BASE LISTING DOCUMENT

Non-collateralised Structured Products

Base Listing Document relating to Hong Kong Listed Structured Products

to be issued by

HSBC

The Hongkong and Shanghai Banking Corporation Limited

(incorporated in Hong Kong with limited liability under the Companies Ordinance of Hong Kong)

The Hongkong and Shanghai Banking Corporation Limited (the "**Bank**", "**Issuer**", "**we**" or "**us**") has published this document in respect of call/put warrants on single equities ("**Equity Warrants**"), call/put warrants on indices ("**Index Warrants**") and call/put warrants on funds ("**Fund Warrants**") (together the "**Warrants**"), inline warrants on single equities ("**Equity Inline Warrants**") and inline warrants on indices ("**Index Inline Warrants**") (together the "**Inline Warrants**"), callable bull/bear contracts on single equities ("**Equity Callable Bull/Bear Contracts**"), callable bull/bear contracts on indices ("**Index Callable Bull/Bear Contracts**") and callable bull/bear contracts on funds ("**Fund Callable Bull/Bear Contracts**") (together the "**CBBCs**" and, together with the Warrants, the Inline Warrants and any other structured products approved by The Stock Exchange of Hong Kong Limited (the "**stock exchange**") from time to time, the "**structured products**") to be issued by us in series (each a "**series**") from time to time and listed on the stock exchange.

Hong Kong Exchanges and Clearing Limited ("**HKEX**"), the stock exchange and Hong Kong Securities Clearing Company Limited ("**HKSCC**") take no responsibility for the contents of this document, make no representation as to its accuracy or completeness and expressly disclaim any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this document.

This document, for which we accept full responsibility, includes particulars given in compliance with the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**rules**") for the purpose of giving information with regard to us and the structured products. We, having made all reasonable enquiries, confirm that to the best of our knowledge and belief the information contained in this document is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement herein or this document misleading. Additional terms relating to each series of our structured products will be set out in a launch announcement and supplemental listing document (each a "**launch announcement and supplemental listing document**") which will be supplemental to, and should be read in conjunction with, this document.

The structured products involve derivatives. You should not invest in the structured products unless you fully understand and are willing to assume the risks associated with the structured products. The structured products are complex products. You should exercise caution in relation to them. You are warned that the price of our structured products may fall in value as rapidly as it may rise and you may sustain a total loss of your investment. Prospective purchasers should therefore ensure that they understand the nature of our structured products and carefully study the risk factors set out in this base listing document and the relevant launch announcement and supplemental listing document and, where necessary, seek professional advice, before they invest in any of our structured products. The Issuer is part of a large global financial institution and has many financial products and contracts outstanding at any given time.

The structured products constitute general unsecured contractual obligations of the Issuer and of no other person and will rank equally among themselves and with all of the Issuer's other unsecured obligations (save for those obligations preferred by law) upon liquidation. If you purchase the structured products, you are relying upon the Issuer's creditworthiness and have no rights under the structured products against (a) any company which has issued the underlying shares, (b) the fund which has issued the underlying securities, or its trustee or manager (as applicable), or (c) any company constituting the underlying index or the index compiler of any underlying index or any other person. If the Issuer becomes insolvent or defaults on its obligations under the structured products, you may not be able to recover all or even part of the amount due under the structured products (if any).

Dated 2 April 2024

IMPORTANT

If you are in any doubt as to any of the contents of this document, you should consult your stockbroker or other registered dealer in securities, bank manager, solicitor, professional accountant or other professional adviser.

If at the time of issue of the structured products, any information in this base listing document needs to be updated and/or amended, we will either include the updated and/or amended information in the relevant launch announcement and supplemental listing document or publish an addendum to this base listing document.

You should read this document, together with any addendum to it and the relevant launch announcement and supplemental listing document, together with any addendum to it, before deciding whether to invest in the structured products.

We cannot give you investment advice. You must decide for yourself whether our structured products meet your investment needs, and obtain independent professional advice if appropriate. This document is for information purposes only and is not intended to be, and should not be considered as, a recommendation or advice by us or any of our affiliates that you should purchase any of our structured products, and you must make your own independent investigation of our financial condition and affairs and your own appraisal of our creditworthiness.

We undertake during the period in which our structured products are listed on the stock exchange to make the following documents available on the website of the HKEX at *www.hkexnews.hk* and our website which is presently at *https://www.warrants.hsbc.com.hk/en/warrant/latest-document-and-notice*:

(a) a copy of this document and any addendum to this document (both the English version and the Chinese translation);

(b) a copy of our latest publicly available annual report (both the English version and the Chinese translation) and interim report (if any); and

(c) a copy of the consent letter from our auditor referred to in this document.

本公司承諾，以下文件可於結構性產品在聯交所上市的期間內於香港交易所披露易網站(*www.hkexnews.hk/index_c.htm*)以及本公司網站(網址現為*https://www.warrants.hsbc.com.hk/tc/warrant/latest-document-and-notice*)瀏覽：

(a) 本文件及本文件的任何增編(英文版本及中文譯本)；

(b) 本公司最近期可供查閱的年報(英文版本及中文譯本)及中期報告(如有)；及

(c) 本文件所述本公司核數師的同意函件。

For the purpose of this document and where the context requires, references to "**Hong Kong**" are to the Hong Kong Special Administrative Region of the People's Republic of China, to "**Macau**" are to the Macau Special Administrative Region of the People's Republic of China and to the "**PRC**" are to The People's Republic of China (which for the purposes of this document shall exclude Hong Kong, Macau and Taiwan).

Our structured products are not available to any person that is: (a) a U.S. Person (as defined in Regulation S of the United States Securities Act of 1933, as amended); (b) a U.S. person as defined in 17 C.F.R. § 23.23(a)(23) (a "**CFTC U.S. Person**") or to others for offer or sale to or for the account or benefit of any such CFTC U.S. person or; (c) a "United States person" as defined in U.S. Executive Order 13959, as amended by U.S. Executive Order 14032, or in the Chinese Military-Industrial Complex Sanctions Regulations (31 C.F.R. Part 586) ("**E.O. 13959 U.S. Persons**"), to the extent that the underlyings for the relevant structured products include (i) securities whose purchase or sale by E.O. 13959 U.S. Persons is restricted under Executive Order 13959 (as amended) or (ii) provide any investment exposure to any such securities ((i) and (ii) collectively, "**E.O. 13959 Restricted Underlyings**").

E.O. 13959 U.S. Persons are restricted from purchasing or selling the structured products with E.O. 13959 Restricted Underlyings after the effective date of the Executive Order 13959 (as amended) restrictions applicable to those underlyings and investors should seek their own independent legal advice regarding compliance with Executive Order 13959 (as amended).

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OVERVIEW OF OUR PROGRAMME

We have set up this **programme** for the purpose of offering from time to time to the public in Hong Kong **structured products** listed on the stock exchange. The following is an overview of the main features of the programme.

Who issues the structured products?	The Hongkong and Shanghai Banking Corporation Limited is the **Issuer** of the structured products. References in this base listing document to the "**Bank**", "**we**", "**our**" and "**us**" are to the Issuer and the "**Bank Group**" are to the Issuer and its subsidiaries.
Will the structured products be guaranteed?	No.
What types of structured products may we issue under the programme?	We may issue Warrants, Inline Warrants and CBBCs under the programme, each as described below. We may also issue from time to time under the programme other structured products approved by the stock exchange.
What types of Warrants may be issued under the programme?	The **Warrants** which we may issue under the programme include: (a) call/put warrants on single equities ("**Equity Warrants**"); (b) call/put warrants on a single index ("**Index Warrants**"); and (c) call/put warrants on a single fund ("**Fund Warrants**").
What types of Inline Warrants may be issued under the programme?	The **Inline Warrants** which we may issue under the programme include: (a) inline warrants on single equities ("**Equity Inline Warrants**"); and (b) inline warrants on a single index ("**Index Inline Warrants**").
What types of CBBCs may be issued under the programme?	The callable bull/bear contracts (the "**CBBCs**") which we may issue under the programme include: (a) callable bull/bear contracts on single equities ("**Equity Callable Bull/Bear Contracts**"); (b) callable bull/bear contracts on a single index ("**Index Callable Bull/Bear Contracts**"); and (c) callable bull/bear contracts on a single fund ("**Fund Callable Bull/Bear Contracts**").
How are the structured products issued?	Our structured products will be issued in one or more **series**. Structured products within a series will have the same terms, but the terms of one series of structured products may be different from another.

What is the legal status of the structured products?

The structured products are our direct, unconditional, unsubordinated and unsecured obligations, ranking equally *(pari passu)* among themselves and with all our other present and future direct, unconditional, unsecured and unsubordinated obligations (save for those obligations preferred by law).

Will the structured products be listed?

Yes. We will apply to the stock exchange to list each series of the structured products which we issue under the programme. This base listing document has been published for the purposes of obtaining a listing of each series of structured products which we issue under the programme.

Will the structured products be admitted to CCASS?

Yes. We will make arrangements to ensure that each series of structured products will be accepted by HKSCC as eligible securities for deposit, clearance and settlement in the Central Clearing and Settlement System ("**CCASS**"). All activities under CCASS are subject to the General Rules of CCASS and CCASS Operational Procedures in effect from time to time (the "**CCASS Rules**").

What are the listing documents for the structured products?

We have published this base listing document to permit the listing of our structured products on the stock exchange. This base listing document sets out the terms and conditions of the structured products, common features of the structured products, the legal terms relating to the programme and information about us. This base listing document includes particulars given in compliance with the rules for the purpose of giving information with regard to us and the structured products.

When we apply to list one or more series of structured products, we will publish a **launch announcement and supplemental listing document**, which will include information on the particular structured products to be listed. The launch announcement and supplemental listing document will be available in English and Chinese versions (which may be printed together in the same document).

If any information in this base listing document needs to be updated and/or amended at the time we issue a launch announcement and supplemental listing document, we will either include the updated and/or amended information in the relevant launch announcement and supplemental listing document or publish an addendum to this base listing document.

What will a launch announcement and supplemental listing document specify?

The launch announcement and supplemental listing document will, amongst other things, set out the terms of the series of structured products being offered to supplement the applicable set of master terms and conditions in this base listing document, which will include the following:

Type of structured product

The launch announcement and supplemental listing document will specify the type of the series of structured products offered.

Exercise	The launch announcement and supplemental listing document will specify the date on which the structured products may be exercised. The structured products which we issue under the programme may be exercised only upon the specified expiry date.
Settlement Basis	The holder of the structured products will be entitled to a cash payment upon exercise (assuming that the cash payment is greater than zero).
Issue price	The launch announcement and supplemental listing document will specify the issue price of the structured product.
Underlying	The launch announcement and supplemental listing document will specify the **underlying** for the structured product, which may be a share of a company, an index or a share or a unit of a fund. References in this base listing document to a "**fund**" are to a unit trust or an exchange-traded fund ("**ETF**") (as the case may be) and the "**securities**" of a fund are to the units or shares of the fund (as the case may be).
Expiry Date	The launch announcement and supplemental listing document will specify the expiry date for the series of structured products offered.
Liquidity Provider	The launch announcement and supplemental listing document will specify the name and contact details of the liquidity provider appointed for the series of structured products offered, and the basis on which the appointed liquidity provider will provide liquidity in the relevant structured products.
How will the structured products be represented?	The structured products of each series will be issued in registered form and represented by a global certificate which will be registered in the name of HKSCC Nominees Limited (or such other nominee company as HKSCC may specify from time to time) and will be deposited with CCASS in accordance with the CCASS Rules.
Will you get any individual certificate representing an investment in a series of our structured products?	No, you will not receive any individual certificates.
In the Terms and Conditions for the structured products, there are references to "holders". Who are they?	The Issuer will maintain a register showing the details of each person who is entitled to a particular number of structured products of a series. The person registered will be treated by us as the absolute owner and **holder** of that number of structured products. The register for each series of structured products will record at all times that HKSCC Nominees Limited (or such other nominee company as HKSCC may specify for that series) is the holder of 100 per cent. of the structured products of that series.

Accordingly you will not be recognised by us as the holder of the structured products in which you invest, and you must refer to the records of CCASS and/or your custodian/broker, and the statements that you receive, to determine your beneficial interest in the structured products.

How do we give notices and make payments under our structured products?

We will give any necessary notices by publishing such notices in English and in Chinese on the website of HKEX, or otherwise in accordance with the terms and conditions of the relevant structured products.

We will make all payments that are due under our structured products to the registered holder of the structured products. The registered holder will be HKSCC Nominees Limited (or such other nominee company as HKSCC may specify for that series). In this situation, the payments to which you are entitled will be made to you or to your custodian/broker through CCASS in accordance with the CCASS Rules.

Can we repurchase our structured products?

Yes, we or our affiliates may repurchase our structured products at any time. We may offer for sale any structured products which we repurchase, and may do so at prevailing market prices or in negotiated transactions at our discretion (acting in good faith and in a commercially reasonable manner). You should not therefore make any assumptions as to the number of structured products of any series which may be in issue from time to time.

RISK FACTORS

You should carefully consider the following information together with the other information contained in this base listing document (and any applicable addendum) and in the applicable launch announcement and supplemental listing document (and any applicable addendum) before purchasing our structured products.

This section highlights only some of the risks of dealing in the structured products but their inclusion in this document does not mean these are the only significant or relevant risks of dealing in our structured products. If you have any concerns or doubts about our structured products, you should obtain independent professional advice.

General Risk Factors relating to us and our Structured Products

(1) Non-collateralised structured products

Our structured products are not secured on any of our assets or any collateral.

(2) You must rely on our creditworthiness

If you purchase our structured products, you rely on our creditworthiness and of no other person (including the ultimate holding company of our group, HSBC Holdings plc) and you have no rights under the structured products against any company which has issued the underlying shares (in respect of equity-linked structured products), any company constituting the underlying index or the index compiler (in respect of index-linked structured products), or any fund which has issued the underlying securities, or its trustee or manager (as applicable) (in respect of fund-linked structured products). There is no assurance of protection against a default by us in respect of our obligations under our structured products. If we become insolvent or default on our obligations under the structured products, you can only claim as our unsecured creditor regardless of the performance of the underlying and you may not be able to recover all or even part of the amount due under the structured products (if any).

You should note that rating agencies usually receive a fee from the issuers that they rate. When evaluating our creditworthiness, you should not solely rely on our credit ratings (which are set out in the section headed "General Information" on page 130 of this base listing document and the section headed "Important information" of the relevant launch announcement and supplemental listing document) because:

(a) a credit rating is not a recommendation to buy, sell or hold our structured products;

(b) ratings of companies may involve difficult-to-quantify factors such as market competition, the success or failure of new products and markets and managerial competence;

(c) a high credit rating is not necessarily indicative of low risk. Our credit ratings as set out in this base listing document and the relevant launch announcement and supplemental listing document are for reference only. Any downgrading of our ratings could result in a reduction in the value of the structured products;

(d) a credit rating is not an indication of the liquidity or volatility of the structured products; and

(e) a credit rating may be downgraded if the credit quality of the Issuer declines.

(3) Macroeconomic and geopolitical risk

Current economic and market conditions may materially adversely affect the Bank Group's results

The Bank Group's earnings are affected by global and local economic and market conditions.

Uncertain economic conditions and volatile markets can create a challenging operating environment for financial services companies such as the Bank Group. In particular, the Bank Group have faced and may continue to face the following challenges to its operations and operating model:

- Economic uncertainty: Current economic forecasts suggest growth will be weaker in 2024, relative to 2023. Consumer and business confidence remains low and major economies continue to face the risk of a more severe downturn, or recession. Interest rates are forecast to fall throughout 2024, but forecasts still assume that they remain materially higher than in recent years. Economic weaknesses and higher interest rates could (among other things) cause asset prices and payment patterns to be adversely affected, leading to greater than expected increases in delinquencies, default rates and expected credit losses ("**ECL**") and other credit impairment charges;

- Mainland China commercial real estate: Mainland China commercial real estate conditions remain distressed as offshore financing conditions and buyer demand remain subdued. Signs of a material or sustained recovery are yet to emerge, with market data still reflecting reduced investment and weak sentiment. The PRC government is expected to expand fiscal and monetary support to the economy to boost growth and lending in 2024, including specific measures to support developers and stimulate housing demand. However, the risk of a slow and protracted recovery remains significant. The business and financial performance of corporates operating in this market has been weak, and refinancing risks are likely to continue in 2024. State-owned enterprises continue to outperform privately-owned enterprises in general, with above market average sales performance, market share gains and greater access to funding. The challenges in this sector could create further pressure on the Bank Group's customers;

- Geopolitical risks: Geopolitical risks remain elevated. Economic forecasts are assumed to reflect the impact from the Russia-Ukraine and Israel-Hamas wars, but there is significant uncertainty around the duration and possible escalation of these wars. Additionally, recent attacks on shipping in the Red Sea and the resulting countermeasures taken have begun to disrupt supply chains. The escalation or a broadening of the Russia-Ukraine war, or the Israel-Hamas war could aggravate supply chain disruptions and drive inflation higher and may pose challenges for the Bank Group's customers and the Bank Group's business (see the section headed "*The macroeconomic and market impact of major geopolitical developments may affect the Bank Group's financial condition and results*" under this risk factor for further discussion);

- Credit demand: The demand for borrowing from creditworthy customers may diminish during periods of recession or where economic activity slows or remains subdued;

- Market conditions: The Bank Group's ability to borrow from other financial institutions or to engage in funding transactions may be adversely affected by market disruption; and

- Other economic factors: High inflation, higher interest rates and the impact of geopolitical risks have significantly changed the operating environment for many companies and sectors. While impairment estimates attempt to capture the effects of these in the aggregate, credit losses on specific exposures, with specific idiosyncratic features may not be fully captured in ECL estimates.

The occurrence of any of these events or circumstances could have a material adverse effect on the Bank Group's business, financial condition, results of operations, prospects and customers.

The macroeconomic and market impact of major geopolitical developments may affect the Bank Group's financial condition and results

Significant geopolitical developments, such as the Russia-Ukraine and Israel-Hamas wars, continue to affect the global economy and have the potential to further influence the global macroeconomic outlook.

Global commodity markets were impacted by heightened geopolitical risks in 2023 – including the Russia-Ukraine and Israel-Hamas wars – which sustained concerns about supply chain disruptions.

A fall in global energy and food prices from the highs of 2022 facilitated a process of disinflation across key economies during 2023. Following the reduction in global inflation rates, central banks in most developed markets are expected to have concluded monetary policy tightening in the second half of 2023.

