

Regulatory Disclosures

31 December 2017



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Capital disclosures

Regulatory capital

		At 31 December 2017		
		Component of regulatory capital reported by bank HK\$'000	Amounts subject to pre-BaseI III treatment* HK\$'000	Cross reference to regulatory scope consolidated balance sheet
CET1 capital: instruments and reserves				
1	Directly issued qualifying CET1 capital instruments plus any related share premium	3,144,517		(4)
2	Retained earnings	31,153,712		(5)
3	Disclosed reserves	8,468,546		(7)+(8)+ (9)+(10)
4	<i>Directly issued capital subject to phase out from CET1 capital (only applicable to non-joint stock companies)</i>	Not applicable		
	<i>Public sector capital injections grandfathered until 1 January 2018</i>	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 deductions	42,766,775		
CET1 capital: regulatory deductions				
7	Valuation adjustments	11,037		Not applicable
8	Goodwill (net of associated deferred tax liability)	-		
9	Other intangible assets (net of associated deferred tax liability)	-		
10	Deferred tax assets net of deferred tax liabilities	222,516		(2)
11	Cash flow hedge reserve	-		
12	Excess of total EL amount over total eligible provisions under the IRB approach	-		
13	Gain-on-sale arising from securitization transactions	-		
14	Gains and losses due to changes in own credit risk on fair valued liabilities	277		(1)+(3)
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)	-		
20	Mortgage servicing rights (amount above 10% threshold)	Not applicable		
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability)	Not applicable		
22	Amount exceeding the 15% threshold	Not applicable		
23	of which: significant investments in the common stock of financial sector entities	Not applicable		
24	of which: mortgage servicing rights	Not applicable		
25	of which: deferred tax assets arising from temporary differences	Not applicable		
26	National specific regulatory adjustments applied to CET1 capital	8,961,483		
26a	Cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties)	6,431,695		(6)+(7)
26b	Regulatory reserve for general banking risks	2,529,788		(9)
26c	Securitization exposures specified in a notice given by the Monetary Authority	-		
26d	Cumulative losses below depreciated cost arising from the institution's holdings of land and buildings	-		
26e	Capital shortfall of regulated non-bank subsidiaries	-		
26f	Capital investment in a connected company which is a commercial entity (amount above 15% of the reporting institution's capital base)	-		
27	Regulatory deductions applied to CET1 capital due to insufficient AT1 capital and Tier 2 capital to cover deductions	-		
28	Total regulatory deductions to CET1 capital	9,195,313		
29	CET1 capital	33,571,462		

Capital disclosures (continued)

Regulatory capital (continued)

		At 31 December 2017		
		Component of regulatory capital reported by bank HK\$'000	Amounts subject to pre-Basel III treatment* HK\$'000	Cross reference to regulatory scope consolidated balance sheet
AT1 capital: instruments				
30	Qualifying AT1 capital instruments plus any related share premium	9,314,890		
31	of which: classified as equity under applicable accounting standards	9,314,890		(11)
32	of which: classified as liabilities under applicable accounting standards	-		
33	<i>Capital instruments subject to phase out arrangements from AT1 capital</i>	-		
34	AT1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in AT1 capital of the consolidation group)	-		
35	<i>of which: AT1 capital instruments issued by subsidiaries subject to phase out arrangements</i>	-		
36	AT1 capital before regulatory deductions	9,314,890		
AT1 capital: regulatory deductions				
37	Investments in own AT1 capital instruments	-		
38	Reciprocal cross-holdings in AT1 capital instruments	-		
39	Insignificant capital investments in AT1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	-		
40	Significant capital investments in AT1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	-		
41	National specific regulatory adjustments applied to AT1 capital	-		
41a	Portion of deductions applied 50:50 to core capital and supplementary capital based on pre-Basel III treatment which, during transitional period, remain subject to deduction from Tier 1 capital	-		
i	of which: Excess of total EL amount over total eligible provisions under the IRB approach	-		
ii	of which: Capital shortfall of regulated non-bank subsidiaries	-		
iii	of which: Investments in own CET1 capital instruments	-		
iv	of which: Reciprocal cross holdings in CET1 capital instruments issued by financial sector entities	-		
v	of which: Capital investment in a connected company which is a commercial entity (amount above 15% of the reporting institution's capital base)	-		
vi	of which: Insignificant capital investments in CET1 capital instruments, AT1 capital instruments and Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	-		
vii	of which: Significant capital investments in CET1 capital instruments, AT1 capital instruments and Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	-		
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	9,314,890		
45	Tier 1 capital (Tier 1 = CET1 + AT1)	42,886,352		
Tier 2 capital: instruments and provisions				
46	Qualifying Tier 2 capital instruments plus any related share premium	-		
47	<i>Capital instruments subject to phase out arrangements from Tier 2 capital</i>	-		
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	<i>of which: capital instruments issued by subsidiaries subject to phase out arrangements</i>	-		
50	Collective impairment allowances and regulatory reserve for general banking risks eligible for inclusion in Tier 2 capital	1,815,512		Not applicable
51	Tier 2 capital before regulatory deductions	1,815,512		

Capital disclosures (continued)

Regulatory capital (continued)

		At 31 December 2017		
		Component of regulatory capital reported by bank HK\$'000	Amounts subject to pre-Basel III treatment* HK\$'000	Cross reference to regulatory scope consolidated balance sheet
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	-		
56	National specific regulatory adjustments applied to Tier 2 capital	(2,894,262)		
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	(2,894,262)		[(6)+(7)] *45%
56b	Portion of deductions applied 50:50 to core capital and supplementary capital based on pre-Basel III treatment which, during transitional period, remain subject to deduction from Tier 2 capital	-		
i	of which: Excess of total EL amount over total eligible provisions under the IRB approach	-		
ii	of which: Capital shortfall of regulated non-bank subsidiaries	-		
iii	of which: Investments in own CET1 capital instruments	-		
iv	of which: Reciprocal cross holdings in CET1 capital instruments issued by financial sector entities	-		
v	of which: Capital investment in a connected company which is a commercial entity (amount above 15% of the reporting institution's capital base)	-		
vi	of which: Insignificant capital investments in CET1 capital instruments, AT1 capital instruments and Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	-		
vii	of which: Significant capital investments in CET1 capital instruments, AT1 capital instruments and Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	-		
57	Total regulatory deductions to Tier 2 capital	(2,894,262)		
58	Tier 2 capital	4,709,774		
59	Total capital (Total capital = Tier 1 + Tier 2)	47,596,126		

Capital disclosures (continued)

Regulatory capital (continued)

		At 31 December 2017	
		Component of regulatory capital reported by bank HK\$'000	Amounts subject to pre-Basel III treatment* HK\$'000
59a	Deduction items under Basel III which during transitional period remain subject to risk-weighting, based on pre-Basel III treatment	-	
i	of which: Mortgage servicing rights	-	
ii	of which: Defined benefit pension fund net assets	-	
iii	of which: Investments in own CET1 capital instruments, AT1 capital instruments and Tier 2 capital instruments	-	
iv	of which: Capital investment in a connected company which is a commercial entity	-	
v	of which: Insignificant capital investments in CET1 capital instruments, AT1 capital instruments and Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	-	
vi	of which: Significant capital investments in CET1 capital instruments, AT1 capital instruments and Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	-	
60	Total risk weighted assets	266,464,621	
Capital ratios (as a percentage of risk weighted assets)			
61	CET1 capital ratio	12.60%	
62	Tier 1 capital ratio	16.09%	
63	Total capital ratio	17.86%	
64	Institution specific buffer requirement (minimum CET1 capital requirement as specified in s.3A, or s.3B, as the case requires, of the BCR plus capital conservation buffer plus countercyclical buffer requirements plus G-SIB or D-SIB requirements)	6.36%	
65	of which: capital conservation buffer requirement	1.25%	
66	of which: bank specific countercyclical buffer requirement	0.61%	
67	of which: G-SIB or D-SIB buffer requirement	-	
68	CET1 capital surplus over the minimum CET1 requirement and any CET1 capital used to meet the Tier 1 and Total capital requirement under s.3A, or s.3B, as the case requires, of the BCR	8.10%	
National minima (if different from Basel 3 minimum)			
69	National CET1 minimum ratio	Not applicable	
70	National Tier 1 minimum ratio	Not applicable	
71	National Total capital minimum ratio	Not applicable	
Amounts below the thresholds for deduction (before risk weighting)			
72	Insignificant capital investments in CET1 capital instruments, AT1 capital instruments and Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	15,156	
73	Significant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	6,100	
74	Mortgage servicing rights (net of related tax liability)	Not applicable	
75	Deferred tax assets arising from temporary differences (net of related tax liability)	Not applicable	
Applicable caps on the inclusion of provisions in Tier 2 capital			
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the basic approach and the standardised (credit risk) approach (prior to application of cap)	635,184	
77	Cap on inclusion of provisions in Tier 2 under the basic approach and the standardised (credit risk) approach	537,641	
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the IRB approach (prior to application of cap)	1,871,724	
79	Cap for inclusion of provisions in Tier 2 under the IRB approach	1,277,871	
Capital instruments subject to phase-out arrangements			
80	Current cap on CET1 capital instruments subject to phase out arrangements	Not applicable	
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	Not applicable	
82	Current cap on AT1 capital instruments subject to phase out arrangements	-	
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	-	
85	Amount excluded from Tier 2 capital due to cap (excess over cap after redemptions and maturities)	-	

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

Capital disclosures (continued)

Regulatory capital (continued)

Notes to the template:

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

Row No.	Description	Hong Kong basis HK\$'000	Basel III basis HK\$'000
9	Other intangible assets (net of associated deferred tax liability) <u>Explanation</u> 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 deferred tax liabilities <u>Explanation</u> As set out in paragraphs 69 and 87 of the Basel III text issued by the Basel Committee (December 2010), DTAs that rely on future profitability of the Bank to be realised are to be deducted, whereas DTAs which relate to temporary differences may be given limited recognition in CET1 capital (and hence be excluded from deduction from CET1 capital up to the specified threshold). In Hong Kong, an AI is required to deduct all DTAs in full, irrespective of their origin, from CET1 capital. Therefore, the amount to be deducted as reported in row 10 may be greater than that required under Basel III. The amount reported under the column "Basel III basis" in this box represents the amount reported in row 10 (i.e. the amount reported under the "Hong Kong basis") adjusted by reducing the amount of DTAs to be deducted which relate to temporary differences to the extent not in excess of the 10% threshold set for DTAs arising from temporary differences and the aggregate 15% threshold set for MSRs, DTAs arising from temporary differences and significant investments in CET1 capital instruments issued by financial sector entities (excluding those that are loans, facilities and other credit exposures to connected companies) under Basel III.	222,516	-
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) <u>Explanation</u> For the purpose of determining the total amount of insignificant capital investments in CET1 capital instruments issued by financial sector entities, an AI is required to aggregate any amount of loans, facilities or other credit exposures provided by it to any of its connected companies, where the connected company is a financial sector entity, as if such loans, facilities or other credit exposures were direct holdings, indirect holdings or synthetic holdings of the AI in the capital instruments of the financial sector entity, except where the AI demonstrates to the satisfaction of the Monetary Authority that any such loan was made, any such facility was granted, or any such other credit exposure was incurred, in the ordinary course of the AI's business. Therefore, the amount to be deducted as reported in row 18 may be greater than that required under Basel III. The amount reported under the column "Basel III basis" in this box represents the amount reported in row 18 (i.e. the amount reported under the "Hong Kong basis") adjusted by excluding the aggregate amount of loans, facilities or other credit exposures to the AI's connected companies which were subject to deduction under the Hong Kong approach.	-	-

Capital disclosures (continued)

Regulatory capital (continued)

Row No.	Description	Hong Kong basis HK\$'000	Basel III basis HK\$'000
19	<p>Significant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)</p> <p><u>Explanation</u> For the purpose of determining the total amount of significant capital investments in CET1 capital instruments issued by financial sector entities, an AI is required to aggregate any amount of loans, facilities or other credit exposures provided by it to any of its connected companies, where the connected company is a financial sector entity, as if such loans, facilities or other credit exposures were direct holdings, indirect holdings or synthetic holdings of the AI in the capital instruments of the financial sector entity, except where the AI demonstrates to the satisfaction of the Monetary Authority that any such loan was made, any such facility was granted, or any such other credit exposure was incurred, in the ordinary course of the AI's business.</p> <p>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.</p>	-	-
39	<p>Insignificant capital investments in AT1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)</p> <p><u>Explanation</u> 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.</p>	-	-
54	<p>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)</p> <p><u>Explanation</u> 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.</p>	-	-
<p>Remarks: The amount of the 10% / 15% thresholds mentioned above is calculated based on the amount of CET1 capital determined under the Banking (Capital) Rules.</p>			

Abbreviations:

CET1: Common Equity Tier 1

AT1: Additional Tier 1

Capital disclosures (continued)

Regulatory capital (continued)

Reconciliation of regulatory scope consolidated balance sheet to capital components

