

Bank of Communications (Hong Kong) Limited

(Incorporated in Hong Kong with limited liability)

2022 ANNUAL REPORT



CREATE SHARED VALUE 創造共同價值

Bank of Communications (Hong Kong) Limited

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Report of the Directors

The board of directors of Bank of Communications (Hong Kong) Limited (the "Bank") hereby submit their report with the audited financial statements for the year ended 31 December 2022.

Principal activity

The principal activity of the Bank is provision of banking services in Hong Kong.

Results and appropriations

The results of the Bank for the year are set out in the statement of profit or loss and other comprehensive income on page 9.

The board of directors do not recommend the payment of a dividend in respect of the year ended 31 December 2022.

Business Review

No business review was presented for the year ended 31 December 2022 as the Bank had been able to claim an exemption under section 388(3)(b) of the Companies Ordinance (Cap. 622) since it is a wholly-owned subsidiary of Bank of Communications Co. Ltd (incorporated in People's Republic of China).

Donations

There were no charitable and other donations made by the Bank during the year (2021: HK\$247,000).

Share Capital

There has been no new issue of share capital for the year ended 31 December 2022. Details of the share capital are set out in note 31 to the financial statements.

Directors of the Bank

The directors during the year and up to the date of this report were:

Chairman:

Wang Feng (resigned on 28 January 2022) Hao Cheng (appointed on 7 February 2023)

Executive directors:

Meng Yu (appointed on 3 March 2022) Zhu Bin Fan Chaorong

Non-executive directors:

Hao Cheng (appointed on 7 February 2023) Han Yuemin (appointed on 7 March 2023) Wu Ye (redesignated as Non-executive director on 3 March 2022) Zhu Chen (resigned on 7 July 2022) Ma Zequan (resigned on 26 October 2022)

Independent non-executive directors:

Chan Ka Lok Tang Kwai Chang Chan Ching Har Eliza Lam Yim Nam

Report of the Directors

Directors of the Bank (continued)

Wang Feng resigned on 28 January 2022 as Chairman and executive director of the Bank. Zhu Chen resigned on 7 July 2022 as non-executive director of the Bank and Ma Zequan resigned on 26 October 2022 as non-executive director of the Bank. Wang Feng, Zhu Chen and Ma Zequan had confirmed that they had no disagreement with the Board and nothing relating to the affairs of the Bank needed to be brought to the attention of the shareholders of the Bank.

In accordance with the Bank's Articles of Association, the existing directors except Hao Cheng and Han Yuemin shall remain in the office.

Pursuant to Articles 23.2, 23.5 and 24 of the Bank's Articles of Association, Hao Cheng and Han Yuemin will retire and, being eligible to offer themselves for election as directors of the Bank at the forthcoming Annual General Meeting.

Directors' material interests in transactions, arrangements and contracts that are significant in relation to the Bank's business

No transactions, arrangements and contracts of significance in relation to the Bank's business to which the Bank's fellow subsidiaries or its holding company was a party and in which a director of the Bank had a material interest, whether directly or indirectly, subsisted at the end of the year or at any time during the year.

Directors' interests in the shares and debentures of the Bank or any specified undertaking of the Bank

At no time during the year was the Bank, its fellow subsidiaries or its holding company or its other associated corporations a party to any arrangement to enable the directors of the Bank to (including their spouse and children under 18 years of age) hold any interests in the shares or debentures of, the Bank or its specified undertakings or other associated corporations.

Management contracts

No contracts concerning the management and administration of the whole or any substantial part of the business of the Bank were entered into or existed during the year.

Permitted indemnity provisions

Pursuant to the Bank's Articles of Association, a director or former director of the Bank may be indemnified out of the Bank's assets against any liability incurred by the director to a person other than the Bank or an associated company of the Bank in connection with any negligence, default, breach of duty or breach of trust in relation to the Bank or associated company. The Bank has arranged appropriate directors' and officers' liability insurance for the directors and officers of the Bank during the year and up to the date of the Report of the Directors.

Auditor

A resolution for the re-appointment of KPMG as auditor of the Bank is to be proposed at the forthcoming Annual General Meeting.

On behalf of the Board

Meng Yu, Executive Director

Hong Kong, 3 April 2023



To the Board of Directors of Bank of Communications (Hong Kong) Limited (incorporated in Hong Kong with limited liability)

Opinion

We have audited the financial statements of Bank of Communications (Hong Kong) Limited (the "Bank") set out on pages 9 to 104, which comprise the statement of financial position as at 31 December 2022, the statement of profit or loss and other comprehensive income, the statement of changes in equity and the statement of cash flows for the year then ended and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the financial statements give a true and fair view of the financial position of the Bank as at 31 December 2022 and of its financial performance and its cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the Hong Kong Companies Ordinance.

Basis of Opinion

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Bank in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code") and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matter is the matter that, in our professional judgement, was of most significance in our audit of the financial statements of the current period. This matter was addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on this matter.

Refer to note 3.1 and 19 to the financial statements and the accounting policies on page 29.

ECL allowances on loans and advances to customers

The total allowances for expected credit losses ("ECLs") on the bank's loans and advances to customers as at 31 December 2022 amounted to HK\$2,706 million, comprising of HK\$554 million, HK\$140 million and HK\$2,012 million in stages 1,2 and 3 respectively. Refer to notes 3.1 and 19 to the Bank's financial statements.

ECL allowances of the Bank are determined based on management's assessment of changes in credit quality of the loans and advances to customers since their initial recognition using a three-stage impairment model. Loan exposures are classified as stage 1 when there is no significant increase in credit risk since initial recognition ("SICR"), for which a 12-month ECL allowance is recognised. Loan exposures that experience a significant increase in credit risk since initial recognition are classified as stage 2 and those that are credit-impaired are classified as stage 3. For loan exposures that are classified as stage 2 or stage 3, the loss allowance is measured at an amount equal to lifetime ECL.

For loans and advances to customers classified as stage 1 or stage 2, a risk parameter modelling approach applies, which considers the probability of default, loss given default, exposure at default, and adjustments for forward-looking information, including management's macro-economic forecasts ("MEFs") and their likelihoods. For loans and advances to customers in stage 3, the ECL allowances are determined based on future cash flows expected to be received from those loans and advances.

The application of the ECL modelling methodology and appropriateness of management's assumptions require ongoing assessment as part of the Bank's governance process and particularly essential under the pandemic situation.

How the matter was addressed in our audit

Our audit procedures to assess the ECL allowance on loans and advances to customers included the following:

- Understanding and assessing the design, implementation and operating effectiveness of key internal controls on the governance process over the ECL methodology and the assumptions used in the ECL models, including assessment of significant management judgements applied over SICR and internal credit ratings and determination of probability weighting assigned to economic scenarios and management judgmental adjustment;
- with the involvement of our information technology specialists, assessing the design, implementation and operating effectiveness of key internal controls over key data inputs into source systems, user access management, and interfaces between the source systems and financial reporting system in relation to the ECL assessment.
- With the assistance of our financial risk management specialists, assessing the appropriateness of the key assumptions in the ECL models, including the criteria used by management in determining loss stages, the probability of default, loss given default, adjustments for forwardlooking information and other management adjustments.
- With the assistance of our financial risk management specialists, evaluating the reasonableness and appropriateness of management's estimate of the postmodel adjustment, giving specific considerations to the impact of COVID-19 and performing sensitivity analysis.

Key Audit Matters (continued)

Refer to note 3.1 and 19 to the financial statements and the accounting policies on page 29.

ECL allowances on loans and advances to customers (continued)

Considering the continued impact of the pandemic and the current macroeconomic conditions on loans to local small and medium enterprises ("SMEs') in the Bank's loan portfolio, management made a post-model adjustment for the SMEs loan portfolio as at 31 December 2022.

Determination of significant increase in credit risk, development of the ECL modelling methodology and inputs required significant management judgements.

ECL allowances on loans and advances to customers across the banking industry continues to be an area of elevated focus because of the global economic outlook, including the economies of Hong Kong and Mainland China, and the recovery from the continuing impact of the COVID-19 pandemic.

We identified the measurement of ECL allowances on loans and advances to customers as a key audit matter because of the inherent uncertainty and management judgment involved and because of its significance to the financial results and capital of the Bank.

How the matter was addressed in our audit

- assessing the accuracy of the loan information in the ECL model by comparing individual loan information, on a sample basis, with the underlying agreements and other related documentation;
- assessing, on a sample basis, the reasonableness of the SICR assessment which in turn drives the probability of default used in the ECL calculation. Our assessment considered the financial and non-financial information of the borrowers, along with external information available, including adjusting events occurred after the year end of 31 December 2022, if any.

Information other than the financial statements and auditor's report thereon

The directors are responsible for the other information. The other information comprises all the information included in the annual report, other than the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the directors for the financial statements

The directors are responsible for the preparation of the financial statements that give a true and fair view in accordance with HKFRSs issued by the HKICPA and the Hong Kong Companies Ordinance and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Bank's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Bank or to cease operations, or have no realistic alternative but to do so.

The directors are assisted by the Audit Committee in discharging their responsibilities for overseeing the Bank's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. This report is made solely to you, as a body, in accordance with section 405 of the Hong Kong Companies Ordinance, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with HKSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

• Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

Auditor's responsibilities for the audit of the financial statements (continued)

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Bank's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Bank's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Bank to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Bank to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the Bank audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and, where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Wong Po Shan.

KPMG

Certified Public Accountants 8th Floor, Prince's Building 10 Chater Road Central, Hong Kong

3 April 2023

Statement of Profit or Loss and Other Comprehensive Income (All amounts expressed in thousands of HK\$ unless otherwise stated)

		Year ended 3	1 December
	Notes	2022	2021
Interest income calculated using effective interest rate		12,062,888	6,034,036
Interest expense		(6,568,575)	(2,395,811)
Net interest income	4	5,494,313	3,638,225
Fee and commission income	5	907,045	1,048,521
Fee and commission expense	6	(66,837)	(72,329)
Net fee and commission income		840,208	976,192
Net gains arising from trading activities	8	337,443	218,541
Net (losses)/gains arising from financial investments		(334,984)	216,053
Dividend income	7	35	35
Other operating income	9	33,237	24,646
Change in expected credit losses	10	(1,786,094)	(238,797)
Other operating expenses	11	(1,704,661)	(1,684,057)
Profit before tax		2,879,497	3,150,838
Income tax expenses	14	(472,064)	(480,580)
Net profit for the year		2,407,433	2,670,258
Other comprehensive income for the year, net of tax			
Item that will not be reclassified subsequently to profit or loss:			
Equity investments at fair value through other comprehensive income – net change in fair value		(282)	(828)
Items that may be reclassified to profit or loss:			
Loans and advances to customers at fair value through other comprehensive income Net gains/(losses) recorded in equity		3,473	(3,473)
Debt investments at fair value through other comprehensive income			
Net (losses)/gains recorded in equity		(2,554,881)	1,102,250
Net losses/(gains) reclassified from equity to profit or loss		279,712	(180,404)
Other comprehensive (loss)/income for the year		(2,271,978)	917,545
Total comprehensive income for the year		135,455	3,587,803

Statement of Financial Position

(All amounts expressed in thousands of HK\$ unless otherwise stated)

	As at 31 December		
	Notes	2022	2021
ASSETS			
Cash and balances with central bank	15	2,267,480	10,906,604
Due from and placements with banks and other financial institutions	16	24,547,060	10,959,316
Financial assets at fair value through profit or loss	17	13,577,897	3,635,487
Financial assets at amortized cost	20	49,711,258	16,697,248
Financial assets at fair value through other comprehensive income	20	161,352,270	222,979,531
Loans and advances to customers	19	208,047,769	188,413,081
Property and equipment	21	72,234	76,253
Deferred income tax assets	22	173,195	-
Right-of-use assets	23	169,447	215,163
Other assets	24	7,093,151	3,633,027
Total assets	_	467,011,761	457,515,710
LIABILITIES			
Due to banks and other financial institutions	25	58,293,873	51,898,784
Due to customers	26	338,218,450	331,727,134
Financial liabilities at fair value through profit or loss	27	1,994,313	1,614,593
Certificates of deposits issued	28	1,757,007	3,753,731
Current income tax liabilities		55,143	185,289
Deferred income tax liabilities	22	-	301,937
Lease liabilities	23	172,297	219,127
Debt securities issued	29	7,797,780	7,796,690
Other liabilities	30	8,172,978	9,458,087
Total liabilities	_	416,461,841	406,955,372
EQUITY	_		
Share capital	31	37,900,000	37,900,000
Other reserves		(91,784)	2,180,194
Retained earnings		8,870,254	6,608,694
Total equity attributable to shareholders of the Bank	_	46,678,470	46,688,888
Additional equity instrument	32	3,871,450	3,871,450
Total equity	-	50,549,920	50,560,338
Total equity and liabilities	_	467,011,761	457,515,710

The financial statements were approved and authorized for issuance by the Board of Directors on 3 April 2023 and signed on its behalf by:

Meng Yu, Executive Director

Zhu Bin, Executive Director

Statement of Changes in Equity

(All amounts expressed in thousands of HK\$ unless otherwise stated)

	Notes	Share capital	Other reserve	Retained earnings (Note (a))	Attributable to the shareholder of the Bank	Additional equity instrument	Total equity
At 1 January 2022		37,900,000	2,180,194	6,608,694	46,688,888	3,871,450	50,560,338
Net profit for the year		-	-	2,407,433	2,407,433	-	2,407,433
Other comprehensive income		-	(2,271,978)	-	(2,271,978)	-	(2,271,978)
		37,900,000	(91,784)	9,016,127	46,824,343	3,871,450	50,695,793
Dividends paid to additional equity instrument holders	32	-	-	(145,873)	(145,873)	-	(145,873)
At 31 December 2022		37,900,000	(91,784)	8,870,254	46,678,470	3,871,450	50,549,920
At 1 January 2021		37,900,000	1,262,649	4,083,044	43,245,693	3,871,450	47,117,143
Net profit for the year		-	-	2,670,258	2,670,258	-	2,670,258
Other comprehensive income		-	917,545	-	917,545	-	917,545
		37,900,000	2,180,194	6,753,302	46,833,496	3,871,450	50,704,946
Dividends paid to additional equity instrument holders	32	-	-	(144,608)	(144,608)	_	(144,608)
At 31 December 2021		37,900,000	2,180,194	6,608,694	46,688,888	3,871,450	50,560,338

Note (a):

In accordance with the requirements of the Hong Kong Monetary Authority (the "HKMA"), the regulatory reserve is set aside for general banking risks, including future losses or other unforeseeable risks. The regulatory reserve is set up in compliance with the HKMA's requirements and is distributable to shareholder of the Bank subject to consultation with the HKMA. As at 31 December 2022, HK\$1,271,308,000 (2021: HK\$932,151,000) was earmarked as the regulatory reserve from the retained earnings.

Statement of Cash Flows

(All amounts expressed in thousands of HK\$ unless otherwise stated)

	Year ended 31 December	
	2022	2021
Cash flows from operating activities:		
Profit before tax	2,879,497	3,150,838
Adjustments for:		
Change in expected credit losses	1,786,094	238,797
Depreciation and amortization	34,578	25,890
Depreciation of right-of-use assets	143,268	153,359
Finance costs – lease interest expense	1,751	2,744
Interest expense for debt securities issued	180,424	86,176
Loss on disposal of property and equipment	276	183
Interest income from financial investments	(6,306,940)	(3,222,826)
Fair value losses	40,165	4,495
Dividend income	(35)	(35)
Net gains arising from financial investments	(334,984)	(216,053)
Effect of changes in exchange rates	1,090	-
Operating cash flows before movements in operating assets and liabilities	(1,574,816)	223,568
Net (increase)/decrease in due from and placements with		
banks and other financial institutions	(11,133,991)	2,812,911
Net increase in financial assets at fair value through profit or loss	(9,982,575)	(2,734,549)
Net increase in loans and advances to customers	(21,456,675)	(51,213,845)
Net (increase)/decrease in other assets	(3,040,164)	576,224
Net increase/(decrease) in due to banks and other financial institutions	6,395,089	(19,760,892)
Net increase/(decrease) in financial liabilities at fair value through profit or loss	379,720	(1,169,392)
Net increase in due to customers	6,491,316	85,977,225
Net (decrease)/increase in certificates of deposits issued	(1,996,724)	3,753,731
Net (decrease)/increase in other liabilities	(1,277,188)	4,121,688
Income tax paid	(579,186)	(289,605)
Net cash (outflows)/inflows from operating activities	(37,775,194)	22,297,064

Statement of Cash Flows

(All amounts expressed in thousands of HK\$ unless otherwise stated)

	Year ended 31 December		
Note	2022	2021	
Cash flows from investing activities:			
Purchase of financial investments	(97,094,167)	(117,673,456)	
Disposal or redemption of financial investments	123,305,513	81,331,562	
Dividend received	35	35	
Interest received from financial investments	5,886,681	2,737,918	
Purchase of property and equipment	(23,812)	(41,305)	
Disposal of property and equipment	48	-	
Purchase of intangible assets	(10,385)	(10,253)	
Net cash inflows/(outflows) from investing activities	32,063,913	(33,655,499)	
Cash flows from financing activities:			
Principal elements of lease payments	(144,382)	(153,598)	
Interest paid for lease	(1,751)	(2,744)	
Proceeds from issuance of debt securities	-	7,796,690	
Interest paid for debt securities issued	(180,412)	-	
Dividend paid to additional equity instrument holders	(145,873)	(144,608)	
Net cash (outflows)/inflows from financing activities	(472,418)	7,495,740	
Net decrease in cash and cash equivalents	(6,183,699)	(3,862,695)	
Cash and cash equivalents at the beginning of the year	20,348,021	24,210,716	
Cash and cash equivalents at the end of the year 34	14,164,322	20,348,021	
Net cash flows from operating activities include:			
Interest received	5,801,870	2,597,261	
Interest paid	(4,217,844)	(2,375,821)	

For the year ended 31 December 2022 (All amounts expressed in thousands of HK $\$ unless otherwise stated)

1 GENERAL

Bank of Communications (Hong Kong) Limited ("the Bank") is a bank incorporated and domiciled in Hong Kong. The address of its registered office is 20 Pedder Street, Central, Hong Kong and principal place of business is Unit B B/F & G/F, Unit C G/F,1-3/F,16/F Rm01 & 18/F Wheelock House, 20 Pedder Street, Central, Hong Kong. Its ultimate holding company is Bank of Communications Co., Ltd., which is incorporated in the People's Republic of China.

These financial statements are presented in thousands of Hong Kong Dollars (HK\$), unless otherwise stated.

The regulatory disclosure information required under the Banking (Disclosure) Rules is available in the Regulatory Disclosure Section of our website www.hk.bankcomm.com.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

2.1 Basis of preparation

These financial statements have been prepared in accordance with all applicable Hong Kong Financial Reporting Standards ('HKFRSs') and the requirements of the Hong Kong Companies Ordinance (Cap. 622). The financial statements have been prepared on the historical cost basis except for certain financial instruments which are measured at fair value.

The Bank adopts the going concern basis in preparing its financial statements.

2.1.1 New and revised HKFRSs applied by the Bank

Annual Improvements to HKFRS Standards 2018 – 2020 Cycle

The Annual Improvements to HKFRSs 2018 – 2020 Cycle include a number of amendments to various HKFRSs:

- HKFRS 9 Financial Instruments clarifies which fees should be included in the 10% test for derecognition of financial liabilities.
- HKFRS 16 Leases amendment of its illustrative example to remove the illustration of payments from the lessor relating to leasehold improvements, to remove any confusion about the treatment of lease incentives.
- HKFRS 1 First time Adoption of Hong Kong Financial Reporting Standards allows entities that have measured their assets and liabilities at carrying amounts recorded in their parent's books to also measure any cumulative translation differences using the amounts reported by the parent. This amendment will also apply to associates and joint ventures that have taken the same HKFRS 1 exemption.
- HKAS 41 Agriculture removal of the requirement for entities to exclude cash flows for taxation when measuring fair value under HKAS 41. This amendment is intended to align with the requirement in the standard to discount cash flows on a post-tax basis.

The annual improvements did not have any material impact on the Bank's accounting policies and did not require retrospective adjustments.

For the year ended 31 December 2022

(All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.1 Basis of preparation (continued)

2.1.2 Standards and amendments that are not yet effective and have not been adopted by the Bank

Certain new accounting standards and interpretations have been published that are not mandatory for 31 December 2022 reporting periods and have not been early adopted by the Bank. These standards are not expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

		Effective for annual period commencing on or after
Amendments to HKAS 8	Accounting Estimates	1 January 2023
Amendments to HKAS 1 and HKFRS Practice Statement 2	Disclosure of Accounting Policies	1 January 2023

Amendments to HKAS 8

The changes to HKAS 8 focus entirely on accounting estimates and clarify the following:

- The definition of a change in accounting estimates is replaced with a definition of accounting estimates. Under the new definition, accounting estimates are "monetary amounts in financial statements that are subject to measurement uncertainty".
- Entities develop accounting estimates if accounting policies require items in financial statements to be measured in a way that involves measurement uncertainty.
- The clarification states that a change in accounting estimate that results from new information or new developments is not the correction of an error. In addition, the effects of a change in an input or a measurement technique used to develop an accounting estimate are changes in accounting estimates if they do not result from the correction of prior period errors.
- A change in an accounting estimate may affect only the current period's profit or loss, or the profit or loss of both the current period and future periods. The effect of the change relating to the current period is recognized as income or expense in the current period. The effect, if any, on future periods is recognized as income or expense in those future periods.

Amendments to HKAS 1 and HKFRS Practice Statement 2

Disclosure of Accounting Policies (Amendments to HKAS 1 and HKFRS Practice Statement 2) amends HKAS 1 in the following ways:

- An entity is now required to disclose its material accounting policy information instead of its significant accounting policies;
- Several paragraphs are added to explain how an entity can identify material accounting policy information and to give examples of when accounting policy information is likely to be material;
- The amendments clarify that accounting policy information may be material because of its nature, even if the related amounts are immaterial;
- The amendments clarify that accounting policy information is material if users of an entity's financial statements would need it to understand other material information in the financial statements; and
- The amendments clarify that if an entity discloses immaterial accounting policy information, such information shall not obscure material accounting policy information.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies

2.2.1 Interest income and expense

Interest income and expense are recognized in profit or loss for interest-bearing financial instruments classified under amortized cost and fair value through other comprehensive income using the effective interest method.

The effective interest method is a method of calculating the amortized cost of a financial asset or a financial liability (including a group of financial assets or financial liabilities) and of allocating the interest income or interest expense over the relevant periods. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the Bank estimates cash flows considering all contractual terms of the financial instrument (but does not consider future credit losses). The calculation includes all fees paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs and all other premiums or discounts.

Interest income on an impaired financial asset or a group of impaired similar financial assets is recognized using the original interest rate which was used to discount the future cash flows for the purpose of measuring the impairment loss.

2.2.2 Fee and commission income

Fee and commission income is recognized when the Bank fulfills its performance obligation, either over time or at a point in time when a customer obtains control of the service.

For the performance obligations satisfied at a point in time, the Bank recognizes revenue when control is passed to the customer at a certain point in time. For the performance obligations satisfied over time, the Bank recognizes revenue according to the progress toward satisfaction of the obligation over the time.

2.2.3 Dividend income

Dividends are recognized when the right to receive the dividends is established.

2.2.4 Financial assets and liabilities

Measurement methods

Initial recognition and measurement

Financial assets and financial liabilities are recognized when the Bank becomes a party to the contractual provisions of the instrument. Regular way purchases and sales of financial assets are recognized on trade-date, the date on which the Bank commits to purchase or sell the asset.

At initial recognition, the Bank measures a financial asset or financial liability at its fair value plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are incremental and directly attributable to the acquisition or issue of the financial asset or financial liability, such as fees and commissions. Transaction costs of financial assets and financial liabilities carried at fair value through profit or loss are expensed in profit or loss.

Immediately after initial recognition, an expected credit loss allowance ("ECL") is recognized for financial assets measured at amortized cost and investments in debt instruments measured at financial assets at fair value through other comprehensive, which results in an accounting loss being recognized in profit or loss when an asset is newly originated.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies (continued)

2.2.4 Financial assets and liabilities (continued)

Measurement methods (continued)

Initial recognition and measurement (continued)

When the fair value of financial assets and liabilities differs from the transaction price on initial recognition, the Bank recognizes the difference as follows:

- (a) When the fair value is evidenced by a quoted price in an active market for an identical asset or liability (i.e. a Level 1 input) or based on a valuation technique that uses only data from observable markets, the difference is recognized as a gain or loss.
- (b) In all other cases, the difference is deferred and the timing of recognition of deferred day one profit or loss is determined individually. It is either amortized over the life of the instrument, deferred until the instrument's fair value can be determined using market observable inputs, or realized through settlement.

Amortized cost and effective interest rate

The amortized cost is the amount at which the financial asset or financial liability is measured at initial recognition minus the principal repayments, plus or minus the cumulative amortization using the effective interest method of any difference between that initial amount and the maturity amount and, for financial assets, adjusted for any ECL allowance.

The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial asset or financial liability to the gross carrying amount of a financial asset (i.e. its amortized cost before any impairment allowance) or to the amortized cost of a financial liability. The calculation does not consider expected credit losses and includes transaction costs, premiums or discounts and fees and points paid or received that are integral to the effective interest rate, such as origination fees. For purchased or originated credit-impaired ('POCI') financial assets – assets that are credit-impaired (see definition on note 3.1.2.2) at initial recognition – the Bank calculates the credit-adjusted effective interest rate, which is calculated based on the amortized cost of the financial asset instead of its gross carrying amount and incorporates the impact of expected credit losses in estimated future cash flows.

When the Bank revises the estimates of future cash flows, the carrying amount of the respective financial asset or financial liability is adjusted to reflect the new estimate discounted cash flows using the original effective interest rate. Any changes are recognized in profit or loss.

Interest income

Interest income is calculated by applying the effective interest rate to the gross carrying amount of financial assets classified under amortized cost and fair value through other comprehensive income, except for:

- (a) POCI financial assets, for which the original credit-adjusted effective interest rate is applied to the amortized cost of the financial asset.
- (b) Financial assets that are not 'POCI' but have subsequently become credit-impaired (or 'stage 3'), for which interest revenue is calculated by applying the effective interest rate to their amortized cost (i.e. net of the expected credit loss allowance).