Disinflationary trends are now visible across most major economies. Markets expect a reduction in monetary policy rates over the next year if conditions in labour markets ease further and inflation returns closer to central banks' target rates. However, the possibility of further supply shocks led by geopolitical risks could cause an increase in prices of commodities and manufactured goods and lead to inflation effects on wages. Higher inflation could prompt central banks to raise interest rates further.

The effects of higher inflation and significant increases in interest rates in many countries may also have material impacts on capital and liquidity. In particular, the pressure of sustained higher inflation and higher interest rate rises may affect the credit rating of the Bank Group's customers and their ability to repay debt. In turn, this could negatively impact the Bank Group's risk-weighted assets ("**RWAs**") and capital position, increase ECL and lead to potential liquidity stress due to, among other factors, increased customer drawdowns. There could be further adverse impacts on the Bank Group's income due to lower lending volumes and lower wealth and insurance revenue, due to market volatility.

The Bank Group's Central scenario, which has the highest probability weighting in the Bank Group's HKFRS 9 "Financial Instruments" ("**HKFRS 9**") calculations of ECL, assumes that GDP growth in many of the Bank Group's main markets will slow down in 2024 followed by a moderate recovery in 2025. It is anticipated that inflation will converge towards central banks' target rates by early 2025. Similarly, interest rates are expected to decline but remain materially higher than in recent years. However, forecasts remain uncertain, and changing economic conditions and the materialisation of key risks could reduce the accuracy of the Central scenario forecast. In particular, forecasts in recent years have been sensitive to commodity price changes, changing supply chain conditions, monetary policy adjustments and inflation expectations. Uncertainty remains with respect to the relationship between the economic factors and the historical loss experience, which has required adjustments to modelled ECLs in cases where the Bank Group determined that the model was unable to capture the material underlying risks.

There could also be adverse impacts on other assets, goodwill and other intangible assets.

Fiscal deficits are expected to remain large in both developed and emerging markets as public spending on items including social welfare, defence and climate transition initiatives is expected to remain high. In many countries, the fiscal response to the COVID-19 pandemic has also left a very high public debt burden. Against a backdrop of slower economic growth and high interest rates, a rise in borrowing costs could increase the financial strains on highly indebted sovereigns.

While the average maturity of sovereign debt in developed markets has lengthened, higher borrowing costs than in recent years could reduce the affordability of debt and may in some countries eventually bring its sustainability into question. Among emerging markets and some developed markets, those that need to refinance maturing U.S. dollar-denominated debt, in the context of a historically strong U.S. dollar, may face increasing difficulties. Where the Bank Group has exposures to such sovereigns and/or related parties, it could incur losses.

Political changes may also have implications for policy. Many countries are expected to hold elections in 2024. This may result in continuity in some markets, but significant political and policy change in others. Political change could bring uncertainty to the political and legal frameworks in markets where the Bank Group operates.

The Bank Group's financial models have been impacted by the effects of higher inflation and significant increases in interest rates in many countries. These include retail and wholesale credit models such as HKFRS loss models, as well as capital models, traded risk models and models used in the asset/liability management process. This continues to require enhanced monitoring of model outputs and the use of model overlays, including management judgemental adjustments based on the expert judgement of senior credit risk managers and the recalibration of key loss models to take into account the impacts of higher rates on critical model inputs.

The Russia-Ukraine war has continued to elevate geopolitical instability which could have significant ramifications for the Bank Group and its customers. For further information, please refer to the section headed *"The Bank Group is subject to political, social and other risks in the countries and territories in which it operates and globally*" under this risk factor. The Bank Group continues to monitor and respond to economic sanctions and trade restrictions that have been adopted in response. These sanctions and trade restrictions are complex, novel and evolving. In particular, the United States (the "**U.S.**"), the United Kingdom (the "**UK**") and the European Union (the "**EU**"), as well as other countries have imposed significant sanctions and trade restrictions against Russia. Such sanctions and restrictions target certain Russian government officials, politically exposed persons, business people, Russian oil imports, energy products, financial institutions and other major Russian companies and sanctions evasion networks. These countries have also enacted more generally applicable investment, export, and import bans and restrictions. In December 2023, the U.S. established a new secondary sanctions regime, providing itself broad discretion to impose severe sanctions on non-U.S. banks that are knowingly or even unknowingly engaged in certain transactions or services involving Russia's military-industrial base. This creates challenges associated with the detection or prevention of third-party activities beyond the Bank Group's control. The imposition of such sanctions against any non-U.S. HSBC entity could result in significant adverse commercial, operational, and reputational consequences for the Bank Group, including the restriction or termination of the non-U.S. HSBC entity's ability to access the U.S. financial system and the freezing of the entity's assets that are subject to U.S. jurisdiction. In response to such sanctions and trade restrictions, as well as asset flight, Russia has implemented certain countermeasures, including the expropriation of foreign assets. These sanctions and restrictions may affect the Bank Group, its customers and the markets in which the Bank Group operates by creating regulatory, reputational and market risks.

Significant uncertainties remain in assessing the duration and impact of the Russia-Ukraine and Israel-Hamas wars. There is a risk that the resulting impact on economic activity may last for a prolonged period and this could have a material adverse effect on the Bank Group's business, financial condition, results of operations, prospects, liquidity, capital position and credit ratings.

The Bank Group is subject to political, social and other risks in the countries and territories in which it operates and globally

The Bank Group operates through an international network of subsidiaries, branches and affiliates across countries and territories around the world. The Bank Group's operations are subject to potentially unfavourable political, social, environmental and economic developments in such jurisdictions, which may include:

- coups, armed conflicts or acts of terrorism;
- political and/or social instability;
- geopolitical tensions;
- epidemics and pandemics (such as the COVID-19);
- climate change, acts of God and natural disasters (such as floods and hurricanes); and
- infrastructure issues, such as transportation and power failures.

Each of the above could impact credit RWAs, and the financial losses caused by any of these risk events or developments could impair asset values and the creditworthiness of customers. These risk events or developments may also give rise to disruption to the Bank Group's services and some may result in physical damage to the Bank Group's operations and/or risks to the safety of the Bank Group's personnel and customers. Geopolitical tensions could have significant ramifications for the Bank Group and its customers. In particular:

- Uncertainty about the scope, duration and potential for further escalation of the Israel and Hamas war presents global economic and political implications. For further details, see the sections headed "*Current economic and market conditions may materially adversely affect the Bank Group's results*" and "*The macroeconomic and market impact of major geopolitical developments may affect the Bank Group's financial condition and results*" under this risk factor;
- The Russia-Ukraine war along with related financial sanctions, trade restrictions and Russian countermeasures, has had global economic and political implications. For further details, see the sections headed "*Current economic and market conditions may adversely affect the Bank Group's results*" and "*The macroeconomic and market impact of major geopolitical developments may affect the Bank Group's financial condition and results*" under this risk factor;
- Global tensions over trade, technology and ideology are manifesting themselves in divergent regulatory standards and compliance regimes, presenting long-term strategic challenges for multinational businesses;
- Diplomatic tensions between the PRC and the U.S., which may extend to and involve the UK, the EU, India and other countries, and developments in Hong Kong, Taiwan, and the surrounding maritime region may affect the Bank Group, creating regulatory, reputational and market risks;
- To date, the U.S., the UK, the EU and other countries have imposed various sanctions and trade restrictions on Chinese persons and companies, and the countries' respective approaches to strategic competition with the PRC continue to develop;
- Although sanctions and trade restrictions are difficult to predict, increases in diplomatic tensions between the PRC and the U.S. and other countries could result in further sanctions and trade restrictions that could negatively impact the Bank Group, its customers and the markets in which the Bank Group operates. For example, there is a continued risk of additional sanctions and trade restrictions being imposed

by the U.S. and other governments in relation to human rights, technology and other issues with the PRC, and this could create a more complex operating environment for the Bank Group and its customers;

- The PRC, in turn, imposed a number of its own sanctions and trade restrictions that target, or provide authority to target, foreign individuals or companies as well as certain goods such as rare earth minerals and metals, and technology and services. These, as well as certain law enforcement measures, have been imposed mainly against certain countries, Western consulting and data intelligence firms, defence companies and public officials associated with the implementation of foreign sanctions against the PRC; and

- Further sanctions, counter sanctions and trade restrictions may adversely affect the Bank Group, its customers and the markets in which the Bank Group operates by creating regulatory, reputational and market risks.

As the geopolitical landscape evolves, the compliance by multinational corporations with their legal or regulatory obligations in one jurisdiction may be seen as supporting the law or policy objectives of that jurisdiction over another, creating additional compliance, reputational and political risks for the Bank Group.

While it is the Bank Group's policy to comply with all applicable laws and regulations of all jurisdictions in which it operates, geopolitical risks and tensions, and potential ambiguities in the Bank Group's compliance obligations, will continue to present challenges and risks for the Bank Group and could have a material adverse impact on the Bank Group's business, financial condition, results of operations, prospects, strategy and reputation, as well as on the Bank Group's customers.

The Bank Group is likely to be affected by global geopolitical trends, including the risk of government intervention

While economic globalisation appears to remain deeply embedded in the international system, it is increasingly challenged by nationalism and protectionism. Consequently, international institutions may be less capable of adapting to this trend. A dispersion of global economic power from the U.S. and the EU towards the PRC and emerging markets appears to be occurring, providing a backdrop for greater U.S.-PRC competition.

A rise in nationalism and protectionism, including trade barriers, may be driven by populist sentiment and structural challenges facing developed and developing economies. Similarly, if capital flows are disrupted, some emerging markets may impose protectionist measures that could affect financial institutions and their clients, and other emerging, as well as developed, markets, may be tempted to follow suit. This rise could contribute to weaker global trade, potentially affecting the Bank Group's business.

The broad geographic footprint and coverage of the Bank Group will make it and its customers susceptible to protectionist measures taken by national governments and authorities, including imposition of trade tariffs, restrictions on market access, restrictions on the ability to transact on a cross-border basis, expropriation, restrictions on international ownership, interest rate caps, limits on dividend flows and increases in taxation.

There may be uncertainty as to the conflicting nature of such measures, their duration, the potential for escalation, and their potential impact on global economies. Whether these emerging trends are cyclical or permanent is hard to determine, and their causes are likely to be difficult to address. The occurrence of any of these events or circumstances could have a material adverse effect on the Bank Group's business, financial condition, results of operations and prospects.

The Bank Group is subject to financial and non-financial risks associated with Environmental, Social and Governance ("ESG") related matters, such as climate change, nature-related and human rights issues

ESG related matters such as climate change, society's impact on nature and human rights issues bring risks to the Bank Group's business, its customers and wider society. If the Bank Group fails to meet evolving regulatory expectations or requirements relating to these matters, this could have regulatory compliance and reputational impacts.

Climate change could have both financial and non-financial impacts on the Bank Group either directly or indirectly through its customers. Transition risk can arise from the move to a low-carbon economy, such as through policy, regulatory and technological changes. Physical risk can arise through increasing severity and/or frequency of severe weather events or other climatic events, such as rising sea levels and flooding, and chronic shifts in weather patterns, which could affect the Bank Group's ability to conduct its day-to-day operations.

The Bank Group currently expects that the following are the most likely ways in which climate risk may materialise for the Bank Group:

- credit risk for the Bank Group's corporate customers may increase if climate-related regulatory, legislative or technological developments impact customers' business models or if extreme weather events disrupt customers' operations, resulting in financial difficulty for customers and/or stranded assets. The Bank Group's customers may find that their business models fail to align to a net zero economy or face disruption to their operations or deterioration to their assets as a result of extreme weather;

- trading losses if climate change results in changes to macroeconomic and financial variables which negatively impact the Bank Group's trading book exposures;

- residential real estate may be affected by changes to the climate, the increase in the frequency and severity of and extreme weather events and chronic shifts in weather patterns, which could impact both property values and the ability of borrowers to afford their mortgage payments;

- the Bank Group's operations may see an increase in operational risk if extreme weather events impact its critical operations and premises;

- regulatory compliance risk may result from the increasing pace, breadth and depth of climate-related regulatory expectations, including on the management of climate risk, and variations in climate-related reporting standards, requiring implementation in short timeframes across multiple jurisdictions;

- conduct risks could develop in association with the increasing demand for "green" products where there are differing and developing standards or taxonomies; and

- reputational risks may result from the Bank Group's decisions on how it supports its customers in high-emitting sectors in their transition to net zero, and if the Bank Group makes insufficient progress in achieving the Bank Group's climate-related ambitions, targets and commitments.

The Bank Group also faces increased reputational, legal and regulatory risks as it makes progress towards the Bank Group's net zero ambition and other ESG-related ambitions, targets and commitments, with stakeholders likely to place greater focus on its actions, such as the development of climate and broader ESG-related policies, its disclosures and financing and investment decisions relating to its net zero ambition and other ESG-related ambitions, targets and commitments. The Bank Group will face additional risks if it knowingly or unknowingly makes inaccurate, unclear, misleading, or unsubstantiated claims regarding sustainability to its stakeholders.

Climate risk may also have an impact on model risk, as the uncertain and evolving impacts of climate change as well as data and methodology limitations present challenges to creating reliable and accurate model outputs.

The Bank Group may be exposed to climate and broader ESG-related litigation and regulatory enforcement risks, either directly if stakeholders think that it is not adequately managing climate and broader ESG risks or indirectly if its clients and customers are themselves the subject of litigation, potentially resulting in the revaluation of client assets.

Requirements, policy objectives, expectations or views may vary by jurisdiction and stakeholder in relation to ESG related matters. The Bank Group may be subject to potentially conflicting approaches to ESG matters in certain jurisdictions, which may impact its ability to conduct certain business within those jurisdictions or result in additional regulatory compliance, reputational, political or litigation risks. These risks may also arise from divergence in the implementation of ESG, climate policy and financial regulation in the many regions in which the Bank Group operates, including initiatives to apply and enforce policy and regulation with extraterritorial effect.

In addition, there is increasing evidence that a number of nature-related risks beyond climate change – which include risks that can be represented more broadly by economic dependency on nature – can and will have significant economic impact. These risks arise when the provision of ecosystem services such as water availability, air quality, and soil quality is compromised by overpopulation, urban development, natural habitat and ecosystem loss, and other environmental stresses beyond climate change. They can manifest themselves in a variety of ways, including through macroeconomic, market, credit, reputational, legal and regulatory risks, for both the Bank Group and its customers.

The human rights issues, which are the human rights at risk of the most severe negative impact through the Bank Group's business activities and relationships include the right to decent work, including freedom from slavery and forced labour and the right to equality and freedom from discrimination, amongst others. The Bank Group's analysis focused on the risk to people, while recognising that where this risk at its highest, it often converges with material risk to its business, specifically, in the Bank Group's role as employer, buyer, investor, and provider of products and services to personal and business clients. Failure to manage these risks may negatively impact people and communities, which in turn may have reputational, legal, regulatory and financial consequences for the Bank Group.

In respect of all ESG-related risks, the Bank Group also needs to ensure that its strategy and business model, including the products and services it provides to customers and risk management processes (including processes to measure and manage the various financial and non-financial risks the Bank Group faces as a result of ESG related matters), adapt to meet regulatory requirements and stakeholder and market expectations, which continue to evolve significantly and at pace. Achieving the Bank Group's strategy with respect to ESG matters, including any ESG-related ambitions, commitments and targets it may set, will depend on a number of different factors outside of the Bank Group's control, such as advancements in technologies and supportive public policies in the markets where the Bank Group operates. If these external factors and other changes do not occur, or do not occur on a timely basis, the Bank Group may fail to achieve its ESG related ambitions, commitments and targets.

In order to track and report on the Bank Group's progress against its ESG-related ambitions, targets and commitments, it relies on internal and, where appropriate and available, external data sources, guided by certain industry standards and the Bank Group's own ability to collect and process such data. While ESG-related reporting has improved over time, data remains of limited quality and consistency exposing the Bank Group to the risk of using incomplete and inaccurate data and models which could result in sub-optimal decision making. Methodologies, data, scenarios and industry standards that the Bank Group has used may develop over time in line with market practice, regulation and developments in science, where applicable. Any such developments in methodologies and scenarios, and changes in the availability, accuracy and verifiability of data over time and the Bank Group's ability to collect and process such data, exposes the Bank Group to financial reporting risk in relation to the Bank Group's climate-related and broader ESG disclosures and could result in revisions to the Bank Group's internal measurement frameworks as well as reported data going forward, including on financed emissions, meaning that such data may not be reconcilable or comparable year-on-year. This could also result in the Bank Group having to re-evaluate its progress towards its ESG-related ambitions, commitments and targets in the future and this could result in reputational, legal and regulatory risks.

If any of the above risks materialise, this could have financial and non-financial impacts for the Bank Group, which could, in turn, have a material adverse effect on its business, financial condition, results of operations, reputation, prospects and strategy.

The Bank Group operates in markets that are highly competitive

The Bank Group competes with other financial institutions in a highly competitive industry that continues to undergo significant change as a result of financial regulatory reform, including Open Banking in Hong Kong, as well as increased public scrutiny stemming from a continued challenging macro-economic environment.

The Bank Group targets internationally mobile clients who need sophisticated global financial solutions and generally competes on the basis of the quality of its customer service, the wide variety of products and services that the Bank Group can offer its customers, the ability of those products and services to satisfy its customers' needs, the extensive distribution channels available for its customers, its innovation and its reputation. Continued and increased competition in any one or all of these areas may negatively affect the Bank Group's market share and/or cause the Bank Group to increase its capital investment in its businesses in order to remain competitive. Additionally, the Bank Group's products and services may not be accepted by its targeted clients. In many markets, there is increased competitive pressure to provide products and services at current or lower prices.

Consequently, the Bank Group's ability to reposition or re-price its products and services from time to time may be limited, and could be influenced significantly by the actions of its competitors who may or may not charge similar fees for their products and services. Any changes in the types of products and services that the Bank Group offers its customers and/or the pricing for those products and services could result in a loss of customers and market share.

Developments in technology and changes to regulations are enabling new entrants to the industry. This challenges the Bank Group to continue innovating and taking advantage of new digital capabilities so that the Bank Group improves how it serves its customers, drive efficiency and adapt its products to attract and retain customers. As a result, the Bank Group may need to increase its investment in its business to adapt or develop new products and services to respond to the Bank Group's customers' evolving needs. The Bank Group also needs to ensure that new digital capabilities do not weaken its resilience. If the Bank Group fails to develop and adapt its products and services to take advantage of new digital capabilities this could have an adverse impact on its business.

