

Regulatory Disclosures

31 December 2022



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KM1: Key prudential ratios

		At 31 December 2022	At 30 September 2022	At 30 June 2022	At 31 March 2022	At 31 December 2021
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
	Regulatory capital (amount)					
1	Common Equity Tier 1 (CET1)	47,160,837	46,029,364	46,461,007	47,290,730	47,157,979
2	Tier 1	52,238,693	51,107,220	51,538,863	56,605,620	56,472,869
3	Total capital	64,922,025	63,848,760	64,486,274	69,637,505	69,402,642
	RWA (amount)					
4	Total RWA	372,096,266	372,149,400	376,525,493	382,995,130	375,956,309
	Risk-based regulatory capital ratios (as a percentage of RWA)					
5	CET1 ratio (%)	12.67%	12.37%	12.34%	12.35%	12.54%
6	Tier 1 ratio (%)	14.04%	13.73%	13.69%	14.78%	15.02%
7	Total capital ratio (%)	17.45%	17.16%	17.13%	18.18%	18.46%
	Additional CET1 buffer requirements (as a percentage of RWA)					
8	Capital conservation buffer requirement (%)	2.50%	2.50%	2.50%	2.50%	2.50%
9	Countercyclical capital buffer requirement (%)	0.58%	0.58%	0.61%	0.60%	0.60%
10	Higher loss absorbency requirements (%) (applicable only to G-SIBs or D-SIBs)	-	-	-	-	-
11	Total AI-specific CET1 buffer requirements (%)	3.08%	3.08%	3.11%	3.10%	3.10%
12	CET1 available after meeting the AI's minimum capital requirements (%)	8.04%	7.73%	7.69%	7.85%	8.04%
	Basel III leverage ratio					
13	Total leverage ratio (LR) exposure measure	593,156,997	580,601,330	587,260,275	591,512,449	582,164,898
14	LR (%)	8.81%	8.80%	8.78%	9.57%	9.70%
	Liquidity Coverage Ratio (LCR) / Liquidity Maintenance Ratio (LMR)					
	Applicable to category 1 institution only:					
15	Total high quality liquid assets (HQLA)	69,679,965	67,909,444	72,707,763	61,766,176	70,119,857
16	Total net cash outflows	50,480,838	48,321,987	50,727,693	38,176,759	45,906,712
17	LCR (%)	139.36%	140.72%	143.98%	163.59%	153.44%
	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	333,630,281	324,281,589	329,130,628	344,888,945	339,996,776
19	Total required stable funding	281,660,752	281,582,226	285,919,549	289,207,286	290,216,030
20	NSFR (%)	118.45%	115.16%	115.11%	119.25%	117.15%
	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, technology risk, conduct risk and climate 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.

Credit Approval Specialized Committee set up by the Chief Executive is responsible for approving credit proposals within the authorisation. Also, 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, technology risk, conduct risk and climate 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 encompasses the code of ethics, professionalism and integrity. Sound management systems and performance evaluation 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 various types of risk. 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".

Cross-border business 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) as a locally-incorporated bank in Mainland, its 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 the Group's networking in PRC and through sharing its experience in risk management, the Group will be able to further improve its own risk management capabilities, 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.

OV1: Overview of RWA

		RWA		Minimum capital requirements
		At 31 December 2022	At 30 September 2022	At 31 December 2022
		HK\$'000	HK\$'000	HK\$'000
1	Credit risk for non-securitization exposures	347,138,745	348,135,403	27,771,100
2	Of which STC approach	347,138,745	348,135,403	27,771,100
2a	Of which BSC approach	-	-	-
3	Of which foundation IRB approach	-	-	-
4	Of which supervisory slotting criteria approach	-	-	-
5	Of which advanced IRB approach	-	-	-
6	Counterparty default risk and default fund contributions	2,658,649	2,169,254	212,692
7	Of which SA-CCR approach	1,306,316	1,549,397	104,505
7a	Of which CEM	-	-	-
8	Of which IMM(CCR) approach	-	-	-
9	Of which others	1,352,333	619,857	108,187
10	CVA risk	559,813	654,663	44,785
11	Equity positions in banking book under the simple risk-weight method and internal models method	-	-	-
12	Collective investment scheme ("CIS") exposures – LTA	-	-	-
13	CIS exposures - MBA	-	-	-
14	CIS exposures - FBA	-	-	-
14a	CIS exposures - combination of approaches	-	-	-
15	Settlement risk	-	-	-
16	Securitization exposures in banking book	-	384,722	-
17	Of which SEC - IRBA	-	-	-
18	Of which SEC - ERBA (including IAA)	-	-	-
19	Of which SEC - SA	-	384,722	-
19a	Of which SEC - FBA	-	-	-
20	Market risk	6,119,413	5,692,763	489,553
21	Of which STM approach	6,119,413	5,692,763	489,553
22	Of which IMM approach	-	-	-
23	Capital charge for switch between exposures in trading book and banking book (not applicable before the revised market risk framework takes effect)	N/A	N/A	N/A
24	Operational risk	15,949,825	15,515,363	1,275,986
24a	Sovereign concentration risk	-	-	-
25	Amounts below the thresholds for deduction (subject to 250% RW)	3,392,200	3,346,138	271,376
26	Capital floor adjustment	-	-	-
26a	Deduction to RWA	3,722,379	3,748,906	297,790
26b	Of which portion of regulatory reserve for general banking risks and collective provisions which is not included in Tier 2 Capital	-	-	-
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	3,722,379	3,748,906	297,790
27	Total	372,096,266	372,149,400	29,767,702

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

PV1: Prudent valuation adjustments

		At 31 December 2022							
		(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	HK\$'000
1	Close-out uncertainty, of which:	-	-	-	570	-	570	-	570
2	<i>Mid-market value</i>	-	-	-	-	-	-	-	-
3	<i>Close-out costs</i>	-	-	-	-	-	-	-	-
4	<i>Concentration</i>	-	-	-	570	-	570	-	570
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	-	-	-	570	-	570	-	570