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies (continued)

2.2.4 Financial assets and liabilities (continued)

2.2.4.1 Financial assets

(i) Classification and subsequent measurement

Debt instruments

Debt instruments are those instruments that meet the definition of a financial liability from the issuer's perspective, such as loans, government and corporate bonds.

Classification and subsequent measurement of debt instruments depend on:

- (i) The Bank's business model for managing the asset; and
- (ii) The cash flow characteristics of the asset.

Based on these factors, the Bank classifies its debt instruments into one of the following three measurement categories:

- Amortized cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest ('SPPI'), and that are not designated at fair value through profit or loss, are measured at amortized cost. The carrying amount of these assets is adjusted by any expected credit loss allowance recognized and measured from these financial assets. Interest income from these financial assets is included in 'Interest income' using the effective interest rate method.
- Fair value through other comprehensive income: Financial assets that are held for collection of contractual cash flows and for selling the assets, where the assets' cash flows represent solely payments of principal and interest, and that are not designated at fair value through profit or loss, are measured at fair value through other comprehensive income. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment gains or losses, interest revenue and foreign exchange gains and losses on the instrument's amortized cost which are recognized in profit or loss. When the financial asset is derecognized, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss and recognized in 'Net gains/losses arising from financial investment'. Interest income from these financial assets is recognized in profit or loss and included in 'Interest income' using the effective interest rate method.
- Fair value through profit or loss: Assets that do not meet the criteria for amortized cost or fair value through other comprehensive income are measured at fair value through profit or loss. A gain or loss on a debt investment that is subsequently measured at fair value through profit or loss and is not part of a hedging relationship is recognized in profit or loss within 'Net gains/losses arising from trading activities' in the period in which it arises.

Business model: the business model reflects how the Bank manages the assets in order to generate cash flows. That is, whether the Bank's objective is solely to collect the contractual cash flows from the assets or is to collect both the contractual cash flows and cash flows arising from the sale of assets. If neither of these is applicable (e.g. financial assets are held for trading purposes), then the financial assets are classified as part of 'other' business model and measured at fair value through profit or loss. Factors considered by the Bank in determining the business model for a group of assets include past experience on how the cash flows for these assets were collected, how the asset's performance is evaluated and reported to key management personnel, how risks are assessed and managed and how managers are compensated.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies (continued)

2.2.4 Financial assets and liabilities (continued)

2.2.4.1 Financial assets (continued)

(i) Classification and subsequent measurement (continued)

Debt instruments (continued)

SPPI: Where the business model is to hold assets to collect contractual cash flows or to collect contractual cash flows and sell, the Bank assesses whether the financial instruments' cash flows represent solely payments of principal and interest (the 'SPPI test'). In making this assessment, the Bank considers whether the contractual cash flows are consistent with a basic lending arrangement i.e. interest includes only consideration for the time value of money, credit risk, other basic lending risks and a profit margin that is consistent with a basic lending arrangement. Where the contractual terms introduce exposure to risk or volatility that are inconsistent with a basic lending arrangement, the related financial asset is classified and measured at fair value through profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

The Bank reclassifies debt investments when and only when its business model for managing those assets changes. The reclassification takes place from the start of the first reporting period following the change. Such changes are expected to be very infrequent and none occurred during the period.

Equity instruments

Equity instruments are instruments that meet the definition of equity from the issuer's perspective; that is, instruments that do not contain a contractual obligation to pay and that evidence a residual interest in the issuer's net assets. Examples of equity instruments include basic ordinary shares.

The Bank subsequently measures all equity investments at fair value through profit or loss, except where the Bank's management has elected, at initial recognition, to irrevocably designate an equity investment at fair value through other comprehensive income. The Bank's policy is to designate equity investments as fair value through other comprehensive income when those investments are held for purposes other than to sell. When this election is used, fair value gains and losses are recognized in other comprehensive income and are not subsequently reclassified to profit or loss, including on disposal. Dividends, when representing a return on such investments, continue to be recognized in profit or loss as 'Dividend income' when the Bank's right to receive payments is established.

Gains and losses on equity investments at fair value through profit or loss are recognized in the profit or loss as 'Net gains/ losses arising from trading activities'.

(ii) Impairment

The Bank assesses on a forward-looking basis the ECL associated with its debt instrument assets carried at amortized cost and fair value through other comprehensive income and with the exposure arising from loan commitments and financial guarantee contracts. The Bank recognizes an ECL allowance for such losses at each reporting date. The measurement of ECL reflects:

- An unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- The time value of money; and
- Reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

Regarding these judgment and estimates, refer to Credit Risk management in note 3.1 and note 3.1.2 provides details of how the ECL allowance is measured.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies (continued)

2.2.4 Financial assets and liabilities (continued)

2.2.4.1 Financial assets (continued)

(iii) Modification of loans

The Bank sometimes renegotiates or otherwise modifies the contractual cash flows of loans to customers. When this happens, the Bank assesses whether or not the new terms are substantially different to the original terms. The Bank does this by considering, among others, the following factors:

- If the borrower is in financial difficulty, whether the modification merely reduces the contractual cash flows to amounts the borrower is expected to be able to pay;
- Whether any substantial new terms are introduced, such as a profit share/equity-based return that substantially affects the risk profile of the loan;
- Significant extension of the loan term when the borrower is not in financial difficulty.
- Significant change in the interest rate;
- Change in the currency the loan is denominated in;
- Insertion of collateral, other security or credit enhancements that significantly affect the credit risk associated with the loan.

If the terms are substantially different, the Bank derecognizes the original financial asset and recognizes a 'new' asset at fair value and recalculates a new effective interest rate for the asset. The date of renegotiation is consequently considered to be the date of initial recognition for impairment calculation purposes, including for the purpose of determining whether a significant increase in credit risk has occurred. However, the Bank also assesses whether the new financial asset recognized is deemed to be credit-impaired at initial recognition, especially in circumstances where the renegotiation was driven by the debtor being unable to make the originally agreed payments. Differences in the carrying amount are also recognized in profit or loss as a gain or loss on derecognition.

If the terms are not substantially different, the renegotiation or modification does not result in derecognition, and the Bank recalculates the gross carrying amount based on the revised cash flows of the financial asset and recognizes a modification gain or loss in profit or loss. The new gross carrying amount is recalculated by discounting the modified cash flows at the original effective interest rate (or credit-adjusted effective interest rate for purchased or originated credit-impaired financial assets).

(iv) Derecognition other than on a modification

Financial assets, or a portion thereof, are derecognized when the contractual rights to receive the cash flows from the assets have expired, or when they have been transferred and either (i) the Bank transfers substantially all the risks and rewards of ownership, or (ii) the Bank neither transfers nor retains substantially all the risks and rewards of ownership and the Bank has not retained control.

The Bank enters into transactions where it retains the contractual rights to receive cash flows from assets but assumes a contractual obligation to pay those cash flows to other entities and transfers substantially all of the risks and rewards. These transactions are accounted for as 'pass through' transfers that result in derecognition if the Bank:

- (i) Has no obligation to make payments unless it collects equivalent amounts from the assets;
- (ii) Is prohibited from selling or pledging the assets; and
- (iii) Has an obligation to remit any cash it collects from the assets without material delay.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies (continued)

2.2.4 Financial assets and liabilities (continued)

2.2.4.1 Financial assets (continued)

(iv) Derecognition other than on a modification (continued)

Collateral (shares and bonds) furnished by the Bank under standard repurchase agreements and securities lending and borrowing transactions are not derecognized because the Bank retains substantially all the risks and rewards on the basis of the predetermined repurchase price, and the criteria for derecognition are therefore not met. This also applies to certain securitization transactions in which the Bank retains a subordinated residual interest.

When the contractual rights to receive the cash flows from the assets have been transferred, and the Bank neither transfers nor retains substantially all the risks and rewards of ownership, and the Bank has retained control of the transferred assets, the Bank applies continuing involvement approach. Under this approach, the Bank continues to recognize the transferred asset to the extent of its continuing involvement and recognize the associated liability, to reflect the rights and obligations retained by the Bank. The net carrying amount of the transferred asset and associated liability is: (a) the amortized cost of the rights and obligations retained by the Bank, if the transferred asset is measured at amortized cost; or (b) equal to the fair value of the rights and obligations retained by the Bank when measured on a stand-alone basis, if the transferred asset is measured at fair value.

2.2.4.2 Financial liabilities

(i) Classification and subsequent measurement

In both the current and prior period, financial liabilities are classified as liabilities measured at amortized cost, except for:

- Financial liabilities at fair value through profit or loss: this classification is applied to derivatives, financial liabilities held for trading (e.g. short positions in the trading booking) and other financial liabilities designated as such at initial recognition. Gains or losses on financial liabilities designated at fair value through profit or loss are presented partially in other comprehensive income (the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability, which is determined as the amount that is not attributable to changes in market conditions that give rise to market risk) and partially profit or loss (the remaining amount of change in the fair value of the liability). This is unless such a presentation would create, or enlarge, an accounting mismatch, in which case the gains and losses attributable to changes in the credit risk of the liability are also presented in profit or loss;
- Financial liabilities arising from the transfer of financial assets which did not qualify for derecognition or when the continuing involvement approach applies. When the transfer of financial asset did not qualify for derecognition, a financial liability is recognized for the consideration received for the transfer. In subsequent periods, the Bank recognizes any expense incurred on the financial liability; when continuing involvement approach applies, see note 2.2.4.1(iv); and
- Financial guarantee contracts and loan commitments (see note 2.2.5).

(ii) Derecognition

Financial liabilities are derecognized when they are extinguished (i.e. when the obligation specified in the contract is discharged, cancelled or expired).

The exchange between the Bank and its original lenders of debt instruments with substantially different terms, as well as substantial modifications of the terms of existing financial liabilities, are accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. The terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective interest rate, is more than 10% different from the discounted present value of the remaining cash flows of the original financial liability. In addition, other qualitative factors, such as the currency that the instrument is denominated in, changes in the type of interest rate, new conversion features attached to the instrument and change in covenants are also taken into consideration. If an exchange of debt instruments or modification of terms is accounted for as an extinguishment, any costs or fees incurred are recognized as part of the gain or loss on the extinguishment. If the exchange or modification is not accounted for as an extinguishment, any costs or fees incurred adjust the carrying amount of the liability and are amortized over the remaining term of the modified liability.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies (continued)

2.2.4 Financial assets and liabilities (continued)

2.2.4.3 Offset financial assets and liabilities

Financial assets and liabilities are offsetted and the net amount is reported in the statement of financial position when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the assets and settle the liability simultaneously.

2.2.5 Financial guarantee contracts and loan commitments

Financial guarantee contracts are contracts that require the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due, in accordance with the terms of a debt instrument. Such financial guarantees are given to banks, financial institutions and others on behalf of customers to secure loans, overdrafts and other banking facilities.

Financial guarantee contracts are initially measured at fair value and subsequently measured at the higher of:

- The amount of the ECL allowance; and
- The premium received on initial recognition less income recognized in accordance with the principles of HKFRS 15.

Loan commitments provided by the Bank are measured as the amount of the ECL allowance. The Bank has not provided any commitment to provide loans at a below-market interest rate, or that can be settled net in cash or by delivering or issuing another financial instrument.

For loan commitments and financial guarantee contracts, the ECL allowance is recognized as provision. However, for contracts that include both a loan and an undrawn commitment and the Bank cannot separately identify the expected credit losses on the undrawn commitment component from those on the loan component, the expected credit losses on the undrawn commitment are recognized together with the ECL allowance for the loan. To the extent that the combined expected credit losses exceed the gross carrying amount of the loan, the expected credit losses are recognized as a provision.

2.2.6 Derivatives and hedging activities

The Bank has elected to apply the hedge accounting requirements of HKFRS 9.

Derivatives are initially recognized at fair value on the date on which the derivative contract is entered into and are subsequently remeasured at fair value. All derivatives are carried as assets when fair value is positive and as liabilities when fair value is negative.

Certain derivatives are embedded in hybrid contracts, such as the conversion option in a convertible bond. If the hybrid contract contains a host that is a financial asset, then the Bank assesses the entire contract as described in the financial assets section above for classification and measurement purposes. Otherwise, the embedded derivatives are treated as separate derivatives when:

- (i) Their economic characteristics and risks are not closely related to those of the host contract;
- (ii) A separate instrument with the same terms would meet the definition of a derivative; and
- (iii) The hybrid contract is not measured at fair value through profit or loss.

These embedded derivatives are separately accounted for at fair value, with changes in fair value recognized in the statement of profit or loss unless the Bank chooses to designate the hybrid contracts at fair value through profit or loss.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies (continued)

2.2.6 Derivatives and hedging activities (continued)

The method of recognizing the resulting fair value gain or loss depends on whether the derivative is designated and qualifies as a hedging instrument, and if so, the nature of the item being hedged. The Bank designates certain derivatives as either:

(a) Hedges of the fair value of recognized assets or liabilities or a firm commitment (fair value hedges); or

(b) Hedges of highly probable future cash flows attributable to a recognized asset or liability (cash flow hedges).

At the inception of the hedging, the Bank documents the economic relationship between hedging instruments and hedged items. The Bank documents its risk management objective and strategy for undertaking its hedge transactions. The Bank also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

The fair values of derivative financial instruments designated in hedge relationships are disclosed in note 18. Movements in the hedging reserve in shareholder's equity are shown in statement of changes in equity.

Fair value hedge

Changes in the fair value of derivatives that are designated and qualified as fair value hedges are recorded in the statement of profit or loss, together with changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of a hedged item for which the effective interest method is used is amortized to profit or loss over the period to maturity and recorded as interest income.

Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualified as cash flow hedges is recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in the statement of profit or loss.

Amounts accumulated in equity are recycled to the statement of profit or loss in the periods when the hedged item affects profit or loss. They are recorded in the income or expense lines in which the revenue or expense associated with the related hedged item is reported.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss recognized in other comprehensive income remains in equity and is recognized in the periods when the hedged item affects profit or loss if the forecast cash flows are still expected to occur. When a forecast cash flows is no longer expected to occur (for example, the recognized hedged asset is disposed of), the cumulative gain or loss recognized in other comprehensive income remains of profit or loss.

Certain derivative instruments do not qualify for hedge accounting. Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognized immediately in profit or loss and are included in 'Net gains/losses arising from trading activities'.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies (continued)

2.2.7 Assets transferred under repurchase agreements

Financial assets sold subject to agreements with a commitment to repurchase at a specific future date at a fixed or determinable price are not derecognized in the statement of financial position. The proceeds from selling such assets are presented under "due to banks and other financial institutions" in the statement of financial position. The difference between the selling price and repurchasing price is recognized as interest expense during the term of the agreement using the effective interest method.

2.2.8 Property and equipment

The Bank's property and equipment mainly comprise buildings, equipment, transportation equipment and property improvement.

The assets purchased are initially measured at acquisition cost.

Subsequent expenditures incurred for the property and equipment are included in the cost of the property and equipment if it is probable that economic benefits associated with the asset will flow to the Bank and the subsequent expenditures can be measured reliably. Meanwhile the carrying amount of the replaced part is derecognized. Other subsequent expenditures are recognized in profit or loss in the period in which they are incurred.

Depreciation is calculated on the straight-line method to write down the cost of such assets over their estimated useful lives. The useful lives of assets are reviewed, and adjusted if appropriate, at each financial reporting date.

Buildings comprise primarily branch office premises and office premises. The estimated useful lives and depreciation rate of buildings, equipment, transportation equipment and property improvement are as follows:

Type of assets	Estimated useful lives
Buildings	50 years
Equipment	5 years
Transportation equipment (excluding equipment under operating leases)	3 years
Property improvement	Over the shorter of the economic useful lives and remaining lease terms

An item of property and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

2.2.9 Repossessed assets

Repossessed assets are initially recognized at lower of fair value less cost to sell or amortized cost of the corresponding debt at the date of repossession and included in other assets. At each reporting date, repossessed assets are subsequently measured at lower of fair value less cost to sell and the carrying amount. When the fair value less cost to sell is lower than the carrying amount, an impairment loss is recognized in profit or loss.

When a repossessed asset is disposed, the difference between the disposal proceeds and the carrying amount is recognized in profit or loss.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies (continued)

2.2.10 Intangible assets

An intangible asset is measured initially at cost. When an intangible asset with a finite useful life is available for use, its original cost is amortized over its estimated useful life using the straight-line method. An intangible asset with an indefinite useful life is not amortized.

For an intangible asset with a finite useful life, the Bank reviews the useful life and amortization method at the end of each reporting period, and makes adjustments when necessary.

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from use or disposal. Gains and losses arising from de-recognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

2.2.11 Impairment of non-financial assets

At the end of the reporting period or whenever there is an indication that the non-financial assets are impaired, the Bank reviews the carrying amounts of its tangible and intangible assets with finite useful lives to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss, if any. If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. An impairment loss is recognized in profit or loss immediately.

Intangible assets with indefinite useful life are tested for impairment annually, irrespective of whether there is any indication that the assets may be impaired.

Where an impairment loss subsequently reverses, the carrying amount of the asset is increased to the revised estimate of its recoverable amount, but the increased carrying amount should not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset in prior years. A reversal of an impairment loss is recognized in profit or loss immediately.

2.2.12 Leases

Leases are recognized as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Bank.

Contracts may contain both lease and non-lease components. The Bank allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable; and
- amounts expected to be payable by the Bank under residual value guarantees.

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies (continued)

2.2.12 Leases (continued)

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the Bank, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

To determine the incremental borrowing rate, the Bank:

- where possible, uses recent third-party financing received by the individual lessee as a starting point, adjusted to reflect changes in financing conditions since third party financing was received; and
- makes adjustments specific to the lease, e.g. term, country, currency and security.

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability;
- any lease payments made at or before the commencement date less any lease incentives received;
- any initial direct costs; and
- restoration costs.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Bank is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

2.2.13 Cash and cash equivalents

Cash and cash equivalents are assets with a maturity of less than three months from the date of acquisition or highly liquid assets with an original maturity of less than three months, which are readily convertible into known amounts of cash and subject to an insignificant risk of changes in value.

2.2.14 Provisions

Provisions are recognized when the Bank has a present obligation related to a contingency, it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the obligation can be measured reliably.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the reporting date, taking into account factors pertaining to a contingency such as the risks, uncertainties and time value of money. Where the effect of the time value of money is material, the amount of the provision is determined by discounting the related future cash outflows.

Where all or some of the expenditure required to settle a provision is expected to be reimbursed by a third party, the reimbursement is recognized as a separate asset only when it is virtually certain that reimbursement will be received, and the amount of reimbursement recognized does not exceed the carrying amount of the provision.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies (continued)

2.2.15 Current and deferred income taxes

Income tax expense represents the sum of the tax currently payable and deferred income tax.

(a) Current income tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit as reported in the statement of profit or loss and other comprehensive income because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Bank's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

(b) Deferred income tax

Deferred income tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax base used in the computation of taxable profit. Deferred income tax liabilities are generally recognized for all taxable temporary differences. Deferred income tax assets are generally recognized for all deductible temporary difference to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred income tax assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

The carrying amount of deferred income tax assets is reviewed at the end of the reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset is realized, based on tax rate (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

The measurement of deferred income tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Bank expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities. Current and deferred income tax is recognized in profit or loss, except when it relates to items that are recognized in other comprehensive income, in which case the current and deferred income tax are also recognized in other comprehensive income.

2.2.16 Contingent liabilities and contingencies

A contingent liability is a possible obligation that arises from past events and whose existence will only be confirmed by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Bank. It can also be a present obligation arising from past events that is not recognized because it is not probable that an outflow of economic resources will be required or the amount of obligation cannot be measured reliably.

A contingent liability is not recognized but is disclosed in the notes to the financial statements. When a change in the probability of an outflow occurs so that outflow is probable and the amount can be reliably measured, it will then be recognized as a provision.

2.2.17 Fiduciary activities

In activities where the Bank acts in a fiduciary capacity such as trustee, custodian or agent, the assets and income arising from the transaction together with the related undertakings to return the assets to customers are excluded from the Bank's financial statements.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies (continued)

2.2.18 Acceptances

Acceptances comprise the Bank's commitments on payment for bills that are issued to customers. Acceptances are accounted for as financial guarantees and credit related commitments and are disclosed as contingent liabilities and commitments.

2.2.19 Employee benefits

(i) Employee leave entitlements

Liabilities for wages and salaries, including non-monetary benefits and accumulating sick leave that are expected to be settled wholly within 12 months after the end of the period in which the employees render the related service are recognized in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled.

(ii) Retirement benefit schemes

The Bank contributes to defined contribution schemes under either recognized Occupational Retirement Schemes Ordinance (ORSO) Schemes or Mandatory Provident Fund (MPF) Schemes that are available to the Bank's employees. Contributions to the schemes by the Bank and employees are calculated as a percentage of employees' basic salaries for the ORSO schemes and in accordance with the MPF rules for MPF schemes. When an employee leaves the Bank prior to his/her interest in the Bank's employer non-mandatory contributions vesting with the employee, the ongoing contributions payable by the Bank may be reduced by the relevant amount of forfeited contributions.

The assets of the schemes are held in independently-administered funds separate from those of the Bank.

2.2.20 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker is the person that allocates resources to and assesses the performance of the operating segments of an entity. The Bank has determined the senior management team represented by the Chief Executive as its chief operating decision maker.

An operating segment is a component of the Bank with all of the following conditions are satisfied: (1) that component can earn revenues and incur expenses from ordinary activities; (2) the component's operating results are regularly reviewed by the chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance, and (3) discrete financial information for the component is available to the Bank. If two or more operating segments have similar economic characteristics, and certain conditions are satisfied, they may be aggregated into a single operating segment.

Intra-segment income and expenses are eliminated. Income and expenses directly associated with each segment are considered in determining segment performance.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2 Significant Accounting Policies (continued)

2.2.21 Foreign currency translation

HK\$ is the currency of the primary economic environment in which the Bank operates. Therefore, the Bank chooses HK\$ as their functional currency and adopts HK\$ to prepare its financial statements.

In preparing the financial statements, transactions in currencies other than the functional currency (foreign currencies) are recorded in the respective functional currency at the rates of exchanges prevailing on the dates of the transactions.

At the reporting date, foreign currency monetary items are translated into HK\$ using the spot exchange rates at the reporting date. Exchange differences arising from the differences between the spot exchange rates prevailing at the reporting date and those on initial recognition or at the previous reporting date are recognized in profit or loss for the period except that (1) exchange differences related to hedging instruments for the purpose of hedging against foreign exchange risks are accounted for using hedge accounting and (2) exchange differences arising from fair value through other comprehensive income non-monetary items denominated in foreign currencies and changes in the carrying amounts (other than the amortized cost) of fair value through other comprehensive income monetary items are recognized as other comprehensive income.

2.3 Critical accounting estimates and judgements in applying accounting policies

The preparation of financial statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities, income and expense.

In preparing these financial statements, the significant judgements made by management in applying the Bank's accounting policies and the key sources of estimation uncertainty were as follow:

(a) Measurement of the ECL allowance

The measurement of the expected credit loss allowance for financial assets measured at amortized cost and fair value through other comprehensive income is an area that requires the use of complex models and significant assumptions about future economic conditions and credit behavior (e.g. the likelihood of customers defaulting and the resulting losses). Explanation of the inputs, assumptions and estimation techniques used in measuring ECL is further detailed in note 3.1.2 and 3.1.3, which also sets out key sensitivities of the ECL to changes in these elements.

A number of significant judgements are also required in applying the accounting requirements for measuring ECL, such as:

- Determining criteria for significant increase in credit risk;
- Applying management judgmental adjustment to take into account for the model and data limitations, and expert judgement applied after management's review and challenge;
- Choosing appropriate models and assumptions for the measurement of ECL;
- Establishing the number and relative weightings of forward-looking scenarios for each type of product/market and the associated ECL; and
- Establishing group of similar financial assets for the purposes of measuring ECL.

Detailed information about the judgements and estimates made by the Bank in the above areas is set out in note 3.1.2.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.3 Critical accounting estimates and judgements in applying accounting policies (continued)

(b) Fair value of financial instruments

The fair values of financial instruments that are not quoted in active markets are determined by using valuation techniques (e.g. discounted cash flow model). To the extent practical, models use only observable data, however areas such as credit risk (both own and counterparty's), volatilities and correlations require management to make estimates. Changes in assumptions about these factors could affect reported fair value of financial instruments.

3 FINANCIAL RISK MANAGEMENT

The Bank's activities expose it to a variety of financial risks and those activities involve analysis, evaluation, acceptance and management of a certain degree of risks or a portfolio of risks. The Bank's aim is to achieve an appropriate balance between risk and return and minimize potential adverse effects on the Bank's financial performance.

The Bank's risk management policies are designed to identify and analyze these risks, to set appropriate risk limits and controls, and to monitor the risks and adherence to limits by means of reliable and up-to-date information systems. The Bank regularly reviews its risk management policies and systems to reflect changes in markets, products and the latest best practice.

The Board of Directors sets out strategies and risk preference for overall risk management strategy and decides the risk tolerance level. The senior management establishes related risk management policies and procedures under the strategy approved by the Board of Directors. Business Units act as the first line of defense in risk management while the Risk Management Department undertakes the main risk management operational functions of the Bank. In addition, internal audit department is responsible for the independent review of risk management and the control environment.

The main types of financial risks of the Bank are credit risk, liquidity risk, market risk and operational risk, etc. Market risk also includes foreign exchange risk, interest rate risk and other price risk.

3.1 Credit risk

Credit risk, the risk that a borrower or counterparty of the Bank will be unable or unwilling to honor a repayment obligation, is one of the key risks encountered by the Bank as the Bank's main business is still dominated by credit business such as lending, billing and stock financing. If credit deterioration or default occurs, it will cause certain losses and affect the Bank's business stability. Therefore, the risks must be strictly monitored. Starting with quality of business, the monitoring approach includes not only rigorous credit review but also ongoing post-lending monitoring. This ensures that the non-performing loan ratio is less than risk tolerance and there is sufficient provision for coverage. The Bank manages and controls the overall credit risk in a prudent manner and reports regularly to the senior management and the Board of Directors of the Bank.

