The Bank of East Asia, Limited
東亞銀行有限公司

Banking Disclosure Statement
For the period ended
31 December 2021

(Unaudited)

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Introduction

Purpose

The information contained in this document is for The Bank of East Asia, Limited ("the Bank") and its subsidiaries (together "the Group"), and is prepared in accordance with the Banking (Disclosure) Rules ("BDR"), Part 6 of the Financial Institutions (Resolution) (Loss-absorbing Capacity Requirements – Banking Sector) Rules ("LAC Rules"), and disclosure templates issued by the Hong Kong Monetary Authority ("HKMA").

These banking disclosures are governed by the Group's disclosure policy, which has been approved by the Board. The disclosure policy sets out the governance, control and assurance requirements for publication of the document. While the banking disclosure statement is not required to be externally audited, the document has been subject to independent review in accordance with the Group's policies on disclosure and its financial reporting and governance processes.

Basis of preparation

Except where indicated otherwise, the financial information contained in this Banking Disclosure Statement has been prepared on the basis of regulatory scope of consolidation specified by the HKMA to the Bank. The basis of consolidation for regulatory purposes is different from that for accounting purposes.

The banking disclosure statement

The HKMA has implemented the final standards on the Revised Pillar 3 Disclosure Requirements issued by the Basel Committee on Banking Supervision ("BCBS") in January 2015, and also incorporated the BCBS Pillar 3 disclosure requirements – consolidated and enhanced framework, which were finalized in March 2017 in the latest BDR and the LAC Rules. These disclosures are supplemented by specific additional requirements of the HKMA set out in the BDR and the LAC Rules. The banking disclosure statement includes the information required under the BDR and the LAC Rules.

According to the BDR and the LAC Rules, disclosure of comparative information is not required unless otherwise specified in the standard disclosure templates.

Table OVA: Overview of risk management

The Group has established a risk governance and management framework in line with the requirements set out by the HKMA and other regulators. This framework is built around a structure that enables the Board and Senior Management to discharge their risk management-related responsibilities with appropriate delegation and checks and balances. These responsibilities include defining risk appetite in accordance with the Group's business strategies and objectives, formulating risk policies that govern the execution of those strategies, and establishing procedures and limits for the approval, control, monitoring, and remedy of risks.

The Risk Committee stands at the highest level of the Group's risk governance structure below the Board. The Risk Committee provides direct oversight over the formulation of the Group's risk appetite, and sets the levels of risk that the Group is willing to undertake with regard to its financial capacity, strategic direction, prevailing market conditions, and regulatory requirements.

The Group faces a variety of risks that could affect its reputation, operations, and financial conditions. Under the Enterprise Risk Management ("ERM") framework, the principal risks include credit risk, interest rate risk, market risk, liquidity risk, operational risk, reputation risk, strategic risk, legal risk, compliance risk and technology risk.

The Group reviews the risk profile through regular assessments of both qualitative and quantitative risk factors to determine its tolerance of prevailing risk levels against the applicable risk appetites annually approved by the Board.

The Risk Committee also ensures that the Group's risk appetite is reflected in the policies and procedures that Senior Management adopts to execute their business functions. Through the Group's management committees, including the Crisis Management Committee, Risk Management Committee, Credit Committee, Asset and Liability Management Committee, and Operational Risk Management Committee – and with overall co-ordination by the Risk Management Division – the Risk Committee regularly reviews the Group's risk management framework and ensures that all important risk-related tasks are performed according to established policies and with appropriate resources.

The Group has adopted the "Three Lines of Defence" risk management structure to ensure that roles and responsibilities in regard to risk management within the Group are clearly defined.

The first line of defence comprises the Risk Owners, who are heads of business units or supporting units of the Bank Group, together with staff under their management. They are primarily responsible for the day-to-day risk management of their units, including establishing and executing specific risk control mechanisms and detailed procedures.

The second line of defence consists of the Risk Controllers who are designated staff responsible for setting out a risk management governance framework, monitoring risks independently and supporting the management committees in their oversight of risk management for the Bank Group.

The third line of defence is the Internal Audit Division, which is responsible for providing assurance as to the effectiveness of the Group's risk management framework including risk governance arrangements.

The Group is committed to fostering strong risk culture embedded with risk ownership, accountability and awareness of all staff. Such environment for risk management is cultivated by both "top-down" and "bottom-up" channels.

"Top-down" channel is reflected in the Board's approval of the Risk Appetite Statement to define the risk tolerance for the Group, so that risk policies and limits can be designed specifically and accordingly. These policies and limits are accessible by all staff on internal electronic platform. Significant updates are communicated to staff by way of regular electronic bulletin.

Table OVA: Overview of risk management (continued)

"Bottom-up" channel is reinforced by staff's awareness of adherence to risk policies and limits, avoidance of excessive risk-taking, and regular information reporting on different risk areas to the Management Committees, the Risk Committee and the Board.

To provide the Board and Senior Management with a clear view of the Group's exposures to different risk types, information on both quantifiable and non-quantifiable risks is reported to the Management Committees, the Risk Committee and the Board at pre-determined schedule for review and discussion. The Group's enterprise risk management framework helps define the scope of risk information, such that those of asset quality, liquidity, profitability, portfolio mix, capital adequacy etc. on Group level and functional unit level are relevant. The information is analysed with regard to factors such as the Group's risk profile, risk management strategies and market statistics.

The Group maintains risk management systems to measure and monitor exposures, identify areas of high risk, and ensure that the magnitude of risk is within the tolerance level. In particular, the credit, market and operational risk management systems are also used for assessing the capital adequacy. Their features are as follows:

(a) Credit risk measurement system

The Group has established policies, procedures, and rating systems to identify, measure, monitor, control, and report on credit risk. In this connection, guidelines for management of credit risk have been laid down in the Group's Credit Risk Management Manual. These guidelines stipulate delegated lending authorities, credit underwriting criteria, a credit monitoring process, an internal rating structure, credit recovery procedures and a provisioning policy. They are reviewed and enhanced on an ongoing basis to cater for market changes, statutory requirements, and best practices in risk management processes.

The Group's credit risk management for the major types of credit risk is depicted as follows:

(i) Corporate and bank credit risk

The Group has laid down policies and procedures to evaluate the potential credit risk of a particular counterparty or transaction and to approve the transaction. For corporate and bank customers, the Group has different internal rating systems that are applied to each counterparty. For exposure classified as Specialised Lending in particular, supervisory slotting criteria are used. To monitor concentration risk, the Group has preset limits for exposures to individual industries and for borrowers and groups of borrowers. The Group also has a review process to ensure that the level of review and approval is proper and will depend on the size of the facility and rating of the credit.

The Group undertakes on-going credit analysis and monitoring at several levels. The policies are designed to promote early detection of counterparty, industry or product exposures that require special monitoring. The overall portfolio risk as well as individual impaired loans and potential impaired loans are monitored on a regular basis.

(ii) Retail credit risk

The Group's retail credit policy and approval process are designed for the fact that there are high volumes of relatively homogeneous and small value transactions in each retail loan category. The design of internal rating system and formulation of credit policies are primarily based on the demographic factors and the loss experience of the loan portfolios. The Group monitors its own and industry experience to determine and periodically revise product terms and desired customer profiles.

(iii) Credit for treasury transactions

The credit risk of the Group's treasury transactions is managed in the same way as the Group manages its corporate and bank lending risk. The Group applies an internal rating system to its counterparties and sets individual counterparty limits.

(iv) Credit–related commitment

The risks involved in credit-related commitments and contingencies are essentially the same as the credit risk involved in extending loan facilities to customers. These transactions are subject to the same credit application, portfolio maintenance and collateral requirements as for customers applying for loans.

Table OVA: Overview of risk management (continued)

(b) Market risk measurement system

The Group has formulated market risk management policy to identify, measure, monitor, control, and report on the market risk, where appropriate, to allocate adequate capital to cover those risks. The market risk management policy and core control limits are approved by the Board and are monitored and regularly reviewed to align with market changes, statutory requirements, and best practices in risk management processes.

For measuring and monitoring of market risk, market risk analysis is conducted on different dimensions, such as by risk factors, by regions, by currencies in the form of potential loss and impact to capital adequacy. Risk limits and management action triggers are set with reference to the nature, volume of transaction and risk appetite of the Bank. Multiple systems are employed to facilitate the calculation, measurement and analysis of market risk.

Hedging and risk mitigation are performed corresponding to the market risk exposures. Various strategies, including the use of traditional market instruments, such as interest rate swaps, or dynamic hedging are adopted by the Bank according to the complexity of the corresponding portfolio.

The effectiveness of the hedging results would be independently monitored by various risk management functions.

(c) Operational risk measurement system

Under the existing risk management framework, operational risk is monitored on a Bank Group basis. All operational risk incidents are captured in a centralised database. MIS reports with analysis of operational losses by event types, comparatives figures of current and prior period, etc. are presented to Operational Risk Management Committee on a regular basis. Amongst others, frequency and severity of operational risk incidents are key measurement to assess the operational risk profile of the Bank Group.

A centralised operational risk management function, Operational Risk Management Department under the Risk Management Division, is responsible for coordinating the establishment / development of standard tools to identify, assess, monitor and report the operational risk inherent in the material products, activities, processes and systems of the Bank Group. A documented set of process / procedures for control and mitigation of operational risk is in place to keep pace with the growth / changes in business activities (e.g. new products / markets, business expansion) and infrastructure of the Bank Group. For identified operational risk, appropriate measures will be taken to determine if the Bank Group should accept the risk, control / mitigate the risk, transfer the risk (such as taking out of insurance policies) or avoid the risk (by withdrawing completely from the business activity).

Stress testing is an integral part of the Group's risk management. The Group regularly performs stress-tests on the principal risks, where appropriate, covering the Group's major portfolios such as lending and investments. Various stress testing methodologies and techniques including sensitivity tests, scenario analyses and reverse stress testing are adopted to assess the potential impact of stressed business conditions (including hypothetical situations such as a significant economic downturn in Mainland China and Hong Kong) on the Group's financial positions, in particular, capital adequacy, profitability, and liquidity. Whenever necessary, a prompt management response will be developed and executed to mitigate potential impacts.

Template KM1 - Key prudential ratios

	(HK$ million)	31 Dec 2021	30 Sep 2021	30 Jun 2021	31 Mar 2021	31 Dec 2020
	Regulatory capital (amount)					
1	Common Equity Tier 1 (CET1)	86,487	85,872	83,395	82,206	81,784
2	Tier 1	100,455	99,840	97,363	96,174	95,752
3	Total capital	109,717	112,530	110,451	108,835	108,421
	RWA (amount)					
4	Total RWA	507,309	502,753	492,165	494,167	494,542
	Risk-based regulatory capital ratios (as a percentage of RWA)					
5	CET1 ratio (%)	17.05%	17.08%	16.94%	16.64%	16.54%
6	Tier 1 ratio (%)	19.80%	19.86%	19.78%	19.46%	19.36%
7	Total capital ratio (%)	21.63%	22.38%	22.44%	22.02%	21.92%
	Additional CET1 buffer requirements (as a percentage of RWA)					
8	Capital conservation buffer requirement (%)	2.500%	2.500%	2.500%	2.500%	2.500%
9	Countercyclical capital buffer requirement (%)	0.378%	0.377%	0.384%	0.394%	0.388%
10	Higher loss absorbency requirements (%) (applicable only to G-SIBs or D-SIBs)	1.000%	1.000%	1.000%	1.000%	1.000%
11	Total AI-specific CET1 buffer requirements (%)	3.878%	3.877%	3.884%	3.894%	3.888%
12	CET1 available after meeting the AI's minimum capital requirements (%)	12.55%	12.58%	12.44%	12.14%	12.04%
	Basel III leverage ratio					
13	Total leverage ratio (LR) exposure measure	941,722	936,913	900,572	876,662	879,956
14	LR (%)	10.67%	10.66%	10.81%	10.97%	10.88%
	Liquidity Coverage Ratio (LCR)					
15	Total high quality liquid assets (HQLA)	71,546	62,974	67,380	65,582	70,848
16	Total net cash outflows	39,506	34,890	38,227	34,865	39,217
17	LCR (%)	182.36%	180.93%	177.32%	189.39%	183.84%
	Net Stable Funding Ratio (NSFR)					
18	Total available stable funding	562,512	546,194	542,465	536,156	540,767
19	Total required stable funding	486,536	490,941	474,589	453,739	455,969
20	NSFR (%)	115.62%	111.25%	114.30%	118.16%	118.60%

The movement of total high quality liquid assets (HQLA) between the periods was mainly contributed by the fluctuation in the average holding of central bank reserve and exchange funds bills and notes in level 1 HQLA.

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Template OV1: Overview of RWA

The following table provides an overview of capital requirements in terms of a detailed breakdown of RWAs for various risks as at 31st December 2021 and 30th September 2021 respectively:

		(a)	(b)	(c)
		RWA		Minimum capital requirements
(HK$ million)		December 2021	September 2021	December 2021
1	**Credit risk for non-securitization exposures**	**406,961**	**398,339**	**34,366**
2	Of which STC approach	30,124	28,943	2,410
2a	Of which BSC approach	0	0	0
3	Of which foundation IRB approach	353,513	347,479	29,978
4	Of which supervisory slotting criteria approach	23,324	21,917	1,978
5	Of which advanced IRB approach	0	0	0
6	**Counterparty default risk and default fund contributions**	**2,568**	**3,465**	**214**
7	Of which SA-CCR approach	2,106	3,042	176
7a	Of which CEM	0	0	0
8	Of which IMM(CCR) approach	0	0	0
8a	Of which counterparty default risk to CCPs in respect of derivative contracts	236	231	19
9	Of which others	226	192	19
10	CVA risk	699	1,058	56
11	Equity positions in banking book under the simple risk-weight method and internal models method	18,408	20,182	1,561
12	Collective investment scheme ("CIS") exposures – LTA*	N/A	N/A	N/A
13	CIS exposures – MBA*	N/A	N/A	N/A
14	CIS exposures – FBA*	N/A	N/A	N/A
14a	CIS exposures – combination of approaches*	N/A	N/A	N/A
15	Settlement risk	0	0	0
16	**Securitization exposures in banking book**	**0**	**0**	**0**
17	Of which SEC-IRBA	0	0	0
18	Of which SEC-ERBA (including IAA)	0	0	0
19	Of which SEC-SA	0	0	0
19a	Of which SEC-FBA	0	0	0
20	**Market risk**	**11,788**	**12,925**	**943**
21	Of which STM approach	886	992	71
22	Of which IMM approach	10,902	11,933	872
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	31,054	31,741	2,484
24a	Sovereign concentration risk	0	0	0
25	Amounts below the thresholds for deduction (subject to 250% RW)	14,253	14,161	1,209
26	Capital floor adjustment	0	0	0
26a	**Deduction to RWA**	**3,099**	**3,474**	**248**
26b	Of which portion of regulatory reserve for general banking risks and collective provisions which is not included in Tier 2 Capital	148	519	12
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	2,951	2,955	236
27	**Total**	**482,632**	**478,397**	**40,585**

* Items marked with an asterisk (*) will be applicable only after their respective policy frameworks take effect.

The minimum capital requirements presented in this template are after application of the 1.06 scaling factor, where applicable.

Template PV1: Prudent valuation adjustments

The following table shows a detailed breakdown of the constituent elements of valuation adjustment that have not been taken into account in the calculation of the amount of the Group's retained earnings or other disclosed reserves as at 31st December 2021:

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
	(HK$ million)	Equity	Interest rates	FX	Credit	Commodities	Total	Of which: In the trading book	Of which: In the banking book
1	Close-out uncertainty, of which:	3	-	-	-	-	3	3	-
2	*Mid-market value*	-	-	-	-	-	-	-	-
3	*Close-out costs*	-	-	-	-	-	-	-	-
4	*Concentration*	3	-	-	-	-	3	3	-
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**	3	-	-	-	-	3	3	-

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:

- Mid-market value – covering bid-offer adjustment on equity derivatives, interest rate swap and credit derivatives
- Close-out costs – covering bid-offer adjustment on futures contracts and foreign exchange contracts
- Concentration – covering liquidity valuation adjustment on equities, bonds and credit derivatives
- Model risk – covering valuation adjustment on structured products

Currently, all elements except concentration 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.

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

The following table shows the differences between the carrying values as reported in the Group's financial statements following the scope of accounting consolidation and the carrying values under the scope of regulatory consolidation, with a breakdown into regulatory risk categories of every item of the assets and liabilities reported in financial statements based on the scope of accounting consolidation.

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
			Carrying values of items at 31 December 2021:				
(HK$ million)	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	subject to credit risk framework	subject to counterparty credit risk framework	subject to the securitization framework	subject to market risk framework	not subject to capital requirements or subject to deduction from capital
Assets							
Cash and balances with banks	55,088	55,040	55,040	-	-	-	-
Placements with and advances to banks (Note 1)	74,742	74,737	74,737	2,114	-	-	-
Trade bills	10,772	10,772	10,772	-	-	-	-
Trading assets	2,483	2,483	-	-	-	2,483	-
Derivative assets (Note 2)	3,381	3,381	-	3,381	-	2,535	-
Loans and advances to customers	544,437	544,139	544,139		-	-	-
Investment securities (Note 1)	147,507	147,330	147,330	9,950	-	-	-
Investments in subsidiaries	-	2,959	2,959	-	-	-	-
Investments in associates and joint ventures	8,947	4,840	4,840	-	-	-	-
Fixed assets							
- Investment properties	4,992	4,905	4,905	-	-	-	-
- Other properties and equipment	8,015	7,785	7,785	-	-	-	-
- Right-of-use assets	837	848	848	-	-	-	-
Goodwill and intangible assets	1,885	1,472	-	-	-	-	1,472
Deferred tax assets	1,861	1,861	-	-	-	-	1,861

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

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
			Carrying values of items at 31 December 2021:				
(HK$ million)	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	subject to credit risk framework	subject to counterparty credit risk framework	subject to the securitization framework	subject to market risk framework	not subject to capital requirements or subject to deduction from capital
Other assets							
- Assets held for sale	2,264	32	32	-	-	-	-
- Others	40,259	40,044	39,967	77	-	-	-
Total Assets	**907,470**	**902,628**	**893,354**	**15,522**	**-**	**5,018**	**3,333**
Liabilities							
Deposits and balances of banks (Note 1)	31,766	31,766	-	1,223	-	-	30,543
Deposits from customers	633,505	633,505	-	-	-	-	633,505
Trading liabilities	5	5	-	-	-	-	5
Derivatives liabilities (Note 2)	5,050	5,050	-	5,050	-	2,659	-
Certificates of deposit issued	64,327	64,327	-	-	-	-	64,327
Current taxation	958	958	-	-	-	-	958
Debt securities issued	5,847	5,847	-	-	-	-	5,847
Deferred tax liabilities	559	526	-	-	-	-	526
Other liabilities							
- Liabilities held for sale	1,637	-	-	-	-	-	-
- Others	41,278	42,399	-	-	-	-	42,399
Loan capital - at amortised cost	6,488	6,488	-	-	-	-	6,488
Total Liabilities	**791,420**	**790,871**	**-**	**6,273**	**-**	**2,659**	**784,598**

Note 1: As the SFTs create both on-balance and off-balance exposures which are subject to both credit risk and counterparty credit risk frameworks, the amount shown in column (b) does not equal to the sum of the amounts shown in columns (c) and (d).

Note 2: As the assets / liabilities arising from derivative contracts under the trading book are marked to market and subject to the risk that the counterparty may default its contractual obligations, the assets / liabilities are subject to both the market risk capital charge and the counterparty credit risk capital charge. Therefore, the amount shown in column (b) does not equal to the sum of the amounts shown in columns (d) and (f).

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

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

At 31 December 2021:

		(a)	(b)	(c)	(d)	(e)
		Total	Items subject to:			
	(HK$ million)		credit risk framework	securitization framework	counterparty credit risk framework	market risk framework
1	**Asset carrying value amount under scope of regulatory consolidation (as per template LI1)**	899,295	893,354	-	15,522	5,018
2	- Liabilities carrying value amount under regulatory scope of consolidation (as per template LI1)	6,273	-	-	6,273	2,659
3	Total net amount under regulatory scope of consolidation	893,022	893,354	-	9,249	2,359
4	Off-balance sheet amounts	278,210	53,627	-	-	-
5	Differences due to consideration of provisions		4,257	-	-	-
6	Differences due to credit risk mitigation		(21,349)	-	-	-
7	Differences due to potential exposures for counterparty credit risk		-	-	16,996	-
8	**Exposure amounts considered for regulatory purposes**	958,493	929,889	-	26,245	2,359

Template LIA: Explanations of differences between accounting and regulatory exposure amounts

The following table describes the sources of differences from financial statements amounts to regulatory exposure amounts, as displayed in templates LI1 and LI2:

(a)	Differences between the amounts in columns (a) and (b) in template LI1	The basis of consolidation for regulatory purposes is different from the basis of consolidation for accounting purposes. Subsidiaries included in consolidation for regulatory purposes are specified in a notice from the HKMA in accordance with Section 3C of the Capital Rules. Subsidiaries not included in consolidation for regulatory purposes are non-financial companies and the securities and insurance companies that are authorised and supervised by a regulator and are subject to supervisory arrangements regarding the maintenance of adequate capital to support business activities comparable to those prescribed for authorized institutions under the Capital Rules and the Banking Ordinance.
(b)	The main drivers for the differences between accounting values and amounts considered for regulatory purposes shown in template LI2	The differences are mainly attributable to the following factors: - The carrying values reported in the financial statements are after deduction of impairment allowances while the exposure amounts for regulatory purposes are before deducting impairment allowances (except for exposures under Standardised Approach of credit risk from which impairment allowances at Stage 3 made against the exposures are deducted); - The exposure amounts for regulatory purposes are after the adjustment for the capital effect of recognized credit risk mitigation on the principal amounts; - Counterparty credit risk exposures for regulatory purposes consist of both the current exposures and the potential exposures which are derived by applying the credit conversion factor (CCF) to the notional principal of the transactions or contracts.
(c)	Systems and controls applied to assets valuation	In order to ensure that the valuation estimates are prudent and reliable, the Group has implemented the following valuation processes and methodologies: Independent Price Verification As part of the control process, market prices or model inputs used in the valuation process are either determined or validated by an independent function. Fair values of financial instruments are determined with reference to external quoted market prices or observable model inputs and validated against secondary sources when appropriate. For fair values that are determined through valuation models, the control process may include validation of the logics, inputs, and outputs by an independent function, and evaluation of any adjustments required on top of the valuation models. Fair value estimates are generally subjective in nature, and are made as of a specific point in time based on the characteristics of the financial instruments and relevant market information. The Group measures fair values using the following hierarchy of methods: Level 1 – Quoted market price in an active market for an identical instrument. Level 2 – Valuation techniques based on observable input. This category includes instruments valued using: quoted market prices in active markets for similar instruments; quoted prices for similar instruments in markets that are considered less than active; or other valuation techniques where all significant inputs are directly or indirectly observable from market data. Level 3 – Valuation techniques using significant unobservable inputs. This category includes all instruments where the valuation technique includes inputs not based on observable data and the unobservable inputs could have a significant effect on the instrument's valuation. This category includes instruments that are valued based on quoted prices for similar instruments where significant unobservable adjustments or assumptions are required to reflect differences between the instruments.