	At 31 December 2017		Cross reference to definition of capital components
	Balance sheet as in published financial statements HK\$'000	Under regulatory scope of consolidation HK\$'000	
ASSETS			
Cash and balances with banks and other financial institutions	67,735,761	67,735,761	
Placements with banks and other financial institutions maturing between one and twelve months	6,114,423	6,114,423	
Financial assets at fair value through profit or loss	4,142,283	4,142,283	
Derivative financial instruments	400,843	400,843	
- of which: debit valuation adjustments in respect of derivative contracts		49	(1)
Advances and other accounts	234,696,791	234,696,791	
Financial investments	111,250,900	111,250,900	
Interests in subsidiaries		6,100	
Investment properties	302,702	302,702	
Properties, plant and equipment	7,386,981	7,386,981	
Deferred tax assets	222,516	222,516	(2)
Other assets	2,808,938	2,808,360	
Total assets	435,062,138	435,067,660	
LIABILITIES			
Deposits and balances from banks and other financial institutions	27,735,507	27,735,507	
Financial liabilities at fair value through profit or loss	4,345,543	4,345,543	
Derivative financial instruments	397,796	397,796	
- of which: debit valuation adjustments in respect of derivative contracts		228	(3)
Deposits from customers	325,415,639	325,437,780	
Debt securities and certificates of deposit in issue	6,781,208	6,781,208	
Other accounts and provisions	17,145,204	17,144,371	
Current tax liabilities	362,383	362,383	
Deferred tax liabilities	789,778	781,407	
Total liabilities	382,973,058	382,985,995	

Capital disclosures (continued)

Regulatory capital (continued)

Reconciliation of regulatory scope consolidated balance sheet to capital components (continued)

	At 31 December 2017		Cross reference to definition of capital components
	Balance sheet as in published financial statements HK\$'000	Under regulatory scope of consolidation HK\$'000	
EQUITY			
Share capital	3,144,517	3,144,517	(4)
Reserves	39,629,673	39,622,258	
- Retained earnings	31,107,225	31,153,712	(5)
- of which: cumulative fair value gains arising from the revaluation of investment properties		444,089	(6)
- Premises revaluation reserve	6,041,508	5,987,606	(7)
- Reserve for fair value changes of available-for-sale securities	(413,176)	(413,176)	(8)
- Regulatory reserve	2,529,788	2,529,788	(9)
- Translation reserve	364,328	364,328	(10)
	42,774,190	42,766,775	
Additional equity instruments	9,314,890	9,314,890	(11)
Total equity	52,089,080	52,081,665	
Total liabilities and equity	435,062,138	435,067,660	

Capital disclosures (continued)

Main features of issued capital instruments

		CET1 Capital Ordinary shares	USD Non-Cumulative Subordinated Additional Tier 1 Capital Securities
1	Issuer	Nanyang Commercial Bank, Limited	Nanyang Commercial Bank, Limited
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	Not Applicable	XS1618163452
3	Governing law(s) of the instrument	Hong Kong Laws	The Capital Securities are governed by and shall be construed in accordance with English Law, except that the subordination provisions are governed by and shall be construed in accordance with Hong Kong law.
	<i>Regulatory treatment</i>		
4	Transitional Basel III rules [#]	Not Applicable	Not Applicable
5	Post-transitional Basel III rules [†]	Common Equity Tier 1	Additional Tier 1
6	Eligible at solo*/group/group & solo	Solo and Group	Solo and Group
7	Instrument type (types to be specified by each jurisdiction)	Ordinary shares	Additional Tier 1 capital instruments
8	Amount recognised in regulatory capital (Currency in million, as of most recent reporting date)	HK\$3,145 million	HK\$9,315million
9	Par value of instrument	No par value (refer to Note 1 for details)	US\$1.2billion
10	Accounting classification	Shareholders' equity	Equity instruments
11	Original date of issuance	1 July 1948 (refer to Note 2 for details)	2 June 2017
12	Perpetual or dated	Perpetual	Perpetual
13	Original maturity date	No maturity	Not Applicable
14	Issuer call subject to prior supervisory approval	No	Yes
15	Optional call date, contingent call dates and redemption amount	Not Applicable	First call date: 2 June 2022 (Redemptions in whole at 100%)
16	Subsequent call dates, if applicable	Not Applicable	any distribution payment date thereafter
	<i>Coupons / dividends</i>		
17	Fixed or floating dividend/coupon	Floating	Fixed
18	Coupon rate and any related index	Not Applicable	Year 1-5: 5.00% per annum payable semi-annually in arrear; Year 5 onwards: resettable on year 5 and every 5 years thereafter at then prevailing 5-year US Treasury yield plus a fixed initial spread
19	Existence of a dividend stopper	No	Yes
20	Fully discretionary, partially discretionary or mandatory	Fully discretionary	Fully discretionary
21	Existence of step up or other incentive to redeem	No	No
22	Noncumulative or cumulative	Noncumulative	Noncumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	Not Applicable	Not Applicable
25	If convertible, fully or partially	Not Applicable	Not Applicable
26	If convertible, conversion rate	Not Applicable	Not Applicable
27	If convertible, mandatory or optional conversion	Not Applicable	Not Applicable
28	If convertible, specify instrument type convertible into	Not Applicable	Not Applicable
29	If convertible, specify issuer of instrument it converts into	Not Applicable	Not Applicable
30	Write-down feature	No	Yes
31	If write-down, write-down trigger(s)	Not Applicable	Upon the occurrence of a Non-Viability Event
32	If write-down, full or partial	Not Applicable	Full or Partial
33	If write-down, permanent or temporary	Not Applicable	Permanent
34	If temporary write-down, description of write-up mechanism	Not Applicable	Not Applicable

Capital disclosures (continued)

Main features of issued capital instruments (continued)

		CET1 Capital Ordinary shares	USD Non-Cumulative Subordinated Additional Tier 1 Capital Securities
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Not Applicable	Depositors, bank's unsubordinated creditors, creditors of Tier 2 capital and all other subordinated indebtedness of the Bank stated to rank senior to the Capital Securities.
36	Non-compliant transitioned features	No	No
37	If yes, specify non-compliant features	Not Applicable	Not Applicable

Footnote:

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

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

^{*} *Include solo-consolidated*

Note 1 : Pursuant to the Hong Kong Companies Ordinance (Chapter 622) which has commenced operation on 3 March 2014, all shares issued by a company incorporated in Hong Kong before, on and after that commencement date shall have no par value and the relevant concept of authorised share capital is abolished, the balance of the share premium account as at 3 March 2014 has been transferred to share capital.

Note 2: Several issuances of ordinary shares have been made since the first issuance in 1948. The last issuance was in 2009.

Capital disclosures (continued)

Countercyclical capital buffer (CCyB) ratio

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

Jurisdiction (J)		At 31 December 2017			
		Applicable JCCyB ratio in effect	Total RWA used in computation of CCyB ratio	CCyB ratio	CCyB amount
		%	HK\$'000	%	HK\$'000
1	Hong Kong SAR	1.25%	96,726,770		
2	Mainland China	-	93,462,873		
3	Australia	-	190,822		
4	Bangladesh	-	378		
5	Bermuda	-	75,061		
6	Canada	-	64,540		
7	Cayman Islands	-	1,180,221		
8	Chinese Taipei	-	195,225		
9	France	-	1,559		
10	Germany	-	7,915		
11	India	-	5,313		
12	Indonesia	-	1,686		
13	Italy	-	3,515		
14	Japan	-	9,141		
15	Macau SAR	-	2,114,693		
16	Malaysia	-	3,993		
17	Netherlands	-	291		
18	New Zealand	-	11,033		
19	Norway	2.00%	965		
20	Panama	-	9,128		
21	Singapore	-	1,230,819		
22	South Africa	-	772		
23	South Korea	-	250,131		
24	Switzerland	-	9,588		
25	United Arab Emirates	-	138,613		
26	United Kingdom	-	237,361		
27	United States	-	472,596		
28	West Indies UK	-	1,207,080		
	Total		197,612,082	0.61%	1,209,104

Leverage ratio disclosures

Leverage ratio

		At 31 December 2017
		HK\$'000
On-balance sheet exposures		
1	On-balance sheet items (excluding derivatives and SFTs, but including collateral)	419,787,495
2	Less: Asset amounts deducted in determining Basel III Tier 1 capital	(9,195,085)
3	Total on-balance sheet exposures (excluding derivatives and SFTs)	410,592,410
Derivative exposures		
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	291,569
5	Add-on amounts for PFE associated with all derivatives transactions	251,037
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework	-
7	Less: Deductions of receivables assets for cash variation margin provided in derivatives transactions	-
8	Less: Exempted CCP leg of client-cleared trade exposures	-
9	Adjusted effective notional amount of written credit derivatives	-
10	Less: Adjusted effective notional offsets and add-on deductions for written credit derivatives	-
11	Total derivative exposures	542,606
Securities financing transaction exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	16,119,764
13	Less: Netted amounts of cash payables and cash receivables of gross SFT assets	-
14	CCR exposure for SFT assets	3,967
15	Agent transaction exposures	-
16	Total securities financing transaction exposures	16,123,731
Other off-balance sheet exposures		
17	Off-balance sheet exposure at gross notional amount	123,055,021
18	Less: Adjustments for conversion to credit equivalent amounts	(86,916,330)
19	Off-balance sheet items	36,138,691
Capital and total exposures		
20	Tier 1 capital	42,886,352
21	Total exposures	463,397,438
Leverage ratio		
22	Basel III leverage ratio	9.25%

Summary comparison table

		At 31 December 2017
		HK\$'000
1	Total consolidated assets as per published financial statements	435,062,138
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	5,522
3	Adjustment for fiduciary assets recognised on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure	-
4	Adjustments for derivative financial instruments	141,763
5	Adjustment for securities financing transactions (i.e. repos and similar secured lending)	3,967
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	36,138,691
7	Other adjustments	(7,954,643)
8	Leverage ratio exposure	463,397,438

Liquidity information disclosures

Liquidity coverage ratio

Number of data points used in calculating the average value of the Liquidity Coverage Ratio (LCR) and related components set out in this table		For the quarter ended 31 December 2017: 73 data points		For the quarter ended 30 September 2017: 77 data points	
Basis of disclosure: consolidated		UNWEIGHTED AMOUNT (Average Value)	WEIGHTED AMOUNT (Average Value)	UNWEIGHTED AMOUNT (Average Value)	WEIGHTED AMOUNT (Average Value)
		HK\$'000	HK\$'000	HK\$'000	HK\$'000
A. HIGH QUALITY LIQUID ASSETS					
1	Total high quality liquid assets (HQLA)		56,989,037		53,097,960
B. CASH OUTFLOWS					
2	Retail deposits and small business funding, of which:	113,439,172	7,795,038	111,368,023	7,647,953
3	Stable retail deposits and stable small business funding	22,820,921	684,628	22,709,392	681,282
4	Less stable retail deposits and less stable small business funding	45,109,156	4,510,916	43,610,044	4,361,004
5	Retail term deposits and small business term funding	45,509,095	2,599,494	45,048,587	2,605,667
6	Unsecured wholesale funding (other than small business funding) and debt securities and prescribed instruments issued by the institution, of which:	122,067,001	64,854,056	113,417,942	62,269,360
7	Operational deposits	31,614,030	7,741,582	28,379,304	6,936,009
8	Unsecured wholesale funding (other than small business funding) not covered in Row 7	89,944,629	56,604,132	84,705,779	55,000,492
9	Debt securities and prescribed instruments issued by the institution and redeemable within the LCR period	508,342	508,342	332,859	332,859
10	Secured funding transactions (including securities swap transactions)		519,772		557,872
11	Additional requirements, of which:	30,483,757	7,536,518	29,444,018	7,050,293
12	Cash outflows arising from derivative contracts and other transactions, and additional liquidity needs arising from related collaterals requirements	4,263,775	4,263,775	3,933,397	3,933,397
13	Cash outflows arising from obligations under structured financing transactions and repayment of funding obtained from such transactions	-	-	-	-
14	Potential drawdown of undrawn committed facilities (including committed credit facilities and committed liquidity facilities)	26,219,982	3,272,743	25,510,621	3,116,896
15	Contractual lending obligations (not otherwise covered in Section B) and other contractual cash outflows	3,295,458	3,295,458	3,468,624	3,468,624
16	Other contingent funding obligations (whether contractual or non-contractual)	105,242,828	3,135,025	110,103,156	3,236,919
17	TOTAL CASH OUTFLOWS		87,135,867		84,231,021
C. CASH INFLOWS					
18	Secured lending transactions (including securities swap transactions)	7,805,642	7,805,642	2,399,245	2,399,245
19	Secured and unsecured loans (other than secured lending transactions covered in Row 18) and operational deposits placed at other financial institutions	49,466,752	36,930,489	53,330,614	43,378,867
20	Other cash inflows	9,624,215	6,361,834	8,459,205	6,271,276
21	TOTAL CASH INFLOWS	66,896,609	51,097,965	64,189,064	52,049,388
D. LIQUIDITY COVERAGE RATIO					
22	TOTAL HQLA		56,989,037		53,097,960
23	TOTAL NET CASH OUTFLOWS		36,037,902		32,181,633
24	LCR (%)		159.33%		168.97%