3.1.1 Credit risk management

The Bank's credit risk management is assumed by major functions including Corporate Business Management Department, Retail Business Management Department, Credit Card Centre, Credit Management Department, Risk Management Department, and Financial Management Department, which are responsible for the standardized management for corporate and retail credit businesses in terms of credit investment, credit investigation and report, credit approval, loan granting, post-loan monitoring and non-performing loan management.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.1 Credit risk management (continued)

(a) Loans and advances to customers

As for corporate loans, the Bank's relationship managers are responsible for receiving application files submitted by the applicants, conducting pre-loan investigation, assessing the credit risk suffered by applicants and relevant businesses, and completing initial internal rating. The Bank adopts the hierarchical approval system based on the credit approval authority. Credit line is determined by taking into account the credit record, financial position, collaterals and guarantees of the applicant, overall credit risk of the credit portfolio, macroeconomic regulation and control policies and relevant laws and regulations. The Bank keeps a close eye on the economic and financial trend and credit risk profile in the industry and provides more guidance on credit investment by formulating guidance for different industries. It strengthens daily risk pre-warning, monitoring and specific risk investigation to identify customers under major risks and material potential risk points. With improvements in post-loan management, the Bank enhanced the refinement of post-loan management in a practical manner. The independent Credit Management Department shall review the compliance, completeness and effectiveness of relevant credit files before loan granting according to the applications for drawdown of credit line. The Bank's relationship manager is the person primarily responsible for post-loan management. The Bank adopts a series of tools and approaches, such as risk filtering, list management, risk warning and risk investigation, in daily risk monitoring of corporate loans. To minimize the losses arising from credit risks, the Bank manages NPLs mainly through (1) collection; (2) restructuring; (3) disposal of collaterals or recourse to the guarantor; (4) litigation or arbitration; and (5) write-off pursuant to regulations and requirements.

For retail credit assets, the Bank adopts categorized management for retail credit assets on the basis of overdue ageing and type of guarantee. With regard to retail credit customers with overdue loans, different approaches are adopted to collect such loans based on their overdue days. Retail credit businesses overdue by a certain period shall be managed as impaired assets and relevant impairment allowance shall be provided for such assets.

Credit Card Centre accounted for independently by the Bank is in charge of the operation and management of credit card business. Credit Card Centre of the Bank adopts various supervisory and preventive measures simultaneously. It reinforces data cross-validation to enhance risk prevention in the approval process, tightens credit line on high risk customers through secondary credit investigation to enter into the collection process earlier than scheduled, deploys collection strength in a proper manner to significantly enhance collection efficiency, and optimizes data analytic system to further propel the refined management of credit card business.

(b) Treasury business

For treasury business, the Bank chooses banks and other financial institutions prudently and balances the credit risk and return rate of investments. By making reference to internal and external credit rating information, the Bank adopts hierarchical credit and uses an appropriate credit limit management system to review and adjust credit lines, aiming to manage the credit risk exposed to the treasury business.

For debt investments, internal and external ratings (such as Standard and Poor's) are used by the Bank when available for managing the credit risk exposed to debt investments and bills. The investment in those debts and bills is to have better credit quality assets while maintaining readily available funding sources. The bond issuers involved with the Bank are subject to the credit granting review and approval of the Global Markets Department and credit limits are placed on such issuers.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.1 Credit risk management (continued)

(b) Treasury business (continued)

As for derivative instruments, the Bank maintains strict limits on net open derivative investment positions (i.e., the difference between long and short contracts), by both amount and maturity. At any time, the amount subject to credit risk is limited to the current fair value of instruments that are favourable to the Bank (i.e., assets where their fair value is positive), which, in relation to derivative instruments, is only a fraction of the contract's notional amount used to express the amount outstanding. This credit risk exposure is managed as part of the overall lending limits with customers, together with potential exposures from market fluctuations. Collateral or other security is not usually obtained for credit risk exposures on these instruments, except when the Bank requires margin deposits from counterparties. The management has set limits of these contracts according to counterparty, and regularly monitor and control the actual credit risk when the Bank concludes foreign exchange and interest rate contracts with other financial institutions and clients.

The Bank manages the credit quality of due from and placements with banks and other financial institutions by considering the size, financial position and the external credit rating of the banks and financial institutions. The Risk Management Department monitors and reviews the credit risk of due from and placements with banks and other financial institutions by counterparties periodically. Limits are placed on different counterparties.

(c) Credit-related commitments

Credit risk exposures to financial guarantees are the same as that of loans. However, commercial letters of credit are usually pledged by the relevant shipped goods, and therefore is subject to lower risk compared with direct loans. Credit related commitments are included in the management of overall credit line granted to the applicant. For customers with transactions beyond the credit limit or infrequent transactions, the applicant shall be requested to provide relevant guarantee in order to reduce credit risk exposures.

(d) Credit risk quality

In accordance with the Guideline on Loan Classification System issued by the HKMA, the Bank has established a loan credit risk classification system and performs credit risk management based on loan classification in one of five categories. The Bank classifies loans into the following five categories: normal, special-mention, substandard, doubtful and loss, of which substandard, doubtful and loss loans are regarded as non-performing loans.

The five categories of loan classification into which the Bank classifies its loans and advances to customers are set out below:

Pass:	Loans for which borrowers are current in meeting commitments and for which the full repayment of interest and principal is not in doubt.
Special-mention:	Loans with which borrowers are experiencing difficulties and which may threaten the authorized institution's position.
Substandard:	Loans in which borrowers are displaying a definable weakness that is likely to jeopardise repayment.
Doubtful:	Loans for which collection in full is improbable and the authorized institution expects to sustain a loss of principal and/or interest, taking into account the net realizable value of collateral.
Loss:	Loans that are considered uncollectable after all collection options (such as the realization of collateral or the institution of legal proceedings) have been exhausted.

Regarding risk, exposures of the treasury business are classified into five categories based on five categories of loan classification.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.1 Credit risk management (continued)

(e) Credit risk measurement

The Bank has established an internal rating system to measure credit risk arising from default events.

The credit risk internal rating system considers the "probability of default" by debtors (or debts). This is similar to the approach used for the purposes of measuring Expected Credit Loss under HKFRS 9. Please refer to note 3.1.2 for more details.

Probability of default is the probability of occurrence of default event in a given period of time in future.

Exposure at default represents the total amount of on-balance sheet and off-balance sheet exposure at the time of default by debtor, reflecting the total amount of possible losses to be incurred. In general, this includes the utilized credit limit, interest receivable, the anticipated usage of unused credit facilities as well as the related expenses to be incurred.

Loss given default represents the percentage of amount of loss to be occurred in the event of default to the total risk exposure. It is expressed as the loss percentage per unit of exposure which typically varies by nature of debtor, type and seniority of claim and the availability of collaterals or other credit enhancements.

The Bank summarized a series of financial and other related factors to build the internal credit rating model to measure the probability of default, which is based on historical data collection, data statistics and data analysis on the characteristics of risks of the clients/debts before the default occurs. Internal rating model applies the principle of regression to forecast the probability of default and then matches the probability of default with relevant rank of default risk which is used for determination of the borrower's credit ranking within the internal rating system. In order to improve the model's accuracy and stability, the Bank performs evaluation of the model every three months and monitors the results by performing back testing and comparing the results from model using the default from customers.

The above credit risk factors are considered for the measurement of possible credit losses to be incurred, and applied in the daily operations of the Bank.

For retail business, the assets are categorized and credit risk is measured by aging analysis.

For corporate business, the rating is determined at the borrower level. A relationship manager will incorporate any updated or new information/credit assessments into the credit system on an ongoing basis. In addition, the relationship manager will also update information about the creditworthiness of the borrower every year from sources such as public financial statements. This will determine the updated internal credit rating and the probability of default.

For debt securities in the Treasury portfolio, external rating agency credit grades are mapped onto the master scale. These published grades are continuously monitored and updated. The mapping to the master scale will determine the updated internal credit rating and the probability of default.

The Bank's rating method comprises 18 rating levels for instruments not in default (1.1 to 1.4, 2 to 15) and one default class. The master scale assigns each rating category a specific range of probabilities of default, which is stable over time. The rating methods are subject to annual validation and recalibration so that they reflect the latest projections in light of all actual observed defaults. An approximated PD is determined by management to represent the probability of default for unrated exposures.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.1 Credit risk management (continued)

(e) Credit risk measurement (continued)

The Bank's internal rating scale are set out below:

Internal Rating	PD Range	Description of Grade
1.1 – 4	0.03% – 0.53%	Investment Grade
5 – 11	0.53% – 14.07%	Standard Monitoring
12 – 15	14.07% – 99.99%	Special Monitoring
Default	100.00%	Default

3.1.2 Expected credit loss measurement

HKFRS 9 outlines a 'three-stage' model for impairment based on changes in credit quality since initial recognition as summarized below:

If the credit risk on a financial instrument has not increased significantly since initial recognition, the financial instrument is classified in 'Stage 1' and has its credit risk continuously monitored by the Bank.

If a significant increase in credit risk ('SICR') since initial recognition is identified, the financial instrument is moved to 'Stage 2' but is not yet deemed to be credit-impaired. Please refer to note 3.1.2.1 for a description of how the Bank determines when a significant increase in credit risk has occurred.

If the financial instrument is credit-impaired, the financial instrument is then moved to 'Stage 3'. Please refer to note 3.1.2.2 for a description of how the Bank defined credit-impaired and default.

Financial instruments in Stage 1 have their ECL measured at an amount equal to the portion of lifetime expected credit losses that result from default events possible within the next 12 months. Instruments in Stages 2 or 3 have their ECL measured based on expected credit losses on a lifetime basis. Please refer to note 3.1.2.3 for a description of inputs, assumptions and estimation techniques used in measuring the ECL.

A pervasive concept in measuring ECL in accordance with HKFRS 9 is that it should consider forward-looking information. Note 3.1.2.4 includes an explanation of how the Bank has incorporated this in its ECL models.

Purchased or originated credit-impaired financial assets are those financial assets that are credit-impaired on initial recognition. Their ECL is always measured on a lifetime basis.

The following diagram summaries the impairment requirements under HKFRS 9 (other than purchased or originated credit-impaired financial assets):

Stage 1	Stage 2	Stage 3
(Initial recognition)	(Significant increase in credit risk since initial recognition)	(Credit-impaired assets)
12 - month expected credit losses	Lifetime expected credit losses	Lifetime expected credit losses

The key judgements and assumptions adopted at the Bank in addressing the requirements of the standards are addressed below.
For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.2 Expected credit loss measurement (continued)

3.1.2.1 Significant increase in credit risk (SICR)

The criteria for the determination of "a significant increase in credit risk" includes but is not limited to the following factors:

(a) Notch difference

For investment securities, significant increase in credit risk is assessed based on the notch difference threshold by comparing ratings at measurement date and initial recognition date.

Internal Rating	Notch Difference
1.1 – 1.3	4
1.4 – 4	3
5 – 8	2
9 – 15	1

(b) Days past due

Different levels of days past due are considered as significant credit deterioration criteria for different portfolios.

(c) Watch list

Qualitative and forward-looking information, e.g. industry outlook of obligor, future organization, restructure plan of obligor, are considered as criteria of adding to the watch list, which is considered as significant increase in credit risk. For investment securities, significant decrease in market price and external rating are considered as significant increase in credit risk.

(d) HKMA ratings

Under HKMA's Guideline on Loan Classification System, the Special Mention grade is considered as threshold for retail loan, corporate loan and credit card portfolio.

(e) Other risk alarm indicators imply growing potential risk, and could cause losses of financial assets to the Bank.

The financial assets are moveable between stages. For instance, financial instruments originally classified at stage 1 should be downgraded to stage 2 if events occur such as a significant increase in credit risk. Financial instruments at stage 2 could be upgraded to stage 1 if credit risk decreases and the criteria for the determination of "a significant increase in credit risk" are no longer met.

The assessment of significant increase in credit risk incorporates forward-looking information (refer to note 3.1.2.4 for further information) and is performed on a periodic basis at a counterparty level for all financial instruments held by the Bank.

3.1.2.2 Definition of default and credit-impaired assets

The Bank defines a financial instrument as in default, which is fully aligned with the definition of credit-impaired, when it meets one or more of the following criteria:

- The borrower is more than 90 days past due on its contractual payments (with the sole exception of credit card where a borrower only needs to be 60 days past due to be considered in default)
- The borrower has been classified as Substandard, Doubtful or Loss under the HKMA classification system
- The loan has been placed on individual assessment list (applicable only to loans)

The credit impairment definition has been applied consistently to model the probability of default, exposure at default and loss given default throughout the Bank's expected loss calculations.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.2 Expected credit loss measurement (continued)

3.1.2.3 Measuring ECL – Explanation of inputs, assumptions and estimation techniques

The ECL is measured on either a 12-month or lifetime basis depending on whether a significant increase in credit risk has occurred since initial recognition or whether an asset is considered to be credit-impaired. Expected credit losses are the discounted product of the Probability of Default (PD), Exposure at Default (EAD), and Loss Given Default (LGD), defined as follows:

- The PD represents the likelihood of a borrower defaulting on its financial obligation, either over the next 12 months (12M PD), or over the remaining lifetime (Lifetime PD) of the obligation.
- EAD is based on the amounts the Bank expects to be owed at the time of default. For example, for a revolving commitment, the Bank includes the current drawn balance plus any further amount that is expected to be drawn up to the current contractual limit by the time of default, should it occur.
- LGD represents the Bank's expectation of the extent of loss on a defaulted exposure. LGD varies by type of counterparty, type and seniority of claim and availability of collateral or other credit support. LGD is expressed as a percentage loss per unit of exposure at the time of default.

The ECL is determined by projecting the PD, LGD and EAD for each future year and for each individual exposure. These three components are multiplied together and adjusted for the likelihood of survival (i.e. the exposure has not prepaid or defaulted in an earlier year). This effectively calculates an ECL for each future year, which is then discounted back to the reporting date and summed. The discount rate used in the ECL calculation is the original effective interest rate or an approximation thereof.

The Lifetime PD is developed by using forecasted macroeconomic factor to calculate a forecasted 12M PD for the 2nd to 5th year. For the years after the fifth year, it is assumed that the PD will remain the same.

EAD represents the total amount of on-balance sheet and off-balance sheet exposure at the time of default by debtor, reflecting the total amount of possible losses to be incurred. In general, this includes the utilized credit limit, interest receivable, the anticipated usage of unused credit facilities as well as the related expenses to be incurred.

LGDs are determined based on the factors which impact the recoveries made post default. These vary by product type.

- For secured products, this is primarily based on collateral type and projected collateral values, historical discounts to market/ book values due to forced sales, time to repossession and recovery costs observed.
- For unsecured products, LGDs are typically set at product level due to the limited differentiation in recoveries achieved across different borrowers. These LGDs are influenced by collection strategies, including contracted debt sales and price.

3.1.2.4 Forward-looking information incorporated in the ECL models

The assessment of SICR and the calculation of ECL both incorporate forward-looking information. The Bank has performed historical analysis and identified the key economic variables impacting credit risk and expected credit losses for each portfolio.

These economic variables and their associated impact on the PD, EAD and LGD vary by financial instrument. Expert judgment has also been applied in this process. Forecasts of these economic variables to come up with the base economic scenario over the next five years are gathered from different sources including economics team of the Bank of Communications Co. Ltd., Development Strategy Team of the Bank and the International Monetary Fund (IMF). After five years, economic variables are assumed to remain stable and the last available forecast is used. The impact of these economic variables on the PD, EAD and LGD has been determined by performing statistical regression analysis to understand the impact changes in these variables have had historically on default rates and on the components of LGD and EAD.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.2 Expected credit loss measurement (continued)

3.1.2.4 Forward-looking information incorporated in the ECL models (continued)

In addition to the base economic scenario, the Bank's Risk Management Department and Development Strategy Team have also considered other economic scenarios which are calculated using historical data, along with weightings for each of the scenarios. At 31 December 2021 and 31 December 2022, the Bank concluded that three scenarios are used in the calculation. The scenario weightings are determined by expert credit judgement, taking account of the range of possible outcomes each chosen scenario is representative of.

Following this assessment, the Bank then measures ECL as either a probability weighted 12 month ECL (Stage 1), or a probability weighted lifetime ECL (Stages 2 and 3). These probability-weighted ECLs are determined by running each scenario through the relevant ECL model and multiplying it by the appropriate scenario weighting (as opposed to weighting the inputs).

As with any economic forecasts, the projections and likelihoods of occurrence of the economic scenarios are based on estimates to future economic conditions which are sensitive to changes in these conditions caused by macro events, including the COVID-19 pandemic and geopolitical developments. They are therefore subject to a high degree of inherent uncertainty and therefore the actual outcomes may be significantly different to those projected. The Bank considers these forecasts to represent its best estimate of the possible outcomes and has analyzed the asymmetries within the Bank's different portfolios to establish that the chosen scenarios are appropriately representative of the range of possible scenarios. The proposed macroeconomic forecasts and probability weightings are subject to management review.

Economic variable assumptions

The COVID-19 pandemic has created unprecedented economic and social challenges to all regions of the world. In order to limit the spread of COVID-19, different restrictions (including social distancing or lock down) are implemented by governments over the world which resulted in a sharp decline in global economic activities in the year of 2020. At the same time, different forms of relief measures have also been rolled out by governments around the world at unprecedented scale and speed to prevent the further deterioration and support the recovery of economies. As the pandemic containment measures are loosened subsequently, the economic activities in most economies have gradually resumed over time and the recovery has occurred globally in the year of 2022.

The above development of COVID-19 pandemic and geopolitical environment changes in the year of 2022 have added complications to the estimates of the economic scenarios and caused the Bank to revisit its economic scenarios and probability weightings in calculating ECL.

The Bank has continued to adopt the use of three economic scenarios for all portfolios. They represent a most likely scenario (i.e. the "Base" scenario) and two, less likely, "outer" scenarios on either side of the Base scenario, referred to as an "Upside" and a "Downside" scenario respectively. The "Base" scenario can be described as follows: After notable rebound of the global economy is observed in 2021, a mild recovery is observed in 2022 as relief measures are ceased and contractionary monetary policies are implemented in most developed countries. GDP in most regions is rebounded largely in 2021 and further recovered in 2022. However, the level of recovery is highly uneven in the global economy. China's GDP is expanded moderately while a mild recession is observed in Hong Kong. The unemployment rate is further dropped in 2022 in most of the regions compared with the high level of 2020. It is forecasted to return to the growth level similar to that in 2019 gradually over the future years.

Due to above observed changes in macro environment in the year of 2022, the Bank has revised the forecast about future economic conditions.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.2 Expected credit loss measurement (continued)

3.1.2.4 Forward-looking information incorporated in the ECL models (continued)

Economic variable assumptions (continued)

The most significant period-end assumptions used for the ECL estimate as at 31 December 2022 are set out below.

		2023	2024	2025	2026	2027
Hong Kong CPI	Base	2.5%	3.0%	3.0%	3.0%	3.0%
	Upside	6.3%	5.8%	2.8%	-4.0%	-3.7%
	Downside	-1.6%	-3.2%	-2.5%	-0.5%	0.9%
Hong Kong Unemployment rate	Base	3.5%	3.3%	3.0%	3.0%	3.0%
	Upside	2.8%	2.2%	4.7%	6.3%	4.9%
	Downside	5.1%	7.3%	7.9%	6.8%	5.6%
China FI Loans Growth Rate (first	Base	2.0%	0.8%	0.1%	-0.1%	0.0%
difference)	Upside	17.7%	-14.0%	-9.0%	-1.6%	-0.5%
	Downside	-0.8%	-0.1%	8.8%	-5.1%	-3.4%
US Total investment per nominal GDP (first difference)	Base	-0.2%	-0.1%	0.1%	0.1%	0.0%
	Upside	0.4%	0.7%	0.5%	0.5%	0.3%
	Downside	-1.5%	-0.5%	0.0%	0.9%	0.7%

The weightings assigned to each economic scenario as at 31 December 2022 were as follows:

Upside	Base	Downside
10%	80%	10%

The most significant period-end assumptions used for the ECL estimate as at 31 December 2021 are set out below.

		2022	2023	2024	2025	2026
Hong Kong CPI	Base	2.0%	2.5%	2.5%	2.5%	2.5%
	Upside	6.3%	5.8%	2.9%	-4.0%	-3.7%
	Downside	-1.7%	-3.1%	-2.5%	-0.5%	0.9%
Hong Kong Unemployment rate	Base	4.0%	3.5%	3.0%	3.0%	3.0%
	Upside	2.8%	2.2%	4.7%	6.3%	5.0%
	Downside	5.1%	7.3%	7.9%	6.8%	5.6%
China Real GDP (first difference)	Base	-3.0%	0.1%	-0.1%	-0.1%	-0.1%
	Upside	-1.1%	-0.7%	-1.6%	0.0%	0.8%
	Downside	-0.1%	0.7%	1.0%	0.1%	1.2%
US Real GDP (first difference)	Base	-0.8%	-3.0%	-0.5%	0.0%	0.0%
	Upside	1.1%	0.7%	0.0%	0.2%	-0.6%
	Downside	-3.1%	0.8%	1.0%	1.0%	-0.4%

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.2 Expected credit loss measurement (continued)

3.1.2.4 Forward-looking information incorporated in the ECL models (continued)

Economic variable assumptions (continued)

The weightings assigned to each economic scenario as at 31 December 2021 were as follows:

Upside	Base	Downside
10%	80%	10%

Other forward-looking considerations not otherwise incorporated within the above scenarios, such as the impact of any regulatory, legislative or political changes, have also been considered, but are not deemed to have a material impact and therefore no adjustment has been made to the ECL for such factors. This is reviewed and monitored for appropriateness on a regular basis.

Sensitivity analysis

The following table presents the base ECL scenario compared to the probability-weighted ECL derived from using three ECL scenarios. The difference reflects the impact of deriving multiple scenarios around the base ECL and resultant change in ECL due to non-linearity and sensitivity to using macroeconomic forecasts.

Change from Base to Probability-weighted ECL	As at 31 December 2022	As at 31 December 2021
Probability-weighted ECL	2,956,301	1,175,625
Base ECL	2,902,207	1,171,600
Difference in amount	54,094	4,025
Difference in percentage	1.8%	0.3%

Management judgmental adjustment

As Hong Kong's local economy is highly dependent on external circumstances, local tourism, retail, catering and other industries will continue to be under pressure. The relief measures of the Hong Kong government are still maintained. The future risks of loans to local Small and Medium Enterprises ("SMEs") in the Bank's loan portfolio have not been fully reflected in the model, thus management judgmental adjustment has been established and made for the year ended 31 December 2022 and 31 December 2021.

As far as HKFRS 9 is concerned, management judgmental adjustment refers to the short-term increase or decrease in ECL to take into account for model and data limitations, and expert judgement applied after management's review and challenge.

Management judgmental adjustment made in estimating the reported ECL at 31 December 2022 are set out in the following table. The table includes an adjustment in relation to data and model limitations resulting from the COVID-19 pandemic. It shows the adjustment applicable to the probability-weighted ECL.

	As at 31 December 2022	As at 31 December 2021
SMEs lending adjustments	203,175	166,167
Probability-weighted ECL	2,956,301	1,175,625
Percentage of adjustments	6.9%	14.1%
	203,175	166,167

The Bank will continue to monitor the local epidemic and economic situations and the cessation of the government's relief measures, review, timely and periodically, the risks of loans to local SMEs and exit the management judgmental adjustment at an appropriate time.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.3 Credit risk exposure

3.1.3.1 Maximum exposure to credit risk – Financial instruments subject to impairment

The following tables contain an analysis of the credit risk exposure of financial instruments for which an ECL allowance is recognized.

The gross carrying amount of financial assets below also represents the Bank's maximum exposure of credit risk on these assets.