Template LIA: Explanations of differences between accounting and regulatory exposure amounts (continued)

	Valuation adjustments Valuation adjustment will be applied on instruments that are subject to fair value measurement with residual market risk, where significant valuation uncertainty and financial impact may arise. The Bank considers that the following valuation adjustments are relevant. (i) Bid offer adjustment: For the fixed income, credit derivatives and interest rate derivatives portfolio, two types of instruments, namely interest rate futures and credit default swap, would be adjusted to the prudent side of the bid offer close-out price. Regarding other types of instruments such as interest rate swap and cross currency swap which have no specific hedging purpose, the adjustment would be derived from the duration. For the equities and equity derivatives portfolio, bid offer adjustment would be applied to volatility dependent derivatives instruments based on the outstanding Vega position. Adjustments are made per underlying equity, based on the bid offer spread of implied volatility observed from the listed derivatives market. Bid offer adjustment is not performed for cash equity instruments in the dynamic hedging portfolio that are being marked at the exchange closing price given the generally insignificant net Delta position per underlying equity. Adjustment is not required for other cash equity instruments held, as they are already being marked at the market bid price. For the currency option portfolio, bid offer adjustment is not being performed due to the insignificant outstanding position. Delta and Vega position will be periodically reviewed to determine whether adjustment is required. In general, bid offer adjustment would not be required if the position is marked to the more prudent side of the bid offer rate or price, such as foreign exchange spot, forward, currency futures and cash equities. (ii) Liquidity valuation adjustment: Liquidity valuation adjustment would be applied to level 2 and level 3 financial instruments only. For the fixed income, credit derivatives and interest rate derivatives portfolio, liquidity valuation adjustment is being performed for less liquid position based on the product specific nature. Adjustment for interest rate swap and cross currency swap would be derived from the duration if the interest rate yield curve has wide bid-ask spread. Adjustment for debt securities would be derived from bid-offer spread if significant position of an illiquid instrument is held by the Bank. For credit default swap and credit linked note, adjustment would be derived from bid offer spread of its reference obligation if the counterparty or its reference obligation does not have an investment grade credit rating as instruments linked with a non-investment grade counterparty or reference obligation usually are not liquid in the market. For convertible asset swap, adjustment would not be required as the instrument is expected to be held until maturity and not expected to be sold in the secondary market. For interest rate futures, the adjustment is determined by the price difference between the day high and day low if significant position is held relative to open interest of the futures. For the equity derivatives portfolio, liquidity valuation adjustment is not being performed for level 2 and 3 equity derivatives instruments considering that the outstanding positions largely originate from dynamic hedging of callable bull / bear contracts and warrants issued and the Bank is the market maker for such products. For other customer derivatives products such as equity linked deposit, since customers are normally not allowed or expected to early terminate the contracts, thus the associated hedging positions would be held to expiration by the Bank at the same time. Moreover, the Bank has established progressively stringent individual position limits according to the underlying equity's average turnover and market capitalization. As a result, any residual positions would be insignificant relative to market liquidity and would not cause any material adverse impact to the overall valuation.

Template LIA: Explanations of differences between accounting and regulatory exposure amounts (continued)

	For the foreign exchange portfolio, liquidity valuation adjustment of spot and forward is not being performed due to the highly liquid market and insignificant positions on minor currencies. Liquidity valuation adjustment for currency futures would be applied if significant position is held relative to open interest of the futures, and would be determined by the price difference between the day high and day low. For the currency option portfolio, liquidity valuation adjustment is not being performed due to insignificant position. Delta and Vega position will be periodically reviewed to determine whether adjustment is required. (iii) Model risk adjustment: Model risk adjustment would be considered for structured products that are priced by simulation technique. The adjustment would be based on the alternate model if there is a significant variance between the original valuation and the price derived from alternate model. (iv) Credit valuation adjustment: Credit value adjustment would be considered for both positive exposure and negative exposure on derivatives. The adjustment for positive exposure on derivatives (i.e. credit valuation adjustment) would be based on the positive fair value of derivatives and the counterparties' probability of default and loss given default and the adjustment for negative exposure on derivatives (i.e. debit valuation adjustment) would be based on the negative fair value of derivatives and the Bank's credit spread.

Template CC1: Composition of regulatory capital

At 31 December 2021		Amount (HK$ million)	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
	CET1 capital: instruments and reserves		
1	Directly issued qualifying CET1 capital instruments plus any related share premium	41,645	(10) + (14)
2	Retained earnings	32,788	(11)
3	Disclosed reserves	23,356	(15) + (16) + (17)
4	*Directly issued capital subject to phase-out arrangements from CET1 (only applicable to non-joint stock companies)*	Not applicable	Not applicable
5	Minority interests arising from CET1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in CET1 capital of the consolidation group)	-	
6	**CET1 capital before regulatory adjustments**	97,789	
	CET1 capital: regulatory deductions		
7	Valuation adjustments	3	
8	Goodwill (net of associated deferred tax liabilities)	1,460	(4)
9	Other intangible assets (net of associated deferred tax liabilities)	12	(5)
10	Deferred tax assets (net of associated deferred tax liabilities)	1,861	(6)
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 securitization transactions	-	
14	Gains and losses due to changes in own credit risk on fair valued liabilities	(58)	(7) + (8)
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

Template CC1: Composition of regulatory capital (continued)

At 31 December 2021

		Amount (HK$ million)	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
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	8,024	
26a	Cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties)	5,365	(2) + (3)
26b	Regulatory reserve for general banking risks	2,659	(12)
26c	Securitization exposures specified in a notice given by the MA	-	
26d	Cumulative losses below depreciated cost arising from the institution's holdings of land and buildings	-	
26e	Capital shortfall of regulated non-bank subsidiaries	-	
26f	Capital investment in a connected company which is a commercial entity (amount above 15% of the reporting institution's capital base)	-	
27	Regulatory deductions applied to CET1 capital due to insufficient AT1 capital and Tier 2 capital to cover deductions	-	
28	**Total regulatory deductions to CET1 capital**	11,302	
29	**CET1 capital**	86,487	
	AT1 capital: instruments		
30	Qualifying AT1 capital instruments plus any related share premium	13,968	(18)
31	of which: classified as equity under applicable accounting standards	13,968	
32	of which: classified as liabilities under applicable accounting standards	-	
33	*Capital instruments subject to phase-out arrangements from AT1 capital*	-	
34	AT1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in AT1 capital of the consolidation group)	-	
35	*of which: AT1 capital instruments issued by subsidiaries subject to phase-out arrangements*	-	
36	**AT1 capital before regulatory deductions**	13,968	
	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)	-	

Template CC1: Composition of regulatory capital (continued)

At 31 December 2021

		Amount (HK$ million)	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
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**	13,968	
45	**Tier 1 capital (T1 = CET1 + AT1)**	100,455	
	Tier 2 capital: instruments and provisions		
46	Qualifying Tier 2 capital instruments plus any related share premium	4,655	(9)
47	*Capital instruments subject to phase-out arrangements from Tier 2 capital*	-	
48	Tier 2 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in Tier 2 capital of the consolidation group)	-	
49	*of which: capital instruments issued by subsidiaries subject to phase-out arrangements*	-	
50	Collective provisions and regulatory reserve for general banking risks eligible for inclusion in Tier 2 capital	2,193	(13) - (1)
51	**Tier 2 capital before regulatory deductions**	6,848	
	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	(2,414)	
56a	Add back of cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties) eligible for inclusion in Tier 2 capital	(2,414)	[(2) + (3)] X 45%

Template CC1: Composition of regulatory capital (continued)

At 31 December 2021

		Amount (HK$ million)	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
56b	Regulatory deductions applied to Tier 2 capital to cover the required deductions falling within §48(1)(g) of BCR	-	
57	**Total regulatory adjustments to Tier 2 capital**	(2,414)	
58	**Tier 2 capital (T2)**	9,262	
59	**Total regulatory capital (TC = T1 + T2)**	109,717	
60	**Total RWA**	507,309	
	Capital ratios (as a percentage of RWA)		
61	**CET1 capital ratio**	17.05%	
62	**Tier 1 capital ratio**	19.80%	
63	**Total capital ratio**	21.63%	
64	**Institution-specific buffer requirement (capital conservation buffer plus countercyclical capital buffer plus higher loss absorbency requirements)**	3.878%	
65	of which: capital conservation buffer requirement	2.500%	
66	of which: bank specific countercyclical capital buffer requirement	0.378%	
67	of which: higher loss absorbency requirement	1.000%	
68	CET1 (as a percentage of RWA) available after meeting minimum capital requirements	12.55%	
	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	6,310	
73	Significant LAC investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	5,701	
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)	532	
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	384	

<u>Template CC1: Composition of regulatory capital</u> (continued)

At 31 December 2021

		Amount (HK$ million)	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the IRB approach and SEC-IRBA (prior to application of cap)	1,809	
79	Cap for inclusion of provisions in Tier 2 under the IRB approach and SEC-IRBA	2,616	
	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)*	-	

Template 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:

	Description	Hong Kong basis (HK$ Million)	Basel III basis (HK$ Million)
9	**Other intangible assets (net of associated deferred tax liabilities)**	12	12
	Explanation As set out in paragraph 87 of the Basel III text issued by the Basel Committee (December 2010), mortgage servicing rights ("MSRs") may be given limited recognition in CET1 capital (and hence be excluded from deduction from CET1 capital up to the specified threshold). In Hong Kong, an AI is required to follow the accounting treatment of including MSRs as part of intangible assets reported in the AI's financial statements and to deduct MSRs in full from CET1 capital. Therefore, the amount to be deducted as reported in row 9 may be greater than that required under Basel III. The amount reported under the column "Basel III basis" in this box represents the amount reported in row 9 (i.e. the amount reported under the "Hong Kong basis") adjusted by reducing the amount of MSRs to be deducted to the extent not in excess of the 10% threshold set for MSRs and the aggregate 15% threshold set for MSRs, DTAs arising from temporary differences and significant investments in CET1 capital instruments issued by financial sector entities (excluding those that are loans, facilities or other credit exposures to connected companies) under Basel III.		
10	**Deferred tax assets (net of associated deferred tax liabilities)**	1,861	303
	Explanation As set out in paragraphs 69 and 87 of the Basel III text issued by the Basel Committee (December 2010), DTAs of the bank to be realized are to be deducted, whereas DTAs which relate to temporary differences may be given limited recognition in CET1 capital (and hence be excluded from deduction from CET1 capital up to the specified threshold). In Hong Kong, an AI is required to deduct all DTAs in full, irrespective of their origin, from CET1 capital. Therefore, the amount to be deducted as reported in row 10 may be greater than that required under Basel III. The amount reported under the column "Basel III basis" in this box represents the amount reported in row 10 (i.e. the amount reported under the "Hong Kong basis") adjusted by reducing the amount of DTAs to be deducted which relate to temporary differences to the extent not in excess of the 10% threshold set for DTAs arising from temporary differences and the aggregate 15% threshold set for MSRs, DTAs arising from temporary differences and significant investments in CET1 capital instruments issued by financial sector entities (excluding those that are loans, facilities or other credit exposures to connected companies) under Basel III.		
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)**	-	-
	Explanation 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.		

Template CC1: Composition of regulatory capital (continued)

Notes to the Template (continued)

	Description	Hong Kong basis (HK$ Million)	Basel III basis (HK$ Million)
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)**	-	-
	Explanation 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.		
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)**	-	-
	Explanation The effect of treating loans, facilities or other credit exposures to connected companies which are financial sector entities as CET1 capital instruments for the purpose of considering deductions to be made in calculating the capital base (see note re row 18 to the template above) will mean the headroom within the threshold available for the exemption from capital deduction of other insignificant 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.		
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)**	-	-
	Explanation The effect of treating loans, facilities or other credit exposures to connected companies which are financial sector entities as CET1 capital instruments for the purpose of considering deductions to be made in calculating the capital base (see note re row 18 to the template above) will mean the headroom within the threshold available for the exemption from capital deduction of other insignificant LAC investments in Tier 2 capital instruments and noncapital 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.		
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.			

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

The Bank of East Asia, Limited
東亞銀行有限公司

Template CC2: Reconciliation of regulatory capital to balance sheet

Balance Sheet Reconciliation	Balance sheet as in published financial statements	Under regulatory scope of consolidation	Cross reference to Definition of Capital Components
	31/12/2021	31/12/2021	
	HK$ Mn	HK$ Mn	
Assets			
Cash and balances with banks	55,088	55,040	
Placements with and advances to banks	74,742	74,737	
Trade bills	10,772	10,772	
Trading assets	2,483	2,483	
Derivative assets	3,381	3,381	
Loans and advances to customers	544,437	544,139	
of which: collective impairment allowances reflected in regulatory capital		(1,476)	(1)
Excess of total EL amount over total eligible provisions under the IRB Approach		-	
Investment securities	147,507	147,330	
Investments in subsidiaries	-	2,959	
Investments in associates/joint ventures	8,947	4,840	
Fixed assets			
- Investment properties	4,992	4,905	
of which: Cumulative fair value gains arising from the revaluation of land and buildings		3,454	(2)
- Other property and equipment	8,015	7,785	
of which: Cumulative fair value gains arising from the revaluation of land and buildings		1,911	(3)
ROU assets	837	848	
Goodwill and intangible assets	1,885	1,472	
of which: goodwill		1,460	(4)
other intangible assets		12	(5)
Deferred tax assets	1,861	1,861	
of which: deferred tax assets		1,861	(6)
Other assets			
- Assets held for sale	2,264	32	
- Others	40,259	40,044	
Total Assets	**907,470**	**902,628**	
Liabilities			
Deposits and balances of banks	31,766	31,766	
Deposits from customers	633,505	633,505	
Trading liabilities	5	5	
Derivative liabilities	5,050	5,050	
Certificates of deposit issued			
- Designated at fair value through profit or loss	32,618	32,618	
of which: gains and losses due to changes in own credit risk on fair valued liabilities		(54)	(7)
- At amortised cost	31,709	31,709	
Current taxation	958	958	
Debt securities issued			
- Designated at fair value through profit or loss	620	620	
of which: gains and losses due to changes in own credit risk on fair valued liabilities	-	(4)	(8)
- At amortised cost	5,227	5,227	
Deferred tax liabilities	559	526	
Other liabilities			
- Liabilities held for sale	1,637	-	
- Others	41,278	42,399	
Loan capital - at amortised cost	6,488	6,488	
of which: portion eligible for Tier 2 capital instruments		4,655	(9)
Total Liabilities	**791,420**	**790,871**	
Equity			
Share capital	41,645	41,645	
of which: paid-in share capital		41,645	(10)
Reserves	60,133	56,144	
of which: retained earnings		32,788	(11)
of which: regulatory reserve earmarked		2,659	(12)
regulatory reserve for general banking risks		717	(13)
share premium		-	(14)
accumulated other comprehensive income		3,818	(15)
exchange revaluation reserve		1,304	(16)
other reserves		18,234	(17)
Additional equity instruments	13,968	13,968	(18)
Non-controlling interests	304	-	
of which: portion not eligible for inclusion in regulatory capital	-	-	
Total Equity	**116,050**	**111,757**	
Total Equity and Liabilities	**907,470**	**902,628**	

Template CCyB1: Geographical distribution of credit exposures used in countercyclical capital buffer (“CCyB”)

The following table presents the geographical breakdown of risk-weighted amounts (RWA) in relation to private sector credit exposures as at 31st December 2021:

		a	c	d	e
	Geographical breakdown by Jurisdiction (J)	**Applicable JCCyB ratio in effect**	**RWA used in computation of CCyB ratio**	**AI-specific CCyB ratio**	**CCyB amount**
		(%)	**(HK$ million)**	**(%)**	**(HK$ million)**
1	Hong Kong SAR	1.000%	145,450		
2	Luxembourg	0.500%	144		
3	Norway	1.000%	13		
	Sum of above		145,607		
	Total (including those exposures in jurisdictions with zero JCCyB ratio)		384,510	0.378%	1,918

The geographical locations of exposures to private sector obligors are determined on an ultimate risk basis according to the residency or registered offices of the obligors in general. To the extent that credit risk has been mitigated by means of a guarantee or credit derivative contract recognized for capital adequacy ratio calculation purposes, the exposure will be allocated to the location of the credit protection provider under the recognized guarantee or the recognized credit derivative contract. If the location of the obligor cannot be determined without disproportionate effort, the credit exposure should be allocated to the jurisdiction where it is booked.

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

At 31 Dec 2021

	Item	Value under Leverage Ratio framework (HK$ million)
1	Total consolidated assets as per published financial statements	907,470
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(15,624)
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	7,485
5	Adjustment for SFTs (i.e. repos and similar secured lending)	12,467
6	Adjustment for off-balance sheet (“OBS”) items (i.e. conversion to credit equivalent amounts of OBS exposures)	46,121
6a	Adjustments for prudent valuation adjustments and specific and collective provisions that are allowed to be excluded from exposure measure	(4,837)
7	Other adjustments	(11,360)
8	**Leverage ratio exposure measure**	941,722

Template LR2: Leverage ratio ("LR")

		(HK$ million)	
		At 31 Dec 2021	At 30 Sep 2021
On-balance sheet exposures			
1	On-balance sheet exposures (excluding those arising from derivative contracts and SFTs, but including collateral)	891,831	886,903
2	Less: Asset amounts deducted in determining Tier 1 capital	(11,360)	(11,189)
3	**Total on-balance sheet exposures (excluding derivative contracts and SFTs)**	880,471	875,714
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)	1,154	1,760
5	Add-on amounts for PFE associated with all derivative contracts	8,822	9,982
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	(2,491)	(3,621)
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**	7,485	8,121
Exposures arising from SFTs			
12	Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	12,064	9,837
13	Less: Netted amounts of cash payables and cash receivables of gross SFT assets	-	-
14	CCR exposure for SFT assets	403	372
15	Agent transaction exposures	-	-
16	**Total exposures arising from SFTs**	12,467	10,209
Other off-balance sheet exposures			
17	Off-balance sheet exposure at gross notional amount	278,210	257,673
18	Less: Adjustments for conversion to credit equivalent amounts	(232,089)	(210,327)
19	**Off-balance sheet items**	46,121	47,346
Capital and total exposures			
20	**Tier 1 capital**	100,455	99,840
20a	**Total exposures before adjustments for specific and collective provisions**	946,544	941,390
20b	**Adjustments for specific and collective provisions**	(4,822)	(4,477)
21	**Total exposures after adjustments for specific and collective provisions**	941,722	936,913
Leverage ratio			
22	**Leverage ratio**	**10.67%**	**10.66%**

The increase in total leverage ratio exposure measures by HK$4,809 million is mainly attributed to increase in loans and advances to customers.

Table LIQA: Liquidity risk management

Liquidity risk is the risk that the Group may not be able to meet its obligations as they come due because of an inability to obtain adequate funding (funding liquidity risk); or that the Group cannot easily liquidate assets quickly without significantly lowering market prices because of inadequate market depth or market disruptions (market liquidity risk).

The purpose of liquidity risk management is to ensure sufficient cash flows to meet all financial commitments and to capitalise on opportunities for business expansion. This includes the Group's ability to meet deposit withdrawals either on demand or at contractual maturity, to repay borrowings as they mature, to make new loans and investments as opportunities arise and last but not least, to comply with all the statutory requirements for liquidity risk management, including Liquidity Coverage Ratio ("LCR") and Net Stable Funding Ratio ("NSFR").

The Group reviews the risk profile through regular assessments of both qualitative and quantitative risk factors to determine its tolerance of prevailing risk levels against applicable risk appetites statement for liquidity risk annually approved by the Board. The Asset and Liability Management Committee is delegated by the Board to oversee the Group's liquidity risk management. The Asset and Liability Management Committee is composed of balanced representation of senior staff from various business units, Treasury, Risk Management and Finance to jointly formulate adequate funding strategies. The Asset and Liability Management Committee sets the strategy, policy, and limits for managing liquidity risk and the means for ensuring that such strategy and policy are implemented. Regular meetings are held to review the compliance status of the monitoring matrix established and the need for any change in strategy and policy. Liquidity is managed daily by the Capital Markets & Liquidity Management Department under the Treasury Markets Division of the Group within the set limits. The Asset & Liability Management Department under the Risk Management Division of the Group is responsible for monitoring the activities relating to liquidity risk. The Internal Audit Division performs periodic reviews to ensure that the liquidity risk management functions are carried out effectively.

The implementation of LCR and NSFR imposes a more stringent regulatory regime for liquidity risk management on the Group. To ensure compliance with the enhanced regulatory requirement, internal targets for LCR and NSFR have been set above regulatory required levels, making reference to the Group's liquidity risk appetite. In addition, material changes in the LCR and NSFR will be reviewed regularly by the Asset and Liability Management Committee together with proposed mitigation actions to cope with adverse changes arising from, but not limited to, composition of the deposit base and remaining tenor to maturity, lending activities with respect to different maturity tenors, and the Group's asset and liability mix strategy. In planning the asset and liability mix strategy, the Group assesses the impact of asset growth and funding structure on the LCR and NSFR with support from relevant business units for the Asset and Liability Management Committee's review and decision.

In 2021, the Group is required to calculate LCR and NSFR in accordance with the regulatory requirements, and to maintain these ratios not less than 100% for both LCR and NSFR on a consolidated basis. As at 31st December, 2021, the ratios are reported as follows:

	As at 31st December 2021
Liquidity Coverage Ratio	200%
Net Stable Funding Ratio	115.6%

As part of Group efforts to manage the LCR and NSFR effectively, emphasis is placed on strengthening the deposit base by retaining loyal customers and maintaining customer relationships. The Group balances funding among retail, small business, and wholesale funding to avoid concentration in any one source. The Group also diversifies its tenors of funding over various time horizons to avoid significant maturity mismatch in any time bucket. Professional markets are accessed through the issuance of certificates of deposit, medium-term notes, subordinated debt, money market placement and other borrowings for the purposes of providing additional funding, maintaining a presence in local money markets, and optimising asset and liability maturities.

Table LIQA: Liquidity risk management (continued)

The table below shows the Group's concentration of sources of funding as at 31st December, 2021. There was no outstanding deposit balance from a single customer exceeding 1% of total liabilities on the Group level.