Liquidity information disclosures (continued)

Liquidity coverage ratio (continued)

Number of data points used in calculating the average value of the Liquidity Coverage Ratio (LCR) and related components set out in this table	For the quarter ended 30 June 2017: 71 data points		For the quarter ended 31 March 2017: 73 data points	
	UNWEIGHTED AMOUNT (Average Value)	WEIGHTED AMOUNT (Average Value)	UNWEIGHTED AMOUNT (Average Value)	WEIGHTED AMOUNT (Average Value)
	HK\$'000	HK\$'000	HK\$'000	HK\$'000
Basis of disclosure: consolidated				
A. HIGH QUALITY LIQUID ASSETS				
1 Total high quality liquid assets (HQLA)		56,337,750		47,372,448
B. CASH OUTFLOWS				
2 Retail deposits and small business funding, of which:				
3 <i>Stable retail deposits and stable small business funding</i>	110,141,147	7,610,768	105,582,302	7,376,663
4 <i>Less stable retail deposits and less stable small business funding</i>	22,117,211	663,516	22,127,747	663,833
5 <i>Retail term deposits and small business term funding</i>	43,582,897	4,358,290	43,144,162	4,314,416
6 Unsecured wholesale funding (other than small business funding) and debt securities and prescribed instruments issued by the institution, of which:				
7 <i>Operational deposits</i>	44,441,039	2,588,962	40,310,393	2,398,414
8 <i>Unsecured wholesale funding (other than small business funding) not covered in Row 7</i>	114,088,858	65,595,818	114,627,515	67,110,523
9 <i>Debt securities and prescribed instruments issued by the institution and redeemable within the LCR period</i>	23,501,712	5,713,768	21,532,282	5,224,100
10 Secured funding transactions (including securities swap transactions)	90,584,743	59,879,647	93,095,233	61,886,423
11 Additional requirements, of which:				
12 <i>Cash outflows arising from derivative contracts and other transactions, and additional liquidity needs arising from related collaterals requirements</i>	2,403	2,403	-	-
13 <i>Cash outflows arising from obligations under structured financing transactions and repayment of funding obtained from such transactions</i>		196,588		342,078
14 <i>Potential drawdown of undrawn committed facilities (including committed credit facilities and committed liquidity facilities)</i>	32,104,033	7,498,056	29,445,163	6,433,128
15 Contractual lending obligations (not otherwise covered in Section B) and other contractual cash outflows	4,163,656	4,163,656	3,297,494	3,297,494
16 Other contingent funding obligations (whether contractual or non-contractual)	-	-	-	-
17 TOTAL CASH OUTFLOWS		86,827,704		86,379,276
C. CASH INFLOWS				
18 Secured lending transactions (including securities swap transactions)	7,264,760	7,264,760	2,845,400	2,845,400
19 Secured and unsecured loans (other than secured lending transactions covered in Row 18) and operational deposits placed at other financial institutions	50,355,318	39,410,875	51,649,381	42,656,122
20 Other cash inflows	4,974,165	4,508,044	6,345,298	5,942,448
21 TOTAL CASH INFLOWS	62,594,243	51,183,679	60,840,079	51,443,970
D. LIQUIDITY COVERAGE RATIO				
22 TOTAL HQLA		56,337,750		47,372,448
23 TOTAL NET CASH OUTFLOWS		35,686,782		34,935,306
24 LCR (%)		171.71%		138.03%

Liquidity information disclosures (continued)

Liquidity coverage ratio (continued)

Notes:

- The weighted amount of HQLA is to be calculated as the amount after applying the haircuts as required under the Banking (Liquidity) Rules.
- The unweighted amounts of cash inflows and cash outflows are to be calculated as the principal amounts in the calculation of the LCR as required under the Banking (Liquidity) Rules.
- The weighted amounts of cash inflows and cash outflows are to be calculated as the amounts after applying the inflow and outflow rates as required under the Banking (Liquidity) Rules.
- The adjusted value of total HQLA and the total net cash outflows have taken into account any applicable ceiling as required under the Banking (Liquidity) Rules.

In 2017, the Group has maintained a healthy liquidity position, the LCR remained stable and there was no material change throughout the year. The average LCR of the first, second, third and fourth quarters were 138.03%, 171.71%, 168.97% and 159.33% respectively. The average HKD level 1 HQLA to HKD net cash outflow ratio of 2017 was 185.85%, well above the regulatory requirement of 20%. The ratios have maintained at stable and healthy levels.

The HQLA consists of cash, balances at central banks and high quality marketable securities issued or guaranteed by sovereigns, central banks, public sector entities or multilateral development banks and non-financial corporate debt securities. In 2017, the

majority of the HQLA was composed of Level 1 HQLA.

The net cash outflow was mainly from retail and corporate customer deposit which are the Group's primary source of funds, together with deposit and balance from bank and other financial institution. To ensure stable, sufficient and diversified source of funds, the Group actively attracts new deposits, keeps the core deposit and obtains supplementary funding from the interbank market. Other cash outflow, such as commitment, cash outflow under derivative contract and potential collateral requirement, were minimal to the LCR.

Majority of the Group's customer deposits are denominated in HKD, USD and RMB. As the supply of HKD denominated HQLA in the market is relatively limited, the Group swaps surplus HKD funding into USD and other foreign currencies, part of funding are deployed to investment in HQLA.

OVA: Overview of risk management

The Group is exposed to financial risks as a result of engaging in a variety of banking business activities. The principal types of risk inherent in the Group's businesses are credit risk, interest rate risk, market risk, liquidity risk, operational risk, reputation risk, legal and compliance risk, and strategic risk.

The Group's risk management objective is to enhance shareholder value by maintaining risk exposures within acceptable levels.

The Bank's Board of Directors (the "Board") holds the ultimate responsibility for the Group's overall risk management. It determines the risk management strategies and the risk management structure.

To achieve the Group's goals in risk management, the Board sets up the Risk Management Committee, which comprises of Independent Non-executive Directors, to oversee the Group's various types of risks and approve the high-level risk management policies. Also, Credit Approval Committee is set up under the Risk Management Committee to approve credit applications and portfolio limit exceeding the Chief Executive's authority or as required by the policy and monitoring the credit activities of the Group.

According to the risk management strategies established by the Board, risk management policies and controls are devised and reviewed regularly by relevant departments and respective management committees set up by the Chief Executive.

The risk management units develop policies and procedures for identifying, measuring, monitoring, controlling and reporting credit risk, market risk, operational risk, reputation risk, legal and compliance risk, interest rate risk, liquidity risk and strategic risk; set appropriate risk limits; and continually monitor risks.

The Audit Department conducts independent reviews on the adequacy and effectiveness of risk management policies and controls to ensure that the Group is operating according to the established policies, procedures and limits.

Independence is crucial to effective risk management. To ensure the independence of the Risk Management Department and the Audit Department, they report directly to the Risk Management Committee and the Audit Committee respectively. Both committees are specialised committees set up by the Board and all members are directors of the Bank.

Risk management culture is the common belief within the organization about risk management philosophy, vision, values and the code of conduct.

The Group upholds high standards of ethics so as to ensure its affairs are conducted in a high degree of integrity. The Group develops codes of conduct. Sound management systems are also in place to enforce them effectively. The standards of conduct are laid down in risk management policies, and other operating principles and guidelines. All staff is required to follow them when conducting business.

OVA: Overview of risk management (continued)

All staff is required to perform their risk management responsibility. The Board establishes strong risk culture and encourages communication and discussion on issues of risk management and risk taking. All staff continues enhancing and strengthening their knowledge and skills in risk management. The Group makes use of appropriate training, remuneration, incentive, reward and penalty schemes to guide and drive staff to conduct business in a responsible, honest, practical and proper manner.

Risk management policies, procedures and rating systems are formulated to identify, measure, evaluate, monitor, control and report the credit risk. These policies and procedures stipulate delegated credit authorities, credit underwriting standards, credit monitoring criteria, internal rating structure, problem loan management and impairment policy. They are reviewed and enhanced on an ongoing basis for catering business environment changes, regulatory requirements changes and market best practices in risk management processes. In addition, sound and robust IT and risk measurement system can provide comprehensive, timely and accurate data to ensure effective risk information can be submitted to relevant staff and senior management on time.

In order to support the Board and senior management to better fulfill the risk management responsibilities, periodic or ad hoc risk reports of each major risk types, covering the trend, limit usage and significant issues, are submitted to the Board, sub-committee and senior management.

Stress testing is a risk management tool for assessing the potential vulnerability under stressed circumstances/scenarios arising from extreme but plausible market or macroeconomic movements. The Bank uses stress testing to strengthen the risk management. The stress tests are conducted on a regular basis or ad hoc basis by the Group's various risk management units in accordance with the principles stated in the HKMA Supervisory Policy Manual "Stress-testing".

NCB became the wholly subsidiary of China Cinda Asset Management Co Ltd (China Cinda) in May 2016. Being a member of China Cinda Group, synergic operation among the China Cinda Group is one of the major business model of the Group with the target in the expansion and integration of businesses both in Hong Kong and the PRC. Under this strategy, NCB (China) position in the PRC will be strengthened.

In order to manage, monitor and mitigate the risks arise from the business model, the Group uses:

Risk management synergy: with strong support from China Cinda through sharing its experience in risk management, the Group will be able to further improve its own risk management capacities, such as familiarity with the PRC industries, disposal of distressed assets.

Comprehensive risk management mechanisms: different risk-related management activities on a group basis being captured, including the formulation of major policies, risk assessment, setting up control limits, and ongoing monitoring. The mechanisms ensure compliance with the Group's policies, and legal and regulatory requirements in Hong Kong and the PRC.

OVA: Overview of risk management (continued)

Group-wide risk appetite: Prudent risk culture is emphasized through-out the Group. NCB (China) also has an independent Risk Management Department to fulfill its day-to-day management function. Two Bank's Risk Management Departments have frequent communication on risk issues and regulatory requirements. Regular risk reports from NCB (China) are also submitted to the Bank for closely monitoring the development of the China business.

To further strengthen the one-bank risk management, the Group also through the following measures:

- Credit Approval Committee is set up to approve/provide approval advice on credit applications exceeding the Chief Executive's authority of both banks;
- The Bank's Chief Executive is also a director of NCB (China) and a member of the Audit Committee of NCB (China) to supervise the internal control of NCB (China);
- The Chief Risk Officer of NCB (China) is also a member of the Bank's Risk Management and Internal Control Committee to strengthen the internal communication regarding risks within the Group;
- Key Risk Indicators are set for and implemented in NCB (China); and
- Trainings and site visits are arranged within the Group for advanced communication of regulatory requirements.

OV1: Overview of RWA

		RWA		Minimum capital requirements
		At 31 December 2017	At 30 September 2017	At 31 December 2017
		HK\$'000	HK\$'000	HK\$'000
1	Credit risk for non-securitization exposures	239,808,105	230,567,827	20,147,507
2	Of which STC approach	39,212,502	33,859,341	3,137,000
2a	Of which BSC approach	-	-	-
3	Of which IRB approach	200,595,603	196,708,486	17,010,507
4	Counterparty credit risk	431,880	685,118	36,122
5	Of which SA-CCR	-	-	-
5a	Of which CEM	166,557	386,019	14,090
6	Of which IMM(CCR) approach	-	-	-
7	Equity exposures in banking book under the market-based approach	-	-	-
8	CIS exposures – LTA	-	-	-
9	CIS exposures – MBA	-	-	-
10	CIS exposures – FBA	-	-	-
11	Settlement risk	-	-	-
12	Securitization exposures in banking book	3,776,502	3,720,271	302,120
13	Of which IRB(S) approach – ratings-based method	-	-	-
14	Of which IRB(S) approach – supervisory formula method	-	-	-
15	Of which STC(S) approach	3,776,502	3,720,271	302,120
16	Market risk	1,071,513	862,325	85,721
17	Of which STM approach	279,738	220,587	22,379
18	Of which IMM approach	791,775	641,738	63,342
19	Operational risk	12,940,963	13,041,750	1,035,277
20	Of which BIA approach	-	-	-
21	Of which STO approach	12,940,963	13,041,750	1,035,277
21a	Of which ASA approach	-	-	-
22	Of which AMA approach	N/A	N/A	N/A
23	Amounts below the thresholds for deduction (subject to 250% RW)	15,250	15,250	1,220
24	Capital floor adjustment	-	-	-
24a	Deduction to RWA	3,634,976	3,516,199	290,798
24b	Of which portion of regulatory reserve for general banking risks and collective provisions which is not included in Tier 2 Capital	97,543	70,844	7,803
24c	Of which portion of cumulative fair value gains arising from the revaluation of land and buildings which is not included in Tier 2 Capital	3,537,433	3,445,355	282,995
25	Total	254,409,237	245,376,342	21,317,169

