

Regulatory Disclosures

31 December 2019



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KM1: Key prudential ratios

		At 31 December 2019	At 30 September 2019	At 30 June 2019	At 31 March 2019	At 31 December 2018
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
	Regulatory capital (amount)					
1	Common Equity Tier 1 (CET1)	39,813,759	38,831,519	38,144,683	38,075,031	36,556,933
2	Tier 1	49,128,649	48,146,409	47,459,573	47,389,921	45,871,823
3	Total capital	59,345,916	52,867,274	52,293,766	52,181,933	50,626,038
	RWA (amount)					
4	Total RWA	273,125,594	262,752,628	278,277,353	278,043,475	270,692,288
	Risk-based regulatory capital ratios (as a percentage of RWA)					
5	CET1 ratio (%)	14.58%	14.78%	13.71%	13.69%	13.50%
6	Tier 1 ratio (%)	17.99%	18.32%	17.05%	17.04%	16.95%
7	Total capital ratio (%)	21.73%	20.12%	18.79%	18.77%	18.70%
	Additional CET1 buffer requirements (as a percentage of RWA)					
8	Capital conservation buffer requirement (%)	2.5%	2.5%	2.5%	2.5%	1.875%
9	Countercyclical capital buffer requirement (%)	1.11%	1.33%	1.37%	1.34%	1.01%
10	Higher loss absorbency requirements (%) (applicable only to G-SIBs or D-SIBs)	-	-	-	-	-
11	Total AI-specific CET1 buffer requirements (%)	3.61%	3.83%	3.87%	3.84%	2.885%
12	CET1 available after meeting the AI's minimum capital requirements (%)	10.08%	10.28%	9.21%	9.19%	9.00%
	Basel III leverage ratio					
13	Total leverage ratio (LR) exposure measure	512,744,692	480,324,461	495,303,731	504,341,925	488,062,361
14	LR (%)	9.58%	10.02%	9.58%	9.40%	9.40%
	Liquidity Coverage Ratio (LCR) / Liquidity Maintenance Ratio (LMR)					
	Applicable to category 1 institution only:					
15	Total high quality liquid assets (HQLA)	73,600,109	74,736,968	75,150,686	71,127,385	61,520,887
16	Total net cash outflows	47,755,499	48,593,366	48,808,494	41,320,198	42,025,704
17	LCR (%)	154.97%	154.48%	154.16%	173.83%	147.72%
	Applicable to category 2 institution only:					
17a	LMR (%)	N/A	N/A	N/A	N/A	N/A
	Net Stable Funding Ratio (NSFR) / Core Funding Ratio (CFR)					
	Applicable to category 1 institution only:					
18	Total available stable funding	301,381,779	290,141,434	298,813,026	296,815,218	276,806,639
19	Total required stable funding	248,958,643	244,680,316	252,318,334	246,919,326	238,184,328
20	NSFR (%)	121.06%	118.58%	118.43%	120.21%	116.22%
	Applicable to category 2A institution only:					
20a	CFR (%)	N/A	N/A	N/A	N/A	N/A

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, strategic risk and technology 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 establishes a sound risk culture and 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, review and approve the high-level risk management policies. Also, Credit Approval Committee is set up under the Risk Management Committee to review or approve credit applications and credit management related matters 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, evaluating, monitoring, controlling and reporting credit risk, market risk, operational risk, reputation risk, legal and compliance risk, interest rate risk, liquidity risk, strategic risk and technology 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 units and the Audit Department, risk management units and Chief Risk Officer report directly to the Risk Management Committee and the Audit Department reports directly to 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.

OVA: Overview of risk management (continued)

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.

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.

OVA: Overview of risk management (continued)

Comprehensive risk management mechanisms: risk management measures are imposed on a group basis, including the formulation of major group policies, consistent risk assessment framework, group level limits, and ongoing monitoring. The mechanisms ensure compliance with the Group's policies, and legal and regulatory requirements in Hong Kong and the PRC.

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 units 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 adopts various measures including but not limited to 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 Risk Committee of NCB (China) to supervise the internal control of NCB (China);
- Periodic meetings between the Chief Risk Officers of two banks have been arranged. The Chief Risk Officer of NCB (China) is also a member of the Bank's risk management related committees to strengthen the internal communication regarding risks within the Group;
- The risk management policies of NCB (China) are subject to no objection or review from Chief Risk Officer or risk management units of the Bank;
- 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 2019	At 30 September 2019	At 31 December 2019
		HK\$'000	HK\$'000	HK\$'000
1	Credit risk for non-securitization exposures	246,187,158	236,141,269	20,779,072
2	Of which STC approach	20,332,891	19,787,862	1,626,631
2a	Of which BSC approach	-	-	-
3	Of which foundation IRB approach	225,179,052	215,584,182	19,095,183
4	Of which supervisory slotting criteria approach	675,215	769,225	57,258
5	Of which advanced IRB approach	-	-	-
6	Counterparty default risk and default fund contributions	655,096	578,144	55,513
7	Of which SA-CCR	N/A	N/A	N/A
7a	Of which CEM	429,113	476,941	36,350
8	Of which IMM(CCR) approach	-	-	-
9	Of which others	225,983	101,203	19,163
10	CVA risk	243,138	275,450	19,451
11	Equity positions in banking book under the simple risk-weight method and internal models method	-	-	-
12	Collective investment scheme ("CIS") exposures – LTA	N/A	N/A	N/A
13	CIS exposures - MBA	N/A	N/A	N/A
14	CIS exposures - FBA	N/A	N/A	N/A
14a	CIS exposures - combination of approaches	N/A	N/A	N/A
15	Settlement risk	-	-	-
16	Securitization exposures in banking book	203,439	199,440	16,275
17	Of which SEC - IRBA	-	-	-
18	Of which SEC - ERBA (including IAA)	-	-	-
19	Of which SEC - SA	203,439	199,440	16,275
19a	Of which SEC - FBA	-	-	-
20	Market risk	768,038	789,625	61,443
21	Of which STM approach	66,188	160,000	5,295
22	Of which IMM approach	701,850	629,625	56,148
23	Capital charge for switch between exposures in trading book and banking book (not applicable before the revised market risk framework takes effect)	N/A	N/A	N/A
24	Operational risk	15,336,063	15,599,650	1,226,885
24a	Sovereign concentration risk	-	-	-
25	Amounts below the thresholds for deduction (subject to 250% RW)	15,250	15,250	1,220
26	Capital floor adjustment	-	-	-
26a	Deduction to RWA	3,872,664	3,861,641	309,813
26b	Of which portion of regulatory reserve for general banking risks and collective provisions which is not included in Tier 2 Capital	77,753	83,627	6,220
26c	Of which portion of cumulative fair value gains arising from the revaluation of land and buildings which is not included in Tier 2 Capital	3,794,911	3,778,014	303,593
27	Total	259,535,518	249,737,187	21,850,046

N/A: Not applicable until the respective policy frameworks take effect

PV1: Prudent valuation adjustments

		At 31 December 2019							
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
		Equity	Interest rates	FX	Credit	Commodities	Total	Of which: In the trading book	Of which: In the banking book
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	
1	Close-out uncertainty, of which:	-	-	-	39	-	39	-	39
2	<i>Mid-market value</i>	-	-	-	-	-	-	-	-
3	<i>Close-out costs</i>	-	-	-	-	-	-	-	-
4	<i>Concentration</i>	-	-	-	39	-	39	-	39
5	Early termination	-	-	-	-	-	-	-	-
6	Model risk	-	-	-	-	-	-	-	-
7	Operational risks	-	-	-	-	-	-	-	-
8	Investing and funding costs						-	-	-
9	Unearned credit spreads						-	-	-
10	Future administrative costs	-	-	-	-	-	-	-	-
11	Other adjustments	-	-	-	-	-	-	-	-
12	Total adjustments	-	-	-	39	-	39	-	39

Valuation adjustments are made for assets measured at fair value either through marked to market or marked to model, including non-derivative and derivative instruments. The Group has taken the following elements of valuation adjustment into consideration and makes adjustments, if any, in accordance with the Group's valuation process:

- Concentration - covering liquidity valuation adjustment on bonds

Currently, the other elements of valuation adjustment are not considered in the valuation process in the view that the risk and financial impact involved are considered to be insignificant when compared to the market valuation adjustments mentioned above.

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

	At 31 December 2019						
	(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		
	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
Assets							
Cash and balances with banks and other financial institutions	41,327,261	41,327,261	41,327,261	-	-	-	-
Placements with banks and other financial institutions maturing between one and twelve months	10,456,347	10,456,347	10,456,347	-	-	-	-
Financial assets at fair value through profit or loss	14,654,347	14,654,347	7,991,766	-	-	6,662,581	-
Derivative financial instruments	589,616	589,616	-	566,205	-	579,433	-
Advances and other accounts	262,413,180	262,413,180	262,413,180	-	-	-	-
Financial investments	146,758,937	146,758,937	145,458,674	14,868,275	1,300,224	-	39
Interests in subsidiaries	-	6,100	6,100	-	-	-	-
Investment properties	355,230	355,230	355,230	-	-	-	-
Properties, plant and equipment	8,602,036	8,602,036	8,602,036	-	-	-	-
Current tax assets	27,275	27,275	27,275	-	-	-	-
Deferred tax assets	58,000	58,000	-	-	-	-	58,000
Other assets	4,346,618	4,346,040	4,346,040	-	-	-	-
Total assets	489,588,847	489,594,369	480,983,909	15,434,480	1,300,224	7,242,014	58,039

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

	At 31 December 2019						
	(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		
	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
Liabilities							
Deposits and balances from banks and other financial institutions	30,984,121	30,984,121	-	-	-	-	30,984,121
Financial liabilities at fair value through profit or loss	5,048,559	5,048,559	-	-	-	5,048,559	-
Derivative financial instruments	587,563	587,563	-	116,171	-	461,196	116,183
Deposits from customers	345,887,782	345,910,275	-	-	-	-	345,910,275
Debt securities and certificates of deposit in issue	15,471,116	15,471,116	-	-	-	-	15,471,116
Other accounts and provisions	25,908,840	25,908,421	-	-	-	-	25,908,421
Current tax liabilities	626,564	626,474	27,325	-	-	-	599,149
Deferred tax liabilities	845,124	837,132	-	-	-	-	837,132
Subordinated liabilities	5,438,386	5,438,386	-	-	-	-	5,438,386
Total liabilities	430,798,055	430,812,047	27,325	116,171	-	5,509,755	425,264,783

Some balance sheet items attract capital charge according to the risk frameworks for more than one risk category. In particular, derivative contracts under trading book are subject to both the market risk capital charge and the counterparty credit risk capital charge. 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

		At 31 December 2019				
		(a)	(b)	(c)	(d)	(e)
		Total	Items subject to:			
			credit risk framework	securitization framework	counterparty credit risk framework	market risk framework
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
1	Asset carrying value amount under scope of regulatory consolidation (as per template LI1)	504,960,627	480,983,909	1,300,224	15,434,480	7,242,014
2	Liabilities carrying value amount under regulatory scope of consolidation (as per template LI1)	5,653,251	27,325	-	116,171	5,509,755
3	Total net amount under regulatory scope of consolidation	499,307,376	480,956,584	1,300,224	15,318,309	1,732,259
4	Off-balance sheet amounts	25,447,096	25,447,096	-	-	-
5	Differences due to consideration of internal estimated EAD under retail IRB approach	1,118,492	1,118,492	-	-	-
6	Differences due to consideration of provisions	3,113,883	3,060,838	53,045	-	-
7	Differences due to application of haircut in SFTs	298,258	-	-	298,258	-
8	Potential exposures of OTC derivative transactions	593,750	-	-	593,750	-
9	Other differences not classified above	2,076	2,076	-	-	-
N	Exposure amounts considered for regulatory purposes	529,880,931	510,585,086	1,353,269	16,210,317	1,732,259

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, by considering asset quality and market share of trading positions, 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.