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 2022						
	(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	62,413,355	62,413,292	62,413,292	-	-	-	-
Placements with banks and other financial institutions maturing between one and twelve months	4,601,418	4,601,418	4,601,418	-	-	-	-
Financial assets at fair value through profit or loss	18,613,952	18,613,952	11,993,040	-	-	6,620,912	-
Derivative financial instruments	1,884,945	1,884,945	-	1,858,935	-	1,211,958	25,568
Advances and other accounts	290,467,189	290,467,189	290,449,971	-	-	-	17,218
Financial investments	151,195,360	151,195,360	151,194,790	25,663,437	-	-	570
Interests in subsidiaries	-	10,983	10,983	-	-	-	-
Investment properties	559,140	559,140	559,140	-	-	-	-
Properties, plant and equipment	9,089,246	9,089,246	9,089,246	-	-	-	-
Current tax assets	63,128	63,128	63,128	-	-	-	-
Deferred tax assets	327,947	327,947	-	-	-	-	327,947
Other assets	2,461,358	2,460,743	962,047	37,663	-	-	1,461,033
Total assets	541,677,038	541,687,343	531,337,055	27,560,035	-	7,832,870	1,832,336

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

	At 31 December 2022						
	(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	44,923,135	44,923,135	-	-	-	-	44,923,135
Financial liabilities at fair value through profit or loss	7,119,358	7,119,358	-	-	-	7,119,358	-
Derivative financial instruments	1,112,781	1,112,781	-	316,059	-	826,315	353,813
Deposits from customers	365,462,464	365,593,084	-	-	-	-	365,593,084
Debt securities and certificates of deposit in issue	35,422,412	35,422,412	-	-	-	-	35,422,412
Other accounts and provisions	19,285,943	19,285,292	-	-	-	-	19,285,292
Current tax liabilities	359,983	346,177	63,128	-	-	-	283,049
Deferred tax liabilities	364,108	356,077	-	-	-	-	356,077
Subordinated liabilities	5,455,215	5,455,215	-	-	-	-	5,455,215
Total liabilities	479,505,399	479,613,531	63,128	316,059	-	7,945,673	471,672,077

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 2022				
		(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)	566,729,960	531,337,055	-	27,560,035	7,832,870
2	Liabilities carrying value amount under regulatory scope of consolidation (as per template LI1)	8,324,860	63,128	-	316,059	7,945,673
3	Total net amount under regulatory scope of consolidation	558,405,100	531,273,927	-	27,243,976	(112,803)
4	Off-balance sheet amounts	47,524,162	47,524,162	-	-	-
5	Differences due to consideration of provisions	4,253,125	4,253,125	-	-	-
6	Differences due to consideration of default risk exposures under SA-CCR approach	1,147,189	-	-	1,147,189	-
N	Exposure amounts considered for regulatory purposes	611,329,576	583,051,214	-	28,391,165	(112,803)

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, Nanyang Commercial Bank (Nominees) Limited and NCB Wealth Management Advisor 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 2022	
		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	(7)
2	Retained earnings	47,250,590	(8)
3	Disclosed reserves	6,600,849	(10)+(11)+ (12)+(13)
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	56,995,956	
CET1 capital: regulatory deductions			
7	Valuation adjustments	570	Not applicable
8	Goodwill (net of associated deferred tax liabilities)	-	
9	Other intangible assets (net of associated deferred tax liabilities)	589,377	(3)+(4)
10	Deferred tax assets (net of associated deferred tax liabilities)	358,280	(2)-(3)
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	2,429	(1)+(5)
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	8,884,463	
26a	Cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties)	6,767,961	(9)+(10)
26b	Regulatory reserve for general banking risks	2,116,502	(12)
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	9,835,119	

CC1: Composition of regulatory capital (continued)

		At 31 December 2022	
		Amount	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
		HK\$'000	
29	CET1 capital	47,160,837	
	AT1 capital: instruments		
30	Qualifying AT1 capital instruments plus any related share premium	5,077,856	
31	of which: classified as equity under applicable accounting standards	5,077,856	(14)
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	5,077,856	
	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	5,077,856	
45	Tier 1 capital (T1 = CET1 + AT1)	52,238,693	
	Tier 2 capital: instruments and provisions		
46	Qualifying Tier 2 capital instruments plus any related share premium	5,431,592	(6)
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	4,206,158	Not applicable
51	Tier 2 capital before regulatory deductions	9,637,750	
	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	(3,045,582)	
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	(3,045,582)	[(9)+(10)] *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 2022	
		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	3,045,582	
58	Tier 2 capital (T2)	12,683,332	
59	Total regulatory capital (TC = T1 + T2)	64,922,025	
60	Total RWA	372,096,266	
Capital ratios (as a percentage of RWA)			
61	CET1 capital ratio	12.67%	
62	Tier 1 capital ratio	14.04%	
63	Total capital ratio	17.45%	
64	Institution-specific buffer requirement (capital conservation buffer plus countercyclical capital buffer plus higher loss absorbency requirements)	3.08%	
65	<i>of which: capital conservation buffer requirement</i>	2.50%	
66	<i>of which: bank specific countercyclical capital buffer requirement</i>	0.58%	
67	<i>of which: higher loss absorbency requirement</i>	-	
68	CET1 (as a percentage of RWA) available after meeting minimum capital requirements	8.04%	
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	226,519	
73	Significant LAC investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	1,356,880	
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)	4,206,158	
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	4,206,158	
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)	-	
79	Cap for inclusion of provisions in Tier 2 under the IRB approach and SEC-IRBA	-	
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)	589,377	-
	<p><u>Explanation</u> As set out in paragraph 87 of the Basel III text issued by the Basel Committee (December 2010), mortgage servicing rights (MSRs) may be given limited recognition in CET1 capital (and hence be excluded from deduction from CET1 capital up to the specified threshold). In Hong Kong, an AI is required to follow the accounting treatment of including MSRs as part of intangible assets reported in the AI's financial statements and to deduct MSRs in full from CET1 capital. Therefore, the amount to be deducted as reported in row 9 may be greater than that required under Basel III. The amount reported under the column "Basel III basis" in this box represents the amount reported in row 9 (i.e. the amount reported under the "Hong Kong basis") adjusted by reducing the amount of MSRs to be deducted to the extent not in excess of the 10% threshold set for MSRs and the aggregate 15% threshold set for MSRs, DTAs arising from temporary differences and significant investments in CET1 capital instruments issued by financial sector entities (excluding those that are loans, facilities or other credit exposures to connected companies) under Basel III.</p>		
10	Deferred tax assets (net of associated deferred tax liabilities)	358,280	-
	<p><u>Explanation</u> 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> 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 2022		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	62,413,355	62,413,292	
Placements with banks and other financial institutions maturing between one and twelve months	4,601,418	4,601,418	
Financial assets at fair value through profit or loss	18,613,952	18,613,952	
Derivative financial instruments	1,884,945	1,884,945	
- of which: debit valuation adjustments in respect of derivative contracts		59	(1)
Advances and other accounts	290,467,189	290,467,189	
Financial investments	151,195,360	151,195,360	
Interests in subsidiaries	-	10,983	
Investment properties	559,140	559,140	
Properties, plant and equipment	9,089,246	9,089,246	
Current tax assets	63,128	63,128	
Deferred tax assets	327,947	327,947	(2)
- of which: deferred tax liabilities related to other intangible assets		(30,333)	(3)
Other assets	2,461,358	2,460,743	
- of which: other intangible assets		619,710	(4)
Total assets	541,677,038	541,687,343	
LIABILITIES			
Deposits and balances from banks and other financial institutions	44,923,135	44,923,135	
Financial liabilities at fair value through profit or loss	7,119,358	7,119,358	
Derivative financial instruments	1,112,781	1,112,781	
- of which: debit valuation adjustments in respect of derivative contracts		2,370	(5)
Deposits from customers	365,462,464	365,593,084	
Debt securities and certificates of deposit in issue	35,422,412	35,422,412	
Other accounts and provisions	19,285,943	19,285,292	
Current tax liabilities	359,983	346,177	
Deferred tax liabilities	364,108	356,077	
Subordinated liabilities	5,455,215	5,455,215	
- of which: included in Tier 2 Capital		5,431,592	(6)
Total liabilities	479,505,399	479,613,531	