N/A: Not applicable in the case of Hong Kong

L11: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Carrying values of items:				
			subject to credit risk framework	subject to counterparty credit risk framework	subject to the securitization framework	subject to market risk framework	not subject to capital requirements or subject to deduction from capital
Assets							
Cash and balances with banks and other financial institutions	67,735,761	67,735,761	52,518,785	15,216,976	-	-	-
Placements with banks and other financial institutions maturing between one and twelve months	6,114,423	6,114,423	5,211,635	902,788	-	-	-
Financial assets at fair value through profit or loss	4,142,283	4,142,283	-	-	-	4,142,283	-
Derivative financial instruments	400,843	400,843	-	395,180	-	400,843	-
Advances and other accounts	234,696,791	234,696,791	234,696,791	-	-	-	-
Financial investments	111,250,900	111,250,900	107,486,777	3,236,119	3,753,086	-	11,037
Interests in subsidiaries	-	6,100	6,100	-	-	-	-
Investment properties	302,702	302,702	302,702	-	-	-	-
Properties, plant and equipment	7,386,981	7,386,981	7,386,981	-	-	-	-
Deferred tax assets	222,516	222,516	-	-	-	-	222,516
Other assets	2,808,938	2,808,360	2,808,360	-	-	-	-
Total assets	435,062,138	435,067,660	410,418,131	19,751,063	3,753,086	4,543,126	233,553

LI1: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories (continued)

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Carrying values of items:				
			subject to credit risk framework	subject to counterparty credit risk framework	subject to the securitization framework	subject to market risk framework	not subject to capital requirements or subject to deduction from capital
Liabilities							
Deposits and balances from banks and other financial institutions	27,735,507	27,735,507	-	-	-	-	-
Financial liabilities at fair value through profit or loss	4,345,543	4,345,543	-	-	-	4,345,543	-
Derivative financial instruments	397,796	397,796	-	103,610	-	397,796	-
Deposits from customers	325,415,639	325,437,780	-	-	-	-	-
Debt securities and certificates of deposit in issue	6,781,208	6,781,208	-	-	-	-	-
Other accounts and provisions	17,145,204	17,144,371	-	-	-	-	-
Current tax liabilities	362,383	362,383	-	-	-	-	-
Deferred tax liabilities	789,778	781,407	-	-	-	-	-
Total liabilities	382,973,058	382,985,995	-	103,610	-	4,743,339	-

Some balance sheet items attract capital charge according to the risk frameworks for more than one risk category. This results in variance between value in column (b) and the sum of values in columns (c) to (g).

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

		(a)	(b)	(c)	(d)	(e)
		Total	Items subject to:			
			credit risk framework	securitization framework	counterparty credit risk framework	market risk framework
1	Asset carrying value amount under scope of regulatory consolidation (as per template LI1)	438,465,406	410,418,131	3,753,086	19,751,063	4,543,126
2	Liabilities carrying value amount under regulatory scope of consolidation (as per template LI1)	4,846,949	-	-	103,610	4,743,339
3	Total net amount under regulatory scope of consolidation	433,618,457	410,418,131	3,753,086	19,647,453	(200,213)
4	Off-balance sheet amounts	31,339,328	31,339,328	-	-	-
5	Differences due to consideration of partial write-offs	51,120	51,120	-	-	-
6	Differences due to consideration of internal estimated EAD under retail IRB approach	801,556	801,556	-	-	-
7	Differences due to consideration of provisions	2,060,230	2,036,814	23,416-	-	-
8	Differences due to application of haircut in SFTs	76,538	-	-	76,538	-
9	Potential exposures of OTC derivative transactions	251,037	-	-	251,037	-
10	Other differences not classified above	43,708	60	-	-	43,648
N	Exposure amounts considered for regulatory purposes	468,241,974	444,647,009	3,776,502	19,975,028	(156,565)

LIA: Explanations of differences between accounting and regulatory exposure amounts

Template LI1 shows the differences between the accounting scope of 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. The accounting scope of consolidation includes subsidiaries, namely Nanyang Commercial Bank Trustee Limited, Kwong Li Nam Investment Agency Limited and Nanyang Commercial Bank (Nominees) Limited, which are outside the regulatory scope of consolidation.

Template LI2 illustrates the differences between accounting values and amounts considered for regulatory purposes. The main driver for the differences relates to the inclusion of off-balance sheet exposures (after application of the CCFs) for regulatory purposes.

The Group uses the valuation methodologies which can be classified into marking-to-market and marking-to-model. Marking-to-market is valuation of positions by adopting readily available and observable quoted market prices in an actively traded principal market. If market quotation is not available, marking-to-model should be adopted. Marking-to-model is valuation which has to be benchmarked, extrapolated or otherwise derived from market data inputs.

For marking-to-market, the Group uses the bid/offer close-out price for the fair value of financial instrument. If the market for assets or liabilities is not active, the Group uses valuation techniques, including the use of recent arm's length transactions, discounted cash flow analysis, option pricing models and other valuation techniques commonly used by market participants, that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

The Group has an established governance structure and controls framework to ensure that fair values are either determined or validated by control units independent of the front offices. Control units have overall responsibility for independent verification of valuation results from front line businesses and all other significant fair value measurements. Specific controls include verification of observable pricing inputs. Significant valuation issues are reported to the Management.

The independent price verification is the process of comparing the pricing inputs used in the valuation process to a corresponding set of independently verifiable external observable market prices and parameters. If the effects of price variances fall within the preset tolerances, the pricing inputs are considered as reliable and appropriate.

For Prudent Valuation, the Group performs liquidity risk valuation adjustment in accordance with risk management, and regulatory and financial reporting purposes for less liquid product positions. The Group also reviews the appropriateness of the valuation adjustment regularly.

CRA: General information about credit risk

Credit risk is the risk of loss that a customer or counterparty is unable to or unwilling to meet its contractual obligations. Credit Risk exists in the trading book and banking book, as well as from on- and off-balance sheet transactions of the Group. It arises principally from lending, trade finance and treasury businesses.

The Group has formulated a comprehensive set of credit risk management policies and procedures, and appropriate credit risk limits to manage and control credit risk that may arise. These policies, procedures and credit risk limits are regularly reviewed and updated to cope with changes in market conditions and business strategies.

The Group's organization structure establishes a clear set of authority and responsibility for monitoring compliance with policies, procedures and limits.

Structure and organization of credit risk management as well as the responsibilities of relevant units can be referred to OVA.

Credit risk management information reports and ad hoc reports will be submitted to Board of Directors, Risk Management Committee and senior management to facilitate their continuous monitoring of credit risk related matters.

In addition, the Group identifies credit concentration risk by industry, geography, customer and counterparty. The risk management units monitor changes to counterparty credit risk, quality of the credit portfolio and credit risk concentrations, and report regularly to the Group management.

CR1: Credit quality of exposures

For exposures subject to the STC approach, defaulted exposures are exposures which are overdue for more than 90 days or have been rescheduled. For exposures subject to the IRB approach, defaulted exposures are exposures which fall within section 149 of the Banking (Capital) Rules.

		At 31 December 2017			
		Gross carrying amounts of		Allowances / impairments	Net values
		Defaulted exposures	Non-defaulted exposures		
		HK\$'000	HK\$'000	HK\$'000	HK\$'000
1	Loans	1,141,446	310,324,990	819,789	310,646,647
2	Debt securities	-	90,052,139	-	90,052,139
3	Off-balance sheet exposures	5,783	123,049,239	-	123,055,022
4	Total	1,147,229	523,426,368	819,789	523,753,808

CR2: Changes in defaulted loans and debt securities

		HK\$'000
1	Defaulted loans and debt securities as at 30 June 2017	1,006,598
2	Loans and debt securities that have defaulted since the last reporting period	512,226
3	Returned to non-defaulted status	(151,205)
4	Amounts written off	(250,728)
5	Other changes	24,555
6	Defaulted loans and debt securities as at 31 December 2017	1,141,446

CRB: Additional disclosure related to credit quality of exposures

Advances with a specific repayment date are classified as overdue when the principal or interest is past due and remains unpaid. Advances repayable by regular instalments are classified as overdue when an instalment payment is past due and remains unpaid. Advances repayable on demand are classified as overdue either when a demand for repayment has been served on the borrower but repayment has not been made in accordance with the instruction or when the advances have continuously exceeded the approved limit that was advised to the borrower.

The Group assesses as at the end of each reporting period whether there is objective evidence that a financial asset or group of financial assets is impaired. A financial asset or a group of financial assets is impaired and impairment losses are incurred if, and only if, there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a "loss event") and that loss event (or events) has an impact on the reliably estimated future cash flows of the financial asset or group of financial assets. Objective evidence that a financial asset or group of financial assets may be impaired includes observable data that comes to the attention of the Group about the following probable loss events:

- (i) significant financial difficulty of the issuer or obligor;
- (ii) a breach of contract, such as a default or delinquency in interest or principal payment;
- (iii) the Group granting to the borrower, for economic or legal reasons relating to the borrower's financial difficulty, a concession that the lender would not otherwise consider;
- (iv) it becoming probable that the borrower will enter into bankruptcy or other financial reorganisation;
- (v) the disappearance of an active market or downgrading below investment grade level for that financial asset because of financial difficulties; or
- (vi) observable data indicating that there is a measurable decrease in the estimated future cash flows from a group of financial assets since the initial recognition of those assets, although the decrease cannot yet be identified with the individual financial assets in the group, including:
 - adverse changes in the payment status of borrowers in the group; or
 - national or local economic conditions that correlate with defaults on the assets in the group.

Exposures which are past due for more than 90 days but are not impaired are mainly due to the facts that these exposures are fully secured by collateral or future cash flow.

CRB: Additional disclosure related to credit quality of exposures (continue)

The Group first assesses whether objective evidence of impairment exists individually for financial assets that are individually significant. If the Group determines that no objective evidence of impairment exists for an individually assessed financial asset, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment together with all other financial assets that are not individually significant or for which impairment has not yet been identified. Assets that are individually assessed for impairment and for which an impairment loss is or continues to be recognised are not included in a collective assessment of impairment.

If there is objective evidence that an impairment loss on loans and receivables or held-to-maturity securities has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred), discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognised in the income statement. If a loan or held-to-maturity security has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract. As a practical expedient, the Group may measure impairment on the basis of an instrument's fair value using an observable market price.

The calculation of the present value of the estimated future cash flows of a collateralised financial asset reflects the cash flows that may result from foreclosure less costs for obtaining and selling the collateral.

For the purposes of a collective assessment of impairment, financial assets are grouped on the basis of similar and relevant credit risk characteristics. Those characteristics are relevant to the estimation of future cash flows for groups of such assets by being indicative of the debtors' ability to pay all amounts due according to the contractual terms of the assets being evaluated.

Future cash flows in a group of financial assets that are collectively evaluated for impairment are estimated on the basis of the contractual cash flows of the assets in the group and historical loss experience for assets with credit risk characteristics similar to those in the group. Historical loss experience is adjusted on the basis of current observable data to reflect the effects of current conditions that did not affect the period on which the historical loss experience is based and to remove the effects of conditions in the historical period that do not exist currently.

Rescheduled advances are those advances that have restructured or renegotiated because of deterioration in the financial position of the borrower or of the inability of the borrower to meet the original repayment schedule.

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

The table below provides a breakdown of exposures by geographical area, industry and residual maturity.

Geographical area	Residual maturity	Exposures by industry						Total HK\$'000
		Banks HK\$'000	Other financial institutions HK\$'000	Real estates HK\$'000	Wholesale, retail and trades HK\$'000	Individuals HK\$'000	Others HK\$'000	
Hong Kong	Within 1 year	42,439,434	9,156,623	13,930,276	30,943,988	6,602,222	47,893,178	150,965,721
	1 to 5 years	18,860,902	10,364,579	26,291,758	5,880,146	4,211,596	47,872,198	113,481,179
	Over 5 years	-	242,084	7,231,114	2,981,575	17,088,569	5,270,030	32,813,372
	Sub-total	61,300,336	19,763,286	47,453,148	39,805,709	27,902,387	101,035,406	297,260,272
Mainland of China	Within 1 year	36,676,443	4,653,975	3,682,215	25,148,234	1,845,772	73,865,329	145,871,968
	1 to 5 years	6,594,812	1,097,787	15,959,412	6,002,514	723,279	24,156,149	54,533,953
	Over 5 years	-	30,756	6,294,203	117,765	15,574,230	4,890,450	26,907,404
	Sub-total	43,271,255	5,782,518	25,935,830	31,268,513	18,143,281	102,911,928	227,313,325
Total		104,571,591	25,545,804	73,388,978	71,074,222	46,045,668	203,947,334	524,573,597

The table below provides a breakdown of impaired exposures, related allowances and write-offs by geographical area and industry.