The digitisation of financial services continues to have an impact on the payment services ecosystem, including new market entrants and payment mechanisms, not all of which are subject to the same level of regulatory scrutiny or regulations as financial institutions. This presents ongoing challenges in terms of maintaining required levels of payment transparency, notably where financial institutions serve as intermediaries. Developments around digital assets and currencies have continued at pace, with an increasing regulatory and enforcement focus.

Any of these factors could have a material adverse effect on the Bank Group's business, financial condition, results of operations, prospects and reputation.

Market fluctuations may reduce the Bank Group's income or the value of its portfolios

The Bank Group's businesses are inherently subject to risks in financial markets and in the wider economy, including changes in, and increased volatility of, interest rates, inflation rates, credit spreads, foreign exchange rates, commodity, equity, bond and property prices, and the risk that the Bank Group's customers act in a manner inconsistent with its business, pricing and hedging assumptions.

Market pricing can be volatile and ongoing market movements could significantly affect the Bank Group in a number of key areas. For example, banking and trading activities are subject to interest rate risk, foreign exchange risk, inflation risk and credit spread risk. Changes in interest rate levels, interbank spreads over official rates and yield curves affect the interest rate spread realised between lending and borrowing costs. The potential for future volatility and margin changes remains. See the section headed "*The macroeconomic and market impact of major geopolitical developments may affect the Bank Group's financial condition and results*" under this risk factor regarding the impact of these on the interest rate environment.

Competitive pressures on fixed rates or product terms in existing customer products sometimes restrict the Bank Group's ability to change interest rates applying to customers in response to changes in official and wholesale market rates.

The Bank Group's insurance businesses are exposed to the risk that market fluctuations may cause mismatches to occur between product liabilities and the investment assets that back them. Market risks can affect the Bank Group's insurance products in a number of ways depending upon the product and the associated contract. For example, mismatches between assets and liability yields and maturities give rise to interest rate risk. Some of these risks are borne directly by the customer and some are borne by the insurance businesses, with their excess capital invested in the markets. Some insurance contracts involve guarantees and options that increase in value in adverse investment markets. There is a risk that the insurance businesses could bear some of the cost of such guarantees and options. The performance of the investment markets could thus have a direct effect upon the value embedded in the insurance and investment contracts and the Bank Group's operating results, financial condition and prospects.

It is difficult to predict with any degree of accuracy changes in market conditions, and such changes could have a material adverse effect on the Bank Group's business, financial condition, results of operations, capital position and prospects.

Liquidity, or ready access to funds, is essential to the Bank Group's businesses

The Bank Group's ability to borrow on a secured or unsecured basis, and the cost of doing so, can be affected by increases in interest rates or credit spreads, the availability of credit, regulatory requirements relating to liquidity or the market perceptions of risk relating to the Bank Group or the banking sector, including the Bank Group's perceived or actual creditworthiness.

Current accounts and savings deposits payable on demand or at short notice form part of the Bank Group's funding, and the Bank Group places considerable importance on maintaining their stability. For deposits, stability depends upon preserving investor confidence in the

Bank Group's capital strength and liquidity, and on comparable and transparent pricing.

The Bank Group also accesses wholesale markets in order to provide funding for entities that do not accept deposits, to align asset and liability maturities and currencies, and to maintain a presence in local markets. An inability to obtain financing in the unsecured long-term or short-term debt capital markets, or to access the secured lending markets, could have a material adverse effect on the Bank Group's liquidity.

Unfavourable macroeconomic developments, market disruptions or regulatory developments may increase the Bank Group's funding costs or challenge the Bank Group's ability to raise funds to support or expand the Bank Group's businesses.

If the Bank Group is unable to raise sufficient funds through deposits and/or in the capital markets, the Bank Group's liquidity position could be adversely affected, and the Bank Group might be unable to meet deposit withdrawals on demand or at their contractual maturity, to repay borrowings as they mature, to meet the Bank Group's obligations under committed financing facilities and insurance contracts or to fund new loans, investments and businesses. The Bank Group may need to liquidate unencumbered assets to meet the Bank Group's liabilities. In a time of reduced liquidity, the Bank Group may be unable to sell some of the Bank Group's assets, or the Bank Group may need to sell assets at reduced prices, which in either case could materially adversely affect the Bank Group's business, financial condition, results of operations, capital position and prospects.

(4) Changes in accounting standards may have a material impact on how the Bank Group reports its financial results and financial condition

The Bank Group prepares its consolidated financial statements in conformity with the requirements of the Companies Ordinance (Cap. 622) of Hong Kong and in accordance with the Hong Kong Financial Reporting Standards ("**HKFRS**") as issued by the Financial Reporting Standards Committee ("**FRSC**") of the Hong Kong Institute of Certified Public Accountants.

From time to time, the FRSC may issue new accounting standards that could materially impact how the Bank Group calculates, reports and discloses its financial results and financial condition, and which may affect its capital ratios, including the Common Equity Tier 1 (CET1) ratio. The Bank Group could be required to apply new or revised standards retrospectively, resulting in restating its prior period financial statements in material amounts. This could have a material adverse effect on the Bank Group's business, financial condition, results of operations and capital position.

(5) The Financial Institutions (Resolution) Ordinance may adversely affect the structured products

On 7 July 2017, the Financial Institutions (Resolution) Ordinance (Cap. 628) of Hong Kong (the "**FIRO**") came into operation. The FIRO provides for, among other things, the establishment of a resolution regime for authorized institutions and other within scope financial institutions in Hong Kong which may be designated by the relevant resolution authorities, which includes us as the issuer of the structured products. The resolution regime seeks to provide the relevant resolution authorities with administrative powers to bring about timely and orderly resolution in order to stabilise and secure continuity for a failing authorized institution or within scope financial institution in Hong Kong. In particular, the relevant resolution authority is provided with powers to affect contractual and property rights as well as payments (including in respect of any priority of payment) that creditors would receive in resolution. These may include, but are not limited to, powers to cancel, write off, modify, convert or replace all or a part of the structured products or cash payment under the structured products, and powers to amend or alter the contractual provisions of the structured products, all of which may adversely affect the value of the structured products, and the holders thereof may suffer a loss of some or all of their investment as a result. Holders of the structured products may become subject to and bound by the FIRO.

On 25 June 2021, the government of Hong Kong published the Financial Institutions (Resolution) (Contractual Recognition of Suspension of Termination Rights – Banking Sector) Rules (the "**Stay Rules**") in the Gazette. The Stay Rules have come into operation on 27 August 2021 following completion of the vetting process by the Legislative Council of Hong Kong. Subject to certain transitional periods, entities subject to the Stay Rules are required to adopt appropriate provisions in certain financial contracts to the effect that the contractual parties agree to be bound by the temporary stay that may be imposed by the Hong Kong Monetary Authority under the FIRO, which may in turn affect any in-scope financial contracts between a qualifying entity and its counterparty(ies).

As the implementation of FIRO remains untested and certain details relating to FIRO will be set out through secondary legislation and supporting rules, we are unable to assess the full impact of FIRO, the Stay Rules, any potential secondary legislation and/or supporting rules and regulations made under FIRO on the financial system generally, our counterparties, us, any of our consolidated subsidiaries, our operations and/or our financial position. **In the worst case scenario, you may get nothing back and the maximum loss could be 100% of your initial investment amount.**

(6) Recent and future U.S. government actions

The U.S. government's recent and future actions against mainland China and Hong Kong may affect the price or value of the underlying equities or indices (as applicable) and the prevailing trading price of the structured products. There can be no assurances that any future actions taken by the U.S. government (or other governments) against mainland China and Hong Kong will not have an adverse effect on the trading price or value of the structured products.

(7) Restrictions on E.O. 13959 U.S. Persons

To the extent the structured products include underlying securities that are or become E.O. 13959 Restricted Underlyings, E.O. 13959 U.S. Persons are or will be restricted under Executive Order 13959 (as amended) from purchasing and selling the structured products, which may adversely affect the prevailing trading price of the structured products. E.O. 13959 U.S. Persons are urged to seek independent legal advice regarding compliance with Executive Order 13959 (as amended).

(8) The structured products are not principal protected and may become worthless

Although the cost of a structured product may cost a fraction of the value of the underlying, the structured product's price may change more rapidly than the price or level of the underlying. Given the gearing feature inherent in the structured products, a small change in the price or level of the underlying may lead to a substantial price movement in the structured products. You may suffer higher losses in percentage terms if you expect the price or level of the underlying to move one way but it moves in the opposite direction. In the worst case, the structured products may become worthless and you will lose all of your investment (or, in the case of Inline Warrants, a substantial part of your investment). The structured products may only be suitable for experienced investors who are willing to accept the risk that they may lose all their investment (or, in the case of Inline Warrants, a substantial part of their investment).

(9) The price of our structured products may fluctuate to a great extent

The price of our structured products may fall or rise rapidly in value and our structured products may expire or become worthless, resulting in a total loss of your investment (or, in the case of

Inline Warrants, a substantial part of your investment). Before dealing in our structured products, you should carefully consider, among other things, (i) the prevailing trading price of the structured products; (ii) the value or level and volatility of the underlying; (iii) in the case of an Inline Warrant, the range between the upper strike price/upper strike level and the lower strike price/lower strike level (both inclusive) of the Inline Warrant and the expected probability of the average price/closing level falling within the range between the upper strike price/upper strike level and the lower strike price/lower strike level (both inclusive) at expiry; (iv) the time remaining to expiration; (v) any change(s) in interim interest rates and dividend yields; (vi) any change(s) in currency exchange rates; (vii) the demand and supply of the structured products; (viii) any related transaction costs; and (ix) our creditworthiness.

(10) The secondary market for our structured products may be limited

We cannot predict if and to what extent a secondary market may develop for the structured products or whether that market will be liquid or illiquid. Whilst we intend to apply to list each series of our structured products on the stock exchange, the fact that a particular series of structured products is listed does not necessarily lead to greater liquidity. In addition, even if a series of structured products is listed on the stock exchange, there can be no assurance that any such listing can be maintained. Our appointed liquidity provider may be the only person quoting prices on the stock exchange for the structured products. Therefore, the secondary market may be limited. The more limited the secondary market, the more difficult it may be for you to realise the value in the structured products prior to expiry.

(11) The liquidity provider may not be able to provide liquidity for the structured products

You should also be aware that the appointed liquidity provider may not be able to provide liquidity when there are operational and technical problem hindering its ability to do so. Even if the appointed liquidity provider is able to provide liquidity in such circumstances, its performance of liquidity provision may be adversely affected. For example: (i) the spread between bid and ask prices quoted by the appointed liquidity provider may be significantly wider than its normal standard; (ii) the quantity for which liquidity will be provided by the appointed liquidity provider may be significantly smaller than its normal standard; and/or (iii) the appointed liquidity provider's response time for a quote may be significantly longer than its normal standard.

(12) The structured products constitute our unsecured and unsubordinated contractual obligations

The structured products constitute our general unsecured contractual obligations and of no other person and shall rank equally *(pari passu)* among themselves and with all our other unsecured obligations (save for certain obligations required to be preferred by law). At any given time, the number of our structured products outstanding may be substantial. We issue a large number of financial instruments on a global basis. We have no obligation to you other than to pay amounts in accordance with the terms set out in the applicable launch announcement and supplemental listing document. We do not in any respect underwrite or guarantee the performance of any structured product or the return on an investment in any structured product. We shall have the absolute discretion (acting in good faith and in a commercially reasonable manner) to put in place any hedging transaction or arrangement appropriate in connection with any structured product or the applicable underlying.

(13) Trading in the structured products may be affected by suspension of trading in the underlying

If an underlying is suspended from trading or dealing for whatever reason on the market on which it is listed or dealt in (including the stock exchange), trading in the relevant series of the structured products may be suspended for a similar period. In addition, if an underlying is an index and the calculation and/or publication of the index level by the index compiler is suspended for whatever reasons, trading in the relevant series of the structured products may be suspended for a similar period. Without taking into account: (i) interim interest rates and (ii) expected dividend payments or other distributions on the underlying shares (in respect of equity-linked structured products), expected dividend payments or other distributions on any components comprising the underlying index (in respect of index-linked structured products), or expected dividend payments or other distributions on the underlying securities of the fund (in respect of fund-linked structured products), and assuming all other factors remain constant, the value of a Warrant or a CBBC is likely to decrease over time while the value of an Inline Warrant is likely to decrease over time when the price or level of the underlying falls outside the range between the upper strike price/upper strike level and the lower strike price/lower strike level (both inclusive). You should note that in the case of a prolonged suspension period, the market price of the structured products may be subject to a significant impact of time decay of such prolonged suspension period and may fluctuate significantly upon resumption of trading after the suspension period of the structured products. This may adversely affect your investment in the structured products.

In respect of our structured products linked to foreign underlying assets, you should note that the trading hours of the foreign underlying assets (based on Hong Kong time) on a stock exchange outside Hong Kong (a "**Foreign Stock Exchange**") may be different from the trading hours of the stock exchange. In the case where trading in the foreign underlying assets on a Foreign Stock Exchange is suspended during non-trading hours of the stock exchange, trading in the relevant structured products on the stock exchange will be suspended as soon as practicable afterwards. Such suspension may be lifted and trading of foreign underlying assets on the Foreign Stock Exchange may resume during non-trading hours of the stock exchange, in which case, trading in the relevant structured products on the stock exchange will also resume as soon as practicable afterwards.

(14) There is a time lag between exercise of the structured products and payment to you

Any delay between exercise of the structured products and payment to you will be specified in the applicable launch announcement and supplemental listing document or in the relevant terms and conditions. We will not compensate you for any loss you suffer as a result of any such time lag.

(15) Time decay

Without taking into account: (i) interim interest rates and (ii) expected dividend payments or other distributions on the underlying shares (in respect of equity-linked structured products), expected dividend payments or other distributions on any components comprising the underlying index (in respect of index-linked structured products) or expected dividend payments or other distributions on the underlying securities of the fund (in respect of fund-linked structured products), and assuming all other factors remain constant, the value of a Warrant or a CBBC is likely to decrease over time while the value of an Inline Warrant is likely to decrease over time when the price or level of the underlying falls outside the range between the upper strike price/upper strike level and the lower strike price/lower strike level (both inclusive). Therefore, the structured product should not be viewed as a product for long term investments.

(16) The value of the underlying may fluctuate

An investment in our structured products involves risks relating to changes in the value of the underlying. The value of the underlying will vary over time, including as a result of corporate actions (where the underlying is a share of a company or a share or a unit of a fund) or changes in computation (where the underlying is an index). Certain of such events which affect the value of the underlying may require an adjustment to the structured products. However, even if such event does not require an adjustment to the structured products, the price of our structured products or the return on an investment in our structured products may be affected.

(17) Investments in the structured products are not the same as investments in the underlying

The value of our structured products may not correlate directly with the movements of the underlying and may be affected by the time remaining to expiry. Also, as holder of our structured products you will not have the same rights (including voting rights and rights to dividends or other distributions and any other rights that a direct holder of the underlying securities would normally be entitled to) as if you were a direct holder of the underlying securities (where the underlying is a share of a company or a share or a unit of a fund) or voting rights or rights to dividends or other distributions or any other rights with respect to any company constituting the underlying index (where the underlying is an index).

(18) Gearing effects

Since the structured products are leveraged, the percentage change in the price of a structured product is greater compared with that of the underlying. You may suffer higher losses in percentage terms if you expect the price or level of the underlying to move one way but it moves in the opposite direction. It is possible that while the price or level of the underlying is moving up, the value of the Warrant or CBBC is falling. In the case of Inline Warrants, generally, without taking into account interim interest rates and expected dividend payments or other distributions on the underlying shares or on any components comprising the underlying index and assuming all other factors remain constant, the closer the price/level of the underlying towards the mid-way of the upper strike price/upper strike level and the lower strike price/lower strike level, the greater the value of the Inline Warrants; conversely, the farther the price/level of the underlying from the mid-way of the upper strike price/upper strike level and the lower strike price/lower strike level, the lower the value of the Inline Warrants.

(19) There could be conflicts of interests which may affect our structured products

Various potential and actual conflicts of interest may arise from our overall activities or activities of our subsidiaries and affiliates. Such actions and conflicts may include, without limitation, the exercise of voting power, the purchase and sale of securities, financial advisory relationships and exercise of creditor rights. Such activities, information and/or research reports may involve or affect the company which has issued the underlying shares, the fund which has issued the underlying securities, the underlying index and/or any components comprising the underlying index and may cause consequences adverse to you or otherwise create conflicts of interests in connection with the issue of the structured products. We have no obligation to disclose such information and may issue research reports and engage in any such activities without regard to the issue of the structured products. In the ordinary course of our business, we and our subsidiaries and affiliates may effect transactions on our own account or for the account of our customers and may enter into one or more transactions with respect to the company which has issued the underlying shares, the fund which has issued the underlying securities, the underlying index and/or any components comprising the underlying index or related derivatives. This may indirectly affect your interests. Any such activities in the ordinary course of our business may also affect the price of the underlying asset and could potentially lead to a negative impact on the value and/or market price of our structured products as well as the cash settlement amount (if any). In respect of CBBCs, such activities may also lead to a mandatory call event.

(20) We and/or members of our group (acting as a dealer) may offer commission rebates or other incentives

We and/or members of our group may, from time to time, act in the capacity of a dealer of our structured products. When acting in such capacity, we and/or members of our group may, in the ordinary course of our/their business, offer commission rebates or other incentives to our/their customers in respect of our structured products. Your investment decision should not be based solely on the benefit of the offer of such commission rebates or other incentives. Before deciding to invest in our structured products, you should fully understand the nature and product features of our structured products and carefully study the risk factors set out in this base listing document and the relevant launch announcement and supplemental listing document and, where necessary, seek independent professional advice. You should also consider your financial position and investment objectives before deciding to invest in our structured products.

(21) Our structured products will be issued in global registered form

Our structured products are issued in global registered form and are held within CCASS. This means that evidence of your interest in the structured products, and the efficiency of the ultimate payment of any cash settlement amount will be governed by the CCASS Rules.

Our structured products in global registered form will be registered in the name of a nominee for HKSCC (currently HKSCC Nominees Limited), who will be treated by us as the holder of the structured products. You are not entitled to any definitive certificates representing your beneficial interests in the structured products. You will have to rely on CCASS and/or your custodian/broker to (a) determine your beneficial interest in the structured products, (b) receive announcements and/or information relating to the structured products and (c) receive any payments under the structured products. Our obligation to you will be duly performed by the delivery of the cash settlement amount (less any exercise expenses) (if any) to HKSCC Nominees Limited as the registered holder of the structured products in accordance with the relevant terms and conditions of the structured products. The amounts will be delivered to you or your custodian/broker through CCASS in accordance with the CCASS Rules.