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

	At 31 December 2022		Reference
	Balance sheet as in published financial statements HK\$'000	Under regulatory scope of consolidation HK\$'000	
EQUITY			
Share capital	3,144,517	3,144,517	(7)
Reserves	53,949,266	53,851,439	
- Retained earnings	47,293,448	47,250,590	(8)
- of which: cumulative fair value gains arising from the revaluation of investment properties		455,500	(9)
- Premises revaluation reserve	6,367,430	6,312,461	(10)
- Reserve for fair value changes through other comprehensive income	(1,361,493)	(1,361,493)	(11)
- Regulatory reserve	2,116,502	2,116,502	(12)
- Translation reserve	(466,621)	(466,621)	(13)
Additional equity instruments	5,077,856	5,077,856	(14)
Total equity	<u>62,171,639</u>	<u>62,073,812</u>	
Total liabilities and equity	<u>541,677,038</u>	<u>541,687,343</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	XS2467774209	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 (as of most recent reporting date)	HK\$3,144,517,000	HK\$5,077,856,000	HK\$5,431,592,000
9	Par value of instrument	No par value (refer to Note 1 for details)	US\$650,000,000	US\$700,000,000
10	Accounting classification	Shareholders' equity	Equity instruments	Liability-amortised cost
11	Original date of issuance	1 July 1948 (refer to Note 2 for details)	28 April 2022	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: 28 April 2027 Additional optional redemption in whole at 100% of principal amount with distributions accrued 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").	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: 6.50% 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	<p>The rights of the holders will, in the event of the Winding-Up of the Issuer, rank:</p> <p>(i) subordinate and junior in right of payment to, and of all claims of (a) all unsubordinated creditors of the Issuer (including its depositors), and (b) holders of Tier 2 Capital Subordinated notes of the Issuer, and (c) all other Subordinated Creditors of the Issuer whose claims are stated to rank senior to the Capital Securities or rank senior to the Capital Securities by operation of law or contract;</p> <p>(ii) pari passu in right of payment to and of all claims of the holders of Parity Obligations; and</p> <p>(iii) senior in right of payment to and of all claims of the holders of Junior Obligations.</p>	<p>The rights of the holders will, in the event of the winding up of the Bank, rank</p> <p>(i) subordinate and junior in right of payment to, and of all claims of, (a) all unsubordinated creditors of the Issuer (including its depositors), 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;</p> <p>(ii) pari passu in right of payment to and of all claims of the holders of Parity Obligations; and</p> <p>(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.</p>
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 2022			
		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	1.00%	173,766,565		
2	United Kingdom	1.00%	1,414,104		
3	Sum		175,180,669		
4	Total		301,009,646	0.58%	1,751,807

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

		Value under the LR framework
		At 31 December 2022
		HK\$'000
1	Total consolidated assets as per published financial statements	541,677,038
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	10,305
2a	Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference	-
3	Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting standard but excluded from the LR exposure measure	-
3a	Adjustments for eligible cash pooling transactions	-
4	Adjustments for derivative contracts	1,091,806
5	Adjustment for SFTs (i.e. repos and similar secured lending)	1,346,725
6	Adjustment for off-balance sheet ("OBS") items (i.e. conversion to credit equivalent amounts of OBS exposures)	59,056,024
6a	Adjustments for prudent valuation adjustments and specific and collective provisions that are allowed to be excluded from exposure measure	(192,152)
7	Other adjustments	(9,832,749)
8	Leverage ratio exposure measure	593,156,997

LR2: Leverage ratio

		At 31 December 2022	At 30 September 2022
		HK\$'000	HK\$'000
On-balance sheet exposures			
1	On-balance sheet exposures (excluding those arising from derivative contracts and SFTs, but including collateral)	519,550,703	510,578,727
2	Less: Asset amounts deducted in determining Tier 1 capital	(9,832,749)	(9,966,435)
3	Total on-balance sheet exposures (excluding derivative contracts and SFTs)	509,717,954	500,612,292
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)	862,906	1,414,292
5	Add-on amounts for PFE associated with all derivative contracts	2,151,508	2,500,909
6	Gross-up for collateral provided in respect of derivative contracts 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	(37,663)	(52,593)
8	Less: Exempted CCP leg of client-cleared trade exposures	-	-
9	Adjusted effective notional amount of written credit-related derivative contracts	-	-
10	Less: Adjusted effective notional offsets and add-on deductions for written credit-related derivative contracts	-	-
11	Total exposures arising from derivative contracts	2,976,751	3,862,608
Exposures arising from SFTs			
12	Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	24,322,691	20,563,310
13	Less: Netted amounts of cash payables and cash receivables of gross SFT assets	-	-
14	CCR exposure for SFT assets	1,346,725	534,208
15	Agent transaction exposures	-	-
16	Total exposures arising from SFTs	25,669,416	21,097,518
Other off-balance sheet exposures			
17	Off-balance sheet exposure at gross notional amount	192,404,200	206,073,438
18	Less: Adjustments for conversion to credit equivalent amounts	(133,348,176)	(146,564,069)
19	Off-balance sheet items	59,056,024	59,509,369
Capital and total exposures			
20	Tier 1 capital	52,238,693	51,107,220
20a	Total exposures before adjustments for specific and collective provisions	597,420,145	585,081,787
20b	Adjustments for specific and collective provisions	(4,263,148)	(4,480,457)
21	Total exposures after adjustments for specific and collective provisions	593,156,997	580,601,330
Leverage ratio			
22	Leverage ratio	8.81%	8.80%

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 seeking funding from the HKMA.