CC1: Composition of regulatory capital

		At 31 December 2019	
		Amount	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
		HK\$'000	
CET1 capital: instruments and reserves			
1	Directly issued qualifying CET1 capital instruments plus any related share premium	3,144,517	(5)
2	Retained earnings	37,165,269	(6)
3	Disclosed reserves	9,157,646	(8)+(9)+ (10)+(11)
4	<i>Directly issued capital subject to phase-out arrangements from CET1 (only applicable to non-joint stock companies)</i>	Not applicable	Not applicable
5	Minority interests arising from CET1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in CET1 capital of the consolidation group)	-	
6	CET1 capital before regulatory deductions	49,467,432	
CET1 capital: regulatory deductions			
7	Valuation adjustments	39	Not applicable
8	Goodwill (net of associated deferred tax liabilities)	-	
9	Other intangible assets (net of associated deferred tax liabilities)	-	
10	Deferred tax assets (net of associated deferred tax liabilities)	58,000	(2)
11	Cash flow hedge reserve	-	
12	Excess of total EL amount over total eligible provisions under the IRB approach	-	
13	Credit-enhancing interest-only strip, and any gain-on-sale and other increase in the CET1 capital arising from securitisation transactions	-	
14	Gains and losses due to changes in own credit risk on fair valued liabilities	1,420	(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 LAC investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	-	
19	Significant LAC investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	-	
20	Mortgage servicing rights (net of associated deferred tax liabilities)	Not applicable	Not applicable
21	Deferred tax assets arising from temporary differences (net of associated deferred tax liabilities)	Not applicable	Not applicable
22	Amount exceeding the 15% threshold	Not applicable	Not applicable
23	of which: significant investments in the ordinary share of financial sector entities	Not applicable	Not applicable
24	of which: mortgage servicing rights	Not applicable	Not applicable
25	of which: deferred tax assets arising from temporary differences	Not applicable	Not applicable
26	National specific regulatory adjustments applied to CET1 capital	-	
26a	Cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties)	6,899,837	(7)+(8)
26b	Regulatory reserve for general banking risks	2,694,377	(10)
26c	Securitisation exposures specified in a notice given by the MA	-	
26d	Cumulative losses below depreciated cost arising from the institution's holdings of land and buildings	-	
26e	Capital shortfall of regulated non-bank subsidiaries	-	
26f	Capital investment in a connected company which is a commercial entity (amount above 15% of the reporting institution's capital base)	-	
27	Regulatory deductions applied to CET1 capital due to insufficient AT1 capital and Tier 2 capital to cover deductions	-	
28	Total regulatory deductions to CET1 capital	9,653,673	

CC1: Composition of regulatory capital (continued)

		At 31 December 2019	
		Amount	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
		HK\$'000	
29	CET1 capital	39,813,759	
	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	(12)
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 LAC investments in AT1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	-	
40	Significant LAC investments in AT1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	-	
41	National specific regulatory adjustments applied to AT1 capital	-	
42	Regulatory deductions applied to AT1 capital due to insufficient Tier 2 capital to cover deductions	-	
43	Total regulatory deductions to AT1 capital	-	
44	AT1 capital	9,314,890	
45	Tier 1 capital (T1 = CET1 + AT1)	49,128,649	
	Tier 2 capital: instruments and provisions		
46	Qualifying Tier 2 capital instruments plus any related share premium	5,414,796	(4)
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 provisions and regulatory reserve for general banking risks eligible for inclusion in Tier 2 capital	1,697,544	Not applicable
51	Tier 2 capital before regulatory deductions	7,112,340	
	Tier 2 capital: regulatory deductions		
52	Investments in own Tier 2 capital instruments	-	
53	Reciprocal cross-holdings in Tier 2 capital instruments and non-capital LAC liabilities	-	
54	Insignificant LAC investments in Tier 2 capital instruments issued by, and non-capital LAC liabilities of, financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold and, where applicable, 5% threshold)	-	
54a	Insignificant LAC investments in non-capital LAC liabilities of financial sector entities that are outside the scope of regulatory consolidation (amount formerly designated for the 5% threshold but no longer meets the conditions) (for institutions defined as "section 2 institution" under §2(1) of Schedule 4F to BCR only)	-	
55	Significant LAC investments in Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (net of eligible short positions)	-	
55a	Significant LAC investments in non-capital LAC liabilities of financial sector entities that are outside the scope of regulatory consolidation (net of eligible short positions)	-	
56	National specific regulatory adjustments applied to Tier 2 capital	(3,104,927)	
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	(3,104,927)	(7)+(8) *45%
56b	Regulatory deductions applied to Tier 2 capital to cover the required deductions falling within §48(1)(g) of BCR	-	

CC1: Composition of regulatory capital (continued)

		At 31 December 2019	
		Amount	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
		HK\$'000	
57	Total regulatory adjustments to Tier 2 capital	(3,104,927)	
58	Tier 2 capital (T2)	10,217,267	
59	Total regulatory capital (TC = T1 + T2)	59,345,916	
60	Total RWA	273,125,594	
Capital ratios (as a percentage of RWA)			
61	CET1 capital ratio	14.58%	
62	Tier 1 capital ratio	17.99%	
63	Total capital ratio	21.73%	
64	Institution-specific buffer requirement (capital conservation buffer plus countercyclical capital buffer plus higher loss absorbency requirements)	3.61%	
65	of which: capital conservation buffer requirement	2.50%	
66	of which: bank specific countercyclical capital buffer requirement	1.11%	
67	of which: higher loss absorbency requirement	-	
68	CET1 (as a percentage of RWA) available after meeting minimum capital requirements	10.08%	
National minima (if different from Basel 3 minimum)			
69	National CET1 minimum ratio	Not applicable	Not applicable
70	National Tier 1 minimum ratio	Not applicable	Not applicable
71	National Total capital minimum ratio	Not applicable	Not applicable
Amounts below the thresholds for deduction (before risk weighting)			
72	Insignificant LAC investments in CET1, AT1 and Tier 2 capital instruments issued by, and non-capital LAC liabilities of, financial sector entities that are outside the scope of regulatory consolidation	694,236	
73	Significant LAC 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 associated deferred tax liabilities)	Not applicable	Not applicable
75	Deferred tax assets arising from temporary differences (net of associated deferred tax liabilities)	Not applicable	Not applicable
Applicable caps on the inclusion of provisions in Tier 2 capital			
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the BSC approach, or the STC approach and SEC-ERBA, SEC-SA and SEC-FBA (prior to application of cap)	334,748	
77	Cap on inclusion of provisions in Tier 2 under the BSC approach, or the STC approach, and SEC-ERBA, SEC-SA and SEC-FBA	256,996	
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the IRB approach and SEC-IRBA (prior to application of cap)	2,493,577	
79	Cap for inclusion of provisions in Tier 2 under the IRB approach and SEC-IRBA	1,440,548	
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2018 and 1 Jan 2022)			
80	Current cap on CET1 capital instruments subject to phase-out arrangements	Not applicable	Not applicable
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	Not applicable	Not applicable
82	Current cap on AT1 capital instruments subject to phase-out arrangements	-	
83	Amount excluded from AT1 capital due to cap (excess over cap after redemptions and maturities)	-	
84	Current cap on Tier 2 capital instruments subject to phase-out arrangements	-	
85	Amount excluded from Tier 2 capital due to cap (excess over cap after redemptions and maturities)	-	

CC1: Composition of 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)	-	-
	<p><u>Explanation</u></p> <p>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.</p>		
10	Deferred tax assets (net of associated deferred tax liabilities)	58,000	-
	<p><u>Explanation</u></p> <p>As set out in paragraphs 69 and 87 of the Basel III text issued by the Basel Committee (December 2010), DTAs of the Bank to be 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 or other credit exposures to connected companies) under Basel III.</p>		
18	Insignificant LAC investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	-	-
	<p><u>Explanation</u></p> <p>For the purpose of determining the total amount of insignificant LAC investments in CET1 capital instruments issued by financial sector entities, an AI is required to aggregate any amount of loans, facilities or other credit exposures provided by it to any of its connected companies, where the connected company is a financial sector entity, as if such loans, facilities or other credit exposures were direct holdings, indirect holdings or synthetic holdings of the AI in the capital instruments of the financial sector entity, except where the AI demonstrates to the satisfaction of the MA that any such loan was made, any such facility was granted, or any such other credit exposure was incurred, in the ordinary course of the AI's business. Therefore, the amount to be deducted as reported in row 18 may be greater than that required under Basel III. The amount reported under the column "Basel III basis" in this box represents the amount reported in row 18 (i.e. the amount reported under the "Hong Kong basis") adjusted by excluding the aggregate amount of loans, facilities or other credit exposures to the AI's connected companies which were subject to deduction under the Hong Kong approach.</p>		

CC1: Composition of regulatory capital (continued)

Row No.	Description	Hong Kong basis HK\$'000	Basel III basis HK\$'000
19	Significant LAC investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	-	-
	<p><u>Explanation</u> For the purpose of determining the total amount of significant LAC investments in CET1 capital instruments issued by financial sector entities, an AI is required to aggregate any amount of loans, facilities or other credit exposures provided by it to any of its connected companies, where the connected company is a financial sector entity, as if such loans, facilities or other credit exposures were direct holdings, indirect holdings or synthetic holdings of the AI in the capital instruments of the financial sector entity, except where the AI demonstrates to the satisfaction of the MA that any such loan was made, any such facility was granted, or any such other credit exposure was incurred, in the ordinary course of the AI's business. Therefore, the amount to be deducted as reported in row 19 may be greater than that required under Basel III. The amount reported under the column "Basel III basis" in this box represents the amount reported in row 19 (i.e. the amount reported under the "Hong Kong basis") adjusted by excluding the aggregate amount of loans, facilities or other credit exposures to the AI's connected companies which were subject to deduction under the Hong Kong approach.</p>		
39	Insignificant LAC investments in AT1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	-	-
	<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 LAC 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	Insignificant LAC investments in Tier 2 capital instruments issued by, and non-capital LAC liabilities of, financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold and, where applicable, 5% threshold)	-	-
	<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 LAC investments in Tier 2 capital instruments and non-capital LAC liabilities 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% threshold and 5% threshold mentioned above is calculated based on the amount of CET1 capital determined in accordance with the deduction methods set out in BCR Schedule 4F. The 15% threshold is referring to paragraph 88 of the Basel III text issued by the Basel Committee (December 2010) and has no effect to the Hong Kong regime.</p>			

Abbreviations:

CET1: Common Equity Tier 1

AT1: Additional Tier 1

CC2: Reconciliation of regulatory capital to balance sheet

	At 31 December 2019		Reference
	Balance sheet as in published financial statements	Under regulatory scope of consolidation	
	HK\$'000	HK\$'000	
ASSETS			
Cash and balances with banks and other financial institutions	41,327,261	41,327,261	
Placements with banks and other financial institutions maturing between one and twelve months	10,456,347	10,456,347	
Financial assets at fair value through profit or loss	14,654,347	14,654,347	
Derivative financial instruments	589,616	589,616	
- of which: debit valuation adjustments in respect of derivative contracts		287	(1)
Advances and other accounts	262,413,180	262,413,180	
Financial investments	146,758,937	146,758,937	
Interests in subsidiaries	-	6,100	
Investment properties	355,230	355,230	
Properties, plant and equipment	8,602,036	8,602,036	
Current tax assets	27,275	27,275	
Deferred tax assets	58,000	58,000	(2)
Other assets	4,346,618	4,346,040	
Total assets	489,588,847	489,594,369	
LIABILITIES			
Deposits and balances from banks and other financial institutions	30,984,121	30,984,121	
Financial liabilities at fair value through profit or loss	5,048,559	5,048,559	
Derivative financial instruments	587,563	587,563	
- of which: debit valuation adjustments in respect of derivative contracts		1,133	(3)
Deposits from customers	345,887,782	345,910,275	
Debt securities and certificates of deposit in issue	15,471,116	15,471,116	
Other accounts and provisions	25,908,840	25,908,421	
Current tax liabilities	626,564	626,474	
Deferred tax liabilities	845,124	837,132	
Subordinated liabilities	5,438,386	5,438,386	
- of which: included in Tier 2 Capital		5,414,796	(4)
Total liabilities	430,798,055	430,812,047	

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

	At 31 December 2019		Reference
	Balance sheet as in published financial statements	Under regulatory scope of consolidation	
	HK\$'000	HK\$'000	
EQUITY			
Share capital	3,144,517	3,144,517	(5)
Reserves	46,331,385	46,322,915	
- Retained earnings	37,119,457	37,165,269	(6)
- of which: cumulative fair value gains arising from the revaluation of investment properties		456,746	(7)
- Premises revaluation reserve	6,497,373	6,443,091	(8)
- Reserve for fair value changes through other comprehensive income	416,618	416,618	(9)
- Regulatory reserve	2,694,377	2,694,377	(10)
- Translation reserve	(396,440)	(396,440)	(11)
Additional equity instruments	9,314,890	9,314,890	(12)
Total equity	<u>58,790,792</u>	<u>58,782,322</u>	
Total liabilities and equity	<u>489,588,847</u>	<u>489,594,369</u>	

CCA: Main features of regulatory capital instruments

		CET1 Capital Ordinary shares	USD Non-Cumulative Subordinated Additional Tier 1 Capital Securities	USD Tier 2 Capital Subordinated notes
1	Issuer	Nanyang Commercial Bank, Limited	Nanyang Commercial Bank, Limited	Nanyang Commercial Bank, Limited
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	Not Applicable	XS1618163452	XS2080210011
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.	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	Not Applicable
5	Post-transitional Basel III rules ⁺	Common Equity Tier 1	Additional Tier 1	Tier 2
6	Eligible at solo*/group/solo and group	Solo and Group	Solo and Group	Solo and Group
7	Instrument type (types to be specified by each jurisdiction)	Ordinary shares	Additional Tier 1 capital instruments	Other Tier 2 instruments
8	Amount recognised in regulatory capital (currency in millions, as of most recent reporting date)	HK\$3,145 million	HK\$9,315million	HK\$5,415million
9	Par value of instrument	No par value (refer to Note 1 for details)	US\$1.2billion	US\$700million
10	Accounting classification	Shareholders' equity	Equity instruments	Liability-amortised cost
11	Original date of issuance	1 July 1948 (refer to Note 2 for details)	2 June 2017	20 November 2019
12	Perpetual or dated	Perpetual	Perpetual	Dated
13	Original maturity date	No maturity	Not Applicable	20 November 2029
14	Issuer call subject to prior supervisory approval	No	Yes	Yes
15	Optional call date, contingent call dates and redemption amount	Not Applicable	First call date: 2 June 2022 (Redemptions in whole at 100%)	One-off call date: 20 November 2024. Additional optional redemption in whole at 100% of principal amount with accrued interest for taxation reasons, tax deductions reasons and regulatory reasons. Redemption amount subject to adjustment following occurrence of a Non-Viability Event. Redemption subject to prior written consent of the Hong Kong Monetary Authority ("HKMA").
16	Subsequent call dates, if applicable	Not Applicable	any distribution payment date thereafter	Not Applicable
	<i>Coupons / dividends</i>			
17	Fixed or floating dividend/coupon	Floating	Fixed	Fixed