	As a percentage of Total Available Stable Funding (exclude Capital)
Deposits from Retail Customers	35.6%
Deposits from Small Business	4.6%
Deposits from Corporate Customers	35.6%
Funding provided by Financial Institutions	13.1%
Debt securities or prescribed instruments issued	9.3%
Other liabilities exclude capital instruments	1.8%
Total	**100%**

In addition to observing the statutory LCR and NSFR, the Group has established different liquidity metrics – including but not limited to the loan-to-deposit ratio, cumulative maturity mismatch ratio, funding concentration ratio, intra-group exposure threshold, and cross currency funding ratio – to measure and analyse the Group's liquidity risks. As at 31st December 2021, the loan-to-deposit ratio of the Group was 78.6%. The Group maintains sufficient high quality liquid assets ("HQLAs") as a liquidity cushion that can be accessed in times of stress. The HQLAs for fulfilling the LCR consist of cash, exchange fund bills and notes, high quality government debt securities and other equivalent liquid marketable assets.

The composition of the Group's HQLAs is shown as below table. The majority of HQLAs are denominated in Hong Kong dollars. Contingent funding sources are maintained to provide strategic liquidity to meet unexpected and material cash outflows. As of 31st December 2021, the Group's holdings of level 2 assets by industry (except Sovereign, Central Banks and Public Sector Entities) were less than 10% of the total HQLAs amount.

	As a percentage of total HQLA (unweighted)
- Level 1	
Cash and Withdrawable Central Bank Reserves	23.7%
Exchange fund bills and notes	17.3%
Marketable debt securities:-	
Issued by Sovereigns or Governments	4.3%
Issued by Central Banks	5.2%
Issued by Multilateral Development Banks	2.1%
- Level 2A	
Marketable debt securities:-	
Issued by Sovereigns or Governments	0.1%
Issued by Corporates	0.2%
Others	-
- Level 2B	
Marketable debt securities:-	
Issued by Corporates	46.7%
Others	0.4%
Total	**100%**

Table LIQA: Liquidity risk management (continued)

Internally, intra-group funding transactions are carried out at arm's length and treated in a manner in line with other third party transactions, with regular monitoring and appropriate control. Head Office is a net funding provider to overseas branches and subsidiary. As at 31st December 2021, funding needs arising from respective branches and subsidiary are shown as follows:

(HK$ million)	**As at 31st December 2021**
The Bank of East Asia (China) Limited	11,572
Overseas branches	
- Los Angeles	6,044
- Macau	4,423
- New York	4,618
- Singapore	5,436
- Taipei	808
- London	6,703

As a majority of the Group's liquidity risk arises from the maturity mismatch gap between the Group's asset and liability portfolios. The Group manages liquidity risk by conducting regular cash flow analysis and projections through the use of the Bank's management information system so as to facilitate the identification of funding needs arising from on and off-balance sheet items over a set of time horizons.

The Group's analysis of on- and off-balance sheet items by remaining maturity and the resultant liquidity gaps as at 31st December 2021 is shown as follows:

(HK$ million)	**Repayable on demand**	**Within 1 month**	**3 months or less but over 1 month**	**1 year or less but over 3 months**	**5 years or less but over 1 year**	**Over 5 years**	**Undated or overdue**
Currency notes and coins	1,016	-	-	-	-	-	-
Placements with banks and other financial institutions	59,565	57,865	1,639	(0)	0	-	11,937
Advances to customers, acceptances and bills of exchange held	9,585	80,897	53,747	145,751	159,396	123,039	6,197
Debt securities, prescribed instruments and structured financial instruments held	145,806	2,202	862	9,643	181	9	-
Other assets	6,837	9,781	10,996	22,894	7,628	1,070	27,907
Total on-balance sheet assets	**222,810**	**150,745**	**67,243**	**178,288**	**167,205**	**124,118**	**46,041**
Total off-balance sheet claims	**153**	**-**	**-**	**-**	**-**	**-**	**173**
Deposits and balance of banks and other financial institutions	3,695	4,542	9,459	5,613	-	-	-
Deposits from customers	292,337	82,764	164,802	86,958	10,020	-	-
Debt securities, prescribed instruments and structured financial instruments issued	762	10,654	21,485	54,053	13,927	-	-
Other liabilities and capital	15,185	8,213	10,956	31,428	9,416	20,501	99,831
Total on-balance sheet liabilities	**311,978**	**106,172**	**206,702**	**178,052**	**33,363**	**20,501**	**99,831**
Total off-balance sheet obligations	**13,475**	**16,622**	**2,004**	**2,402**	**10,705**	**1,217**	**1,513**
Contractual maturity mismatch	**(102,490)**	**27,951**	**(141,463)**	**(2,165)**	**123,136**	**102,399**	**(55,130)**
Cumulative contractual maturity mismatch	**(102,490)**	**(74,539)**	**(216,002)**	**(218,168)**	**(95,031)**	**7,368**	**(47,762)**

Table LIQA: Liquidity risk management (continued)

The Group also conducts stress testing regularly to analyse liquidity risk. Both on and off-balance sheet items and their impact on cash flow are considered, together with applicable hypothetical and historical assumptions. The assessment and review of market liquidity risk are included in the various control processes, including investment/ trading strategy, market risk monitoring, valuation, and portfolio review.

Three stress scenarios – namely an institution-specific crisis, a general market crisis, and a crisis involving a combination of the two – are adopted with minimum survival period defined according to the HKMA's Supervisory Policy Manual LM-2, "Sound Systems and Controls for Liquidity Risk Management".

With reference to the stress-testing results, the Group identifies potential vulnerabilities within the Group, establishes internal limits, and formulates a contingency funding plan that sets out the Group's strategy for dealing with any liquidity problem and the procedures for making up cash flow deficits in emergency situations.

The contingency funding plan is designed to be pro-active and pre-emptive, and stipulates the following three stages:

1. The Group utilises early warning indicators, which cover both qualitative and quantitative measures, and monitors both internal and external factors. Should there be any early signs of significant impact on the Group's liquidity position, the Asset and Liability Management Committee is informed. The Asset and Liability Management Committee will consider appropriate remedial actions and will consider employing crisis management if the situation warrants.

2. A Crisis Management Committee, which is chaired by the Co-Chief Executives, is formed to handle the crisis. Strategy and procedures for obtaining contingency funding, as well as roles and responsibilities of the parties concerned, are clearly stated.

3. In the final stage, a post-crisis review is carried out to recommend necessary improvements to avoid incidents of a similar nature in the future.

An annual drill test is conducted and the contingency funding plan is subject to regular review in order to accommodate any changes in the business environment. Any significant changes to the contingency funding plan are approved by the Board.

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Template LIQ1: Liquidity Coverage Ratio (“LCR”)

	(HK$ million)	Quarter ending on 31 December 2021		Quarter ending on 30 September 2021	
	Number of data points used in calculating the average value of the LCR and related components set out in this template	73		77	
	Basis of disclosure: consolidated	**Unweighted value** (average)	**Weighted value** (average)	**Unweighted value** (average)	**Weighted value** (average)
A.	**High Quality Liquid Assets (HQLA)**				
1	Total HQLA		85,600		74,989
B.	**Cash Outflows**				
2	Retail deposits and small business funding, of which:	284,576	22,124	279,737	22,007
3	*Stable retail deposits and stable small business funding*	50,408	1,548	50,982	1,567
4	*Less stable retail deposits and less stable small business funding*	177,337	17,734	180,046	18,005
4a	*Retail term deposits and small business term funding*	56,831	2,842	48,709	2,435
5	Unsecured wholesale funding (other than small business funding), and debt securities and prescribed instruments issued by the institution, of which:	163,086	93,145	150,035	86,729
6	*Operational deposits*	0	0	0	0
7	*Unsecured wholesale funding (other than small business funding) not covered in row 6*	156,158	86,217	143,815	80,509
8	*Debt securities and prescribed instruments issued by the institution and redeemable within the LCR period*	6,928	6,928	6,220	6,220
9	Secured funding transactions (including securities swap transactions)		506		461
10	Additional requirements, of which:	93,823	13,488	93,456	13,625
11	*Cash outflows arising from derivative contracts and other transactions, and additional liquidity needs arising from related collateral requirements*	3,734	3,734	3,782	3,782
12	*Cash outflows arising from obligations under structured financing transactions and repayment of funding obtained from such transactions*	0	0	0	0
13	*Potential drawdown of undrawn committed facilities (including committed credit facilities and committed liquidity facilities)*	90,089	9,754	89,674	9,843
14	Contractual lending obligations (not otherwise covered in Section B) and other contractual cash outflows	12,036	12,036	8,008	8,008
15	Other contingent funding obligations (whether contractual or non-contractual)	132,466	1,941	124,105	1,827
16	**Total Cash Outflows**		143,240		132,657
C.	**Cash Inflows**				
17	Secured lending transactions (including securities swap transactions)	2,657	2,657	1,986	1,969
18	Secured and unsecured loans (other than secured lending transactions covered in row 17) and operational deposits placed at other financial institutions	159,007	99,256	150,765	92,957
19	Other cash inflows	4,168	3,870	5,285	4,973
20	**Total Cash Inflows**	165,832	105,783	158,036	99,899
D.	**Liquidity Coverage Ratio**		**Adjusted value**		**Adjusted value**
21	**Total HQLA**		71,546		62,974
22	**Total Net Cash Outflows**		39,506		34,890
23	**LCR (%)**		182.36%		180.93%

This is the standard disclosure template that a category 1 institution must use for the purposes of making its liquidity information disclosures under section 16FK or 103A (where applicable) of the Banking (Disclosure) Rules.

Template LIQ1: Liquidity Coverage Ratio ("LCR") (continued)

Main drivers of LCR results

The Liquidity Coverage Ratio ("LCR"), which came into effect on 1st January, 2015, promotes the short-term resilience of the Group's liquidity risk by requiring that the Group hold sufficient high quality liquid assets ("HQLAs") to survive under a pre-defined stress scenario over a period of 30 days. It is expressed as a percentage, of the amount of a category 1 institution's HQLAs to the amount of the institution's "total net cash outflows" over 30 calendar days. The Banking (Liquidity) Rules require that Group meets the minimum LCR of not less than 100% starting from 1st January, 2019.

The total net cash outflows is the total cash outflows offset by the total cash inflows. Total cash outflows mainly consist of customer deposits which are the Group's main source of stable funding. Total cash inflows mainly come from maturing assets such as money market placements, loans and securities within 30 calendar days.

The Group's LCR is well above the regulatory limit of 100% throughout the fourth quarter of 2021. The average LCR was maintained at similar level of over 180% when comparing the ratio for the fourth quarter of 2021 year-on-year. Overall, there was no material fluctuation in the average LCR across the quarters of the year.

Composition of HQLA

The HQLAs for fulfilling the LCR consist of cash, exchange fund bills and notes, high quality government debt securities and other equivalent liquid marketable assets. The majority of HQLAs are denominated in Hong Kong dollars. The classification of HQLAs among level 1, 2A or 2B is based on the credit rating of securities and a number of market factors in determining the degree of readiness of monetizing the assets in short period of time. The Group's liquid assets are predominately classified as level 1 assets.

Concentration of Funding Sources

The Group has strengthened the deposit base by retaining loyal customers and maintaining customer relationships. The Group balances funding among retail, small business, and wholesale funding to avoid concentration in any one source. Professional markets are accessed through the issuance of certificates of deposit, medium-term notes, subordinated debt, money market placement, and borrowing for the purposes of providing additional funding, maintaining a presence in local money markets, and optimizing asset and liability maturities.

Currency mismatch in the LCR

Majority of the Group's customer deposits are denominated in HKD, USD and RMB. The Bank held an amount of HKD-denominated level 1 assets that was not less than 20% of its HKD-denominated total net cash outflows. The Group manages the composition of its HQLA by currency through funding swaps. There is no significant currency mismatch in the Bank's LCR at respective levels of consolidation.

Degree of centralization of liquidity management

The Asset and Liability Management Committee is delegated by the Board to oversee the Group's liquidity risk management. The Asset and Liability Management Committee sets the strategy, policy, and limits for managing liquidity risk and the means for ensuring that such strategy and policy are implemented. Regular meetings are held to review the compliance status of the monitoring matrix established and the need for any change in strategy and policy. Liquidity is managed daily by the Capital Markets & Liquidity Management Department under the Treasury Markets Division of the Group within the set limits. The Asset & Liability Management Department under the Risk Management Division of the Group is responsible for monitoring the activities relating to liquidity risk. The Internal Audit Division performs periodic reviews to ensure that the liquidity risk management functions are carried out effectively.

Template LIQ2: Net Stable Funding Ratio ("NSFR")

		Quarter ended 31 Dec 2021				
(HK$ million)		(a)	(b)	(c)	(d)	(e)
Basis of disclosure: consolidated		Unweighted value by residual maturity				**Weighted amount**
		No specified term to maturity	<6 months or repayable on demand	6 months to < 12 months	12 months or more	
A. Available stable funding ("ASF") item						
1	Capital:	113,263	79	0	6,488	119,751
2	*Regulatory capital*	113,263	17	0	4,655	117,918
2a	*Minority interests not covered by row 2*	0	0	0	0	0
3	*Other capital instruments*	0	62	0	1,833	1,833
4	Retail deposits and small business funding:		303,161	0	0	277,003
5	*Stable deposits*		83,149	0	0	78,992
6	*Less stable deposits*		220,012	0	0	198,011
7	Wholesale funding:		327,414	31,933	9,595	144,770
8	*Operational deposits*		0	0	0	0
9	*Other wholesale funding*	0	327,414	31,933	9,595	144,770
10	Liabilities with matching interdependent assets	0	0	0	0	0
11	Other liabilities:	38,574	41,482	17,845	12,065	20,988
12	*Net derivative liabilities*	0				
13	*All other funding and liabilities not included in the above categories*	38,574	41,482	17,845	12,065	20,988
14	**Total ASF**					562,512
B. Required stable funding ("RSF") item						
15	Total HQLA for NSFR purposes	150,652				31,171
16	Deposits held at other financial institutions for operational purposes	0	0	0	0	0
17	Performing loans and securities:	8,612	264,423	71,659	343,163	403,678
18	*Performing loans to financial institutions secured by Level 1 HQLA*	0	2,096	0	0	210
19	*Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions*	1	132,471	7,692	12,674	36,391
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:*	8,211	121,283	58,165	177,926	247,941
21	*With a risk-weight of less than or equal to 35% under the STC approach*	0	387	0	0	193
22	*Performing residential mortgages, of which:*	0	4,954	3,529	121,199	89,190
23	*With a risk-weight of less than or equal to 35% under the STC approach*	0	3,998	2,829	90,355	62,144
24	*Securities that are not in default and do not qualify as HQLA, including exchange-traded equities*	400	3,619	2,273	31,364	29,946
25	Assets with matching interdependent liabilities	0	0	0	0	0
26	Other assets:	36,414	24,641	6,935	1	46,996
27	*Physical traded commodities, including gold*	0				0
28	*Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs*	1,886				1,636
29	*Net derivative assets*	350				350
30	*Total derivative liabilities before adjustments for deduction of variation margin posted*	5,050				253
31	*All other assets not included in the above categories*	29,128	24,641	6,935	1	44,757
32	Off-balance sheet items		262,868			4,691
33	**Total RSF**					486,536
34	**Net Stable Funding Ratio (%)**					115.62%

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Template LIQ2: Net Stable Funding Ratio ("NSFR") (continued)

		Quarter ended 30 Sep 2021				
(HK$ million)		(a)	(b)	(c)	(d)	(e)
Basis of disclosure: consolidated		**Unweighted value by residual maturity**				**Weighted amount**
		No specified term to maturity	<6 months or repayable on demand	6 months to < 12 months	12 months or more	
A. Available stable funding ("ASF") item						
1	Capital:	112,544	4,025	38	6,454	119,017
2	*Regulatory capital*	112,544	4,025	0	4,648	117,192
2a	*Minority interests not covered by row 2*	0	0	0	0	0
3	*Other capital instruments*	0	0	38	1,806	1,825
4	Retail deposits and small business funding:		299,134	0	0	273,372
5	*Stable deposits*		83,023	0	0	78,872
6	*Less stable deposits*		216,111	0	0	194,500
7	Wholesale funding:		320,319	27,705	10,271	133,944
8	*Operational deposits*		0	0	0	0
9	*Other wholesale funding*	0	320,319	27,705	10,271	133,944
10	Liabilities with matching interdependent assets	0	0	0	0	0
11	Other liabilities:	44,125	41,850	16,190	11,766	19,861
12	*Net derivative liabilities*	0				
13	*All other funding and liabilities not included in the above categories*	44,125	41,850	16,190	11,766	19,861
14	**Total ASF**					546,194
B. Required stable funding ("RSF") item						
15	Total HQLA for NSFR purposes	142,119				26,056
16	Deposits held at other financial institutions for operational purposes	0	0	0	0	0
17	Performing loans and securities:	8,597	234,886	84,896	354,773	409,458
18	*Performing loans to financial institutions secured by Level 1 HQLA*	0	1,187	0	0	119
19	*Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions*	1	121,181	15,446	11,795	37,696
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:*	7,957	103,913	64,025	185,524	248,428
21	*With a risk-weight of less than or equal to 35% under the STC approach*	0	319	0	0	159
22	*Performing residential mortgages, of which:*	0	5,309	3,420	120,129	88,295
23	*With a risk-weight of less than or equal to 35% under the STC approach*	0	4,142	2,809	90,899	62,559
24	*Securities that are not in default and do not qualify as HQLA, including exchange-traded equities*	639	3,296	2,005	37,325	34,920
25	Assets with matching interdependent liabilities	0	0	0	0	0
26	Other assets:	38,743	27,713	8,090	2	49,920
27	*Physical traded commodities, including gold*	0				0
28	*Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs*	1,799				1,559
29	*Net derivative assets*	82				82
30	*Total derivative liabilities before adjustments for deduction of variation margin posted*	6,235				312
31	*All other assets not included in the above categories*	30,627	27,713	8,090	2	47,967
32	Off-balance sheet items		237,743			5,507
33	**Total RSF**					490,941
34	**Net Stable Funding Ratio (%)**					111.25%

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

The Group defines interest rate risk in the banking book ("IRRBB") per requirement of Hong Kong Monitory Authority ("HKMA") Supervisory Policy Manual IR-1. IRRBB refers to the risk of the Group's financial condition resulting from adverse movements in interest rates that affect the Group's banking book interest rate sensitive positions and off-balance sheet items.

The Group has established risk governance management framework to oversee and monitor IRRBB. The framework is built around a structure that enables the Board to discharge the responsibility for on-going IRRBB management to the Risk Committee, the Risk Management Committee ("RMC") and the Asset and Liability Management Committee ("ALCO"). The ALCO deals with all IRRBB issues of the Group. It is also responsible for conducting a regular review of interest rate trends, outcome analysis in terms of risk profile, stress testing results and deciding the corresponding hedging strategy.

The Group has implemented Enterprise Risk Management framework for identifying and managing potential risks of the Group. Under such framework, three lines of defence are adopted for interest rate risk management. The first line of defence comprises risk owners at business units. They are primarily responsible for the day-to-day interest rate risk management. The second line of defence refers to the risk controller of interest rate risk, who is designated as the Head of Asset & Liability Management Department ("ALMD") and the third line of defence refers to the Internal Audit Division.

Risk appetite has been defined in accordance with the Group's business strategies and objectives to govern the IRRBB activities in order to optimize risk and return. Risk limits and/ or management action triggers ("MAT") are established for on-going monitoring of impact to economic value of equity ("EVE") and net interest income ("NII") resulting from future interest rate change.

For monitoring of IRRBB, risk reports are compiled and monitored on a daily basis. Besides, risk reports are prepared for different level of governance on a regular basis.

Derivatives, such as interest rate swaps and interest rate futures are used to manage IRRBB exposure. Hedging is entered either against individual transactions or on portfolio basis. Hedge accounting treatment under Hong Kong Financial Reporting Standard is actively applied to avoid fluctuation of profit and loss arising from mark-to-market of the hedging derivatives.

The Group also conducts stress-testing to measure the vulnerability to loss in stressed market conditions and consider those results when reviewing policy, limits and capital adequacy. The stress testing includes the six HKMA standardized interest rate shock scenarios and internal scenarios set with historical / hypothetical / forward looking assumptions. Changes in economic value and in earnings are measured and assessed.

The Group applied below key assumptions that required by HKMA IR-1.

1. Non-maturity deposits ("NMD")

   NMD here refers to current and savings deposits, the deposits types without maturity of the Group. The average repricing maturity of NMDs are determined per historical re-pricing and run off behavior with consideration of relationship between market interest rate and the interest rate offered by the Group. Geographical factors (like Hong Kong and China) are also considered.

   Average behavioural maturity of NMDs is calculated based on the weighted average of each time buckets using the behavioural weights. The Group's average and longest behavioural maturity of NMDs are 0.45 year and 5 years respectively.

2. Cash flow of retail fixed rate loans and retail time deposits with optionality

   Prepayment on retail fixed rate loans would cause the loans being paid back on an earlier date than the contractual maturity.

   Retail time deposits subject to early redemption risk are time deposits that can be withdrawn early at the discretion of the customer. Except there is significant penalty that the customers might not early uplift or breaking the deposits contract due to interest rate change.

   According to the characteristic of different products, various statistical methods with reference to macroeconomic factors and historical data are applied to forecast prepayment rates on retail fixed rate loans and early withdrawal rates on retail time deposits to adequately assess the impact on earnings and economic value.

3. Treatment of commercial margins and spread

   In measurement of economic value of equity, the commercial margins and spread components have been included in the cash flows used in the computation and discount rate used.

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

4. Aggregation method

   Significant currencies are defined that account for 5% or more of the Group's total on-balance sheet interest rate sensitive position in all currencies. The total position in non-reported currencies could not exceed 10% of the same. Adverse currency impact would be aggregated for significant currencies. For prudent sake, no netting is adopted among currencies.

5. Constant balance sheet under earnings perspective

   Under earnings perspective approach, the Group assesses the impact on earnings over the next 12 months based on the two standard interest rate shock assuming constant balance sheet, where maturing or repricing cash flows are replaced by new cash flows with identical features with regard to the amount, repricing period and spread components. It measures the impact on the Group's NII when interest rates change in parallel up and down movement.

There were no significant differences in the assumptions applied in internal monitoring and regulatory reporting.

Other than those regulatory provided assumptions, other assumptions are validated and reported to ALCO on annual basis or as required during the year.

Template IRRBB1: Quantitative information on interest rate risk in banking book

This table provides information on the change in economic value of equity ("EVE") and also the change in net interest income ("NII") over next 12 months under each of the prescribed interest rate shock scenario in respect of the Group's interest rate exposures arising from banking book positions for the annual reporting dates at 31st December 2021 and 31st December 2020.