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. 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 Financial Market Department 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 2022, 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\$17,326,179,000 (2021: HK\$17,026,621,000) 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 2022, 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 2022, the Bank's liquidity cushion (before haircut) was HK\$48,631,199,000(2021: HK\$44,050,883,000). 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. The Group is required to maintain the LCR and NSFR not less than 100%.

The LCR and NSFR as at 31 December 2022 were 180.98% and 118.45% 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 2022 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	HK\$'000	HK\$'000
1 Deposits from non-bank customers	365,593,000	176,038,630	99,895,265	82,543,498	6,881,645	233,962	
2 Due to MA & Overseas central banks	-	-	-	-	-	-	-
3 Due to banks	10,680,364	5,954,838	1,255,895	3,469,631	-	-	-
4 Debt securities, prescribed instruments and structured financial instruments issued and outstanding	35,422,412	380,245	6,702,697	15,588,894	12,749,814	762	-
5 Other liabilities and Capital	122,522,856	19,854,515	9,981,784	20,713,383	12,383,531	3,214	61,128,383
6 Total On-balance sheet liabilities	534,218,632	202,228,228	117,835,641	122,315,406	32,014,990	237,938	61,128,383
7 Total Off-balance sheet obligations	105,573,593	14,248,635	29,574,526	46,376,187	14,817,808	556,437	-
8 Cash	590,060	590,060	-	-	-	-	-
9 Due from MA & Overseas central banks	18,033,681	18,033,681	-	-	-	-	-
10 Due from banks	44,506,332	39,749,143	3,947,098	653,525	156,566	-	-
11 Debt securities, prescribed instruments and structured financial instruments held (net of short positions)	149,418,232	92,464,346	9,021,544	22,265,341	25,552,705	85,778	28,518
12 Loans and advances to non-bank customers, Acceptances and bills of exchange held	304,911,942	34,826,345	24,590,365	72,592,273	125,209,082	43,617,395	4,076,482
13 Other assets	21,001,970	6,554,348	898,174	1,004,673	1,349,234	1,958	12,318,303
14 Total On-balance sheet assets	538,462,217	192,217,923	38,457,181	96,515,812	152,267,587	43,705,131	16,423,303
15 Total Off-balance sheet claims	2,465,833	-	-	-	-	-	2,465,833
16 Contractual Maturity Mismatch		(24,258,940)	(108,952,986)	(72,175,781)	105,434,789	42,910,756	
17 Cumulative Contractual Maturity Mismatch		(24,258,940)	(133,211,926)	(205,387,707)	(99,952,918)	(57,042,162)	

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 2022	
		UNWEIGHTED VALUE (Average) HK\$'000	WEIGHTED VALUE (Average) HK\$'000
Basis of disclosure: consolidated			
A. HQLA			
1	Total HQLA		69,679,965
B. CASH OUTFLOWS			
2	Retail deposits and small business funding, of which:	163,135,988	10,468,116
3	Stable retail deposits and stable small business funding	25,588,122	767,644
4	Less stable retail deposits and less stable small business funding	51,732,897	5,173,289
4a	Retail term deposits and small business term funding	85,814,969	4,527,183
5	Unsecured wholesale funding (other than small business funding) and debt securities and prescribed instruments issued by the AI, of which:	114,463,830	65,048,808
6	Operational deposits	18,770,189	4,500,368
7	Unsecured wholesale funding (other than small business funding) not covered in Row 6	93,431,219	58,286,018
8	Debt securities and prescribed instruments issued by the AI and redeemable within the LCR period	2,262,422	2,262,422
9	Secured funding transactions (including securities swap transactions)		3,157,807
10	Additional requirements, of which:	50,004,541	14,025,588
11	Cash outflows arising from derivative contracts and other transactions, and additional liquidity needs arising from related collateral requirements	5,198,972	5,198,972
12	Cash outflows arising from obligations under structured financing transactions and repayment of funding obtained from such transactions	-	-
13	Potential drawdown of undrawn committed facilities (including committed credit facilities and committed liquidity facilities)	44,805,569	8,826,616
14	Contractual lending obligations (not otherwise covered in Section B) and	6,069,289	6,069,289
15	Other contingent funding obligations (whether contractual or non-contractual)	162,912,276	4,709,168
16	TOTAL CASH OUTFLOWS		103,478,776
C. CASH INFLOWS			
17	Secured lending transactions (including securities swap transactions)	1,804,012	1,804,012
18	Secured and unsecured loans (other than secured lending transactions covered in Row 17) and operational deposits placed at other financial	70,945,659	45,899,470
19	Other cash inflows	5,811,048	5,294,456
20	TOTAL CASH INFLOWS	78,560,719	52,997,938
D. LIQUIDITY COVERAGE RATIO			ADJUSTED VALUE
21	TOTAL HQLA		69,679,965
22	TOTAL NET CASH OUTFLOWS		50,480,838
23	LCR (%)		139.36%