	2022				
Loans and advances to customers at	Stage 1	Stage 2	Stage 3		
amortized cost – Corporate Loan	12 month ECL	Lifetime ECL	Lifetime ECL	Total	
Investment Grade	43,157,927	4,689,895	-	47,847,822	
Standard Monitoring	54,499,232	6,525,882	-	61,025,114	
Special Monitoring	816,817	843,756	-	1,660,573	
Defaults	-	-	5,752,876	5,752,876	
Unrated	33,233,682	752,712	-	33,986,394	
Gross carrying amount	131,707,658	12,812,245	5,752,876	150,272,779	
ECL allowance	(526,961)	(92,350)	(1,982,779)	(2,602,090)	
Carrying amount	131,180,697	12,719,895	3,770,097	147,670,689	

	2021				
Loans and advances to customers at	Stage 1	Stage 2	Stage 3		
amortized cost – Corporate Loan	12 month ECL	Lifetime ECL	Lifetime ECL	Total	
Investment Grade	41,185,222	1,328,584	_	42,513,806	
Standard Monitoring	46,270,011	5,479,839	-	51,749,850	
Special Monitoring	303,094	201,925	-	505,019	
Defaults	-	-	129,154	129,154	
Unrated	37,424,540	1,352,614	-	38,777,154	
Gross carrying amount	125,182,867	8,362,962	129,154	133,674,983	
ECL allowance	(614,132)	(78,712)	(53,131)	(745,975)	
Carrying amount	124,568,735	8,284,250	76,023	132,929,008	

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.3 Credit risk exposure (continued)

3.1.3.1 Maximum exposure to credit risk – Financial instruments subject to impairment (continued)

	2022				
Loans and advances to customers at	Stage 1	Stage 2	Stage 3		
amortized cost – Retail Loan	12 month ECL	Lifetime ECL	Lifetime ECL	Total	
Investment Grade	59,841,951	35,230	-	59,877,181	
Standard Monitoring	114,516	496,945	-	611,461	
Special Monitoring	-	34,782	-	34,782	
Defaults	-	-	48,072	48,072	
Gross carrying amount	59,956,467	566,957	48,072	60,571,496	
ECL allowance	(27,606)	(47,299)	(29,141)	(104,046)	
Carrying amount	59,928,861	519,658	18,931	60,467,450	

	2021				
Loans and advances to customers at	Stage 1	Stage 2	Stage 3		
amortized cost – Retail Loan	12 month ECL	Lifetime ECL	Lifetime ECL	Total	
Investment Grade	52,344,801	20,119	-	52,364,920	
Standard Monitoring	112,867	124,550	-	237,417	
Special Monitoring	-	15,292	-	15,292	
Defaults	_	-	72,815	72,815	
Gross carrying amount	52,457,668	159,961	72,815	52,690,444	
ECL allowance	(85,088)	(30,376)	(23,584)	(139,048)	
Carrying amount	52,372,580	129,585	49,231	52,551,396	

	2022				
Loans and advances to customers at fair value through other comprehensive income	Stage 1 12 month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total	
Investment Grade	_	_	_	-	
Gross carrying amount	-	_	_	-	
ECL allowance	-	-	-	-	
Carrying amount	-	_	_	_	

		2021		
Loans and advances to customers at	Stage 1	Stage 2	Stage 3	
fair value through other comprehensive income	12 month ECL	Lifetime ECL	Lifetime ECL	Total
Investment Grade	2,862,977	_	-	2,862,977
Gross carrying amount	2,862,977	_	-	2,862,977
ECL allowance	(839)	-	-	(839)
Carrying amount	2,862,138	-	-	2,862,138

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.3 Credit risk exposure (continued)

3.1.3.1 Maximum exposure to credit risk - Financial instruments subject to impairment (continued)

	2022			
Due from and placements with banks	Stage 1	Stage 2	Stage 3	
and other financial institutions	12 month ECL	Lifetime ECL	Lifetime ECL	Total
Investment Grade	21,951,402	_	-	21,951,402
Standard Monitoring	2,442,621	-	-	2,442,621
Unrated	155,000	-	-	155,000
Gross carrying amount	24,549,023	-	-	24,549,023
ECL allowance	(1,963)	-	-	(1,963)
Carrying amount	24,547,060	_	-	24,547,060

		2021		
Due from and placements with banks	Stage 1	Stage 2	Stage 3	
and other financial institutions	12 month ECL	Lifetime ECL	Lifetime ECL	Total
Investment Grade	10,959,607	_	_	10,959,607
Standard Monitoring	-	-	-	-
Unrated		-	-	-
Gross carrying amount	10,959,607	_	_	10,959,607
ECL allowance	(291)	-	-	(291)
Carrying amount	10,959,316	_	_	10,959,316

	2022			
Debt securities at fair value through	Stage 1	Stage 2	Stage 3	
other comprehensive income	12 month ECL	Lifetime ECL	Lifetime ECL	Total
Investment Grade	99,048,954	-	-	99,048,954
Standard Monitoring	113,126	-	-	113,126
Unrated	61,560,755	620,848	-	62,181,603
Carrying amount	160,722,835	620,848	-	161,343,683
ECL allowance	(184,196)	(2,177)	-	(186,373)

		2021		
Debt securities at fair value through	Stage 1	Stage 2	Stage 3	
other comprehensive income	12 month ECL	Lifetime ECL	Lifetime ECL	Total
Investment Grade	147,016,679	-	-	147,016,679
Standard Monitoring	372,773	-	-	372,773
Unrated	75,333,219	247,991	-	75,581,210
Carrying amount	222,722,671	247,991	-	222,970,662
ECL allowance	(233,854)	(3,056)	_	(236,910)

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.3 Credit risk exposure (continued)

3.1.3.1 Maximum exposure to credit risk – Financial instruments subject to impairment (continued)

	2022			
	Stage 1	Stage 2	Stage 3	
Debt securities at amortized cost	12 month ECL	Lifetime ECL	Lifetime ECL	Total
Investment Grade	42,305,970	-	_	42,305,970
Standard Monitoring	-	-	-	-
Unrated	8,048,839	199,301	_	8,248,140
Gross carrying amount	50,354,809	199,301	_	50,554,110
ECL allowance	(23,869)	(693)	_	(24,562)
Carrying amount	50,330,940	198,608	_	50,529,548

	2021			
	Stage 1	Stage 2	Stage 3	
Debt securities at amortized cost	12 month ECL	Lifetime ECL	Lifetime ECL	Total
Investment Grade	11,141,431	_	_	11,141,431
Standard Monitoring	-	-	-	-
Unrated	5,569,487	-	-	5,569,487
Gross carrying amount	16,710,918	_	_	16,710,918
ECL allowance	(10,790)	-	-	(10,790)
Carrying amount	16,700,128	-	-	16,700,128

Information on how the Expected Credit Loss (ECL) is measured and how the three stages above are determined is included in note 3.1.2.

3.1.3.2 Maximum exposure to credit risk – Financial instruments

The following table contains an analysis of the maximum credit risk exposure from financial assets not subject to impairment:

	Maximum exposure to credit risk		
	2022	2021	
Financial assets at fair value through profit or loss			
Derivative financial instruments	13,133,770	2,591,909	
Debt securities	444,127	1,043,578	
Total	13,577,897	3,635,487	

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.3 Credit risk exposure (continued)

3.1.3.3 Collateral and other credit enhancements

The Bank manages limits and controls concentrations of credit risk wherever they are identified, in particular, to individual counterparties, banking groups and geographical regions.

The Bank structures the levels of credit risk it undertakes by placing limits in relation to one borrower, or group of borrowers. Such risks are monitored on a regular basis and subject to annual or more frequent reviews, whenever necessary.

The exposure to any single borrower including banks and brokers is further restricted by sub-limits covering on-balance and offbalance sheet exposures, and daily delivery risk limits in relation to trading items such as forward foreign exchange contracts. Actual exposures against limits are monitored daily.

Exposure to credit risk is also managed through regular analysis of the ability of borrowers and potential borrowers to meet interest and principal repayment obligations and by changing their lending limits where appropriate.

Some other specific control and risk mitigation measures are outlined below:

(a) Collaterals

The Bank employs a range of policies and practices to mitigate credit risk. The most useful practice is to accept collaterals. The Bank implements guidelines on the acceptability of specific classes of collaterals. The principal types of collaterals for loans and advances to customers are:

- Residential properties;
- Business assets such as premises, inventory and accounts receivable;
- Financial instruments such as debt securities and stocks.

Long-term loans and advances to corporate and individual customers are generally secured; while revolving individual credit facilities are generally unsecured. In addition, in order to minimize the credit loss the Bank will seek additional collaterals from the counterparties as soon as impairment indicators are noted for the relevant individual loans and advances.

For loans guaranteed by a third-party guarantor, the Bank will assess the financial condition, credit history and ability to meet obligations of the guarantor.

Collaterals held as security for financial assets other than loans and advances to customers are determined by the nature of the instrument. Debt securities and treasury bonds are generally unsecured, with the exception of asset backed securities, which are secured by portfolios of financial instruments.

The Bank closely monitors collateral held for financial assets considered to be credit-impaired, as it becomes more likely that the Bank will take possession of collateral to mitigate potential credit losses. The fair value is capped at lower of carrying amount and fair value. Financial assets that are credit-impaired and related collateral held in order to mitigate potential losses are shown below:

As at 31 December 2022	Gross exposure	ECL allowance	Carrying amount	Fair value of collateral held
Loans to individuals	48,072	(29,141)	18,931	17,489
Loans to corporate entities	5,752,876	(1,982,779)	3,770,097	44,586
	5,800,948	(2,011,920)	3,789,028	62,075

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.3 Credit risk exposure (continued)

3.1.3.3 Collateral and other credit enhancements (continued)

(a) Collaterals (continued)

As at 31 December 2021	Gross exposure	ECL allowance	Carrying amount	Fair value of collateral held
Loans to individuals	72,815	(23,584)	49,231	47,915
Loans to corporate entities	129,154	(53,131)	76,023	31,894
	201,969	(76,715)	125,254	79,809

(b) Master netting arrangements

The Bank further restricts its exposure to credit losses by entering into master netting arrangements with counterparties with which it undertakes a significant volume of transactions. Master netting arrangements do not generally result in an offset of assets and liabilities in the statement of financial position, as transactions are usually settled on a gross basis. However, the credit risk associated with favourable contracts is reduced by a master netting arrangement to the extent that if a default occurs, all amounts with the counterparty are terminated and settled on a net basis. The Bank's overall exposure to credit risk on derivative instruments subject to master netting arrangements can change substantially within a short period, as each transaction subject to the arrangement affects credit risk.

3.1.4 Movements of gross carrying amount and ECL allowance

The ECL allowance recognized in the period is impacted by a variety of factors, such as:

- Transfers between Stage 1 and Stages 2 or 3 due to financial instruments experiencing significant increases (or decreases) of credit risk or becoming credit-impaired in the period, and the consequent step up (or step down) between 12-month and Lifetime ECL;
- Additional allowances for new financial instruments recognized during the period, as well as releases for financial instruments derecognized in the period;
- Impact on the measurement of ECL due to changes in PDs, EADs and LGDs in the period, arising from regular refreshing of inputs to models;
- Applying management judgmental adjustment to take into account for the model and data limitations, and expert judgement applied after management's review and challenge;
- Discount unwind within ECL due to the passage of time, as ECL is measured on a present value basis; and
- Financial assets derecognized during the period and write-offs of allowances related to assets that were written-off during the period (see note 3.1.5).

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.4 Movements of gross carrying amount and ECL allowance (continued)

The following tables explain the changes in the ECL allowance between the beginning and the end of the annual period due to these factors:

Movement of gross amount - Loans and advances to customers at amortized cost

Corporate Loan	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount as at 1 January 2022	125,182,867	8,362,962	129,154	133,674,983
Transfers:				
Transfer from Stage 1 to Stage 2	(4,167,466)	4,167,466	_	-
Transfer from Stage 1 to Stage 3	(1,580,696)	-	1,580,696	-
Transfer from Stage 2 to Stage 1	97,150	(97,150)	-	-
Transfer from Stage 2 to Stage 3	-	(3,744,613)	3,744,613	-
Transfer from stage 3 to stage 1	5,986	-	(5,986)	-
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending (Note 1)	12,171,972	4,123,875	304,402	16,600,249
Write-offs	-	-	-	-
Foreign exchange and other movements	(2,155)	(295)	(3)	(2,453)
Gross carrying amount as at 31 December 2022	131,707,658	12,812,245	5,752,876	150,272,779

Note 1: The balances include the corporate loans originated or purchased in the year and subsequently transferred between stage 1, stage 2 and stage 3 during the year.

Corporate Loan	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount as at 1 January 2021	92,308,570	1,778,994	58,071	94,145,635
Transfers:				
Transfer from Stage 1 to Stage 2	(5,581,666)	5,581,666	-	_
Transfer from Stage 1 to Stage 3	(31,553)	-	31,553	-
Transfer from Stage 2 to Stage 1	139,293	(139,293)	-	-
Transfer from Stage 2 to Stage 3	-	(26,384)	26,384	-
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending (Note 1)	38,255,615	1,167,979	13,190	39,436,784
Write-offs	-	-	(81)	(81)
Foreign exchange and other movements	92,608	-	37	92,645
Gross carrying amount as at 31 December 2021	125,182,867	8,362,962	129,154	133,674,983

Note 1: The balances include the corporate loans originated or purchased in the year and subsequently transferred between stage 1, stage 2 and stage 3 during the year.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.4 Movements of gross carrying amount and ECL allowance (continued)

Movement of ECL allowance - Loans and advances to customers at amortized cost

	Stage 1 12-month ECL	12-month ECL Lifetime ECL Lifetime ECL		
Corporate loan	allowance	allowance	allowance	Total
ECL allowance as at 1 January 2022	614,132	78,712	53,131	745,975
Transfers:				
Transfer from Stage 1 to Stage 2	(14,714)	14,714	_	-
Transfer from Stage 1 to Stage 3	(9,151)	-	9,151	-
Transfer from Stage 2 to Stage 1	14,735	(14,735)	-	-
Transfer from Stage 2 to Stage 3	-	(19,909)	19,909	-
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and further lending	32,936	29,415	17,022	79,373
Changes in PDs/LGDs/EADs	(110,904)	2,780	1,883,568	1,775,444
Unwind of discount	-	1,374	_	1,374
Write-offs	-	_	_	_
Foreign Exchange and other movements	(73)	(1)	(2)	(76)
ECL allowance amount as at 31 December 2022	526,961	92,350	1,982,779	2,602,090
Corporato Joan	Stage 1 12-month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total
Corporate loan	allowance	allowance	allowance	
ECL allowance as at 1 January 2021	297,231	80,938	25,418	403,587
Transfers:				
Transfer from Stage 1 to Stage 2	(12,539)	12,539	-	-
Transfer from Stage 1 to Stage 3	(145)	-	145	-
Transfer from Stage 2 to Stage 1	18,182	(18,182)	-	-
Transfer from Stage 2 to Stage 3	-	(1,150)	1,150	-
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and further lending	279,530	(1,420)	16,558	294,668
Changes in PDs/LGDs/EADs	31,483	4,728	9,907	46,118
Unwind of discount		1,259	5,507	1,259
Write-offs	_		(81)	(81)
Foreign Exchange and other movements	390	_	34	424
ECL allowance amount as at 31 December 2021		70 71 2		
ECL anowance amount as at 31 December 2021	614,132	78,712	53,131	745,975

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.4 Movements of gross carrying amount and ECL allowance (continued)

Movement of gross amount - Loans and advances to customers at amortized cost

Retail Loan	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount as at 1 January 2022	52,457,668	159,961	72,815	52,690,444
Transfers:				
Transfer from Stage 1 to Stage 2	(428,781)	428,781	_	_
Transfer from Stage 1 to Stage 3	(20,755)	-	20,755	_
Transfer from Stage 2 to Stage 1	87,001	(87,001)	-	-
Transfer from Stage 2 to Stage 3	-	(9,609)	9,609	-
Transfer from Stage 3 to Stage 1	34,043	-	(34,043)	-
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending (Note)	7,827,727	74,827	(15,525)	7,887,029
Write-offs	-	-	(5,537)	(5,537)
Foreign exchange and other movements	(436)	(2)	(2)	(440)
Gross carrying amount as at 31 December 2022	59,956,467	566,957	48,072	60,571,496

Note: The balances include the retail loans originated or purchased in the year and subsequently transferred between stage 1, stage 2 and stage 3 during the year.

Retail Loan	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount as at 1 January 2021	43,122,089	624,159	47,811	43,794,059
Transfers:				
Transfer from Stage 1 to Stage 2	(112,266)	112,266	-	-
Transfer from Stage 1 to Stage 3	(45,655)	-	45,655	-
Transfer from Stage 2 to Stage 1	509,552	(509,552)	-	-
Transfer from Stage 2 to Stage 3	-	(9,741)	9,741	-
Transfer from Stage 3 to Stage 1	8,227	-	(8,227)	-
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending (Note)	8,971,804	(57,362)	(16,805)	8,897,637
Write-offs	-	-	(5,360)	(5,360)
Foreign exchange and other movements	3,917	191	_	4,108
Gross carrying amount as at 31 December 2021	52,457,668	159,961	72,815	52,690,444

Note: The balances include the retail loans originated or purchased in the year and subsequently transferred between stage 1, stage 2 and stage 3 during the year.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.4 Movements of gross carrying amount and ECL allowance (continued)

Movement of ECL allowance - Loans and advances to customers at amortized cost

Wovement of LCL anowance - Loans and advances	to customers at and	57 112 CG COST		
	Stage 1	Stage 2	Stage 3	
	12-month ECL	Lifetime ECL	Lifetime ECL	
Retail Loan	allowance	Allowance	allowance	Total
ECL allowance amount as at 1 January 2022	85,088	30,376	23,584	139,048
Transfers:				
Transfer from Stage 1 to Stage 2	(957)	957	_	-
Transfer from Stage 1 to Stage 3	(61)	-	61	-
Transfer from Stage 2 to Stage 1	16,601	(16,601)	_	-
Transfer from Stage 2 to Stage 3	-	(1,716)	1,716	-
Transfer from Stage 3 to Stage 1	1	-	(1)	-
New financial assets originated or purchased, assets				
remeasurement, derecognized, repayments and	(6.0.0)			
further lending	(6,843)	13,196	3,081	9,434
Changes in PDs/LGDs/EADs	(66,221)	20,681	5,888	(39,652)
Recoveries of loans written-off in previous years	-	-	351	351
Write-offs	-	-	(5,537)	(5,537)
Unwind of discount	-	407	-	407
Foreign Exchange and other movements	(2)	(1)	(2)	(5)
ECL allowance amount as at 31 December 2022	27,606	47,299	29,141	104,046
	Ctore 1	Stara 2	Stage 2	
	Stage 1	Stage 2	Stage 3	
Detail Loop	12-month ECL	Lifetime ECL	Lifetime ECL	Tatal
Retail Loan	allowance	Allowance	allowance	Total
ECL allowance amount as at 1 January 2021	83,968	68,427	18,815	171,210
Transfers:				
Transfer from Stage 1 to Stage 2	(456)	456	-	-
Transfer from Stage 1 to Stage 3	(129)	-	129	-
Transfer from Stage 2 to Stage 1	50,071	(50,071)	-	-
Transfer from Stage 2 to Stage 3	-	(2,757)	2,757	-
Transfer from Stage 3 to Stage 1	76	-	(76)	-
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	16,449	(5,211)	(1,165)	10,073
Changes in PDs/LGDs/EADs	(64,903)	18,520	8,251	(38,132)
Recoveries of loans written-off in previous years	-	-	233	233
Write-offs	-	-	(5,360)	(5,360)
Unwind of discount	-	988	-	988
Foreign Exchange and other movements	12	24	-	36
ECL allowance amount as at 31 December 2021	85,088	30,376	23,584	139,048
		20,0.0		

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.4 Movements of gross carrying amount and ECL allowance (continued)

Movement of ECL allowance - Loans and advances to customers at amortized cost (continued)

Wovement of LCL anowance - Loans and advances	Stage 1	Stage 2	Stage 3	
	12-month ECL	Lifetime ECL	Lifetime ECL	
Loans and advances to customers	allowance	allowance	allowance	Total
ECL allowance amount as at 1 January 2022	699,220	109,088	76,715	885,023
Transfers:				
Transfer from Stage 1 to Stage 2	(15,671)	15,671	_	_
Transfer from Stage 1 to Stage 3	(9,212)	-	9,212	-
Transfer from Stage 2 to Stage 1	31,336	(31,336)	-	-
Transfer from Stage 2 to Stage 3	-	(21,625)	21,625	-
Transfer from Stage 3 to Stage 1	1	_	(1)	-
New financial assets originated or purchased, assets				
remeasurement, derecognized, repayments and				
further lending	26,093	42,611	20,103	88,807
Changes in PDs/LGDs/EADs	(177,125)	23,461	1,889,456	1,735,792
Unwind of discount	-	1,781	-	1,781
Recoveries of loans written-off in previous years	-	-	351	351
Write-offs	-	-	(5,537)	(5,537)
Foreign Exchange and other movements	(75)	(2)	(4)	(81)
ECL allowance amount as at 31 December 2022	554,567	139,649	2,011,920	2,706,136
	Stage 1	Stage 2	Stage 3	
	12-month ECL	Lifetime ECL	Lifetime ECL	
Loans and advances to customers	allowance	allowance	allowance	Total
ECL allowance amount as at 1 January 2021	381,199	149,365	44,233	574,797
Transfers:	,		,	
Transfer from Stage 1 to Stage 2	(12,995)	12,995	_	_
Transfer from Stage 1 to Stage 3	(274)	-	274	-
Transfer from Stage 2 to Stage 1	68,253	(68,253)	-	-
Transfer from Stage 2 to Stage 3	-	(3,907)	3,907	-
Transfer from Stage 3 to Stage 1	76	-	(76)	-
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	295,979	(6,631)	15,393	304,741
Changes in PDs/LGDs/EADs	(33,420)	23,248	18,158	7,986
Unwind of discount	-	2,247	-	2,247
Recoveries of loans written-off in previous years	-	-	233	233
Write-offs	-	-	(5,441)	(5,441)
Foreign Exchange and other movements	402	24	34	460
ECL allowance amount as at 31 December 2021	699,220	109,088	76,715	885,023
		•		

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.4 Movements of gross carrying amount and ECL allowance (continued)

Movement of gross amount - Loans and advances to customers at fair value through other comprehensive income

Loans and advances to customers at fair value

through other comprehensive income	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount as at 1 January 2022	2,862,977	_	_	2,862,977
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	(2,862,977)	_	-	(2,862,977)
Gross carrying amount as at 31 December 2022	_	-	_	-
Loans and advances to customers at fair value through other comprehensive income	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount as at 1 January 2021	-	_	_	_
New financial assets originated or purchased, assets derecognized, repayments and further lending	2,862,977	_	_	2,862,977
Gross carrying amount as at 31 December 2021	2,862,977	_	_	2,862,977

Movement of ECL allowance - Loans and advances to customers at fair value through other comprehensive income

Loans and advances to customers at fair value through other comprehensive income	Stage 1 12-month ECL allowance	Stage 2 Lifetime ECL Allowance	Stage 3 Lifetime ECL allowance	Total
ECL allowance amount as at 1 January 2022	839	_	_	839
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	(839)	-	-	(839)
ECL allowance amount as at 31 December 2022	-	-	-	-
	Stage 1	Stage 2	Stage 3	
Loans and advances to customers at fair value through other comprehensive income	12-month ECL allowance	Lifetime ECL Allowance	Lifetime ECL allowance	Total
ECL allowance amount as at 1 January 2021	_	_	-	_
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	839	-	-	839
ECL allowance amount as at 31 December 2021	839	-	-	839

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.4 Movements of gross carrying amount and ECL allowance (continued)

Movement of gross carrying amount – Due from and placements with banks and other financial institutions

Due from and placements with banks and other

financial institutions	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount as at 1 January 2022	10,959,607	-	-	10,959,607
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	13,795,111	-	-	13,795,111
Foreign exchange and other movements	(205,695)	-	_	(205,695)
Gross carrying amount as at 31 December 2022	24,549,023	-	-	24,549,023
Due from and placements with banks and other financial institutions	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount as at 1 January 2021	20,102,867	_	-	20,102,867
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	(9,116,644)	-	-	(9,116,644)
Foreign exchange and other movements	(26,616)	-	-	(26,616)
Gross carrying amount as at 31 December 2021	10,959,607	-	-	10,959,607

Movement of ECL allowance - Due from and placements with banks and other financial institutions

Due from and placements with banks and other financial institutions	Stage 1 12-month ECL allowance	Stage 2 Lifetime ECL allowance	Stage 3 Lifetime ECL allowance	Total
ECL allowance amount as at 1 January 2022	291	-	-	291
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	1,878	-	-	1,878
Change in PDs/LGDs/EADs	(184)	-	-	(184)
Foreign exchange and other movements	(22)	-	-	(22)
ECL allowance amount as at 31 December 2022	1,963	-	-	1,963
Due from and placements with banks and other financial institutions	Stage 1 12-month ECL allowance	Stage 2 Lifetime ECL allowance	Stage 3 Lifetime ECL allowance	Total
ECL allowance amount as at 1 January 2021	8,131	_	_	8,131
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and further lending	(5,285)	_	-	(5,285)
Change in PDs/LGDs/EADs	(2,570)	-	-	(2,570)
Foreign exchange and other movements	15	-	-	15
ECL allowance amount as at 31 December 2021	291	_	-	291

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.4 Movements of gross carrying amount and ECL allowance (continued)

Movement of carrying amount - Debt securities at fair value through other comprehensive income

Debt securities at fair value through other

comprehensive income	Stage 1	Stage 2	Stage 3	Total
Carrying amount as at 1 January 2022	222,722,671	247,991	_	222,970,662
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	(58,991,647)	372,885	-	(58,618,762)
Foreign exchange and other movements	(3,008,189)	(28)	-	(3,008,217)
Carrying amount as at 31 December 2022	160,722,835	620,848	_	161,343,683
Debt securities at fair value through other comprehensive income	Stage 1	Stage 2	Stage 3	Total
Carrying amount as at 1 January 2021	201,938,126	_	-	201,938,126
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	20,671,717	247,991	-	20,919,708
Foreign exchange and other movements	112,828	-	_	112,828
Carrying amount as at 31 December 2021	222,722,671	247,991	_	222,970,662

Movement of ECL allowance - Debt securities at fair value through other comprehensive income

Debt securities at fair value through other comprehensive income	Stage 1 12-month ECL allowance	Stage 2 Lifetime ECL allowance	Stage 3 Lifetime ECL allowance	Total
ECL allowance amount as at 1 January 2022	233,854	3,056	-	236,910
Transfers:				
Transfer from Stage 1 to Stage 2	(1,042)	1,042	-	-
Transfer from Stage 2 to Stage 1	3,149	(3,149)	-	-
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	(5,858)	159	-	(5,699)
Changes in PDs/LGDs/EADs	(44,486)	976	-	(43,510)
Unwind of discount	-	94	-	94
Foreign exchange and other movements	(1,421)	(1)	-	(1,422)
ECL allowance amount as at 31 December 2022	184,196	2,177	_	186,373

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.4 Movements of gross carrying amount and ECL allowance (continued)

Movement of ECL allowance - Debt securities at fair value through other comprehensive income (continued)

	Stage 1	Stage 2	Stage 3	
Debt securities at fair value through other	12-month ECL	Lifetime ECL	Lifetime ECL	
comprehensive income	allowance	allowance	allowance	Total
ECL allowance amount as at 1 January 2021	318,962	_	-	318,962
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	45,588	3,056	-	48,644
Changes in PDs/LGDs/EADs	(131,718)	-	-	(131,718)
Foreign exchange and other movements	1,022	-	-	1,022
ECL allowance amount as at 31 December 2021	233,854	3,056	_	236,910

Movement of gross amount - Debt securities at amortized cost

Debt securities at amortized cost	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount as at 1 January 2022	16,710,918	_	_	16,710,918
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	33,644,039	199,301	-	33,843,340
Foreign exchange and other movements	(148)	-	-	(148)
Gross carrying amount as at 31 December 2022	50,354,809	199,301	-	50,554,110
Debt securities at amortized cost	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount as at 1 January 2021	_	_	-	_
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	16,710,918	-	-	16,710,918
Gross carrying amount as at 31 December 2021	16,710,918	-	-	16,710,918

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.4 Movements of gross carrying amount and ECL allowance (continued)

Movement of ECL allowance - Debt securities at amortized cost

	Stage 1	Stage 2	Stage 3	
	12-month ECL	Lifetime ECL	Lifetime ECL	
Debt securities at amortized cost	allowance	allowance	allowance	Total
ECL allowance amount as at 1 January 2022	10,790	-	-	10,790
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and	12 602	602		42.276
further lending	12,683	693	-	13,376
Changes in PDs/LGDs/EADs	396	_	-	396
ECL allowance amount as at 31 December 2022	23,869	693	_	24,562
	Stage 1	Stage 2	Stage 3	
	12-month ECL	Lifetime ECL	Lifetime ECL	
Debt securities at amortized cost	allowance	allowance	allowance	Total
ECL allowance amount as at 1 January 2021	-	-	-	-
New financial assets originated or purchased, assets remeasurement, derecognized, repayments and				
further lending	10,790		_	10,790
ECL allowance amount as at 31 December 2021	10,790	-	-	10,790
		, i i i i i i i i i i i i i i i i i i i		
Financial guarantees and credit related commitment	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount as at 31 December 2022	29,775,586	1,897,619	_	31,673,205
Gross carrying amount as at 31 December 2021	26,652,874	422,893	_	27,075,767
	Stage 1	Stage 2	Stage 3	
	12-month ECL	Lifetime ECL	Lifetime ECL	
Financial guarantees and credit related commitment	allowance	allowance	allowance	Total
ECL allowance amount as at 31 December 2022	13,405	1,559	_	14,964
ECL allowance amount as at 31 December 2021	21,103	1,794	-	22,897

3.1.5 Write-off policy

The Bank writes off financial assets, in whole or in part, when it has exhausted all practical recovery efforts and has concluded there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include but is not limited to (i) ceasing enforcement activity and (ii) where the Bank's recovery method is foreclosing on collateral and the value of the collateral is such that there is no reasonable expectation of recovering in full.