(in HK$ million)		Adverse impact on EVE		Adverse impact on NII	
	Period	**31st December 2021**	**31st December 2020**	**31st December 2021**	**31st December 2020**
1	Parallel up	567	497	11	32
2	Parallel down	477	302	2,792	2,636
3	Steepener	546	117		
4	Flattener	101	140		
5	Short rate up	381	345		
6	Short rate down	1,093	977		
7	**Maximum**	1,093	977	2,792	2,636
	Period	**31st December 2021**		**31st December 2020**	
8	**Tier 1 capital**	100,455		95,752	

In order to produce quantitative estimation on IRRBB, the Group has assumed shock scenarios to interest rate yield curves which allow changes in economic value and earnings to be computed with consideration of optionality and behavioural assumptions. These scenarios are applied to IRRBB exposures in each currency for which the Group has material positions.

The prescribed interest rate shock scenarios are provided by the Hong Kong Monetary Authority in their Supervisory Policy Manual IR-1, Interest Rate Risk in the Banking Book and are generally described as follows:

1. Parallel up: A constant parallel shock up across all time buckets
2. Parallel down: A constant parallel shock down across all time buckets
3. Steepener: Short rates down and long rates up
4. Flattener: Short rates up and long rates down
5. Short rate up: Rates up are greatest at shortest time bucket and diminish towards current rates in longer time buckets
6. Short rate down: Rates down are greatest at shortest time bucket and diminish towards current rates in longer time buckets

With low interest rate environment continued throughout the year 2021, there was no significant difference for the worst adverse impact on net interest income ("NII") and economic value of equity ("EVE") compared to year 2020. The key contributor to the movement of both NII and EVE impact was from the net gap positions with increase in long repricing tenor liabilities to support loan growth. The parallel down scenario and short rate down scenario would cause the most significant adverse impact on NII and EVE respectively according to the HKMA's requirements.

Table REMA: Remuneration policy

Disclosure of Remuneration Policy

In accordance with the latest "Guideline on a Sound Remuneration System" (the "Guideline") issued by the HKMA in July 2021, the Bank has reviewed and revised its Remuneration Policy for employees of the Group, including its overseas branches and subsidiaries. The Remuneration Policy covers all categories of employees, including the 4 described in paragraph 2.1.1 of the Guideline. The Remuneraton committee ("REMCO"), Group Chief Risk Officer and Group Chief Compliance Officer annually reviews the Bank's Remuneration Policy, including a reassessment of the principles applied in determining remuneration packages, as well as the structure and amount of compensation ultimately awarded.

The Remuneration Policy was reviewed and endorsed by REMCO in 2021. The major changes were to further align with the latest requirements as stipulated in the Guideline, refine the roles and responsibilities of the risk control functions in the design and implementation of the Bank's remuneration policy, and further elaborate the approval requirement on variable remuneration plans.

General Principles

The Remuneration Policy of the Group promotes effective risk management, and is designed to encourage employee behaviour that supports the Group's business objectives, long-term financial soundness, risk tolerance, risk management framework and corporate values.

Remuneration Structure

Employee remuneration packages may consist of a combination of fixed and variable remuneration. The appropriate proportion of fixed and variable remuneration shall vary according to an employee's seniority, role, responsibilities, and activities within the Group, among other things.

Fixed remuneration refers to an employee's annual salary (including year-end pay), while variable remuneration – comprising cash bonus payments and/or share options – is awarded based on the employee's performance with a view to better aligning incentives with risk and longer-term value creation. Variable remuneration, which is awarded in the form of cash bonus payments and/or share options, is determined taking into account an employee's seniority, role and responsibilities, and the actual or potential risks that the employee's activities may create for the Group and the extent to which they may affect its overall performance. In general, share options will be granted to staff at General Manager grade or above only.

Separate bonus schemes apply to risk control personnel, whose awards are not linked to the performances of the business units that they oversee.

Employees' Performance Measurements and the Award of Variable Remuneration

The REMCO determines the measures and the corresponding target levels of the Group's performance with reference to corporate goals and objectives at the beginning of each financial year and when necessary.

The performance of business units will be assessed by a combination of financial and non-financial factors which are determined by senior management with reference to the relevant corporate goals and the functional responsibilities of the business units.

The award of variable remuneration is determined by taking into account a combination of corporate and/or business results as well as the assessment of individual employee's performance against the pre-set financial/quantitative measures and non-financial/qualitative measures for the year which include adherence to risk management policies, compliance with legal, regulatory and ethical standards, results of internal audit reviews as well as adherence to corporate values.

Table REMA: Remuneration policy (continued)

To ensure that there is balance between financial factors and non-financial factors in the assessment of performance of both business units and individual employees, the overall weighting on financial factors is limited to avoid over reliance on financial measures and to align with HKMA's expectation on Bank Culture Reform. Performance is therefore judged, not only on what is achieved over the short and long-term, but also on how it is achieved. Performance in relation to non-financial factors, including risk, compliance and adherence to corporate values, forms a significant part of the overall employee performance measurement and promotes proper employee conduct and behaviour, given that poor performance in these areas can be indicative of significant risks to the Group. Adverse performance in non-financial/qualitative factors will override outstanding financial/quantitative achievements and be reflected by a reduction to, or elimination of, any variable remuneration.

To help ensure a balanced evaluation, a series of compliance and risk management factors are also taken into account. The major types of risks covered are market, credit, interest rate, liquidity and operational risks. Other risks including legal, reputation, technology, strategic and compliance are closely monitored at Bank level by various Management Committees and adjustment will be made to an individual's variable remuneration when appropriate.

To embed a values-led, high performance culture, the variable remuneration plans are designed to recognise and reward positive behaviours. Meanwhile, the Bank Group carries out regular review to assess instances of non-compliance with risk control procedures and/or regulatory requirements. Instances of non-compliance are escalated for consideration in remuneration decision, including adjustment of variable remuneration within the year, malus of the unvested awards granted in prior year(s) and clawback of vested awards.

In 2021, in accordance with the Accountability Framework Implementation Guidelines of the Bank, regular accountability review meetings were held by Senior Management, Group Chief Risk Officer, Group Chief Compliance Officer, Group Chief Auditor, Head of Human Resources & Corporate Communications, and Head of Legal, Secretarial & Tax Divisions to ensure that risk and compliance performance of department were taken into due consideration in the determination of variable remuneration funding and individual performance and reward so as to foster proper risk culture and business conduct. To enhance openness and transparency, if a formal accountability review of a significant incident is required, the Accountability Work Group will determine whether any staff member should be held accountable individually or collectively, or any department should be subject to risk and compliance modification on variable remuneration funding for the incident.

Senior Executive Compensation

The REMCO annually reviews the remuneration packages of the Senior Management (including the Executive Chairman, Co-Chief Executives and Deputy Chief Executives of the Bank), and Key Personnel (including 19 General Managers, the Head of Capital Markets & Liquidity Management Department and the Head of Fixed Income Capital Markets Department). In determining the remuneration packages of the Senior Management and Key Personnel, the REMCO takes into account individual performances, performances of respective divisions and departments, and the Group's overall business goals and objectives. The Bank is undergoing vendor selection to engage an external consultant to review and refine the remuneration package of senior management and key personnel to ensure its competitiveness and alignment with regulatory requirements.

The aggregate payouts for these senior executives for 2021 are shown in the table below in accordance with the disclosure requirement 3.3 of the Guideline.

Deferral Arrangements

The award of variable remuneration to the Senior Management and Key Personnel is subject to deferment in such a manner as determined by the REMCO. In general, the proportion of variable remuneration which is subject to deferment will increase progressively in line with the seniority, scope of responsibilities, and other relevant factors pertinent to the Senior Management and Key Personnel.

For employees other than Senior Management and Key Personnel, the Bank adopts a materiality-based deferral arrangement of variable remuneration, where the total amount of variable remuneration, including cash bonus and any kind of incentive, will be subject to deferment when certain thresholds of total variable remunerations determined by the Board of Directors are met. The portion of variable remuneration to be deferred will increase by reference to the total amount of variable remuneration.

Table REMA: Remuneration policy (continued)

The award of deferred remuneration is subject to a minimum vesting period and pre-defined vesting conditions as determined by the REMCO and communicated to all relevant employees. Deferred remuneration is awarded in such a manner so as to align employees' incentive awards with long-term value creation and the time horizons of risk. The future performance (both financial and non-financial) of the Group, relevant business units, and individual employees, as well as the creation of value for our shareholders, are taken into consideration when determining vesting conditions. Vesting and payment of deferred remuneration will be made gradually over a period of 3 years and no faster than on a pro-rata basis.

In circumstances where it is later established that decisions or actions made by an employee and/or business unit in a particular year had a severe negative impact on the Bank Group's overall profitability, any unvested portions (i.e. both cash bonus and/or share option tranche(s) which have yet to be vested) of deferred variable remuneration (relating to that particular year) should be forgone, either in part or in whole, as determined by the REMCO.

In circumstances where it is later established that any performance measurement for a particular year was based on data that is later proven to have been manifestly misstated, or it is later established that the relevant employee has committed fraud, malfeasance, or a violation of internal control policies, any unvested portions (i.e. both cash bonuses and/or share option tranches that have yet to be vested) of deferred variable remuneration (relating to that particular year in question) should be forgone, either in part or in whole, as determined by the REMCO. In certain circumstances, clawback of vested portion of the deferred variable remuneration of that particular year may apply.

Template REM1: Remuneration awarded during financial year

Total value of remuneration in 2021

Total value of remuneration awards for the current financial year	2021 Non-deferred (HK$)	2021 Deferred (HK$)	2020 (Restated) Non-deferred (HK$)	2020 (Restated) Deferred (HK$)
(i) Senior Management				
Number of employees	5		5	
Fixed remuneration				
• Cash-based	35,955,010	0	35,797,870	0
Variable remuneration				
• Cash-based	20,253,200	7,431,800	12,885,001	4,734,111
• Share Options	0	19,721,140	0	12,564,685
(ii) Key Personnel				
Number of employees	23		25	
Fixed remuneration				
• Cash-based	64,654,864	0	59,910,412	0
Variable remuneration				
• Cash-based	26,659,992	13,104,008	23,558,095	8,423,405
• Share Options	0	4,919,313	0	7,448,663
Total Remuneration	**147,523,066**	**45,176,261**	**132,151,378**	**33,170,864**

(i) For indication purpose only, the value of share options is calculated based on the fair value of the Bank's shares on 31st January, 2022 for 2021 and 18th January, 2021 for 2020 respectively.

(ii) The remuneration of Key Personnel for 2021 included the remuneration of three Key Personnel who retired from/left the Group on 1st March, 2021, 1st October, 2021 and 1st January, 2022 and two Key Personnel who joined the Group on 12th April, 2021 and 27th September, 2021 respectively. The remuneration of Key Personnel for 2020 included the remuneration of four Key Personnel who retired from/left the Group on 1st March, 2020, 14th March, 2020, 1st April, 2020 and 1st September 2020 and six Key Personnel who joined the Group on 2nd January, 2020, 2nd March, 2020, 14th April, 2020, 23rd June, 2020, 16th September, 2020 and 2nd November, 2020 respectively.

(iii) The 2020 award of share options was not granted to one Key Personnel as the employee left the Group on 1st March, 2021. As such, the 2020 deferred and non-deferred portion of variable remuneration for the related employee were restated.

Template REM2: Special payments

The aggregate amount of HK$4,230,092 and HK$3,856,888 sign-on payment was made to four and three Key Personnel of the Group for 2021 and 2020 respectively while no guaranteed bonuses or severance payments was made.

Template REM3: Deferred remuneration

Total outstanding deferred remuneration in 2021

Outstanding deferred remuneration	Vested portion during the year 2021 (HK$)	Unvested portion as at the end of 2021 (HK$)	Performance adjustments to Vested portion during the year 2021 (HK$)	Performance adjustments to Unvested portion as at the end of 2021 (HK$)
(i) Senior Management				
• Cash-based	11,798,499	13,438,994	0	0
• Share Options	12,382,600	22,542,758	3,256,283	874,697
(ii) Key Personnel				
• Cash-based	10,119,643	17,373,898	0	0
• Share Options	6,308,678	15,269,667	608,674	198,494

Remarks:

(i) The values of share options are calculated based on the fair value on the respective Grant Dates.

(ii) The vested cash bonuses and share options relate to the 2017 variable remuneration award granted in 2018 and vested in 2021, the 2018 variable remuneration award granted in 2019 and vested in 2021 and the 2019 variable remuneration award granted in 2020 and vested in 2021. The total number of share options granted in 2018, 2019 and 2020 are 6,687,500 shares, 5,850,000 shares and 5,381,829 shares respectively.

(iii) The unvested cash bonuses and share options relate to the 2018, 2019 and 2020 variable remunerations.

(iv) The outstanding deferred remuneration of Key Personnel in 2021 included the vested and unvested cash bonuses and share options of seven Key Personnel who retired from/left the Group on 1st May, 2018, 1st August, 2019, 1st September, 2019, 1st April, 2020, 1st September, 2020, 1st March, 2021 and 1 October, 2021 respectively.

(v) These performance adjustments reduced the outstanding balance of deferred remuneration

Total outstanding deferred remuneration in 2020

Outstanding deferred remuneration	Vested portion during the year 2020 (HK$)	Unvested portion as at the end of 2020 (HK$)	Performance adjustments to Vested portion during the year 2020 (HK$)	Performance adjustments to Unvested portion as at the end of 2020 (HK$)
(i) Senior Management				
• Cash-based	10,541,087	20,503,382	0	0
• Share Options	13,710,184	22,360,673	5,288,839	4,130,980
(ii) Key Personnel				
• Cash-based	8,198,523	20,829,166	0	0
• Share Options	6,921,580	11,060,182	1,078,394	807,168

Remarks:

(i) The values of share options are calculated based on the fair value on the respective Grant Dates.

(ii) The vested cash bonuses and share options relate to the 2016 variable remuneration award granted in 2017 and vested in 2020, the 2017 variable remuneration award granted in 2018 and vested in 2020 and the 2018 variable remuneration award granted in 2019 and vested in 2020. The total number of share options granted in 2017, 2018 and 2019 are 6,400,000 shares, 6,687,500 shares and 5,850,000 shares respectively.

(iii) The unvested cash bonuses and share options relate to the 2017, 2018 and 2019 variable remunerations.

(iv) The outstanding deferred remuneration of Key Personnel in 2020 included the vested and unvested cash bonuses and share options of five Key Personnel who retired from/left the Group on 1st May, 2018, 1st August, 2019 and 1st September, 2019, 1st April, 2020 and 1st September, 2020 respectively.

(v) These performance adjustments reduced the outstanding balance of deferred remuneration.

Table CRA: General information about credit risk

Overview

Credit risk is the risk of loss arising from a borrower or counterparty failing to meet its 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.

For the purpose of this document, any reference to exposures related to "credit risk" is referring to the same scope (i.e. non-securitization exposures excluding counterparty credit risk) unless otherwise specified.

The Group has established policies, procedures, risk profile and rating systems to identify, measure, monitor, control, and report on credit risk. In this connection, guidelines for management of credit risk have been laid down in the Group's Credit Risk Management Manual which is in line with the business strategy and risk appetite and above all, the regulatory guidelines and statutory requirements. These guidelines stipulate delegated lending authorities, credit underwriting criteria, credit monitoring processes, an internal rating structure, credit recovery procedures and a provisioning policy. They are reviewed and enhanced on an ongoing basis to cater for market changes, statutory requirements, and best practices in risk management processes.

Also, credit risk control limits are set for different levels. Risk, return, and market situation are considered when setting all limits. Active limit monitoring is undertaken.

Credit Risk Management

Pursuant to the establishment of the framework of Enterprise Risk Management ("ERM"), a "Three Lines of Defence" risk management model has been adopted by the Group as follows:

- The first line of defence: Risk Owners;
- The second line of defence: Risk Controllers; and
- The third line of defence: Internal Audit Division ("IAD").

Credit risk is one of the major risk types identified by the Group under the ERM framework. The Head of Credit Risk Management Department ("CRMD") under Risk Management Division ("RMD") is the Risk Controller of Credit Risk who is responsible for setting out a credit risk management governance framework, monitoring credit risk independently, and supporting the Credit Committee in managing all credit risk-related issues of the Group. Credit Committee receives a variety of reports on the credit risk exposures including asset quality and loan impairment charges, total exposures and RWAs, as well as updates on specific loan portfolios that are considered to have heightened credit risk.

As a prudent measure for the credit environment, CRMD has reviewed its roles, functions and organization structure, in particular, to ensure that under ERM framework, the first line of defence holds frontline positions in identification, assessment, management and reporting of risk exposures, having regard to the Group's risk appetite, policies, procedures and controls.

Being the third line of defence, IAD is responsible for providing assurance on the effectiveness of the Group's risk management framework including risk governance arrangements.

Template CR1: Credit quality of exposures

The table below provides an overview of the credit quality of on- and off-balance sheet exposures as at 31st December 2021:

		(a)	(b)	(c)	(d)	(e)	(f)	(g)
		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 (a+b-c)
	(HK$ million)	Defaulted exposures	Non-defaulted exposures		Allocated in regulatory category of specific provisions	Allocated in regulatory category of collective provisions		
1	Loans	5,975	682,068	4,377	439	426	3,512	683,666
2	Debt securities	-	147,497	327	0	5	322	147,170
3	Off-balance sheet exposures	321	277,889	174	0	92	82	278,036
4	**Total**	**6,296**	**1,107,454**	**4,878**	**439**	**523**	**3,916**	**1,108,872**

Definition of default

A credit exposure is defined as defaulted if borrower is displaying a definable weakness which is likely to jeopardize repayment, including but not limiting to:

- past due status has been over 90 days;
- borrower is put under receivership by other financial institutions;
- borrower is petitioned for winding-up or bankruptcy; or
- other significant deficiencies of borrower business are present which threaten the borrower’s cash flow and payment capability.

Template CR2: Changes in defaulted loans and debt securities

The table below provides information on the changes in defaulted loans and debt securities, including any changes in the amount of defaulted exposures, movements between non-defaulted and defaulted exposures, and reductions in the defaulted exposures due to write-offs for the period from 30th June 2021 to 31st December 2021:

		(a)
	(HK$ million)	Amount
1	**Defaulted loans and debt securities at end of the previous reporting period (30th June 2021)**	**6,458**
2	Loans and debt securities that have defaulted since the last reporting period	1,850
3	Returned to non-defaulted status	(95)
4	Amounts written off	(2,266)
5	Other changes*	28
6	**Defaulted loans and debt securities at end of the current reporting period (31st December 2021)**	**5,975**

* Other changes include loan repayment, disposal of the impaired loans and exchange rate difference

Table CRB: Additional disclosure related to credit quality of exposures

The Group adopts a forward-looking "expected credit loss" model for measuring and recognising impairment loss to meet the requirement of HKFRS9. Impairment allowance was measured for 12-month or lifetime expected credit losses ("ECL") using a 3-stage approach as follows:-

Stage	Description	Impairment Loss	HKMA's 5-Grade Asset	
1	Performing	12-month ECL	Pass	General (i.e. do not meet the Bank's criteria of "Significant Increase of Credit Risk")
2	Performing but with credit risk increased significantly at reporting date since its initial recognition	Lifetime ECL	Pass	Meet the Bank's criteria of "Significant Increase of Credit Risk"
			Special Mention	
3	Non-Performing	Lifetime ECL	Substandard	
			Doubtful	
			Loss	

- 12-month ECL are the portion of ECL that result from default events on a financial instrument that are possible within the 12 months after the reporting date.
- Lifetime ECL are the expected losses that result from all possible default events over the expected life of financial instrument.

The key inputs into the measurement of ECL are the term structure of the following variables:-

- Probability of default (PD);
- Loss given default (LGD); and
- Exposure of default (EAD)

For the portfolios without PD, references of peer bank PD estimates of similar portfolios and the long-run average default rate of the portfolios are used. The PD term structure estimation is referenced to forecast of economic index relevant to the portfolio.

LGD is the magnitude of the likely loss if there is a default. For the portfolios with insufficient historical loss and recovery data, either reference of peer bank LGD estimates of the similar portfolios or external data source are used for derivating the LGD estimates.

For the portfolio with individual assessment of credit risk mitigation measures, collateral values are projected for different economic scenario so as to reflect LGD estimates under different economic scenarios.

A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Loans and advances with a specific repayment date are classified as overdue when the principal or interest is overdue and remains unpaid at the period-end. Loans repayable by regular instalments are treated as overdue when an instalment payment is overdue and remains unpaid at period-end. Loans 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 demand notice, and/or when the loans have remained continuously outside the approved limit advised to the borrower for more than the overdue period in question. In addition, a loan that is overdue for 90 days or more is considered impaired. There were no loans and advances that are past due for more than 90 days but are not impaired as at 31st December, 2021.

Loan will be regarded as "rescheduled loan" when it has been restructured or renegotiated due to financial difficulty of the borrower and the revised repayment terms are non-commercial to the Bank.

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

The quality of loans and advances to customers can be analysed as follows:-

Total Advances to Customers (HK$ million)	12-month ECL	Lifetime ECL not credit-impaired	Lifetime ECL credit-impaired
Pass	512,676	23,845	0
Special Mention	-	6,011	0
Substandard	-	-	4,324
Doubtful	-	-	1,563
Loss	-	-	90
Total	**512,676**	**29,856**	**5,977**

(i) Exposure by geographical area

(HK$ million)	Total Advances to Customers	Advances Overdue for Over Three Months	Impaired Advances to Customers	Impairment Provision for Stage 3	Write-off
Hong Kong	263,986	406	1,216	255	538
Mainland China	202,365	2,020	4,589	2,821	1,707
Other Asian Countries & Regions	28,036	22	164	101	-
Others	54,122	-	6	-	21
Total	**548,509**	**2,448**	**5,975**	**3,177**	**2,266**

(ii) Exposure by industry sector

Industry Sector (HK$ million)	Total Advances to Customers	Impaired Advances to Customers	Impairment Provision for Stage 3	Write-off
Property investment	100,124	2,552	1,375	12
Property development	91,328	1,009	326	87
Loans for purchase of residential properties	112,756	270	10	0
Financial Concern	66,238	64	34	0
Others	178,063	2,082	1,432	2,167
Total	**548,509**	**5,977**	**3,177**	**2,266**

(iii) Breakdown of exposures by remaining maturity

Total Advances to Customers	(HK$ million)
Repayable on demand	2,228
Within 1 month	69,356
3 months or less but over 1 month	32,104
1 year or less but over 3 months	120,407
5 years or less but over 1 year	199,371
Over 5 year	120,621
Undated or overdue	4,422
Total	**548,509**

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

(iv) The aging analysis of loans and advances to customers that are past due:-

Gross advances overdue for	(HK$ million)
- 6 months or less but over 3 months	948
- 1 year or less but over 6 months	1,013
- Over 1 year	489
Total	**2,450**

(v) Rescheduled exposure

Rescheduled exposure	(HK$ million)
Impaired Exposure	268
Not Impaired Exposure	86
Total	**354**

Table CRC: Qualitative disclosures related to credit risk mitigation

Process of managing and recognising credit risk mitigation

In evaluating the credit risk associated with an individual customer or counterparty, financial strength and repayment ability are always the primary considerations. Credit risk may be mitigated by obtaining recognised collateral and guarantees from the customer or counterparty. Meanwhile, recognised netting is not adopted by the Group.