(22) There may be exchange rate risks and interest rate risks

You should note that there may be exchange rate risks. For example, the underlying may be denominated in a currency other than that of our structured products, our structured products may be denominated in a currency other than the currency of your home jurisdiction and our structured products may settle in a currency other than the currency in which you wishes to receive funds.

Changes in the exchange rate(s) between the currency of the underlying, the currency in which the structured products settle and/or the currency of your home jurisdiction may adversely affect the return of your investment in the structured products. We cannot assure that current exchange rates at the issue date of the structured products will be representative of the future exchange rates used in computing the value of our structured products. Fluctuations in exchange rates may therefore affect the value of the structured products.

In addition, you should be aware that an investment in the structured products may involve interest rate risks in that the intrinsic value of a structured product may be sensitive to fluctuations in interest rates. Interest rates are determined by factors of supply and demand in the international money markets which are affected by macroeconomic factors, speculation and central bank and government intervention. Fluctuations in interest rates (whether short term or long term, and whether of the currency in which the structured products are settled or of the currency in which the underlying is denominated) may affect the value of the structured products.

(23) There may be certain events relating to an index underlying that affect index-linked structured products

In the case of index-linked structured products, the level of the index may vary over time and may increase or decrease due to various factors including changes in the formula for or the method of calculating the index. In addition, a level for the index may be published by the index compiler (as defined in the relevant terms and conditions) at a time when one or more shares comprised in the relevant index are not trading. If this occurs on a valuation date (as defined in the relevant terms and conditions) and there is no market disruption event (as defined in the relevant terms and conditions) under the terms of the relevant index-linked structured products, then the closing level of the index will be calculated by reference to the remaining shares comprised in the relevant index. Certain events relating to the index permit us to determine in good faith and in a commercially reasonable manner the level of the index on the basis of the formula or method last in effect prior to such change in formula or method.

(24) Two or more risk factors may simultaneously affect the structured products

Two or more risk factors may simultaneously have an effect on the value of a structured product such that the effect of any individual risk factor may not be predicted. No assurance can be given as to the effect any combination of risk factors may have on the value of a structured product.

(25) We are not the holding company of the group to which we belong

We are not the ultimate holding company of the group to which we belong and with which our name is identified. The ultimate holding company of the group to which we belong is HSBC Holdings plc.

(26) U.S. Foreign Account Tax Compliance Withholding

We and other financial institutions through which payments on the structured products are made may be required to withhold U.S. tax at a rate of 30 per cent. on all, or a portion of, payments made after the second anniversary of the date on which final U.S. Treasury Regulations defining the term "foreign passthru payments" are published with the U.S. Federal Register in respect of (i) any structured products characterised as obligations for U.S. federal tax purposes that are issued after (or are materially modified after) the date that is six months after the date on which final U.S. Treasury Regulations defining the term "foreign passthru payments" are filed with the U.S. Federal Register and (ii) any structured products not characterised as obligations for U.S. federal tax purposes, whenever issued, pursuant to Sections 1471 through 1474 of the U.S. Internal Revenue Code ("**FATCA**") or similar law implementing an intergovernmental approach to FATCA.

In addition, we and other financial institutions through which payments on the structured products are made may be required to withhold U.S. tax pursuant to FATCA at a rate of 30 per cent. on payments made in respect of any structured products characterised as obligations for U.S. federal tax purposes that are issued after (or are materially modified after) the date that is six months after the date on which such products are treated as giving rise to "dividend equivalent" payments as described under "Legislation Affecting Dividend Equivalent Payments" under the section headed "Taxation".

FATCA withholding tax may apply to an investor or to any non-U.S. financial institution through which payment on the structured products is made if the investor or non-U.S. financial institution does not fulfill its obligations under FATCA, including if (i) that investor (unless otherwise exempt from FATCA) does not provide information or consent to determine whether the investor is a U.S.

person or should otherwise be treated as holding a "United States account" of the Issuer or (ii) that non-U.S. financial institution does not become a Participating Foreign Financial Institution (as defined by FATCA) by entering into an agreement with the U.S. Internal Revenue Service ("**IRS**") to provide the IRS with certain information in respect of its account holders and investors or is not otherwise deemed FATCA compliant or exempt from FATCA withholding tax. Structured product holders therefore may receive less settlement amount than expected. We are not required to pay any additional amounts with respect to amounts so withheld.

Each holder of structured products should consult its own tax advisor as to the application of FATCA to an investment in the structured products.

Further information on FATCA may be found at *https://www.irs.gov/corporations* under the section headed "Foreign Account Tax Compliance Act (FATCA)". Any information appearing on such website does not form part of this base listing document.

(27) Changes in the landscape of financial sector regulation

The global landscape of financial sector regulation is undergoing significant change. The extensive programme of regulatory change carries significant implementation risks for authorities and industry participants. Many official measures are proposals in development and negotiation, and have yet to be enacted into regional and national legislation. These processes could result in differing, fragmented and overlapping implementation around the world, leading to risks of regulatory arbitrage, a far from level competitive playing field and increased compliance costs. Any regulatory changes may affect our ability to perform our obligations under the structured products or to continue to issue structured products under the programme.

(28) We may early terminate the structured products on the grounds of illegality or impracticability

We are entitled to terminate the structured products if we determine in good faith and in a commercially reasonable manner that, for reasons beyond our control, it has become or it will become illegal or impracticable for us to perform our obligations under the structured products, in whole or in part, as a result of a change in law event (as defined in the relevant terms and conditions), or for us or any of our affiliates to maintain our hedging arrangements with respect to the structured products due to a change in law event.

Upon the occurrence of a change in law event, we will, if and to the extent permitted by applicable law or regulation, pay to you a cash amount that we determine in good faith and in a commercially reasonable manner to be the fair market value in respect of each structured product held by you immediately prior to such termination (ignoring such illegality or impracticability) less the cost to us of unwinding any related hedging arrangement and any charges or expenses including any taxes or duties which are incurred or withheld as we determine in our sole and absolute discretion (acting in good faith and in a commercially reasonable manner). Such amount could be substantially less than the amount you invested and can be as low as zero.

(29) We may adjust the terms and conditions of our structured products upon the occurrence of certain corporate events or extraordinary events affecting the underlying

We may determine in good faith and in a commercially reasonable manner that certain corporate events or extraordinary events affecting the underlying have occurred and may make corresponding adjustments to the terms and conditions of our structured products, including adjustments to the value or level of the underlying or changing the composition of the underlying. Such events and/or adjustments (if any) may have an adverse impact on the value and/or market price of our structured products. We may also in our sole discretion (acting in good faith and in a commercially reasonable manner) adjust the entitlement of our structured products for dilution events such as stock subdivisions and stock dividends.

However, we have no obligation to make an adjustment for every event that can affect the underlying. The value and/or market price of our structured products may be adversely affected by such events in the absence of an adjustment by us. If adjustments were made, we do not assure that such adjustments can negate any adverse impact of such events on the value and/or market price of our structured products.

(30) Modification to the terms and conditions

Under the terms and conditions of the structured products, we may, without the consent of the holder of the structured products, modify the terms and conditions applicable to the structured products if such modification, in our opinion, is (a) not materially prejudicial to the interests of any holder of the structured products generally (without considering circumstances of any individual holder of the structured products or the tax or other consequences of such modification in any particular jurisdiction), (b) of a formal, minor or technical nature, (c) made to correct a manifest error, or (d) necessary in order to comply with mandatory provisions of the laws or regulations of Hong Kong.

(31) Risks in using our structured products for hedging

If you intend to purchase our structured products to hedge against the market risk associated with investing in or having an exposure to any underlying, you should recognise the risks of utilising the structured products in this manner. There is no assurance that the value of the structured products will correlate with movements of the relevant underlying. You may therefore incur substantial losses in the structured products, notwithstanding any losses already incurred with respect to investments in or exposures to the relevant underlying.

(32) Liquidation of the underlying company

In the case of structured products linked to shares, in the event of liquidation or dissolution or winding up of the company that issues the underlying shares or the appointment of a liquidator, receiver or administrator or analogous person under applicable law in respect of the whole or substantially the whole of the undertaking, property or assets of the company (each an "**Insolvency Event**"), the relevant structured products will terminate automatically upon the occurrence of the relevant Insolvency Event, save in the case of (i) put Warrants and (ii) bear CBBCs, whereby if we determine in good faith and in a commercially reasonable manner that there is any residual value in the relevant put Warrant or bear CBBC (as the case may be) upon the occurrence of such Insolvency Event, we will pay you the residual value of such put Warrant or bear CBBC (as applicable) in cash representing the fair market value in respect of each put Warrant or bear CBBC (as applicable) held by you on or about the occurrence of such Insolvency Event, less the cost to us of unwinding any related hedging arrangement and any charges or expenses including any taxes or duties which are incurred or withheld as we determine in our sole and absolute discretion (acting in good faith and in a commercially reasonable manner). Such amount could be substantially less than the amount you invested and can be as low as zero. If we determine in good faith and in a commercially reasonable manner that there is no residual value in the relevant put Warrant or bear CBBC (as the case may be) upon the occurrence of such Insolvency Event, such put Warrant or bear CBBC (as the case may be) will lapse. For further details, please refer to the relevant terms and conditions of the structured products.

(33) Liquidation or termination of the underlying fund

In the case of structured products linked to securities of a fund, in the event of (i) a liquidation, dissolution, termination or winding up of the fund or (ii) a liquidation or dissolution or winding up of the trustee of the fund (including any successor trustee appointed from time to time) or where applicable, the trustee ceases to be authorised under the fund to hold the property of the fund in its name and perform its obligations under the trust deed constituting the fund or (iii) the appointment of a liquidator, receiver or administrator or analogous person under applicable law in respect of the whole or substantially the whole of the fund's or the trustee's (as the case may be) undertaking, property or assets or (iv) the withdrawal of the Securities and Futures Commission's authorisation of the fund under the Securities and Futures Ordinance, the relevant structured products shall lapse.

(34) Commodity market risk

In the case of structured products linked to securities of a fund and the value of the underlying securities relates directly to the value of a commodity, you should note that fluctuations in the price of the commodity could materially adversely affect the value of the underlying securities. Commodity market is generally subject to greater risks than other markets. The price of a commodity is highly volatile. Price movement of a commodity is influenced by, among other things, interest rates, changing market supply and demand relationships, trade, fiscal, monetary and exchange control programmes and policies of governments, and international political and economic events and policies.

(35) Risks relating to structured products linked to exchange-traded funds

Some of our structured products may be linked to an ETF. You should note that:

(a) an ETF is exposed to the economic, political, currency, legal and other risks of a specific sector or market related to the underlying asset pool or index or market that the ETF is designed to track;

(b) there may be disparity between the performance of the ETF and the performance of the underlying asset pool or index or market that the ETF is designed to track as a result of, for example, failure of the tracking strategy, currency differences, fees and expenses; and

(c) where the underlying asset pool or index or market that the ETF tracks is subject to restricted access, the efficiency in the creation or redemption of securities to keep the price of the ETF in line with its net asset value may be disrupted, causing the ETF to trade at a higher premium or discount to its net asset value. Hence, the market price of the structured products will also be indirectly subject to these risks.

(36) Risks relating to structured products linked to synthetic exchange-traded funds

An ETF is designed to replicate the performance of an underlying index (or in some cases, a group of assets such as commodities). Some ETFs gain exposure to the underlying index by investing in shares, bonds or other assets that make up the index. An increasing number of ETFs, however, adopt a synthetic replication investment strategy to achieve its investment objectives by investing in financial derivative instruments linked to the performance of an underlying asset pool or index that the ETF is designed to track ("**synthetic ETF**"). You should note that:

(a) investments in financial derivative instruments will expose the synthetic ETF to the credit, potential contagion and concentration risks of the counterparties who issued such financial derivative instruments. As such counterparties are predominantly international financial institutions, the failure of one such counterparty may have a negative effect on other counterparties of the synthetic ETF. Even if the synthetic ETF has collateral to reduce the counterparty risk, there may still be a risk that the market value of the collateral has fallen substantially when the synthetic ETF seeks to realise the collateral; and

(b) the synthetic ETF may be exposed to higher liquidity risk if the synthetic ETF invests in financial derivative instruments which do not have an active secondary market.

Accordingly, investing in the structured products is also exposed to the credit risk of the counterparties who issued the derivatives in addition to the risks associated with the underlying index the performance of which the synthetic ETF is designed to replicate. The above risks may have a significant impact on the performance of the synthetic ETF and hence the market price of our structured products.

(37) Risks relating to structured products linked to real estate investment trust

Some of our structured products may be linked to a real estate investment trust ("**REIT**"). The primary investment objective of REIT is to invest in a real estate portfolio. A REIT is exposed to risks relating to investments in real estate, including but not limited to (a) adverse changes in political or economic conditions; (b) changes in interest rates and the availability of debt or equity financing, which may result in an inability by the REIT to maintain or improve the real estate portfolio and finance future acquisitions; (c) changes in environmental, zoning and other governmental rules; (d) changes in market rents; (e) any required repair and maintenance of the portfolio properties; (f) breach of any property laws or regulations; (g) the relative illiquidity of real estate investment; (h) real estate taxes; (i) any hidden interests in the portfolio properties; (j) any increase in insurance premiums and (k) any uninsurable losses.

There may also be disparity between the market price of the units of a REIT and the net asset value per unit. This is because the market price of the units of a REIT also depends on many factors, including but not limited to (a) the market value and perceived prospects of the real estate portfolio; (b) changes in economic or market conditions; (c) changes in market valuations of similar companies; (d) changes in interest rates; (e) the perceived attractiveness of the units of the REIT against those of other equity securities; (f) the future size and liquidity of the market for the units and the REIT market generally; (g) any future changes to the regulatory system, including the tax system and (h) the ability of the REIT to implement its investment and growth strategies and to retain its key personnel.

The above risks may have a significant impact on the performance of the units and the price of our structured products.

(38) Risks relating to structured products linked to an ETF investing through the QFI regimes and/or China Connect

Some of our structured products may be linked to securities of an ETF ("**China ETF**") issued and traded outside the PRC with direct investment in the mainland Chinese securities markets through the Qualified Foreign Institutional Investor regime and the Renminbi Qualified Foreign Institutional Investor regime (collectively, the "**QFI**" regimes) and/or the Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect (collectively, "**China Connect**"). You should note that, amongst others:

(a) the novelty and untested nature of China Connect makes China ETFs riskier than traditional ETFs investing directly in more developed markets. The policy and rules for the QFI regimes and China Connect prescribed by the PRC government are relatively new and subject to change, and there may be uncertainty to their interpretation and/or implementation. The uncertainty and change of the laws and regulations in the PRC may adversely impact on the performance of the China ETFs and the trading price of the securities;

(b) a China ETF primarily invests in securities traded in the mainland Chinese securities markets and is subject to concentration risk. Investment in the mainland Chinese securities markets (which are inherently stock markets with restricted access) involves certain risks and special considerations as compared with investment in more developed economies or markets, such as greater political, tax, economic, foreign exchange, liquidity and regulatory risks. The operation of a China ETF may also be affected by interventions by the applicable government(s) and regulators in the financial markets;

(c) trading of securities invested by a China ETF under China Connect will be subject to a daily quota ("**Daily Quota**") which is utilised on a "first-come-first-serve" basis under China Connect. In the event that the Daily Quota under China Connect is reached, the manager may need to suspend creation of further securities of such China ETF, and therefore may affect liquidity in trading of the securities of such China ETF. In such event, the trading price of the securities of such China ETF is likely to be at a significant premium to its net asset value, and may be highly volatile. The People's Bank of China and the State Administration of Foreign Exchange have jointly published detailed implementation rules removing the investment quota under the QFI regimes with effect from 6 June 2020;

(d) although there is no longer an aggregate quota limitation, trading eligible mainland Chinese securities through China Connect is still subject to the Daily Quota. The Daily Quota under China Connect is applicable to the whole market and limits the maximum net buy value of cross-boundary trades under China Connect each day. Daily Quota limitations may prevent such China ETF from purchasing the eligible mainland Chinese securities when it is otherwise advantageous to do so. In particular, once the remaining balance of the relevant Daily Quota drops to zero or the Daily Quota is exceeded, buy orders will be rejected (although such China ETF will be permitted to sell its eligible mainland Chinese securities regardless of the quota balance). If such China ETF becomes unable to invest directly in or alternatively hold the eligible mainland Chinese securities, the value of the securities of such China ETF may be adversely affected which in turn may have an adverse effect on the market value and/or potential payout of the structured products; and

(e) there are risks and uncertainties associated with the current PRC tax laws applicable to China ETFs investing in the PRC through the QFI regimes and/or China Connect. Although such China ETF may have made a tax provision in respect of potential tax liability, however, any such provision may be excessive or inadequate. Any shortfall between the provisions and actual tax liabilities may be covered by the assets of such China ETF and may therefore adversely affect the net asset value of such China ETF and the market value and/or potential payout of the structured products.

The above risks may have a significant adverse impact on the performance of the securities of a China ETF and the market value and/or potential payout of our structured products. Please read the offering documents of the relevant China ETF to understand its key features and risks.

(39) Risks relating to structured products linked to underlying asset adopting the multiple counters model

Some of our structured products may be linked to an underlying asset that adopts the multiple counters model. If our structured products are linked to an underlying asset that adopts the multiple counters model for trading its securities on the stock exchange in Hong Kong dollars ("**HKD**") and one or more other currencies (such as Renminbi and/or U.S. dollars) (each an "**Other Currency**") separately, you need to consider the following additional risks in light of the novelty and relatively untested nature of the stock exchange's multiple counters model:

(a) our structured products may be linked to the HKD-traded securities or the Other Currency traded securities. If the underlying asset is securities traded in one currency counter, movements in the trading prices of securities traded in another currency counter should not directly affect the price of our structured products;

(b) if there is a suspension of inter-counter transfer of such securities between different currency counters for any reason, such securities will only be able to be traded in the relevant currency counter on the stock exchange, which may affect the demand and supply of such securities and have an adverse effect on the price of our structured products; and

(c) the trading prices on the stock exchange of securities traded in one currency counter may deviate significantly from the trading prices on the stock exchange of securities traded in another currency counter due to different factors, such as market liquidity, foreign exchange conversion risk, supply and demand in each counter and exchange rate fluctuation. Changes in the trading price of the underlying asset in the relevant currency counter may adversely affect the price of our structured products.