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 2022, 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 2022 was 139.36%. The average HKD level 1 HQLA to HKD net cash outflow ratio of the fourth quarter of 2022 was 208.42%, 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 2022, 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 2022 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:	64,163,468	-	-	5,431,592	69,595,060
2	Regulatory capital	64,163,468	-	-	5,431,592	69,595,060
2a	Minority interests not covered by row 2	-	-	-	-	-
3	Other capital instruments	-	-	-	-	-
4	Retail deposits and small business funding:	-	147,036,346	24,799,816	1,455,578	157,370,358
5	Stable deposits	-	25,244,685	-	-	23,982,451
6	Less stable deposits	-	121,791,661	24,799,816	1,455,578	133,387,907
7	Wholesale funding:	-	223,044,259	22,923,836	5,569,777	87,736,511
8	Operational deposits	-	19,353,870	-	-	9,676,935
9	Other wholesale funding	-	203,690,389	22,923,836	5,569,777	78,059,576
10	Liabilities with matching interdependent assets	-	-	-	-	-
11	Other liabilities:	3,908,633	18,395,565	11,891,351	13,117,843	18,928,352
12	Net derivative liabilities	-	-	-	-	-
13	All other funding and liabilities not included in the above categories	3,908,633	18,395,565	11,891,351	13,117,843	18,928,352
14	Total ASF					333,630,281
B. Required stable funding (“RSF”) item						
15	Total HQLA for NSFR purposes		119,176,738			10,669,281
16	Deposits held at other financial institutions for operational purposes	-	361,086	-	-	180,543
17	Performing loans and securities:	1,936,773	135,075,999	55,842,586	212,749,099	253,545,530
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	1,599	70,237,242	10,993,931	14,657,535	30,691,686
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:	1,863,488	59,544,957	36,442,352	128,808,659	159,052,341
21	With a risk-weight of less than or equal to 35% under the STC approach	-	-	-	63,195	41,077
22	Performing residential mortgages, of which:	-	654,625	665,328	25,706,412	20,510,476
23	With a risk-weight of less than or equal to 35% under the STC approach	-	299,362	295,043	9,999,753	6,797,042
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	71,686	4,639,175	7,740,975	43,576,493	43,291,027
25	Assets with matching interdependent liabilities	-	-	-	-	-
26	Other assets:	15,257,857	1,931,482	157,821	-	15,077,750
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	75,825	-	-	-	75,825
30	Total derivative liabilities before adjustments for deduction of variation margin posted	830,457	-	-	-	41,523
31	All other assets not included in the above categories	14,351,575	1,931,482	157,821	-	14,960,402
32	Off-balance sheet items			192,404,200		2,187,648
33	Total RSF					281,660,752
34	Net Stable Funding Ratio (%)					118.45%

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

At 30 September 2022 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:	62,897,156	-	-	5,466,484	68,363,640
2	Regulatory capital	62,897,156	-	-	5,466,484	68,363,640
2a	Minority interests not covered by row 2	-	-	-	-	-
3	Other capital instruments	-	-	-	-	-
4	Retail deposits and small business funding:	-	135,879,264	21,111,526	1,166,695	143,818,558
5	Stable deposits	-	27,203,011	-	-	25,842,861
6	Less stable deposits	-	108,676,253	21,111,526	1,166,695	117,975,697
7	Wholesale funding:	-	224,918,543	22,426,297	6,689,542	90,108,591
8	Operational deposits	-	19,634,297	-	-	9,817,149
9	Other wholesale funding	-	205,284,246	22,426,297	6,689,542	80,291,442
10	Liabilities with matching interdependent assets	-	-	-	-	-
11	Other liabilities:	4,679,042	18,699,677	5,004,930	19,488,335	21,990,800
12	Net derivative liabilities	584,275	-	-	-	-
13	All other funding and liabilities not included in the above categories	4,094,767	18,699,677	5,004,930	19,488,335	21,990,800
14	Total ASF					324,281,589
B. Required stable funding (“RSF”) item						
15	Total HQLA for NSFR purposes		104,253,011			9,987,956
16	Deposits held at other financial institutions for operational purposes	-	493,146	-	-	246,573
17	Performing loans and securities:	1,901,600	132,205,315	56,601,540	214,227,521	253,096,428
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	1,739	71,166,103	11,913,412	12,855,047	29,488,407
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:	1,820,398	57,237,089	36,003,783	131,689,126	160,103,531
21	With a risk-weight of less than or equal to 35% under the STC approach	-	-	-	-	-
22	Performing residential mortgages, of which:	-	664,375	665,764	25,614,084	20,399,907
23	With a risk-weight of less than or equal to 35% under the STC approach	-	313,244	305,447	10,185,672	6,930,032
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	79,463	3,137,748	8,018,581	44,069,264	43,104,583
25	Assets with matching interdependent liabilities	-	-	-	-	-
26	Other assets:	17,230,268	3,015,731	252,130	-	16,031,990
27	Physical traded commodities, including gold	-	-	-	-	-
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	-	-	-	-	-
29	Net derivative assets	-	-	-	-	-
30	Total derivative liabilities before adjustments for deduction of variation margin posted	1,812,768	-	-	-	90,638
31	All other assets not included in the above categories	15,417,500	3,015,731	252,130	-	15,941,352
32	Off-balance sheet items			206,073,438		2,219,279
33	Total RSF					281,582,226
34	Net Stable Funding Ratio (%)					115.16%

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 115.16% and 118.45% respectively. The ratio remained stable and well above the regulatory requirement of 100% throughout the second half of 2022. 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 and procedures stipulate delegated credit authorities, credit underwriting standards, credit monitoring criteria, internal rating structure, problem loan management and impairment policy. 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

Defaulted exposures are exposures which are overdue for more than 90 days or have been rescheduled.

At 31 December 2022								
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	
				Allocated in regulatory category of specific provisions	Allocated in regulatory category of collective provisions			
	Defaulted exposures	Non-defaulted exposures						
	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	
1	Loans	2,123,011	369,370,773	4,065,688	2,168,384	1,852,155	-	367,428,096
2	Debt securities	210,649	151,185,460	183,394	182,130	1,264	-	151,212,715
3	Off-balance sheet exposures	-	77,085,594	191,484	-	187,649	-	76,894,110
4	Total	2,333,660	597,641,827	4,440,566	2,350,514	2,041,068	-	595,534,921

CR2: Changes in defaulted loans and debt securities

		HK\$'000
1	Defaulted loans and debt securities as at 30 June 2022	3,523,470
2	Loans and debt securities that have defaulted since the last reporting period	946,226
3	Returned to non-defaulted status	(1,002,002)
4	Amounts written off	(1,100,288)
5	Other changes	(33,746)
6	Defaulted loans and debt securities as at 31 December 2022	2,333,660