Geographical area	Industry	Impaired exposures HK\$'000	Individually assessed impairment allowances HK\$'000	Partial write-offs HK\$'000
Hong Kong	Banks	-	-	-
	Other financial institutions	24,684	24,684	-
	Real estates	-	-	-
	Wholesale, retail and trades	65,887	57,586	-
	Individuals	-	-	-
	Others	191,278	112,206	51,120
	Sub-total	281,849	194,476	51,120
Mainland of China	Banks	-	-	-
	Other financial institutions	-	-	-
	Real estates	282	305	-
	Wholesale, retail and trades	498,196	444,440	-
	Individuals	61,952	22,211	-
	Others	185,348	158,357	-
Sub-total	745,778	625,313	-	
Total		1,027,627	819,789	51,120

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

The table below provides aging analysis of accounting past due exposures.

Overdue for:	Exposures HKD\$'000
Up to 1 month	392,317
3 months or less but over 1 month	73,034
6 months or less but over 3 months	157,953
1 year or less but over 6 months	321,281
Over 1 year	583,352
Total	1,527,937

The table below provides a breakdown of restructured exposures between impaired and not impaired exposures.

	Impaired HKD\$'000	Not impaired HKD\$'000	Total HKD\$'000
Restructured exposures	1,308	8,506	9,814

CRC: Qualitative disclosures related to credit risk mitigation

The netting should only be applied where there is a legal right to do so. In accordance with the Banking Capital Rules section 209, the Bank adopts the netting approach which is consistent with the Banking Capital Rules for capital adequacy purposes, and only those OTC derivative transactions subject to valid bilateral netting agreements are eligible to net amounts owed by the Bank.

The Group utilizes collateral or guarantees, among other instruments, to mitigate credit risks. The management of collateral or guarantees has been documented in the credit risk management policies and procedures which include collateral acceptance criteria, validity of collateral, loan-to-value ratio, haircut ratio, valuation and insurance requirements, etc.

The collateral is revalued on a regular basis, though the frequency and the method used varies with the type of collateral involved and the nature and the risk of the underlying credit. The Bank established a mechanism to update the value of its main type of collateral, real estate properties, with the use of public indices on a portfolio basis. Collateral is insured with the Bank as the beneficiary.

The credit and market risk concentrations within the credit risk mitigation used by the Bank are under a low level.

CR3: Overview of recognised credit risk mitigation

		At 31 December 2017				
		Exposures unsecured: carrying amount	Exposures to be secured	Exposures secured by recognised collateral	Exposures secured by recognised guarantees	Exposures secured by recognised credit derivative contracts
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
1	Loans	235,532,410	75,114,237	33,231,683	41,882,554	-
2	Debt securities	86,426,920	3,625,219	-	3,625,219	-
3	Total	321,959,330	78,739,456	33,231,683	45,507,773	-
4	Of which defaulted	240,180	82,865	82,865	-	-

CRD: Qualitative disclosures on use of ECAI ratings under STC approach

The Group adopts STC approach to determine the risk weights of the credit exposures that was approved by the HKMA to be exempted from FIRB approach. ECAI ratings are used as part of the determination of risk weights for the following classes of exposure:

- Sovereigns
- Public sector entities
- Banks
- Corporates

The Group performs the ECAI issuer ratings mapping to its exposures in banking book in accordance with Part 4 of the Banking (Capital) Rules. The ECAIs recognised by the Group include Standard & Poor's, Moody's and Fitch.

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

STC approach

Exposure classes	At 31 December 2017						
	Exposures pre-CCF and pre-CRM		Exposures post-CCF and post-CRM		RWA and RWA density		
	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density	
	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000		
1	Sovereign exposures	63,060,197	811	63,060,197	811	1,881,914	2.98%
2	PSE exposures	193,676	432,400	199,192	190,691	77,977	20.00%
2a	Of which: domestic PSEs	193,676	432,400	199,192	190,691	77,977	20.00%
2b	Of which: foreign PSEs	-	-	-	-	-	N/A
3	Multilateral development bank exposures	-	-	-	-	-	N/A
4	Bank exposures	10,392	-	10,392	-	2,078	20.00%
5	Securities firm exposures	-	-	-	-	-	N/A
6	Corporate exposures	8,589,841	4,065,905	8,589,841	424,492	9,014,333	100.00%
7	CIS exposures	17,430,519	-	17,430,519	-	17,430,519	100.00%
8	Cash items	-	-	-	-	-	N/A
9	Exposures in respect of failed delivery on transactions entered into on a basis other than a delivery-versus-payment basis	-	-	-	-	-	N/A
10	Regulatory retail exposures	2,919,013	1,604,094	2,827,524	175,125	2,251,986	75.00%
11	Residential mortgage loans	16,067,314	8,983	16,060,223	-	8,030,112	50.00%
12	Other exposures which are not past due exposures	616,089	288,443	368,571	52,823	421,394	100.00%
13	Past due exposures	77,448	-	77,448	-	102,189	131.95%
14	Significant exposures to commercial entities	-	-	-	-	-	N/A
15	Total	108,964,489	6,400,636	108,623,907	843,942	39,212,502	35.82%

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

STC approach

Risk Weight Exposure class		At 31 December 2017										Total credit risk exposures amount (post CCF and post CRM)
		0%	10%	20%	35%	50%	75%	100%	150%	250%	Others	
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	
1	Sovereign exposures	60,389,457	-	987,047	-	-	-	1,684,504	-	-	-	63,061,008
2	PSE exposures	-	-	389,883	-	-	-	-	-	-	-	389,883
2a	Of which: domestic PSEs	-	-	389,883	-	-	-	-	-	-	-	389,883
2b	Of which: foreign PSEs	-	-	-	-	-	-	-	-	-	-	-
3	Multilateral development bank exposures	-	-	-	-	-	-	-	-	-	-	-
4	Bank exposures	-	-	10,392	-	-	-	-	-	-	-	10,392
5	Securities firm exposures	-	-	-	-	-	-	-	-	-	-	-
6	Corporate exposures	-	-	-	-	-	-	9,014,333	-	-	-	9,014,333
7	CIS exposures	-	-	-	-	-	-	17,430,519	-	-	-	17,430,519
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	-	-	-	-	-	3,002,649	-	-	-	-	3,002,649
11	Residential mortgage loans	-	-	-	-	16,060,223	-	-	-	-	-	16,060,223
12	Other exposures which are not past due exposures	-	-	-	-	-	-	421,394	-	-	-	421,394
13	Past due exposures	-	-	-	-	-	-	27,965	49,483	-	-	77,448
14	Significant exposures to commercial entities	-	-	-	-	-	-	-	-	-	-	-
15	Total	60,389,457	-	1,387,322	-	16,060,223	3,002,649	28,578,715	49,483	-	-	109,467,849

CRE: Qualitative disclosures related to internal models for measuring credit risk under IRB approach

The Group adopts the FIRB approach to calculate the regulatory capital requirements for most of the corporate and bank exposures, and adopts the supervisory slotting criteria approach to project finance exposures under specialised lending. The Group adopts retail IRB approach for retail exposures to individuals and small business.

The table below shows the Group's different capital calculation approaches to each asset class and sub-classes of exposures (other than securitization exposures):

Asset class	Exposure sub-class	Capital calculation approach
Corporate exposures	Specialised lending under supervisory slotting criteria approach (project finance)	Supervisory Slotting Criteria Approach
	Small-and-medium sized corporates	FIRB Approach
	Other corporates	
Sovereign exposures	Sovereigns	Standardised (credit risk) Approach
	Sovereign foreign public sector entities	
	Multilateral development banks	
Bank exposures	Banks	FIRB Approach
	Securities firms	
	Public sector entities (excluding sovereign foreign public sector entities)	Standardised (credit risk) Approach
Retail exposures	Residential mortgages to individuals	Retail IRB Approach
	Residential mortgages to property-holding shell companies	
	Qualifying revolving retail	
	Other retail to individuals	
	Small business retail	
Equity exposures	-	Standardised (credit risk) Approach
Other exposures	Cash items	Specific Risk-weight Approach
	Other items	

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

The tables below show, by portfolio type, the portion of EAD (after CRM) and RWAs within the Group covered by the STC approach, FIRB, Retail IRB and other IRB calculation approaches.

Portfolio		At 31 December 2017				
		Portion of EAD (after CRM) in each portfolio				
		FIRB approach	Supervisory Slotting Criteria Approach	Retail IRB Approach	Specific Risk-weight Approach	STC approach
Sovereign, Bank, Corporate	Sovereign	-	-	-	-	100.00%
	PSE	-	-	-	-	100.00%
Corporate	Bank	99.99%	-	-	-	0.01%
	Corporate	95.56%	0.20%	-	-	4.24%
Retail	Residential mortgages	-	-	46.48%	-	53.52%
	Small business retail	-	-	100.00%	-	-
	Other retail to individuals	-	-	79.56%	-	20.44%
Other		-	-	-	37.86%	62.14%
Total		66.65%	0.10%	6.15%	2.46%	24.64%

Portfolio		At 31 December 2017				
		Percentage of RWA in each portfolio				
		FIRB approach	Supervisory Slotting Criteria Approach	Retail IRB Approach	Specific Risk-weight Approach	STC approach
Sovereign, Bank, Corporate	Sovereign	-	-	-	-	100.00%
	PSE	-	-	-	-	100.00%
Corporate	Bank	100.00%	-	-	-	0.00%
	Corporate	93.69%	0.27%	-	-	6.04%
Retail	Residential mortgages	-	-	22.30%	-	77.70%
	Small business retail	-	-	100.00%	-	-
	Other retail to individuals	-	-	63.31%	-	36.69%
Other		-	-	-	31.33%	68.67%
Total		77.42%	0.17%	2.63%	3.42%	16.36%

The Group uses IRB models to provide own estimated probability of default (“PD”) for its corporate, bank and retail borrowers, and loss given default (“LGD”) and exposure at default (“EAD”) for retail exposures under retail IRB approach. Besides using PD estimates for regulatory capital calculation in corporate and bank exposures, the Group uses the PD together with the LGD and EAD estimates in the credit approval, credit monitoring, reporting and analysis of credit risk information, etc., for the purpose of strengthening the daily management on all credit related matters.

Model acceptance standards are established to ensure the discriminatory power, accuracy and stability of the rating systems meet regulatory and management requirements. Review of a rating model will be triggered if the performance of the model deteriorates materially against pre-determined tolerance limit.

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

The performance of internal rating system is put under ongoing periodic monitoring. The Management periodically reviews the performance and predictive ability of the internal rating system. The effectiveness of the internal rating system and processes are reviewed by independent control functions. The model development and maintenance unit is responsible for developing of new internal rating models, and conducting assessment on the discriminatory power, accuracy and stability of the existing rating systems while the validation unit is responsible for performing comprehensive review of the internal rating system. Internal audit reviews the internal rating system and the operations of the related credit risk control units. The results of the review are reported to the Board and the Management regularly.

A model validation team which is independent from the model development unit and rating assignment units, conducts periodic model validations using both qualitative and quantitative analysis.

For newly-developed or revised IRB models, independent validation has to be conducted before the model is submitted for the approval by the Credit and Loans Management Committee and Risk Management Committee of the Board.

There is no change of internal models over the current reporting period.

Description of internal credit risk models

The Group's internal credit risk models can be classified into wholesale and retail models.

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

IRB models - Wholesale

Probability of Default ("PD") models

- PD represents the likelihood of a default event in a one-year horizon.

Portfolio	Model type	Number of models	Model Scope	Key Model Characteristics	Regulatory floors applied
Corporates	PD	6	Segmented mainly by the counterparty type (real estate developer, real estate investor, general corporate) and product nature (object finance, project finance). Among the general corporates, models are segmented by the total revenue size (large corporate, mid-market corporate).	Model estimates based on both quantitative and qualitative inputs (such as variables of latest financial performance, management quality, industry risks, group connection and negative warning signals).	PD \geq 0.03%
Financial institutions	PD	3	Segmented by the counterparty type (banks, insurance companies and securities firms).	Model estimates are based on both quantitative and qualitative inputs (such as variables of latest financial performance, management quality, industry risks, group connection and negative warning signals).	PD \geq 0.03%

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

IRB models - Retail

The Group uses statistical models to provide own estimated probability of default (“PD”), loss given default (“LGD”) and exposure at default (“EAD”) for retail exposures under retail IRB approach.

The estimates for retail IRB portfolios are pooled by nature of obligors, facility types, collateral types and delinquency status into different PD, EAD and LGD pools. This pooling process provides the basis of accurate and consistent estimation for PD, LGD and EAD at the pool level for exposures arising from residential mortgages to both individuals and property-holding shell companies, other retail exposures to individuals and small business retail exposures.

Probability of Default (“PD”) models

- The Group uses internal rating system to assess the borrower’s likelihood of default for all IRB portfolios. PD estimates the risk of borrower default over a one-year period.

Loss given Default (“LGD”) models

- LGD estimates the potential loss of each credit exposure if the obligor defaults. Under retail IRB approach, LGD is the economic loss, considering the direct and indirect costs induced during the recovery period and the time value of money of recoveries adjusted by the discount rates.

