	PSE exposures	–	–	–	–	–	–	–	–	–	–	–
2a	*– Of which: domestic PSEs*	–	–	–	–	–	–	–	–	–	–	–
2b	*– Of which: foreign PSEs*	–	–	–	–	–	–	–	–	–	–	–
3	Multilateral development bank exposures	–	–	–	–	–	–	–	–	–	–	–
4	Bank exposures	–	–	–	–	223	–	–	–	–	–	**223**
5	Securities firm exposures	–	–	–	–	–	–	–	–	–	–	**–**
6	Corporate exposures	–	–	–	–	–	–	569	–	–	–	**569**
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**	–	–	–	–	**223**	**–**	**569**	–	–	–	**792**

There was no material change across risk weight buckets by exposure class in the second half of 2018.

9 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 2018 *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	0.01%	1	45.00%	1.00	0	3%
0.15 to < 0.25	–	0.00%	–	0.00%	–	–	0%
0.25 to < 0.50	–	0.00%	–	0.00%	–	–	0%
0.50 to < 0.75	–	0.00%	–	0.00%	–	–	0%
0.75 to < 2.50	–	0.00%	–	0.00%	–	–	0%
2.50 to < 10.00	–	0.00%	–	0.00%	–	–	0%
10.00 to < 100.00	–	0.00%	–	0.00%	–	–	0%
100.00 (Default)	–	0.00%	–	0.00%	–	–	0%
Sub-total	0	0.01%	1	45.00%	1.00	0	3%
Portfolio (ii) – Bank							
0.00 to < 0.15	69,903	0.04%	24	18.19%	0.39	3,958	6%
0.15 to < 0.25	8,776	0.22%	5	27.22%	0.17	1,747	20%
0.25 to < 0.50	1,967	0.39%	8	9.44%	1.04	236	12%
0.50 to < 0.75	2,040	0.66%	11	9.39%	1.04	337	17%
0.75 to < 2.50	809	1.51%	6	15.34%	1.00	241	30%
2.50 to < 10.00	145	2.73%	4	5.00%	1.00	17	12%
10.00 to < 100.00	–	0.00%	–	0.00%	–	–	0%
100.00 (Default)	–	0.00%	–	0.00%	–	–	0%
Sub-total	83,640	0.10%	58	18.66%	0.40	6,536	8%
Portfolio (iii) – Corporate							
0.00 to < 0.15	1,427	0.10%	45	68.60%	2.11	606	42%
0.15 to < 0.25	60	0.22%	12	65.20%	1.07	30	50%
0.25 to < 0.50	45	0.37%	17	67.73%	1.65	34	77%
0.50 to < 0.75	915	0.54%	33	67.32%	1.18	775	85%
0.75 to < 2.50	464	1.49%	46	68.80%	1.31	700	151%
2.50 to < 10.00	147	4.96%	31	68.67%	1.04	293	200%
10.00 to < 100.00	0	13.77%	6	67.43%	1.00	0	298%
100.00 (Default)	–	0.00%	–	0.00%	–	–	0%
Sub-total	3,058	0.68%	190	68.17%	1.63	2,438	80%
Total (all portfolios subject to the IRB approaches)	86,698	0.12%	249	20.41%	0.45	8,974	10%

* Counterparty default risk exposures post-CRM decreased mainly driven by less SFT transactions with Bank customers. Increase in average LGD was mainly driven by the model updates in the second half of 2018.

9 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.

	(a)	(b)	(c)	(d)	(e)	(f)
	Derivative contracts				SFTs	
At 31 December 2018	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		
	HK$'M	HK$'M	HK$'M	HK$'M	HK$'M	HK$'M
Cash – domestic currency	–	–	–	–	–	4,116
Cash – other currencies	–	–	–	–	11	61,369
Domestic sovereign debt	–	–	–	–	–	–
Other sovereign debt	–	–	–	–	47,677	–
Government agency debt	–	–	–	–	–	–
Corporate bonds	–	–	–	–	1,420	14
Equity securities	–	–	–	–	3,866	–
Other collateral	–	–	–	–	–	–
Total	**–**	**–**	**–**	**–**	**52,974**	**65,499**

* Fair value of collateral posted and received decreased in second half of 2018 mainly driven by less repo transactions.