Risk Factors relating to Inline Warrants

(40) Inline Warrants are exotic warrants and are not comparable to standard derivative warrants

Inline Warrants are exotic warrants with different terms and risk and return profile compared to standard call or put derivative warrants listed on the stock exchange and are not comparable to standard derivative warrants. Inline Warrants carry exotic features and their terms and pricing may be more complicated than standard derivative warrants. Inline Warrants may behave quite differently from standard derivative warrants and other exotic warrants in its response to the price levels/levels or movements in the price/level of the underlying asset/index. The pricing structure of Inline Warrants requires investors to assess accurately the value of Inline Warrants in relation to the expected probability of the average price/closing level falling within the range between the upper strike price/upper strike level and the lower strike price/lower strike level (both inclusive). Inline Warrants are highly complicated and risky financial instruments and may be difficult for investors to properly value and/or to use as a hedging tool. You should carefully review and understand the terms and conditions, including the exotic features, before deciding to invest in Inline Warrants. In particular, you should note that Inline Warrants provide a pre-fixed potential payoff at either **a capped amount or a floor amount** at expiry. If the average price/closing level falls outside the range between the lower strike price/lower strike level and the upper strike price/upper strike level (both inclusive), you will receive a lower fixed and floor amount equal to the minimum payoff amount per Inline Warrant (which may be substantially less than your initial investment) at expiry and may suffer loss in your investment. You will still receive the minimum payoff amount per Inline Warrant in this scenario because such amount is included in the price you pay for buying the Inline Warrants. Do not invest in Inline Warrants unless you fully understand them and are willing to assume the risks associated with them.

(41) Maximum potential payoff is fixed and capped

If the average price/closing level stays within the range between the lower strike price/lower strike level and the upper strike price/upper strike level (both inclusive), we will only pay you a fixed and capped amount equal to the maximum payoff amount per Inline Warrant at expiry. This is the maximum potential payoff under the Inline Warrants.

(42) Rejection of orders and trades at the price above HK$1

You should note that any orders and reported trades of Inline Warrants at the price above HK$1 will be automatically rejected upon their entry to the stock exchange's trading system. The stock exchange and its recognised exchange controller, HKEX, will not incur any liability (whether based on contract, tort (including, without limitation, negligence), or any other legal or equitable grounds and without regard to the circumstances giving rise to any purported claim except in the case of wilful misconduct on the part of the stock exchange and/or HKEX) for any direct, consequential, special, indirect, economic, punitive, exemplary or any other loss or damage suffered or incurred by us or any other party arising from or in connection with such rejection of orders and trades, including without limitation, any delay, failure, mistake or error in such rejection of orders and trades.

We and our subsidiaries and affiliates shall not have any responsibility for any losses suffered as a result of such rejection of orders and trades in any circumstances.

(43) Prohibition on the sale of certain binary options in European retail markets

There have been regulatory concerns over the sale of certain binary options to retail investors across the European Union in recent years. Such binary options are typically traded over-the-counter with bespoke structures and are very short-term, making them extremely speculative in nature. Until recently, the European Securities and Markets Authority ("**ESMA**") implemented a temporary ban on the marketing, distribution or sale of binary options to retail customers in the European Union except for securitised binary options. The temporary ban expired and was lifted by ESMA on 1 July 2019 based on the fact that most national competent authorities within the European Union had taken permanent national product intervention measures relating to binary options that are at least as stringent as ESMA's measure. For example, the Financial Conduct Authority ("**FCA**") in the United Kingdom (a then European Union member) imposed a permanent ban effective from 2 April 2019 on the marketing, distribution or sale of all binary options (including securitised binary options) to retail customers in the United Kingdom while the Federal Financial Supervisory Authority ("**BaFin**") in Germany and the Autorite des Marches Financiers ("**AMF**") of France had also permanently banned the marketing, distribution or sale of binary options (other than securitised binary options) to retail customers.

Inline Warrants are a form of securitised binary options. Unlike the binary options in the European retail markets as described above, Inline Warrants listed on the stock exchange have a more standardised structure and relatively longer period to expiry (with a minimum duration of 6 months before expiry).

Irrespective of the differences between Inline Warrants listed on the stock exchange and the binary options in Europe, you should nevertheless note the approach taken by the European regulators over binary options. Inline Warrants are complex products. You should fully understand the structure and terms and conditions of the Inline Warrants and are willing to assume the risks associated with them before investing in the Inline Warrants.

Risk Factors relating to CBBCs

(44) Our CBBCs could automatically expire worthless in certain circumstances

In the case of CBBCs, you should note that you can lose your entire investment on or prior to the expiry date. Unlike Warrants and Inline Warrants, CBBCs has a mandatory call feature and trading in the CBBCs will be suspended when the price or level of the underlying reaches the call price or call level (as defined in the relevant terms and conditions) (subject to the circumstances in which a mandatory call event will be reversed as set out in the sub-section titled "A mandatory call event is irrevocable" below). No investors can sell the CBBCs after the occurrence of a mandatory call event. Even if the price or level of the underlying bounces back in the right direction, the CBBCs which have been terminated as a result of the mandatory call event will not be revived and investors will not be able to profit from the bounce-back. Investors may receive a residual value per board lot (if positive) (as defined in the relevant terms and conditions) (less any exercise expenses) after the occurrence of a mandatory call event but such amount may be zero. If a mandatory call event occurs, the CBBCs will automatically expire. The CBBCs may become worthless.

(45) The trading price of a CBBC may not be the same as the theoretical value of such CBBC

A CBBC can be terminated when the price or level of the underlying reaches or goes beyond the call price or call level (as defined in the relevant terms and conditions). When the price or level of the underlying approaches the call price or call level, the trading price and theoretical value of the CBBC will likely be more volatile and any change in the trading price of the CBBCs may not be comparable and may be disproportionate with the change in the price or level of the underlying. This is because it is more likely that a mandatory call event will occur.

Once a mandatory call event has occurred in respect of a CBBC, the CBBC will be settled at the residual value (as defined in the relevant terms and conditions) (less exercise expenses), and you will not be able to benefit under that CBBC from any changes to the price or level of the underlying after the occurrence of a mandatory call event.

Further, when you sell your CBBC holdings in the market at any time prior to the expiry of such CBBC, the price realised may not be the same as the theoretical value of the CBBC, as the price will be determined by the levels of supply and demand in the market at that time.

(46) The residual value payable (if any) will not include residual funding cost

The residual value (if any) payable by us following the occurrence of a mandatory call event will not include the residual funding cost for the CBBCs. When a mandatory call event occurs, you will lose the funding cost for the full period.

(47) A mandatory call event is irrevocable

A mandatory call event is irrevocable unless it is triggered due to the occurrence of one of the following events:

(i) report of system malfunction or other technical errors of the stock exchange (e.g. the setting up of the wrong call level or call price or other parameters) by the stock exchange to us; or

(ii) report of manifest errors caused by the relevant third party price sources where applicable (e.g. miscalculation of the index level by the relevant index compiler) by us to the stock exchange.

And, in each case, we agree with the stock exchange that such mandatory call event is to be revoked provided that such mutual agreement must be reached no later than 30 minutes before the commencement of trading (including the pre-opening session) (Hong Kong time) on the trading day of the stock exchange immediately following the day on which the mandatory call event occurs, or such other time as prescribed by the stock exchange from time to time.

In such case, the mandatory call event so triggered will be reversed and all trades cancelled (if any) will be reinstated and the trading of the CBBCs will resume.

(48) Delay in mandatory call event notification

We will notify the market as soon as reasonably practicable after the occurrence of a mandatory call event. You should be aware that there may be a delay in our announcement of a mandatory call event due to technical errors, system failures and other factors that are beyond the reasonable control of the stock exchange and us.

(49) Non-Recognition of Post MCE Trades

The stock exchange and its recognised exchange controller, HKEX, will not incur any liability (whether based on contract, tort, (including, without limitation, negligence), or any other legal or equitable grounds and without regard to the circumstances giving rise to any purported claim except in the case of wilful misconduct on the part of the stock exchange and/or HKEX) for, any direct, consequential, special, indirect, economic, punitive, exemplary or any other loss or damage suffered or incurred by us or any other party arising from or in connection with the mandatory call event or the suspension of trading ("**Trading Suspension**") or the non-recognition of trades after a mandatory call event ("**Non-Recognition of Post MCE Trades**"), including without limitation, any delay, failure, mistake or error in the Trading Suspension or Non-Recognition of Post MCE Trades.

We and our affiliates shall not have any responsibility for any losses suffered as a result of the Trading Suspension and/or Non-Recognition of Post MCE Trades in connection with the occurrence of a mandatory call event, notwithstanding that such Trading Suspension or Non-Recognition of Post MCE Trades may have occurred as a result of an error in the observation of the event.

(50) Fluctuation in the funding cost

The issue price of the CBBCs is set by reference to the difference between the initial reference spot price of the underlying securities and the strike price or the initial reference spot level of the underlying index and the strike level (as the case may be), plus the applicable funding cost as of the relevant launch date. The initial funding cost applicable to the CBBCs as set out in the relevant launch announcement and supplemental listing document will fluctuate throughout the life of the CBBCs as the funding rate may change from time to time. The funding rate is a rate determined by us based on one or more of the following factors, including but not limited to the strike price or the strike level (as the case may be), the prevailing interest rate, the expected life of the CBBCs, any expected notional dividend payments or other distributions in respect of the underlying securities or any securities comprising the index (as the case may be) and the margin financing provided by us.

(51) Our hedging activities

Our trading and/or hedging activities or those of our related parties related to the CBBCs and/or other financial instruments issued by us from time to time may have an impact on the price or level of the underlying and may trigger a mandatory call event.

In particular, when the price or level of the underlying is close to the call price or call level (as defined in the relevant terms and conditions), our unwinding activities in relation to the underlying may cause a fall or rise (as the case may be) in the price or level of the underlying leading to a mandatory call event as a result of such unwinding activities.

We or our related party may unwind our hedging transactions relating to the CBBCs in proportion to the amount of the CBBCs we repurchase from the market from time to time. Such activity may lead to greater volatility of the price or level of the underlying, and may lead to a mandatory call event as a result. Upon the occurrence of a mandatory call event, we or our related party may unwind any hedging transactions relating to the CBBCs. Such unwinding activities after the occurrence of a mandatory call event may affect the price or level of the underlying and consequently the residual value (if any) for the CBBCs.

The relevant terms and conditions will, together with the supplemental provisions contained in the relevant launch announcement and supplemental listing document and subject to completion and amendment, be endorsed on the global certificate. The applicable launch announcement and supplemental listing document in relation to the issue of any series of structured products may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the relevant terms and conditions, replace or modify the relevant terms and conditions for the purpose of such series of structured products. Capitalised terms used in the relevant terms and conditions and not otherwise defined therein shall have the meaning given to them in the relevant launch announcement and supplemental listing document.

TERMS AND CONDITIONS OF THE EQUITY WARRANTS (CASH SETTLED)

1. Form, Status, Transfer and Title

(a) *Form.* The call/put Warrants (the "**Warrants**") (which expression shall, unless the context otherwise requires, include any further Warrants issued pursuant to Condition 13) relating to the Shares of the Company are issued in registered form subject to and with the benefit of a global certificate by way of deed poll (the "**Global Certificate**") dated the Issue Date, made by The Hongkong and Shanghai Banking Corporation Limited (the "**Issuer**") and an instrument by way of deed poll dated 2 April 2012 executed by the Issuer (the "**Instrument**"). Copies of the Global Certificate and the Instrument are available for inspection at the specified office of the Issuer. The Warrantholders (as defined below) are entitled to the benefit of, are bound by and are deemed to have notice of all the provisions of the Global Certificate and the Instrument.

(b) *Status.* The Warrants represent general, unsecured, contractual obligations of the Issuer and of no other person and rank *pari passu* among themselves and (save for certain obligations required to be preferred by law) equally with all other unsecured obligations of the Issuer.

(c) *Transfer.* Transfers of beneficial interests in the Warrants may be effected only in Board Lots or integral multiples thereof in CCASS (as defined below) in accordance with the CCASS Rules (as defined below).

(d) *Title.* Each person who is for the time being shown in the register kept by the Issuer as entitled to a particular number of Warrants shall be treated by the Issuer as the absolute owner and holder of such number of Warrants. The expression "**Warrantholder**" shall be construed accordingly.

2. Warrant Rights and Exercise Expenses

(a) *Warrant Rights.* Every Board Lot gives each Warrantholder, upon due exercise and compliance with Condition 4, the right to receive the payment of the Cash Settlement Amount (as defined below), if any, less any Exercise Expenses (as defined below).

(b) *Exercise Expenses.* On exercise of the Warrants, Warrantholders are required to pay Exercise Expenses. To effect such payment, an irrevocable authorisation to deduct all Exercise Expenses from the applicable Cash Settlement Amount is deemed to be given by a Warrantholder to the Issuer upon purchase of the Warrants. Any Exercise Expenses which have not been determined on the Expiry Date (as defined below) shall be notified to the Warrantholder as soon as practicable after determination thereof by the Issuer and shall be paid by the Warrantholder immediately upon demand.

(c) *Definitions.* For the purposes of these Conditions:

"**Average Price**" means the arithmetic mean of the closing prices of a Share (as derived from the Daily Quotation Sheet of the Stock Exchange, subject to any adjustment to such closing prices as may be necessary to reflect any event as contemplated in Condition 6 such as capitalisation, rights issue, distribution or the like) for each Valuation Date (as defined below);

"**Board Lot**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange (as defined below) is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Cash Settlement Amount**" means in respect of every Board Lot, an amount in the Settlement Currency calculated by the Issuer as equal to:

(1) in the case of a series of call Warrants:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Average Price – Exercise Price) x one Board Lot}}{\text{Number of Warrants per Entitlement}}$$

(2) in the case of a series of put Warrants:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Exercise Price – Average Price) x one Board Lot}}{\text{Number of Warrants per Entitlement}}$$

provided that if the Cash Settlement Amount is a negative amount it shall be deemed to be zero;

"**CCASS**" means the Central Clearing and Settlement System established and operated by Hong Kong Securities Clearing Company Limited ("**HKSCC**");

"**CCASS Rules**" means the General Rules of CCASS and the CCASS Operational Procedures in effect from time to time;

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the General Rules of CCASS, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Company**" means the company specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Entitlement**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred or withheld in respect of the exercise of the Warrants;

"**Exercise Price**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Expiry Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Market Disruption Event**" means:

(1) the occurrence or existence on any Valuation Date during the one-half hour period that ends at the close of trading of any suspension of or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Stock Exchange or otherwise) on the Stock Exchange in (i) the Shares; or (ii) any options or futures contracts relating to the Shares if, in any such case, such suspension or limitation is, in the determination of the Issuer, material;

(2) the occurrence of any severe weather condition or other event on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for opening of trading on any day as a result of such severe weather condition or other event; or

(3) a limitation or closure of the Stock Exchange due to any unforeseen circumstances;

"**Settlement Currency**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after the later of: (i) the Expiry Date; and (ii) the day on which the Average Price is determined in accordance with these Conditions;

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment electronically through CCASS to the relevant bank account designated by the relevant Warrantholder ("**Designated Bank Account**");

"**Shares**" means the shares of the Company specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Stock Exchange**" means The Stock Exchange of Hong Kong Limited; and

"**Valuation Date**" means, with respect to the exercise of Warrants, and subject as provided below in relation to a Market Disruption Event, each of the five Business Days immediately preceding the Expiry Date.

3. Exercise of Warrants, Automatic Exercise and Expiry

(a) *Exercise of Warrants.* The Warrants are exercisable only on the Expiry Date.

(b) *Automatic Exercise.* Any Warrant will automatically be exercised if the Cash Settlement Amount on the Expiry Date is greater than zero (without notice being given to the Warrantholders). The Warrantholders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Warrantholders the Cash Settlement Amount (if any) less any Exercise Expenses in accordance with Condition 4(d).

(c) *Expiry.* Any Warrant which has not been automatically exercised in accordance with Condition 3(b) shall expire immediately without value thereafter and all rights of the Warrantholder and obligations of the Issuer with respect to such Warrant shall cease.

4. Exercise of Warrants

(a) Warrants may only be exercised in a Board Lot or integral multiples thereof.

(b) *No requirement to deliver an exercise notice.* The Warrantholders will not be required to deliver an exercise notice for any purpose in relation to the Warrants.

(c) *Cancellation.* The Issuer will, with effect from the first Business Day following the Expiry Date, remove from its register the name of the person in respect of the Warrants which (i) are the subject of an exercise pursuant to automatic exercise in accordance with these Conditions; or (ii) have expired worthless, and thereby cancel the relevant Warrants.

(d) *Cash Settlement.* Subject to automatic exercise of Warrants in accordance with these Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant Warrantholder equal to the Cash Settlement Amount less any Exercise Expenses. If the Cash Settlement Amount is equal to, or less than, the determined Exercise Expenses, no Cash Settlement Amount shall be payable by the Issuer.

The Cash Settlement Amount less the determined Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Warrantholder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Warrantholder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Warrantholder for any interest in respect of the amount due or any loss or damage that such Warrantholder may suffer as a result of the existence of the Settlement Disruption Event.

If the Issuer determines, in its sole discretion (acting in good faith and in a commercially reasonable manner), that a Market Disruption Event has occurred on any Valuation Date, then that Valuation Date shall be postponed until the first succeeding Business Day on which there is no Market Disruption Event, irrespective of whether that postponed Valuation Date would fall on a Business Day that is already or is deemed to be a Valuation Date. For the avoidance of doubt, in the event that a Market Disruption Event has occurred and a Valuation Date is postponed as aforesaid, the closing price of the Shares on the first succeeding Business Day will be used more than once in determining the Average Price, so that in no event shall there be less than five closing prices used to determine the Average Price. If the postponement of the Valuation Date as aforesaid would result in the Valuation Date falling on or after the Expiry Date, then: (i) the Business Day immediately preceding the Expiry Date (the "**Last Valuation Date**") shall be deemed to be the Valuation Date notwithstanding the Market Disruption Event; and (ii) the Issuer shall determine the closing price of the Shares on the basis of its good faith estimate of the price that would have prevailed on the Last Valuation Date but for the Market Disruption Event.

5. Register

The Issuer will at all times maintain or arrange for the maintenance of a register in Hong Kong.