The relevant policies and processes relating to the use of credit risk mitigation are established and approved by Credit Committee, in which guidelines and collateral valuation parameters are subject to regular reviews to ensure their effectiveness over credit risk management.

The Group applies safe custodian of collaterals, concentration limit and loan-to-value ratio controls, regular re-valuation and close monitoring. In particular, the Group monitors the value of the collateral on a sufficiently frequent basis with respect to the nature of the underlying credit, type of collateral and market practice, and at least annually. Marketable securities (i.e. equity share) are marked-to-market on a daily basis whilst valuations on properties are reviewed periodically.

The most common method of mitigating credit risk is to lend against eligible collateral. The extent of collateral coverage over the Group's loans and advances to customer depends on the type of customers and the product offered. Types of collateral include residential properties (in the form of mortgages over property), other properties, other registered securities over assets, cash deposits, standby letters of credit and guarantees. The Group has established guidelines and limits to control and monitor the credit risk arising from collateral concentration, and such guidelines and limits are subject to regular review. While on-going monitoring has been in place, the exposures which pledged with properties and shares are within the pre-set limit as at 31 December 2021.

Template CR3: Overview of recognised credit risk mitigation

The following table presents the extent of credit risk exposures covered by different types of recognised CRM as at 31st December 2021:

		(a)	(b1)	(b)	(d)	(f)
(HK$ million)		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
1	Loans	386,397	297,269	296,359	910	0
2	Debt securities	98,904	48,266	0	48,266	0
3	**Total**	**485,301**	**345,535**	**296,359**	**49,176**	**0**
4	Of which defaulted	758	1,919	1,919	0	0

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

The Group adopts the Standardised approach, which mainly features the risk-weighting of credit risk exposures according to credit ratings provided by External Credit Assessment Institutions ("ECAIs") recognised by the HKMA, in assessing the capital adequacy of credit risk exposures which do not qualify for or are exempted from the use of an IRB approach.

Credit ratings from Moody's Investors Service and Standard and Poor's Ratings Services are used in the Group for risk-weighting credit risk exposures under the following exposure classes:

- Sovereign;
- Public sector entity;
- Bank;
- Securities firm;
- Corporate; and
- Collective investment scheme.

In accordance with the requirements prescribed in Part 4 of the Banking (Capital) Rules in respect of the application of ECAI ratings, for an exposure falling under any of the exposure classes listed above that consists of a debt obligation issued or undertaken by the obligor or an interest in a collective investment scheme which has one or more than one ECAI issue specific rating, the Group would apply the issue specific rating(s) directly in risk-weighting the exposure; while for an exposure falling under one of the first five exposure classes listed above which does not have an ECAI issue specific rating and the obligor of which has an ECAI issuer rating but does not have a long-term ECAI issue specific rating assigned to a debt obligation issued or undertaken by the obligor, the Group would use the ECAI issuer rating in risk-weighting the exposure under any of the following circumstances:

- The use of the ECAI issuer rating would result in the allocation of a risk weight to the exposure that would be equal to, or higher than, the risk weight allocated to the exposure on the basis that the obligor has neither an ECAI issuer rating nor an ECAI issue specific rating assigned to a debt obligation issued or undertaken by the obligor; the ECAI issuer rating is only applicable to unsecured exposures to the obligor as an issuer that are not subordinated to other exposures to that obligor; and the exposure to the obligor ranks equally with, or is subordinated to, the unsecured exposures referred to above.

- The use of the ECAI issuer rating would result in the allocation of a risk weight to the exposure that would be lower than the risk weight allocated to the exposure on the basis that the obligor has neither an ECAI issuer rating nor an ECAI issue specific rating assigned to a debt obligation issued or undertaken by the obligor; the ECAI issuer rating is only applicable to unsecured exposures to the obligor as an issuer that are not subordinated to other exposures to that obligor; and the exposure to the obligor is not subordinated to other exposures to the obligor as an issuer.

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

The following table illustrates the effect of any recognised CRM (including recognised collateral under both comprehensive and simple approaches) on the calculation of credit risk capital requirements under STC approach as at 31st December 2021:

		(a)	(b)	(c)	(d)	(e)	(f)
		Exposures pre-CCF and pre-CRM		Exposures post-CCF and post-CRM		RWA and RWA density	
	Exposure Classes	On-balance sheet amount (HK$ Mn)	Off-balance sheet amount (HK$ Mn)	On-balance sheet amount (HK$ Mn)	Off-balance sheet amount (HK$ Mn)	RWA (HK$ Mn)	RWA density
1	Sovereign exposures	68,071	0	68,152	0	626	0.92%
2	PSE exposures	587	110	703	197	143	15.92%
2a	Of which: domestic PSEs	84	108	200	196	79	20.00%
2b	Of which: foreign PSEs	503	2	503	1	64	12.73%
3	Multilateral development bank exposures	2,303	0	2,303	0	0	0.00%
4	Bank exposures	349	0	349	0	117	33.42%
5	Securities firm exposures	3,791	1,821	1,835	12	924	50.00%
6	Corporate exposures	6,564	3,054	4,236	453	4,523	96.46%
7	CIS exposures	0	0	0	0	0	-
8	Cash items	0	0	0	0	0	-
9	Exposures in respect of failed delivery on transactions entered into on a basis other than a delivery-versus-payment basis	0	0	0	0	0	-
10	Regulatory retail exposures	24,058	53,432	23,077	10	17,315	75.00%
11	Residential mortgage loans	6,533	571	6,298	62	2,580	40.56%
12	Other exposures which are not past due exposures	15,345	1,763	3,814	4	3,818	100.00%
13	Past due exposures	70	0	70	0	78	112.11%
14	Significant exposures to commercial entities	0	0	0	0	0	-
15	**Total**	**127,671**	**60,751**	**110,837**	**738**	**30,124**	**27.00%**

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

The following table presents a breakdown of credit risk exposures under STC approach by asset classes and by risk weights as at 31st December 2021:

	(HK$ million)	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(ha)	(i)	(j)
	Risk Weight / Exposure Class	0%	10%	20%	35%	50%	75%	100%	150%	250%	Others	Total credit risk exposures amount (post CCF and post CRM)
1	Sovereign exposures	65,022	0	3,130	0	0	0	0	0	0	0	68,152
2	PSE exposures	183	0	717	0	0	0	0	0	0	0	900
2a	Of which: domestic PSEs	0	0	396	0	0	0	0	0	0	0	396
2b	Of which: foreign PSEs	183	0	321	0	0	0	0	0	0	0	504
3	Multilateral development bank exposures	2,303	0	0	0	0	0	0	0	0	0	2,303
4	Bank exposures	0	0	193	0	156	0	0	0	0	0	349
5	Securities firm exposures	0	0	0	0	1,847	0	0	0	0	0	1,847
6	Corporate exposures	0	0	29	0	285	0	4,375	0	0	0	4,689
7	CIS exposures	0	0	0	0	0	0	0	0	0	0	0
8	Cash items	0	0	0	0	0	0	0	0	0	0	0
9	Exposures in respect of failed delivery on transactions entered into on a basis other than a delivery-versus-payment basis	0	0	0	0	0	0	0	0	0	0	0
10	Regulatory retail exposures	0	0	0	0	0	23,087	0	0	0	0	23,087
11	Residential mortgage loans	0	0	0	5,728	0	229	403	0	0	0	6,360
12	Other exposures which are not past due exposures	0	0	0	0	0	0	3,818	0	0	0	3,818
13	Past due exposures	3	0	0	0	0	0	45	22	0	0	70
14	Significant exposures to commercial entities	0	0	0	0	0	0	0	0	0	0	0
15	**Total**	**67,511**	**0**	**4,069**	**5,728**	**2,288**	**23,316**	**8,641**	**22**	**0**	**0**	**111,575**

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

The Group mainly adopts the IRB approach and relies on its own internal rating models for assessments of the Group's capital adequacy in relation to credit risk exposures.

Overview of the Group's Application of IRB Approach

The Group has been approved by the Hong Kong Monetary Authority pursuant to the Banking (Capital) Rules to use the respective IRB approaches to calculate its credit risk for non-securitisation exposures falling under the following exposure classes:

Exposure class	Description	IRB approach
Corporate	Specialised lending and exposures to small-and-medium sized corporates and other corporates which have sufficient financial information for PD estimation	Specialised lending: Supervisory slotting criteria approach Other than specialised lending: Foundation IRB approach
Bank	Exposures to banks which have sufficient financial information for PD estimation	Foundation IRB approach
Retail	Qualifying revolving retail exposures, small business retail exposures and other retail exposures to individuals in Hong Kong, and mortgages to individuals and property holding shell companies in Hong Kong and Mainland China	Retail IRB approach
Equity	All direct and indirect equity interests in publicly-traded and private companies	Market-based approach
Other	All cash items and other items	Specific risk-weighting approach

The table below indicates the portion of EAD within the Group covered by the Standardised approach and the respective IRB approaches for each of the exposure classes as at 31st December 2021:

Exposure class	Standardised approach	IRB approaches					
		Foundation IRB approach	Supervisory slotting criteria approach	Retail IRB approach	Market-based approach	Specific risk-weighting approach	Other
Sovereign	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Corporate	0.93%	91.91%	7.16%	0.00%	0.00%	0.00%	0.00%
Bank	1.97%	98.03%	0.00%	0.00%	0.00%	0.00%	0.00%
Retail	17.64%	0.00%	0.00%	82.36%	0.00%	0.00%	0.00%
Equity	0.00%	0.00%	0.00%	0.00%	45.47%	0.00%	54.53%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%

Control Mechanisms for Internal Models

Risk Strategy & Governance Department under the Risk Management Division is responsible for the initial design and development, ongoing enhancement and monitoring of the Group's credit risk internal rating models. To ensure that the internal rating models fit for purpose, they should be reviewed by functions independent from the function in charge of development. For this purpose, the Independent Validation Section has been established within Risk Management Division to validate the internal rating models independently while Internal Audit Division is responsible for reviewing the validation process and estimation of the risk components of the internal rating models. All credit risk internal rating models are subject to the review and approval by the Credit Committee, which has been delegated by the Board of Directors to deal with all credit risk related issues of the Group.

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

To ensure that the Credit Committee has sufficient information to execute the review and approval of the internal rating models, reports with the following information should be submitted by Risk Strategy & Governance Department to the Credit Committee regularly:

- risk profile by grade;
- risk rating migration across grades;
- estimation of relevant parameters per grade;
- comparison of realised default rates (LGDs and EADs where applicable) against expectation;
- changes in regulatory capital due to model enhancement;
- results of credit risk stress-testing; and
- material changes or exceptions from established policies that will materially impact the operations of the internal rating models.

Main Characteristics of Internal Models

The Group has developed internal models for estimation of the probability of default ("PD") of obligors in the bank, corporate and retail exposure classes. In addition, internal models for estimation of the loss given default ("LGD") and exposure at default ("EAD") have also been developed for retail exposures. As at 31st December 2021, approximately 82% of the Group's exposures under IRB approach (measured in terms of RWA) are covered by internal models.

Internal Models for non-Retail Portfolios

The scope of application of different PD models is determined according to the nature of counterparties. The Bank PD model is applied to exposures to bank obligors while the Corporate PD model is applied to exposures to obligors that are corporates.

The Bank PD model relies on financial information as the base rating and expert qualitative assessment as exceptional rating adjustment. As internal default data is not available for this low default portfolio, the PDs are estimated with reference to the external credit ratings of the obligors and calibrated to the long-run default rates associated with respective external credit ratings published by ECAIs.

The Corporate PD model relies heavily on the statistical analysis of quantitative financial information and expert qualitative assessment of individual obligors. As there are sufficient internal default data for this portfolio, the PDs are estimated with reference to the historical internal default data and calibrated to the long-run default rates from the Group's internal data.

Under the Foundation IRB approach, the Group applies the supervisory estimates in determining the LGD and EAD for non-retail portfolios.

Internal Models for Retail Portfolio

The retail portfolio has been segmented into various sub-portfolios according to product characteristics with one PD model developed for each of the sub-portfolios. As more sufficient sample is available for retail exposures, the retail PD models are built on a pool basis with reference to the historical internal default data and the PD estimates are calibrated to the long-run default rates from the Group's internal data.

Under the Retail IRB approach, the Group also generates its own LGD and EAD estimates for retail portfolios with the use of internal models.

The retail LGD models are developed according to the historical data collected during the recovery processes. In determining the time lapse between default event and closure of the exposure in LGD estimation, an exposure is considered to be closed when there is no reasonable prospect of further recovery. All LGD models are calibrated to an economic downturn. For secured retail portfolios, downturn LGDs are estimated by adjusting the LGDs with reference to the highest drop in the corresponding macroeconomic index associated with respective collateral types; whilst for unsecured retail portfolios, downturn LGDs refer to the highest actual LGDs in the last 5 years.

EAD is calculated as the sum of on-balance sheet amount and credit equivalent amount of off-balance sheet items. For the Hong Kong credit card portfolio, two distinctive models for estimation of the credit equivalent amount and hence EAD have been developed taking into consideration the different behaviours of accounts with high and low utilisations respectively. For Hong Kong credit card exposures with high utilisation, the credit equivalent amount is calculated as the product of utilisation ratio and credit limit; while for those with low utilisation, the historical realised further drawdown ratio of unutilised portion in the year prior to default is used in estimating the credit equivalent amount and hence the EAD.

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

For other retail exposures, credit equivalent amounts for performing accounts are estimated with a credit conversion factor of 100% and those for non-performing accounts with a credit conversion factor of 0%.

The main characteristics of individual component models are summarised in the table below:

Portfolio	Component	Number of Material Model(s)	Model Description and Methodology	Regulatory Floor
Bank	PD	1	Statistical model built on financial information as the base rating and expert qualitative assessment as exceptional rating adjustment, and calibrated to the long-run default rates associated with respective external credit ratings published by ECAIs.	0.03%
Corporate	PD	2	Statistical models built by combining financial information and expert qualitative assessment, and calibrated to the long-run default rates from the Group's internal data. The 2 models are for borrowers operating in Mainland China and for borrowers operating outside Mainland China, respectively.	0.03%
Retail – Hong Kong Credit Card	PD	1	Statistical model built on internal and bureau data, and calibrated to the long-run default rates from the Group's internal data.	0.03%
	LGD	1	Statistical model built on internal loss and recovery data, with the downturn LGD referring to the highest LGD in the last 5 years.	–
	EAD	2	For high utilisation accounts, the credit equivalent amount is calculated as the product of utilisation ratio and credit limit; while for low utilisation accounts, the historical realised further drawdown ratio of unutilised portion in the year prior to default is used in estimating the credit equivalent amount.	–
Retail – Hong Kong Unsecured Overdraft	PD	1	Statistical model built on internal and bureau data, and calibrated to the long-run default rates from the Group's internal data.	0.03%
	LGD	1	Statistical model built on internal loss and recovery data, with the downturn LGD referring to the highest LGD in the last 5 years.	–
	EAD	1	In estimating the credit equivalent amount and hence the EAD, a credit conversion factor of 100% is applied to performing accounts and a credit conversion factor of 0% to non-performing accounts.	–

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

Portfolio	Component	Number of Material Model(s)	Model Description and Methodology	Regulatory Floor
Retail – Hong Kong Revolving Loan	PD	1	Statistical model built on internal and bureau data, and calibrated to the long-run default rates from the Group's internal data.	0.03%
	LGD	1	Statistical model built on internal loss and recovery data, with the downturn LGD referring to the highest LGD in the last 5 years.	–
	EAD	1	In estimating the credit equivalent amount and hence the EAD, a credit conversion factor of 100% is applied to performing accounts and a credit conversion factor of 0% to non-performing accounts.	–
Retail – Hong Kong Other Unsecured Loan	PD	1	Statistical model built on internal and bureau data, and calibrated to the long-run default rates from the Group's internal data.	0.03%
	LGD	1	Statistical model built on internal loss and recovery data, with the downturn LGD referring to the highest LGD in the last 5 years.	–
	EAD	1	In estimating the credit equivalent amount and hence the EAD, a credit conversion factor of 100% is applied to performing accounts and a credit conversion factor of 0% to non-performing accounts.	–
Retail – Hong Kong Residential Mortgage	PD	1	Statistical model built on historical default data with consideration of mortgage scheme type, borrower type and delinquency status, and calibrated to the long-run default rates from the Group's internal data.	0.03%
	LGD	1	Statistical model built on internal loss and recovery data, with the downturn LGD estimated by adjusting the LGD with reference to the historical highest drop in Hong Kong Private Domestic Price Index.	10%
	EAD	1	In estimating the credit equivalent amount and hence the EAD, a credit conversion factor of 100% is applied to performing accounts and a credit conversion factor of 0% to non-performing accounts.	–
Retail – Hong Kong Non-residential Mortgage	PD	1	Statistical model built on historical default data and calibrated to the long-run default rates from the Group's internal data.	0.03%
	LGD	1	Statistical model built on internal loss and recovery data, with the downturn LGD estimated by adjusting the LGD with reference to the historical highest drop in Hong Kong Private Office Price Index.	–
	EAD	1	In estimating the credit equivalent amount and hence the EAD, a credit conversion factor of 100% is applied to performing accounts and a credit conversion factor of 0% to non-performing accounts.	–

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

Portfolio	Component	Number of Material Model(s)	Model Description and Methodology	Regulatory Floor
Retail – Hong Kong Other Secured Loan	PD	1	Statistical model built on historical default data with consideration of collateral type and delinquency status, and calibrated to the long-run default rates from the Group's internal data.	0.03%
	LGD	1	Statistical model built on internal loss and recovery data, with the downturn LGD estimated by adjusting the LGD with reference to the historical highest drop in License Fee of Urban Taxi.	–
	EAD	1	In estimating the credit equivalent amount and hence the EAD, a credit conversion factor of 100% is applied to performing accounts and a credit conversion factor of 0% to non-performing accounts.	–
Retail – China Mortgage Loan	PD	1	Statistical model built on historical default data with consideration of delinquency status, and calibrated to the long-run default rates from the Group's internal data.	0.03%
	LGD	1	Statistical model built on internal loss and recovery data, with the downturn LGD estimated by adjusting the LGD with reference to the historical highest drop in China Property Price Index.	–
	EAD	1	In estimating the credit equivalent amount and hence the EAD, a credit conversion factor of 100% is applied to performing accounts and a credit conversion factor of 0% to non-performing accounts.	–

Comparison of Actual Default Rate against Estimated Probability of Default

The following tables present a comparison of the actual percentage of default during the last three reporting periods and the corresponding 1-year probability of default estimated as at the end of the previous financial year-ends.

2021

Exposure class	Actual percentage of default for the year ended 31st December, 2021	Estimated 1-year probability of default at 31st December, 2020
Bank	0.00%	0.25%
Corporate	0.53%	2.15%
Retail – QRRE	0.24%	0.51%
Retail – Residential mortgage exposures	0.15%	0.61%
Retail – Small business retail exposures	0.19%	1.37%
Other retail exposures to individuals	1.31%	4.86%

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

2020

Exposure class	Actual percentage of default for the year ended 31st December, 2020	Estimated 1-year probability of default at 31st December, 2019
Bank	0.00%	0.28%
Corporate	0.84%	2.16%
Retail – QRRE	0.29%	0.54%
Retail – Residential mortgage exposures	0.30%	0.63%
Retail – Small business retail exposures	0.33%	1.33%
Other retail exposures to individuals	3.24%	4.87%

2019

Exposure class	Actual percentage of default for the year ended 31st December, 2019	Estimated 1-year probability of default at 31st December, 2018
Bank	0.00%	0.32%
Corporate	1.21%	2.55%
Retail – QRRE	0.30%	0.55%
Retail – Residential mortgage exposures	0.15%	0.70%
Retail – Small business retail exposures	0.82%	1.22%
Other retail exposures to individuals	2.46%	3.93%

An actual default rate for a particular financial year is “point-in-time” in nature and, as the economy moves above or below cyclical norms, may differ from the corresponding PD estimate which is measured on a “through-the-cycle” basis.

As shown in the above tables, the actual default rates have been lower than the corresponding PD estimates in the last three reporting periods.