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 2018	(a) Protection bought HK$'M	(b) Protection sold HK$'M
Notional amounts		
Single-name credit default swaps	–	–
Index credit default swaps	–	–
Total return swaps	4,203	672
Credit-related options	–	–
Other credit-related derivative contracts	–	–
Total notional amounts	**4,203**	**672**
Fair values		
Positive fair value (asset)	33	–
Negative fair value (liability)	(1,260)	(33)

The main driver for the movement was the investment decision and requirement in the normal course of business.

9 Counterparty Credit risk (continued)

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 2018	*(a)* *Exposure after CRM HK$'M*	*(b)* *RWA HK$'M*
1	**Exposures of the Bank 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 Bank 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	–	–

10 Securitization exposures

a. Qualitative disclosures related to securitization exposure (SECA)

Securitisation activities are undertaken by the Bank for risk-taking purpose by various businesses acting as investors. The Bank adopts the SEC-ERBA approach to calculate the credit risk for asset securitisations in which it is an investing institution. There was no asset securitisations for which the Bank was an originating institution under the regulatory consolidation scope.

The Bank uses the following external credit assessment institutions to calculate the capital adequacy requirements: S & P, Moody's and Fitch Ratings.

The Bank's securitisation exposures are measured in accordance with the accounting policy described in note 2(i) of the 2018 consolidated financial statements.

The securitised assets have appropriate credit and market risk limits in place with exposures being monitored against these limits. There is also a periodic performance analysis of the underlying collateral pools through review of trustee reports, market research and monitoring the changes of their external ratings. In addition, for Corporate & Institutional Banking and Commercial Banking clients, there is an internal credit model in place to measure any change in the performance of the underlying collateral pools.

b. Securitization exposures in banking book (SEC1)

The following table sets out a breakdown of securitization exposures in the banking book.

		(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*	*(g)*	*(h)*	*(i)*
		Acting as originator (excluding sponsor)			*Acting as sponsor*			*Acting as investor*		
		Traditional	*Synthetic*	*Sub-total*	*Traditional*	*Synthetic*	*Sub-total*	*Traditional*	*Synthetic*	*Sub-total*
1	Retail (total) – of which:	–	–	–	–	–	–	13,396	–	13,396
2	residential mortgage	–	–	–	–	–	–	7,756	–	7,756
3	credit card	–	–	–	–	–	–	535	–	535
4	other retail exposures	–	–	–	–	–	–	5,105	–	5,105
5	re-securitization exposures	–	–	–	–	–	–	–	–	–
7	Wholesale (total) – of which:	–	–	–	–	–	–	72	–	72
8	loans to corporates	–	–	–	–	–	–	–	–	–
6	commercial mortgage	–	–	–	–	–	–	72	–	72
9	lease and receivables	–	–	–	–	–	–	–	–	–
10	other wholesale	–	–	–	–	–	–	–	–	–
11	re-securitization exposures	–	–	–	–	–	–	–	–	–

The movement in second half of 2018 was mainly driven by the change in portfolio mix in the ordinary course of business.

10 Securitization exposures (continued)

c. Securitization exposures in trading book (SEC2)

The following table sets out a breakdown of securitization exposures in the trading book.

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
		Acting as originator (excluding sponsor)			Acting as sponsor			Acting as investor		
		Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
1	Retail (total) – of which:	–	–	–	–	–	–	1,035	–	1,035
2	residential mortgage	–	–	–	–	–	–	839	–	839
3	credit card	–	–	–	–	–	–	53	–	53
4	other retail exposures	–	–	–	–	–	–	143	–	143
5	re-securitization exposures	–	–	–	–	–	–	–	–	–
6	Wholesale (total) – of which:	–	–	–	–	–	–	187	–	187
7	loans to corporates	–	–	–	–	–	–	94	–	94
8	commercial mortgage	–	–	–	–	–	–	–	–	–
9	lease and receivables	–	–	–	–	–	–	–	–	–
10	other wholesale	–	–	–	–	–	–	93	–	93
11	re-securitization exposures	–	–	–	–	–	–	–	–	–

The movement in second half of 2018 was mainly driven by the investment decision of the business in the ordinary course of business.

d. Securitization exposures in banking book and associated capital requirements – where the Bank acts as investor (SEC4)

The following table sets out the securitization exposures in the banking book where an AI acts as an investing institution of securitization transactions and the associated capital requirements.