6. Adjustments

(a) *Rights Issues.* If and whenever the Company shall, by way of Rights (as defined below), offer new Shares for subscription at a fixed subscription price to the holders of existing Shares pro rata to existing holdings (a "**Rights Offer**"), the Entitlement will be adjusted to take effect on the Business Day on which trading in the Shares of the Company becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{1 + M}{1 + (R/S) \times M}$$

E: Existing Entitlement immediately prior to the Rights Offer

S: Cum-Rights Share price being the closing price of the Shares on the Stock Exchange on the last Business Day on which the Shares are traded on a cum-Rights basis

R: Subscription price per new Share as specified in the Rights Offer plus an amount equal to any dividends or other benefits foregone to exercise the Rights

M: Number of new Share(s) (whether a whole or a fraction) per existing Share each holder thereof is entitled to subscribe

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Exercise Price in accordance with the following formula:

$$\begin{array}{c}\text{Adjusted Exercise Price} \\ \text{(rounded to the nearest 0.001)}\end{array} = \text{Exercise Price} \div \text{Adjustment Factor}$$

Adjustment to the Exercise Price shall take effect on the same day that the Entitlement is adjusted.

For the purposes of these Conditions:

"**Rights**" means the right(s) attached to each existing Share or needed to acquire one new Share (as the case may be) which are given to the holders of existing Shares to subscribe at a fixed subscription price for new Shares pursuant to the Rights Offer (whether by the exercise of one Right, a part of a Right or an aggregate number of Rights).

(b) *Bonus Issues.* If and whenever the Company shall make an issue of Shares credited as fully paid to the holders of Shares generally by way of capitalisation of profits or reserves (other than pursuant to a scrip dividend or similar scheme for the time being operated by the Company or otherwise in lieu of a cash dividend and without any payment or other consideration being made or given by such holders) (a "**Bonus Issue**") the Entitlement will be increased on the Business Day on which trading in the Shares of the Company becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

Adjustment Factor = 1 + N

E: Existing Entitlement immediately prior to the Bonus Issue

N: Number of additional Shares (whether a whole or a fraction) received by a holder of existing Shares for each Share held prior to the Bonus Issue

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Exercise Price in accordance with the following formula:

$$\begin{array}{c}\text{Adjusted Exercise Price}\\ \text{(rounded to the nearest 0.001)}\end{array} = \text{Exercise Price} \div \text{Adjustment Factor}$$

Adjustment to the Exercise Price shall take effect on the same day that the Entitlement is adjusted.

(c) *Share Subdivisions or Consolidations.* If and whenever the Company shall subdivide its Shares or any class of its outstanding share capital comprised of the Shares into a greater number of shares (a "**Subdivision**") or consolidate the Shares or any class of its outstanding share capital comprised of the Shares into a smaller number of shares (a "**Consolidation**"), the Entitlement in effect immediately prior thereto will be increased (in the case of a Subdivision) or decreased (in the case of a Consolidation) accordingly in each case on the day on which the relevant Subdivision or Consolidation shall have taken effect. In addition, the Exercise Price (which shall be rounded to the nearest 0.001) will be decreased (in the case of a Subdivision) or increased (in the case of a Consolidation) accordingly.

Adjustment to the Exercise Price shall take effect on the same day that the Entitlement is adjusted.

(d) *Merger or Consolidation.* If it is announced that the Company is to or may merge or consolidate with or into any other corporation (including becoming, by agreement or otherwise, a subsidiary of any corporation or controlled by any person or corporation) (except where the Company is the surviving corporation in a merger) or that it is to or may sell or transfer all or substantially all of its assets, the rights attaching to the Warrants may in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner) be amended no later than the Business Day preceding the consummation of such merger, consolidation, sale or transfer (each a "**Restructuring Event**") (as determined by the Issuer in its absolute discretion (acting in good faith and in a commercially reasonable manner)).

The rights attaching to the Warrants after the adjustment shall, after such Restructuring Event, relate to the number of shares of the corporation(s) resulting from or surviving such Restructuring Event or other securities ("**Substituted Securities**") and/or cash offered in substitution for the affected Shares, as the case may be, to which the holder of such number of Shares to which the Warrants related immediately before such Restructuring Event would have been entitled upon such Restructuring Event. Thereafter the provisions hereof shall apply to such Substituted Securities, provided that any Substituted Securities may, in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner), be deemed to be replaced by an amount in the relevant currency equal to the market value or, if no market value is available, fair value, of such Substituted Securities in each case as determined by the Issuer as soon as practicable after such Restructuring Event is effected.

For the avoidance of doubt, any remaining Shares shall not be affected by this paragraph (d) and, where cash is offered in substitution for Shares or is deemed to replace Substituted Securities as described above, references in these Conditions to the Shares shall include any such cash.

(e) *Cash Distributions.* Generally, no adjustment will be made for an ordinary cash dividend (whether or not it is offered with a scrip alternative). For any other forms of cash distribution (each a "**Cash Distribution**") announced by the Company, such as a cash bonus, special dividend or extraordinary dividend, no adjustment will be made unless the value of the Cash Distribution accounts for two per cent. or more of the Share's closing price on the day of announcement by the Company.

If and whenever the Company shall make a Cash Distribution credited as fully paid to the holders of Shares generally, the Entitlement will be adjusted to take effect on the Business Day on which trading in the Shares of the Company becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{S - OD}{S - OD - CD}$$

OD: Amount of the relevant ordinary cash dividend per Share, provided that OD shall be deducted from S only if the Business Day on which trading in the Shares of the Company becomes ex-entitlement with respect to the Cash Distribution and the distribution of the ordinary cash dividend by the Company falls on the same date. For the avoidance of doubt, OD shall be deemed to be zero if the ex-entitlement dates of the relevant ordinary cash dividend and the Cash Distribution are different

CD: Amount of the relevant Cash Distribution per Share

E: Existing Entitlement immediately prior to the Cash Distribution

S: Cum-Cash Distribution Share price being the closing price of the Shares on the Stock Exchange on the last Business Day on which the Shares of the Company are traded on a cum-Cash Distribution basis

In addition, the Issuer shall adjust the Exercise Price in accordance with the following formula:

$$\text{Adjusted Exercise Price (rounded to the nearest 0.001)} = \text{Exercise Price} \div \text{Adjustment Factor}$$

Adjustment to the Exercise Price shall take effect on the same day that the Entitlement is adjusted.

(f) *Other Adjustments.* Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the Warrants as appropriate where any event (including the events as contemplated in the applicable Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Conditions, provided that such adjustment is:

(i) not materially prejudicial to the interests of the Warrantholders generally (without considering the circumstances of any individual Warrantholder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(ii) determined by the Issuer in good faith to be appropriate and commercially reasonable.

(g) *Notice of Adjustments.* All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Warrantholders. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment and of the date from which such adjustment is effective by publication in accordance with Condition 11.

7. Illegality or Impracticability

The Issuer is entitled to terminate the Warrants if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the Warrants, in whole or in part, as a result of: (i) the adoption of, any change in, any relevant law or regulation (including any tax law); or (ii) the promulgation of, or any change in the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law), (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the Warrants due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by applicable law or regulation, pay to each Warrantholder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each Warrant held by such Warrantholder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement and any charges or expenses including any taxes or duties which are incurred or withheld as determined by the Issuer in its sole and absolute discretion (acting in good faith and in a commercially reasonable manner). Payment will be made in such manner as shall be notified to the Warrantholders in accordance with Condition 11.

8. Purchases

The Issuer and/or any of its subsidiaries and affiliates may at any time purchase Warrants at any price in the open market or by tender or by private treaty. Any Warrants so purchased may be held or resold or surrendered for cancellation.

9. Global Certificate

The Warrants are represented by the Global Certificate registered in the name of HKSCC Nominees Limited and deposited with CCASS in accordance with the CCASS Rules. Warrantholders will not be entitled to definitive certificates in respect of any Warrants issued or transferred to them.

10. Meetings of Warrantholders; Modification

(a) *Meetings of Warrantholders.* The Instrument contains provisions for convening meetings of the Warrantholders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution (as defined in the Instrument) of a modification of the provisions of the Warrants or of the Global Certificate.

Any resolution to be passed in a meeting of the Warrantholders shall be decided by poll. Such a meeting may be convened by the Issuer or by Warrantholders holding not less than 10 per cent. of the Warrants for the time being remaining unexercised. The quorum at any such meeting for passing an Extraordinary Resolution will be two or more persons holding or representing not less than 25 per cent. of the Warrants for the time being remaining unexercised, or at any adjourned meeting two or more persons being or representing Warrantholders whatever the number of Warrants so held or represented.

A resolution will be an Extraordinary Resolution when it has been passed at a duly convened meeting by not less than three-quarters of the votes cast by such Warrantholders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the Warrantholders shall be binding on all the Warrantholders, whether or not they are present at the meeting.

Resolutions can be passed in writing without a meeting of the Warrantholders being held if passed unanimously.

(b) *Modification.* The Issuer may, without the consent of the Warrantholders, effect any modification of the terms and conditions of the Warrants or the Global Certificate which, in the opinion of the Issuer, is:

(i) not materially prejudicial to the interests of the Warrantholders generally (without considering the circumstances of any individual Warrantholder or the tax or other consequences of such modification in any particular jurisdiction);

(ii) of a formal, minor or technical nature;

(iii) made to correct a manifest error; or

(iv) necessary in order to comply with mandatory provisions of the laws or regulations of Hong Kong.

Any such modification shall be binding on the Warrantholders and shall be notified to them by the Issuer as soon as practicable in accordance with Condition 11.

11. Notices

All notices to Warrantholders will be validly given if published in English and in Chinese on the website of Hong Kong Exchanges and Clearing Limited. Such notices shall be deemed to have been given on the date of the first such publication. If publication is not practicable, notice will be given in such other manner as the Issuer may determine.

12. Liquidation

In the event of a liquidation or dissolution or winding up of the Company or the appointment of a liquidator, receiver or administrator or analogous person under applicable law in respect of the whole or substantially the whole of the undertaking, property or assets of the Company (each an "**Insolvency Event**"), all unexercised Warrants will terminate automatically upon the occurrence of the Insolvency Event and the Issuer shall have no further obligation under such Warrants, save in the case of a series of put Warrants:

(a) if the Issuer determines in good faith and in a commercially reasonable manner that there is any residual value in the put Warrants upon the occurrence of such Insolvency Event:

   (i) the Issuer will pay to each Warrantholder the residual value of the put Warrants in cash representing the fair market value in respect of each put Warrant held by such Warrantholder on or about the occurrence of such Insolvency Event less the cost to the Issuer of unwinding any related hedging arrangement and any charges or expenses including any taxes or duties which are incurred or withheld as determined by the Issuer in its sole and absolute discretion (acting in good faith and in a commercially reasonable manner). Payment will be made in such manner as shall be notified to the Warrantholders in accordance with Condition 11; and

   (ii) the Issuer may, but shall not be obliged to, determine such cash amount by having regard to the manner in which options contracts or futures contracts relating to the Shares traded on the Stock Exchange (if any) are calculated; and

(b) for the avoidance of doubt, if the Issuer determines in good faith and in a commercially reasonable manner that there is no residual value in the put Warrants upon the occurrence of such Insolvency Event, the put Warrants will lapse and cease to be valid for any purpose upon the occurrence of the Insolvency Event.

For the purposes of this Condition 12, an Insolvency Event occurs, (i) in the case of a voluntary liquidation or winding up of the Company, on the effective date of the relevant resolution; or (ii) in the case of an involuntary liquidation or dissolution or winding up of the Company, on the date of the relevant court order; or (iii) in the case of the appointment of a liquidator or receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of the undertaking, property or assets of the Company, on the date when such appointment is effective but subject (in any such case) to any contrary mandatory requirement of applicable law.

13. Further Issues

The Issuer shall be at liberty from time to time, without the consent of the Warrantholders, to create and issue further Warrants so as to form a single series with the Warrants.

14. Delisting

(a) If at any time the Shares cease to be listed on the Stock Exchange, the Issuer shall give effect to these Conditions in such manner and make such adjustments to the rights attaching to the Warrants as it shall, in its absolute discretion (acting in good faith and in a commercially reasonable manner), consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the Warrantholders generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of any Warrantholder or the tax or other consequences that may result in any particular jurisdiction).

(b) Without prejudice to the generality of Condition 14(a), where the Shares are, or, upon the delisting, become, listed on any other stock exchange, these Conditions may, in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner), be amended to the extent necessary to allow for the substitution of that other stock exchange in place of the Stock Exchange and the Issuer may, without the consent of the Warrantholders, make such adjustments to the entitlements of Warrantholders on exercise (including, if appropriate, by converting foreign currency amounts at prevailing market rates into the relevant currency) as may be appropriate in the circumstances.

(c) The Issuer shall determine, in its absolute discretion (acting in good faith and in a commercially reasonable manner), any adjustment or amendment and its determination shall be conclusive and binding on the Warrantholders save in the case of manifest error. Notice of any adjustments or amendments shall be given to the Warrantholders in accordance with Condition 11 as soon as practicable after they are determined.

15. Contracts (Rights of Third Parties) Ordinance

A person who is not a party to these Conditions has no right under the Contracts (Rights of Third Parties) Ordinance (Cap. 623 of the Laws of Hong Kong) to enforce or to enjoy the benefit of any term of the Warrants.

16. Governing Law

The Warrants, the Global Certificate and the Instrument will be governed by and construed in accordance with the laws of the Hong Kong Special Administrative Region of the People's Republic of China ("**Hong Kong**"). The Issuer and each Warrantholder (by its purchase of the Warrants) shall be deemed to have submitted for all purposes in connection with the Warrants, the Global Certificate and the Instrument to the non-exclusive jurisdiction of the courts of Hong Kong.

17. Language

In the event of any inconsistency between the Chinese translation of these Conditions and the English version of these Conditions, the English version of these Conditions shall prevail.

The relevant terms and conditions will, together with the supplemental provisions contained in the relevant launch announcement and supplemental listing document and subject to completion and amendment, be endorsed on the global certificate. The applicable launch announcement and supplemental listing document in relation to the issue of any series of structured products may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the relevant terms and conditions, replace or modify the relevant terms and conditions for the purpose of such series of structured products. Capitalised terms used in the relevant terms and conditions and not otherwise defined therein shall have the meaning given to them in the relevant launch announcement and supplemental listing document.

TERMS AND CONDITIONS OF THE INDEX WARRANTS (CASH SETTLED)

1. Form, Status, Transfer and Title

(a) *Form.* The call/put Warrants (the "**Warrants**") (which expression shall, unless the context otherwise requires, include any further Warrants issued pursuant to Condition 12) relating to the Index as published by the Index Compiler are issued in registered form subject to and with the benefit of a global certificate by way of deed poll (the "**Global Certificate**") dated the Issue Date, made by The Hongkong and Shanghai Banking Corporation Limited (the "**Issuer**") and an instrument by way of deed poll dated 2 April 2012 executed by the Issuer (the "**Instrument**"). Copies of the Global Certificate and the Instrument are available for inspection at the specified office of the Issuer. The Warrantholders (as defined below) are entitled to the benefit of, are bound by and are deemed to have notice of all the provisions of the Global Certificate and the Instrument.

(b) *Status.* The Warrants represent general, unsecured, contractual obligations of the Issuer and of no other person and rank *pari passu* among themselves and (save for certain obligations required to be preferred by law) equally with all other unsecured obligations of the Issuer.

(c) *Transfer.* Transfers of beneficial interests in the Warrants may be effected only in Board Lots or integral multiples thereof in CCASS (as defined below) in accordance with the CCASS Rules (as defined below).

(d) *Title.* Each person who is for the time being shown in the register kept by the Issuer as entitled to a particular number of Warrants shall be treated by the Issuer as the absolute owner and holder of such number of Warrants. The expression "**Warrantholder**" shall be construed accordingly.

2. Warrant Rights and Exercise Expenses

(a) *Warrant Rights.* Every Board Lot entitles each Warrantholder, upon due exercise and compliance with Condition 4, to payment of the Cash Settlement Amount (as defined below), if any, less any Exercise Expenses (as defined below).

(b) *Exercise Expenses.* On exercise of the Warrants, Warrantholders are required to pay Exercise Expenses. To effect such payment, an irrevocable authorisation to deduct all Exercise Expenses from the applicable Cash Settlement Amount is deemed to be given by a Warrantholder to the Issuer upon purchase of the Warrants. Any Exercise Expenses which have not been determined on the Expiry Date shall be notified to the Warrantholder as soon as practicable after determination thereof by the Issuer and shall be paid by the Warrantholder immediately upon demand.

(c) *Definitions.* For the purposes of these Conditions:

"**Board Lot**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange (as defined below) is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Cash Settlement Amount**" means in respect of every Board Lot, an amount, converted (if applicable) into the Settlement Currency at the Exchange Rate, calculated by the Issuer as equal to:

(1) in the case of a series of call Warrants:

$$\text{Cash Settlement Amount per Board Lot} = \frac{(\text{Closing Level} - \text{Strike Level}) \times \text{one Board Lot} \times \text{Index Currency Amount}}{\text{Divisor}}$$

(2) in the case of a series of put Warrants:

$$\text{Cash Settlement Amount per Board Lot} = \frac{(\text{Strike Level} - \text{Closing Level}) \times \text{one Board Lot} \times \text{Index Currency Amount}}{\text{Divisor}}$$

provided that if the Cash Settlement Amount is a negative amount it shall be deemed to be zero;

"**CCASS**" means the Central Clearing and Settlement System established and operated by Hong Kong Securities Clearing Company Limited ("**HKSCC**");

"**CCASS Rules**" means the General Rules of CCASS and the CCASS Operational Procedures in effect from time to time;

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the General Rules of CCASS, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Closing Level**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Divisor**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Exchange Rate**" means the rate specified in the relevant Launch Announcement and Supplemental Listing Document (if applicable);

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred or withheld in respect of the exercise of the Warrants;

"**Expiry Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Index**" means the index specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Index Compiler**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Index Currency Amount**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Index Exchange**" means the exchange specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Market Disruption Event**" means:

(1) the occurrence or existence, on the Valuation Date during the one-half hour period that ends at the close of trading on the Index Exchange, of any of:

  (i) the suspension or material limitation of the trading of a material number of securities that comprise the Index; or

  (ii) the suspension or material limitation of the trading of options or futures contracts relating to the Index on any exchanges on which such contracts are traded; or

  (iii) the imposition of any exchange controls in respect of any currencies involved in determining the Cash Settlement Amount;

  for the purposes of paragraph (1), (x) the limitation of the number of hours or days of trading will not constitute a Market Disruption Event if it results from an announced change in the regular business hours of any relevant exchange, and (y) a limitation on trading imposed by reason of the movements in price exceeding the levels permitted by any relevant exchange will constitute a Market Disruption Event; or

(2) where the Index Exchange is the Stock Exchange, the occurrence of any severe weather condition or other event on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for opening of trading on any day as a result of such severe weather condition or other event; or

(3) a limitation or closure of the Index Exchange due to any unforeseen circumstances; or

(4) any circumstances beyond the control of the Issuer in which the Closing Level or, if applicable, the Exchange Rate cannot be determined by the Issuer in the manner set out in these Conditions or in such other manner as the Issuer considers appropriate at such time after taking into account all the relevant circumstances;

"**Settlement Currency**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after the later of: (i) the Expiry Date; and (ii) the day on which the Closing Level is determined in accordance with these Conditions;

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment electronically through CCASS to the relevant bank account designated by the relevant Warrantholder ("**Designated Bank Account**");

"**Stock Exchange**" means The Stock Exchange of Hong Kong Limited;

"**Strike Level**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6; and

"**Valuation Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document.