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 by internal economic research unit. 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 reviewed 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	44,198,977	23,470,199	29,261,202	13,066,878	7,819,787	64,468,009	182,285,052
	1 to 5 years	36,624,341	28,609,631	35,428,907	8,806,275	9,974,810	57,115,705	176,559,669
	Over 5 years	-	108,422	7,535,923	2,193,677	17,468,394	3,009,522	30,315,938
	Sub-total	80,823,318	52,188,252	72,226,032	24,066,830	35,262,991	124,593,236	389,160,659
Mainland of China	Within 1 year	31,577,814	3,666,791	2,890,274	34,905,669	1,496,326	53,032,952	127,569,826
	1 to 5 years	-	1,959,329	2,822,605	786,112	1,717,526	40,936,414	48,221,986
	Over 5 years	107,918	239,465	4,307,759	400,656	19,549,495	10,417,723	35,023,016
	Sub-total	31,685,732	5,865,585	10,020,638	36,092,437	22,763,347	104,387,089	210,814,828
Total		112,509,050	58,053,837	82,246,670	60,159,267	58,026,338	228,980,325	599,975,487

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	1,826,529	1,020,114	538,797
	Wholesale, retail and trades	283,168	212,631	13,338
	Individuals	5,934	1,989	1,025
	Others	256,205	194,671	11,689
	Sub-total	2,371,836	1,429,405	564,849
Mainland of China	Banks	-	-	-
	Other financial institutions	-	-	-
	Real estates	841,636	531,229	595,426
	Wholesale, retail and trades	32,981	33,113	31,093
	Individuals	138,004	103,785	2,919
	Others	262,400	254,951	330,663
	Sub-total	1,275,021	923,078	960,101
Total		3,646,857	2,352,483	1,524,950

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	5,413,738
3 months or less but over 1 month	564,950
6 months or less but over 3 months	65,438
1 year or less but over 6 months	1,391,450
Over 1 year	636,482
Total	8,072,058

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	30,043	16	30,059

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, i.e. 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 2022				
		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	344,456,914	22,971,182	15,850,789	7,120,393	-
2	Debt securities	150,300,061	912,654	-	912,654	-
3	Total	494,756,975	23,883,836	15,850,789	8,033,047	-
4	Of which defaulted	461,418	61,263	60,887	376	-

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. ECAI ratings are used as part of the determination of risk weights for the following classes of credit risk exposures:

- Sovereigns
- Public sector entities
- Banks
- Securities Firms
- Corporates

The Group performs the ECAI ratings mapping to its credit risk exposures in accordance with Part 4 of the Banking (Capital) Rules. The ECAIs recognised by the Group include S&P Global Ratings, Moody's Investors Service and Fitch Ratings.

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

STC approach

Exposure classes		At 31 December 2022					
		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	89,609,726	811	89,632,085	811	467,518	0.52%
2	PSE exposures	3,347,202	600,000	4,048,293	27,609	792,482	19.44%
2a	<i>Of which: domestic PSEs</i>	3,233,712	600,000	3,934,803	27,609	792,482	20.00%
2b	<i>Of which: foreign PSEs</i>	113,490	-	113,490	-	-	0.00%
3	Multilateral development bank exposures	1,791,696	-	1,791,696	-	-	0.00%
4	Bank exposures	102,082,233	6,987,651	100,336,654	7,003,190	38,785,391	36.13%
5	Securities firm exposures	1,216,794	1,230,145	1,380,321	-	690,161	50.00%
6	Corporate exposures	263,164,854	175,563,442	250,417,932	21,288,613	256,998,256	94.59%
7	CIS exposures	-	-	-	-	-	N/A
8	Cash items	590,061	-	590,061	-	-	0.00%
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	20,037,219	5,528,902	19,793,097	409,178	15,151,706	75.00%
11	Residential mortgage loans	27,034,231	8,354	26,688,169	-	12,495,488	46.82%
12	Other exposures which are not past due exposures	22,411,706	2,484,895	20,817,511	174,975	20,992,486	100.00%
13	Past due exposures	531,685	-	531,685	-	765,257	143.93%
14	Significant exposures to commercial entities	-	-	-	-	-	N/A
15	Total	531,817,407	192,404,200	516,027,504	28,904,376	347,138,745	63.70%

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

STC approach

Risk Weight		At 31 December 2022										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	88,503,303	-	827,594	-	-	-	301,999	-	-	-	89,632,896
2	PSE exposures	113,490	-	3,962,412	-	-	-	-	-	-	-	4,075,902
2a	<i>Of which: domestic PSEs</i>	-	-	3,962,412	-	-	-	-	-	-	-	3,962,412
2b	<i>Of which: foreign PSEs</i>	113,490	-	-	-	-	-	-	-	-	-	113,490
3	Multilateral development bank exposures	1,791,696	-	-	-	-	-	-	-	-	-	1,791,696
4	Bank exposures	-	-	51,017,447	-	55,480,994	-	841,403	-	-	-	107,339,844
5	Securities firm exposures	-	-	-	-	1,380,321	-	-	-	-	-	1,380,321
6	Corporate exposures	-	-	1,838,451	-	30,817,414	-	234,708,323	4,342,357	-	-	271,706,545
7	CIS exposures	-	-	-	-	-	-	-	-	-	-	-
8	Cash items	590,061	-	-	-	-	-	-	-	-	-	590,061
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	-	-	-	-	-	20,202,275	-	-	-	-	20,202,275
11	Residential mortgage loans	-	-	-	10,270,602	14,798,558	470,043	1,148,966	-	-	-	26,688,169
12	Other exposures which are not past due exposures	-	-	-	-	-	-	20,992,486	-	-	-	20,992,486
13	Past due exposures	1,339	-	376	-	-	-	59,547	470,423	-	-	531,685
14	Significant exposures to commercial entities	-	-	-	-	-	-	-	-	-	-	-
15	Total	90,999,889	-	57,646,280	10,270,602	102,477,287	20,672,318	258,052,724	4,812,780	-	-	544,931,880

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 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 monitors its exposure against the risk appetite and reports to the Bank's senior management regularly. 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 is measured by SA-CCR. 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 credit 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 2022					
		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 approach (for derivative contracts)	631,178	1,317,199		1.4	2,727,728	1,306,316
1a	CEM (for derivative contracts)	-	-		1.4	-	-
2	IMM (CCR) approach				Not applicable	-	-
3	Simple approach (for SFTs)					-	-
4	Comprehensive approach (for SFTs)					3,323,048	1,352,333
5	VaR (for SFTs)					-	-
6	Total						2,658,649