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
		Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap			
		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	SEC-IRBA	SEC-ERBA	SEC-SA	SEC-FBA	SEC-IRBA	SEC-ERBA	SEC-SA	SEC-FBA	SEC-IRBA	SEC-ERBA	SEC-SA	SEC-FBA
1	**Total exposures**	**10,800**	**1,050**	**339**	**1,279**	**–**	**–**	**13,468**	**–**	**–**	**–**	**4,171**	**–**	**–**	**–**	**334**	**–**	**–**
2	Traditional securitization	**10,800**	**1,050**	**339**	**1,279**	**–**	**–**	**13,468**	**–**	**–**	**–**	**4,171**	**–**	**–**	**–**	**334**	**–**	**–**
3	*Of which securitization*	***10,800***	***1,050***	**339**	**1,279**	**–**	**–**	**13,468**	**–**	**–**	**–**	**4,171**	**–**	**–**	**–**	**334**	**–**	**–**
4	*Of which retail underlying*	*10,800*	*1,050*	267	1,279	–	–	13,396	–	–	–	4,122	–	–	–	330	–	–
5	*Of which wholesale*	–	–	72	–	–	–	72	–	–	–	49	–	–	–	4	–	–
6	*Of which re-securitization*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7	*Of which senior*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8	*Of which non-senior*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
9	Synthetic securitization	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
10	*Of which securitization*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11	*Of which retail underlying*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12	*Of which wholesale*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13	*Of which re-securitization*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14	*Of which senior*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15	*Of which non-senior*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

The increase in RWA in second half of 2018 was in line with the increase in securitization exposures.

11 Market risk

a. Qualitative disclosures related to market risk (MRA)

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 34 (c) on pages 118 to 120 of the 2018 consolidated financial statements.

b. 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 2018	*(a)* *RWA* *HK$'M*
	Outright product exposures	
1	Interest rate exposures (general and specific risk)	21,054
2	Equity exposures (general and specific risk)	–
3	Foreign exchange (including gold) exposures	1,721
4	Commodity exposures	–
	Option exposures	
5	Simplified approach	–
6	Delta-plus approach	–
7	Other approach	–
8	Securitization exposures	757
9	**Total**	**23,532**

Increase in Market Risk RWA from foreign exchange exposures in second half of 2018 was mainly driven by the increase in net open position.

c. Market risk exposures on guaranteed retirement funds

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. As of 31 December 2018, the accounting provisions exceed the potential shortfalls, hence there are no additional capital requirements.

12 Interest rate exposure in the banking book (IRRBB)

Interest rate risk in the Banking Book represents the potential for loss of future earnings or economic value following adverse movement in interest rates, which arises from mismatch in the re-pricing profile of assets, liabilities, and off-balance sheet items 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*
2018	1,687	473	(198)	130	4

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 repriced 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.

13 Remuneration (REMA/REM1/REM2/REM3)

Pursuant to section 3 of CG-5 on Guideline on a Sound Remuneration System of the Supervisory Policy manual issued by the HKMA and to comply with the Banking (Disclosure) Rules section 16ZS-16ZV, the following disclosures are made:

a) Information relating to the governance structure of the remuneration system

b) Information relating to the design and structure of the remuneration processes

c) Description of the ways in which current and future risks are taken into account in the remuneration processes

d) Description of the ways in which the Bank seeks to link performance during a performance measurement period with levels of remuneration

e) Description of the ways in which the Bank seeks to adjust remuneration to take account of longer-term performance

f) Description of the different forms of variable remuneration that the Bank utilises and the rationale for using these different forms