3. Exercise of Warrants, Automatic Exercise and Expiry

(a) *Exercise of Warrants.* The Warrants are exercisable only on the Expiry Date.

(b) *Automatic Exercise.* Any Warrant will automatically be exercised if the Cash Settlement Amount on the Expiry Date is greater than zero (without notice being given to the Warrantholders). The Warrantholders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Warrantholders the Cash Settlement Amount (if any) less any Exercise Expenses in accordance with Condition 4(d).

(c) *Expiry.* Any Warrant which has not been automatically exercised in accordance with Condition 3(b) shall expire immediately without value thereafter and all rights of the Warrantholder and obligations of the Issuer with respect to such Warrant shall cease.

4. Exercise of Warrants

(a) Warrants may only be exercised in a Board Lot or integral multiples thereof.

(b) *No requirement to deliver an exercise notice.* The Warrantholders will not be required to deliver an exercise notice for any purpose in relation to the Warrants.

(c) *Cancellation.* The Issuer will, with effect from the first Business Day following the Expiry Date, remove from its register the name of the person in respect of the Warrants which (i) are the subject of an exercise pursuant to automatic exercise in accordance with these Conditions or (ii) have expired worthless, and thereby cancel the relevant Warrants.

(d) *Cash Settlement.* Subject to automatic exercise of Warrants in accordance with these Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant Warrantholder equal to the Cash Settlement Amount less any Exercise Expenses. If the Cash Settlement Amount is equal to, or less than, the determined Exercise Expenses, no Cash Settlement Amount shall be payable by the Issuer.

The Cash Settlement Amount less the determined Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Warrantholder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Warrantholder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Warrantholder for any interest in respect of the amount due or any loss or damage that such Warrantholder may suffer as a result of the existence of the Settlement Disruption Event.

If the Issuer determines, in its sole discretion (acting in good faith and in a commercially reasonable manner), that on the Valuation Date a Market Disruption Event has occurred, then the Issuer shall determine the Closing Level or, if applicable, the Exchange Rate on the basis of its good faith estimate of the Closing Level or, if applicable, the Exchange Rate that would have prevailed on that day but for the occurrence of the Market Disruption Event provided that in the case of determining the Closing Level, the Issuer, if applicable, may, but shall not be obliged to, determine such Closing Level by having regard to the manner in which futures contracts relating to the Index are calculated.

5. Register

The Issuer will at all times maintain or arrange for the maintenance of a register in Hong Kong.

6. Adjustments to the Index

(a) *Successor Index Compiler Calculates and Reports Index.* If the Index is (i) not calculated and announced by the Index Compiler but is calculated and published by a successor to the Index Compiler (the "**Successor Index Compiler**") acceptable to the Issuer or (ii) replaced by a successor index using, in the determination of the Issuer, the same or a substantially similar formula for and method of calculation as used in the calculation of the Index, then the Index will be deemed to be the index so calculated and announced by the Successor Index Compiler or that successor index, as the case may be.

(b) *Modification and Cessation of Calculation of Index.*

If:

(i) on or prior to a Valuation Date the Index Compiler or (if applicable) the Successor Index Compiler makes a material change in the formula for or the method of calculating the Index or in any other way materially modifies the Index (other than a modification prescribed in that formula or method to maintain the Index in the event of changes in constituent stock, contracts or commodities and other routine events); or

(ii) on a Valuation Date the Index Compiler or (if applicable) the Successor Index Compiler fails to calculate and publish the Index (other than as a result of a Market Disruption Event),

then the Issuer shall determine the Closing Level using, in lieu of a published level for the Index, the level for the Index as at that Valuation Date as determined by the Issuer in accordance with the formula for and method of calculating the Index last in effect prior to that change or failure, but using only those securities, contracts or commodities that comprised the Index immediately prior to that change or failure.

(c) *Other Adjustments.* Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the Warrants as appropriate where any event (including the events as contemplated in the applicable Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Conditions, provided that such adjustment is:

(i) not materially prejudicial to the interests of the Warrantholders generally (without considering the circumstances of any individual Warrantholder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(ii) determined by the Issuer in good faith to be appropriate and commercially reasonable.

(d) *Notice of Adjustments.* All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Warrantholders. The Issuer will give, or procure that there is given, notice as soon as practicable of any determinations by publication in accordance with Condition 11.

7. Illegality or Impracticability

The Issuer is entitled to terminate the Warrants if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the Warrants, in whole or in part, as a result of: (i) the adoption of, any change in, any relevant law or regulation (including any tax law); or (ii) the promulgation of, or any change in the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law), (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the Warrants due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by applicable law or regulation, pay to each Warrantholder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each Warrant held by such Warrantholder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement and any charges or expenses including any taxes or duties which are incurred or withheld as determined by the Issuer in its sole and absolute discretion (acting in good faith and in a commercially reasonable manner). Payment will be made in such manner as shall be notified to the Warrantholders in accordance with Condition 11.

8. Purchases

The Issuer and/or any of its subsidiaries and affiliates may at any time purchase Warrants at any price in the open market or by tender or by private treaty. Any Warrants so purchased may be held or resold or surrendered for cancellation.

9. Global Certificate

The Warrants are represented by the Global Certificate registered in the name of HKSCC Nominees Limited and deposited with CCASS in accordance with the CCASS Rules. Warrantholders will not be entitled to definitive certificates in respect of any Warrants issued or transferred to them.

10. Meetings of Warrantholders; Modification

(a) *Meetings of Warrantholders.* The Instrument contains provisions for convening meetings of the Warrantholders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution (as defined in the Instrument) of a modification of the provisions of the Warrants or of the Global Certificate.

Any resolution to be passed in a meeting of the Warrantholders shall be decided by poll. Such a meeting may be convened by the Issuer or by Warrantholders holding not less than 10 per cent. of the Warrants for the time being remaining unexercised. The quorum at any such meeting for passing an Extraordinary Resolution will be two or more persons holding or representing not less than 25 per cent. of the Warrants for the time being remaining unexercised, or at any adjourned meeting two or more persons being or representing Warrantholders whatever the number of Warrants so held or represented.

A resolution will be an Extraordinary Resolution when it has been passed at a duly convened meeting by not less than three-quarters of the votes cast by such Warrantholders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the Warrantholders shall be binding on all the Warrantholders, whether or not they are present at the meeting.

Resolutions can be passed in writing without a meeting of the Warrantholders being held if passed unanimously.

(b) *Modification.* The Issuer may, without the consent of the Warrantholders, effect any modification of the terms and conditions of the Warrants or the Global Certificate which, in the opinion of the Issuer, is:

(i) not materially prejudicial to the interests of the Warrantholders generally (without considering the circumstances of any individual Warrantholder or the tax or other consequences of such modification in any particular jurisdiction);

(ii) of a formal, minor or technical nature;

(iii) made to correct a manifest error; or

(iv) necessary in order to comply with mandatory provisions of the laws or regulations of Hong Kong.

Any such modification shall be binding on the Warrantholders and shall be notified to them by the Issuer as soon as practicable in accordance with Condition 11.

11. Notices

All notices to Warrantholders will be validly given if published in English and in Chinese on the website of Hong Kong Exchanges and Clearing Limited. Such notices shall be deemed to have been given on the date of the first such publication. If publication is not practicable, notice will be given in such other manner as the Issuer may determine.

12. Further Issues

The Issuer shall be at liberty from time to time, without the consent of the Warrantholders, to create and issue further Warrants so as to form a single series with the Warrants.

13. Contracts (Rights of Third Parties) Ordinance

A person who is not a party to these Conditions has no right under the Contracts (Rights of Third Parties) Ordinance (Cap. 623 of the Laws of Hong Kong) to enforce or to enjoy the benefit of any term of the Warrants.

14. Governing Law

The Warrants, the Global Certificate and the Instrument will be governed by and construed in accordance with the laws of the Hong Kong Special Administrative Region of the People's Republic of China ("**Hong Kong**"). The Issuer and each Warrantholder (by its purchase of the Warrants) shall be deemed to have submitted for all purposes in connection with the Warrants, the Global Certificate and the Instrument to the non-exclusive jurisdiction of the courts of Hong Kong.

15. Language

In the event of any inconsistency between the Chinese translation of these Conditions and the English version of these Conditions, the English version of these Conditions shall prevail.

The relevant terms and conditions will, together with the supplemental provisions contained in the relevant launch announcement and supplemental listing document and subject to completion and amendment, be endorsed on the global certificate. The applicable launch announcement and supplemental listing document in relation to the issue of any series of structured products may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the relevant terms and conditions, replace or modify the relevant terms and conditions for the purpose of such series of structured products. Capitalised terms used in the relevant terms and conditions and not otherwise defined therein shall have the meaning given to them in the relevant launch announcement and supplemental listing document.

TERMS AND CONDITIONS OF THE FUND WARRANTS (CASH SETTLED)

1. Form, Status, Transfer and Title

(a) *Form.* The call/put Warrants (the "**Warrants**") (which expression shall, unless the context otherwise requires, include any further Warrants issued pursuant to Condition 13) relating to the Units of the Fund are issued in registered form subject to and with the benefit of a global certificate by way of deed poll (the "**Global Certificate**") dated the Issue Date, made by The Hongkong and Shanghai Banking Corporation Limited (the "**Issuer**") and an instrument by way of deed poll dated 2 April 2012 executed by the Issuer (the "**Instrument**"). Copies of the Global Certificate and the Instrument are available for inspection at the specified office of the Issuer. The Warrantholders (as defined below) are entitled to the benefit of, are bound by and are deemed to have notice of all the provisions of the Global Certificate and the Instrument.

(b) *Status.* The Warrants represent general, unsecured, contractual obligations of the Issuer and of no other person and rank *pari passu* among themselves and (save for certain obligations required to be preferred by law) equally with all other unsecured obligations of the Issuer.

(c) *Transfer.* Transfers of beneficial interests in the Warrants may be effected only in Board Lots or integral multiples thereof in CCASS (as defined below) in accordance with the CCASS Rules (as defined below).

(d) *Title.* Each person who is for the time being shown in the register kept by the Issuer as entitled to a particular number of Warrants shall be treated by the Issuer as the absolute owner and holder of such number of Warrants. The expression "**Warrantholder**" shall be construed accordingly.

2. Warrant Rights and Exercise Expenses

(a) *Warrant Rights.* Every Board Lot gives each Warrantholder, upon due exercise and compliance with Condition 4, the right to receive the payment of the Cash Settlement Amount (as defined below), if any, less any Exercise Expenses (as defined below).

(b) *Exercise Expenses.* On exercise of the Warrants, Warrantholders are required to pay Exercise Expenses. To effect such payment, an irrevocable authorisation to deduct all Exercise Expenses from the applicable Cash Settlement Amount is deemed to be given by a Warrantholder to the Issuer upon purchase of the Warrants. Any Exercise Expenses which have not been determined on the Expiry Date (as defined below) shall be notified to the Warrantholder as soon as practicable after determination thereof by the Issuer and shall be paid by the Warrantholder immediately upon demand.

(c) *Definitions.* For the purposes of these Conditions:

"**Average Price**" means the arithmetic mean of the closing prices of a Unit (as derived from the Daily Quotation Sheet of the Stock Exchange, subject to any adjustment to such closing prices as may be necessary to reflect any event as contemplated in Condition 6 such as capitalisation, rights issue, distribution or the like) for each Valuation Date (as defined below);

"**Board Lot**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange (as defined below) is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Cash Settlement Amount**" means in respect of every Board Lot, an amount in the Settlement Currency calculated by the Issuer as equal to:

(1) in the case of a series of call Warrants:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Average Price – Exercise Price) x one Board Lot}}{\text{Number of Warrants per Entitlement}}$$

(2) in the case of a series of put Warrants:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Exercise Price – Average Price) x one Board Lot}}{\text{Number of Warrants per Entitlement}}$$

provided that if the Cash Settlement Amount is a negative amount it shall be deemed to be zero;

"**CCASS**" means the Central Clearing and Settlement System established and operated by Hong Kong Securities Clearing Company Limited ("**HKSCC**");

"**CCASS Rules**" means the General Rules of CCASS and the CCASS Operational Procedures in effect from time to time;

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the General Rules of CCASS, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Entitlement**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred or withheld in respect of the exercise of the Warrants;

"**Exercise Price**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Expiry Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Fund**" means the unit trust or exchange-traded fund (as the case may be) specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Market Disruption Event**" means:

(1) the occurrence or existence on any Valuation Date during the one-half hour period that ends at the close of trading of any suspension of or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Stock Exchange or otherwise) on the Stock Exchange in (i) the Units; or (ii) any options or futures contracts relating to the Units if, in any such case, such suspension or limitation is, in the determination of the Issuer, material;

(2) the occurrence of any severe weather condition or other event on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for opening of trading on any day as a result of such severe weather condition or other event; or

(3) a limitation or closure of the Stock Exchange due to any unforeseen circumstances;

"**Settlement Currency**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after the later of: (i) the Expiry Date; and (ii) the day on which the Average Price is determined in accordance with these Conditions;

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment electronically through CCASS to the relevant bank account designated by the relevant Warrantholder ("**Designated Bank Account**");

"**Stock Exchange**" means The Stock Exchange of Hong Kong Limited;

"**Units**" means the units or shares (as the case may be) of the Fund specified as such in the relevant Launch Announcement and Supplemental Listing Document; and

"**Valuation Date**" means, with respect to the exercise of Warrants, and subject as provided below in relation to a Market Disruption Event, each of the five Business Days immediately preceding the Expiry Date.

3. Exercise of Warrants, Automatic Exercise and Expiry

(a) *Exercise of Warrants.* The Warrants are exercisable only on the Expiry Date.

(b) *Automatic Exercise.* Any Warrant will automatically be exercised if the Cash Settlement Amount on the Expiry Date is greater than zero (without notice being given to the Warrantholders). The Warrantholders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Warrantholders the Cash Settlement Amount (if any) less any Exercise Expenses in accordance with Condition 4(d).

(c) *Expiry.* Any Warrant which has not been automatically exercised in accordance with Condition 3(b) shall expire immediately without value thereafter and all rights of the Warrantholder and obligations of the Issuer with respect to such Warrant shall cease.

4. Exercise of Warrants

(a) Warrants may only be exercised in a Board Lot or integral multiples thereof.

(b) *No requirement to deliver an exercise notice.* The Warrantholders will not be required to deliver an exercise notice for any purpose in relation to the Warrants.

(c) *Cancellation.* The Issuer will, with effect from the first Business Day following the Expiry Date, remove from its register the name of the person in respect of the Warrants which (i) are the subject of an exercise pursuant to automatic exercise in accordance with these Conditions; or (ii) have expired worthless, and thereby cancel the relevant Warrants.

(d) *Cash Settlement.* Subject to automatic exercise of Warrants in accordance with these Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant Warrantholder equal to the Cash Settlement Amount less any Exercise Expenses. If the Cash Settlement Amount is equal to, or less than, the determined Exercise Expenses, no Cash Settlement Amount shall be payable by the Issuer.

The Cash Settlement Amount less the determined Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Warrantholder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Warrantholder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Warrantholder for any interest in respect of the amount due or any loss or damage that such Warrantholder may suffer as a result of the existence of the Settlement Disruption Event.

If the Issuer determines, in its sole discretion (acting in good faith and in a commercially reasonable manner), that a Market Disruption Event has occurred on any Valuation Date, then that Valuation Date shall be postponed until the first succeeding Business Day on which there is no Market Disruption Event, irrespective of whether that postponed Valuation Date would fall on a Business Day that is already or is deemed to be a Valuation Date. For the avoidance of doubt, in the event that a Market Disruption Event has occurred and a Valuation Date is postponed as aforesaid, the closing price of the Units on the first succeeding Business Day will be used more than once in determining the Average Price, so that in no event shall there be less than five closing prices used to determine the Average Price. If the postponement of the Valuation Date as aforesaid would result in the Valuation Date falling on or after the Expiry Date, then: (i) the Business Day immediately preceding the Expiry Date (the "**Last Valuation Date**") shall be deemed to be the Valuation Date notwithstanding the Market Disruption Event; and (ii) the Issuer shall determine the closing price of the Units on the basis of its good faith estimate of the price that would have prevailed on the Last Valuation Date but for the Market Disruption Event.

5. Register

The Issuer will at all times maintain or arrange for the maintenance of a register in Hong Kong.

6. Adjustments

(a) *Rights Issues.* If and whenever the Fund shall, by way of Rights (as defined below), offer new Units for subscription at a fixed subscription price to the holders of existing Units pro rata to existing holdings (a "**Rights Offer**"), the Entitlement will be adjusted to take effect on the Business Day on which trading in the Units of the Fund becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{1 + M}{1 + (R/S) \times M}$$

E: Existing Entitlement immediately prior to the Rights Offer

S: Cum-Rights Unit price being the closing price of the Units on the Stock Exchange on the last Business Day on which the Units are traded on a cum-Rights basis

R: Subscription price per new Unit as specified in the Rights Offer plus an amount equal to any distributions or other benefits foregone to exercise the Rights

M: Number of new Unit(s) (whether a whole or a fraction) per existing Unit each holder thereof is entitled to subscribe

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Exercise Price in accordance with the following formula:

$$\underset{\text{(rounded to the nearest 0.001)}}{\text{Adjusted Exercise Price}} = \text{Exercise Price} \div \text{Adjustment Factor}$$

Adjustment to the Exercise Price shall take effect on the same day that the Entitlement is adjusted.