CCR2: CVA capital charge

		At 31 December 2022	
		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	2,717,822	559,813
4	Total	2,717,822	559,813

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 2022										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	-	-	1,507,615	-	4,371,470	-	17,866	-	-	-	5,896,951
5	Securities firm exposures	-	-	-	-	-	-	-	-	-	-	-
6	Corporate exposures	-	-	-	-	-	-	152,628	-	-	-	152,628
7	CIS exposure	-	-	-	-	-	-	-	-	-	-	-
8	Regulatory retail exposures	-	-	-	-	-	1,197	-	-	-	-	1,197
9	Residential mortgage loans	-	-	-	-	-	-	-	-	-	-	-
10	Other exposures which are not past due exposures	-	-	-	-	-	-	-	-	-	-	-
11	Significant exposures to commercial entities	-	-	-	-	-	-	-	-	-	-	-
12	Total	-	-	1,507,615	-	4,371,470	1,197	170,494	-	-	-	6,050,776

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

	At 31 December 2022					
	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	-	-	-	-	-	-
Cash - other currencies	-	1,039,848	-	37,663	23,332,733	-
Government bonds	-	-	-	-	-	-
Other bonds	-	-	-	-	-	26,655,781
Total	-	1,039,848	-	37,663	23,332,733	26,655,781

CCR6: Credit-related derivatives contracts

	At 31 December 2022	
	Protection bought	Protection sold
	HK\$'000	HK\$'000
Total notional amounts	-	-
Fair values	-	-
Positive fair value (asset)	-	-
Negative fair value (liability)	-	-

CCR8: Exposures to CCPs

		At 31 December 2022	
		Exposure after CRM	RWA
		HK\$'000	HK\$'000
1	Exposures of the AI as clearing member or clearing client to qualifying CCPs (total)		-
2	Default risk exposures to qualifying CCPs (excluding items disclosed in rows 7 to 10), of which:	-	-
3	(i) OTC derivative transactions	-	-
4	(ii) Exchange-traded derivative contracts	-	-
5	(iii) Securities financing transactions	-	-
6	(iv) Netting sets subject to valid cross-product netting agreements	-	-
7	Segregated initial margin	-	
8	Unsegregated initial margin	-	-
9	Funded default fund contributions	-	-
10	Unfunded default fund contributions	-	-
11	Exposures of the AI as clearing member or client to non-qualifying CCPs (total)		-
12	Default risk exposures to non-qualifying CCPs (excluding items disclosed in rows 17 to 20), of which:	-	-
13	(i) OTC derivative transactions	-	-
14	(ii) Exchange-traded derivative contracts	-	-
15	(iii) Securities financing transactions	-	-
16	(iv) Netting sets subject to valid cross-product netting agreements	-	-
17	Segregated initial margin	-	
18	Unsegregated initial margin	-	-
19	Funded default fund contributions	-	-
20	Unfunded default fund contributions	-	-

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 on a day to day basis. Daily risk limits are set up on hierarchy-based and portfolio-based respectively and reviewed regularly to effectively monitor the corresponding market risk factors.

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 risk profiles are within acceptable levels. Independent units are assigned to monitor the market 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) has set 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 and trading within approved market risk indicators and limits. The Group also implements regular model validation to ascertain market risk models appropriateness and market risk to be adequately measured and captured.

MR1: Market risk under STM approach

		At 31 December 2022
		RWA
		HK\$'000
Outright product exposures		
1	Interest rate exposures (general and specific risk)	920,225
2	Equity exposures (general and specific risk)	-
3	Foreign exchange (including gold) exposures	5,199,188
4	Commodity exposures	-
Option exposures		
5	Simplified approach	-
6	Delta-plus approach	-
7	Other approach	-
8	Securitisation exposures	-
9	Total	6,119,413

IRRBA: 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 Financial Market Department, 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 performs 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 2022, 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 ΔEVE , 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 2022, the average interest rate sensitive tenors of HKD and USD CASA is 1.75 months and 1.22 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 2022	31 December 2021	31 December 2022	31 December 2021
1	Parallel up	2,762,673	5,328,957	(560,623)	(198,138)
2	Parallel down	62,104	27,075	560,893	198,898
3	Steeper	371,570	1,006,962		
4	Flattener	549,282	392,399		
5	Short rate up	1,509,829	2,071,304		
6	Short rate down	319,955	52,236		
7	Maximum	2,762,673	5,328,957	560,893	198,898
	Period	31 December 2022		31 December 2021	
8	Tier 1 capital	52,238,693		56,472,869	

Remarks: Positive values indicate losses under the alternative scenarios.

As at 31 December 2022, the net interest income impact for all currencies is HK\$560,893,000 under the interest rate parallel down scenario. The maximum negative impact on Δ EVE is HK\$2,762,673,000 under the interest rate parallel up scenario. Compared with 31 December 2021, the Group's net interest income impact for all currencies is increased by HK\$361,995,000 and maximum negative impact on Δ EVE is decreased by HK\$2,566,284,000 with lengthen repricing tenor on liability side.

REMA: Remuneration policy

Nomination and Remuneration Committee

The Nomination and Remuneration Committee assists the Board in performing the duties, including but not limited to the following areas:

- review human resources and remuneration strategy of the Group, and monitor related strategy implementation;
- monitor establishment and implementation of culture-related matters of the Group;
- monitor structure, size, composition and effectiveness of the Board of Director and committees;
- nominate Directors, Board Committee members, and review nomination of Senior Management of the Bank and appointment and resignation of Directors of the Group's major subsidiaries;
- review and approve remuneration of Directors, Board Committee members, Senior Management of the Bank and Directors of the Group's major subsidiaries;
- review performance appraisal indicators and performance appraisal results of Senior Management; and
- establish induction and training plans for Directors and Board Committee members.

2022 Key Tasks

Nomination and Remuneration Committee according to its responsibilities and authorities to approve and review the following key tasks:

- formulation and amendment on remuneration policies;
- Independent Review Report on Compliance of Guideline on a Sound Remuneration System;
- the appointment and resignation of Senior Management;
- remuneration and performance management of Senior Management;
- remuneration of Key Personnel;
- establishment of corporate culture related matters; and
- implementation of human resource strategies.