Exposure at Default (“EAD”) models

- EAD estimates the additional drawn down on the undrawn facility (if any) after the facility defaulted.
- The EAD of on-balance sheet exposure is the outstanding balance of the facility. The EAD of off-balance sheet exposure is determined by the credit equivalent amount, i.e. the undrawn limit multiplied by the credit conversion factor.

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

Portfolio	Model Type	Number of Models	Model Scope	Key Model Characteristics	Regulatory floors applied
Residential Mortgages	PD	1	Models are applicable to residential mortgage loans to individuals and property-holding shell companies.	The PD estimate is mainly calibrated from scores of the following two scorecards: Application scorecard (key drivers include personal and application details) and Behavioural scorecard (key drivers include account performance)	PD \geq 0.03%
	LGD	1		The model segments the portfolio with different level of LGD estimates with respect to the segmentation factors such as collateral type and loan-to-value level.	LGD \geq 10%
	EAD	1		Current exposure is used to estimate the EAD. For accounts denominated in foreign currency, an FX adjustment is applied to cater for the potential increase in EAD due to foreign currency appreciation against Hong Kong Dollar.	Nil
Other Retail Exposures to Individuals	PD	1	Models are applicable to retail loans to individuals other than residential mortgages.	PD estimates are assigned to accounts with time on book no more than 6 months by product type. PD estimates are assigned to accounts with time on book more than 6 months according to the scores generated by the two scorecards – Revolving and Instalment behavioural scorecards.	PD \geq 0.03%
	LGD	1		For accounts with single collateral, the model segments the portfolio into various pools with respect to the drivers such as collateral type and loan-to-value level. For other accounts, the model segments the portfolio into various pools such as tax loans, temporary overdrafts, other unsecured products and multiple collateralized accounts.	Nil
	EAD	1		For revolving products, utilization ratio is adopted to anticipate the exposure changes when the accounts are leading up to default. For reducing balance products, current exposure is used to estimate the EAD. For accounts denominated in foreign currency, an FX adjustment is applied to cater for the potential increase in EAD due to foreign currency appreciation against Hong Kong Dollar.	Nil

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

Portfolio	Model Type	Number of Models	Model Scope	Key Model Characteristics	Regulatory floors applied
Small Business Retail	PD	1	Models are applicable to small business retail which is defined by group exposures smaller than HKD 10 million and annual individual turnover smaller than HKD 50 million.	The PD estimate is mainly calibrated from scores of the following two scorecards: Application scorecard (key risk drivers include financial and non-financial factors) and Behavioural scorecard (key risk drivers include customer performance information)	PD \geq 0.03%
	LGD	1		The model is a segmentation model based on segmentation factors such as product type, degree of collateralization, industry type. Each exposure will be slotted into one of the LGD pools by the segmentation factors.	Nil
	EAD	1		An exposure is assigned to the EAD pool according to the key factors such as product type, industry type and utilization ratio.	Nil

CR6: Credit risk exposures by portfolio and PD ranges – for IRB approach

FIRB approach	PD scale	At 31 December 2017												
		Original on-balance sheet gross exposure	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWA	RWA	EL	Provisions	
		HK\$'000	HK\$'000		HK\$'000				Years	HK\$'000	density	HK\$'000	HK\$'000	
Portfolio (i) – Bank	0.00 to < 0.15	52,252,588	1,171,434	100.00%	56,109,693	0.07%	171	44.97%	2.5	17,335,651	30.90%	16,611		
	0.15 to < 0.25	10,816,197	1,535,287	98.02%	12,590,669	0.22%	35	45.00%	2.5	7,766,789	61.69%	12,465		
	0.25 to < 0.50	11,491,976	2,979,402	100.00%	14,915,226	0.39%	35	45.00%	2.5	12,173,254	81.62%	26,175		
	0.50 to < 0.75	2,146,300	1,206,174	98.69%	3,788,496	0.64%	17	45.00%	2.5	3,695,884	97.56%	10,877		
	0.75 to < 2.50	2,237,797	2,759,300	100.00%	5,061,809	0.95%	12	45.00%	2.5	4,772,609	94.29%	21,622		
	2.50 to < 10.00	-	25,000	-	-	N/A	-	N/A	N/A	-	N/A	-	-	
	10.00 to < 100.00	-	1,677,931	20.00%	335,586	18.00%	1	-	2.5	-	-	-	-	
	100.00 (Default)	-	-	N/A	-	N/A	-	N/A	N/A	-	N/A	-	-	
Sub-total	78,944,858	11,354,528	87.55%	92,801,479	0.28%	271	44.82%	2.5	45,744,187	49.29%	87,750	716,076		
Portfolio (ii) – Corporate – small-and-medium sized corporates	0.00 to < 0.15	1,778,669	417,132	21.92%	1,549,089	0.10%	81	42.95%	2.5	355,346	22.94%	690		
	0.15 to < 0.25	1,092,375	467,754	6.20%	2,050,455	0.22%	80	42.83%	2.5	769,928	37.55%	1,932		
	0.25 to < 0.50	1,972,345	1,222,104	7.86%	4,282,505	0.39%	150	42.48%	2.5	2,003,980	46.79%	7,095		
	0.50 to < 0.75	4,228,440	2,795,783	14.60%	5,996,567	0.57%	241	38.95%	2.5	3,067,097	51.15%	13,327		
	0.75 to < 2.50	10,375,182	8,111,908	13.31%	8,809,854	1.43%	524	39.78%	2.5	6,590,931	74.81%	49,891		
	2.50 to < 10.00	4,561,161	1,176,061	4.08%	2,827,625	4.30%	206	31.51%	2.5	2,170,142	76.75%	36,684		
	10.00 to < 100.00	2,351,391	391,368	60.21%	2,589,166	11.12%	23	36.18%	2.5	3,189,404	123.18%	105,411		
	100.00 (Default)	92,179	3,037	-	92,179	100.00%	8	41.55%	2.5	183,795	199.39%	35,480		
Sub-total	26,451,742	14,585,147	13.63%	28,197,440	2.43%	1,313	39.26%	2.5	18,330,623	65.01%	250,510	323,101		
Portfolio (iii) – Corporate – other (including purchased corporate receivables)	0.00 to < 0.15	21,162,077	4,188,342	52.89%	33,223,453	0.09%	153	44.47%	2.5	9,769,257	29.40%	13,507		
	0.15 to < 0.25	8,015,175	3,156,404	18.50%	11,510,939	0.22%	71	44.75%	2.5	5,464,144	47.47%	11,333		
	0.25 to < 0.50	13,384,227	7,122,318	8.16%	21,818,937	0.39%	175	42.94%	2.5	13,068,532	59.90%	36,538		
	0.50 to < 0.75	26,437,706	15,952,576	19.07%	22,335,094	0.60%	265	42.93%	2.5	16,445,630	73.63%	57,507		
	0.75 to < 2.50	58,515,546	41,276,015	22.42%	62,206,569	1.39%	759	37.39%	2.5	52,055,533	83.68%	315,651		
	2.50 to < 10.00	28,439,587	14,470,301	11.86%	21,221,840	3.57%	222	33.62%	2.5	22,391,507	105.51%	262,550		
	10.00 to < 100.00	3,810,499	1,165,217	54.40%	1,799,229	15.64%	36	25.29%	2.5	2,221,702	123.48%	73,654		
	100.00 (Default)	976,139	2,746	19.48%	976,674	100.00%	37	44.74%	2.5	181,541	18.59%	797,532		
Sub-total	160,740,956	87,333,919	20.64%	175,092,735	1.80%	1,718	40.08%	2.5	121,597,846	69.45%	1,568,272	2,705,783		
Total (sum of all portfolios)	266,137,556	113,273,594	26.44%	296,091,654	1.38%	3,302	41.48%	2.5	185,672,656	62.71%	1,906,532	3,744,960		

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

Retail IRB approach	At 31 December 2017												
	PD scale	Original on-balance sheet gross exposure	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWA	RWA	EL	Provisions
		HK\$'000	HK\$'000		HK\$'000				Years	HK\$'000	density	HK\$'000	HK\$'000
Portfolio (iv) – Retail – Residential mortgage exposures (including both to individuals and to property-holding shell companies)	0.00 to < 0.15	8,748,204	4	100.00%	8,748,208	0.09%	6,000	11.90%		1,419,651	16.23%	970	
	0.15 to < 0.25	2,684,531	-	N/A	2,684,531	0.22%	685	12.48%		412,407	15.36%	737	
	0.25 to < 0.50	1,758,329	-	N/A	1,758,329	0.39%	624	12.93%		280,064	15.93%	882	
	0.50 to < 0.75	646,905	-	N/A	646,905	0.55%	229	18.89%		132,964	20.55%	670	
	0.75 to < 2.50	35,060	-	N/A	35,060	1.55%	26	18.03%		8,666	24.72%	66	
	2.50 to < 10.00	48,527	-	N/A	48,527	5.02%	21	11.33%		18,230	37.57%	295	
	10.00 to < 100.00	19,724	-	N/A	19,724	22.80%	13	14.39%		15,815	80.18%	703	
	100.00 (Default)	5,740	-	N/A	5,740	100.00%	9	23.65%		16,972	295.68%	-	
Sub-total	13,947,020	4	100.00%	13,947,024	0.27%	7,607	12.48%		2,304,769	16.53%	4,323	36,079	
Portfolio (v) – Retail – small business retail exposures	0.00 to < 0.15	323,945	480,900	29.98%	468,142	0.09%	739	8.02%		8,583	1.83%	34	
	0.15 to < 0.25	135,314	48,875	30.17%	150,061	0.22%	169	8.93%		5,790	3.86%	30	
	0.25 to < 0.50	200,651	63,196	34.51%	222,460	0.39%	234	7.91%		10,942	4.92%	69	
	0.50 to < 0.75	277,841	118,049	30.07%	313,342	0.59%	278	8.22%		20,427	6.52%	155	
	0.75 to < 2.50	334,969	123,576	28.97%	370,775	1.34%	309	11.41%		46,700	12.60%	550	
	2.50 to < 10.00	133,966	17,991	29.90%	139,346	4.14%	140	10.63%		21,110	15.15%	568	
	10.00 to < 100.00	2,836	167	30.47%	2,887	10.54%	4	6.86%		338	11.71%	21	
	100.00 (Default)	17,740	-	N/A	17,740	100.00%	38	21.16%		3,848	21.69%	9,644	
Sub-total	1,427,262	852,754	30.20%	1,684,753	1.91%	1,911	9.22%		117,738	6.99%	11,071	11,487	
Portfolio (vi) – Other retail exposures to individuals	0.00 to < 0.15	319,492	777,219	-	1,055,172	0.05%	597	13.11%		20,563	1.95%	75	
	0.15 to < 0.25	146,660	926	-	147,394	0.22%	378	12.47%		7,941	5.39%	41	
	0.25 to < 0.50	2,017,597	155	-	2,017,727	0.37%	1,361	12.18%		147,383	7.30%	906	
	0.50 to < 0.75	3,405,282	80,019	99.98%	3,485,468	0.60%	1,495	22.94%		617,547	17.72%	4,580	
	0.75 to < 2.50	1,934,047	1,471,070	2.10%	2,029,317	1.15%	1,120	41.25%		911,383	44.91%	9,966	
	2.50 to < 10.00	2,802,923	130,310	99.76%	2,933,393	2.86%	759	53.21%		2,154,263	73.44%	44,503	
	10.00 to < 100.00	14,006	-	N/A	14,006	26.99%	21	52.61%		17,943	128.11%	1,932	
	100.00 (Default)	1,914	-	N/A	1,914	100.00%	4	34.03%		8,143	425.44%	-	
Sub-total	10,641,921	2,459,699	9.79%	11,684,391	1.22%	5,735	30.88%		3,885,166	33.25%	62,003	60,818	
Total (sum of all portfolios)	26,016,203	3,312,457	15.05%	27,316,168	0.78%	15,253	20.15%		6,307,673	23.09%	77,397	108,384	

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

Up to the date of report, the Group has not used any recognised credit derivative contracts for credit risk mitigation. Therefore, pre-credit derivatives RWA was equal to actual RWA.