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

The following tables present the main parameters of internal models used for the calculation of credit risk capital requirements under the foundation and retail IRB approaches respectively at 31st December 2021:

Foundation IRB Approach

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	PD Scale	Original on-balance sheet gross exposure (HK$ Mn)	Off-balance sheet exposure pre-CCF (HK$ Mn)	Average CCF	EAD post-CRM and post-CCF (HK$ Mn)	Average PD	Number of obligors	Average LGD	Average maturity (Year)	RWA (HK$ Mn)	RWA density	EL (HK$ Mn)	Provisions (HK$ Mn)
Bank	0.00 to <0.15	69,672	5	100.00%	69,676	0.06%	180	46.30%	2.5	21,989	31.56%	21	
	0.15 to <0.25	30,483	1,091	16.58%	30,706	0.21%	92	45.00%	2.5	18,402	59.93%	29	
	0.25 to <0.50	16,678	31	20.00%	16,684	0.34%	50	45.72%	2.5	12,768	76.53%	26	
	0.50 to <0.75	6,717	4	20.00%	6,718	0.54%	15	46.41%	2.5	6,262	93.21%	17	
	0.75 to <2.50	4,706	390	75.00%	4,999	0.93%	24	45.00%	2.5	5,556	111.15%	21	
	2.50 to <10.00	0	0	-	0	-	0	-	-	0	-	0	
	10.00 to <100.00	0	0	-	0	-	0	-	-	0	-	0	
	100.00 (Default)	0	0	-	0	-	0	-		0	-	0	
	Sub-total	**128,256**	**1,521**	**31.89%**	**128,783**	**0.19%**	**361**	**45.87%**	**2.5**	**64,977**	**50.45%**	**114**	**23**
Corporate – small-and-medium sized corporates	0.00 to <0.15	6,420	1,023	36.62%	9,885	0.08%	38	42.81%	2.5	1,927	19.50%	3	
	0.15 to <0.25	6,142	2,127	39.86%	10,764	0.22%	124	43.19%	2.5	3,812	35.42%	10	
	0.25 to <0.50	8,492	710	31.57%	8,746	0.33%	90	37.68%	2.5	3,473	39.71%	11	
	0.50 to <0.75	5,411	553	16.96%	4,483	0.52%	90	26.65%	2.5	1,497	33.39%	6	
	0.75 to <2.50	14,234	5,598	18.81%	13,955	1.33%	440	40.03%	2.5	9,763	69.96%	74	
	2.50 to <10.00	11,142	4,656	3.75%	7,944	5.40%	684	36.78%	2.5	7,785	97.99%	161	
	10.00 to <100.00	982	26	0.00%	880	26.74%	24	40.55%	2.5	1,526	173.45%	96	
	100.00 (Default)	88	0	-	88	100.00%	278	44.35%		108	123.45%	36	
	Sub-total	**52,911**	**14,693**	**18.84%**	**56,745**	**1.80%**	**1,768**	**39.25%**	**2.5**	**29,891**	**52.68%**	**397**	**402**

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

Foundation IRB Approach (continued)

	PD Scale	(a) Original on-balance sheet gross exposure (HK$ Mn)	(b) Off-balance sheet exposure pre-CCF (HK$ Mn)	(c) Average CCF	(d) EAD post-CRM and post-CCF (HK$ Mn)	(e) Average PD	(f) Number of obligors	(g) Average LGD	(h) Average maturity (Year)	(i) RWA (HK$ Mn)	(j) RWA density	(k) EL (HK$ Mn)	(l) Provisions (HK$ Mn)
Corporate – other (including purchased corporate receivables)	0.00 to <0.15	113,916	34,040	22.46%	141,894	0.08%	525	44.18%	2.5	36,594	25.79%	48	
	0.15 to <0.25	112,342	38,680	17.95%	121,835	0.20%	547	43.08%	2.5	53,903	44.24%	107	
	0.25 to <0.50	43,806	23,939	8.06%	46,484	0.33%	280	42.33%	2.5	27,393	58.93%	66	
	0.50 to <0.75	22,969	9,691	9.10%	21,988	0.52%	147	41.33%	2.5	15,692	71.37%	47	
	0.75 to <2.50	59,799	35,590	10.41%	50,835	1.29%	445	38.95%	2.5	47,291	93.03%	253	
	2.50 to <10.00	26,607	18,936	11.36%	19,540	4.90%	254	24.51%	2.5	16,318	83.51%	206	
	10.00 to <100.00	3,325	0	-	2,217	23.47%	23	38.50%	2.5	4,294	193.65%	217	
	100.00 (Default)	4,791	2	97.66%	4,793	100.00%	85	41.61%		2,198	45.87%	2,663	
	Sub-total	**387,555**	**160,878**	**14.46%**	**409,586**	**1.84%**	**2,306**	**41.84%**	**2.5**	**203,683**	**49.73%**	**3,607**	**4,923**
Total (sum of all portfolios)		**568,722**	**177,092**	**14.97%**	**595,114**	**1.48%**	**4,435**	**42.47%**	**2.5**	**298,551**	**50.17%**	**4,118**	**5,348**

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

Retail IRB Approach

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	PD Scale	Original on-balance sheet gross exposure (HK$ Mn)	Off-balance sheet exposure pre-CCF (HK$ Mn)	Average CCF	EAD post-CRM and post-CCF (HK$ Mn)	Average PD	Number of obligors	Average LGD	Average maturity (Year)	RWA (HK$ Mn)	RWA density	EL (HK$ Mn)	Provisions (HK$ Mn)
Retail – QRRE	0.00 to <0.15	93	12,305	59.50%	7,415	0.14%	504,052	91.87%		542	7.31%	10	
	0.15 to <0.25	38	296	60.41%	217	0.25%	9,679	91.85%		25	11.57%	0	
	0.25 to <0.50	2,965	16,863	61.40%	13,318	0.35%	333,394	91.87%		2,067	15.52%	43	
	0.50 to <0.75	135	1,817	78.11%	1,555	0.60%	71,160	90.70%		364	23.43%	9	
	0.75 to <2.50	454	1,767	69.85%	1,688	1.41%	92,599	90.21%		743	43.98%	21	
	2.50 to <10.00	784	1,171	74.39%	1,655	5.15%	31,542	91.20%		1,831	110.60%	78	
	10.00 to <100.00	8	5	89.83%	12	26.43%	243	91.44%		30	241.85%	3	
	100.00 (Default)	36	0	-	36	100.00%	37,378	91.39%		194	542.73%	17	
	Sub-total	**4,513**	**34,224**	**62.48%**	**25,896**	**0.83%**	**1,080,047**	**91.65%**		**5,796**	**22.38%**	**181**	**85**
Retail – Residential mortgage exposures (including both to individuals and to property-holding shell companies)	0.00 to <0.15	16,280	471	100.00%	16,751	0.11%	3,512	36.62%		4,084	24.38%	7	
	0.15 to <0.25	30,474	939	100.00%	31,413	0.23%	15,382	21.23%		6,053	19.27%	16	
	0.25 to <0.50	66,669	25	100.00%	66,694	0.34%	22,613	14.52%		14,620	21.92%	33	
	0.50 to <0.75	3,280	98	100.00%	3,378	0.64%	1,716	30.45%		956	28.29%	7	
	0.75 to <2.50	1,677	4	100.00%	1,681	1.06%	1,678	11.12%		384	22.83%	2	
	2.50 to <10.00	571	0	100.00%	571	7.00%	577	29.98%		665	116.50%	12	
	10.00 to <100.00	508	0	-	508	15.82%	322	18.78%		500	98.43%	17	
	100.00 (Default)	284	0	-	284	100.00%	229	22.91%		614	216.07%	19	
	Sub-total	**119,743**	**1,537**	**100.00%**	**121,280**	**0.63%**	**46,029**	**19.82%**		**27,876**	**22.99%**	**113**	**848**

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

Retail IRB Approach (continued)

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	PD Scale	Original on-balance sheet gross exposure (HK$ Mn)	Off-balance sheet exposure pre-CCF (HK$ Mn)	Average CCF	EAD post-CRM and post-CCF (HK$ Mn)	Average PD	Number of obligors	Average LGD	Average maturity (Year)	RWA (HK$ Mn)	RWA density	EL (HK$ Mn)	Provisions (HK$ Mn)
Retail – small business retail exposures	0.00 to <0.15	0	0	-	0	-	0	-		0	-	0	
	0.15 to <0.25	34	0	-	34	0.25%	12	30.07%		5	14.01%	0	
	0.25 to <0.50	65	0	100.00%	65	0.34%	30	12.42%		5	7.13%	0	
	0.50 to <0.75	14	8	100.00%	22	0.55%	35	76.01%		13	57.37%	0	
	0.75 to <2.50	497	29	100.00%	526	1.41%	321	21.26%		125	23.82%	1	
	2.50 to <10.00	11	1	100.00%	12	4.58%	22	47.91%		8	68.40%	0	
	10.00 to <100.00	3	0	-	3	22.11%	4	20.87%		1	41.64%	0	
	100.00 (Default)	3	0	-	3	100.00%	3	39.34%		8	317.07%	1	
	Sub-total	**627**	**38**	**100.00%**	**665**	**1.76%**	**427**	**23.21%**		**165**	**24.84%**	**2**	**4**
Other retail exposures to individuals	0.00 to <0.15	10	23	59.37%	23	0.09%	45	78.23%		5	19.48%	0	
	0.15 to <0.25	126	2	100.00%	128	0.25%	381	31.15%		18	14.38%	0	
	0.25 to <0.50	83	164	67.69%	194	0.35%	247	91.70%		105	53.80%	1	
	0.50 to <0.75	1,821	141	96.61%	1,958	0.52%	521	70.42%		1,017	51.97%	7	
	0.75 to <2.50	4,059	60	84.51%	4,109	1.66%	11,120	46.28%		2,316	56.36%	33	
	2.50 to <10.00	918	47	88.09%	960	4.94%	3,929	51.63%		736	76.72%	27	
	10.00 to <100.00	128	0	59.37%	128	28.75%	866	61.27%		192	149.23%	23	
	100.00 (Default)	217	0	-	217	100.00%	477	39.61%		566	261.26%	134	
	Sub-total	**7,362**	**437**	**81.25%**	**7,717**	**4.93%**	**17,586**	**54.12%**		**4,955**	**64.21%**	**225**	**176**
Total (sum of all portfolios)		**132,245**	**36,236**	**64.34%**	**155,558**	**0.88%**	**1,144,089**	**33.49%**		**38,792**	**24.94%**	**521**	**1,113**

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

The following table presents the effect of recognised credit derivative contracts on the calculation of credit risk capital requirements under the IRB approach as at 31st December 2021:

		(a)	(b)
(HK$ million)		Pre-credit derivatives RWA	Actual RWA
1	Corporate – Specialised lending under supervisory slotting criteria approach (project finance)	132	132
2	Corporate – Specialised lending under supervisory slotting criteria approach (object finance)	983	983
3	Corporate – Specialised lending under supervisory slotting criteria approach (commodities finance)	0	0
4	Corporate – Specialised lending under supervisory slotting criteria approach (income-producing real estate)	22,209	22,209
5	Corporate – Specialised lending (high-volatility commercial real estate)	0	0
6	Corporate – Small-and-medium sized corporates	29,891	29,891
7	Corporate – Other corporates	203,683	203,683
8	Sovereigns	0	0
9	Sovereign foreign public sector entities	0	0
10	Multilateral development banks	0	0
11	Bank exposures – Banks	64,977	64,977
12	Bank exposures – Securities firms	0	0
13	Bank exposures – Public sector entities (excluding sovereign foreign public sector entities)	0	0
14	Retail – Small business retail exposures	165	165
15	Retail – Residential mortgages to individuals	26,574	26,574
16	Retail – Residential mortgages to property-holding shell companies	1,302	1,302
17	Retail – Qualifying revolving retail exposures (QRRE)	5,796	5,796
18	Retail – Other retail exposures to individuals	4,955	4,955
19	Equity – Equity exposures under market-based approach (simple risk-weight method)	18,408	18,408
20	Equity – Equity exposures under market-based approach (internal models method)	0	0
21	Equity – Equity exposures under PD/LGD approach (publicly traded equity exposures held for long-term investment)	0	0
22	Equity – Equity exposures under PD/LGD approach (privately owned equity exposures held for long-term investment)	0	0
23	Equity – Equity exposures under PD/LGD approach (other publicly traded equity exposures)	0	0
24	Equity – Equity exposures under PD/LGD approach (other equity exposures)	0	0
25	Equity – Equity exposures associated with equity investments in funds (CIS exposures)	0	0
25a	Equity – Specified equity exposures to financial sector entities and commercial entities	14,253	14,253
26	Other – Cash items	378	378
27	Other – Other items	15,792	15,792
28	**Total**	**409,498**	**409,498**

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

The following table presents a flow statement explaining variations in the RWA for credit risk determined under the IRB approach for the period from 30th September 2021 to 31st December 2021:

(HK$ million)		(a) Amount
1	**RWA as at end of previous reporting period**	**403,739**
2	Asset size	-1,283
3	Asset quality	5,972
4	Model updates	0
5	Methodology and policy	0
6	Acquisitions and disposals	0
7	Foreign exchange movements	1,345
8	Other	-275
9	**RWA as at end of reporting period**	**409,498**

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

The following table provides back-testing data as at 31st December 2021 to validate the reliability of PD calculations, including a comparison of the PD used to calculate capital requirements with the effective default rates of obligors under the IRB approach:

(a)	(b)	(c)		(d)	(e)	(f)		(g)	(h)	(i)
Portfolio	PD Range	External Rating Equivalent		Weighted Average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	Of which: new defaulted obligors in the year	Average historical annual default rate
		Moody's	Standard & Poor's			Beginning of the year	End of the year			
Bank	0.00 to <0.15	Aaa to Baa1	AAA to BBB+	0.06%	0.07%	218	263	0	0	0.00%
	0.15 to <0.25	Baa1 to Baa2	BBB+ to BBB	0.23%	0.21%	96	139	0	0	0.00%
	0.25 to <0.50	Baa2 to Ba1	BBB to BB+	0.35%	0.35%	74	172	0	0	0.00%
	0.50 to <0.75	Ba1 to Ba2	BB+ to BB	0.50%	0.50%	23	42	0	0	0.00%
	0.75 to <2.50	Ba2 to B2	BB to B	0.99%	0.97%	24	49	0	0	0.00%
	2.50 to <10.00	B2 to Caa1	B to CCC+	6.96%	6.96%	1	1	0	0	0.00%
	10.00 to <100.00	Caa1 to C	CCC+ to C	-	-	0	0	0	0	-
Corporate - small-and-medium sized corporates	0.00 to <0.15	Aaa to Baa1	AAA to BBB+	0.07%	0.08%	35	44	0	0	0.00%
	0.15 to <0.25	Baa1 to Baa2	BBB+ to BBB	0.21%	0.21%	84	105	0	0	0.00%
	0.25 to <0.50	Baa2 to Ba1	BBB to BB+	0.33%	0.33%	60	76	0	0	0.28%
	0.50 to <0.75	Ba1 to Ba2	BB+ to BB	0.56%	0.56%	83	108	0	0	0.00%
	0.75 to <2.50	Ba2 to B2	BB to B	1.56%	1.39%	322	399	0	0	0.31%
	2.50 to <10.00	B2 to Caa1	B to CCC+	5.31%	5.63%	571	672	3	0	0.63%
	10.00 to <100.00	Caa1 to C	CCC+ to C	28.36%	21.21%	27	30	2	0	10.39%
Corporate - other (including purchased corporate receivables)	0.00 to <0.15	Aaa to Baa1	AAA to BBB+	0.08%	0.08%	483	701	1	0	0.21%
	0.15 to <0.25	Baa1 to Baa2	BBB+ to BBB	0.21%	0.21%	411	581	2	0	0.31%
	0.25 to <0.50	Baa2 to Ba1	BBB to BB+	0.33%	0.33%	269	368	0	0	0.52%
	0.50 to <0.75	Ba1 to Ba2	BB+ to BB	0.56%	0.56%	115	186	0	0	0.72%
	0.75 to <2.50	Ba2 to B2	BB to B	1.11%	1.15%	261	426	1	0	0.67%
	2.50 to <10.00	B2 to Caa1	B to CCC+	4.96%	5.12%	235	340	2	1	1.55%
	10.00 to <100.00	Caa1 to C	CCC+ to C	22.70%	14.49%	23	27	4	1	25.29%

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

(a)	(b)	(c)		(d)	(e)	(f)		(g)	(h)	(i)
Portfolio	PD Range	External Rating Equivalent		Weighted Average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	Of which: new defaulted obligors in the year	Average historical annual default rate
		Moody's	Standard & Poor's			Beginning of the year	End of the year			
Retail – QRRE	0.00 to <0.15			0.14%	0.14%	542,798	542,860	78	0	0.02%
	0.15 to <0.25			0.24%	0.25%	9,504	9,520	1	0	0.05%
	0.25 to <0.50			0.35%	0.35%	360,287	376,800	941	19	0.26%
	0.50 to <0.75			0.60%	0.67%	56,197	63,700	109	10	0.24%
	0.75 to <2.50			1.47%	1.22%	94,824	142,283	730	46	0.80%
	2.50 to <10.00			5.19%	5.38%	34,876	35,304	830	4	3.12%
	10.00 to <100.00			22.40%	30.73%	280	349	66	10	22.45%
Retail – Residential mortgage exposures (including both to individuals and to property-holding shell companies)	0.00 to <0.15			0.11%	0.11%	2,274	4,755	0	0	0.04%
	0.15 to <0.25			0.23%	0.24%	14,840	18,969	6	0	0.07%
	0.25 to <0.50			0.34%	0.34%	26,764	26,766	9	0	0.05%
	0.50 to <0.75			0.64%	0.64%	1,166	2,912	0	0	0.05%
	0.75 to <2.50			1.23%	0.95%	1,894	1,961	3	0	0.15%
	2.50 to <10.00			7.00%	6.98%	974	974	13	0	1.33%
	10.00 to <100.00			16.81%	17.43%	416	420	42	2	7.11%
Retail – small business retail exposures	0.00 to <0.15			-	-	-	-	-	-	-
	0.15 to <0.25			0.25%	0.25%	32	32	0	0	0.00%
	0.25 to <0.50			0.34%	0.34%	52	53	0	0	0.00%
	0.50 to <0.75			0.55%	0.55%	42	42	0	0	0.23%
	0.75 to <2.50			1.41%	1.27%	381	413	1	0	0.44%
	2.50 to <10.00			3.62%	3.28%	24	24	0	0	0.82%
	10.00 to <100.00			33.42%	40.73%	3	3	0	0	8.72%

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

(a)	(b)	(c)		(d)	(e)	(f)		(g)	(h)	(i)
Portfolio	PD Range	External Rating Equivalent		Weighted Average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	Of which: new defaulted obligors in the year	Average historical annual default rate
		Moody's	Standard & Poor's			Beginning of the year	End of the year			
Other retail exposures to individuals	0.00 to <0.15			0.14%	0.14%	35	40	0	0	0.00%
	0.15 to <0.25			0.25%	0.25%	470	472	0	0	0.06%
	0.25 to <0.50			0.35%	0.35%	236	239	3	0	0.94%
	0.50 to <0.75			0.53%	0.55%	774	790	4	0	0.16%
	0.75 to <2.50			1.76%	2.02%	13,453	18,143	80	8	0.93%
	2.50 to <10.00			4.91%	6.57%	6,083	6,700	106	5	3.99%
	10.00 to <100.00			28.81%	31.92%	1,273	1,596	125	13	13.12%

As at 31st December 2021, approximately 82% of the Group's exposures under IRB approach (in terms of RWA) are covered by internal models whose back-testing results are shown in the above table.

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

I. Specialised Lending under supervisory slotting criteria approach – HVCRE

The following table presents quantitative information in respect of specialised lending – HVCRE under the supervisory slotting criteria approach as at 31st December 2021:

		(a)	(b)	(c)	(d)	(e)	(f)
Supervisory Rating Grade	Remaining Maturity	On-balance sheet exposure amount (HK$ Mn)	Off-balance sheet exposure amount (HK$ Mn)	SRW	EAD amount (HK$ Mn)	RWA (HK$ Mn)	Expected loss amount (HK$ Mn)
Strong ^	Less than 2.5 years	0	0	70%	0	0	0
Strong	Equal to or more than 2.5 years	0	0	95%	0	0	0
Good ^	Less than 2.5 years	0	0	95%	0	0	0
Good	Equal to or more than 2.5 years	0	0	120%	0	0	0
Satisfactory		0	0	140%	0	0	0
Weak		0	0	250%	0	0	0
Default		0	0	0%	0	0	0
Total		**0**	**0**		**0**	**0**	**0**

^ Use of preferential risk-weights.

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

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

The following table presents quantitative information in respect of specialised lending – other than HVCRE under the supervisory slotting criteria approach as at 31st December 2021:

		(a)	(b)	(c)	(d)(i)	(d)(ii)	(d)(iii)	(d)(iv)	(d)(v)	(e)	(f)
Supervisory Rating Grade	Remaining Maturity	On-balance sheet exposure amount (HK$ Mn)	Off-balance sheet exposure amount (HK$ Mn)	SRW	EAD amount (HK$ Mn)					RWA (HK$ Mn)	Expected loss amount (HK$ Mn)
					PF	OF	CF	IPRE	Total		
Strong ^	Less than 2.5 years	21,648	2,113	50%	0	2	0	23,326	23,328	11,664	0
Strong	Equal to or more than 2.5 years	8,012	1,996	70%	189	330	0	8,980	9,499	6,649	38
Good ^	Less than 2.5 years	371	22	70%	0	22	0	365	387	271	2
Good	Equal to or more than 2.5 years	1,508	0	90%	0	273	0	1,235	1,508	1,357	12
Satisfactory		0	0	115%	0	0	0	0	0	0	0
Weak		1,353	0	250%	0	196	0	1,157	1,353	3,383	108
Default		196	0	0%	0	0	0	233	233	0	116
Total		**33,088**	**4,131**		**189**	**823**	**0**	**35,296**	**36,308**	**23,324**	**276**

^ Use of preferential risk-weights.

III. Equity exposures under the simple risk-weight method

The following table presents quantitative information in respect of equity exposures under the simple risk-weight method as at 31st December 2021:

	(a)	(b)	(c)	(d)	(e)
Categories	On-balance sheet exposure amount (HK$ Mn)	Off-balance sheet exposure amount (HK$ Mn)	SRW	EAD amount (HK$ Mn)	RWA (HK$ Mn)
Publicly traded equity exposures	605	0	300%	605	1,814
All other equity exposures	4,148	0	400%	4,148	16,594
Total	**4,753**	**0**		**4,753**	**18,408**

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

Counterparty Credit Risk Management

The Group has adopted the Standardized Approach for Counterparty Credit Risk (SA-CCR) for regulatory capital calculation of its counterparty credit risk ("CCR") arising from derivative contracts booked in the banking book and trading book.

The Group has in place a set of policies and a comprehensive framework to effectively manage such counterparty credit risk.

Under this management framework, the Group establishes credit limit through formal credit approval procedures to control the pre-settlement and settlement credit risk arising from derivative transactions. In this connection, distinct credit limits for counterparty credit exposure for individual counterparties and each group of related counterparties are determined based on the credit standing of the counterparties, collateral value, contract nature, actual needs, etc.

From a risk management perspective, the Group monitors the risk exposure due to fluctuations in the market by using the current exposure and the potential exposure value of the transactions.

All credit facilities granted to a counterparty, including general credit facilities as well as pre-settlement Limit for derivative and FX products will be subject to review on an annual basis, in order to assess the latest information together with credit standing of the counterparties, and decide whether any adjustment of the credit package is required. Similar to the Group's general credit risk management, a number of credit risk mitigating measures, such as collateral, margining and netting arrangements may be adopted.

At 31st December, 2021, no recognised credit derivative contract is applied as credit risk mitigation and netting agreements have been recognized in the calculation of regulatory capital.

Wrong-way risk occurs when counterparty's risk exposures are adversely correlated with its credit quality. It is further classified into specific wrong-way risk and general wrong-way risk. The Group has set out in its internal policies a process for identification of wrong-way risk for individual counterparties.

To monitor and control wrong-way risk, any wrong-way risk will be identified and evaluated at the time of credit application, in which the analysis and mitigation measures are documented in the credit proposal for approver's consideration. The wrong-way risk will be monitored during the tenor of relevant transaction, and cases with wrong-way risk are reported. Besides, regular stress-testing is conducted to assess the potential impact of wrong-way risk on the Group's capital adequacy and profitability.

Credit ratings downgrade

A credit rating downgrade clause in International Swaps and Derivatives Association ("ISDA") Master Agreement or a credit rating downgrade threshold clause in a Credit Support Annexes ("CSA") is designed to trigger an action if the credit rating of the affected party falls below a specified level. These actions may include the requirement to pay or increase collateral, the termination of transactions by the non-affected party or the assignment of transactions by the affected party.