The Bank may write-off financial assets that are still subject to enforcement activity. The Bank still seeks to recover amounts it is legally owed in full, but which have been partially written off due to no reasonable expectation of full recovery.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.1 Credit risk (continued)

3.1.6 Derivative instruments

The Bank undertakes its transactions in foreign exchange, interest rate derivative contracts and others with other financial institutions and customers. The management has established limits for these contracts based on counterparties, industry sectors and countries. Actual credit exposures and limits are regularly monitored and controlled by management.

Settlement risk arises mainly from foreign exchange transactions with counterparties and also from derivatives transactions in any situation where a payment in cash, securities or equities is made in the expectation of a corresponding receipt in cash, securities or equities. Daily settlement limits are established for each counterparty or customer to cover all settlement risk arising from the Bank's market transactions on any single day.

3.1.7 Repossessed assets

Repossessed assets are collateral of the outstanding indebtedness that the Bank takes possession of the collateral assets through court proceedings or voluntary delivery actions by the borrower. It will be sold as soon as practicable with the proceeds used to repay the outstanding indebtedness.

As at 31 December 2022 and 2021, there was no repossessed asset that being held by the Bank.

3.1.8 Concentration risk analysis for loans and advances to customers with credit risk exposure

The Bank mainly manages concentration risk for loans and advances to customers by geographical sectors. The following tables are the geographical analysis of gross loans and advances to customers:

Geographical sectors	2022	2021
Mainland China	15,984,468	21,395,480
Hong Kong	193,495,552	165,634,743
Others	1,273,885	2,267,881
	210,753,905	189,298,104

3.2 Market risk

3.2.1 Overview

The Bank takes on exposure to market risks, which is initiated by the fluctuation of the fair value of or future cash flow of financial instruments as a result of the changes of the market prices. Market risks arise from open positions in interest rates, exchange rates and equity products, all of which are exposed to market fluctuations and changes in interest rates, foreign exchange rates and equity price.

The Bank established a management model of "large and small middle offices" for its market risk management, which is a centralized control framework led by Board of Directors and senior management. With the establishment of segregation of different duties, the Risk Management Department formulates market risk policies and ensures the Bank's exposure are within risk appetite of the Board of Directors, while Global Markets Department is the execution unit of market risk management. The Internal Audit Department is responsible for independent verification of the market risk management system policies and processes.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.2 Market risk (continued)

3.2.1 Overview (continued)

The Bank monitors market risk separately in respect of trading portfolios and non-trading portfolios. The trading account consists of financial instruments held either for trading intent or economic hedging for other elements of the trading account. The non-trading account consists of the investments purchased by the Bank with excess funds and other financial instruments that are not captured in the trading account.

With regard to the exchange rate risks and the interest rate risks of trading book, the Bank established an effective limit management system by implementing Net Position, Risk Sensitivity, Value at Risk ("VaR") and other indicators. Net interest income sensitivity analysis, interest rate repricing gap analysis and foreign exchange risk concentration analysis are the major tools used by the Bank to monitor the market risk of its overall businesses. In addition, through adequate pricing management and asset allocation, the Bank strived to maximize its rate of return while keeping its risks under control.

The Bank has continuously improved the management system of market risk. The Bank conducted stress tests on historical scenarios and hypothetical scenarios in the consideration of the Bank's major market risk factors. The Bank has implemented daily automatic collection of trading data and market data in the system. The Bank conducted the management of risk capital and VaR quota, and formulated the quota allocation plans.

As part of market risk management, the Bank enters into interest rate swaps to match the interest rate risk associated with the structured deposits and fix-rate long-term debt securities.

The major measurement techniques used to measure and control market risk are outlined below:

3.2.2 VaR

VaR refers to the maximum loss that an investment portfolio may incur at a given confidence level and holding period caused by the changes in market price factors such as interest rates and exchange rates etc. The Bank adopted the historical simulation method to calculate daily VaR (99% confidence interval, the holding period of one day).

A summary of VaR by risk type of the Bank's portfolios is as follows:

	For the year ended 31 December 2022						
Items	31 December 2022	Average	Maximum	Minimum			
VaR	47,735	13,895	50,653	455			
– Interest rate risk	459	772	6,461	111			
– Foreign exchange risk	48,071	13,781	51,479	442			

	For the year ended 31 December 2021					
	31 December					
Items	2021	Average	Maximum	Minimum		
VaR	685	2,190	5,677	389		
– Interest rate risk	108	156	522	53		
– Foreign exchange risk	687	2,192	5,677	374		

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.2 Market risk (continued)

3.2.3 Sensitivity tests

Interest rate sensitivity test

The Bank performs interest rate sensitivity analysis on net interest income for the Bank by measuring the impact of a change in net interest income of financial assets and liabilities, not taking customer behaviour and repayment option into consideration.

On an assumption of a parallel shift of 100 basis points in RMB, USD and HKD interest rates, the Bank calculates the changes in net interest income for the year on a monthly basis.

The table below illustrates the impact to net interest income of the coming year of the Bank based on the structure of interest bearing assets and liabilities as at 31 December 2022 and 31 December 2021, caused by a parallel shift of 100 basis points of RMB, USD and HKD interest rates.

	Expected changes in net interest income		
	As at 31 December 2022	As at 31 December 2021	
+100 basis points parallel shift in yield curves	(838,035)	(919,380)	
-100 basis points parallel shift in yield curves	838,035	919,380	

The results of the interest rate sensitivity tests set out in the table above are illustrative only and are based on simplified scenarios. The figures represent the projected impact to the net interest income caused by the projected movement of current interest risk structure yield curves. This effect, however, does not take into account actions that would be taken by the Bank to mitigate the impact of interest rate changes. The projections above also assume that interest rates of all maturities excluding demand deposits move by the same amount and, therefore, do not reflect the potential impact on net interest income due to changes in certain rates while others remain unchanged. The projections make other simplifying assumptions as well, including that all positions are to be held to maturity. There will be changes to the projection if positions are not held to maturity but it is not expected that the changes would be material.

Foreign exchange sensitivity test

The Bank performs exchange rate sensitivity analysis on net profit and equity for the Bank by measuring the impact of a change in exchange rate on financial assets and liabilities denominated in different currencies. Since HK\$ is pegged to USD under linked exchange rate system, no sensitivity analysis against USD is presented. On an assumption of an appreciation or depreciation of RMB, GBP, AUD and EUR spot and forward rates against HK\$ by 5%, the Bank calculates the changes in net profit and other comprehensive income for the year on a monthly basis.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.2 Market risk (continued)

3.2.3 Sensitivity tests (continued)

Foreign exchange sensitivity test (continued)

The table below illustrates the impact of an appreciation or depreciation of RMB, GBP, AUD and EUR spot and forward rates against HK\$ by 5% on the Bank's net profit and equity:

	•	Expected changes in net profit and equity		
	As at	As at		
	31 December 2022	31 December 2021		
5% appreciation of RMB	(1,646,982)	375,893		
5% depreciation of RMB	1,646,982	(375,893)		
5% appreciation of GBP	(38,296)	14,672		
5% depreciation of GBP	38,296	(14,672)		
5% appreciation of AUD	332,974	779,368		
5% depreciation of AUD	(332,974)	(779,368)		
5% appreciation of EUR	120,522	173,539		
5% depreciation of EUR	(120,522)	(173,539)		

3.2.4 Interest rate risk

Cash flow interest rate risk is the risk that the future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Fair value interest rate risk is the risk that the market value of a financial instrument will fluctuate because of changes in market interest rates.

The Bank takes on exposure to the effects of fluctuations in the prevailing levels of market interest rates on its financial position and cash flows.

The interest rate repricing risk for foreign currency denominated debt securities and the remaining part of the financial guarantees and credit commitments businesses which are not based upon these basic interest rates is not expected to be significant.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.2 Market risk (continued)

3.2.4 Interest rate risk (continued)

The tables below summarize the Bank's exposures to interest rate risks. The tables show the Bank's assets and liabilities at carrying amounts, categorized by the earlier of contractual repricing or maturity dates.

	Up to 1 month	1 – 3 months	3 – 12 months	1 – 5 years	Over 5 years	Non-interest bearing	Total
As at 31 December 2022							
Assets							
Cash and balances with central bank	-	-	_	-	-	2,267,480	2,267,480
Due from and placements with banks and other financial							
institutions	15,794,972	5,698,314	3,053,774	-	-	-	24,547,060
Financial assets at fair value through profit or loss	-	-	-	444,127	-	13,133,770	13,577,897
Financial assets at amortized cost	2,609,015	5,092,439	15,249,386	21,839,103	4,921,315	-	49,711,258
Financial assets at fair value through other comprehensive							
income	14,906,230	24,512,048	18,129,926	67,141,477	36,654,002	8,587	161,352,270
Loans and advances to customers	185,518,222	18,849,329	1,753,460	1,823,113	103,645	-	208,047,769
Other financial assets	-	973,172	-	-	-	5,667,921	6,641,093
Total financial assets	218,828,439	55,125,302	38,186,546	91,247,820	41,678,962	21,077,758	466,144,827
Liabilities							
Due to banks and other financial institutions	11,814,279	14,587,304	31,892,290	-	-	_	58,293,873
Due to customers	141,806,945	104,353,450	89,637,397	263,544	205	2,156,909	338,218,450
Financial liabilities at fair value through profit or loss	-	-	-	-	_	1,994,313	1,994,313
Certificates of deposits issued	-	-	1,757,007	-	-	-	1,757,007
Lease liabilities	11,835	22,781	60,465	77,216	-	-	172,297
Debt securities issued	-	-	-	-	7,797,780	-	7,797,780
Other financial liabilities	-	-	-	-	-	8,007,543	8,007,543
Total financial liabilities	153,633,059	118,963,535	123,347,159	340,760	7,797,985	12,158,765	416,241,263
Total interest sensitivity gap	65,195,380	(63,838,233)	(85,160,613)	90,907,060	33,880,977	8,918,993	49,903,564

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.2 Market risk (continued)

3.2.4 Interest rate risk (continued)

	Up to					Non-interest	
	1 month	1 – 3 months	3 – 12 months	1 – 5 years	Over 5 years	bearing	Total
As at 31 December 2021							
Assets							
Cash and balances with central bank	-	-	_	-	-	10,906,604	10,906,604
Due from and placements with banks and other financial institutions	9,439,086	466,760	_	1,053,470	_	_	10,959,316
Financial assets at fair value	5,455,000	400,700		1,055,470			10,555,510
through profit or loss	-	-	-	417,476	626,102	2,591,909	3,635,487
Financial assets at amortized cost	2,627,546	2,755,280	5,005,374	4,081,003	2,228,045	-	16,697,248
Financial assets at fair value through other comprehensive							
income	24,496,735	41,137,046	21,347,411	85,490,918	50,498,552	8,869	222,979,531
Loans and advances to customers	161,349,135	17,002,831	7,728,681	231,908	2,100,526	-	188,413,081
Other financial assets	-	-	-	-	-	3,542,985	3,542,985
Total financial assets	197,912,502	61,361,917	34,081,466	91,274,775	55,453,225	17,050,367	457,134,252
Liabilities							
Due to banks and other financial institutions	17,115,167	19,965,225	14,806,276	_	_	12,116	51,898,784
Due to customers	201,408,125	109,486,673	18,629,948	15,014	147	2,187,227	331,727,134
Financial liabilities at fair value through profit or loss	-	-	_	-	-	1,614,593	1,614,593
Certificates of deposits issued	-	389,382	3,364,349	-	-	-	3,753,731
Lease liabilities	12,064	23,369	93,318	90,376	-	-	219,127
Debt securities issued	-	-	-	-	7,796,690	-	7,796,690
Other financial liabilities	-	-	-	-	-	9,319,072	9,319,072
Total financial liabilities	218,535,356	129,864,649	36,893,891	105,390	7,796,837	13,133,008	406,329,131
- Total interest sensitivity gap	(20,622,854)	(68,502,732)	(2,812,425)	91,169,385	47,656,388	3,917,359	50,805,121

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.2 Market risk (continued)

3.2.5 Foreign exchange risk

The Bank conducts the majority of its businesses in HK\$, with certain foreign transactions in USD, RMB and other currencies. The Bank takes on exposure to the effects of fluctuations in the prevailing foreign exchange rates and changes on its financial position and cash flows. The senior management sets limits on the level of exposure in exchange rate risk and monitors the exposure regularly. The tables below summarize the Bank's exposure to foreign exchange risk at the end of the year. The tables show the Bank's total assets and liabilities in carrying amounts in HK\$, are categorized by the original currency.

	HK\$	RMB (HK\$ Equivalent)	USD (HK\$ Equivalent)	Others (HK\$ Equivalent)	Total
As at 31 December 2022					
Assets					
Cash and balances with central bank	2,218,669	20,186	13,383	15,242	2,267,480
Due from and placements with banks and other financial institutions	9,055,765	3,282,909	10,422,567	1,785,819	24,547,060
Financial assets at fair value through profit or loss	1,617,087	403	11,959,417	990	13,577,897
Financial assets at amortized cost	13,241,516	7,430,806	24,341,710	4,697,226	49,711,258
Financial assets at fair value through other comprehensive income	4,875,065	19,942,901	122,552,453	13,981,851	161,352,270
Loans and advances to customers	170,560,829	311,394	36,133,540	1,042,006	208,047,769
Other financial assets	853,636	681,610	5,001,823	104,024	6,641,093
Total financial assets	202,422,567	31,670,209	210,424,893	21,627,158	466,144,827
Liabilities					
Due to banks and other financial institutions	4,083,383	30,864,881	16,266,164	7,079,445	58,293,873
Due to customers	215,121,779	30,981,032	83,969,060	8,146,579	338,218,450
Financial liabilities at fair value through profit or loss	1,614,977	827	378,506	3	1,994,313
Certificates of deposits issued	-	1,570,739	186,268	-	1,757,007
Lease liabilities	172,297	-	-	-	172,297
Debt securities issued	-	-	7,797,780	-	7,797,780
Other financial liabilities	2,617,529	1,133,953	4,119,231	136,830	8,007,543
Total financial liabilities	223,609,965	64,551,432	112,717,009	15,362,857	416,241,263
Net position	(21,187,398)	(32,881,223)	97,707,884	6,264,301	49,903,564

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.2 Market risk (continued)

3.2.5 Foreign exchange risk (continued)

		(HK\$ Equivalent)	(HK\$ Equivalent)	(HK\$ Equivalent)	Total
As at 31 December 2021					
Assets					
Cash and balances with central bank	10,583,323	20,671	291,347	11,263	10,906,604
Due from and placements with banks and other financial institutions	498,023	136,878	8,299,662	2,024,753	10,959,316
Financial assets at fair value through profit or loss	572,970	61	3,062,076	380	3,635,487
Financial assets at amortized cost	615,088	3,654,720	12,427,440	-	16,697,248
Financial assets at fair value through other comprehensive income	13,379,235	27,297,860	158,758,814	23,543,622	222,979,531
Loans and advances to customers	143,507,310	1,497,965	42,378,325	1,029,481	188,413,081
Other financial assets	692,627	556,465	2,280,017	13,876	3,542,985
Total financial assets	169,848,576	33,164,620	227,497,681	26,623,375	457,134,252
Liabilities					
Due to banks and other financial					
institutions	3,312,142	344,240	46,569,099	1,673,303	51,898,784
Due to customers	203,583,203	24,785,942	96,351,985	7,006,004	331,727,134
Financial liabilities at fair value through					
profit or loss	1,024,215	-	590,378	-	1,614,593
Certificates of deposits issued	250,000	-	3,503,731	-	3,753,731
Lease liabilities	219,127	-	-	-	219,127
Debt securities issued	-	-	7,796,690	-	7,796,690
Other financial liabilities	1,880,423	516,577	6,813,176	108,896	9,319,072
Total financial liabilities	210,269,110	25,646,759	161,625,059	8,788,203	406,329,131
Net position	(40,420,534)	7,517,861	65,872,622	17,835,172	50,805,121

3.2.6 Other price risk

The Bank is exposed to other price risk arising from financial assets such as equity investments and derivatives linked to commodity price. The Bank considers the exposure to the other price risk to be insignificant.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.3 Liquidity risk

3.3.1 Overview

Liquidity risk is the risk that the Bank will be unable to meet its payment obligations associated with its financial liabilities when they fall due and other current liquidity needs. The consequence may be the failure to meet obligations to repay depositors and fulfill loan commitments for lending. The Bank's objective in liquidity management is to ensure the availability of adequate funding to meet the demands of fund deposit withdrawals and other liabilities as they fall due and to ensure that it is able to meet its obligations to fund loan originations and commitments and to take advantage of new investment opportunities.

The Bank is exposed to daily calls on its available cash resources from overnight deposits, current accounts, matured deposits, loan drawdowns, guarantees and from margin and other calls on cash settled derivatives. The Bank set limits on the minimum proportion of funds to meet such calls and on the minimum level of interbank and other borrowing facilities that should be in place to cover different levels of unexpected withdrawals.

3.3.2 Liquidity risk management process

Funding liquidity risk relates to the Bank's ability to fulfill its obligations arising from financial liabilities as they fall due, or its ability to fulfill maturing funding needs, which subsequently affects the Bank's capacity to support deposit withdrawal or drawdown on loan commitments. Effective liquidity risk management helps to sustain the expansion of the Bank's business with liquidity cost and risk under control. The Bank has established and implemented its own liquidity risk management policy per local regulatory requirements in order to fulfill its liquidity risk management. The Asset and Liability Management Committee ("ALCO") of the Bank is the decision-making body in balance sheet management and is responsible for coordinating and overseeing all related strategies, including risk management framework and risk appetite. Financial Management Department is responsible for analyzing and monitoring activities related to liquidity risk. Global Markets Department is responsible for managing daily liquidity position and related executions. Internal Audit Department is responsible for conducting periodic review to ensure liquidity risk management framework is effectively implemented.

The cornerstone of the Bank's funding sources is customer deposit. The Bank strives to build up core deposits while diversifying funding sources via various funding channels to enhance financing capacity. Regarding liquidity arrangement with parent bank, the Bank performs regular funding transfer with parent bank to preserve prompt intragroup backup funding supply if necessary. Monitoring and control on intragroup funding transactions are in line with those of third parties. Moreover, parent bank has set up groupwide internal limits to control the Bank's reliance on parent bank's funding.

The majority of the liquidity risk of the Bank arises from maturity mismatch of assets and liabilities. Therefore, regular cash flow analysis and projections on both on- and off-balance sheet items falling within different maturity buckets is performed to ensure funding need. Moreover, the Bank closely monitors off-balance sheet funding obligations (such as commitments or letters of guarantee) and assesses their impact to our liquidity capacity. Furthermore, the Bank strives to maintain high marketability of the asset portfolio to allow prompt monetization in case of unforeseeable liquidity crunch in the market.

The Bank has in place various limits and indicators for liquidity risk, including liquidity coverage ratio, loan-to-deposit ratio, concentration limits on customer deposits, interbank borrowing utilization ratio, etc. for effective identification and control of liquidity risk. The Bank utilizes relevant management information systems to perform daily liquidity risk management functions. Moreover, the Bank performs daily cash flow analysis to assess liquidity in normal circumstances, and performs regular stress test (at least monthly) to evaluate the Bank's resilience under significant stress conditions. The stress test scenarios are designed with reference to the HKMA's Supervisory Policy Manuals, and also historical liquidity stress scenarios. The Bank's stress test takes into account the impact of all assets, liabilities and off-balance sheet positions and estimates possible funding short-fall with historical data and plausible stress conditions. The results will be scrutinized and appropriate measures will be taken if necessary.

The Bank has set up early warning indicator system, and movement of relevant indicators is closely monitored on a regular basis. In case of liquidity crisis emerges, the Bank's Crisis Management Committee will be formed to formulate appropriate contingency funding plan to resolve the crisis. The Bank also performs regular drill in order to ensure prompt actions and feasibility of contingency funding plan under crisis.

To cope with unpredictable liquidity needs, the Bank has set up liquidity buffer to maintain sufficient highly liquid assets. The buffer portfolio contains cash, Exchange Fund Bills/Notes, unencumbered sovereign bonds and other high quality bonds, which is managed by Financial Management Department and operated by Global Markets Department on a daily basis.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.3 Liquidity risk (continued)

3.3.3 Non-derivative financial instruments cash flows

The table below presents the cash flows of the Bank related to non-derivative financial liabilities (including accrued interest) by remaining contractual maturities at the end of the reporting date. The amounts disclosed in the tables are undiscounted contractual cash flows. The Bank's expected cash flows on these financial instruments may vary significantly from the following analysis. For example, demand deposits from customers are expected to maintain a stable or increasing balance although they have been classified as repayable on demand in the following tables.

	On Demand	Up to 1 month	1 – 3 months	3 – 12 months	1 – 5 years	Over 5 years	Total
As at 31 December 2022							
Financial liabilities							
Due to banks and other financial institutions	1,158,577	8,711,990	14,688,751	32,622,064	-	2,028,324	59,209,706
Due to customers	76,137,244	67,872,598	104,640,649	90,363,751	265,198	209	339,279,649
Certificates of deposits issued	-	-	-	1,772,232	-	-	1,772,232
Lease liabilities	-	11,966	23,016	61,244	77,992	-	174,218
Debt securities issued	-	-	-	-	-	7,884,101	7,884,101
Other financial liabilities	202,705	5,710,565	715,003	1,255,131	70	109,104	7,992,578
Total financial liabilities	77,498,526	82,307,119	120,067,419	126,074,422	343,260	10,021,738	416,312,484
		Up to	1 – 3	3 – 12	1 – 5	Over 5	
	On Demand	1 month	months	months	years	years	Total
As at 31 December 2021							
Financial liabilities							
Due to banks and other financial institutions	1,087,459	14,041,485	19,979,659	14,826,629	-	2,008,335	51,943,567
Due to customers	98,051,307	105,681,903	109,712,214	18,726,911	15,112	171	332,187,618
Certificates of deposits issued	-	-	389,835	3,369,159	-	-	3,758,994
Lease liabilities	-	12,231	23,670	94,217	91,107	-	221,225
Debt securities issued	-	-	-	-	-	7,882,999	7,882,999
Other financial liabilities	11,375	9,107,325	22,219	62,230	12	93,014	9,296,175
Total financial liabilities	99,150,141	128,842,944	130,127,597	37,079,146	106,231	9,984,519	405,290,578

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.3 Liquidity risk (continued)

3.3.4 Derivative financial instruments cash flows

The Bank's derivative financial instruments are either settled on a net basis or a gross basis.

The Bank's derivative financial instruments that will be settled on a net basis mainly include interest rate swaps, forward rate agreements and others, whereas derivative financial instruments that will be settled on a gross basis mainly include currency forward and currency swaps.

The table below analyses the cash flows of the Bank by remaining contractual period as at the reporting date. The amounts disclosed in the table are the contractual undiscounted cash flows.

	Up to 1 month	1-3 months	3-12 months	1-5 years	Over 5 years	Total
As at 31 December 2022						
Derivative financial instruments settled on net basis	97,052	511,684	3,255,266	6,061,938	2,396,748	12,322,688
Derivative financial instruments settled on a gross basis						
– Outflow	(92,821,687)	(79,667,865)	(64,692,551)	(4,094)	-	(237,186,197)
– Inflow	92,738,928	79,888,147	64,187,089	4,100	-	236,818,264
Total	(82,759)	220,282	(505,462)	6	-	(367,933)
	Up to 1 month	1-3 months	3-12 months	1-5 years	Over 5 years	Total
As at 31 December 2021						
Derivative financial instruments settled on net basis	20,800	63,549	(196,630)	946,420	642,295	1,476,434
Derivative financial instruments settled on a gross basis						
– Outflow	(142,637,950)	(114,654,649)	(30,354,931)	-	-	(287,647,530)
– Inflow	142,461,139	114,372,470	30,370,543	-	-	287,204,152
Total	(176,811)	(282,179)	15,612	-	-	(443,378)

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.3 Liquidity risk (continued)

3.3.5 Maturity analysis

The table below analyses the Bank's assets and liabilities into relevant maturity groupings based on the remaining period at the end of reporting date to the contractual maturity date.