CCA: Main features of regulatory capital instruments (continued)

		CET1 Capital Ordinary shares	USD Non-Cumulative Subordinated Additional Tier 1 Capital Securities	USD Tier 2 Capital Subordinated notes
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	3.80% p.a. Fixed until 20 November 2024 and thereafter reset to a new fixed rate equal to the sum of the then prevailing U.S. Treasury Rate and the Spread at Pricing.
19	Existence of a dividend stopper	No	Yes	No
20	Fully discretionary, partially discretionary or mandatory	Fully discretionary	Fully discretionary	Mandatory
21	Existence of step up or other incentive to redeem	No	No	No
22	Noncumulative or cumulative	Noncumulative	Noncumulative	Cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	Not Applicable	Not Applicable	Not Applicable
25	If convertible, fully or partially	Not Applicable	Not Applicable	Not Applicable
26	If convertible, conversion rate	Not Applicable	Not Applicable	Not Applicable
27	If convertible, mandatory or optional conversion	Not Applicable	Not Applicable	Not Applicable
28	If convertible, specify instrument type convertible into	Not Applicable	Not Applicable	Not Applicable
29	If convertible, specify issuer of instrument it converts into	Not Applicable	Not Applicable	Not Applicable
30	Write-down feature	No	Yes	Yes
31	If write-down, write-down trigger(s)	Not Applicable	Upon the occurrence of a Non-Viability Event	Upon the occurrence of a Non-Viability Event
32	If write-down, full or partial	Not Applicable	Full or Partial	Full or Partial
33	If write-down, permanent or temporary	Not Applicable	Permanent	Permanent
34	If temporary write-down, description of write-up mechanism	Not Applicable	Not Applicable	Not Applicable

CCA: Main features of regulatory capital instruments (continued)

		CET1 Capital Ordinary shares	USD Non-Cumulative Subordinated Additional Tier 1 Capital Securities	USD Tier 2 Capital Subordinated notes
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument in the insolvency creditor hierarchy of the legal entity concerned)	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.	The rights of the holders will, in the event of the winding up of the Bank, rank (i) subordinate and junior in right of payment to, and of all claims of, (a) all depositors and unsubordinated creditors of the Issuer, and (b) all other Subordinated Creditors of the Issuer whose claims are stated to rank senior to the Notes or rank senior to the Notes by operation of law or contract; (ii) pari passu in right of payment to and of all claims of the holders of Parity Obligations; and (iii) senior in right of payment to, and of all claims of, (a) the holders of Junior Obligations, and (b) holders of Tier 1 Capital Instruments.
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	Not Applicable	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.

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

Geographical breakdown by Jurisdiction (J)		At 31 December 2019			
		Applicable JCCyB ratio in effect	RWA used in computation of CCyB ratio	AI-specific CCyB ratio	CCyB amount
		%	HK\$'000	%	HK\$'000
1	Hong Kong SAR	2.00%	113,268,270		
2	France	0.25%	5,181		
3	Norway	2.50%	836		
4	United Kingdom	1.00%	29,090		
5	Sum		113,303,377		
6	Total		204,107,560	1.11%	2,265,690

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

		Value under the LR framework
		At 31 December 2019
		HK\$'000
1	Total consolidated assets as per published financial statements	489,588,847
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 applicable accounting standard but excluded from the LR exposure measure	-
4	Adjustments for derivative contracts	449,418
5	Adjustment for SFTs (i.e. repos and similar secured lending)	758,648
6	Adjustment for off-balance sheet ("OBS") items (i.e. conversion to credit equivalent amounts of OBS exposures)	31,696,437
6a	Adjustment for specific and collective provisions that are allowed to be excluded from exposure measure	(101,638)
7	Other adjustments	(9,652,542)
8	Leverage ratio exposure measure	512,744,692

LR2: Leverage ratio

		At 31 December 2019	At 30 September 2019
		HK\$'000	HK\$'000
On-balance sheet exposures			
1	On-balance sheet exposures (excluding those arising from derivative contracts and SFTs, but including collateral)	477,827,139	448,496,868
2	Less: Asset amounts deducted in determining Tier 1 capital	(9,652,542)	(9,747,210)
3	Total on-balance sheet exposures (excluding derivative contracts and SFTs)	468,174,597	438,749,658
Exposures arising from derivative contracts			
4	Replacement cost associated with all derivative contracts (where applicable net of eligible cash variation margin and/or with bilateral netting)	445,285	599,089
5	Add-on amounts for PFE associated with all derivative contracts	593,750	507,389
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-	-
7	Less: Deductions of receivables assets for cash variation margin provided under derivative contracts	-	(20,543)
8	Less: Exempted CCP leg of client-cleared trade exposures	-	-
9	Adjusted effective notional amount of written credit derivative contracts	-	-
10	Less: Adjusted effective notional offsets and add-on deductions for written credit derivative contracts	-	-
11	Total exposures arising from derivative contracts	1,039,035	1,085,935
Exposures arising from SFTs			
12	Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	14,109,627	8,864,678
13	Less: Netted amounts of cash payables and cash receivables of gross SFT assets	-	-
14	CCR exposure for SFT assets	758,648	368,931
15	Agent transaction exposures	-	-
16	Total exposures arising from SFTs	14,868,275	9,233,609
Other off-balance sheet exposures			
17	Off-balance sheet exposure at gross notional amount	148,195,510	138,820,869
18	Less: Adjustments for conversion to credit equivalent amounts	(116,499,073)	(104,355,629)
19	Off-balance sheet items	31,696,437	34,465,240
Capital and total exposures			
20	Tier 1 capital	49,128,649	48,146,409
20a	Total exposures before adjustments for specific and collective provisions	515,778,344	483,534,442
20b	Adjustments for specific and collective provisions	(3,033,652)	(3,209,981)
21	Total exposures after adjustments for specific and collective provisions	512,744,692	480,324,461
Leverage ratio			
22	Leverage ratio	9.58%	10.02%

LIQA: Liquidity risk management

Liquidity risk is the risk that banks fail to provide sufficient funds to grow assets or pay due obligations, and need to bear an unacceptable loss. The Group maintains sound liquidity risk appetite to provide stable, reliable and adequate sources of cash to meet liquidity needs under normal circumstances or stressed scenarios; and to survive with net positive cumulative cash flow in extreme scenarios, without requesting the HKMA to act as the lender of last resort.

The Group's liquidity risk management objective is to effectively manage the liquidity of on- and off-balance sheet items with reasonable cost based on the liquidity risk appetite to achieve sound operation and sustainable profitability. Deposits from customers are the Group's primary source of funds, in which 57% is retail deposits. To ensure stable and sufficient source of funds are in place, the Group actively attracts new deposits, keeps the core deposit and obtains supplementary funding from the interbank market. According to different term maturities and the results of funding needs estimated from stressed scenarios, the Group adjusts its asset structure (including loans, bonds investment, interbank placement, etc.) to maintain sufficient liquid assets which provides adequate funds in support of normal business needs and ensure its ability to raise funds at a reasonable cost to serve external claims in case of emergency. The Group is committed to diversify the source of funds and the use of funds to avoid excessive concentration of assets and liabilities and prevent triggering liquidity risk due to the break of funding strand when problem occurred in one concentrated funding source. The Group has established intra-group liquidity risk management guideline to manage the liquidity funding among different entities within the Group, and to restrict their reliance of funding on each other. The Group also pays attention to manage liquidity risk created by off-balance sheet activities, such as loan commitments and derivatives. The Group has an overall liquidity risk management strategy to cover the liquidity management of foreign currency assets and liabilities, collateral, intra-day liquidity, intra-group liquidity, the liquidity risk arising from other risks, etc., and has formulated corresponding contingency plan.

Risk Management Committee (RMC) is the decision-making authority of liquidity risk management, and assumes the ultimate responsibility of liquidity risk management. As authorised by RMC, the Asset and Liability Management Committee (ALCO) exercises its oversight of liquidity risk and ensures the daily operations of the Group are in accordance with risk appetite and policies as set by RMC. Asset and Liability Management Division is responsible for overseeing the Group's liquidity risk. It cooperates with Treasury Division to assist the ALCO to perform liquidity management functions according to their specific responsibilities.

LIQA: Liquidity risk management (continued)

The Group established liquidity risk management indicators and limits to identify, measure, monitor and control liquidity risk on daily basis. These indicators and limits include, but are not limited to liquidity coverage ratio (“LCR”), net stable funding ratio (“NSFR”), loan-to-deposit ratio, Maximum Cumulative Cash Outflow (“MCO”), liquidity buffer asset portfolio and depositor concentration limit. The Group applies cash flow analysis to assess the Group’s liquidity condition under normal conditions and also performs a liquidity stress test (including institution specific, general market crisis and combined crisis) at least on monthly basis to assess the Group’s capability to withstand various severe liquidity crises. Also, the Assets and Liabilities Management System is developed to provide data and the preparation for regular management reports to facilitate liquidity risk management duties.

In accordance with the requirements of Supervisory Policy Manual LM-2 “Sound Systems and controls for Liquidity Risk Management” issued by the HKMA, the Group has implemented behaviour model and assumptions of cash flow analysis and stress test to enhance the Group’s cash flow analysis under both normal and stressed conditions. In cash flow analysis under normal circumstances, assumptions have been made relating to on-balance sheet items (such as deposits from customers) and off-balance sheet items (such as loan commitments). According to various characteristics of the assets, liabilities and off-balance sheet items, the Group forecasts the future cash flow based on contractual maturity date and the assumptions of customer behaviour and balance sheet changes. The Group establishes MCO indicator which predicts the future 30 day maximum cumulative net cash outflow in normal situations based on the above assumptions, to assess if the Group has sufficient financing capacity to meet the cash flow gap in order to achieve the objective of continuing operation. As at 31 December 2019, before taking the cash inflow through the sale of outstanding marketable securities into consideration, the Bank’s 30 day cumulative cash flow was a net cash inflow amounting to HK\$4,670,594,000 (2018: HK\$514,585,000) and was in compliance with the internal limit requirements.

LIQA: Liquidity risk management (continued)

In the liquidity stress test, institution specific, general market crisis and combined crisis scenario has been set up, combined crisis scenario is a combination of institution specific and general market crisis to assess the Group's capability to withstand a more severe liquidity crisis, with a more stringent set of assumptions being adopted. Stress test assumptions include the run-off rate of retail, wholesale and interbank deposits; drawdown rate of loan commitments and trade-related contingent liabilities; delinquency ratio and rollover rate of customer loans; and haircut of interbank placement and marketable securities. As at 31 December 2019, the Group was able to maintain a positive cash flow under the three stressed scenarios, indicating the Group has the ability to meet financing needs under stressed conditions. In addition, the Group has a policy in place to maintain a liquidity cushion which includes high quality or comparable quality marketable securities issued or guaranteed by sovereigns, central banks, public sector entities or multilateral development banks with 0% or 20% risk weight or marketable securities issued or guaranteed by non-financial corporate with a corresponding external credit rating of A- or above to ensure funding needs even under stressed scenarios. As at 31 December 2019, the Bank's liquidity cushion (before haircut) was HK\$61,246,448,000 (2018: HK\$44,804,168,000). A contingency plan is being established which details the conditions to trigger the plan based on stress test results and early warning indicators, the action plans and relevant procedures and responsibility of various departments. The Group tests and updates the Plan annually to ensure its effectiveness and operational feasibility.

The LCR is calculated in accordance with the Banking (Liquidity) Rules effective from 1 January 2015 and the NSFR is effective from 1 January 2018. The Group, being classified as category 1 authorised institution by the HKMA, is required to calculate ratios on consolidated basis. During the year of 2019, the Group is required to maintain the LCR and NSFR not less than 100%.

The LCR and NSFR as at 31 December 2019 were 158.10% and 121.06% respectively.

LIQA: Liquidity risk management (continued)

By maintaining a ratio in excess of minimum regulatory requirements, the LCR seeks to ensure that the Group holds adequate liquidity assets to mitigate a short-term liquidity stress and the NSFR ensures the Group maintaining sufficient stable funding sources to cover their long-term assets.

In certain derivative contracts, the counterparties have right to request from the Group additional collateral if they have concerns about the Group's creditworthiness.

The Group's liquidity risk management also covers new products or business developments. Before launching a new product or business, the relevant departments are required to go through a risk assessment process, which includes the assessment of underlying liquidity risk and consideration of the adequacy of the current risk management mechanism. Any material impact on liquidity risk noted during the risk assessment process will be reported to Risk Management Committee for approval.

The Group has established a set of uniform liquidity risk management policies. On the basis of the Group's uniform policy, the principal banking subsidiary develops its own liquidity management policies according to its own characteristics, and assumes its own liquidity risk management responsibility, executes its daily risk management processes independently, and reports to the Group's Management on a regular basis.

LIQA: Liquidity risk management (continued)

(i) On- and off-balance sheet items, broken down into maturity buckets and the resultant liquidity gaps.