As at 31st December, 2021, the potential value of the additional collateral pertaining to ISDA and CSA downgrade thresholds that the Group would need to post with counterparties in the event of a one-notch downgrade and a two-notch downgrade of the Group's rating was HK$4.05mil and HK$17.31mil respectively.

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

The following table presents a comprehensive breakdown of counterparty default risk exposures (other than those to CCPs), RWAs, and, where applicable, main parameters under the approaches used to calculate default risk exposures in respect of derivative contracts and SFTs as at 31st December 2021:

		(a)	(b)	(c)	(d)	(e)	(f)
		Replacement cost (RC) (HK$ Mn)	PFE (HK$ Mn)	Effective EPE (HK$ Mn)	Alpha (α) used for computing default risk exposure	Default risk exposure after CRM (HK$ Mn)	RWA (HK$ Mn)
1	SA-CCR approach (for derivative contracts)	646	1,868		1.4	3,520	2,106
1a	CEM (for derivative contracts)	0	0		1.4	0	0
2	IMM (CCR) Approach			0	N/A	0	0
3	Simple Approach (for SFTs)					0	0
4	Comprehensive Approach (for SFTs)					10,840	222
5	VaR (for SFTs)					0	0
6	**Total**						**2,328**

Template CCR2: CVA capital charge

The following table presents information on portfolios subject to the CVA capital charge and the CVA calculations based on standardised CVA method and advanced CVA method as at 31st December 2021:

		(a)	(b)
	(HK$ million)	EAD post CRM	RWA
	Netting sets for which CVA capital charge is calculated by the advanced CVA method	0	0
1	(i) VaR (after application of multiplication factor if applicable)		0
2	(ii) Stressed VaR (after application of multiplication factor if applicable)		0
3	Netting sets for which CVA capital charge is calculated by the standardised CVA method	3,519	699
4	**Total**	**3,519**	**699**

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

The following table presents a breakdown of default risk exposures as at 31st December 2021, other than those to CCPs, in respect of derivative contracts and SFTs that are subject to the STC approach, by asset classes and risk-weights, irrespective of the approach used to determine the amount of default risk exposures:

	(HK$ million)	(a)	(b)	(c)	(ca)	(d)	(e)	(f)	(g)	(ga)	(h)	(i)
	Exposure Class / Risk Weight	0%	10%	20%	35%	50%	75%	100%	150%	250%	Others	Total default risk exposure after CRM
1	Sovereign exposures	0	0	0	0	0	0	0	0	0	0	0
2	PSE exposures	0	0	0	0	0	0	0	0	0	0	0
2a	Of which: domestic PSEs	0	0	0	0	0	0	0	0	0	0	0
2b	Of which: foreign PSEs	0	0	0	0	0	0	0	0	0	0	0
3	Multilateral development bank exposures	0	0	0	0	0	0	0	0	0	0	0
4	Bank exposures	0	0	11	0	146	0	0	0	0	0	157
5	Securities firm exposures	0	0	0	0	12	0	0	0	0	0	12
6	Corporate exposures	0	0	0	0	0	0	158	0	0	0	158
7	CIS exposures	0	0	0	0	0	0	0	0	0	0	0
8	Regulatory retail exposures	0	0	0	0	0	116	0	0	0	0	116
9	Residential mortgage loans	0	0	0	0	0	0	0	0	0	0	0
10	Other exposures which are not past due exposures	0	0	0	0	0	0	229	0	0	0	229
11	Significant exposures to commercial entities	0	0	0	0	0	0	0	0	0	0	0
12	**Total**	**0**	**0**	**11**	**0**	**158**	**116**	**387**	**0**	**0**	**0**	**672**

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

The Bank applies internal rating models for estimating the obligor PD of its entire counterparty default risk portfolio under the foundation IRB approach, with the bank model applied to bank obligors and two corporate models applied to corporate obligors operating in Mainland China and those outside Mainland China respectively at the group level.

The following table presents all the relevant parameters used for the calculation of counterparty default risk capital requirements for exposures subject to the foundation IRB approach (other than those to CCPs) as at 31st December 2021:

Foundation IRB Approach

		(a)	(b)	(c)	(d)	(e)	(f)	(g)
	PD Scale	EAD post-CRM (HK$ Mn)	Average PD	Number of obligors	Average LGD	Average maturity (Year)	RWA (HK$ Mn)	RWA density
Bank	0.00 to <0.15	5,171	0.07%	38	10.02%	0.9	345	6.68%
	0.15 to <0.25	493	0.21%	26	43.89%	2.4	285	57.71%
	0.25 to <0.50	1,216	0.34%	14	11.86%	1.0	242	19.88%
	0.50 to <0.75	640	0.54%	6	4.15%	0.6	50	7.89%
	0.75 to <2.50	5,221	0.87%	8	3.06%	0.6	329	6.30%
	2.50 to <10.00	37	4.38%	4	45.00%	2.5	64	171.27%
	10.00 to <100.00	0	-	0	-	-	0	-
	100.00 (Default)	0	-	0	-		0	-
	Sub-total	**12,778**	**0.46%**	**96**	**8.47%**	**0.8**	**1,315**	**10.29%**
Corporate	0.00 to <0.15	507	0.09%	13	45.00%	2.5	150	29.69%
	0.15 to <0.25	197	0.24%	16	45.00%	2.5	108	55.01%
	0.25 to <0.50	49	0.33%	12	45.00%	2.5	35	70.96%
	0.50 to <0.75	21	0.52%	7	45.00%	2.5	15	70.16%
	0.75 to <2.50	107	1.33%	19	45.00%	2.5	101	94.62%
	2.50 to <10.00	27	4.12%	13	45.00%	2.5	41	148.01%
	10.00 to <100.00	0	-	0	-	-	0	-
	100.00 (Default)	1	100.00%	1	45.00%		7	562.50%
	Sub-total	**909**	**0.56%**	**81**	**45.00%**	**2.5**	**457**	**50.30%**
Total (sum of all portfolios)		**13,687**	**0.47%**	**177**	**10.89%**	**0.9**	**1,772**	**12.95%**

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

The following table presents a breakdown of all types of collateral posted or recognised collateral received to support or reduce the exposures to counterparty default risk exposures as at 31st December 2021 in respect of derivative contracts or SFTs entered into, including contracts or transactions cleared through a CCP:

	(a)	(b)	(c)	(d)	(e)	(f)
	Derivative contracts				SFTs	
	Fair value of recognised collateral received		Fair value of posted collateral		Fair value of recognised collateral received	Fair value of posted collateral
(HK$ million)	Segregated	Unsegregated	Segregated	Unsegregated		
Cash – domestic currency	0	2,299	0	320	0	17
Cash – other currencies	0	22,659	0	6,046	9,530	0
Debt securities	0	1	0	0	2,055	12,047
Equity securities	0	167	0	0	12	0
Other collateral	0	0	0	0	0	0
Total	**0**	**25,126**	**0**	**6,366**	**11,597**	**12,064**

Template CCR6: Credit-related derivatives contracts

The following table presents the amount of credit-related derivative contracts as at 31st December 2021, broken down into credit protection bought and credit protection sold:

	(a)	(b)
(HK$ million)	Protection bought	Protection sold
Notional amounts		
Credit default swaps	0	0
Total return swaps	0	0
Other credit-related derivative contracts	0	0
Total notional amounts	**0**	**0**
Fair values		
Positive fair value (asset)	0	0
Negative fair value (liability)	0	0

Template CCR8: Exposures to CCPs

The following table provides a comprehensive breakdown of exposures to both qualifying and non-qualifying CCPs and the respective RWAs as at 31st December 2021, covering all types of credit risk exposures (including default risk exposures to the CCPs, credit risk exposures arising from initial margins posted, and default fund contributions made, to the CCPs):

		(a)	(b)
	(HK$ million)	Exposure after CRM	RWA
1	**Exposures of the AI as clearing member or clearing client to qualifying CCPs (total)**		**240**
2	Default risk exposures to qualifying CCPs (excluding items disclosed in rows 7 to 10), of which:	11,807	236
3	(i) OTC derivative transactions	6,965	139
4	(ii) Exchange-traded derivative contracts	4,842	97
5	(iii) Securities financing transactions	0	0
6	(iv) Netting sets subject to valid cross-product netting agreements	0	0
7	Segregated initial margin	0	
8	Unsegregated initial margin	0	0
9	Funded default fund contributions	77	4
10	Unfunded default fund contributions	0	0
11	**Exposures of the AI as clearing member or clearing client to non-qualifying CCPs (total)**		**0**
12	Default risk exposures to non-qualifying CCPs (excluding items disclosed in rows 17 to 20), of which:	0	0
13	(i) OTC derivative transactions	0	0
14	(ii) Exchange-traded derivative contracts	0	0
15	(iii) Securities financing transactions	0	0
16	(iv) Netting sets subject to valid cross-product netting agreements	0	0
17	Segregated initial margin	0	
18	Unsegregated initial margin	0	0
19	Funded default fund contributions	0	0
20	Unfunded default fund contributions	0	0

Table MRA: Qualitative disclosures related to market risk

The Group has established risk governance management framework to oversee and monitor market risk. This framework is built around a structure that enables the Board to discharge the responsibility for on-going market risk management to the Risk Committee, the Risk Management Committee and the Asset and Liability Management Committee. The Asset and Liability Management Committee deals with all market risk-related issues of the Group. It is also responsible for conducting a regular review of market risk trends and deciding the corresponding strategy.

Besides, the Group has implemented Enterprise Risk Management framework for identifying and managing potential risks of the Group. Under such framework, three lines of defence are adopted for market risk management. The first line of defence comprises risk owners at business units. They are primarily responsible for the day-to-day market risk management. The second line of defence refers to the risk controller of market risk, who is designated as the Head of Asset & Liability Management Department and the third line of defence refers to the Internal Audit Division.

The Group Chief Risk Officer coordinates market risk management related matters of the Group, works closely with the Head of Asset & Liability Management Department on the formulation of market risk management policies. Moreover, on a daily basis, the Group Chief Risk Officer is responsible for overseeing the Bank Group's risk management issues which include, but are not limited to, the risk management infrastructure, strategies, appetites, culture, and resources. The Group has formulated the market risk management policy to identify, measure, monitor, control, and report on the market risk, where appropriate, to allocate adequate capital to cover those risks. The market risk management policy and core control limits are approved by the Board and are monitored and regularly reviewed to align with market changes, statutory requirements, and best practices in risk management processes.

Risk appetite has been defined in accordance with the Group's business strategies and objectives to govern the trading book activities in order to optimize risk and return. Hedging is allowed and monitored per market risk management framework.

For measuring and monitoring of market risk, market risk analysis is conducted on different dimensions, such as by risk factors, by regions, by currencies in the form of potential loss and impact to capital adequacy. Risk limits and management action triggers are set with reference to the nature, volume of transaction and risk appetite of the Bank. Multiple systems are employed to facilitate the calculation, measurement and analysis of market risk.

For reporting of market risk, risk reporting for trading book positions is compiled and monitored on a daily basis. Besides, risk reports are prepared for different level of governance on a regular basis.

Table MRB: Additional qualitative disclosures for AI using IMM approach

The calculation of market risk capital charge adopted by the Group is divided into two parts: market risk capital charge for general market risk and market risk capital charge for specific risk. General market risk arising from debt securities, interest rates, equities and FX trading activities of the bank group under scope of capital adequacy consolidation is covered by the VaR and stressed VaR models, while specific risk from debt securities and equities of trading book is separately captured in market risk capital charge via standardised approach.

The Group estimates VaR and stressed VaR for the trading portfolio by historical simulation approach, where the VaR and stressed VaR are calculated by revaluing the portfolio (through full revaluation approach) for each of the market movement scenarios obtained from the historical observation period.

This methodology uses movements in market rates and prices over a one-day holding period (for daily risk management purpose) or ten-day holding period from directly modeled ten-day historical returns (for regulatory purpose) with a 99% confidence level, where the market rates and prices are updated on daily basis in the model.

Two-year equally weighted observations are adopted for VaR, and one-year observations from 2008 to 2009 financial tsunami historical scenario are adopted for stressed VaR. The scenario was chosen according to the assessment of the Group with reference to the severity of different historical scenario and was approved by the Hong Kong Monetary Authority.

Mixed approach is adopted for simulating potential movements in risk factors; where relative return is assumed for FX, equities and implied volatilities risk factors, and absolute return is assumed for interest rate risk factors.

In order to validate the accuracy and internal consistency of data and parameters used for the internal models and modelling processes, back-testing is conducted to compare daily actual / hypothetical profit & loss with VaR results on the trading portfolio.

Template MR1: Market risk under Standardised (market risk) approach (STM approach)

The table below provides the components of the market risk capital requirements calculated using the STM approach exposures as at 31st December 2021:

(HK$ million)	RWA
Outright product exposures	
Interest rate exposures (general and specific risk)	307
Equity exposures (general and specific risk)	579
Option exposures	-
Securitization exposures	-
Total	886

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

The table below presents a flow statement explaining variations in the RWA for market risk determined under the IMM approach for the period from 30th September 2021 to 31st December 2021:

		(a)	(b)	(c)	(d)	(e)	(f)
(HK$ million)		VaR	Stressed VaR	IRC	CRC	Other	Total RWA
1	**RWA as at end of previous reporting period**	**4,027**	**7,906**	**0**	**0**	**0**	**11,933**
1a	Regulatory adjustment	2,763	5,555	0	0	0	8,318
1b	RWA as at day-end of previous reporting period	1,264	2,351	0	0	0	3,615
2	Movement in risk levels	-72	-204	0	0	0	-276
3	Model updates/changes	0	0	0	0	0	0
4	Methodology and policy	0	0	0	0	0	0
5	Acquisitions and disposals	0	0	0	0	0	0
6	Foreign exchange movements	4	2	0	0	0	6
7	Other	-9	-17	0	0	0	-26
7a	RWA as at day-end of reporting period	1,187	2,132	0	0	0	3,319
7b	Regulatory adjustment	2,598	4,985	0	0	0	7,583
8	**RWA as at end of reporting period**	**3,785**	**7,117**	**0**	**0**	**0**	**10,902**

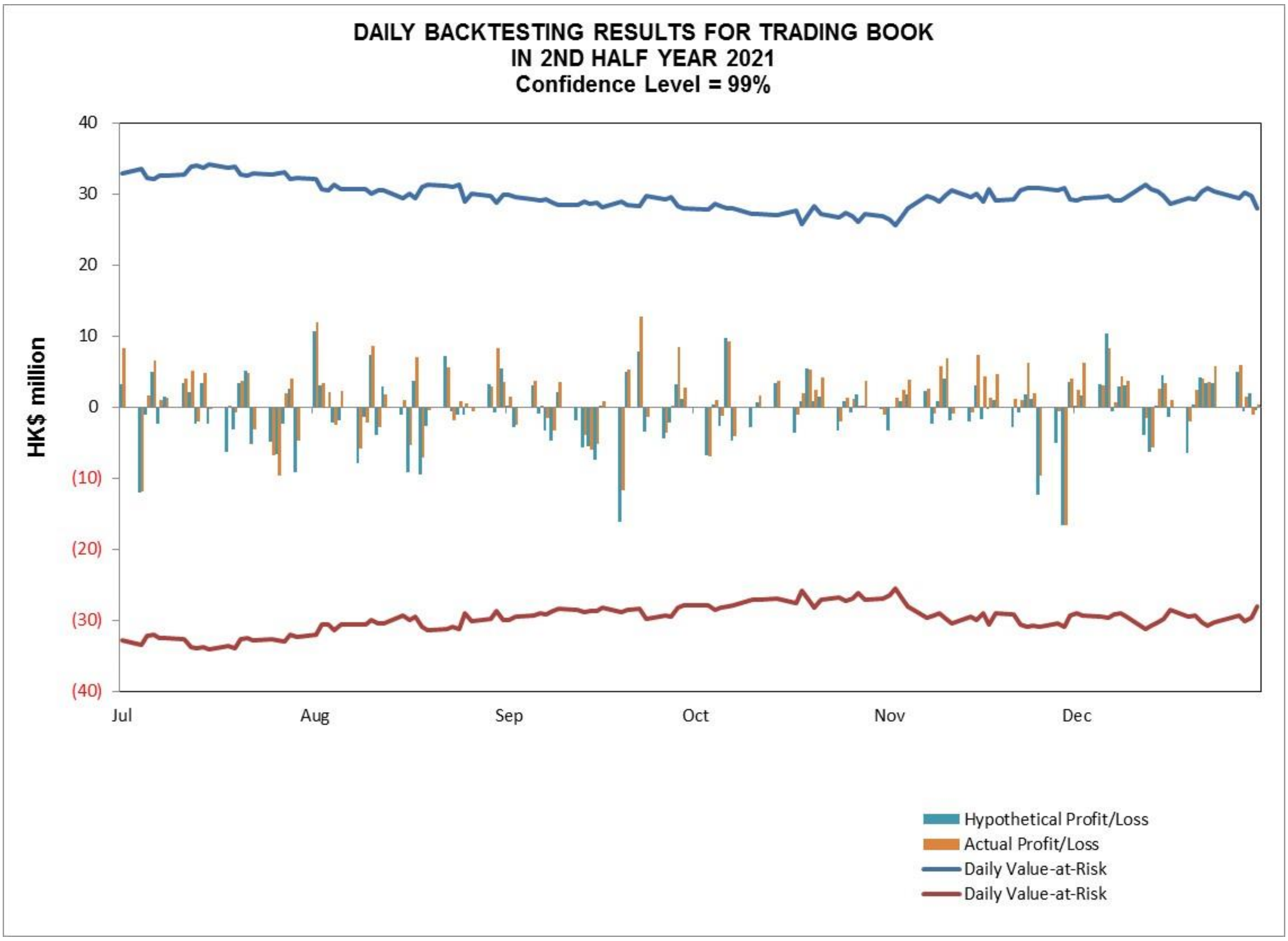
Template MR3: IMM approach values for market risk exposures

The table below discloses the values resulting from the different types of models used for computing the regulatory market risk capital requirement at the group-wide level, before any additional capital charge is applied in the 2nd half year of 2021:

		(a)
(HK$ million)		Value
VaR (10 days – one-tailed 99% confidence interval)		
1	Maximum Value	116
2	Average Value	104
3	Minimum Value	89
4	Period End	95
Stressed VaR (10 days – one-tailed 99% confidence interval)		
5	Maximum Value	229
6	Average Value	200
7	Minimum Value	167
8	Period End	171
Incremental risk charge (IRC) (99.9% confidence interval)		
9	Maximum Value	0
10	Average Value	0
11	Minimum Value	0
12	Period End	0
Comprehensive risk charge (CRC) (99.9% confidence interval)		
13	Maximum Value	0
14	Average Value	0
15	Minimum Value	0
16	Period End	0
17	Floor	0

Template MR4: Comparison of VaR estimates with gains or losses

The graph below presents a comparison of the results of estimates from the key VaR model for calculating market risk capital requirements with both hypothetical and actual trading outcomes:



The actual P/L is the P/L arising from trading activities in the trading book, which excludes reserves, commissions and fees. The hypothetical P/L is calculated by the change of trading book portfolio value assuming the end of day position remains unchanged.

Template KM2: Key metrics – LAC requirements for resolution entities (at LAC consolidation group level)

	(HK$ million)	31 Dec 2021	30 Sep 2021	30 Jun 2021	31 Mar 2021	31 Dec 2020
Of the resolution entity at LAC consolidation group level						
1	External loss-absorbing capacity available	105,838	104,757	102,691	101,071	100,669
2	Risk-weighted amount under the LAC Rules	507,309	502,753	492,165	494,167	494,542
3	External LAC risk-weighted ratio	20.86%	20.84%	20.87%	20.45%	20.36%
4	Exposure measure under the LAC Rules	941,722	936,913	900,572	876,662	879,956
5	External LAC leverage ratio	11.24%	11.18%	11.40%	11.53%	11.44%
6a	Does the subordination exemption in the antepenultimate paragraph of Section 11 of the FSB TLAC Term Sheet apply?[1]	N.A	N.A	N.A	N.A	N.A
6b	Does the subordination exemption in the penultimate paragraph of Section 11 of the FSB TLAC Term Sheet apply?[1]	N.A	N.A	N.A	N.A	N.A
6c	If the capped subordination exemption applies, the amount of funding issued that ranks pari passu with excluded liabilities and that is recognised as external loss-absorbing capacity, divided by funding issued that ranks pari passu with excluded liabilities and that would be recognised as external loss-absorbing capacity if no cap was applied[1]	N.A	N.A	N.A	N.A	N.A

Footnote:

1 The subordination exemptions under Section 11 of the FSB TLAC Term Sheet do not apply in Hong Kong under the LAC Rules.

Template TLAC1: LAC composition of resolution entity (at LAC consolidation group level)

At 31 December 2021		(a) Amount (HK$ Million)
	Regulatory capital elements of external loss-absorbing capacity and adjustments	
1	Common Equity Tier 1 (“CET1”) capital	86,487
2	Additional Tier 1 (“AT1”) capital before LAC adjustments	13,968
3	AT1 capital instruments ineligible as external loss-absorbing capacity as issued by a member of the resolution entity’s LAC consolidation group other than the resolution entity	-
4	Other adjustments[1]	(3,879)
5	AT1 capital eligible under the LAC Rules	10,089
6	Tier 2 (“T2”) capital before LAC adjustments	9,262
7	Amortized portion of T2 capital instruments that are external LAC debt instruments issued by the resolution entity	-
8	T2 capital instruments ineligible as external loss-absorbing capacity as issued by a member of the resolution entity’s LAC consolidation group other than the resolution entity	-
9	Other adjustments	-
10	T2 capital eligible under the LAC Rules	9,262
11	**External loss-absorbing capacity arising from regulatory capital**	105,838
	Non-regulatory capital elements of external loss-absorbing capacity	
12	External non-capital LAC debt instruments issued directly by the resolution entity and that meet subordination requirements set out in the LAC Rules	-
17	**External loss-absorbing capacity arising from non-capital LAC debt instruments before adjustments**	-
	Non-regulatory capital elements of external loss-absorbing capacity: adjustments	
18	**External loss-absorbing capacity before deductions**	105,838
19	Deductions of exposures between the resolution entity’s LAC consolidation group and group companies outside that group that correspond to non-capital items eligible for external loss-absorbing capacity	-
20	Deduction of holdings of its own non-capital LAC liabilities	-
21	Other adjustments to external loss-absorbing capacity	-
22	**External loss-absorbing capacity after deductions**	105,838
	Risk-weighted amount and exposure measure under the LAC Rules for external loss-absorbing capacity purposes	
23	Risk-weighted amount under the LAC Rules	507,309
24	Exposure measure under the LAC Rules	941,722
	External LAC ratios and buffers	
25	**External LAC risk-weighted ratio**	20.86%

Template TLAC1: LAC composition of resolution entity (at LAC consolidation group level) (continued)

At 31 December 2021		(a) **Amount (HK$ Million)**
26	**External LAC leverage ratio**	11.24%
27	**CET1 capital (as a percentage of RWA under the Banking (Capital) Rules ("BCR")) available after meeting the LAC consolidation group's minimum capital and LAC requirements**	12.55%
28	Institution-specific buffer requirement (capital conservation buffer plus countercyclical capital buffer requirements plus higher loss absorbency requirement, expressed as a percentage of RWA under the BCR)	3.878%
29	Of which: capital conservation buffer requirement	2.500%
30	Of which: institution-specific countercyclical capital buffer requirement	0.378%
31	Of which: higher loss absorbency requirement	1.000%

Footnote:

1 The amount deducted in row 4 represents the US$500 million perpetual non-cumulative Additional Tier 1 undated capital securities which had not obtained HKMA acknowledgement as qualifying for LAC at 31 December 2021.