		At 31 December 2017	
		Pre-credit derivatives RWA	Actual RWA
		HK\$'000	HK\$'000
1	Corporate – Specialised lending under supervisory slotting criteria approach (project finance)	417,286	417,286
2	Corporate – Specialised lending under supervisory slotting criteria approach (object finance)	-	-
3	Corporate – Specialised lending under supervisory slotting criteria approach (commodities finance)	-	-
4	Corporate – Specialised lending under supervisory slotting criteria approach (income-producing real estate)	-	-
5	Corporate – Specialised lending (high-volatility commercial real estate)	-	-
6	Corporate – Small-and-medium sized corporates	18,330,623	18,330,623
7	Corporate – Other corporates	121,597,846	121,597,846
8	Sovereigns	-	-
9	Sovereign foreign public sector entities	-	-
10	Multilateral development banks	-	-
11	Bank exposures – Banks	45,269,214	45,269,214
12	Bank exposures – Securities firms	474,973	474,973
13	Bank exposures – Public sector entities (excluding sovereign foreign public sector entities)	-	-
14	Retail – Small business retail exposures	117,738	117,738
15	Retail – Residential mortgages to individuals	2,218,680	2,218,680
16	Retail – Residential mortgages to property-holding shell companies	86,089	86,089
17	Retail – Qualifying revolving retail exposures (QRRE)	-	-
18	Retail – Other retail exposures to individuals	3,885,166	3,885,166
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	-	-
27	Other – Other items	8,197,988	8,197,988
28	Total (under the IRB calculation approaches)	200,595,603	200,595,603

CR8: RWA flow statements of credit risk exposures under IRB approach

		HK\$'000
1	RWA as at 30 September 2017	196,708,486
2	Asset size	1,356,536
3	Asset quality	1,676,760
4	Model updates	-
5	Methodology and policy	-
6	Acquisitions and disposals	-
7	Foreign exchange movements	853,821
8	Other	-
9	RWA as at 31 December 2017	200,595,603

CR9: Back-testing of PD per portfolio – for IRB approach

(a) Portfolio X	(b) PD Range	(c)(i) External rating equivalent Moody's	(c)(ii) External rating equivalent S&P	(c)(iii) External rating equivalent Fitch	(d) Weighted average PD	(e) Arithmetic average PD by obligors	(f) Number of obligors		(g) Defaulted obligors in the year	(h) Of which: new defaulted obligors in the year	(i) Average historical annual default rate
							Beginning of the year	End of the year			
Portfolio (i) – Bank	0.00 to < 0.15	Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1	AAA, AA+, AA, AA-, A+, A-, BBB+	AAA, AA+, AA, AA-, A+, A-, BBB+	0.07%	0.07%	258	171	-	-	-
	0.15 to < 0.25	Baa2	BBB	BBB	0.22%	0.22%	10	35	-	-	-
	0.25 to < 0.50	Baa3	BBB-	BBB-	0.39%	0.39%	26	35	-	-	-
	0.50 to < 0.75	Ba1	BB+	BB+	0.56%	0.55%	11	17	-	-	-
	0.75 to < 2.50	Ba2, Ba3	BB, BB-	BB, BB-	1.07%	1.08%	17	12	-	-	-
	2.50 to < 10.00	B1, B2, B3	B+, B, B-	B+, B, B-	N/A	N/A	-	-	-	-	-
10.00 to < 100.00	B3, Caa1, Caa2, Caa3, Ca, C	B-, CCC+, CCC, CCC-, CC, C	B-, CCC, CC, C	18.00%	18.00%	1	1	-	-	-	
Portfolio (ii) – Corporate – small-and-medium sized corporates	0.00 to < 0.15	Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1	AAA, AA+, AA, AA-, A+, A-, BBB+	AAA, AA+, AA, AA-, A+, A-, BBB+	0.10%	0.11%	75	81	-	-	-
	0.15 to < 0.25	Baa2	BBB	BBB	0.22%	0.22%	79	80	-	-	-
	0.25 to < 0.50	Baa3	BBB-	BBB-	0.39%	0.39%	154	150	-	-	0.28%
	0.50 to < 0.75	Ba1	BB+	BB+	0.61%	0.59%	249	241	-	-	-
	0.75 to < 2.50	Ba2, Ba3	BB, BB-	BB, BB-	1.42%	1.41%	533	524	3	-	0.97%
	2.50 to < 10.00	B1, B2, B3	B+, B, B-	B+, B, B-	3.85%	4.01%	198	206	2	-	0.80%
10.00 to < 100.00	B3, Caa1, Caa2, Caa3, Ca, C	B-, CCC+, CCC, CCC-, CC, C	B-, CCC, CC, C	17.06%	19.03%	27	23	3	-	12.83%	
Portfolio (iii) – Corporate – other (including purchased corporate receivables)	0.00 to < 0.15	Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1	AAA, AA+, AA, AA-, A+, A-, BBB+	AAA, AA+, AA, AA-, A+, A-, BBB+	0.09%	0.10%	147	153	-	-	0.20%
	0.15 to < 0.25	Baa2	BBB	BBB	0.22%	0.22%	70	71	-	-	-
	0.25 to < 0.50	Baa3	BBB-	BBB-	0.39%	0.39%	152	175	-	-	-
	0.50 to < 0.75	Ba1	BB+	BB+	0.60%	0.60%	311	265	-	-	-
	0.75 to < 2.50	Ba2, Ba3	BB, BB-	BB, BB-	1.38%	1.39%	798	759	4	-	0.56%
	2.50 to < 10.00	B1, B2, B3	B+, B, B-	B+, B, B-	3.90%	4.24%	244	222	4	-	1.85%
10.00 to < 100.00	B3, Caa1, Caa2, Caa3, Ca, C	B-, CCC+, CCC, CCC-, CC, C	B-, CCC, CC, C	15.36%	17.52%	36	36	5	3	19.19%	

CR9: Back-testing of PD per portfolio – for IRB approach (Continued)

(a) Portfolio X	(b) PD Range	(c)		(d) Weighted average PD	(e) Arithmetic average PD by obligors	(f) Number of obligors		(g) Defaulted obligors in the year	(h) Of which: new defaulted obligors in the year	(i) Average historical annual default rate	
		(i) External equivalent Moody's rating	(ii) External equivalent S&P rating			(iii) External equivalent Fitch rating	Beginning of the year				End of the year
Portfolio (iv) –Retail – Residential mortgage exposures (including both to individuals and to property-holding shell companies)	0.00 to < 0.15	N/A	N/A	N/A	0.09%	0.08%	6,649	6,000	5	-	0.03%
	0.15 to < 0.25	N/A	N/A	N/A	0.22%	0.22%	585	685	-	-	-
	0.25 to < 0.50	N/A	N/A	N/A	0.39%	0.39%	478	624	-	-	0.02%
	0.50 to < 0.75	N/A	N/A	N/A	0.54%	0.54%	463	229	-	-	-
	0.75 to < 2.50	N/A	N/A	N/A	1.07%	1.11%	49	26	-	-	-
	2.50 to <10.00	N/A	N/A	N/A	6.24%	5.22%	28	21	-	-	0.46%
	10.00 to < 100.00	N/A	N/A	N/A	23.26%	21.87%	12	13	1	-	5.44%
Portfolio (v) – Retail – small business retail exposures	0.00 to < 0.15	N/A	N/A	N/A	0.09%	0.09%	804	739	-	-	0.09%
	0.15 to < 0.25	N/A	N/A	N/A	0.22%	0.22%	183	169	-	-	0.68%
	0.25 to < 0.50	N/A	N/A	N/A	0.39%	0.39%	277	234	-	-	0.11%
	0.50 to < 0.75	N/A	N/A	N/A	0.60%	0.59%	308	278	-	-	0.08%
	0.75 to < 2.50	N/A	N/A	N/A	1.33%	1.29%	459	309	-	-	1.44%
	2.50 to <10.00	N/A	N/A	N/A	4.29%	4.81%	141	140	7	3	3.80%
	10.00 to < 100.00	N/A	N/A	N/A	23.69%	27.04%	13	4	-	-	7.38%
Portfolio (vi) –Other retail exposures to individuals	0.00 to < 0.15	N/A	N/A	N/A	0.05%	0.06%	601	597	-	-	0.07%
	0.15 to < 0.25	N/A	N/A	N/A	0.22%	0.22%	345	378	-	-	-
	0.25 to < 0.50	N/A	N/A	N/A	0.36%	0.36%	1,193	1,361	1	-	0.09%
	0.50 to < 0.75	N/A	N/A	N/A	0.56%	0.58%	1,618	1,495	-	-	0.19%
	0.75 to < 2.50	N/A	N/A	N/A	1.05%	1.13%	914	1,120	-	-	0.28%
	2.50 to <10.00	N/A	N/A	N/A	3.04%	3.29%	516	759	1	-	0.71%
	10.00 to < 100.00	N/A	N/A	N/A	31.63%	26.46%	16	21	-	-	-

All Portfolio in the scope of regulatory consolidation have been considered for back-testing purpose.

CR10: Specialised lending under supervisory slotting criteria approach and equities under simple risk-weight method – for IRB approach

I. Specialised lending under supervisory slotting criteria approach – HVCRE

Supervisory Rating Grade	Remaining Maturity	At 31 December 2017					
		On-balance sheet exposure amount	Off-balance sheet exposure amount	SRW	EAD amount	RWA	Expected loss amount
		HK\$'000	HK\$'000		HK\$'000	HK\$'000	HK\$'000
Strong [^]	Less than 2.5 years	-	-	70%	-	-	-
Strong	Equal to or more than 2.5 years	-	-	95%	-	-	-
Good [^]	Less than 2.5 years	-	-	95%	-	-	-
Good	Equal to or more than 2.5 years	-	-	120%	-	-	-
Satisfactory		-	-	140%	-	-	-
Weak		-	-	250%	-	-	-
Default		-	-	0%	-	-	-
Total		-	-		-	-	-

[^] Use of preferential risk-weights.

CR10: Specialised lending under supervisory slotting criteria approach and equities under simple risk-weight method – for IRB approach (continued)

II. Specialised lending under supervisory slotting criteria approach – Other than HVCRE

Supervisory Rating Grade	Remaining Maturity	At 31 December 2017										
		On-balance sheet exposure amount	Off-balance sheet exposure amount	SRW	EAD amount					RWA	Expected loss amount	
					PF	OF	CF	IPRE	Total			
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	
Strong [^]	Less than 2.5 years	-	-	50%	-	-	-	-	-	-	-	-
Strong	Equal to or more than 2.5 years	162,013	-	70%	162,013	-	-	-	-	162,013	113,409	648
Good [^]	Less than 2.5 years	-	-	70%	-	-	-	-	-	-	-	-
Good	Equal to or more than 2.5 years	30,025	27,566	90%	30,025	-	-	-	-	30,025	27,023	240
Satisfactory		240,743	40,769	115%	240,743	-	-	-	-	240,743	276,854	6,741
Weak		-	-	250%	-	-	-	-	-	-	-	-
Default		-	-	0%	-	-	-	-	-	-	-	-
Total		432,781	68,335		432,781	-	-	-	-	432,781	417,286	7,629

[^]Use of preferential risk-weights.

III. Equity exposures under the simple risk-weight method

Categories	At 31 December 2017				
	On-balance sheet exposure amount	Off-balance sheet exposure amount	SRW	EAD amount	RWA
	HK\$'000	HK\$'000		HK\$'000	HK\$'000
Publicly traded equity exposures	-	-	300%	-	-
All other equity exposures	-	-	400%	-	-
Total	-	-		-	-

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

The risk management objective with respect to counterparty credit risk is to ensure that the relevant business is well managed and controlled under existing risk management framework. The policies has defined the counterparty credit risks in the Bank, transaction categories that arise counterparty credit risks, relevant risk factors and layouts the Bank risk assessment methodology and mitigation measures.

For well controlling concentration risk, the Bank has set a trigger point for reviewing the counterparty credit risk portfolio. With reference to the Bank transaction history and future business development, the Bank sets the review trigger point of the counterparty pre-settlement risk exposures limit as a percentage of the Bank-level capital base. If the trigger point is reached, Risk Management Department will review and assess the counterparty credit risk portfolio and report to the Credit Management Committee for taking any necessary actions.

Based on the credit risk assessment of the counterparties, the Bank will apply appropriate risk mitigating/credit enhanced measures to mitigate the counterparties risk exposures. These measures generally include: netting, collection of collateral/guarantee and margin deposit.

During the credit assessment and review of the counterparty, the Bank will observe if there are any general or specific wrong way risks. The Bank in principle does not conduct any transaction that would arise specific wrong way risk. The Bank will also identify any general wrong way risk by conducting stress testing. The Bank will further analyze the risks with these counterparties and take further mitigating or controlling actions when necessary.

Currently, the ISDA master agreement and CSA signed between the Bank and its counterparties do not contain any credit rating downgrade clause.