At 31 December 2019 Basis of disclosure: consolidated	Total amount	Amount by contractual maturity					No specified term to maturity/Overdue
		up to 1 month	1 to 3 months	3 to 12 months	1 to 5 years	Over 5 years	
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	
1 Deposits from non-bank customers	345,910,167	159,602,360	73,733,352	97,864,128	14,383,112	327,215	
2 Due to MA & Overseas central banks	-	-	-	-	-	-	
3 Due to banks	15,811,181	8,473,248	4,576,784	2,761,149	-	-	-
4 Debt securities, prescribed instruments and structured financial instruments issued and outstanding	15,471,116	330,652	2,155,133	2,862,778	10,122,553	-	-
5 Other liabilities and Capital	107,233,348	39,822,309	16,295,205	17,068,314	15,212,325	23,128	57,045,094
6 Total On-balance sheet liabilities	484,425,812	208,228,569	96,760,474	120,556,369	39,717,990	350,343	57,045,094
7 Total Off-balance sheet obligations	64,651,454	7,403,247	15,011,053	29,211,428	12,381,830	643,896	-
8 Cash	642,600	642,600	-	-	-	-	
9 Due from MA & Overseas central banks	20,596,585	20,596,585	-	-	-	-	-
10 Due from banks	30,827,870	20,204,230	6,918,039	3,538,960	-	-	166,641
11 Debt securities, prescribed instruments and structured financial instruments held (net of short positions)	145,784,968	97,065,205	11,671,923	19,021,613	18,004,119	22,108	-
12 Loans and advances to non-bank customers, Acceptances and bills of exchange held	273,029,759	23,183,690	22,086,543	65,452,880	118,908,360	42,576,688	821,598
13 Other assets	16,578,310	20,706,920	8,047,984	13,416,335	23,051,144	4,359	11,489,164
14 Total On-balance sheet assets	487,460,092	182,399,230	48,724,489	101,429,788	159,963,623	42,603,155	12,477,403
15 Total Off-balance sheet claims	-	-	-	-	-	-	-
16 Contractual Maturity Mismatch		(33,232,586)	(63,047,038)	(48,338,009)	107,863,803	41,608,916	
17 Cumulative Contractual Maturity Mismatch		(33,232,586)	(96,279,624)	(144,617,633)	(36,753,830)	4,855,086	

LIQ1: Liquidity Coverage Ratio – for category 1 institution

Number of data points used in calculating the average value of the LCR and related components set out in this template: 75		For the quarter ended 31 December 2019	
		UNWEIGHTED VALUE (Average) HK\$'000	WEIGHTED VALUE (Average) HK\$'000
Basis of disclosure: consolidated			
A. HQLA			
1	Total HQLA		73,600,109
B. CASH OUTFLOWS			
2	Retail deposits and small business funding, of which:	155,092,441	9,881,567
3	<i>Stable retail deposits and stable small business funding</i>	24,310,270	729,308
4	<i>Less stable retail deposits and less stable small business funding</i>	43,807,049	4,380,705
4a	<i>Retail term deposits and small business term funding</i>	86,975,122	4,771,554
5	Unsecured wholesale funding (other than small business funding) and debt securities and prescribed instruments issued by the AI, of which:	86,428,250	45,395,693
6	<i>Operational deposits</i>	13,194,895	3,121,624
7	<i>Unsecured wholesale funding (other than small business funding) not</i>	72,819,735	41,860,449
8	<i>Debt securities and prescribed instruments issued by the AI and redeemable within the LCR period</i>	413,620	413,620
9	Secured funding transactions (including securities swap transactions)		2,581,551
10	Additional requirements, of which:	46,375,324	11,548,527
11	<i>Cash outflows arising from derivative contracts and other transactions, and additional liquidity needs arising from related collateral requirements</i>	5,586,348	5,586,348
12	<i>Cash outflows arising from obligations under structured financing transactions and repayment of funding obtained from such transactions</i>	-	-
13	<i>Potential drawdown of undrawn committed facilities (including committed credit facilities and committed liquidity facilities)</i>	40,788,976	5,962,179
14	Contractual lending obligations (not otherwise covered in Section B) and	3,218,877	3,218,877
15	Other contingent funding obligations (whether contractual or non-contractual)	107,025,166	1,966,885
16	TOTAL CASH OUTFLOWS		74,593,100
C. CASH INFLOWS			
17	Secured lending transactions (including securities swap transactions)	1,174,521	1,174,521
18	Secured and unsecured loans (other than secured lending transactions covered in Row 17) and operational deposits placed at other financial	38,396,398	19,798,649
19	Other cash inflows	6,059,092	5,864,431
20	TOTAL CASH INFLOWS	45,630,011	26,837,601
D. LIQUIDITY COVERAGE RATIO			ADJUSTED VALUE
21	TOTAL HQLA		73,600,109
22	TOTAL NET CASH OUTFLOWS		47,755,499
23	LCR (%)		154.97%

LIQ1: Liquidity Coverage Ratio – for category 1 institution (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 the fourth quarter of 2019, the Group has maintained a healthy liquidity position. The LCR remained stable and there was no material change compared with the last quarter. The average LCR of the fourth quarter of 2019 was 154.97%. The average HKD level 1 HQLA to HKD net cash outflow ratio of the fourth quarter of 2019 was 177.06%, 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 the fourth quarter of 2019, 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.

LIQ2: Net Stable Funding Ratio – for category 1 institution

At 31 December 2019 Basis of disclosure: consolidated		Unweighted value by residual maturity				Weighted amount HK\$'000
		No specified term to maturity HK\$'000	<6 months or repayable on demand HK\$'000	6 months to < 12 months HK\$'000	12 months or more HK\$'000	
A. Available stable funding (“ASF”) item						
1	Capital:	65,746,614	-	-	-	65,746,614
2	Regulatory capital	65,746,614	-	-	-	65,746,614
2a	Minority interests not covered by row 2	-	-	-	-	-
3	Other capital instruments	-	-	-	-	-
4	Retail deposits and small business funding:	-	136,892,678	15,579,001	5,037,343	143,514,139
5	Stable deposits	-	25,045,685	-	-	23,793,401
6	Less stable deposits	-	111,846,993	15,579,001	5,037,343	119,720,738
7	Wholesale funding:	-	196,018,893	27,016,885	8,666,865	80,794,019
8	Operational deposits	-	14,298,951	-	-	7,149,476
9	Other wholesale funding	-	181,719,942	27,016,885	8,666,865	73,644,543
10	Liabilities with matching interdependent assets	-	-	-	-	-
11	Other liabilities:	3,884,352	19,912,389	980,492	10,959,909	11,327,007
12	Net derivative liabilities	-	-	-	-	-
13	All other funding and liabilities not included in the above categories	3,884,352	19,912,389	980,492	10,959,909	11,327,007
14	Total ASF					301,381,779
B. Required stable funding (“RSF”) item						
15	Total HQLA for NSFR purposes		120,962,145			9,294,471
16	Deposits held at other financial institutions for operational purposes	-	317,660	-	-	158,830
17	Performing loans and securities:	1,980,406	114,345,257	49,764,913	187,844,187	226,530,537
18	Performing loans to financial institutions secured by Level 1 HQLA	-	-	-	-	-
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	194	45,022,844	6,660,577	7,146,420	17,230,329
20	Performing loans, other than performing residential mortgage, to non-financial corporate clients, retail and small business customers, sovereigns, the Monetary Authority for the account of the Exchange Fund, central banks and PSEs, of which:	1,897,162	54,296,972	31,653,914	129,269,508	154,467,113
21	With a risk-weight of less than or equal to 35% under the STC approach	-	-	-	-	-
22	Performing residential mortgages, of which:	-	683,078	695,780	25,414,658	20,102,439
23	With a risk-weight of less than or equal to 35% under the STC approach	-	344,554	343,767	10,947,241	7,459,867
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	83,050	14,342,363	10,754,642	26,013,601	34,730,656
25	Assets with matching interdependent liabilities	-	-	-	-	-
26	Other assets:	10,871,939	4,584,828	265,304	-	11,035,237
27	Physical traded commodities, including gold	-	-	-	-	-
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	-	-	-	-	-
29	Net derivative assets	124,545	-	-	-	124,545
30	Total derivative liabilities before deduction of variation margin posted	471,392	-	-	-	N/A
31	All other assets not included in the above categories	10,276,002	4,584,828	265,304	-	10,910,692
32	Off-balance sheet items			148,195,510		1,939,568
33	Total RSF					248,958,643
34	Net Stable Funding Ratio (%)					121.06%

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

At 30 September 2019 Basis of disclosure: consolidated		Unweighted value by residual maturity				Weighted amount HK\$'000
		No specified term to maturity HK\$'000	<6 months or repayable on demand HK\$'000	6 months to < 12 months HK\$'000	12 months or more HK\$'000	
A. Available stable funding (“ASF”) item						
1	Capital:	59,346,883	-	-	-	59,346,883
2	Regulatory capital	59,346,883	-	-	-	59,346,883
2a	Minority interests not covered by row 2	-	-	-	-	-
3	Other capital instruments	-	-	-	-	-
4	Retail deposits and small business funding:	-	126,549,703	25,897,269	4,810,299	143,293,149
5	Stable deposits	-	25,611,507	-	-	24,330,932
6	Less stable deposits	-	100,938,196	25,897,269	4,810,299	118,962,217
7	Wholesale funding:	-	170,792,473	33,224,806	8,487,716	76,129,404
8	Operational deposits	-	13,883,426	-	-	6,941,713
9	Other wholesale funding	-	156,909,047	33,224,806	8,487,716	69,187,691
10	Liabilities with matching interdependent assets	-	-	-	-	-
11	Other liabilities:	3,565,971	11,188,961	1,076,191	10,833,902	11,371,998
12	Net derivative liabilities	-	-	-	-	-
13	All other funding and liabilities not included in the above categories	3,565,971	11,188,961	1,076,191	10,833,902	11,371,998
14	Total ASF					290,141,434
B. Required stable funding (“RSF”) item						
15	Total HQLA for NSFR purposes		107,185,900			8,864,888
16	Deposits held at other financial institutions for operational purposes	-	234,264	-	-	117,132
17	Performing loans and securities:	1,881,779	95,007,367	48,957,346	188,830,262	222,280,042
18	Performing loans to financial institutions secured by Level 1 HQLA	-	-	-	-	-
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	236	30,757,654	7,100,331	8,069,573	16,233,623
20	Performing loans, other than performing residential mortgage, to non-financial corporate clients, retail and small business customers, sovereigns, the Monetary Authority for the account of the Exchange Fund, central banks and PSEs, of which:	1,811,922	50,709,800	26,886,187	130,426,321	151,200,500
21	With a risk-weight of less than or equal to 35% under the STC approach	-	199,037	-	-	99,518
22	Performing residential mortgages, of which:	-	679,768	683,657	25,335,923	19,964,405
23	With a risk-weight of less than or equal to 35% under the STC approach	-	353,681	348,434	11,264,208	7,672,793
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	69,621	12,860,145	14,287,171	24,998,445	34,881,514
25	Assets with matching interdependent liabilities	-	-	-	-	-
26	Other assets:	11,071,741	2,791,574	281,610	-	11,219,333
27	Physical traded commodities, including gold	-	-	-	-	-
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	-	-	-	-	-
29	Net derivative assets	359,743	-	-	-	359,743
30	Total derivative liabilities before deduction of variation margin posted	451,016	-	-	-	N/A
31	All other assets not included in the above categories	10,260,982	2,791,574	281,610	-	10,859,590
32	Off-balance sheet items			138,820,870		2,198,921
33	Total RSF					244,680,316
34	Net Stable Funding Ratio (%)					118.58%

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

Notes:

The above disclosures are made pursuant to the section 16FL and 103AB of Banking (Disclosure) Rules. The items disclosed are measured according to the methodology and instructions set out in the Stable Funding Position Return (MA(BS)26) and the requirements set out in Banking (Liquidity) Rules.

Net Stable Funding Ratio (“NSFR”) is defined as the amount of available stable funding (“ASF”) relative to the amount of required stable funding (“RSF”). The ratio is calculated after applying the respective ASF or RSF factors required under the Stable Funding Position Return (MA(BS)26). It requires banks to maintain a stable funding profile in relation to the composition of banks’ assets and off-balance sheet activities.

The Group has maintained a healthy liquidity position. The NSFR of the third and fourth quarters were 118.58% and 121.06% respectively. The ratio remained stable and well above the regulatory requirement of 100% throughout the second half of 2019. The weighted amount of ASF items mainly consists of retail and corporate deposits which are the Group’s primary source of funds, together with regulatory capital. The weighted amount of RSF items mainly consists of loans to customers and investments in debt securities.

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 defines 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 management related matters.

In addition, Risk Management Units identify credit concentration risk by industry, geography, customer and counterparty. The risk management units monitor changes in 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 2019								
		Gross carrying amounts of		Allowances / impairments	Of which ECL accounting provisions for credit losses on STC approach exposures		Of which ECL accounting provisions for credit losses on IRB approach exposures	Net values
		Defaulted exposures	Non-defaulted exposures		Allocated in regulatory category of specific provisions	Allocated in regulatory category of collective provisions		
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
1	Loans	1,840,625	322,497,606	2,875,329	1,466	61,486	2,763,273	321,462,902
2	Debt securities	181,869	145,425,033	182,348	-	74	182,274	145,424,554
3	Off-balance sheet exposures	32,137	148,163,373	101,638	-	2,381	87,196	148,093,872
4	Total	2,054,631	616,086,012	3,159,315	1,466	63,941	3,032,743	614,981,328

CR2: Changes in defaulted loans and debt securities

		HK\$'000
1	Defaulted loans and debt securities as at 30 June 2019	2,522,548
2	Loans and debt securities that have defaulted since the last reporting period	1,163,864
3	Returned to non-defaulted status	(742,048)
4	Amounts written off	(898,820)
5	Other changes	(23,050)
6	Defaulted loans and debt securities as at 31 December 2019	2,022,494

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.

Advances are credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows have occurred. Credit-impaired advances are classified as Stage 3. The Group identifies the advances as impaired if the exposure is past due for more than 90 days or the borrower is unlikely to pay in full for the credit obligations to the Group.

Exposures which are past due for more than 90 days are classified as Stage 3 exposure and thus being classified as impaired.