Template TLAC3: Resolution entity – creditor ranking at legal entity level

	(HK$ Million)	Creditor ranking			Sum of values in columns 1 to 3
		1 (most junior)	2	3 (most senior)	
1	Description of creditor ranking	Ordinary Shares	AT1 instruments	T2 instruments	
2	Total capital and liabilities net of credit risk mitigation	41,645	13,968	4,655	60,268
3	Subset of row 2 that are excluded liabilities	-	-	-	-
4	Total capital and liabilities less excluded liabilities	41,645	13,968	4,655	60,268
5	Subset of row 4 that are eligible as external loss-absorbing capacity	41,645	10,089	4,655	56,389
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years	-	-	-	-
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years	-	-	-	-
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years	-	-	4,655	4,655
9	Subset of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities	-	-	-	-
10	Subset of row 5 that is perpetual securities	41,645	10,089	-	51,734

Template CCA(A): Main features of regulatory capital instruments and non-capital LAC debt instruments

Section (i) Only regulatory capital (but not LAC) requirements

		(1)
		US$500 million Additional Tier 1 issued in 2017
1	Issuer	BEA
2	Unique identifier - ISIN	XS1615078141
3	Governing law(s) of the instrument	England (Subordination governed by Hong Kong laws)
3a	Means by which enforceability requirement of Section 13 of the TLAC Term Sheet is achieved (for non-capital LAC debt instruments governed by non-Hong Kong law)	N.A.
	Regulatory treatment	
4	Transitional Basel III rules#	N.A.
5	Post-transitional Basel III rules+	Additional Tier 1
6	Eligible at solo*/group/solo and group (for regulatory capital purposes)	Solo and group
6a	Eligible at solo* / LAC consolidation group / solo and LAC consolidation group (for LAC purposes)	N.A.
7	Instrument type	Perpetual non-cumulative Additional Tier 1 capital securities
8	Amount recognised in regulatory capital (at 31/12/2021)	HK$3,879 Mn
8a	Amount recognised in loss-absorbing capacity (at 31/12/2021)	N.A.
9	Par value of instrument	Issue price: US$500 million : 100%
10	Accounting classification	Equity
11	Original date of issuance	18th May, 2017
12	Perpetual or dated	Perpetual
13	Original maturity date	No maturity
14	Issuer call subject to prior supervisory approval	Yes
15	Optional call date, contingent call dates and redemption price	First call date : 18th May, 2022 Included tax and regulatory call options Redemptions in whole at 100% with accrued dividends, final amount subject to adjustment following occurance of a Non-Viability Event
16	Subsequent call dates, if applicable	Any payment dates thereafter first call date
	Coupons / dividends	
17	Fixed or floating dividend/coupon	Fixed
18	Coupon rate and any related index	Up to 18th May, 2022 : 5.625% p.a. Thereafter and every 5 years thereafter reset at : 5-year U.S. Treasury + 3.682%

Template CCA(A): Main features of regulatory capital instruments and non-capital LAC debt instruments (continued)

Section (i) Only regulatory capital (but not LAC) requirements (continued)

		(1)
		US$500 million Additional Tier 1 issued in 2017
19	Existence of a dividend stopper	Yes
20	Fully discretionary, partially discretionary or mandatory	Fully discretionary
21	Existence of step up or other incentive to redeem	No
22	Noncumulative or cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible
24	If convertible, conversion trigger (s)	N.A.
25	If convertible, fully or partially	N.A.
26	If convertible, conversion rate	N.A.
27	If convertible, mandatory or optional conversion	N.A.
28	If convertible, specify instrument type convertible into	N.A.
29	If convertible, specify issuer of instrument it converts into	N.A.
30	Write-down feature	Yes
31	If write-down, write-down trigger(s)	Occurrence of a "Non-Viability Event", which means the earlier of: (i) the HKMA notifying BEA in writing that the HKMA is of the opinion that a write-off or conversion is necessary, without which BEA would become non-viable; and (ii) the HKMA notifying BEA in writing that a decision has been made by the government body, a government officer or other relevant regulatory body with the authority to make such a decision, that a public sector injection of capital or equivalent support is necessary, without which BEA would become non-viable.
32	If write-down, full or partial	Partial
33	If write-down, permanent or temporary	Permanent
34	If temporary write-down, description of write-up mechanism	N.A.
34a	Type of subordination	Contractual
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument in the insolvency creditor hierarchy of the legal entity concerned).	Immediately subordinated to unsecured senior notes / indebtedness and subordinated Tier 2 notes / indebtedness
36	Non-compliant transitioned features	No
37	If yes, specify non-compliant features	N.A.

Footnotes:
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*

Template CCA(A): Main features of regulatory capital instruments and non-capital LAC debt instruments (continued)

Section (ii) Both regulatory capital and LAC requirements

		(2)	(3)	(4)	(5)
		Ordinary Shares	**US$650 million Additional Tier 1 issued in 2019**	**US$650 million Additional Tier 1 issued in 2020**	**US$600 million Tier 2 due 2030**
1	Issuer	BEA	BEA	BEA	BEA
2	Unique identifier - ISIN	HK0023000190	XS2049804896	XS2222027364	XS2168040744
3	Governing law(s) of the instrument	Hong Kong	England (Subordination, set-off, non-viability loss absorption and Hong Kong Resolution Authority Power governed by Hong Kong laws)	England (Subordination, set-off, non-viability loss absorption and Hong Kong Resolution Authority Power governed by Hong Kong laws)	England (Subordination, set-off, non-viability loss absorption and Hong Kong Resolution Authority Power governed by Hong Kong laws)
3a	Means by which enforceability requirement of Section 13 of the TLAC Term Sheet is achieved (for non-capital LAC debt instruments governed by non-Hong Kong law)	N.A.	N.A.	N.A.	N.A.
	Regulatory treatment				
4	Transitional Basel III rules#	N.A.	N.A.	N.A.	N.A.
5	Post-transitional Basel III rules+	Common Equity Tier 1	Additional Tier 1	Additional Tier 1	Tier 2
6	Eligible at solo*/group/solo and group (for regulatory capital purposes)	Solo and group	Solo and group	Solo and group	Solo and group
6a	Eligible at solo* / LAC consolidation group / solo and LAC consolidation group (for LAC purposes)	Solo and LAC consolidation group	Solo and LAC consolidation group	Solo and LAC consolidation group	Solo and LAC consolidation group
7	Instrument type	Ordinary shares	Perpetual non-cumulative Additional Tier 1 capital securities	Perpetual non-cumulative Additional Tier 1 capital securities	Tier 2 notes
8	Amount recognised in regulatory capital (at 31/12/2021)	HK$41,645 Mn	HK$5,068 Mn	HK$5,021 Mn	HK$4,655 Mn
8a	Amount recognised in loss-absorbing capacity (at 31/12/2021)	HK$41,645 Mn	HK$5,068 Mn	HK$5,021 Mn	HK$4,655 Mn
9	Par value of instrument	N.A.	Issue price: US$650 million : 100%	Issue price: US$650 million : 100%	Issue price : US$600 million: 99.592%
10	Accounting classification	Equity	Equity	Equity	Liability – amortised cost
11	Original date of issuance	Since incorporation	19th September, 2019	21st October, 2020	29th May, 2020
12	Perpetual or dated	N.A.	Perpetual	Perpetual	Dated
13	Original maturity date	N.A.	No maturity	No maturity	29th May, 2030
14	Issuer call subject to prior supervisory approval	No	Yes	Yes	Yes
15	Optional call date, contingent call dates and redemption price	N.A.	First call date : 19th September, 2024 Included tax and regulatory call options Redemptions in whole at 100% with accrued dividends, final amount subject to adjustment following occurance of a Non-Viability Event or the exercise of Hong Kong Resolution Authority Power	First call date : 21st October, 2025 Included tax and regulatory call options Redemptions in whole at 100% with accrued dividends, final amount subject to adjustment following occurance of a Non-Viability Event or the exercise of Hong Kong Resolution Authority Power	One-off call date: 29th May, 2025 Included tax and regulatory call options Redemptions in whole at 100% with accrued interests, final amount subject to adjustment following occurance of a Non-Viability Event or the exercise of Hong Kong Resolution Authority Power
16	Subsequent call dates, if applicable	N.A.	Any payment dates thereafter first call date	Any payment dates thereafter first call date	N.A.
	Coupons / dividends				
17	Fixed or floating dividend/coupon	N.A.	Fixed	Fixed	Fixed
18	Coupon rate and any related index	N.A.	Up to 19th September, 2024 : 5.875% p.a. Thereafter and every 5 years thereafter reset at : 5-year U.S. Treasury + 4.257%	Up to 21st October, 2025 : 5.825% p.a. Thereafter and every 5 years thereafter reset at : 5-year U.S. Treasury + 5.527%	Up to 29th May, 2025: 4% p.a. Thereafter reset at 5-year U.S. Treasury + 3.75%

Template CCA(A): Main features of regulatory capital instruments and non-capital LAC debt instruments (continued)

Section (ii) Both regulatory capital and LAC requirements (continued)

		(2)	(3)	(4)	(5)
		Ordinary Shares	**US$650 million Additional Tier 1 issued in 2019**	**US$650 million Additional Tier 1 issued in 2020**	**US$600 million Tier 2 due 2030**
19	Existence of a dividend stopper	No	Yes	Yes	No
20	Fully discretionary, partially discretionary or mandatory	N.A.	Fully discretionary	Fully discretionary	Mandatory
21	Existence of step up or other incentive to redeem	No	No	No	No
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger (s)	N.A.	N.A.	N.A.	N.A.
25	If convertible, fully or partially	N.A.	N.A.	N.A.	N.A.
26	If convertible, conversion rate	N.A.	N.A.	N.A.	N.A.
27	If convertible, mandatory or optional conversion	N.A.	N.A.	N.A.	N.A.
28	If convertible, specify instrument type convertible into	N.A.	N.A.	N.A.	N.A.
29	If convertible, specify issuer of instrument it converts into	N.A.	N.A.	N.A.	N.A.
30	Write-down feature	No	Yes	Yes	Yes
31	If write-down, write-down trigger(s)	N.A.	Occurrence of a "Non-Viability Event", which means the earlier of: (i) the HKMA notifying BEA in writing that the HKMA is of the opinion that a write-off or conversion is necessary, without which BEA would become non-viable; and (ii) the HKMA notifying BEA in writing that a decision has been made by the government body, a government officer or other relevant regulatory body with the authority to make such a decision, that a public sector injection of capital or equivalent support is necessary, without which BEA would become non-viable.	Occurrence of a "Non-Viability Event", which means the earlier of: (i) the HKMA notifying BEA in writing that the HKMA is of the opinion that a write-off or conversion is necessary, without which BEA would become non-viable; and (ii) the HKMA notifying BEA in writing that a decision has been made by the government body, a government officer or other relevant regulatory body with the authority to make such a decision, that a public sector injection of capital or equivalent support is necessary, without which BEA would become non-viable.	Occurrence of a "Non-Viability Event", which means the earlier of: (i) the HKMA notifying BEA in writing that the HKMA is of the opinion that a write-off or conversion is necessary, without which BEA would become non-viable; and (ii) the HKMA notifying BEA in writing that a decision has been made by the government body, a government officer or other relevant regulatory body with the authority to make such a decision, that a public sector injection of capital or equivalent support is necessary, without which BEA would become non-viable.
32	If write-down, full or partial	N.A.	Partial	Partial	Partial
33	If write-down, permanent or temporary	N.A.	Permanent	Permanent	Permanent
34	If temporary write-down, description of write-up mechanism	N.A.	N.A.	N.A.	N.A.
34a	Type of subordination	Contractual	Contractual	Contractual	Contractual
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument in the insolvency creditor hierarchy of the legal entity concerned).	N.A.	Immediately subordinated to unsecured senior notes / indebtedness, non-preferred loss absorbing capacity notes / indebtedness and subordinated Tier 2 notes / indebtedness	Immediately subordinated to unsecured senior notes / indebtedness, non-preferred loss absorbing capacity notes / indebtedness and subordinated Tier 2 notes / indebtedness	Immediately subordinated to unsecured senior notes / indebtedness and non-preferred loss absorbing capacity notes / indebtedness
36	Non-compliant transitioned features	No	No	No	No
37	If yes, specify non-compliant features	N.A.	N.A.	N.A.	N.A.

There is no capital instrument meeting only LAC (but not regulatory capital) requirements.

Footnotes:
\# *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*

International Claims

The information on international claims discloses exposures to foreign counterparties on which the ultimate risk lies, and is derived according to the location of the counterparties after taking into account any recognised risk transfer. In general, such transfer of risk takes place if the claims are guaranteed by a party in a country which is different from that of the counterparty or if the claims are on an overseas branch of a bank whose head office is located in another country. Only countries constituting 10% or more of the aggregate international claims after taking into account any recognised risk transfer are disclosed.

	31/12/2021					
			Non-bank private sector			
(HK$ million)	Banks	Official sector	Non-bank financial institutions	Non-financial private sector	Others	Total claims
Counterparty country/ jurisdiction						
Developed countries	48,378	100	7,032	27,183	-	82,693
Offshore centres	8,263	271	15,712	62,491	-	86,737
- of which: Hong Kong	4,639	269	12,291	55,182	-	72,381
Developing Asia and Pacific	37,812	3,760	7,884	122,095	-	171,551
- of which: China	21,493	3,758	7,019	117,448	-	149,718

	31/12/2020					
			Non-bank private sector			
(HK$ million)	Banks	Official sector	Non-bank financial institutions	Non-financial private sector	Others	Total claims
Counterparty country/ jurisdiction						
Developed countries	39,595	113	8,964	25,323	-	73,995
Offshore centres	8,686	316	11,989	70,669	-	91,660
- of which: Hong Kong	4,559	312	8,828	62,008	-	75,707
Developing Asia and Pacific	50,339	3,581	9,565	118,420	-	181,905
- of which: China	20,362	3,578	8,306	108,551	-	140,797

The above figures are computed in accordance with the HKMA's guidelines on the return of international banking statistics and the Banking (Disclosure) Rules in respect of the reporting period on the consolidated basis.

Mainland Activities

The table below summaries the non-bank Mainland China exposure of the Bank's Hong Kong Office and the Bank's Mainland subsidiary banks categorised by types of counterparties:

	31/12/2021		
	On-balance sheet exposure	Off-balance sheet exposure	Total
Type of counterparties	HK$ Mn	HK$ Mn	HK$ Mn
1. Central government, central government owned entities and their subsidiaries and joint ventures	33,504	978	34,482
2. Local governments, local government-owned entities and their subsidiaries and joint ventures	20,204	1,714	21,918
3. PRC nationals residing in Mainland China or other entities incorporated in Mainland China and their subsidiaries and joint ventures	173,537	13,282	186,819
4. Other entities of central government not reported in item 1 above	9,776	41	9,817
5. Other entities of local governments not reported in item 2 above	6,597	28	6,625
6. PRC nationals residing outside Mainland China or entities incorporated outside Mainland China where the credit is granted for use in Mainland China	6,399	623	7,022
7. Other counterparties where the exposures are considered by the reporting institution to be non-bank Mainland China exposures	34,957	1,998	36,955
Total	284,974	18,664	303,638
Total assets after provision	846,389		
On-balance sheet exposures as percentage of total assets	33.7%		

Mainland Activities (continued)

	31/12/2020		
	On-balance sheet exposure	Off-balance sheet exposure	Total
	HK$ Mn	HK$ Mn	HK$ Mn
Type of counterparties			
1. Central government, central government-owned entities and their subsidiaries and joint ventures	29,219	966	30,185
2. Local governments, local government-owned entities and their subsidiaries and joint ventures	13,458	2,028	15,486
3. PRC nationals residing in Mainland China or other entities incorporated in Mainland China and their subsidiaries and joint ventures	137,407	10,679	148,086
4. Other entities of central government not reported in item 1 above	7,992	108	8,100
5. Other entities of local governments not reported in item 2 above	4,617	1	4,618
6. PRC nationals residing outside Mainland China or entities incorporated outside Mainland China where the credit is granted for use in Mainland China	5,388	823	6,211
7. Other counterparties where the exposures are considered by the reporting institution to be non-bank Mainland China exposures	41,317	2,941	44,258
Total	239,398	17,546	256,944
Total assets after provision	805,424		
On-balance sheet exposures as percentage of total assets	29.7%		

The above figures are disclosed in accordance with the return relating to Mainland activities the Bank submitted to the HKMA pursuant to section 63 of the Banking Ordinance in respect of the reporting period, which are computed on the consolidated basis as required by the HKMA for its regulatory purposes.

Currency Concentration

The net non-structural position or net structural position in a particular foreign currency is disclosed when the position in that currency constitutes 10% or more of the total net position or total net structural position in all foreign currencies respectively. The net option position is calculated in the basis of the delta-weighted position of all foreign currency option contracts.

	31/12/2021			
	USD HK$ Mn	RMB HK$ Mn	Other foreign currencies HK$ Mn	Total HK$ Mn
Spot assets	250,133	244,343	88,518	582,994
Spot liabilities	(227,188)	(245,657)	(74,695)	(547,540)
Forward purchases	55,460	34,083	11,518	101,061
Forward sales	(75,554)	(33,215)	(24,718)	(133,487)
Net options position	84	(19)	14	79
Net long/(short) non-structural position	2,935	(465)	637	3,107

	31/12/2020			
	USD HK$ Mn	RMB HK$ Mn	Other foreign currencies HK$ Mn	Total HK$ Mn
Spot assets	239,817	224,882	83,489	548,188
Spot liabilities	(222,120)	(223,899)	(68,472)	(514,491)
Forward purchases	70,284	41,295	10,392	121,971
Forward sales	(82,468)	(44,263)	(24,678)	(151,409)
Net options position	(2,795)	2,397	13	(385)
Net long/(short) non-structural position	2,718	412	744	3,874

Currency Concentration (continued)

	31/12/2021				
	USD HK$ Mn	RMB HK$ Mn	MYR HK$ Mn	Other foreign currencies HK$ Mn	Total HK$ Mn
Net structural position	(12,983)	17,014	2,335	985	7,351

	31/12/2020				
	USD HK$ Mn	RMB HK$ Mn	MYR HK$ Mn	Other foreign currencies HK$ Mn	Total HK$ Mn
Net structural position	(12,883)	16,503	2,376	991	6,987

The above figures are disclosed in accordance with the return relating to foreign currency positions the Bank submitted to the HKMA pursuant to section 63 of the Banking Ordinance in respect of the interim reporting period, which are computed on consolidated basis as required by the HKMA for its regulatory purposes.

Capital Buffer

Countercyclical Capital Buffer Ratio

	31/12/2021	31/12/2020
	%	%
Countercyclical capital buffer ratio	0.378	0.388

The relevant disclosures pursuant to section 16FG of the Banking (Disclosure) Rules can be found in Template CCyB1 in this Banking Disclosure Statement.

Capital Conservation Buffer Ratio

Under section 3M of the Capital Rules, the capital conservation buffer ratio for calculating the Bank's buffer level is 2.5% from 2019 onwards.

Higher Loss Absorbency Ratio

The HKMA has designated the Bank as a domestic systematically important authorised institution ("D-SIB") up to 31st December 2021. Under section 3V of the Capital Rules, the higher loss absorbency ratio applicable to the Bank is 1% for 2019 to 2021.

Glossary

Abbreviations	Descriptions
AI	Authorised Institution
BCR	Banking (Capital) Rules
BSC Approach	Basic Approach
CCF	Credit Conversion Factor
CCP	Central Counterparty
CCR	Counterparty Credit Risk
CEM	Current Exposure Method
CF	Commodities Finance
CIS	Collective Investment Scheme
CRC	Comprehensive Risk Charge
CRM	Credit Risk Mitigation
CVA	Credit Valuation Adjustment
D-SIB	Domestic Systemically Important Authorised Institution
DTA	Deferred Tax Asset
EAD	Exposure at Default
ECL	Expected Credit Loss
EL	Expected Loss
EPE	Expected Positive Exposure
FBA	Fall-back Approach
FSB	Financial Stability Board
FX	Foreign Exchange
G-SIB	Global Systemically Important Authorised Institution
HVCRE	High-Volatility Commercial Real Estate
IAA	Internal Assessment Approach
IMM (CCR) Approach	Internal Models (Counterparty Credit Risk) Approach
IMM Approach	Internal Models Approach
IPRE	Income-Producing Real Estate
IRB Approach	Internal Ratings-Based Approach
IRC	Incremental Risk Charge
LAC	Loss-absorbing Capacity
LAC Rules	Financial Institutions (Resolution) (Loss-absorbing Capacity Requirements –Banking Sector) Rules
LGD	Loss Given Default
LTA	Look-through Approach
MBA	Mandate-based Approach
OF	Object Finance
OTC	Over-the-counter
PD	Probability Of Default
PF	Project Finance
PFE	Potential Future Exposure

Glossary (continued)

Abbreviations	Descriptions
PSE	Public Sector Entity
QRRE	Qualifying Revolving Retail Exposures
RW	Risk Weight
RWA	Risk-Weighted Amount
SA-CCR Approach	Standardized (Counterparty Credit Risk) Approach
SEC-ERBA	Securitization External Ratings-Based Approach
SEC-FBA	Securitization Fall-Back Approach
SEC-IRBA	Securitization Internal Ratings-Based Approach
SEC-SA	Securitization Standardized Approach
SFT	Securities Financing Transaction
SRW	Supervisory Risk Weight
STC Approach	Standardized (Credit Risk) Approach
STM Approach	Standardized (Market Risk) Approach
TLAC	Total Loss-absorbing Capacity
VaR	Value-at-Risk