13 Remuneration (REMA/REM1/REM2/REM3) (continued)

g) Number of meetings held by the Board Remuneration Committees during the financial year and remuneration paid to the staff

The Bank adopts the remuneration policy and systems of SCPLC. Please refer to the Directors' Remuneration Report in the Annual Report of SCPLC for details of the Board Remuneration Committee, the major characteristics of the remuneration system, and how risks are taken into account in the remuneration processes.

h) Aggregate quantitative information on remuneration for Senior Management and Key Personnel (note 1) for the year ended 31 December 2018 and 31 December 2017 are as follows:

Analysis of remuneration split between fixed and variable remuneration

	2018		*2017*	
	Senior Management HK$'000	*Key Personnel HK$'000*	*Senior Management HK$'000*	*Key Personnel HK$'000*
Fixed remuneration				
– Cash-based	49,491	48,075	31,606	51,592
– Shares and share-linked instruments	–	–	–	–
– Others	–	–	–	–
Variable remuneration				
– Up front cash	12,821	13,774	8,357	14,985
– Up front shares	9,447	7,686	6,498	6,151
– Deferred cash	11,309	8,154	9,981	5,848
– Deferred shares:				
– Restricted shares	12,718	9,300	10,891	6,676
– Performance shares	–	–	–	–
– Others	–	–	–	–
Total remuneration	95,786	86,989	67,333	85,252
Number of staff at 31 December	11	15	8	18

Analysis of deferred remuneration (note 2)

	2018		*2017*	
	Senior Management HK$'000	*Key Personnel HK$'000*	*Senior Management HK$'000*	*Key Personnel HK$'000*
At 1 January	48,563	58,714	24,062	43,645
Dividends granted	450	554	–	–
Awarded during the year	24,028	17,454	20,872	12,524
Paid out during the year	(9,682)	(8,865)	(3,273)	(5,071)
Vested and lapsed during the year	–	–	–	–
Not vested due to performance adjustment	–	–	(2,893)	(2,447)
At 31 December	63,359	67,857	38,768	48,651
Vested during the year	9,372	10,124	2,133	8,498

13 Remuneration (REMA/REM1/REM2/REM3) (continued)

Analysis of total amount of outstanding deferred remuneration

	2018		*2017*	
	Senior Management HK$'000	*Key Personnel HK$'000*	*Senior Management HK$'000*	*Key Personnel HK$'000*
At 31 December				
– Vested	2,745	11,738	2,273	12,817
– Not-vested	60,614	56,119	36,495	35,833
	63,359	67,857	38,768	48,650
At 31 December				
– Cash	19,294	15,699	10,792	8,806
– Shares	44,065	52,158	27,976	39,844
– Cash-linked instruments	–	–	–	–
– Other	–	–	–	–
	63,359	67,857	38,768	48,650
Total amount of remuneration exposed to ex post explicit and/ or implicit adjustments (note 3)				
– Deferred remuneration (outstanding)	63,359	67,857	38,768	48,650
– Retained remuneration	4,359	3,920	2,613	3,459

Analysis of adjustments of deferred remuneration

	2018		*2017*	
	Senior Management HK$'000	*Key Personnel HK$'000*	*Senior Management HK$'000*	*Key Personnel HK$'000*
Total amount of adjustments during the financial year due to				
– ex post explicit adjustments	–	–	(2,893)	(2,447)
– ex post implicit adjustments	(12,284)	(13,997)	5,411	6,797

13 Remuneration (REMA/REM1/REM2/REM3) (continued)

Analysis of guaranteed bonuses, sign-on awards and severance payments during the year

	2018		*2017*	
	Senior Management HK$'000	*Key Personnel HK$'000*	*Senior Management HK$'000*	*Key Personnel HK$'000*
Guaranteed bonuses awarded	–	–	2,400	–
Sign-on awards made	–	–	–	–
Severance payments awarded and made	–	–	–	–
Highest severance payments awarded	–	–	–	–
Number of beneficiaries of guaranteed bonuses awarded	–	–	1	–
Number of beneficiaries of sign-on awards made	–	–	–	–
Number of beneficiaries of severance payments awarded and made	–	–	–	–

Note 1: As defined in the CG-5 Guideline on a Sound Remuneration System issued by the HKMA, senior management are those who are responsible for oversight of either the Bank's company-wide strategy or activities or those of the Bank's material business lines. Key Personnel are individual employees whose duties or activities in the course of their employment involve the assumption of material risk or the taking on of material exposures on behalf of the Bank.