HKFRS 9 introduces a new impairment model that requires the recognition of ECL for financial instrument held at amortized cost and fair value through other comprehensive income. Under HKFRS 9, ECL is assessed in three stages and the financial assets and commitments are classified in one of the three stages.

Stage 1: if the financial instrument is not credit-impaired upon origination and the credit risk on the financial instrument has not increased significantly since initial recognition, the loss allowance is measured at an amount up to 12-month ECL;

Stage 2: if the financial instrument is not credit-impaired upon origination but the credit risk on the financial instrument has increased significantly since initial recognition, the loss allowance is measured at an amount equal to the lifetime ECL;

Stage 3: if the financial instrument is credit-impaired, with one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred, the loss allowance is also measured at an amount equal to the lifetime ECL.

The Group leverages the parameters implemented under Internal Ratings-Based (“IRB”) models and internal models where feasible and available to assess ECL. For the portfolios without models, all other reasonable and supportable information such as historical information, relevant loss experience or proxies are utilized. The measurement of ECL is the product of the financial instrument’s probability of default (“PD”), loss given default (“LGD”) and exposures at default (“EAD”) discounted at the effective interest rate to the reporting date.

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

ECL is measured at an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes, the time value of money and reasonable and supportable information about past events, current conditions and forecasts of future economic conditions. The Group adopts three economic scenarios in the ECL measurement to meet the requirements of HKFRS 9. The “Base case” scenario represents a most likely outcome and the other two scenarios, referred to as “Upside” scenario and “Downside” scenario, represent less likely outcomes which are more optimistic or more pessimistic compared to Base case scenario.

The Base case scenario is made reference to macroeconomics forecast subscribed from external economic research agency. For the Upside scenario and Downside scenarios, the Group makes reference to the historical macroeconomics data.

The macroeconomic factors in the major operate countries/regions such as HK GDP growth rate, HK Inflation, HK unemployment rate, HK Property price growth, China GDP growth rate and China unemployment rate are applied in the economic scenarios. These macroeconomic factors are considered to be important to the Group’s ECL in statistical analysis and business opinion.

The probability assigned for each scenario reflects the Group’s view for the economic environment, which implements the Group’s prudent and consistent credit strategy of ensuring the adequacy of impairment allowance. A higher probability is assigned to the Base case scenario to reflect the most likely outcome and a lower probability is assigned to the Upside and Downside scenarios to reflect the less likely outcomes. The probabilities assigned are updated each quarter.

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
		Banks	Other financial institutions	Real estates	Wholesale, retail and trades	Individuals	Others	
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	
Hong Kong	Within 1 year	36,724,844	18,975,581	19,744,321	31,048,994	7,949,992	83,790,148	198,233,880
	1 to 5 years	29,427,077	9,890,856	52,828,439	4,962,262	12,836,140	35,500,773	145,445,547
	Over 5 years	30,007	1,070,763	9,115,291	2,342,966	17,181,305	3,959,782	33,700,114
	Sub-total	66,181,928	29,937,200	81,688,051	38,354,222	37,967,437	123,250,703	377,379,541
Mainland of China	Within 1 year	27,376,741	6,949,675	5,138,249	31,513,600	1,582,388	73,051,430	145,612,083
	1 to 5 years	2,177,034	2,370,807	17,742,766	5,049,501	1,025,650	34,353,877	62,719,635
	Over 5 years	-	271,100	7,390,373	1,445,833	17,752,647	5,569,431	32,429,384
	Sub-total	29,553,775	9,591,582	30,271,388	38,008,934	20,360,685	112,974,738	240,761,102
Total		95,735,703	39,528,782	111,959,439	76,363,156	58,328,122	236,225,441	618,140,643

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

Geographical area	Industry	Impaired exposures	Impairment allowances – Stage 3	Write-offs
		HK\$'000	HK\$'000	HK\$'000
Hong Kong	Banks	-	-	-
	Other financial institutions	-	-	-
	Real estates	-	-	-
	Wholesale, retail and trades	206,417	196,979	55,897
	Individuals	263	263	1,798
	Others	810,697	593,694	351,307
	Sub-total	1,017,377	790,936	409,002
Mainland of China	Banks	166,641	166,641	-
	Other financial institutions	-	-	5,569
	Real estates	-	-	-
	Wholesale, retail and trades	331,672	293,654	301,367
	Individuals	37,245	4,654	41,501
	Others	398,021	410,139	512,362
	Sub-total	933,579	875,088	860,799
Total		1,950,956	1,666,024	1,269,801

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	1,484,674
3 months or less but over 1 month	61,113
6 months or less but over 3 months	13,501
1 year or less but over 6 months	494,515
Over 1 year	218,974
Total	2,272,777

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	427,321	68,483	495,804

CRC: Qualitative disclosures related to credit risk mitigation

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 netting should only be applied where there is a legal right to do so.

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 2019				
		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	217,771,518	103,691,384	39,803,796	63,887,588	-
2	Debt securities	139,242,050	6,182,504	-	6,182,504	-
3	Total	357,013,568	109,873,888	39,803,796	70,070,092	-
4	Of which defaulted	264,461	91,673	91,673	-	-

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 ECAs 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

		At 31 December 2019					
		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	83,587,333	811	83,587,333	811	1,785,434	2.14%
2	PSE exposures	2,461,881	769,200	2,466,648	106,311	22,215	0.86%
2a	<i>Of which: domestic PSEs</i>	-	769,200	4,767	106,311	22,215	20.00%
2b	<i>Of which: foreign PSEs</i>	2,461,881	-	2,461,881	-	-	0.00%
3	Multilateral development bank exposures	3,900,731	-	3,900,731	-	-	0.00%
4	Bank exposures	14,173	-	14,173	-	2,835	20.00%
5	Securities firm exposures	-	-	-	-	-	N/A
6	Corporate exposures	5,811,202	8,986,495	5,561,265	441,006	5,618,154	93.60%
7	CIS exposures	-	-	-	-	-	N/A
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	4,771,325	1,456,647	4,581,258	195,752	3,582,758	75.00%
11	Residential mortgage loans	15,105,255	3,421	15,018,231	-	7,509,117	50.00%
12	Other exposures which are not past due exposures	2,015,227	426,150	1,662,923	76,338	1,739,261	100.00%
13	Past due exposures	69,802	-	69,802	-	73,117	104.75%
14	Significant exposures to commercial entities	-	-	-	-	-	N/A
15	Total	117,736,929	11,642,724	116,862,364	820,218	20,332,891	17.28%

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

Risk Weight Exposure class		At 31 December 2019										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	80,504,699	-	1,622,514	-	-	-	1,460,931	-	-	-	83,588,144
2	PSE exposures	2,461,881	-	111,078	-	-	-	-	-	-	-	2,572,959
2a	<i>Of which: domestic PSEs</i>	-	-	111,078	-	-	-	-	-	-	-	111,078
2b	<i>Of which: foreign PSEs</i>	2,461,881	-	-	-	-	-	-	-	-	-	2,461,881
3	Multilateral development bank exposures	3,900,731	-	-	-	-	-	-	-	-	-	3,900,731
4	Bank exposures	-	-	14,173	-	-	-	-	-	-	-	14,173
5	Securities firm exposures	-	-	-	-	-	-	-	-	-	-	-
6	Corporate exposures	-	-	-	-	768,233	-	5,234,038	-	-	-	6,002,271
7	CIS exposures	-	-	-	-	-	-	-	-	-	-	-
8	Cash items	-	-	-	-	-	-	-	-	-	-	-
9	Exposures in respect of failed delivery on transactions entered into on a basis other than a delivery-versus-payment basis	-	-	-	-	-	-	-	-	-	-	-
10	Regulatory retail exposures	-	-	-	-	-	4,777,010	-	-	-	-	4,777,010
11	Residential mortgage loans	-	-	-	-	15,018,231	-	-	-	-	-	15,018,231
12	Other exposures which are not past due exposures	-	-	-	-	-	-	1,739,261	-	-	-	1,739,261
13	Past due exposures	-	-	-	-	-	-	63,172	6,630	-	-	69,802
14	Significant exposures to commercial entities	-	-	-	-	-	-	-	-	-	-	-
15	Total	86,867,311	-	1,747,765	-	15,786,464	4,777,010	8,497,402	6,630	-	-	117,682,582

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 2019				
		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%
	Multilateral development bank	-	-	-	-	100.00%
Corporate	Bank	99.98%	-	-	-	0.02%
	Corporate	97.36%	0.29%	-	-	2.35%
Retail	Residential mortgages	-	-	43.86%	-	56.14%
	Small business retail	-	-	100.00%	-	0.00%
	Other retail to individuals	-	-	82.72%	-	17.28%
Other	-	-	-	88.24%	-	11.76%
Total		67.01%	0.15%	7.08%	2.67%	23.09%

Portfolio		At 31 December 2019				
		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%
	Multilateral development bank	-	-	-	-	-
Corporate	Bank	99.99%	-	-	-	0.01%
	Corporate	96.23%	0.41%	-	-	3.36%
Retail	Residential mortgages	-	-	22.65%	-	77.35%
	Small business retail	-	-	99.96%	-	0.04%
	Other retail to individuals	-	-	74.48%	-	25.52%
Other	-	-	-	83.81%	-	16.19%
Total		82.45%	0.27%	5.17%	3.84%	8.27%

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		At 31 December 2019												
		Original on-balance sheet gross exposure	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWA	RWA density	EL	Provisions	
PD scale	HK\$'000	HK\$'000		HK\$'000				Years	HK\$'000		HK\$'000	HK\$'000		
Portfolio (i) – Banks	0.00 to < 0.15	69,411,641	476,696	100.00%	69,927,405	0.07%	202	45.00%	2.5	22,723,931	32.50%	23,336		
	0.15 to < 0.25	380	-	N/A	104,808	0.22%	1	45.00%	2.5	64,604	61.64%	103		
	0.25 to < 0.50	12,941,152	109,703	100.00%	13,050,855	0.39%	36	45.00%	2.5	10,651,623	81.62%	22,905		
	0.50 to < 0.75	6,182,948	28,670	12.80%	6,373,511	0.58%	16	44.64%	2.5	6,051,641	94.95%	16,342		
	0.75 to < 2.50	2,538,527	314,045	16.61%	2,682,599	1.09%	10	42.64%	2.5	2,709,560	101.01%	12,582		
	2.50 to < 10.00	-	-	N/A	-	N/A	-	N/A	N/A	-	N/A	-	-	
	10.00 to < 100.00	-	-	N/A	-	N/A	-	N/A	N/A	-	N/A	-	-	
	100.00 (Default)	166,641	-	N/A	166,641	100.00%	1	45.00%	2.5	-	-	166,641	-	
Sub-total	91,241,289	929,114	69.12%	92,305,819	0.36%	266	44.90%	2.5	42,201,359	45.72%	241,909	894,983		
Portfolio (ii) – Corporate – small-and-medium sized corporates	0.00 to < 0.15	2,813,725	92,152	2.68%	2,292,446	0.10%	111	43.88%	2.5	561,574	24.50%	977		
	0.15 to < 0.25	366,444	392,459	4.20%	1,694,306	0.22%	100	40.92%	2.5	566,793	33.45%	1,525		
	0.25 to < 0.50	1,703,239	2,198,193	4.38%	3,148,858	0.39%	175	40.71%	2.5	1,420,216	45.10%	5,000		
	0.50 to < 0.75	2,868,965	2,873,275	8.86%	6,580,005	0.56%	232	41.42%	2.5	3,571,633	54.28%	15,074		
	0.75 to < 2.50	7,862,397	6,593,368	7.21%	7,694,444	1.34%	471	36.51%	2.5	5,134,022	66.72%	37,688		
	2.50 to < 10.00	7,962,444	1,445,973	4.92%	6,223,885	3.31%	198	37.51%	2.5	5,736,545	92.17%	76,526		
	10.00 to < 100.00	699,279	345,371	48.86%	358,538	13.19%	21	19.55%	2.5	252,384	70.39%	8,863		
	100.00 (Default)	20,244	6,550	-	20,244	100.00%	2	35.00%	2.5	88,567	437.50%	-	-	
Sub-total	24,296,737	13,947,341	7.78%	28,012,726	1.54%	1,310	39.01%	2.5	17,331,734	61.87%	145,653	299,147		
Portfolio (iii) – Corporate – other (including purchased corporate receivables)	0.00 to < 0.15	34,144,868	10,376,108	31.81%	50,935,420	0.09%	182	44.61%	2.5	14,533,113	28.53%	20,598		
	0.15 to < 0.25	10,611,850	2,011,449	11.66%	16,080,385	0.22%	77	36.10%	2.5	6,210,157	38.62%	12,771		
	0.25 to < 0.50	17,421,735	8,422,400	17.83%	32,583,738	0.39%	171	42.77%	2.5	20,003,407	61.39%	54,351		
	0.50 to < 0.75	37,522,685	22,924,638	27.12%	35,344,440	0.62%	299	38.81%	2.5	23,669,336	66.97%	85,469		
	0.75 to < 2.50	66,844,400	52,398,183	17.68%	68,426,531	1.38%	794	40.12%	2.5	62,313,223	91.07%	374,445		
	2.50 to < 10.00	30,583,705	19,309,827	6.52%	14,560,127	3.53%	237	32.11%	2.5	13,845,795	95.09%	159,706		
	10.00 to < 100.00	3,572,510	1,129,691	0.33%	1,555,964	14.89%	24	38.58%	2.5	2,809,779	180.58%	93,630		
	100.00 (Default)	1,793,187	25,587	-	1,736,082	100.00%	29	44.80%	2.5	66,953	3.86%	1,471,402		
Sub-total	202,494,940	116,597,883	18.68%	221,222,687	1.74%	1,813	40.54%	2.5	143,451,763	64.84%	2,272,372	3,967,975		
Total (sum of all portfolios)	318,032,966	131,474,338	17.88%	341,541,232	1.35%	3,389	41.60%	2.5	202,984,856	59.43%	2,659,934	5,162,105		