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

		At 31 December 2017					
		Replacement cost (RC)	PFE	Effective EPE	Alpha (α) used for computing default risk exposure	Default risk exposure after CRM	RWA
		HK\$'000	HK\$'000	HK\$'000		HK\$'000	HK\$'000
1	SA-CCR (for derivative contracts)	-	-		1.4	-	-
1a	CEM	291,569	251,037		Not applicable	276,345	166,556
2	IMM (CCR) approach			-	Not applicable	-	-
3	Simple Approach (for SFTs)					-	-
4	Comprehensive Approach (for SFTs)					19,432,420	167,925
5	VaR (for SFTs)					-	-
6	Total						334,481

CCR2: CVA capital charge

		At 31 December 2017	
		EAD post CRM	RWA
		HK\$'000	HK\$'000
	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 standardised CVA method	542,608	97,400
4	Total	542,608	97,400

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

STC approach

Risk Weight Exposure class		At 31 December 2017										Total default risk exposure after CRM HK\$'000
		0%	10%	20%	35%	50%	75%	100%	150%	250%	Others	
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	
1	Sovereign exposures	-	-	-	-	-	-	-	-	-	-	-
2	PSE exposures	-	-	-	-	-	-	-	-	-	-	-
2a	Of which: domestic PSEs	-	-	-	-	-	-	-	-	-	-	-
2b	Of which: foreign PSEs	-	-	-	-	-	-	-	-	-	-	-
3	Multilateral development bank exposures	-	-	-	-	-	-	-	-	-	-	-
4	Bank exposures	-	-	-	-	-	-	-	-	-	-	-
5	Securities firm exposures	-	-	-	-	-	-	-	-	-	-	-
6	Corporate exposures	-	-	-	-	-	-	6,264	-	-	-	6,264
7	CIS exposure	-	-	-	-	-	-	-	-	-	-	-
8	Regulatory retail exposures	-	-	-	-	-	1,001	-	-	-	-	1,001
9	Residential mortgage loans	-	-	-	-	-	-	-	-	-	-	-
10	Other exposures which are not past due exposures	-	-	-	-	-	-	-	-	-	-	-
11	Significant exposures to commercial entities	-	-	-	-	-	-	-	-	-	-	-
12	Total	-	-	-	-	-	1,001	6,264	-	-	-	7,265

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

FIRB approach	PD scale	At 31 December 2017						
		EAD post-CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWA	RWA density
		HK\$'000				Years	HK\$'000	
Portfolio (i) –Bank	0.00 to < 0.15	1,522,706	0.04%	13	7.58%	0.70	54,965	3.61%
	0.15 to < 0.25	1,942,015	0.22%	4	0.44%	0.50	7,184	0.37%
	0.25 to < 0.50	4,117,417	0.39%	5	0.60%	0.52	39,200	0.95%
	0.50 to < 0.75	6,254,081	0.54%	6	0.59%	0.50	49,973	0.80%
	0.75 to < 2.50	5,797,069	1.00%	7	1.14%	0.50	99,601	1.72%
	2.50 to < 10.00	-	N/A	-	N/A	N/A	-	N/A
	10.00 to < 100.00	-	N/A	-	N/A	N/A	-	N/A
	100.00 (Default)	-	N/A	-	N/A	N/A	-	N/A
	Sub-total	19,633,288	0.57%	35	1.28%	0.52	250,923	1.28%
Portfolio (ii) – Corporate	0.00 to < 0.15	-	N/A	-	N/A	N/A	-	N/A
	0.15 to < 0.25	2,535	0.22%	2	45.00%	2.5	1,171	46.19%
	0.25 to < 0.50	275	0.39%	2	45.00%	2.5	170	61.82%
	0.50 to < 0.75	2,702	0.58%	2	45.00%	2.5	1,999	73.98%
	0.75 to < 2.50	44,034	1.74%	11	45.00%	2.5	48,125	109.29%
	2.50 to < 10.00	18,667	3.53%	7	45.00%	2.5	25,077	134.34%
	10.00 to < 100.00	-	N/A	-	N/A	N/A	-	N/A
	100.00 (Default)	-	N/A	-	N/A	N/A	-	N/A
	Sub-total	68,213	2.12%	24	45.00%	2.5	76,542	112.21%
Total (sum of all portfolios)	19,701,501	0.58%	59	1.43%	0.53	327,465	1.66%	

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

	At 31 December 2017					
	Derivative contracts				SFTs	
	Fair value of recognised collateral received		Fair value of posted collateral		Fair value of recognised collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
Cash - domestic currency	-	154,934	-	-	-	-
Cash - other currencies	-	179,135	-	49,729	3,168,886	16,119,764
Government bonds	-	-	-	-	7,279,237	1,070,819
Other bonds	-	-	-	-	8,626,681	2,241,837
Total	-	334,069	-	49,729	19,074,804	19,432,420

CCR6: Credit-related derivatives contracts

	At 31 December 2017	
	Protection bought	Protection sold
	HK\$'000	HK\$'000
Total notional amounts	-	-
Fair values		
Positive fair value (asset)	-	-
Negative fair value (liability)	-	-

SECA: Qualitative disclosures related to securitization exposures

The Group adopts the standardized (securitization) approach to calculate the credit risk for securitization exposures as an investing institution. The securitization exposures held by the Group were all unrated. Since the Group held the most senior tranche in the securitization transactions and knew the current composition of the pool of underlying exposures, risk-weights are determined by applying the look-through treatment in accordance to section 238 of the Banking (Capital) Rules.

The Group monitors the risks inherent in its securitization assets on an ongoing basis. Assessment of the underlying assets is used for managing credit risk associated with the investment.

The Group's securitization exposures are measured in accordance with the accounting policy described in Notes 2.8 "Financial assets", 2.11 "Recognition and derecognition of financial instruments", and 2.14 "Impairment of financial assets" of the 2017 consolidated financial statements. For those investments not measured at fair value, further details on their valuation are outlined in Note 5.2 "Financial instruments not measured at fair value" of the 2017 consolidated financial statements.

SEC1: Securitization exposures in banking book

		At 31 December 2017								
		(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
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
1	Retail (total) – of which:	-	-	-	-	-	-	-	-	-
2	residential mortgage	-	-	-	-	-	-	-	-	-
3	credit card	-	-	-	-	-	-	-	-	-
4	other retail exposures	-	-	-	-	-	-	-	-	-
5	re-securitization exposures	-	-	-	-	-	-	-	-	-
6	Wholesale (total) – of which:	-	-	-	-	-	-	3,776,502	-	3,776,502
7	loans to corporates	-	-	-	-	-	-	3,776,502	-	3,776,502
8	commercial mortgage	-	-	-	-	-	-	-	-	-
9	lease and receivables	-	-	-	-	-	-	-	-	-
10	other wholesale	-	-	-	-	-	-	-	-	-
11	re-securitization exposures	-	-	-	-	-	-	-	-	-

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

At 31 December 2017																
(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)				RWAs (by regulatory approach)				Capital charges after cap			
≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	IRB(S) RBM	IRB(S) SFM	STC(S)	1250%	IRB(S) RBM	IRB(S) SFM	STC(S)	1250%	IRB(S) RBM	IRB(S) SFM	STC(S)	1250%
HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
1	Total exposures	-	3,776,502	-	-	-	3,776,502	-	-	-	3,776,502	-	-	-	-	302,120
2	Traditional securitization	-	3,776,502	-	-	-	3,776,502	-	-	-	3,776,502	-	-	-	-	302,120
3	Of which securitization	-	3,776,502	-	-	-	3,776,502	-	-	-	3,776,502	-	-	-	-	302,120
4	Of which retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Of which wholesale	-	3,776,502	-	-	-	3,776,502	-	-	-	3,776,502	-	-	-	-	302,120
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Of which wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

MRA: Qualitative disclosures related to market risk

Market risk refers to the risk of loss arising from movements in the value of foreign exchange, interest rate, equity and commodity positions held by the Group due to the volatility of financial market price (foreign exchange rate, interest rate, equity price, commodity price). The Group adopts a moderate market risk appetite to achieve a balance between risk and return.

The Group's objective in managing market risk is to secure healthy growth of the treasury business, by effective management of potential market risk in the Group's business, according to the Group's overall risk appetite and strategy of treasury business on the basis of a well-established risk management regime and related management measures.

Market risk is managed across the Group at portfolio level within the limits and on a day to day basis. Daily risk limits are set up in hierarchy-based and portfolio-based respectively and reviewed regularly to effectively monitor the corresponding risk factor.

In accordance with the Group's corporate governance principles in respect of risk management, the Board and Risk Management Committee, Senior Management and functional units perform their duties and responsibilities to manage the Group's market risk. The risk management units are responsible for assisting Senior Management to perform their day-to-day duties, independently monitoring the market risk profile and compliance of management policies and limits of the Group, to ensure that the aggregate and individual market risks are within acceptable levels. Independent units are assigned to monitor the risk exposure against risk limits on a daily basis, together with profit and loss reports submitted to Senior Management on a regular basis, while limit excess will be reported to Senior Management at once when it occurs. NCB (China) sets up independent risk monitoring teams to monitor daily market risk and limit compliance, and submit management information and reports to the Bank on a regular basis.

The Group sets up market risk indicators and limits to identify, measure, monitor and control market risk. To meet management requirements, major risk indicators and limits are classified into four levels, subject to review regularly based on current situation, and are approved by the Risk Management Committee, Asset and Liability Management Committee or Senior Management respectively. Major risk indicators and limits which include but not limited to VAR (Value-at-Risk), Stop Loss, Open Position, Stress Testing and Sensitivity Analysis (Basis Point Value) are monitored daily, and are also reported regularly to Senior Management. Treasury business units are required to conduct their business within approved market risk indicators and limits.

MRB: Additional qualitative disclosures for AI using IMM approach

The Group uses the internal models (“IMM”) approach to calculate the general market risk capital charge for foreign exchange and interest rate exposures and, with the approval from the HKMA, exclude its structural FX positions pursuant to section 317C of the Banking (Capital) Rules in the calculation of the market risk capital charge. The Group adopts the standardised (market risk) (“STM”) approach to calculate the market risk capital charge for the remaining exposures.

The Group adopts a uniformed VAR calculation model, using a historical simulation approach and two years of historical market data, to calculate the VAR of the Group and the Bank with 99% confidence level. Instruments are valued using a full revaluation approach when calculating VAR. Absolute return is used for movement in interest rate risk factor while relative return is used for foreign exchange and commodity risk factor. VAR and stressed VAR are computed on a daily basis and the data is updated daily.

For both management purposes and regulatory purposes, the Group uses the same single VAR model. 1-day VAR is used for management purposes while 10-day VAR is used for regulatory purposes. The stressed VAR is generated with inputs calibrated to the historical market data from a continuous 12-month period in year 2008 which is significant financial stress relevant to the Group's portfolio.

The Group use back-testing to validate the accuracy and reliability of VAR model by comparing daily VAR with daily actual profit & loss and hypothetical profit & loss respectively. Back-testing results for calculating the market risk capital charge does not apply to stressed VAR. For details please refer to template MR4.

MR1: Market risk under STM approach

		At 31 December 2017
		RWA
		HK\$'000
Outright product exposures		
1	Interest rate exposures (general and specific risk)	249,363
2	Equity exposures (general and specific risk)	-
3	Foreign exchange (including gold) exposures	-
4	Commodity exposures	30,375
Option exposures		
5	Simplified approach	-
6	Delta-plus approach	-
7	Other approach	-
8	Securitization exposures	-
9	Total	279,738

MR2: RWA flow statements of market risk exposures under IMM approach

Movement in RWA was mainly driven by interest rates exposures during the period.

		VaR	Stressed VaR	IRC	CRC	Other	Total RWA
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
1	RWA as at 30 September 2017	134,325	507,413	-	-	-	641,738
1a	Regulatory adjustment	(81,737)	(380,600)	-	-	-	(462,337)
1b	RWA as at 30 September 2017	52,588	126,813	-	-	-	179,401
2	Movement in risk levels	(6,188)	103,975	-	-	-	97,787
3	Model updates/changes	-	-	-	-	-	-
4	Methodology and policy	-	-	-	-	-	-
5	Acquisitions and disposals	-	-	-	-	-	-
6	Foreign exchange movements	-	-	-	-	-	-
7	Other	-	-	-	-	-	-
7a	RWA as at 31 December 2017	46,400	230,788	-	-	-	277,188
7b	Regulatory adjustment	122,238	392,349	-	-	-	514,587
8	RWA as at 31 December 2017	168,638	623,137	-	-	-	791,775

MR3: IMM approach values for market risk exposures

The maximum, minimum, average and period-end values were calculated for the reporting period from July 2017 to December 2017. Movement of Stressed VaR was driven by interest rates exposure during the reporting period.

		At 31 December 2017
		HK\$'000
VaR (10 days – one-tailed 99% confidence interval)		
1	Maximum Value	6,335
2	Average Value	4,044
3	Minimum Value	2,552
4	Period End	3,712
Stressed VaR (10 days – one-tailed 99% confidence interval)		
5	Maximum Value	23,717
6	Average Value	15,016
7	Minimum Value	6,483
8	Period End	18,463
Incremental risk charge (IRC) (99.9% confidence interval)		
9	Maximum Value	-
10	Average Value	-
11	Minimum Value	-
12	Period End	-
Comprehensive risk charge (CRC) (99.9% confidence interval)		
13	Maximum Value	-
14	Average Value	-
15	Minimum Value	-
16	Period End	-
17	Floor	-

MR4: Comparison of VaR estimates with gains or losses

Below is the 250-day history for back-testing results of the Group's market risk under IMM approach. The Group adopts a uniformed VAR calculation model, and daily VaR is calculated at a 99% confidence level using two years of historical market data. During the period, there was 1 hypothetical loss exceeding the VaR for the Group as shown in the back-testing results (No exception was found for actual P&L). The exception was driven by unexpected market movement in interest rates.

Actual P&L in back-testing does not include reserves, commissions and fees.