Note 2: The population of Senior Management and Key Personnel in 2018 differs from that of 2017.

Note 3: Ex post adjustments are adjustments made after the awards are granted.

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 34(g) on pages 132 to 133 of the 2018 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 into two categories: (i) non-trading financial assets mandatorily at fair value through profit or loss and (ii) fair value through other comprehensive income/available-for-sale securities. These securities are reported on the balance sheet as "Financial assets at fair value through profit or loss" and "Investment securities" respectively.

These securities are measured at fair value as described in note 2(i) of the 2018 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.

	2018 *HK$'M*	*2017* *HK$'M*
Cumulative realised (loss)/gains on disposal recognised in income statement	–	(1)
Unrealised gains recognised in income statement	67	–
Unrealised gains recognised in reserves but not through the income statement	92	133

16 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:

	2018 *HK$'M*	*2017* *HK$'M*
Insurance services	1,344	1,311
Financial market products	2,603	2,500
Investment services	1,294	1,125

17 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 2018	*Banks* *HK$'M*	*Official Sector* *HK$'M*	*Non-bank Financial institution* *HK$'M*	*Non-financial private sector* *HK$'M*	*Total* *HK$'M*
Developed countries	141,933	33,767	8,001	28,609	212,310
Offshore centres	18,373	350	22,859	72,457	114,039
– of which Hong Kong SAR	9,702	350	18,638	58,206	86,896
Developing Asia and Pacific	189,358	3,039	4,552	40,807	237,756
– of which China	148,439	2,270	3,357	29,229	183,295

18 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 2018 HK$'M	*% of advances covered by collateral or other securities*
Gross advances for use in Hong Kong		
Industrial, commercial and financial		
– Property development	11,730	42%
– Property investment	25,587	89%
– Financial concerns	35,676	30%
– Stockbrokers	8,573	49%
– Wholesale and retail trade	11,955	27%
– Manufacturing	25,494	9%
– Transport and transport equipment	6,731	5%
– Recreational activities	1,061	18%
– Information technology	3,831	1%
– Others	22,688	3%
Individuals		
– Advances for the purchase of flats in the Home Ownership Scheme, Private Sector Participation Scheme and Tenants Purchase Scheme	472	100%
– Advances for the purchase of other residential properties	203,465	100%
– Credit card advances	22,125	0%
– Others	30,757	46%
Total gross advances for use in Hong Kong	410,145	
Trade finance	31,270	2%
Trade bills	1,308	10%
Gross advances for use outside Hong Kong	64,490	3%
Gross advances to customers	507,213	53%

As at 31 December 2018, approximately 80 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.

18 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:

	Impaired advances to customers HK$'M	*Overdue advances to customers HK$'M*	*Stage 3 expected credit loss provision HK$'M*	*Stage 1 & 2 expected credit loss provision HK$'M*	*Provision charge HK$'M*
At 31 December 2018					
Advances for the purchase of other residential properties	87	29	–	4	1
Gross advances for use outside Hong Kong	136	–	57	65	109

19 Overdue advances to customers

	At 31 December 2018	
	HK$'M	*% of advances to customers*
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	522	0.10%
1 year or less but over 6 months	278	0.06%
Over 1 year	472	0.09%
	1,272	0.25%

	At 31 December 2018 HK$'M
Fair value of collateral held against the covered portion of overdue advances to customers	727
Covered portion of overdue advances to customers	460
Uncovered portion of overdue advances to customers	812

19 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.