	On demand	Up to 1 month	1 – 3 months	3 – 12 months	1 – 5 years	Over 5 years	Overdue	Undated	Total
As at 31 December 2022									
Assets									
Cash and balances with central banks	2,267,480	-	-	-	-	-	-	-	2,267,480
Due from and placements with banks and other financial									
institutions	3,070,116	12,724,856	5,698,314	3,053,774	-	-	-	-	24,547,060
Financial assets at fair value through profit or loss	-	276,144	534,556	739,256	5,802,703	6,225,238	-	-	13,577,897
Financial assets at amortized cost	-	80,508	561,824	15,522,436	28,625,176	4,921,314	-	-	49,711,258
Financial assets at fair value through other comprehensive									
income	-	1,914,457	6,437,584	33,663,067	82,476,145	36,852,429	-	8,588	161,352,270
Loans and advances to customers	2,935,774	1,551,425	8,997,578	29,801,195	98,527,177	59,877,658	6,356,962	-	208,047,769
Other financial assets	1,024,345	3,050,955	127,017	432,190	1,377,538	570,702	58,346	-	6,641,093
Total financial assets	9,297,715	19,598,345	22,356,873	83,211,918	216,808,739	108,447,341	6,415,308	8,588	466,144,827
Liabilities									
Due to banks and other financial institutions	1,158,577	8,655,703	14,587,304	31,892,289	-	2,000,000	-	-	58,293,873
Due to customers	76,137,244	67,826,611	104,353,450	89,637,397	263,544	204	-	-	338,218,450
Financial liabilities at fair value through profit or loss	-	333,240	271,004	887,545	320,472	182,052	-	-	1,994,313
Certificates of deposit issued	-	-	-	1,757,007	-	-	-	-	1,757,007
Lease liabilities	-	11,835	22,781	60,465	77,216	-	-	-	172,297
Debt securities issued	-	-	-	-	-	7,797,780	-	-	7,797,780
Other financial liabilities	217,669	5,710,565	715,003	1,255,131	70	109,105	-	-	8,007,543
Total financial liabilities	77,513,490	82,537,954	119,949,542	125,489,834	661,302	10,089,141	_	-	416,241,263
Net amount on liquidity gap	(68,215,775)	(62,939,609)	(97,592,669)	(42,277,916)	216,147,437	98,358,200	6,415,308	8,588	49,903,564

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.3 Liquidity risk (continued)

3.3.5 Maturity analysis (continued)

		Up to	1 – 3	3 – 12	1 – 5	Over 5			
	On demand	1 month	months	months	years	years	Overdue	Undated	Total
As at 31 December 2021									
Assets									
Cash and balances with central banks	10,906,604	-	-	-	-	-	-	-	10,906,604
Due from and placements with banks and other financial									
institutions	7,310,592	2,128,494	466,760	-	1,053,470	-	-	-	10,959,316
Financial assets at fair value through profit or loss	-	306,002	148,929	90,262	1,322,137	1,768,157	-	-	3,635,487
Financial assets at amortized cost	-	2,627,546	2,755,280	5,005,374	4,081,003	2,228,045	-	-	16,697,248
Financial assets at fair value through other comprehensive									
income	-	5,136,184	12,146,355	31,502,445	123,502,998	50,682,680	-	8,869	222,979,531
Loans and advances to customers	2,886,318	1,128,158	3,434,117	37,395,856	89,834,368	53,393,992	340,272	-	188,413,081
Other financial assets	122,301	1,667,995	40,177	109,254	1,056,950	534,228	12,080	-	3,542,985
Total financial assets	21,225,815	12,994,379	18,991,618	74,103,191	220,850,926	108,607,102	352,352	8,869	457,134,252
Liabilities									
Due to banks and other financial									
institutions	1,087,459	14,039,824	19,965,225	14,806,276	-	2,000,000	-	-	51,898,784
Due to customers	98,039,932	105,516,333	109,525,760	18,629,948	15,014	147	-	-	331,727,134
Financial liabilities at fair value through profit or loss	-	475,949	404,310	94,694	455,140	184,500	-	-	1,614,593
Certificates of deposit issued	-	-	389,382	3,364,349	-	-	-	-	3,753,731
Lease liabilities	-	12,064	23,369	93,318	90,376	-	-	-	219,127
Debt securities issued	-	-	-	-	-	7,796,690	-	-	7,796,690
Other financial liabilities	34,272	9,107,325	22,219	62,230	12	93,014	-	-	9,319,072
Total financial liabilities	99,161,663	129,151,495	130,330,265	37,050,815	560,542	10,074,351	-	-	406,329,131
Net amount on liquidity gap	(77,935,848)	(116,157,116)	(111,338,647)	37,052,376	220,290,384	98,532,751	352,352	8,869	50,805,121

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.3 Liquidity risk (continued)

3.3.6 Off-balance sheet items

The table below lists the off-balance sheet items of the Bank according to their remaining period to the contractual maturity date. Financial guarantees are included at notional amounts and based on the earliest contractual maturity date.

	Up to 3 months	3-12 months	1-5 years	Over 5 years	Total
As at 31 December 2022					
Loan commitments and credit related commitments	7,869,076	11,188,206	10,281,427	1,415,084	30,753,793
Guarantees, acceptances and letters of credit	831,783	78,133	3,634	5,862	919,412
Total	8,700,859	11,266,339	10,285,061	1,420,946	31,673,205
	Up to 3 months	3-12 months	1-5 years	Over 5 years	Total
As at 31 December 2021					
Loan commitments and credit related commitments	8,300,315	9,004,561	7,182,583	2,184,194	26,671,653
Guarantees, acceptances and letters of credit	332,743	62,330	6,480	2,561	404,114
Total	8,633,058	9,066,891	7,189,063	2,186,755	27,075,767

3.4 Fair value of financial assets and liabilities

(a) Determination of fair value and valuation techniques

Certain financial assets and liabilities of the Bank are measured at fair value or with fair value disclosed for financial reporting purposes. The fair value has been determined using appropriate valuation techniques and inputs for fair value measurements. The appropriateness of the valuation techniques and the inputs to the fair value measurements are reviewed periodically.

Fair value measurements are categorized into Level 1,2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

Level 1: The fair value of financial instruments traded in active markets is based on quoted (unadjusted) market prices at the end of the reporting period. The quoted market price used for financial assets held by the Bank is the current bid price. These instruments are included in level 1.

Level 2: The fair value of financial instruments that are not traded in an active market is determined using valuation techniques. These valuation techniques maximize the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

Level 3: If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.4 Fair value of financial assets and liabilities (continued)

(a) Determination of fair value and valuation techniques (continued)

Specific valuation techniques used to value for Level 2 financial instruments include:

- The use of quoted market prices or dealer quotes for similar instruments.
- Calculation of the present value of the estimated future cash flows based on observable yield curves for interest rate swaps.
- The fair value of foreign currency forwards is determined using forward exchange rates at the balance sheet date.
- The fair value of the remaining financial instruments is determined using discounted cash flow analysis.

(b) Financial assets and financial liabilities measured at fair value on a recurring basis

The table below summarizes the information relating to the fair value hierarchy of the financial assets and financial liabilities measured at fair value on a recurring basis:

	Level 1	Level 2	Level 3	Total
As at 31 December 2022				
Financial assets at fair value through profit or loss				
Debt securities				
- Governments and central banks	233	-	-	233
– Banks and other financial institutions	230,896	-	_	230,896
– Corporate entities	212,998	-	_	212,998
Derivative financial instruments				
– Foreign exchange contracts	-	1,244,122	-	1,244,122
- Interest rate contracts and others	-	11,889,648	-	11,889,648
-	444,127	13,133,770	_	13,577,897
Financial assets at fair value through other comprehensive income				
Debt securities				
- Governments and central banks	13,990,493	1,749,792	-	15,740,285
– Banks and other financial institutions	71,803,617	9,621,833	-	81,425,450
– Corporate entities	63,433,127	744,821	-	64,177,948
Equity securities				
– Banks and other financial institutions	_	-	8,587	8,587
	149,227,237	12,116,446	8,587	161,352,270
Total financial assets measured at fair value	149,671,364	25,250,216	8,587	174,930,167
Financial liabilities at fair value through profit or loss				
Certificates of deposits issued	_	1,757,007	_	1,757,007
Derivative financial instruments				
– Foreign exchange contracts	_	1,367,784	_	1,367,784
- Interest rate contracts and others	_	626,529	_	626,529
Total financial liabilities measured at fair value	-	3,751,320	_	3,751,320
For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.4 Fair value of financial assets and liabilities (continued)

(b) Financial assets and financial liabilities measured at fair value on a recurring basis (continued)

	Level 1	Level 2	Level 3	Total
As at 31 December 2021				
Financial assets at fair value through profit or loss				
Debt securities				
– Banks and other financial institutions	810,224	-	_	810,224
– Corporate entities	233,354	-	-	233,354
Derivative financial instruments				
– Foreign exchange contracts	-	529,125	-	529,125
- Interest rate contracts and others	-	2,062,784	-	2,062,784
	1,043,578	2,591,909	-	3,635,487
- Financial assets at fair value through other comprehensive income				
Debt securities				
- Governments and central banks	29,988,960	7,402,972	-	37,391,932
- Banks and other financial institutions	98,114,693	15,147,322	-	113,262,015
– Corporate entities	70,924,073	1,392,642	-	72,316,715
Equity securities				
– Banks and other financial institutions	-	-	8,869	8,869
	199,027,726	23,942,936	8,869	222,979,531
Total financial assets measured at fair value	200,071,304	26,534,845	8,869	226,615,018
· Financial liabilities at fair value through profit or loss				
Derivative financial instruments				
– Foreign exchange contracts	-	935,359	-	935,359
- Interest rate contracts and others	_	679,234	-	679,234
Total financial liabilities measured at fair value	_	1,614,593	_	1,614,593

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.4 Fair value of financial assets and liabilities (continued)

(c) Financial instruments not measured at fair value

The table below summarizes the carrying amounts and fair values where there are obvious variances from the carrying amounts, of those financial assets and liabilities that are not presented on the statement of financial position at their fair value:

	As at 31 December 2022		As at 31 Decem	ber 2021
	Carrying		Carrying	
	amount	Fair value	amount	Fair value
Financial assets				
Financial assets at amortized cost	49,711,258	49,341,253	16,697,248	16,687,625
Financial liabilities				
Certificates of deposits issued	-	-	3,753,731	3,746,743
Debt securities issued	7,797,780	7,776,336	7,796,690	7,775,249

Fair value hierarchy of financial instruments not measured at fair value:

	Level 1	Level 2	Level 3	Total
As at 31 December 2022				
Financial assets				
Financial assets at amortized cost	31,441,672	17,899,581	-	49,341,253
Financial liabilities				
Debt securities issued	7,776,336	-	-	7,776,336
As at 31 December 2021				
Financial assets				
Financial assets at amortized cost	7,555,089	9,132,536	_	16,687,625
Financial liabilities				
Certificates of deposits issued	249,925	3,496,818	-	3,746,743
Debt securities issued	7,775,249	-	-	7,775,249

Other financial instruments not carried at fair value are typically short-term in nature or repriced to current market rates frequently. Accordingly, their carrying amounts are reasonable approximations of their fair values.

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3 FINANCIAL RISK MANAGEMENT (continued)

3.5 Offsetting financial assets and financial liabilities

Certain financial assets and financial liabilities of the Bank are subject to enforceable master netting arrangements or similar agreements. The agreement between the Bank and the counterparty generally allows for net settlement of the relevant financial assets and financial liabilities when both elect to settle on a net basis. In the absence of such a mutual consent, financial assets and financial liabilities will be settled on a gross basis. However, each party to the master netting arrangements or similar agreements will have the option to settle all such amounts on a net basis in the event of default of the other party. These financial assets and financial liabilities of the Bank are not offset in accordance with HKFRS.

The following table presents the recognized financial instruments that are offset, or subject to enforceable master netting arrangements and other similar agreements but not offset, as at 31 December 2022 and 31 December 2021. The column 'net amount' shows the impact on the Bank's statement of financial position if all set-off rights were exercised.

	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities set off in the statement of financial position	Net amounts of financial assets presented in the statement of financial position	Related amoun Financial instruments (including non-cash collateral)	ts not offset Cash collateral received	Net amount
2022						
Financial assets						
Derivative financial instruments	13,133,770	-	13,133,770	(2,176,791)	(1,584,708)	9,372,271
Financial assets at fair value through						
other comprehensive income	23,615,867	-	23,615,867	(21,882,034)	-	1,733,833
Other assets	2,011,420	(33,511)	1,977,909	-	-	1,977,909
Total	38,761,057	(33,511)	38,727,546	(24,058,825)	(1,584,708)	13,084,013

	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets set off in the statement of financial position	Net amounts of financial liabilities presented in the statement of financial position	Related amoun Financial instruments (including non-cash collateral)	ts not offset Cash collateral advanced	Net amount
Financial liabilities Derivative financial instruments	1,994,313	-	1,994,313	(2,176,791)	(1,131,683)	(1,314,161)
Due to banks and other financial institutions	21,882,034	-	21,882,034	(21,882,034)	-	-
Other liabilities	1,269,004	(33,511)	1,235,493	-	-	1,235,493
Total	25,145,351	(33,511)	25,111,840	(24,058,825)	(1,131,683)	(78,668)

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (continued)

3.5 Offsetting financial assets and financial liabilities (continued)

		Gross amounts of recognized	Net amounts of financial assets	Related amou	ints not offset	
		financial liabilities	presented in	Financial		
	Gross amounts	set off in the	the statement	instruments		
	of recognized	statement of	of financial	(including non-	Cash collateral	
	financial assets	financial position	position	cash collateral)	received	Net amount
2021						
Financial assets						
Derivative financial instruments	2,591,909	-	2,591,909	(1,099,876)	(77,811)	1,414,222
Financial assets at fair value through						
other comprehensive income	31,003,531	-	31,003,531	(28,772,576)	-	2,230,955
Other assets	1,156,555	(20,948)	1,135,607	-	-	1,135,607
Total	34,751,995	(20,948)	34,731,047	(29,872,452)	(77,811)	4,780,784

		Gross amounts of recognized	Net amounts of financial liabilities	Related amou	ints not offset	
	Gross amounts	financial assets	presented in	Financial		
	of recognized	set off in the	the statement	instruments		
	financial	statement of	of financial	(including non-	Cash collateral	
	liabilities	financial position	position	cash collateral)	advanced	Net amount
Financial liabilities						
Derivative financial instruments	1,614,593	-	1,614,593	(1,099,876)	(365,275)	149,442
Due to banks and other financial						
institutions	28,772,576	-	28,772,576	(28,772,576)	-	-
Other liabilities	6,123,782	(20,948)	6,102,834	-	-	6,102,834
Total	36,510,951	(20,948)	36,490,003	(29,872,452)	(365,275)	6,252,276

3.6 Capital management

The Bank's objectives in managing "capital", which is a broader concept than the "shareholder equity" on the statement of financial position, are:

- To comply with the capital requirements set by the regulators of the markets where the Bank operates;
- To ensure the Bank's ability to maintain a stable operation so as to continue provide returns for shareholders and benefits for other stakeholders; and
- To maintain a strong capital base to support the development of its business.

Consistent with industry practice, the Bank monitors its capital structure on the basis of the capital adequacy ratio and there have been no material changes in the Bank's policy on the management of capital during the year.

The Bank has complied with all externally imposed capital requirements during 2022.

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3 FINANCIAL RISK MANAGEMENT (continued)

3.7 Climate-related Risks

The climate-related risks faced by the Bank can be categorised into physical risks and transition risks. Physical risks may have financial impacts on the Bank arising from increasingly frequent extreme weather events such as hurricanes, cyclones or floods, or long-term shifts in climate patterns which may cause rising sea levels or chronic heat waves. Transition risk refers to that in response to climate change, the completion of low-carbon economy transition may involve changes in policies and laws, technology and market, which may affect the Bank's financial performance and reputation. Currently the climate-related risks identified include greater difficulty for risk management, increased pressure on reputation, and more complex stress testing, etc. Climate-related opportunities include that the green and low-carbon transitions encourage new development drivers and bring new varieties of business, etc.

Complying with the climate change management framework set up by the Board of Directors, the Bank has identified the climate-related risk factors and regularly assessed and monitored the potential financial impact of climate-related risks on it. The Bank has also clarified the management responsibilities for the identified climate risk factors and served the climate and environmental risk management as an important part of the Bank's medium and long-term planning. At the same time, measures such as risk monitoring, stress testing, green ratings, and climate risk reserves will be studied and utilised continuously to strengthen the Bank's capabilities of risk identification and risk resistance and enhance the risk management in high carbon emissions industries.

To enhance the resilience of development strategies under different climate change scenarios, the Bank has set out principles for incorporating climate-related risks into stress test scenarios and conducted stress testing for various physical risks and transition risks:

- Physical risk stress testing: Through exerting pressure on the forecast for climate scenario of Hong Kong in mid-twenty-first century, transmitting to the collateral value of property held by the Bank, and increasing the Loss Given Default (hereinafter referred to as "LGD") of property mortgage loans to affect the Expected Credit Loss (hereinafter referred to as "ECL") of loans and Risk-weighted Assets (hereinafter referred to as "RWA"), it was found that the majority of properties held by the Bank as collateral are located in areas less influenced by tropical cyclones. The impact of physical risks on ECL and Capital Adequacy Ratio (hereinafter referred to as "CAR") is immaterial.
- Transition risk stress testing: Through exerting pressure on the loan customers and bond issuers' financial abilities and conducting credit ratings to affect the ECL of loans, RWA and market value of bond investments among the Bank's 12 high carbon emission industries (energy, thermal power, power transmission, metal and mining, cement, steel, glass, paper, construction, real estate development, aviation, shipping), it turns out that the impact of transition risks on ECL and CAR is immaterial.

Based on the results of stress testing, physical risks and transition risks at present have no material financial impact on the Bank. The Bank will regularly review the materiality of climate-related risks, and gradually promote the development of ECL models to assess, manage and monitor climate-related risks in a more comprehensive way.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

4 NET INTEREST INCOME

	2022	2021
Interest income		
Due from and placements with banks and other financial institutions	569,930	144,638
Loans and advances to customers	5,186,018	2,666,572
Financial assets at amortized cost	921,199	53,420
Financial assets at fair value through other comprehensive income	5,385,741	3,169,406
	12,062,888	6,034,036
Interest expense		
Due to banks and other financial institutions	(1,268,688)	(177,279)
Due to customers	(5,114,407)	(2,121,187)
Debt securities and certificates of deposit issued at amortized cost	(185,480)	(97,345)
	(6,568,575)	(2,395,811)
Net interest income	5,494,313	3,638,225

5 FEE AND COMMISSION INCOME

	2022	2021
Settlement service	46,739	46,304
Interchange service	20,843	22,510
Credit facilities, guarantee and commitment	22,630	8,910
Agency service	750,894	901,802
Depositary service	60,372	60,832
Others	5,567	8,163
	907,045	1,048,521
Of which arise from:		
Financial assets/liabilities not at fair value through profit or loss	22,630	8,910
Trust and other fiduciary activities	45,167	89,204

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6 FEE AND COMMISSION EXPENSE

	2022	2021
Settlement and brokerage service	49,770	52,098
Interchange service	9,684	11,433
Others	7,383	8,798
	66,837	72,329
Of which arise from:		
Financial assets/liabilities not at fair value through profit or loss	9,684	11,433

7 DIVIDEND INCOME

	2022	2021
Financial assets at fair value through other		
comprehensive income – unlisted investments	35	35

8 NET GAINS ARISING FROM TRADING ACTIVITIES

	2022	2021
Foreign exchange	377,608	223,044
Interest rate instruments and others	(249,892)	36,876
Debt securities at fair value through profit or loss	(57,076)	5,149
Net gains/(losses) of interest rate instruments and items under fair value hedge (note 18)	264,460	(46,670)
Others	2,343	142
	337,443	218,541

Net gains on foreign exchange include gains or losses from the trading of spot and forward contracts, currency swaps, cross currency interest rate swaps, currency options and the translation of foreign currency monetary assets and liabilities into HK\$.

Net gains on interest rate instruments and others include trading gains and losses and fair value changes of interest rate swaps, interest rate options and other derivatives.

9 OTHER OPERATING INCOME

	2022	2021
Management fee received from a branch of		
the ultimate holding company (note 36(g))	2,754	2,003
Others	30,483	22,643
	33,237	24,646

Others mainly include income arising from miscellaneous banking services provided to the Bank's customers.

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10 CHANGE IN EXPECTED CREDIT LOSSES

	2022	2021
Change in ECL allowance		
Loans and advances to customers	1,825,460	316,273
Financial investments at amortized cost	13,772	6,336
Financial investments at fair value through other comprehensive income	(50,537)	(77,598)
Cash and balances with central bank	(46)	33
Other receivables	3,706	2,666
Due from and placements with banks and other financial institutions	1,672	(7,840)
Financial guarantees and credit related commitments	(7,933)	(1,073)
	1,786,094	238,797

11 OTHER OPERATING EXPENSES

	2022	2021
Staff costs		
– salaries and other allowances	528,172	530,009
– retirement benefit costs (note 12)	44,580	34,531
Loss on disposal of property and equipment	276	183
General operational and administrative expenses	268,583	288,870
Depreciation and amortization	34,578	25,890
Depreciation of right-of-use assets (note 23)	143,268	153,359
Auditor's remuneration	3,825	5,287
Buildings administration fee	11,133	11,459
Rental expenses	49,467	51,507
Repairs and maintenance	34,795	38,231
Printing, postage and telegram	43,280	53,542
Directors', senior management's and key personnel's emoluments (note 13)	20,416	21,845
Management fee paid to a branch of the ultimate holding company	500,730	445,434
Finance costs – lease interest expense (note 23)	1,751	2,744
Others	19,807	21,166
	1,704,661	1,684,057

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

12 RETIREMENT BENEFIT COSTS

	2022	2021
Pension costs – defined contribution plans	44,580	34,531

13 BENEFITS AND INTEREST OF DIRECTORS (DISCLOSURES REQUIRED BY SECTION 383 OF THE COMPANIES ORDINANCE (CAP. 622) AND COMPANIES (DISCLOSURE OF INFORMATION ABOUT BENEFITS OF DIRECTORS) REGULATION (CAP. 622G)

(a) Directors' emoluments

Details of the emoluments paid to or receivable by the directors of the Bank in respect of their services rendered for the Bank are as follows:

	2022	2021
Directors' fees	2,650	2,570
Salaries, allowances and benefits in kind	1,451	-
Bonuses	691	-
Retirement benefit costs	-	-
	4,792	2,570

For the year ended 31 December 2022 and 2021, some of the executive directors received emoluments and emoluments receivable from Bank of Communications Co., Ltd. Hong Kong Branch ("HKBR"), amounting to HK\$7,730,000 (2021: HK\$12,015,000), in respect of their service to the Bank and HKBR. The portion of the directors' emoluments in relation to the services to the Bank of HK\$4,100,000 (2021: HK\$7,283,000) has been borne by HKBR and included in management fee to a branch of the ultimate holding company (note 11).

(b) Directors' material interests in transactions, arrangements or contracts

No significant transactions, arrangements and contracts in relation to the Bank's business to which the Bank was a party and in which a director of the Bank had a material interest, whether directly or indirectly, subsisted at the end of the year or at any time during the year.

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(All amounts expressed in thousands of HK\$ unless otherwise stated)

14 INCOME TAX EXPENSES

	2022	2021
Current tax		
– Hong Kong profits tax	448,986	525,084
– Under provision in prior years	54	100
	449,040	525,184
Deferred income tax	23,024	(44,604)
Income tax expense	472,064	480,580

The current tax provision for the year ended 31 December 2022 and 2021 is based on the estimated assessable profit by using the Hong Kong profits tax rate of 16.5 per cent. The major reconciliation items are as follows:

	2022	2021
Profit before tax	2,879,497	3,150,838
Tax calculated at a tax rate of 16.5%	475,117	519,888
Tax effect of expense not deductible for tax purpose	31,392	10,351
Tax effect arising from income not subject to tax	(34,448)	(49,724)
Under provision in prior years	54	100
Others	(51)	(35)
	472,064	480,580

15 CASH AND BALANCES WITH CENTRAL BANK

	2022	2021
Cash	710,229	1,104,512
Balances with central bank	1,557,253	9,802,140
Less: ECL allowances	(2)	(48)
	2,267,480	10,906,604

16 DUE FROM AND PLACEMENTS WITH BANKS AND OTHER FINANCIAL INSTITUTIONS

	2022	2021
Due from and placements with banks and other financial institutions	3,070,118	7,310,594
Placements with and loans to banks	21,478,905	3,649,013
Less: ECL allowances	(1,963)	(291)
	24,547,060	10,959,316

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17 FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	2022	2021
Derivative financial instruments (note 18)	13,133,770	2,591,909
Debt securities at fair value through profit or loss		
– Unlisted	444,127	1,043,578
	13,577,897	3,635,487

Debt securities at fair value through profit or loss are analyzed by issuer as follows:

	2022	2021
Debt securities at fair value through profit or loss		
- Governments and central banks	233	-
– Banks and other financial institutions	230,896	810,224
– Corporate entities	212,998	233,354
	444,127	1,043,578

18 DERIVATIVE FINANCIAL INSTRUMENTS

The following derivative instruments are utilized by the Bank for trading or hedging purposes:

Currency forwards are contracts between two parties to buy or sell certain currencies at a specified future date at a predetermined price. The party agreeing to buy the underlying currency in the future assumes a long position, and the party agreeing to sell the currency in the future assumes a short position. The price agreed upon is called the delivery price, which is equal to the forward price at the time the contract is entered into.

Currency and interest rate swaps are commitments to exchange one set of cash flows for another. Swaps result in an economic exchange of currencies or interest rates (for example, fixed rate for floating rate) or a combination of all these (i.e. cross-currency interest rate swaps). The Bank's credit risk represents the potential cost to replace the swap contracts if counterparties fail to perform their obligation. This risk is monitored on an ongoing basis with reference to the current fair value, the notional amount of the contracts and the liquidity of the market. To control the level of credit risk taken, the Bank assesses counterparties using the same techniques as for its lending activities.

Currency and interest rate options are contractual agreements under which the seller (writer) grants the purchaser (holder) the right, but not the obligation, either to buy (a call option) or sell (a put option), on or before a set date or during a set period, a specific amount of a foreign currency at a predetermined price or to receive an interest payment based on a variable interest rate and pay a fixed interest rate or vice versa. The seller receives a premium from the purchaser in consideration for assuming foreign exchange or interest rate risk. Options may be either exchange-traded or negotiated between the Bank and a customer (over the-counter market).

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18 DERIVATIVE FINANCIAL INSTRUMENTS (continued)

The notional amounts of certain types of financial instruments provide a reference of the amounts recognized in the statement of financial position but do not necessarily indicate the amounts of future cash flows involved or the current fair value of the instruments and, therefore, do not indicate the Bank's exposure to credit or price risks. The derivative instruments become favourable (assets) or unfavourable (liabilities) as a result of fluctuations in market interest rates or foreign exchange rates relative to their terms. The aggregate fair values of derivative financial assets and liabilities can fluctuate significantly from time to time. The fair values of derivative instruments held are set out in the following tables.

		For hedging			For trading			Total	
	Contractual/	Fair valu	es	Contractual/	Fair valu			Fair valu	r values
	notional amount	Assets	Liabilities	notional amount	Assets	Liabilities	notional amount	Assets	Liabilities
As at 31 December 2022								·	
Foreign exchange contracts	-	-	-	237,747,294	1,244,122	(1,367,784)	237,747,294	1,244,122	(1,367,784)
Interest rate contracts and others	113,486,400	11,217,237	(3,705)	36,690,366	672,411	(622,824)	150,176,766	11,889,648	(626,529)
Total amount of derivative instruments recognized	113,486,400	11,217,237	(3,705)	274,437,660	1,916,533	(1,990,608)	387,924,060	13,133,770	(1,994,313)
As at 31 December 2021									
Foreign exchange contracts	-	-	-	286,693,645	529,125	(935,359)	286,693,645	529,125	(935,359)
Interest rate contracts and others	106,568,813	1,775,468	(477,410)	32,765,008	287,316	(201,824)	139,333,821	2,062,784	(679,234)
Total amount of derivative instruments recognized	106,568,813	1,775,468	(477,410)	319,458,653	816,441	(1,137,183)	426,027,466	2,591,909	(1,614,593)

The tables above provide a breakdown of the contractual or notional amounts and the fair values of the Bank's derivative financial instruments outstanding at year end. These instruments, comprising foreign exchange and interest rate derivatives allow the Bank and its customers to transfer, modify or reduce their foreign exchange and interest rate risks.