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

Retail IRB approach	PD scale	At 31 December 2019											
		Original on-balance sheet gross exposure	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWA	RWA density	EL	Provisions
		HK\$'000	HK\$'000		HK\$'000			Years	HK\$'000		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	7,203,665	-	N/A	7,203,665	0.10%	4,922	12.24%	-	1,239,949	17.21%	872	-
	0.15 to < 0.25	2,593,048	-	N/A	2,593,048	0.22%	765	13.99%	-	462,731	17.85%	798	-
	0.25 to < 0.50	1,214,644	-	N/A	1,214,644	0.39%	348	15.08%	-	277,783	22.87%	698	-
	0.50 to < 0.75	575,465	-	N/A	575,465	0.53%	202	21.58%	-	142,281	24.72%	661	-
	0.75 to < 2.50	89,887	-	N/A	89,887	1.04%	42	23.73%	-	30,465	33.89%	219	-
	2.50 to < 10.00	18,602	-	N/A	18,602	4.42%	16	14.17%	-	8,425	45.29%	130	-
	10.00 to < 100.00	31,315	-	N/A	31,315	27.25%	20	15.42%	-	27,052	86.39%	1,334	-
	100.00 (Default)	8,622	-	N/A	8,622	100.00%	6	10.00%	-	10,778	125.01%	-	-
Sub-total	11,735,248	-	N/A	11,735,248	0.34%	6,321	13.48%	-	2,199,464	18.74%	4,712	37,960	
Portfolio (v) –Retail – small business retail exposures	0.00 to < 0.15	314,088	442,641	29.90%	446,425	0.09%	664	8.11%	-	8,056	1.80%	32	-
	0.15 to < 0.25	129,739	44,319	35.13%	145,309	0.22%	127	8.59%	-	5,392	3.71%	26	-
	0.25 to < 0.50	199,223	99,145	32.05%	230,998	0.39%	194	7.45%	-	10,704	4.63%	67	-
	0.50 to < 0.75	257,370	67,116	32.77%	279,362	0.60%	206	7.21%	-	15,962	5.71%	122	-
	0.75 to < 2.50	265,579	109,593	29.78%	298,220	1.31%	229	9.10%	-	30,131	10.10%	361	-
	2.50 to < 10.00	57,396	17,550	34.12%	63,384	3.94%	92	11.51%	-	10,356	16.34%	272	-
	10.00 to < 100.00	520	-	N/A	520	19.53%	3	7.47%	-	80	15.38%	7	-
	100.00 (Default)	128	-	N/A	128	100.00%	3	25.22%	-	-	-	111	-
Sub-total	1,224,043	780,364	30.79%	1,464,346	0.68%	1,518	8.23%	-	80,681	5.51%	998	1,502	
Portfolio (vi) –Other retail exposures to individuals	0.00 to < 0.15	280,013	1,073,967	-	1,299,357	0.05%	713	12.31%	-	21,623	1.66%	76	-
	0.15 to < 0.25	160,449	-	N/A	160,449	0.22%	368	11.85%	-	8,215	5.12%	42	-
	0.25 to < 0.50	2,565,807	874	-	2,566,624	0.37%	1,542	12.36%	-	190,285	7.41%	1,170	-
	0.50 to < 0.75	3,587,743	171,676	99.02%	3,758,685	0.55%	1,549	32.26%	-	900,020	23.95%	6,429	-
	0.75 to < 2.50	3,718,780	2,419,369	3.16%	3,892,265	0.99%	1,801	17.48%	-	703,353	18.07%	7,163	-
	2.50 to < 10.00	10,590,552	344	0.01%	10,590,824	3.26%	2,156	56.10%	-	8,352,973	78.87%	192,985	-
	10.00 to < 100.00	124,659	470,000	100.00%	594,666	31.73%	45	16.22%	-	245,106	41.22%	29,636	-
	100.00 (Default)	4,863	-	N/A	4,863	100.00%	4	57.07%	-	32,656	671.52%	258	-
Sub-total	21,032,866	4,136,230	17.32%	22,867,733	2.66%	8,178	36.86%	-	10,454,231	45.72%	237,759	180,685	
Total (sum of all portfolios)	33,992,157	4,916,594	19.46%	36,067,327	1.82%	16,017	28.09%	-	12,734,376	35.31%	243,469	220,147	

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 2019	
		Pre-credit derivatives RWA	Actual RWA
		HK\$'000	HK\$'000
1	Corporate – Specialised lending under supervisory slotting criteria approach (project finance)	675,215	675,215
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	17,331,734	17,331,734
7	Corporate – Other corporates	143,451,763	143,451,763
8	Sovereigns	-	-
9	Sovereign foreign public sector entities	-	-
10	Multilateral development banks	-	-
11	Bank exposures – Banks	42,136,931	42,136,931
12	Bank exposures – Securities firms	64,428	64,428
13	Bank exposures – Public sector entities (excluding sovereign foreign public sector entities)	-	-
14	Retail – Small business retail exposures	80,681	80,681
15	Retail – Residential mortgages to individuals	2,141,420	2,141,420
16	Retail – Residential mortgages to property-holding shell companies	58,044	58,044
17	Retail – Qualifying revolving retail exposures (QRRE)	-	-
18	Retail – Other retail exposures to individuals	10,454,231	10,454,231
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	9,459,820	9,459,820
28	Total (under the IRB calculation approaches)	225,854,267	225,854,267

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

		HK\$'000
1	RWA as at 30 September 2019	216,353,407
2	Asset size	4,129,007
3	Asset quality	4,567,400
4	Model updates	-
5	Methodology and policy	-
6	Acquisitions and disposals	-
7	Foreign exchange movements	804,453
8	Other	-
9	RWA as at 31 December 2019	225,854,267

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

At 31 December 2019											
(a)	(b)	(c)(i)	(c)(ii)	(c)(iii)	(d)	(e)	(f)		(g)	(h)	(i)
Portfolio X	PD Range	External equivalent rating Moody's	External equivalent rating S&P	External equivalent rating Fitch	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	Of which: new defaulted obligors in the year	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, A-, BBB+	AAA, AA+, AA, AA-, A+, A, A-, BBB+	0.07%	0.07%	184	202	-	-	-
	0.15 to < 0.25	Baa2	BBB	BBB	0.22%	0.22%	24	1	-	-	-
	0.25 to < 0.50	Baa3	BBB-	BBB-	0.39%	0.39%	22	36	-	-	-
	0.50 to < 0.75	Ba1	BB+	BB+	0.65%	0.59%	19	16	-	-	-
	0.75 to < 2.50	Ba2, Ba3	BB, BB-	BB, BB-	1.36%	1.32%	23	10	1	-	0.87%
	2.50 to < 10.00	B1, B2, B3	B+, B, B-	B+, B, B-	2.67%	2.67%	1	-	-	-	-
	10.00 to < 100.00	B3, Caa1, Caa2, Caa3, Ca, C	B-, CCC+, CCC, CCC-, CC, C	B-, CCC, CC, C	10.54%	10.54%	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, A-, BBB+	AAA, AA+, AA, AA-, A+, A, A-, BBB+	0.12%	0.11%	78	111	-	-	-
	0.15 to < 0.25	Baa2	BBB	BBB	0.22%	0.22%	66	100	-	-	-
	0.25 to < 0.50	Baa3	BBB-	BBB-	0.39%	0.39%	147	175	1	-	0.30%
	0.50 to < 0.75	Ba1	BB+	BB+	0.57%	0.59%	228	232	-	-	-
	0.75 to < 2.50	Ba2, Ba3	BB, BB-	BB, BB-	1.25%	1.36%	497	471	2	-	0.74%
	2.50 to < 10.00	B1, B2, B3	B+, B, B-	B+, B, B-	3.32%	4.17%	190	198	3	1	0.80%
	10.00 to < 100.00	B3, Caa1, Caa2, Caa3, Ca, C	B-, CCC+, CCC, CCC-, CC, C	B-, CCC, CC, C	10.69%	11.69%	14	21	-	-	9.44%
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, A-, BBB+	AAA, AA+, AA, AA-, A+, A, A-, BBB+	0.10%	0.11%	215	182	1	-	0.21%
	0.15 to < 0.25	Baa2	BBB	BBB	0.22%	0.22%	105	77	1	-	0.47%
	0.25 to < 0.50	Baa3	BBB-	BBB-	0.39%	0.39%	165	171	-	-	-
	0.50 to < 0.75	Ba1	BB+	BB+	0.59%	0.59%	271	299	2	-	0.22%
	0.75 to < 2.50	Ba2, Ba3	BB, BB-	BB, BB-	1.32%	1.33%	800	794	3	1	0.54%
	2.50 to < 10.00	B1, B2, B3	B+, B, B-	B+, B, B-	3.85%	4.02%	204	237	3	-	1.58%
	10.00 to < 100.00	B3, Caa1, Caa2, Caa3, Ca, C	B-, CCC+, CCC, CCC-, CC, C	B-, CCC, CC, C	14.17%	17.32%	30	24	8	-	21.85%

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

At 31 December 2019														
(a)	(b)	(c)(i)		(c)(ii)		(c)(iii)		(d)	(e)	(f)		(g)	(h)	(i)
Portfolio X	PD Range	External equivalent Moody's rating	External equivalent S&P rating	External equivalent Fitch rating	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	Of which: new defaulted obligors in the year	Average historical annual default rate			
							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	0.10%	0.08%	5,526	4,922	-	-	0.03%			
	0.15 to < 0.25	N/A	N/A	N/A	0.22%	0.22%	848	765	-	-	-			
	0.25 to < 0.50	N/A	N/A	N/A	0.39%	0.39%	360	348	-	-	0.01%			
	0.50 to < 0.75	N/A	N/A	N/A	0.53%	0.54%	165	202	-	-	-			
	0.75 to < 2.50	N/A	N/A	N/A	1.19%	1.27%	27	42	1	-	1.51%			
	2.50 to < 10.00	N/A	N/A	N/A	6.40%	4.98%	18	16	-	-	0.28%			
	10.00 to < 100.00	N/A	N/A	N/A	27.45%	26.42%	15	20	3	-	7.27%			
Portfolio (v) – Retail – small business retail exposures	0.00 to < 0.15	N/A	N/A	N/A	0.09%	0.09%	663	664	-	-	0.05%			
	0.15 to < 0.25	N/A	N/A	N/A	0.22%	0.22%	198	127	-	-	0.64%			
	0.25 to < 0.50	N/A	N/A	N/A	0.39%	0.39%	219	194	-	-	0.07%			
	0.50 to < 0.75	N/A	N/A	N/A	0.59%	0.60%	215	206	-	-	0.05%			
	0.75 to < 2.50	N/A	N/A	N/A	1.20%	1.21%	255	229	-	-	0.86%			
	2.50 to < 10.00	N/A	N/A	N/A	3.82%	4.87%	125	92	-	-	2.42%			
	10.00 to < 100.00	N/A	N/A	N/A	22.05%	21.77%	6	3	-	-	4.43%			
Portfolio (vi) – Other retail exposures to individuals	0.00 to < 0.15	N/A	N/A	N/A	0.05%	0.06%	636	713	-	-	0.04%			
	0.15 to < 0.25	N/A	N/A	N/A	0.22%	0.22%	408	368	-	-	-			
	0.25 to < 0.50	N/A	N/A	N/A	0.36%	0.37%	1,703	1,542	-	-	0.06%			
	0.50 to < 0.75	N/A	N/A	N/A	0.58%	0.56%	1,564	1,549	5	-	0.20%			
	0.75 to < 2.50	N/A	N/A	N/A	1.04%	1.09%	1,852	1,801	-	-	0.19%			
	2.50 to < 10.00	N/A	N/A	N/A	2.97%	3.23%	865	2,156	1	-	0.53%			
	10.00 to < 100.00	N/A	N/A	N/A	32.22%	28.28%	24	45	1	-	1.79%			

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 2019					
		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 2019										
		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	-	-	70%	-	-	-	-	-	-	-	-
Good^	Less than 2.5 years	-	-	70%	-	-	-	-	-	-	-	-
Good	Equal to or more than 2.5 years	628,847	161,855	90%	750,239	-	-	-	750,239	675,215	6,002	-
Satisfactory		-	-	115%	-	-	-	-	-	-	-	-
Weak		-	-	250%	-	-	-	-	-	-	-	-
Default		-	-	0%	-	-	-	-	-	-	-	-
Total		628,847	161,855		750,239	-	-	-	750,239	675,215	6,002	

^ Use of preferential risk-weights.

III. Equity exposures under the simple risk-weight method

Categories	At 31 December 2019				
	On-balance sheet exposure amount	Off-balance sheet exposure amount	SRW	EAD amount	RWA
				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 Bank's risk management objective with respect to counterparty credit risk is to ensure that the relevant businesses are well managed and controlled under the Bank's existing risk management framework. The Bank has in place clearly documented CCR management policies, which have defined counterparty credit risk and its components, types of transactions that give rise to counterparty credit risk, risk assessment methodology, risk mitigation measures and risk appetite.