During the year, the Nomination and Remuneration Committee has convened two meetings. Written resolutions are used for deliberation during the adjournment. As at the end of the year, Nomination and Remuneration Committee was composed of three members, including two Independent Non-executive Directors (Mr. Lan Hong Tsung, David and Mr. Lau Hon Chuen) and one Non-executive Director (Mr. Yang Yingxun). Mr. Lan Hong Tsung, David was the Chairman.

REMA: Remuneration policy (continued)

Remuneration and Incentive Policy

Objectives, Main Features and Scope of Application

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", which 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 related policy is 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 "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, including Management Team members, Executive Directors, 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 directly generate the profit, including heads of material business lines, heads of risk control functions with direct influence from the middle and back office, as well as heads of major subsidiaries.

2022 Revision Highlights

- in order to improve the effectiveness of remuneration and follow common practice of the market, employee remuneration package should be considered from the perspective of total annual compensation.
- according to the "Competence and Ethical Behavior" issued by the HKMA, "competence" is considered as a factor in salary determination with the purpose of improving employees' capabilities.
- review the mechanism of the total variable remuneration pool to enhance the structure.
- with reference to the relevant policies of Cinda Group, supplement the vesting conditions at individual level and three "clawback" situations of variable remuneration.
- further clarify that the "clawback" conditions of the vested remuneration for retirees and resignees.

Performance and Independence of Remuneration Management of Risk Control Personnel

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, their performance results are reviewed by Risk Management Department.

REMA: Remuneration policy (continued)

Remuneration and Incentive Policy (continued)

Performance-based and Risk-adjusted Remuneration Management

The remuneration of staff is composed of “fixed remuneration”, “variable remuneration” and “non-cash benefits”. 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 size of the pool is subject to the Board’s approval and the Board can make discretionary adjustment to it if deemed appropriate depending on the external market and the overall performance of the Group. When the Group’s performance is relatively weak, variable remuneration may be reduced. Factors considered by the Board of Directors include the Group’s overall performance, key performance indicators, risk management indicators, comparison with the past and competitors, achievements of key annual tasks, and external factors affecting business performance. The Group’s payout of variable remuneration is in cash.

The Group has put in place a performance management mechanism to formalize the performance management at the levels of the Group, units and individuals. For individual staff at different levels, annual targets will be tied to their job responsibilities, and the annual targets of the Group being cascaded down to units and individuals. The annual targets of the Group are linked with all job roles through the performance management mechanism. Performance rating scales of individuals will be mainly appraised on their achievement against performance targets, overall performance and adherence to the Group’s corporate culture. Performance measurement includes financial and non-financial indicators. Not only is target accomplishment taken into account, but also the values-based behaviors during the course of performance management.

Unit-level performance indicators mainly include operational effectiveness, key tasks and risk management. Operational effectiveness includes but is not limited to profits, revenue, business scale, cost management and related ratio indicators. The principal types of risk management are credit risk, market risk, interest rate and liquidity risk, operational risk, reputation risk, legal and compliance risk, etc. Relevant indicators are evaluated in accordance with the rating standards and evaluation methods.

The proportion of the fixed and variable remuneration for individual staff members depends on roles, responsibilities and the degree of impact on bank risks, etc. Different roles have their own salary structure. The proportion of variable remuneration of the Senior Management, Key Personnel and Designated Teams is higher, while the proportion of variable remuneration of the middle office, back office and risk control personnel is lower. The Group will conduct periodic review on the remuneration of the staff with reference to various factors including the remuneration strategy, market pay trend, etc.

Linking the payout of the variable remuneration with the time horizon of the risk

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 risks and its impact before the actual payout, payout of the variable remuneration of staff is required to be deferred if prescribed requirement is met. The payout requirements are linked to the realization of the Bank’s future value creation. The proportion of deferred variable remuneration depends on different factors, including roles, responsibilities, time horizon of the risk, level of variable remuneration, etc. The longer the time horizon of the risk, the higher the job grade or the higher the amount of bonus granted to the staff, the higher will be the proportion of deferred variable remuneration in principle. Among them, the proportion of deferred variable remuneration of staff is according to the role, duties and the total variable remuneration. Deferral period lasts for three years.

REMA: Remuneration policy (continued)

Remuneration and Incentive Policy (continued)

Linking the payout of the variable remuneration with the time horizon of the risk (continued)

The vesting of the deferred variable remuneration will be determined by the Board of Directors by considering factors such as annual financial performance and the occurrence of material risk accidents to determine whether the vesting of the deferred variable remuneration met at the bank level. When the vesting of the deferred variable remuneration has met the prescribed requirements of both the bank and individual levels, the deferred variable remuneration would be vested following the corresponding proportion. However, if a staff is found to have encountered any of the situations listed in the "Deferral of Variable Remuneration Policy", such as committing 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, etc. The unvested portion of the deferred variable remuneration of the relevant staff would be reduced or forfeited, and the vested portion would be recalled under prevailing circumstances.

Determination of the Remuneration Policy

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. The proposed Remuneration Policy will be reviewed by the Chief Executive Office, and subsequently submitted to the Nomination and Remuneration Committee or the Board of Directors for review and 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.

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.

REM1: Remuneration awarded during financial year

			At 31 December 2022	
			(a)	(b)
Remuneration amount and quantitative information			Senior management	Key personnel
			HK\$'000	HK\$'000
1	Fixed remuneration	Number of employees	10	13
2		Total fixed remuneration	34,148	25,062
3		Of which: cash-based	30,559	23,188
4		Of which: deferred	-	-
5		Of which: shares or other share-linked instruments	-	-
6		Of which: deferred	-	-
7		Of which: other forms	3,589	1,874
8		Of which: deferred	-	-
9	Variable remuneration	Number of employees	10	13
10		Total variable remuneration	16,082	12,336
11		Of which: cash-based	16,082	12,336
12		Of which: deferred	9,291	4,934
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		50,230	37,398

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 2022					
		(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 2022				
		(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	18,911	-	-	-	8,709
2	Cash	18,911	-	-	-	8,709
3	Shares	-	-	-	-	-
4	Cash-linked instruments	-	-	-	-	-
5	Other	-	-	-	-	-
6	Key personnel	9,270	-	-	-	4,900
7	Cash	9,270	-	-	-	4,900
8	Shares	-	-	-	-	-
9	Cash-linked instruments	-	-	-	-	-
10	Other	-	-	-	-	-
11	Total	28,181	-	-	-	13,609