The Bank undertakes its transactions in foreign exchange and interest rates contracts with other financial institutions and customers. Management has established limits for these contracts based on counterparty types, industry sectors and countries. Related risks are regularly monitored and controlled by management.

Notional amounts of derivative financial instruments by original currency:

		2021
Renminbi	47,658,390	43,751,783
United States Dollar	191,426,511	240,300,398
Hong Kong Dollar	142,328,142	138,214,909
Others	6,511,017	3,760,376
Total	387,924,060	426,027,466

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18 DERIVATIVE FINANCIAL INSTRUMENTS (continued)

Hedge accounting

The Bank applies hedge accounting on hedging its interest rate risk on certain bond investments and loans, as follows:

Interest rate risk on fixed rate financial assets (fair value hedge)

The Bank holds a portfolio of long-term fixed rate debt securities and loans and therefore is exposed to changes in fair value due to movements in market rates. The Bank manages this risk exposure by entering into pay fixed/receive floating interest rate swaps.

Only the interest rate risk element is hedged and therefore other risks, such as credit risk, are managed but not hedged by the Bank. The interest rate risk component is determined as the change in fair value of the long-term fixed rate debt securities arising solely from changes in the benchmark rate of interest. Such changes are usually the largest component of the overall change in fair value.

This strategy is designated as a fair value hedge and its effectiveness is assessed by comparing changes in the fair value of the debt securities attributable to changes in the benchmark rate of interest with changes in the fair value of the interest rate swaps.

The Bank establishes the hedging ratio by matching the notional of the derivatives with the principal of the portfolio being hedged. Following reasons could cause ineffectiveness:

- 1) the effect of the counterparty and the Bank's own credit risk on the fair value of the interest rate swap, which is not reflected in the fair value of the hedged item attributable to the change in interest rate;
- 2) differences in maturities of the interest rate swap and the debt securities.
- a) The following table sets out the maturity profile and average fixed interest rate of the hedging instruments used in the Bank's hedging strategies:

	Maturity					
As at 31 December 2022	Up to one month	One to three months	Three months to one year	One year to five years	More than five years	Total
Fair value hedge						
Interest rate						
Interest rate contract						
Notional amount	633,764	1,606,054	9,740,324	57,755,634	43,750,624	113,486,400
Average fixed interest rate	3.96%	3.21%	3.80%	3.25%	3.29%	3.31%
			Maturity			
	Up to one	One to three	Three months	One year to	More than five	
As at 31 December 2021	month	months	to one year	five years	years	Total
Fair value hedge						
Interest rate						
Interest rate contract						
Notional amount	272,884	2,474,280	6,541,750	52,654,792	44,625,107	106,568,813
Average fixed interest rate	4.31%	3.56%	3.43%	3.26%	3.33%	3.31%

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18 DERIVATIVE FINANCIAL INSTRUMENTS (continued)

Hedge accounting (continued)

b)The following table contains details of the hedging instruments used in the Bank's hedging strategies:

	Ca	arrying amount			
As at 31 December 2022	Notional amount	Assets	Liabilities	Line item on statement of financial position	Fair value changes of the hedging instruments
Fair value hedge					
Interest rate					
Interest rate contract	113,486,400	11,217,237	(3,705)	Financial assets/ liabilities at fair value through profit or loss	10,315,164
	C	Carrying amount			
As at 31 December 2021	Notional amount	Assets	Liabilities	Line item on statement of financial position	Fair value changes of the hedging instruments
Fair value hedge					
Interest rate					
Interest rate contract	106,568,813	1,775,468	(477,410)	Financial assets/ liabilities at fair value through profit or loss	2,931,467

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18 DERIVATIVE FINANCIAL INSTRUMENTS (continued)

Hedge accounting (continued)

c) The following table contains details of the hedged exposures covered by the Bank's hedging strategies:

As at 31 December 2022	Carrying amount of hedged item	Accumulated amount of fair value adjustments on the hedged item	Line item on statement of financial position	Fair value changes of the hedged items	Ineffectiveness recognized in profit or loss
Fair value hedge					
Interest rate					
Debt investments	90,108,108	(10,496,907)	Financial asset at fair value through other comprehensive income	(9,069,824)	271,083
Debt investments	10,765,407	(818,290)	Financial asset	(820,810)	(6,681)
			at amortized cost		
Loans and advances to customers	1,468,123	(90,370)	Loans and advances to customers	(160,070)	58
As at 31 December 2021	Carrying amount of hedged item	Accumulated amount of fair value adjustments on the hedged item	Line item on statement of financial position	Fair value changes of the hedged items	Ineffectiveness recognized in profit or loss
Fair value hedge					
Interest rate					
Debt investments	101,548,603	(1,474,407)	Financial asset at fair value through other comprehensive income	(2,895,184)	(44,249)
Debt investments	2,232,932	(2,880)	Financial asset at amortized cost	(2,880)	(2,232)
Loans and advances to customers	1,628,194	69,700	Loans and advances to customers	(80,073)	(189)

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18 DERIVATIVE FINANCIAL INSTRUMENTS (continued)

Hedge accounting (continued)

The following table contains information regarding the effectiveness of the hedging relationships designated by the Bank, as well as the impacts on profit or loss and other comprehensive income:

For the year ended 31 December 2022	Gains/(losses) recognized in other comprehensive Income	Hedge ineffectiveness recognized in profit and loss	Profit and loss line item that includes hedge ineffectiveness
Fair value hedge			
Interest rate	-	264,460	Net gains arising from trading activities
	Gains/(losses)	Hedge ineffectiveness	Profit and loss line item
For the year ended	recognized in other	recognized in	that includes hedge
31 December 2021	comprehensive Income	profit and loss	ineffectiveness
Fair value hedge			
Interest rate	-	(46,670)	Net gains arising from trading activities

Exposures to interbank offered rates

Following the decision by global regulators to phase out Interbank Offered Rates ("IBORs") and replace them with alternative reference rates, the Bank has established a project to manage the transition for any of its contracts that could be affected. The project is coordinated by Deputy Chief Executive and involved senior representatives from functions across the Bank including the asset and liability management, front line business and product management, legal and compliance, finance, risk management, operations and technology. The project team provides progress updates to the project steering committee and the senior management at least on a monthly basis.

During 2022, the Bank has successfully completed the transition of a significant portion of its IBOR exposure to the Alternate Reference Rates (ARRs) and has in place detailed plans, processes and procedures to support the transition of the remainder. The Bank is confident that it has the operational capability to process the remaining transitions to the ARRs for those interest rate benchmarks such as USD London Interbank Offered Rate ("LIBOR") that will cease to be available after 30 June 2023.

IBOR reform exposes the Bank to various risks, which the project is managing and monitoring closely. These risks include but are not limited to the following:

- 1. Conduct risk arising from discussions with clients and market counterparties due to the amendments required to existing contracts necessary to effect IBOR reform
- 2. Financial risk to the Bank and its clients that markets are disrupted due to IBOR reform giving rise to financial losses
- 3. Pricing risk from the potential lack of market information if liquidity in IBORs reduces and ARRs are illiquid and unobservable
- 4. Operational risk arising from changes to the Bank's IT systems and processes, also the risk of payments being disrupted if an IBOR ceases to be available
- 5. Accounting risk if the Bank's hedging relationships fail and from unrepresentative income statement volatility as financial instruments transition to ARRs

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

18 DERIVATIVE FINANCIAL INSTRUMENTS (continued)

Exposures to interbank offered rates (continued)

The Bank has fair value hedge accounting relationships maturing beyond the anticipated cessation date for IBORs. Significant judgement will be required in determining when uncertainty is expected to be resolved and when targeted relief will cease to apply. As at 31 December 2022, the Bank believes uncertainty continues to exist as to when and how the replacement may occur with respect to the relevant derivative hedging instruments, and so the targeted reliefs apply to the Bank's hedge accounting relationships that reference benchmarks subject to reform or replacement.

As at 31 December 2022, the details of derivative instruments designated in fair value hedge accounting relationships linked to IBORs, excluding the derivative instruments that will expire the transition date, are as follows:

	Notional amount		
	As at As a		
	31 December	31 December	
	2022	2021	
Fair value hedge			
Interest rate contract			
USD LIBOR	90,791,432	102,503,091	

The following table shows outstanding amounts of financial instruments referencing the interest rate benchmarks that have yet to transit alternative benchmark rates as at 31 December 2022, excluding the financial instruments that will expire before the transition date. The amounts of financial assets and liabilities are shown at gross carrying amounts, and derivatives are shown at notional amounts.

	Non-derivative financial assets carrying value	Non-derivative financial liabilities carrying value	Derivatives nominal amounts (note a)
USD LIBOR with different tenors			
As at 31 December 2022	35,778,701	159,812	98,961,418
As at 31 December 2021	40,911,291	192,569	109,990,957
EUR LIBOR with different tenors			
As at 31 December 2022	-	-	-
As at 31 December 2021	37,420	-	-

Note a: The IBOR exposures for derivatives nominal amounts include loan commitments.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

19 LOANS AND ADVANCES TO CUSTOMERS

19.1 Loans and advances to customers

	2022	2021
Loans and advances to customers at amortized cost		
Loans and advances to customers	210,753,905	186,435,127
Less: ECL allowance	(2,706,136)	(885,023)
	208,047,769	185,550,104
Loans and advances to customers at fair value through other comprehensive income		
Loans and advances to customers	-	2,862,977
	208,047,769	188,413,081

19.2 Analysis of loans and advances to customers by staging

As at 31 December 2022	Stage 1 allowance	Stage 2 allowance	Stage 3 allowance	Total
Loans and advances to customers				
– Carried at amortized cost (Note)	191,573,755	13,379,202	5,800,948	210,753,905
 Carried at fair value through other comprehensive income 	_	_	-	-
Less: ECL allowance	(554,567)	(139,649)	(2,011,920)	(2,706,136)
Net loans and advances to customers	191,019,188	13,239,553	3,789,028	208,047,769

Note: Included in the stage 1 balance is a fair value loss of hedging adjustment of HK\$90,370,000 which is not subject to ECL allowance (note 18(c)).

As at 31 December 2021	Stage 1 allowance	Stage 2 allowance	Stage 3 allowance	Total
Loans and advances to customers				
– Carried at amortized cost (Note)	177,710,235	8,522,923	201,969	186,435,127
- Carried at fair value through other				
comprehensive income	2,862,977	-	-	2,862,977
Less: ECL allowance	(699,220)	(109,088)	(76,715)	(885,023)
Net loans and advances to customers	179,873,992	8,413,835	125,254	188,413,081

Note: Included in the stage 1 balance is a fair value gain of hedging adjustment of HK\$69,700,000 which is not subject to ECL allowance (note 18(c)).

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

19 LOANS AND ADVANCES TO CUSTOMERS (continued)

19.3 Credit quality of loans and advances to customers

Loans and advances to customers analyzed by security type

	2022	2021
Unsecured loans	44,552,577	42,095,342
Loans secured by guarantee	67,523,538	61,088,084
Collateralized and other secured loans	98,677,790	86,114,678
Gross amount of loans and advances to customers before ECL allowance	210,753,905	189,298,104

19.4 Overdue loans

Gross advances to customers overdue for more than 3 months

	2022		2021	
		% of gross advances to customers		% of gross advances to customers
Six months or less but over three months	2,403,079	1.27%	69,314	0.04%
One year or less but over six months	1,595,963	0.84%	43,945	0.02%
Over one year	171,351	0.09%	59,374	0.03%
Total gross amount of advances overdue for more than three months	4,170,393	2.20%	172,633	0.09%
ECL allowance for stage 3	1,678,135		72,420	
Rescheduled advances excluding those overdue for more than three months	1,367	0.00%	2,163	0.00%

20 FINANCIAL INVESTMENTS

	2022	2021
Financial assets at amortized cost		
Debt securities at amortized cost (Note)		
– Listed	12,015,178	5,340,882
– Unlisted	37,720,642	11,367,156
Less: ECL allowance	(24,562)	(10,790)
	49,711,258	16,697,248
Financial assets at fair value through other comprehensive income		
Debt securities at fair value through other comprehensive income		
– Listed	72,389,534	92,088,821
– Unlisted	88,954,149	130,881,841
Equity securities at fair value through other comprehensive income		
– Unlisted	8,587	8,869
	161,352,270	222,979,531
	211,063,528	239,676,779

Note: Included in the debt securities at amortized cost is a fair value change of hedging adjustment of HK\$818,290,000 (2021: HK\$2,880,000) which is not subject to ECL allowance (note 18(c)).

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

20 FINANCIAL INVESTMENTS (continued)

The Bank has designated the investment in equity instrument at fair value through other comprehensive income. The Bank chose this presentation alternative because the investment was made as a pre-requisite for the provision of the bank's certain normal banking business rather than with a view to profit on a subsequent sale, and there is no plan to dispose this investment in short or medium term.

Financial investments analyzed by issuer are as follows:

	2022	2021
Financial assets at amortized cost		
Debt securities at amortized cost		
- Governments and central banks	20,756,228	6,290,674
– Banks and other financial institutions	25,610,986	9,418,072
– Corporate entities	3,344,044	988,502
	49,711,258	16,697,248
Financial assets at fair value through other comprehensive income		
Debt securities at fair value through other comprehensive income		
– Governments and central banks	15,740,285	37,391,932
– Banks and other financial institutions	81,425,450	113,262,015
– Corporate entities	64,177,948	72,316,715
Equity securities at fair value through other comprehensive income		
– Banks and other financial institutions	8,587	8,869
	161,352,270	222,979,531
	211,063,528	239,676,779

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

21 PROPERTY AND EQUIPMENT

	Equipment	Property improvement	Transportation equipment	Total
Cost				
As at 1 January 2022	85,340	83,253	-	168,593
Additions	14,689	5,997	3,126	23,812
Disposals	(1,600)	_	-	(1,600)
As at 31 December 2022	98,429	89,250	3,126	190,805
Accumulated depreciation				
As at 1 January 2022	(50,774)	(41,566)	-	(92,340)
Charge for the year	(12,918)	(13,981)	(608)	(27,507)
Disposals	1,276	-	-	1,276
As at 31 December 2022	(62,416)	(55,547)	(608)	(118,571)
Net book value				
As at 31 December 2022	36,013	33,703	2,518	72,234
	Equipment	Property improvement	Transportation equipment	Total
Cost				
As at 1 January 2021	73,436	54,703	_	128,139
Additions	12,707	28,598	-	41,305
Disposals	(803)	(48)	-	(851)
As at 31 December 2021	85,340	83,253	-	168,593
Accumulated depreciation				
As at 1 January 2021	(40,809)	(31,538)	-	(72,347)
Charge for the year	(10,623)	(10,038)	-	(20,661)
Disposals	658	10	-	668
As at 31 December 2021	(50,774)	(41,566)	-	(92,340)
Net book value				

34,566

41,687

As at 31 December 2021

_

76,253

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

22 DEFERRED INCOME TAX ASSETS/(LIABILITIES)

The movements on the net deferred income tax assets/(liabilities) are as follows:

	2022	2021
As at 1 January	(301,937)	(163,500)
Deferred income tax (debited)/credited to income statement (note 14)	(23,024)	44,604
Deferred income tax credited/(debited) to equity	498,156	(183,041)
As at 31 December	173,195	(301,937)

Deferred income tax assets and liabilities are attributable to the following items:

	2022	2021
Deferred income tax assets		
ECL allowances	121,932	138,767
Revaluation of investment securities	56,844	-
Deferred income tax liabilities		
Accelerated depreciation allowances	(5,581)	(8,458)
Revaluation of investment securities	-	(432,246)
	173,195	(301,937)

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to set off current income tax assets against current income tax liabilities and when the deferred income taxes relate to the same fiscal authority. The deferred income tax assets and liabilities are to be recovered and settled after one year and the following amounts, determined after appropriate offsetting, are shown in the statement of financial position:

	2022	2021
Deferred income tax assets	178,776	138,767
Deferred income tax liabilities	(5,581)	(440,704)
	173,195	(301,937)

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

23 RIGHT-OF-USE ASSETS

	2022	2021
Gross:		
As at 1 January	711,611	578,148
Additions	98,500	136,640
Reductions	(1,517)	(3,177)
As at 31 December	808,594	711,611
Accumulated depreciation		
As at 1 January	(496,448)	(344,018)
Charge for the year (note 11)	(143,268)	(153,359)
Reduction	569	929
As at 31 December	(639,147)	(496,448)
Net book value		
As at 1 January	215,163	234,130
As at 31 December	169,447	215,163

(i) Amounts recognized in the statement of financial position

The statement of financial position shows the following amounts relating to leases:

Right-of-use asset	2022	2021
Properties	168,959	209,411
Equipment	442	5,567
Others	46	185
	169,447	215,163
Lease liabilities	172,297	219,127

For the year ended 31 December 2022

(All amounts expressed in thousands of HK\$ unless otherwise stated)

23 RIGHT-OF-USE ASSETS (continued)

(ii) Amounts recognized in the statement of profit or loss

The statement of profit or loss shows the following amounts relating to leases:

Depreciation charge of right-of-use assets (note 11)	2022	2021
Properties	138,004	147,474
Equipment	5,125	5,746
Others	139	139
	143,268	153,359

The statement of profit or loss shows the following amounts relating to leases:

Finance costs-lease interest expense (note 11)	2022	2021
Properties	1,732	2,702
Equipment	18	39
Others	1	3
	1,751	2,744

The total cash outflow for leases in 2022 was HK\$195,600,000 (2021: HK\$207,032,000).

(iii) The Bank's leasing activities and how these are accounted for

The Bank leases various retail stores, equipment and advertising spaces. Rental contracts are typically made for fixed periods of 1 year to 8 years, but may have extension options as described in (iv) below.

Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants but leased assets may not be used as security for borrowing purposes.

(iv) Extension and termination options

Extension and termination options are included in a number of retail stores across the Bank. These terms are used to maximise operational flexibility in terms of managing contracts. The majority of extension and termination options held are exercisable only by the Bank and not by the respective lessor.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

24 OTHER ASSETS

	2022	2021
Interest receivable	2,701,048	2,326,711
Less: ECL allowances	(22,249)	(18,821)
	2,678,799	2,307,890
Other receivables, prepayments and others	2,408,791	165,192
Less: ECL allowances	(6)	(6)
	2,408,785	165,186
Settlement accounts	1,977,909	1,135,607
Intangible assets (a)	27,658	24,344
	7,093,151	3,633,027

(a) Intangible assets

	2022	2021
Cost		
As at 1 January	34,269	24,016
Additions	10,385	10,253
As at 31 December	44,654	34,269
Accumulated amortization		
As at 1 January	(9,925)	(4,696)
Amortization expenses	(7,071)	(5,229)
As at 31 December	(16,996)	(9,925)
Net book value as at 31 December	27,658	24,344

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

25 DUE TO BANKS AND OTHER FINANCIAL INSTITUTIONS

	2022	2021
Deposits from banks and other financial institutions	34,411,839	21,126,208
Subordinated loan from the ultimate holding company	2,000,000	2,000,000
Financial assets sold under repurchase agreements (note 35)	21,882,034	28,772,576
Total	58,293,873	51,898,784

On 19 January 2018, the Bank had drawn down a HKD2,000 million Tier 2 subordinated capital loan from the ultimate holding company due 19 January 2028. It has a floating rate of interest payable quarterly per annum in arrears for each interest period at the aggregate of 1.50% per annum and three month HIBOR.

26 DUE TO CUSTOMERS

	2022	2021
Demand deposits and current accounts	12,142,424	15,980,611
Saving deposits	63,994,819	82,059,322
Time, call, notice and other deposits	262,081,207	233,687,201
	338,218,450	331,727,134
Including:		
Deposits pledged as collateral	3,349,966	3,228,851

27 FINANCIAL LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

	2022	2021
Derivative financial instruments (note 18)	1,994,313	1,614,593

For the year ended 31 December 2022 and 2021, there were no significant changes in the fair value of the Bank's financial liabilities designated as at fair value through profit or loss that were attributable to the changes in credit risk.

28 CERTIFICATES OF DEPOSITS ISSUED

	2022	2021
Carried at amortized cost	-	3,753,731
Carried at fair value through profit and loss	1,757,007	-
	1,757,007	3,753,731

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29 DEBT SECURITIES ISSUED

	2022	2021
Tier 2 capital bonds	7,797,780	7,796,690

On 8 July 2021, the Bank issued USD1,000 million Tier 2 capital bonds due 2031. They have an initial rate of distribution of 2.304% per annum payable semi-annually in arrear until year 5 and resettable on year 5 at the prevailing 5-year U. S. Treasury yield plus 1.4% per annum.

30 OTHER LIABILITIES

	2022	2021
Interest payable	2,630,783	460,464
Settlement accounts	1,235,493	6,102,834
Withholding tax	58,419	63,805
Provision for impairment allowances on financial guarantees and credit related commitment	14,964	22,897
Others	4,233,319	2,808,087
Total	8,172,978	9,458,087

31 SHARE CAPITAL

	2022	2021
Share capital as at 1 January and 31 December	37,900,000	37,900,000
Number of Shares	37,900,000,000	37,900,000,000

32 ADDITIONAL EQUITY INSTRUMENT

	2022	2021
Undated non-cumulative subordinated Additional		
Tier 1 capital securities with US\$500 million	3,871,450	3,871,450

In March 2020, the Bank issued USD500 million undated non-cumulative subordinated Additional Tier 1 capital securities. The capital securities are perpetual securities and listed on the Stock Exchange of Hong Kong Limited in respect of which they may be redeemed at the Bank's option on 3 March 2025 and every six months thereafter or the occurrence of certain other events. They have an initial rate of distribution of 3.725% per annum payable semi-annually in arrear in year 1 to year 5 and resettable on year 5 and every 5 years thereafter at then prevailing 5-year U. S. Treasury yield plus 2.525% per annum. The Bank has paid dividend of HKD145,873,000 to the additional equity instrument holders for the year ended 31 December 2022 (31 December 2021: HKD144,608,000). The equity instrument will be written down at the point of non-viability on the occurrence of a trigger event as defined in the Banking (Capital) Rules. It ranks higher than ordinary shares in the event of a winding-up.

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

33 FINANCIAL GUARANTEES AND CREDIT RELATED COMMITMENTS AND OTHER COMMITMENTS

Financial guarantees and credit related commitments

The following tables indicate the contractual amounts of the Bank's financial guarantees and credit related commitments which the Bank has committed to its customers:

	2022	2021
Letters of guarantee	16,321	73,635
Letters of credit commitments	810,900	248,129
Acceptances bills	92,191	82,350
Credit card commitments	4,849,698	5,099,298
Other credit-related commitments		
Under 1 year	14,207,584	12,205,578
More than 1 year	11,696,511	9,366,777
	31,673,205	27,075,767
Capital expenditure commitments		
	2022	2021
Contracted but not provided for	19,540	8,726

Operating lease commitments

As at 31 December 2022 and 2021, the Bank has no non-cancellable operating lease commitments related to short-term leases, which are the leases with a lease term of 12 months or less.

34 NOTES TO STATEMENT OF CASH FLOWS

(a) Analysis of the balance of cash and cash equivalents

For the purposes of the statement of cash flows, cash and cash equivalents comprise the following balances with original maturities of less than or equal to 90 days used for the purpose of meeting short-term cash commitments:

	2022	2021
Cash and balances with central bank (note 15)	2,267,480	10,906,604
Due from and placements with banks and other financial institutions	11,896,842	9,441,417
	14,164,322	20,348,021

For the year ended 31 December 2022 (All amounts expressed in thousands of HK\$ unless otherwise stated)

34 NOTES TO STATEMENT OF CASH FLOWS (continued)

(b) Reconciliation of liabilities arising from financing activities

	Debt securities issued	
	2022	2021
At 1 January	7,796,690	_
Cash flows:		
Proceeds from issuance of debt securities	-	7,796,690
Non-cash changes:		
Exchange difference	1,090	-
At 31 December	7,797,780	7,796,690
	Lease li	abilities
	2022	2021
At 1 January	219,127	238,333
Cash flows:		
Payment of lease liabilities	(146,133)	(156,342)
Non-cash changes:		
Additions	98,500	136,131
Interest expense	1,751	2,744
Early termination	(948)	(1,739)
At 31 December	172,297	219,127

35 COLLATERALS

Financial assets sold under repurchase agreements included certain transactions under which, title of the pledged securities has been transferred to counterparties.

Sales and repurchase agreements are transactions in which the Bank sells a security and simultaneously agrees to repurchase it (or an asset that is substantially the same) at a fixed price on a future date. Since the repurchase prices are fixed, the Bank is still exposed to substantially all the credit risks and market risks and rewards of those securities sold. These securities, which the Bank does not have the ability to use during the term of the arrangements, are not derecognized from the financial statements but regarded as "collateral" for the secured lending from these because the Bank retains substantially all the risks and rewards of these securities. In addition, it recognizes a financial liability for cash received.

As at 31 December 2022 and 2021, the Bank entered into repurchase agreements with certain counterparties. The proceeds from selling such securities were presented as "financial assets sold under repurchase agreements" (see note 25).

	Transferred assets		Associated	l liabilities
	2022	2021	2022	2021
Investment securities	23,615,867	31,003,531	(21,882,034)	(28,772,576)

36 MATERIAL RELATED PARTY TRANSACTIONS

(a) Parent entity

The Bank is controlled by the following entity:

Name	Туре	Place of incorporation	Ownership interest	
			2022	2021
Bank of Communications Co., Ltd.	Ultimate parent entity and controlling party	People's Republic of China	100%	100%

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36 MATERIAL RELATED PARTY TRANSACTIONS (continued)

(b) Key management personnel compensation

	2022	2021
Short-term employee benefits	16,273	17,902
Post-employment benefits	1,493	1,373
	17,766	19,275

(c) Transactions with the Ministry of Finance of the People's Republic of China ("MOF")

As at 31 December 2022, the MOF holds 17,732 million (31 December 2021: 17,732 million) shares of the ultimate holding company of the Bank which represents 23.88% (31 December 2021: 23.88%) of equity interest of the ultimate holding company of the Bank.