The Bank has set risk appetite for both solo and consolidated levels for its counterparty credit risk exposure. The appetite is set as a percentage of pre-settlement risk exposure over the Bank's Tier 1 capital. The risk appetite is reviewed annually and approved by the Board. The Bank regularly reviews its exposure against the risk appetite and reports to the Bank senior management, further controlling action(s) will be taken when necessary.

The bank sets credit limits to control pre-settlement and settlement risks. Limits are approved through formal credit assessment procedures stated in Bank's policies. Limit utilization/risk exposure are measured by Current Exposure Method. Any limit exceptions or excesses will be closely monitored and reported.

Based on the credit risk assessment result of counterparties, the Bank applies appropriate risk mitigating / credit enhancing measures to mitigate the counterparty risk exposures. These measures generally include netting arrangement, collateral and margining arrangement and PvP for settlement.

When conducting the credit assessment process, the Bank assesses whether there is any general or specific wrong way risk associated with CCR-related activities. The Bank, in principle, does not conduct any transactions that would give rise to specific wrong way risk. The Bank also assesses if there is any general wrong way risk with any counterparties by conducting regular stress testing. The Bank will further assess the risks with those identified counterparties and take further controlling action(s) when necessary.

Currently, GMRA, ISDA master agreements 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 2019					
		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	450,035	593,750	-	Not applicable	858,435	429,113
2	IMM (CCR) approach	-	-	-	Not applicable	-	-
3	Simple Approach (for SFTs)	-	-	-	-	-	-
4	Comprehensive Approach (for SFTs)	-	-	-	-	15,166,532	225,983
5	VaR (for SFTs)	-	-	-	-	-	-
6	Total	-	-	-	-	-	655,096

CCR2: CVA capital charge

		At 31 December 2019	
		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	1,043,805	243,138
4	Total	1,043,805	243,138

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 2019										Total default risk exposure 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	-	-	-	-	-	-	7,591	-	-	-	7,591
7	CIS exposure	-	-	-	-	-	-	-	-	-	-	-
8	Regulatory retail exposures	-	-	-	-	-	269	-	-	-	-	269
9	Residential mortgage loans	-	-	-	-	-	-	-	-	-	-	-
10	Other exposures which are not past due exposures	-	-	-	-	-	-	285	-	-	-	285
11	Significant exposures to commercial entities	-	-	-	-	-	-	-	-	-	-	-
12	Total	-	-	-	-	-	269	7,876	-	-	-	8,145

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 2019						
		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	13,312,957	0.06%	29	6.06%	0.60	367,000	2.76%
	0.15 to < 0.25	-	N/A	-	N/A	N/A	-	N/A
	0.25 to < 0.50	553,831	0.39%	4	4.74%	0.68	44,993	8.12%
	0.50 to < 0.75	26,722	0.67%	2	45.00%	2.50	27,379	102.46%
	0.75 to < 2.50	2,006,579	1.29%	5	2.33%	0.51	87,421	4.36%
	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	15,900,089	0.23%	40	5.61%	0.59	526,793	3.31%
Portfolio (ii) – Corporate	0.00 to < 0.15	-	N/A	-	N/A	N/A	-	N/A
	0.15 to < 0.25	-	N/A	-	N/A	N/A	-	N/A
	0.25 to < 0.50	12,566	0.39%	3	45.00%	2.5	7,786	61.96%
	0.50 to < 0.75	49	0.51%	1	45.00%	2.5	27	55.10%
	0.75 to < 2.50	95,577	1.53%	7	45.00%	2.5	100,944	105.62%
	2.50 to < 10.00	8,541	3.51%	4	45.00%	2.5	11,469	134.28%
	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	116,733	1.55%	15	45.00%	2.5	120,226	102.99%
Total (sum of all portfolios)	16,016,822	0.24%	55	5.89%	0.61	647,019	4.04%	

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

	At 31 December 2019					
	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	-	66,178	-	-	-	-
Cash - other currencies	-	157,138	-	127,243	13,913,942	-
Government bonds	-	-	-	-	-	6,054,720
Other bonds	-	-	-	-	-	9,111,812
Total	-	223,316	-	127,243	13,913,942	15,166,532

CCR6: Credit-related derivatives contracts

	At 31 December 2019	
	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 securitization standardized approach to calculate the credit risk for securitization exposures as an investing institution. The securitization exposures held by the Group were all unrated. There were no securitization exposures in trading book and re-securitization exposures in both banking book and trading book as at 31 December 2019.

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 2019 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 2019 consolidated financial statements.

SEC1: Securitization exposures in banking book

		At 31 December 2019								
		(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:	-	-	-	-	-	-	1,356,260	-	1,356,260
7	loans to corporates	-	-	-	-	-	-	1,356,260	-	1,356,260
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 2019																
		(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	SEC-IRBA	SEC-ERBA (incl. IAA)	SEC-SA	SEC-FBA	SEC-IRBA	SEC-ERBA (incl. IAA)	SEC-SA	SEC-FBA	SEC-IRBA	SEC-ERBA (incl. IAA)	SEC-SA	SEC-FBA
		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	1,356,260	-	-	-	-	-	-	1,356,260	-	-	-	203,439	-	-	-	16,275	-
2	Traditional securitization	1,356,260	-	-	-	-	-	-	1,356,260	-	-	-	203,439	-	-	-	16,275	-
3	Of which securitization	1,356,260	-	-	-	-	-	-	1,356,260	-	-	-	203,439	-	-	-	16,275	-
4	Of which retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Of which wholesale	1,356,260	-	-	-	-	-	-	1,356,260	-	-	-	203,439	-	-	-	16,275	-
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 uses 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 2019
		RWA
		HK\$'000
Outright product exposures		
1	Interest rate exposures (general and specific risk)	-
2	Equity exposures (general and specific risk)	-
3	Foreign exchange (including gold) exposures	-
4	Commodity exposures	66,188
Option exposures		
5	Simplified approach	-
6	Delta-plus approach	-
7	Other approach	-
8	Securitisation exposures	-
9	Total	66,188

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

Movement in RWA was mainly driven by changes in exposure and risk level 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 2019	143,025	486,600	-	-	-	629,625
1a	Regulatory adjustment	(70,987)	(222,112)	-	-	-	(293,099)
1b	RWA as at 30 September 2019 (day-end)	72,038	264,488	-	-	-	336,526
2	Movement in risk levels	(19,675)	13,300	-	-	-	(6,375)
3	Model updates/changes	-	-	-	-	-	-
4	Methodology and policy	-	-	-	-	-	-
5	Acquisitions and disposals	-	-	-	-	-	-
6	Foreign exchange movements	-	-	-	-	-	-
7	Other	-	-	-	-	-	-
7a	RWA as at 31 December 2019 (day-end)	52,363	277,788	-	-	-	330,151
7b	Regulatory adjustment	113,762	257,937	-	-	-	371,699
8	RWA as at 31 December 2019	166,125	535,725	-	-	-	701,850

MR3: IMM approach values for market risk exposures

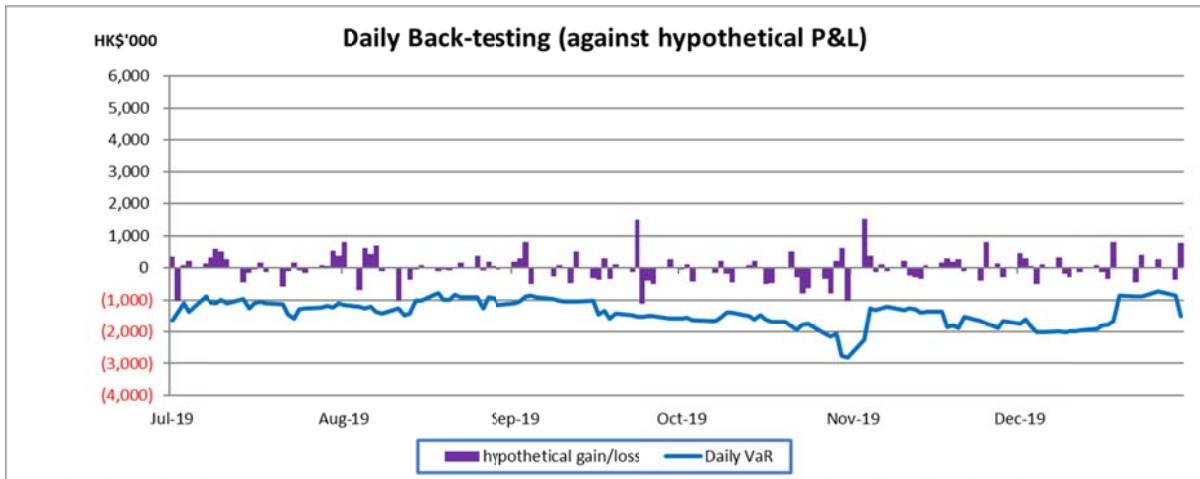
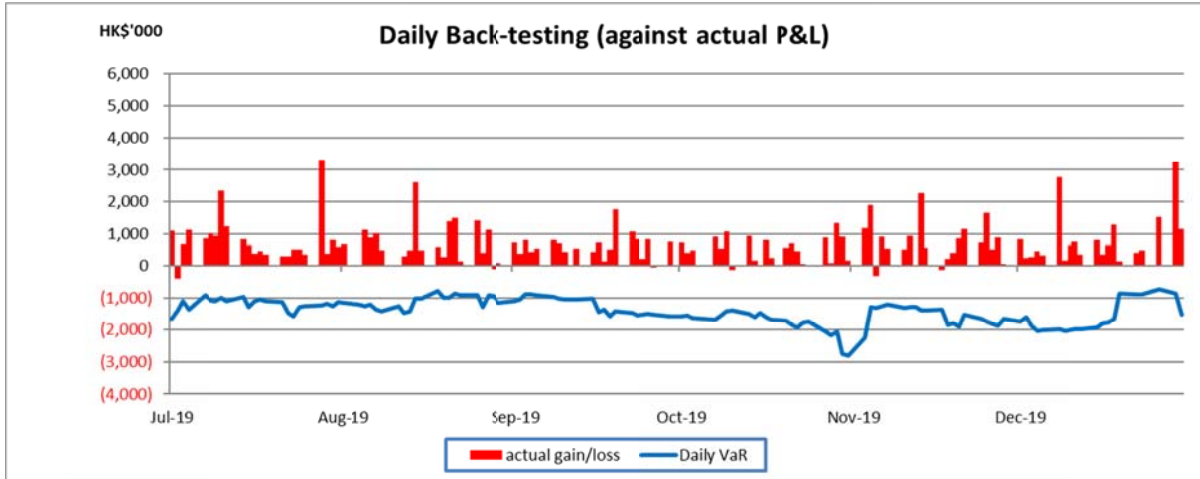
The maximum, minimum, average and period-end values were calculated for the reporting period from July 2019 to Dec 2019. Movement of Stressed VaR was driven by changes in exposure and risk level during the reporting period.

		At 31 December 2019
		HK\$'000
VaR (10 days – one-tailed 99% confidence interval)		
1	Maximum Value	9,684
2	Average Value	4,143
3	Minimum Value	1,811
4	Period End	4,189
Stressed VaR (10 days – one-tailed 99% confidence interval)		
5	Maximum Value	23,344
6	Average Value	13,848
7	Minimum Value	8,286
8	Period End	22,223
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 back-testing results of the Group's market risk under IMM approach in the second half of 2019. 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 no hypothetical loss and actual loss exceeding the VaR for the Group as shown in the back-testing results.

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



IRRBB: Interest rate risk in banking book – risk management objectives and policies

Interest rate risk in Banking Book (“IRRBB”) means the risks to a bank’s earnings and economic value arising from movements in interest rate and term structures of the bank’s asset and liability positions. The Group’s interest rate risk exposures in Banking Book are mainly structural. The major types of interest rate risk in Banking Book from structural positions are:

- IRR Gapping risk: arising from the changes in the interest rates on assets, liabilities and off-balance sheet items of different maturities and different repricing tenors. The extent of gapping risk depends on whether changes to the term structure of interest rates occur consistently across the yield curve (parallel risk) or differentially by period (non-parallel risk);
- Basis risk: different pricing basis for different transactions resulting that the yield on assets and cost of liabilities may change by different amounts within the same repricing period;
- Option risk: arising from interest rate option derivatives or from optional elements embedded in an AI’s assets, liabilities and off-balance sheet items, where the AI or its customer can alter the level and timing of their cash flows. Option risk can be further characterised into automatic option risk and behavioural option risk.

The Group’s risk management framework applies also to interest rate risk management in banking book. The Asset and Liability Management Committee exercises its oversight of interest rate risk in accordance with the “Banking Book Interest Rate Risk Management Policy” approved by Risk Management Committee. Asset & Liability Management Division is responsible for banking book interest rate risk management. With the cooperation of the Treasury Division, Asset & Liability Management Division assists the Asset and Liability Management Committee to perform day-to-day banking book interest rate risk management. Its roles include, but are not limited to, the formulation of management policies, selection of methodologies, setting of risk indicators and limits, assessment of target balance sheet, monitoring of the compliance with policies and limits, and submission of banking book interest rate risk management reports to the Management and Risk Management Committee.

The Group’s Internal Audit Department acts as the independent audit on interest rate risk in banking book, supervises the related departments to execute the interest rate risk function according to the policy in order to effectively control the risk. The Group’s Model Validation Division preforms independent model validation regularly for interest rate risk in banking book.