	At 31 December 2018 HK$'M
Individually assessed impairment provision against advances to customers overdue more than 3 months	336

As at 31 December 2018, there were no overdue advances to banks and other financial institutions.

20 Rescheduled advances to customers

	At 31 December 2018	
	HK$'M	*% of advances to customers*
Rescheduled advances to customers	255	0.05%

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 14.

As at 31 December 2018, there were no rescheduled advances to banks and other financial institutions.

21 Mainland Activities

	On-balance sheet exposure HK$'M	*Off-balance sheet exposure HK$'M*	*Total HK$'M*
At 31 December 2018			
(i) Central government, central government-owned entities and their subsidiaries and joint ventures ("JVs")	17,699	1,554	19,253
(ii) Local governments, local government-owned entities and their subsidiaries and JVs	934	436	1,370
(iii) PRC nationals residing in Mainland China or other entities incorporated in Mainland China and their subsidiaries and JVs	41,503	4,182	45,685
(iv) Other entities of central government not reported in item (i) above	545	59	604
(v) Other entities of local governments not reported in item (ii) above	1,802	9	1,811
(vi) PRC nationals residing outside Mainland China or entities incorporated outside Mainland China where the credit is granted for use in Mainland China	34,282	4,392	38,674
(vii) Other counterparties where the exposures are considered by the reporting institution to be non-bank Mainland China exposures	10,832	1,296	12,128
Total	107,597	11,928	119,525
Total assets after provision	1,183,751		
On-balance sheet exposures as percentage of total assets	9.09%		

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
AIRB	Advanced internal ratings-based approach
ALCO	Asset and Liability Committee
ASA	Alternative standardised approach
ASF	Available stable funding
AT1	Additional tier 1
Bank	Standard Chartered Bank (Hong Kong) Limited
BCBS	Basel Committee on Banking Supervision
BCR	Banking (Capital) Rules
BDR	Banking (Disclosure) Rules
BIA	Basic indicator approach
BSC	Basic approach
CCF	Credit conversion factor
CCP	Central counterparty
CCR	Counterparty credit risk
CCyB	Countercyclical capital buffer
CEM	Current exposure method
CET1	Common equity tier 1
CF	Commodities finance
CIS	Collective investment scheme
CRC	Comprehensive risk charge
CRM	Credit risk mitigation
CVA	Credit valuation adjustment
D-SIB	Domestic systematically important authorised institution
DTAs	Deferred tax assets
EAD	Exposure at default
EL	Expected loss
EPE	Expected positive exposure
FBA	Fall-back approach
G-SIB	Global systematically important bank
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
IRC	Incremental risk charge
JCCyB	Jurisdictional countercyclical capital buffer
JVs	Joint ventures
LCR	Liquidity coverage ratio
LGD	Loss given default
LMR	Liquidity Maintenance Ratio
LR	Leverage Ratio
LTA	Look through approach
MBA	Mandate-based approach
MSRs	Mortgage servicing rights
N/A	Not applicable
NSFR	Net stable funding ratio
OF	Object finance
OTC	Over-the-counter
PD	Probability of default
PF	Project finance
PFE	Potential future exposure
PRC	People's Republic of China
PVA	Prudential Valuation Adjustments
PSE	Public sector entity
QRRE	Qualifying revolving retail exposures
RC	Replacement cost
RSF	Required stable funding
RW	Risk-weight
RWA	Risk-weighted asset/risk-weighted amount
S&P	Standard & Poor's
SA-CCR	Standardised approach for counterparty credit risk
SCPLC	Standard Chardered PLC
SEC-ERBA	Securitization external ratings-based approach
SEC-FBA	Securitization fall back approach
SEC-IRBA	Securitization internal ratings-based approach
SEC-SA	Securitization standardised approach
SFT	Securities financing transaction
SME	Small and Medium Enterprises
SRW	Supervisory risk-weights
STC	Standardised (credit risk) approach
STM	Standardised (market risk) approach
STO	Standardised (operational risk) approach
VaR	Value at risk