The MOF is a Chinese government ministry, primarily responsible for managing state fiscal revenue and expenditures, and establishing and enforcing taxation policies. The Bank enters into banking transactions with the MOF under normal course of business and they mainly include the purchase and redemption of financial investments issued by the MOF and the deposits from the MOF.

Details of transactions and outstanding balances are summarized below:

	2022	2021
Bonds issued by MOF	4,288,659	10,022,720
Other assets	18,910	52,073
Interest income	160,891	186,935
Net gains arising from trading activities	262,786	86,537

(d) Transactions with The Hong Kong and Shanghai Banking Corporation Limited and its subsidiaries ("HSBC")

As at 31 December 2022, HSBC holds 13,886 million (31 December 2021: 13,886 million) shares of the ultimate holding company of the Bank which represents 18.7% (31 December 2021: 18.7%) of total share capital of the Bank. Transactions between the Bank and HSBC are carried out under normal commercial terms and paid at market rates.

Details of transactions and outstanding balances are summarized below:

	2022	2021
Due from and placements with banks and other financial institutions	58,618	155,232
Placement with and loans to banks	1,080,000	-
Financial assets at fair value through other comprehensive income	1,639,755	1,279,397
Derivative financial assets	99,292	48,893
Other assets	5,565	2,064
Due to banks and other financial institutions	11,261,017	12,741,193
Derivative financial liabilities	49,761	17,653
Other liabilities	100,395	6,059
Interest income	40,914	20,401
Interest expense	3,548	916
Net gains arising from trading activities	339,791	105,820
Net (losses)/gains arising from financial investments	(3,181)	1,618

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36 MATERIAL RELATED PARTY TRANSACTIONS (continued)

(e) Transactions with fellow subsidiaries

The pricing of the transactions with fellow subsidiaries is determined based on normal terms of commercial banks.

Details of transactions and outstanding balances are summarized below:

	2022	2021
Loans and advances to customers	418,065	423,425
Other receivables	217,924	-
Other assets	218,076	148
Due to customers	1,406,814	1,293,907
Due to banks and other financial institutions	39,065	-
Other liabilities	6,713	6,646
Fee and commission income	12,471	13,571
Interest income	17,805	8,971
Interest expense	1,283	266
Fee and commission expense	12,839	17,614
Rental expenses	21,982	24,608
Other operating expenses	29,964	30,392

(f) Transactions with directors and senior management

	2022	2021
Loans and advances to customers	21,169	22,266
Due to customers	89,616	76,097
Interest income	220	23
Interest expense	1,516	622

Particular of loans made to directors of the Bank pursuant to section 383 of the Hong Kong Companies Ordinance and Part 3 of the Companies (Disclosure of Information about Benefits of Directors) Regulation for the year ended 31 December 2022 and 2021 are as follows:

	2022	2021
Aggregate amount of relevant transactions outstanding at year end	446	30
Maximum aggregate amount of relevant transactions outstanding during the year	846	369

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36 MATERIAL RELATED PARTY TRANSACTIONS (continued)

(g) Transactions with the ultimate holding company

Transactions between the Bank and the ultimate holding company are carried out under normal commercial terms and paid at market price.

Details of transactions and outstanding balances are summarized below:

	2022	2021
Due from and placements with banks and other financial institutions	1,244,807	3,971,187
Other assets	1,086,590	549,331
Derivative financial assets	10,494,774	2,244,430
Due to banks and other financial institutions	33,602,497	11,858,679
Other liabilities	1,448,509	1,098,213
Derivative financial liabilities	1,008,799	942,795
Interest income	52,045	7,741
Interest expense	767,170	89,347
Other operating expenses	552,974	501,130
Other operating income	2,754	2,003
Purchase of loan and advances	8,041,506	29,712,025
Net gains arising from trading activities	9,361,556	1,674,804
Net losses arising from financial investments	21	_

37 SEGMENTAL ANALYSIS

The Bank manages the business mainly from an operating segment perspective and the majority of the Bank's revenues, profits before tax and assets are derived from Hong Kong. The Bank is engaged predominantly in banking and related financial activities. It comprises corporate banking, personal banking, treasury and other business. Corporate banking mainly comprises corporate loans, bills, trade finance, corporate deposits and remittance. Personal banking mainly comprises individual loans, individual deposits, credit cards and remittance. Treasury mainly comprises money market placements and takings, financial investment, and securities sold under repurchase agreements. The "Others" segment mainly comprises unallocated revenue and expenses and corporate expenses.

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37 SEGMENTAL ANALYSIS (continued)

The business information of the Bank is summarized as follows:

			2022		
	Corporate Banking	Personal Banking	Treasury	Others	Total
External net interest income/(expense)	2,626,533	(2,387,790)	5,255,586	(16)	5,494,313
Inter-segment net interest income/(expense)	(1,567,521)	4,289,018	(2,721,497)	_	-
Net interest income	1,059,012	1,901,228	2,534,089	(16)	5,494,313
Net fee and commission income/(expense)	386,950	679,537	(226,279)	-	840,208
Net gains arising from trading activities	-	74	337,369	-	337,443
Net gains arising from financial investments	-	-	(334,984)	-	(334,984)
Dividend income	-	35	-	-	35
Other operating income	966	29,524	2,614	133	33,237
Total operating income	1,446,928	2,610,398	2,312,809	117	6,370,252
Change in expected credit losses	(1,834,178)	29,421	18,967	(304)	(1,786,094)
Other operating expense					
- Depreciation and amortization	(2,427)	(166,628)	(136)	(8,655)	(177,846)
– Others	(84,406)	(881,756)	(79,794)	(480,859)	(1,526,815)
Profit/(loss) before tax	(474,083)	1,591,435	2,251,846	(489,701)	2,879,497
Income tax expense	_	-	-	(472,064)	(472,064)
Net profit/(loss) for the year	(474,083)	1,591,435	2,251,846	(961,765)	2,407,433
Depreciation and amortization	(2,427)	(166,628)	(136)	(8,655)	(177,846)
Capital expenditure	(267)	(25,425)	(32)	(8,471)	(34,195)
Segment assets	147,900,578	62,147,187	256,837,612	-	466,885,377
Unallocated assets	-	-	-	126,384	126,384
Total assets	147,900,578	62,147,187	256,837,612	126,384	467,011,761
- Segment liabilities	(110,016,502)	(232,553,581)	(73,495,216)	_	(416,065,299)
Unallocated liabilities	_	-	-	(396,542)	(396,542)
Total liabilities	(110,016,502)	(232,553,581)	(73,495,216)	(396,542)	(416,461,841)

For the year ended 31 December 2022

(All amounts expressed in thousands of HK\$ unless otherwise stated)

37 SEGMENTAL ANALYSIS (continued)

			2021		
	Corporate Banking	Personal Banking	Treasury	Others	Total
External net interest income/(expense)	1,377,871	(718,589)	2,978,943	_	3,638,225
Inter-segment net interest income/(expense)	(309,220)	2,609,441	(2,300,221)	_	
Net interest income	1,068,651	1,890,852	678,722	-	3,638,225
Net fee and commission income/(expense)	294,430	861,534	(179,772)	_	976,192
Net gains arising from trading activities	-	-	218,541	_	218,541
Net gains arising from financial investments	-	-	216,053	-	216,053
Dividend income	-	-	35	-	35
Other operating income	572	23,965	23	86	24,646
Total operating income	1,363,653	2,776,351	933,602	86	5,073,692
Change in expected credit losses Other operating expense	(340,807)	27,416	74,667	(73)	(238,797)
– Depreciation and amortization	(4,244)	(168,824)	(107)	(6,074)	(179,249)
– Others	(81,605)	(866,937)	(78,903)	(477,363)	(1,504,808)
Profit/(loss) before tax	936,997	1,768,006	929,259	(483,424)	3,150,838
Income tax expense	-	-	-	(480,580)	(480,580)
Net profit/(loss) for the year	936,997	1,768,006	929,259	(964,004)	2,670,258
- Depreciation and amortization	(4,244)	(168,824)	(107)	(6,074)	(179,249)
Capital expenditure	(96)	(47,132)	(91)	(4,239)	(51,558)
- Segment assets	137,258,416	57,604,531	262,567,584	_	457,430,531
Unallocated assets	-	-	-	85,179	85,179
Total assets	137,258,416	57,604,531	262,567,584	85,179	457,515,710
- Segment liabilities	(79,134,493)	(255,713,596)	(71,477,013)	_	(406,325,102)
Unallocated liabilities	-	-	-	(630,270)	(630,270)
Total liabilities	(79,134,493)	(255,713,596)	(71,477,013)	(630,270)	(406,955,372)
-					

38 NON-ADJUSTING EVENT AFTER REPORTING PERIOD

The Bank has no other significant subsequent events.

For the year ended 31 December 2022

The following information is disclosed as part of accompanying information to the financial statements and does not form part of the audited financial statements.

1 Corporate Governance

Sound corporate governance is the system guarantee for sustainable development and the key for prudent operation of a commercial bank. The Bank was committed to fulfilling the responsibilities of corporate governance and continuously moved forwarded the establishment of the corporate governance policy and mechanism. The Bank also refined the assignment of duties and authorities of Specialized Committees under the Board of Directors ("Board") which continuously enhance the effectiveness of corporate governance.

The Bank has compiled with, in material respects, the requirements set out in the Supervisory Policy Manual Module, CG-1 "Corporate Governance of Locally Incorporated Authorized Institutions" issued by the Hong Kong Monetary Authority ("HKMA"). The Bank has established a corporate governance structure comprising the Sole Shareholder, the Board of Directors, the Specialized Committees, Management-level Committee and Senior Management, with clearly defined authorities and responsibilities, balanced equilibrium, and coordinated and independent operation.

The Board has set up six (6) Specialized Committees, namely Green Finance Management Committee, since December 2022, Management Committee, since June 2021, Audit Committee, Nomination Committee, Remuneration Committee and Risk Management Committee since June 2017. The Specialized Committees are responsible for reporting their work to the Board, and to assist the Board to perform their duties in accordance with authorization from the Board.

2 Board of Directors

The Board is at the core of the Bank's corporate governance framework and has the ultimate responsibilities to the shareholder, depositors, creditors, employees, other stakeholders and banking supervisors of the Bank. In discharging its responsibilities, the Board strives to establish sound risk management and internal control systems for ensuring the business and operations are managed in a prudent, professional and competent manner and in conformity with relevant laws and regulations.

Generally, the key responsibilities of the Board are as follows:

- (1) To formulate the objectives and strategies as well as monitoring the implementation thereof;
- (2) To review and monitor the risk management and internal control system;
- (3) To appoint senior management and monitor its performance;
- (4) To set corporate values and standards to promote ethical and responsible professional behavior amongst staff;
- (5) To oversee and monitor Senior Management's implementation of remuneration system; and
- (6) To review and approve the annual business plans and financial budgets.

For the year ended 31 December 2022

2 Board of Directors (continued)

During the year, the Board had held five (5) meetings and major works performed by the Board include:

- (1) Approval of annual financial budget and financial accounts;
- (2) Approval of the set up of the Green Finance Management Committee under the Board and its terms of reference and the appointment of chairman and members of the Green Finance Management Committee;
- (3) Approval of the appointment of 1 Executive Director after having received the consent in writing from the HKMA;
- (4) Approval of the re-designation from Executive Director to Non-executive Director of 1 Director;
- (5) Approval of the nomination of 1 Executive Director and Chairman candidate and 1 Non-executive Director candidate by the Nomination Committee. According to the Banking Ordinance, consent of accepting the proposed appointments from HKMA is required. As at the date of this report, the applications of consent from HKMA have been approved;
- (6) Review and approval of the risk appetite, the recovery plan, report of Internal Capital Adequacy Assessment Process ("ICAAP") as well as various risk management and capital management policies;
- (7) Review of the work carried out by Specialized Committees; and
- (8) Review of the annual statement of business continuity plan and the business continuity drill report.

3 Management Committee

The main duties of the Management Committee are as follows:

- (1) To manage and control daily operation and business of the Bank in accordance with the policies and procedures adopted by the Bank from time to time and the power authorized by the Board;
- (2) To discuss and review policies which may have a significant impact on the Bank;
- (3) To ensure that senior management have the opportunities to receive regular training so as to maintain and enhance their professional capabilities, keeping them abreast of the latest industry and regulatory developments in the area relating to their duties;
- (4) To act in accordance with the instructions and requirements of the Board from time to time; and
- (5) To review and update the terms of reference of the Management Committee regularly, and submit any necessary amendments.

According to the terms of reference of the Management Committee, the Management Committee shall be chaired by Chairman of the Board, and the majority of members shall be Deputy Chairman of the Board and Chief Executive, all Deputy Chief Executives, as well as any person who is deemed appropriate and necessary according to the Board. The current members of the Management Committee are Mr. Hao Cheng (Chairman of the Management Committee), Mr. Meng Yu, Mr. Zhu Bin, Mr. Fan Chaorong, Mr. Ip Tsz Kin and Mr. Yang Hao.

During the year, the Management Committee had held nineteen (19) meetings.

For the year ended 31 December 2022

4 Audit Committee

The Audit Committee, established and authorized by the Board, is primarily responsible for monitoring the effectiveness of the Bank's Internal Audit function and work performed by external auditors. The main duties of the Audit Committee are as follows:

- (1) To draw up, review and update periodically the Terms of Reference of the Audit Committee for the Board's approval;
- (2) To establish the responsibility and independence of the Internal Audit function, and to provide guidance to the Audit Department of the Bank;
- (3) To approve the Audit Charter drawn up and updated periodically by the Audit Department of the Bank;
- (4) To approve the annual Audit Plan and the related manpower and financial resources required after identifying the areas of risk within the Bank's operations to be covered;
- (5) To assess all major aspects of the Internal Audit function periodically, and to make suggestions for improvement on its effectiveness;
- (6) To receive audit reports and review significant recommendations and implementation plans and furthermore, to ensure that the Senior Management has taken timely remedial actions as necessary to tackle the internal control weaknesses, the areas of non-compliance with the laws, regulations and policies and issues identified by external auditors;
- (7) To review ad-hoc non-compliance incident reports and HKMA on-site examination reports, etc.;
- (8) To recommend to the Board with regard to the appointment, remuneration and termination of external auditors, to consider their audit work plans, and to review their audit conclusions and significant recommendations;
- (9) To review accounting policies, financial conditions and financial reporting process; and
- (10) To provide opportunities for external and internal auditors to meet and discuss their respective findings.

According to the Terms of Reference of the Audit Committee, all Audit Committee members should be Non-executive Directors appointed by the Board. Besides, the majority of whom (including the Chairman) should be Independent Non-executive Directors. All current members of the Audit Committee are Independent Non-executive Directors; namely Mr. Tang Kwai Chang (Chairman of the Audit Committee), Mr. Chan Ka Lok and Ms. Chan Ching Har Eliza.

During the year, the Audit Committee had held four (4) meetings.

For the year ended 31 December 2022

5 Nomination Committee

The main duties of the Nomination Committee are as follows:

- (1) To identify individuals suitably qualified to become members of the Board or of Senior Management, and to select, or to make recommendations to the Board on the selection of, individuals nominated for directorships and Senior Management positions; and to ensure objectivity and independence in the selection process for Board members and Senior Management;
- (2) To make recommendations to the Board on the appointment or re-appointment of Directors and succession planning for Directors;
- (3) To review the independence of the Independent Non-executive Directors;
- (4) To undertake regular assessments of the Board performance to assist the Board in reviewing the efficiency and effectiveness of the functioning of the Board; and
- (5) To undertake regular assessments of the ongoing suitability of each Board member.

The Nomination Committee comprises at least three members. The Committee shall be chaired by an Independent Non-executive Director, and the majority of members shall be Independent Non-executive Directors. All current members of the Nomination Committee are Independent Non-executive Directors, namely Ms. Chan Ching Har Eliza (Chairman of the Nomination Committee), Mr. Chan Ka Lok and Mr. Lam Yim Nam.

Eight (8) Nomination Committee meetings were held during the year. Major works performed during the year include:

(1) Consideration of the matters relating to the adjustment and appointment of Directors and Senior Management;

- (2) Review of the Terms of Reference of the Nomination Committee;
- (3) Review of policies related to the succession and appointment of Directors and Senior Management; and
- (4) Evaluation of the independence of the Independent Non-executive Directors, performance of the Board, its Specialized Committees and the Board members.

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6 Remuneration Committee

The main duties of the Remuneration Committee are as follows:

- (1) To make recommendations to the Board on the Bank's remuneration policy and structure for all Directors, Chief Executive (including Alternate Chief Executives), Senior Management and Key Personnel and on the establishment of a formal and transparent procedure for developing a remuneration policy;
- (2) To make recommendations to the Board on the remuneration by reference to corporate goals and objectives resolved by the Board, and on the remuneration of Directors, Chief Executive, Senior Management and Key Personnel;
- (3) To make recommendations in respect of remuneration policy and practices to the Board, and to ensure that the remuneration policy is consistent with the principles set out in the Supervisory Policy Manual Module, CG-5"Guideline on a Sound Remuneration System" of HKMA and any other legal or regulatory requirements;
- (4) To develop and promote a sound bank culture according to the "Bank Culture Reform" guidance issued by HKMA, to support prudent risk management and to contribute towards promoting proper staff behavior leading to positive customer outcomes and high ethical standards in the banking industry; to lay down the Bank's ethical standards and promote them to all levels of staff; to review and approve the proposed amendment of the Code of Conduct; to ensure the Bank has adequate systems to enforce the Code of Conduct; to resolve complex ethical dilemmas;
- (5) To exercise competent and independent judgement on remuneration policies and practices, as well as the incentives thereby created for managing risk, capital and liquidity; to work closely with other relevant Board Committees and consulting risk control functions in the evaluation of the incentives created by the remuneration system; and
- (6) To ensure that a regular review of the Bank's remuneration system and its operation, either internally conducted or externally commissioned, is carried out independently of management and the result is submitted to the HKMA.

The Remuneration Committee comprises at least three members. The Committee shall be chaired by an Independent Nonexecutive Director, and the majority of members shall be Independent Non-executive Directors. Current members of the Remuneration Committee are Mr. Chan Ka Lok (Chairman of the Remuneration Committee), Mr. Han Yuemin and Mr. Tang Kwai Chang.

Four (4) Remuneration Committee meetings were held during the year. Major works performed during the year include:

- (1) Review of remuneration policies;
- (2) Review of the Terms of Reference of the Remuneration Committee;
- (3) Review of the Staff Code of Conduct;
- (4) Consideration of the proposal on staff bonus for year 2021 and of the proposal on salary adjustment for year 2022;
- (5) Consideration of the report of independent assessment on internal control of remuneration system prepared by consultancy firm;
- (6) Listening to the report of the annual audit review on remuneration policies; and
- (7) Listening to the implementation report on bank culture reform.

For the year ended 31 December 2022

7 Risk Management Committee

The function of Risk Management Committee is as follow:

- (1) To establish the risk appetite and the strategy in risk management of the Bank, judge the risk level in each kind of risk;
- (2) To identify, assess, and manage different kind of risk faced by the Bank ;
- (3) To review and access the risk management process of the Bank, and the adequacy of system and internal control;
- (4) To review and monitor the compliance of risk management policies, procedures, system and internal control; and
- (5) To conduct annual review on the ICAAP procedure and report. After considering the business and risk strategy, to ensure the Bank has adequate capital to cater for major risk.

The Risk Management Committee shall comprise at least three members. The Risk Management Committee currently comprises four members, including three Independent Non-executive Directors, namely Mr. Lam Yim Nam (Chairman of the Risk Management Committee), Mr. Tang Kwai Chang and Ms. Chan Ching Har Eliza; and one Executive Director, Mr. Fan Chaorong.

Four (4) Risk Management Committee meetings were held in the year 2022. The major task completed by Risk Management Committee included the following:

- (1) Review and recommend risk management strategy, and risk level/appetite that could be accepted by the Bank for Board approval;
- (2) Review and access whether the risk management structure and policies is able to identify, measure, monitor and control the risk faced by the Bank; and if the risk management structure and policies function effectively;
- (3) Review the report from Comprehensive Risk Management Committee about the risk exposures and risk management activities;
- (4) Review and approve high level risk policies and measures;
- (5) Approve various risk management limits; and
- (6) Review and recommend the Recovery Plan for Board approval.

For the year ended 31 December 2022

8 Green Finance Management Committee

The function of Green Finance Management Committee is as follow:

- (1) To formulate the green finance management objectives and action plan;
- (2) To coordinate the planning and promote the construction of institutional mechanisms for green finance;
- (3) To review and listen the relevant green finance work report and other major issues related to green finance;
- (4) To review and make decisions on green finance-related policies and important system; and
- (5) To undertake regular assessments of the status of green finance governance and development.

According to the terms of reference of the Green Finance Management Committee, the Green Finance Management Committee shall be chaired by Chief Executive, and the members shall be all Deputy Chief Executives. The current members of the Green Finance Management Committee are Mr. Meng Yu (Chairman of the Green Finance Management Committee), Mr. Zhu Bin, Mr. Fan Chaorong, Mr. Ip Tsz Kin, and Mr. Yang Hao.

Zero (0) Green Finance Management Committee meetings were held in the year 2022.

9 Governance of climate-related risk

At present, climate change is impacting the global ecological environment and economic development to varying degrees. To serve the national strategy of "carbon peak and carbon neutrality" and practice the concept of green development, Bank of Communications Co., Ltd. has been active in taking measures to identify and respond to financial risks caused by climate change, explicitly incorporated climate and environmental risks into the comprehensive risk management system, and officially become a supporting institution for Task Force on Climate-related Financial Disclosures. The Bank evaluate and manage climate-related risks and opportunities, integrate climate-related factors into strategic planning. The Bank also formulate and implement green finance-related policies, build up a green bank image, and assist in the society's low-carbon transition and higher-quality green development.

(1) Board Oversight

The Bank pays close attention to the management, strategies, objectives and progress management of climate change related issues. The Board of Directors is the top decision-making body for the Bank's risk management and green finance. It is responsible for supervising the formulation and implementation of the Bank's climate-related development strategies, policies and regulations as well as targets and plans, regularly reviewing the results of identifying and monitoring climate-related risks and opportunities and promoting the improvement of the Bank's green financial system.

The Risk Management Committee (hereinafter referred to as the "RMC") is a standing committee under the Board of Directors, which has been established, authorised and directly managed by the Board of Directors and holds at least one meeting every quarter. The RMC is responsible for monitoring various risks, including but not limited to credit risk, market risk, operational risk, interest rate risk, liquidity risk, legal and compliance risk, strategic risk, reputational risk, climate risk, and any other material risks which may arise from time to time. In addition, the RMC takes on a monitoring role and is responsible for assisting the Board of Directors in monitoring and supervising the Bank's risk strategies, risk appetite/tolerance, risk structure, capital adequacy and liquidity adequacy.

For the year ended 31 December 2022

9 Governance of climate-related risk (continued)

(1) Board Oversight (continued)

In order to promote green finance management, the Board of Directors of the Bank has established and authorised the affiliated Green Finance Management Committee (hereinafter referred to as the "GFMC") to monitor and supervise the Bank's green finance management. The GFMC also collectively reviews and evaluates the various objectives, action plans, as well as major issues and topics related to environmental, social and governance risks by holding regular or irregular meetings. The main responsibilities of the GFMC include taking the lead in formulating and promoting the implementation of the bank's green finance management objectives and action plans, in accordance with the green finance development strategies determined by the Board of Directors and Hong Kong's local regulatory requirements. It is also responsible for coordinating the planning and promoting the construction of institutional mechanisms for green finance, reviewing and making decisions on green finance-related policies and important systems, regularly assessing the status of green finance governance and development, tracking the completion of major regulatory indicators, and making timely strategic adjustments based on actual conditions, etc. In principle, at least one meeting is held every year.

The Bank regularly reports or submits reports on climate-related risks and green finance to the RMC and GFMC and asks for their approval or decisions on other major issues and topics relevant to climate-related risks and green finance.

(2) Role of Management

To strengthen the responsibility of supervising risk management, the Bank has established a Comprehensive Risk Management Committee (hereinafter referred to as the "CRMC") at the senior management level to collectively supervise and evaluate various risks including climate risks defined by the Hong Kong Monetary Authority through holding quarterly meetings. The CRMC is authorised by the RMC. The Chief Executive of the Bank serves as the chairman, the vice chairman is the Executive Office member in charge of the Risk Management Department, and all other persons of the Executive Office serve as members. The duties of the CRMC include determining the Bank's risk control objectives, overall risk strategies, management policies, procedures and measures for internal control based on the risk management strategies and overall policies determined by the Board of Directors. It also takes responsibility for coordinating the planning and promoting the construction of comprehensive risk management and internal control system, supervising and guiding each business line and department to effectively implement risk management indicators, setting and monitoring procedures, and regularly reviewing risk appetite, risk limits as well as key risk management indicators, setting and monitoring procedures, and regularly reviewing risk appetite, risk limits and the implementation status of key risk management indicators; approving results of major risk identification and assessment, reviewing control measures for significant risk scenarios, etc., and regularly reporting management situations on various risks and submitting relevant reports to the RMC for review and approval.

When a climate risk event occurs or a climate risk regulatory standard is issued, the RMC and CRMC will timely report in regular meetings and continuously review the project outcomes. If the situation is urgent or there are multiple departments involved in the topic, the Bank will hold a GFMC meeting to invite all the relevant departments to participate in the discussion.

(3) Target Planning for Climate-related Issues

The Bank has incorporated the climate-related issues into the processes of formulating major strategies, identifying and making management policies for climate risks and opportunities, establishing a comprehensive risk management system, supervising capital use and asset allocation, innovating and developing businesses, and monitoring the implementation and execution status of strategies.

To further support the national carbon emission reduction and Hong Kong's 2050 carbon neutrality development goal, the Bank thoroughly implement the integration of the green and low-carbon concept into all aspects of operation and management; by 2030, significantly reduce the carbon intensity of its own operation and asset portfolio, and serve the concept of carbon neutrality at a high level.

To steadily improve the green credit ratio, the Bank has added the climate risk indicator of "Green Asset Proportion" to the risk appetite statement after review and approval by the Board of Directors. This indicator is monitored quarterly and reviewed at least once a year to align with the Bank's development pace and macroeconomic situation.