IRRBB: Interest rate risk in banking book – risk management objectives and policies (continued)

In accordance with the requirements of Supervisory Policy Manual IR-1 “Interest Rate Risk in the Banking Book” issued by the HKMA in 2018, the Group sets interest rate risk indicators and limits to identify, measure, monitor and control interest rate risk. The Group’s key risk indicators, the Net Interest Income impact and the Economic Value of Equity impact, reflect the impact of interest rate movement on the Group’s net interest income and capital base respectively. The former assesses the impact of interest rate movement on net interest income as a percentage to the projected net interest income for the year. The latter assesses the impact of interest rate movement on economic values as a percentage to the latest capital base. The risk appetites and limits of these two indicators are set by the Board and Risk Management Committee respectively to monitor and control the Group’s banking book interest rate risk. In addition, the Group monitors the interest rate risk in banking book through indicators and limits including, but are not limited to, interest rate sensitivity gap limits, basis risk, duration and price value of a basis point (“PVBP”).

The Group’s indicators and limits are classified into three levels, which are approved by the Risk Management Committee, Asset and Liability Management Committee and Chief Financial Officer respectively. Risk-taking business units are required to conduct their business within the banking book interest rate risk limits. In addition, risk mitigation measures including, but not limited to, the use of interest rate derivatives, adjustment of portfolio duration, etc. as approved by ALCO, are effectively used to mitigate the IRRBB. Before launching a new product or business in the banking book, the relevant departments are required to go through a risk assessment process, which includes the assessment of underlying interest rate risk and consideration of the adequacy of current risk monitoring mechanism. Any material impact on banking book interest rate risk noted during the risk assessment process will be submitted to Risk Management Committee for approval.

The Group uses scenario analyses and stress tests to assess the banking book interest rate risk that the Group would face under adverse circumstances. Scenario analyses and stress tests are also used to assess the impact on net interest income arising from the optionality of savings deposits.

The Group is principally exposed to HK Dollar, US Dollar and Renminbi in terms of interest rate risk. As at 31 December 2019, according to the new standard IRRBB framework of HKMA, the Group assesses the impact of changes in the Group’s net interest income (“ Δ NII”) and economic value (“ Δ EVE”) respectively under 6 interest rate shock scenarios, in which optionality and behavioural assumptions of certain products will also be estimated in the exposure measurement. The 6 interest rate shock scenarios include: (1) Parallel up; (2) Parallel down; (3) Steepener; (4) Flattener; (5) Short rates up; and (6) Short rates down.

IRRBB: Interest rate risk in banking book – risk management objectives and policies (continued)

When calculating Δ EVE, commercial margins and other spread components are included in the cash flows and discounted by the risk-free rates. The key behavioural assumptions include

(1) part of the current account and savings account deposits (CASA) in HKD and USD are classified into core stable deposit based on historical data which would be assigned a longer interest rate sensitive tenor while the interest rate sensitive tenor of other non-maturity deposits are considered as “Next day”. As at 31 December 2019, the average interest rate sensitive tenors of HKD and USD CASA is 1.60 months and 1.21 months, and the longest interest rate sensitive tenor is 3 months.

(2) For retail term deposits and retail fixed rate loans subject to early redemption without significant penalty, early redemption rates are calculated under different portfolios.

Methods of aggregation across currencies strictly follow the IRRBB Standardised Framework. The aggregate EVE losses across all applicable currencies are calculated as the maximum loss across the six interest rate shock scenarios.

IRRBB1: Quantitative information on interest rate risk in banking book

HK\$'000		Δ EVE	Δ NII
	Period	31 December 2019	
1	Parallel up	1,773,666	-745,846
2	Parallel down	266,548	746,309
3	Steepener	391,746	
4	Flattener	379,359	
5	Short rate up	935,369	
6	Short rate down	531,202	
7	Maximum	1,773,666	746,309
	Period	31 December 2019	
8	Tier 1 capital	49,128,649	

Remarks: Positive values indicate losses under the alternative scenarios.

As at 31 December 2019, the net interest income impact for all currencies is 746 million under the interest rate parallel down scenario. The maximum negative impact on Δ EVE is 1,774 million under the interest rate parallel up scenario.

REMA: Remuneration policy

Remuneration and Incentive Mechanism

The Remuneration and Incentive Mechanism of the Group is based on the principles of “effective motivation” and “sound remuneration management”. It links remuneration with performance and risk factors closely. It serves to encourage staff to enhance their performance, and at the same time, to strengthen their awareness of risk so as to achieve sound remuneration management.

The Remuneration and Incentive Policy of the Group is generally in line with the broad principles set out in the HKMA’s “Guideline on a Sound Remuneration System” and applicable to Nanyang Commercial Bank Limited and all of its subsidiaries.

- **“Senior Management” and “Key Personnel”**

The following groups of employees have been identified as the “Senior Management” and “Key Personnel” as defined in the HKMA’s “Guideline on a Sound Remuneration System”:

- “Senior Management”: The senior executives directly managed by the Board who are responsible for oversight of the firm-wide strategy or material business lines, including Managing Director, Chief Executive, Deputy Chief Executives, Management Committee Members, Chief Strategy Officer, Chief Financial Officer, Chief Risk Officer, Chief Information Officer, Chief Human Resources Officer, Board Secretary and General Manager of Audit Department.
- “Key Personnel”: The employees whose individual business activities involve the assumption of material risk which may have significant impact on risk exposure, or whose individual responsibilities are directly and materially linked to the risk management, or those who have direct influence to the profit, including heads of material business lines, heads of major subsidiaries, General Manager of Risk Management Department, General Manager of Credit Management Department, General Manager of Basel Management Department, General Manager of Finance Department, as well as General Manager of Information Technology Department.

- **Determination of the Remuneration Policy**

To fulfill the above-mentioned principles and to facilitate effective risk management within the framework of the Remuneration Policy of the Group, Human Resources Department is responsible for proposing the Remuneration Policy of the Group and will seek consultation of the risk control units including risk management, financial management and compliance if necessary, in order to balance the needs for staff motivations, sound remuneration and prudent risk management. In 2019, the proposed Remuneration Policy submitted to the Nomination and Remuneration Committee for review and thereafter to the Board of Directors for approval. The Nomination and Remuneration Committee and the Board of Directors will seek opinions from other Board Committees (e.g. Risk Management Committee, Audit Committee, etc.) where they consider necessary under the circumstances.

REMA: Remuneration policy (continued)

Remuneration and Incentive Mechanism (continued)

- **Key Features of the Remuneration and Incentive Mechanism**

1. Performance Management Mechanism

The Group has put in place a performance management mechanism to formalise the performance management at the levels of the Group, units and individuals. The annual targets of the Group will be cascaded down under the framework of balanced scorecard whereby the performance of the Senior Management and different units (including business units, risk control units and other units) would be assessed from the perspectives of financial, building blocks/key tasks, risk management and compliance. For individual staff at different levels, annual targets of the Group will be tied to their job requirements through the performance management mechanism. Performance of individuals will be appraised on their achievement against targets, their contribution towards performance of their units and fulfilment of risk management duties and compliance, etc. Not only is target accomplishment taken into account, but the risk exposure involved during the course of work could also be evaluated and managed, ensuring secured and normal operation of the Group.

2. Risk Adjustment of Remuneration

To put the principle of aligning performance and remuneration with risk into practice, based on the risk adjustment method of the Group, the key risk modifiers of the bank have been incorporated into the performance management mechanism of the Group. Risk adjustment focuses on major issues such as risk compliance, internal control audit, risk management, liability and liquidity management. The size of the variable remuneration pool of the Bank is subject to the risk adjusted performance results approved by the Board and is subject to its discretion. This ensures the Bank to decide the Bank's variable remuneration pool after considering risk exposures and changes and to maintain effective risk management through the remuneration mechanism.

REMA: Remuneration policy (continued)

Remuneration and Incentive Mechanism (continued)

- **Key Features of the Remuneration and Incentive Mechanism (continued)**

3. Performance-based and Risk-adjusted Remuneration Management

The remuneration of staff is composed of “fixed remuneration” and “variable remuneration”. The proportion of the fixed and variable remuneration for individual staff shall strike a balance depending on job grades, roles, responsibilities and functions of the staff. In general, the higher the job grades and/or the greater the responsibilities, the higher will be the proportion of variable remuneration so as to encourage the staff to follow the philosophy of prudent risk management and sound long-term financial stability. Fixed remuneration can be in the form of cash or in other forms, such as benefits in kind; while variable remuneration will be granted to staff in the form of cash.

Every year, the Group will conduct periodic review on the fixed remuneration of the staff with reference to various factors including the remuneration strategy, market pay trend and staff salary level, and will determine the remuneration based on the affordability of the Group as well as the performance of the Group, units and individuals. As mentioned above, performance assessment criteria include quantitative and qualitative factors, as well as financial and non-financial indicators.

According to the Bank Bonus Funding Policy, the size of the variable remuneration pool of the Bank is determined by the Board on the basis of the financial performance of the Bank and the achievement of non-financial strategic business targets under the long-term development of the Bank. Thorough consideration is also made to the risk factors in the determination process. The size of the pool is subject to the Board's approval and the Board can make discretionary adjustment to it if deemed appropriate under prevailing circumstances. When the Bank's performance is relatively weak, no variable remuneration will be paid out that year in principle. However, the Board reserves the rights to exercise its discretion.

As far as individual units and individual staff are concerned, allocation of the variable remuneration is closely linked to the risk-adjusted performance of the units, and that of each individual staff. The performance and remuneration arrangement of risk control personnel are determined by the achievement of their core job responsibilities, independent from the business they oversee; for front-line risk controllers, a cross-departmental reporting and performance evaluation is applied to ensure the suitability of performance-based remuneration. Within the acceptable risk level of the Group, the better the performance of the unit and the individual staff, the higher will be the variable remuneration for the individual staff.

REMA: Remuneration policy (continued)

Remuneration and Incentive Mechanism (continued)

- **Key Features of the Remuneration and Incentive Mechanism (continued)**

- 4. **Linking the payout of the variable remuneration with the time horizon of the risk to reflect the long-term value creation of the Group**

To realize the principle of aligning remuneration with the time horizon of risk and to ensure that sufficient time is allowed to ascertain the associated risk and its impact before the actual payout, payout of the variable remuneration of staff is required to be deferred in cash if such amount reaches certain prescribed threshold. The higher amount of the variable remuneration granted to the staff, the higher will be the proportion of deferral. Deferral period lasts for 3 years.

The vesting of the deferred variable remuneration is linked with the long term value creation of the Group. The vesting conditions are closely linked to the annual performance of the Group in the next 3 years and the individual behaviour of the staff concerned. When the Group's performance has met the threshold requirement, the deferred variable remuneration would be vested following the corresponding schedule. However, if a staff is found to have committed fraud, or any financial or non-financial factors used in performance measurement or variable pay determination are later proven to have been manifestly worse than originally understood in a particular year, or individual behaviour / management style pose negative impacts to the business unit and even the Group, including but not limited to improper or inadequate risk management, etc., the unvested portion of the deferred variable remuneration of the relevant staff would be forfeited.

- 5. **Annual Review of Remuneration Policy**

The Remuneration Policy of the Group is subject to annual review with reference to regulatory requirements, market conditions, organizational structure and risk management requirements, etc.

- **Disclosure on remuneration**

The Group has fully complied with the guideline in Part 3 of the "Guideline on a Sound Remuneration System" issued by the HKMA to disclosure information in relation to our remuneration and incentive mechanism.

REM1: Remuneration awarded during financial year

			At 31 December 2019	
			(a)	(b)
Remuneration amount and quantitative information			Senior management	Key personnel
			HK\$'000	HK\$'000
1	Fixed remuneration	Number of employees	13	12
2		Total fixed remuneration	29,145	23,680
3		Of which: cash-based	24,965	21,742
4		Of which: deferred	-	-
5		Of which: shares or other share-linked instruments	-	-
6		Of which: deferred	-	-
7		Of which: other forms	4,180	1,938
8		Of which: deferred	-	-
9	Variable remuneration	Number of employees	13	12
10		Total variable remuneration	18,381	14,291
11		Of which: cash-based	18,381	14,291
12		Of which: deferred	9,887	4,225
13		Of which: shares or other share-linked instruments	-	-
14		Of which: deferred	-	-
15		Of which: other forms	-	-
16		Of which: deferred	-	-
17	Total remuneration		47,526	37,971

Remark: The fixed remuneration above is in the form of cash and in other forms, such as benefits in kind.

REM2: Special payments

		At 31 December 2019					
		(a)	(b)	(c)	(d)	(e)	(f)
Special payments		Guaranteed bonuses		Sign-on awards		Severance payments	
		Number of employees	Total amount	Number of employees	Total amount	Number of employees	Total amount
		HK\$'000		HK\$'000		HK\$'000	
1	Senior management	-	-	-	-	-	-
2	Key personnel	-	-	-	-	-	-

REM3: Deferred remuneration

		At 31 December 2019				
		(a)	(b)	(c)	(d)	(e)
Deferred and retained remuneration		Total amount of outstanding deferred remuneration	Of which: Total amount of outstanding deferred and retained remuneration exposed to ex post explicit and/or implicit adjustment	Total amount of amendment during the year due to ex post explicit adjustments	Total amount of amendment during the year due to ex post implicit adjustments	Total amount of deferred remuneration paid out in the financial year
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
1	Senior management	19,543	-	-	-	6,625
2	Cash	19,543	-	-	-	6,625
3	Shares	-	-	-	-	-
4	Cash-linked instruments	-	-	-	-	-
5	Other	-	-	-	-	-
6	Key personnel	7,781	-	-	-	2,544
7	Cash	7,781	-	-	-	2,544
8	Shares	-	-	-	-	-
9	Cash-linked instruments	-	-	-	-	-
10	Other	-	-	-	-	-
11	Total	27,324	-	-	-	9,169