For the purposes of these Conditions:

"**Rights**" means the right(s) attached to each existing Unit or needed to acquire one new Unit (as the case may be) which are given to the holders of existing Units to subscribe at a fixed subscription price for new Units pursuant to the Rights Offer (whether by the exercise of one Right, a part of a Right or an aggregate number of Rights).

(b) *Bonus Issues.* If and whenever the Fund shall make an issue of Units credited as fully paid to the holders of Units generally (other than pursuant to a scrip dividend or distribution or similar scheme for the time being operated by the Fund or otherwise in lieu of a cash dividend or distribution and without any payment or other consideration being made or given by such holders) (a "**Bonus Issue**") the Entitlement will be increased on the Business Day on which trading in the Units of the Fund becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

Adjustment Factor = 1 + N

E: Existing Entitlement immediately prior to the Bonus Issue

N: Number of additional Units (whether a whole or a fraction) received by a holder of existing Units for each Unit held prior to the Bonus Issue

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Exercise Price in accordance with the following formula:

$$\begin{array}{c}\text{Adjusted Exercise Price}\\ \text{(rounded to the nearest 0.001)}\end{array} = \text{Exercise Price} \div \text{Adjustment Factor}$$

Adjustment to the Exercise Price shall take effect on the same day that the Entitlement is adjusted.

(c) *Unit Subdivisions or Consolidations.* If and whenever the Fund shall subdivide its Units or any class of its outstanding units or shares into a greater number of units or shares (a "**Subdivision**") or consolidate the Units or any class of its outstanding units or shares into a smaller number of units or shares (a "**Consolidation**"), the Entitlement in effect immediately prior thereto will be increased (in the case of a Subdivision) or decreased (in the case of a Consolidation) accordingly in each case on the day on which the relevant Subdivision or Consolidation shall have taken effect. In addition, the Exercise Price (which shall be rounded to the nearest 0.001) will be decreased (in the case of a Subdivision) or increased (in the case of a Consolidation) accordingly.

Adjustment to the Exercise Price shall take effect on the same day that the Entitlement is adjusted.

(d) *Merger or Consolidation.* If it is announced that the Fund is to or may merge or consolidate with or into any other fund or corporation (including becoming, by agreement or otherwise, controlled by any person or corporation) (except where the Fund is the surviving entity in a merger) or that it is to or may sell or transfer all or substantially all of its assets, the rights attaching to the Warrants may in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner) be amended no later than the Business Day preceding the consummation of such merger, consolidation, sale or transfer (each a "**Restructuring Event**") (as determined by the Issuer in its absolute discretion (acting in good faith and in a commercially reasonable manner)).

The rights attaching to the Warrants after the adjustment shall, after such Restructuring Event, relate to the number of units or shares of the fund(s) or corporation(s) resulting from or surviving such Restructuring Event or other securities ("**Substituted Securities**") and/or cash offered in substitution for the affected Units, as the case may be, to which the holder of such number of Units to which the Warrants related immediately before such Restructuring Event would have been entitled upon such Restructuring Event. Thereafter the provisions hereof shall apply to such

Substituted Securities, provided that any Substituted Securities may, in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner), be deemed to be replaced by an amount in the relevant currency equal to the market value or, if no market value is available, fair value, of such Substituted Securities in each case as determined by the Issuer as soon as practicable after such Restructuring Event is effected.

For the avoidance of doubt, any remaining Units shall not be affected by this paragraph (d) and, where cash is offered in substitution for Units or is deemed to replace Substituted Securities as described above, references in these Conditions to the Units shall include any such cash.

(e) *Cash Distributions.* Generally, no adjustment will be made for an ordinary cash distribution (whether or not it is offered with a scrip alternative). For any other forms of cash distribution (each a "**Cash Distribution**") announced by the Fund, no adjustment will be made unless the value of the Cash Distribution accounts for two per cent. or more of the Unit's closing price on the day of announcement by the Fund.

If and whenever the Fund shall make a Cash Distribution credited as fully paid to the holders of Units generally, the Entitlement will be adjusted to take effect on the Business Day on which trading in the Units of the Fund becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{S - OD}{S - OD - CD}$$

OD: Amount of the relevant ordinary cash distribution per Unit, provided that OD shall be deducted from S only if the Business Day on which trading in the Units of the Fund becomes ex-entitlement with respect to the Cash Distribution and the distribution of the ordinary cash distribution by the Fund falls on the same date. For the avoidance of doubt, OD shall be deemed to be zero if the ex-entitlement dates of the relevant ordinary cash distribution and the Cash Distribution are different

CD: Amount of the relevant Cash Distribution per Unit

E: Existing Entitlement immediately prior to the Cash Distribution

S: Cum-Cash Distribution Unit price being the closing price of the Units on the Stock Exchange on the last Business Day on which the Units of the Fund are traded on a cum-Cash Distribution basis

In addition, the Issuer shall adjust the Exercise Price in accordance with the following formula:

$$\begin{array}{c}\text{Adjusted Exercise Price} \\ \text{(rounded to the nearest 0.001)}\end{array} = \text{Exercise Price} \div \text{Adjustment Factor}$$

Adjustment to the Exercise Price shall take effect on the same day that the Entitlement is adjusted.

(f) *Other Adjustments.* Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the Warrants as appropriate where any event (including the events as contemplated in the applicable Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Conditions, provided that such adjustment is:

(i) not materially prejudicial to the interests of the Warrantholders generally (without considering the circumstances of any individual Warrantholder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(ii) determined by the Issuer in good faith to be appropriate and commercially reasonable.

(g) *Notice of Adjustments.* All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Warrantholders. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment and of the date from which such adjustment is effective by publication in accordance with Condition 11.

7. Illegality or Impracticability

The Issuer is entitled to terminate the Warrants if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the Warrants, in whole or in part, as a result of: (i) the adoption of, any change in, any relevant law or regulation (including any tax law); or (ii) the promulgation of, or any change in the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law), (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the Warrants due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by applicable law or regulation, pay to each Warrantholder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each Warrant held by such Warrantholder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement and any charges or expenses including any taxes or duties which are incurred or withheld as determined by the Issuer in its sole and absolute discretion (acting in good faith and in a commercially reasonable manner). Payment will be made in such manner as shall be notified to the Warrantholders in accordance with Condition 11.

8. Purchases

The Issuer and/or any of its subsidiaries and affiliates may at any time purchase Warrants at any price in the open market or by tender or by private treaty. Any Warrants so purchased may be held or resold or surrendered for cancellation.

9. Global Certificate

The Warrants are represented by the Global Certificate registered in the name of HKSCC Nominees Limited and deposited with CCASS in accordance with the CCASS Rules. Warrantholders will not be entitled to definitive certificates in respect of any Warrants issued or transferred to them.

10. Meetings of Warrantholders; Modification

(a) *Meetings of Warrantholders.* The Instrument contains provisions for convening meetings of the Warrantholders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution (as defined in the Instrument) of a modification of the provisions of the Warrants or of the Global Certificate.

Any resolution to be passed in a meeting of the Warrantholders shall be decided by poll. Such a meeting may be convened by the Issuer or by Warrantholders holding not less than 10 per cent. of the Warrants for the time being remaining unexercised. The quorum at any such meeting for passing an Extraordinary Resolution will be two or more persons holding or representing not less than 25 per cent. of the Warrants for the time being remaining unexercised, or at any adjourned meeting two or more persons being or representing Warrantholders whatever the number of Warrants so held or represented.

A resolution will be an Extraordinary Resolution when it has been passed at a duly convened meeting by not less than three-quarters of the votes cast by such Warrantholders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the Warrantholders shall be binding on all the Warrantholders, whether or not they are present at the meeting.

Resolutions can be passed in writing without a meeting of the Warrantholders being held if passed unanimously.

(b) *Modification.* The Issuer may, without the consent of the Warrantholders, effect any modification of the terms and conditions of the Warrants or the Global Certificate which, in the opinion of the Issuer, is:

(i) not materially prejudicial to the interests of the Warrantholders generally (without considering the circumstances of any individual Warrantholder or the tax or other consequences of such modification in any particular jurisdiction);

(ii) of a formal, minor or technical nature;

(iii) made to correct a manifest error; or

(iv) necessary in order to comply with mandatory provisions of the laws or regulations of Hong Kong.

Any such modification shall be binding on the Warrantholders and shall be notified to them by the Issuer as soon as practicable in accordance with Condition 11.

11. Notices

All notices to Warrantholders will be validly given if published in English and in Chinese on the website of Hong Kong Exchanges and Clearing Limited. Such notices shall be deemed to have been given on the date of the first such publication. If publication is not practicable, notice will be given in such other manner as the Issuer may determine.

12. Liquidation

In the event of (i) a liquidation, dissolution, termination or winding up of the Fund or (ii) a liquidation or dissolution or winding up of the trustee of the Fund (including any successor trustee appointed from time to time) ("**Trustee**") or where applicable, the Trustee ceases to be authorised under the Fund to hold the property of the Fund in its name and perform its obligations under the trust deed constituting the Fund or (iii) the appointment of a liquidator, receiver or administrator or analogous person under applicable law in respect of the whole or substantially the whole of the Fund's or the Trustee's (as the case may be) undertaking, property or assets or (iv) the withdrawal of the Securities and Futures Commission's authorisation of the Fund under the Securities and Futures Ordinance, all unexercised Warrants will lapse and shall cease to be valid for any purpose, in the case of (i) a voluntary liquidation or winding up, on the effective date of the relevant resolution, (ii) an involuntary liquidation or dissolution or winding up, on the date of the relevant court order, (iii) a termination, on the effective date of the termination, (iv) the appointment of a liquidator or receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of the Fund's or the Trustee's (as the case may be) undertaking, property or assets, on the date on which such appointment is effective, or (v) withdrawal of authorisation, on the date on which such withdrawal becomes effective, but subject (in any such case) to any contrary mandatory requirement of applicable law.

13. Further Issues

The Issuer shall be at liberty from time to time, without the consent of the Warrantholders, to create and issue further Warrants so as to form a single series with the Warrants.

14. Delisting

(a) If at any time the Units cease to be listed on the Stock Exchange, the Issuer shall give effect to these Conditions in such manner and make such adjustments to the rights attaching to the Warrants as it shall, in its absolute discretion (acting in good faith and in a commercially reasonable manner), consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the Warrantholders generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of any Warrantholder or the tax or other consequences that may result in any particular jurisdiction).

(b) Without prejudice to the generality of Condition 14(a), where the Units are, or, upon the delisting, become, listed on any other stock exchange, these Conditions may, in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner), be amended to the extent necessary to allow for the substitution of that other stock exchange in place of the Stock Exchange and the Issuer may, without the consent of the Warrantholders, make such adjustments to the entitlements of Warrantholders on exercise (including, if appropriate, by converting foreign currency amounts at prevailing market rates into the relevant currency) as may be appropriate in the circumstances.

(c) The Issuer shall determine, in its absolute discretion (acting in good faith and in a commercially reasonable manner), any adjustment or amendment and its determination shall be conclusive and binding on the Warrantholders save in the case of manifest error. Notice of any adjustments or amendments shall be given to the Warrantholders in accordance with Condition 11 as soon as practicable after they are determined.

15. Contracts (Rights of Third Parties) Ordinance

A person who is not a party to these Conditions has no right under the Contracts (Rights of Third Parties) Ordinance (Cap. 623 of the Laws of Hong Kong) to enforce or to enjoy the benefit of any term of the Warrants.

16. Governing Law

The Warrants, the Global Certificate and the Instrument will be governed by and construed in accordance with the laws of the Hong Kong Special Administrative Region of the People's Republic of China ("**Hong Kong**"). The Issuer and each Warrantholder (by its purchase of the Warrants) shall be deemed to have submitted for all purposes in connection with the Warrants, the Global Certificate and the Instrument to the non-exclusive jurisdiction of the courts of Hong Kong.

17. Language

In the event of any inconsistency between the Chinese translation of these Conditions and the English version of these Conditions, the English version of these Conditions shall prevail.

The relevant terms and conditions will, together with the supplemental provisions contained in the relevant launch announcement and supplemental listing document and subject to completion and amendment, be endorsed on the global certificate. The applicable launch announcement and supplemental listing document in relation to the issue of any series of structured products may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the relevant terms and conditions, replace or modify the relevant terms and conditions for the purpose of such series of structured products. Capitalised terms used in the relevant terms and conditions and not otherwise defined therein shall have the meaning given to them in the relevant launch announcement and supplemental listing document.

TERMS AND CONDITIONS OF THE EQUITY INLINE WARRANTS (CASH SETTLED)

1. Form, Status, Transfer and Title

(a) *Form.* The inline warrants (the "**Inline Warrants**") (which expression shall, unless the context otherwise requires, include any further Inline Warrants issued pursuant to Condition 13) relating to the Shares of the Company are issued in registered form subject to and with the benefit of a global certificate by way of deed poll (the "**Global Certificate**") dated the Issue Date, made by The Hongkong and Shanghai Banking Corporation Limited (the "**Issuer**") and an instrument by way of deed poll dated 2 April 2012 executed by the Issuer (the "**Instrument**"). Copies of the Global Certificate and the Instrument are available for inspection at the specified office of the Issuer. The Inline Warrantholders (as defined below) are entitled to the benefit of, are bound by and are deemed to have notice of all the provisions of the Global Certificate and the Instrument.

(b) *Status.* The Inline Warrants represent general, unsecured, contractual obligations of the Issuer and of no other person and rank *pari passu* among themselves and (save for certain obligations required to be preferred by law) equally with all other unsecured obligations of the Issuer.

(c) *Transfer.* Transfers of beneficial interests in the Inline Warrants may be effected only in Board Lots or integral multiples thereof in CCASS (as defined below) in accordance with the CCASS Rules (as defined below).

(d) *Title.* Each person who is for the time being shown in the register kept by the Issuer as entitled to a particular number of Inline Warrants shall be treated by the Issuer as the absolute owner and holder of such number of Inline Warrants. The expression "**Inline Warrantholder**" shall be construed accordingly.

2. Inline Warrant Rights and Exercise Expenses

(a) *Inline Warrant Rights.* Every Board Lot gives each Inline Warrantholder, upon due exercise and compliance with Condition 4, the right to receive the payment of the Cash Settlement Amount (as defined below), less any Exercise Expenses (as defined below).

(b) *Exercise Expenses.* On exercise of the Inline Warrants, Inline Warrantholders are required to pay Exercise Expenses. To effect such payment, an irrevocable authorisation to deduct all Exercise Expenses from the applicable Cash Settlement Amount is deemed to be given by the Inline Warrantholder to the Issuer upon purchase of the Inline Warrants. Any Exercise Expenses which have not been determined on the Expiry Date (as defined below) shall be notified to the Inline Warrantholder as soon as practicable after determination thereof by the Issuer and shall be paid by the Inline Warrantholder immediately upon demand.

(c) *Definitions.* For the purposes of these Conditions:

"**Average Price**" means the arithmetic mean of the closing prices of a Share (as derived from the Daily Quotation Sheet of the Stock Exchange, subject to any adjustment to such closing prices as may be necessary to reflect any event as contemplated in Condition 6 such as capitalisation, rights issue, distribution or the like) for each Valuation Date (as defined below);

"**Board Lot**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange (as defined below) is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Cash Settlement Amount**" means in respect of every Board Lot, an amount in the Settlement Currency calculated by the Issuer as equal to:

(1) if the Average Price is at or below the Upper Strike Price and at or above the Lower Strike Price:

Cash Settlement Amount per Board Lot = Maximum Payoff Amount per Inline Warrant x one Board Lot

OR

(2) if the Average Price is above the Upper Strike Price or below the Lower Strike Price:

Cash Settlement Amount per Board Lot = Minimum Payoff Amount per Inline Warrant x one Board Lot

"**CCASS**" means the Central Clearing and Settlement System established and operated by Hong Kong Securities Clearing Company Limited ("**HKSCC**");

"**CCASS Rules**" means the General Rules of CCASS and the CCASS Operational Procedures in effect from time to time;

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the General Rules of CCASS, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Company**" means the company specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred or withheld in respect of the exercise of the Inline Warrants;

"**Expiry Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Inline Warrants**" means the warrants specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Lower Strike Price**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6.

"**Market Disruption Event**" means:

(1) the occurrence or existence on any Valuation Date during the one-half hour period that ends at the close of trading of any suspension of or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Stock Exchange or otherwise) on the Stock Exchange in (i) the Shares; or (ii) any options or futures contracts relating to the Shares if, in any such case, such suspension or limitation is, in the determination of the Issuer, material;

(2) the occurrence of any severe weather condition or other event on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for opening of trading on any day as a result of such severe weather condition or other event; or

(3) a limitation or closure of the Stock Exchange due to any unforeseen circumstances;

"**Maximum Payoff Amount per Inline Warrant**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Minimum Payoff Amount per Inline Warrant**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Currency**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after the later of: (i) the Expiry Date; and (ii) the day on which the Average Price is determined in accordance with these Conditions;

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment electronically through CCASS to the relevant bank account designated by the relevant Inline Warrantholder ("**Designated Bank Account**");

"**Shares**" means the shares of the Company specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Stock Exchange**" means The Stock Exchange of Hong Kong Limited; and

"**Upper Strike Price**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6.

"**Valuation Date**" means, with respect to the exercise of Inline Warrants, and subject as provided below in relation to a Market Disruption Event, each of the five Business Days immediately preceding the Expiry Date.

3. Exercise of Inline Warrants and Automatic Exercise

(a) *Exercise of Inline Warrants.* The Inline Warrants are exercisable only on the Expiry Date.

(b) *Automatic Exercise.* Any Inline Warrant will automatically be exercised on the Expiry Date (without notice being given to the Inline Warrantholders). The Inline Warrantholders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Inline Warrantholders the Cash Settlement Amount less any Exercise Expenses in accordance with Condition 4(d).

4. Exercise of Inline Warrants

(a) Inline Warrants may only be exercised in a Board Lot or integral multiples thereof.

(b) *No requirement to deliver an exercise notice.* The Inline Warrantholders will not be required to deliver an exercise notice for any purpose in relation to the Inline Warrants.

(c) *Cancellation.* The Issuer will, with effect from the first Business Day following the Expiry Date, remove from its register the name of the person in respect of the Inline Warrants which are the subject of an exercise pursuant to automatic exercise in accordance with these Conditions, and thereby cancel the relevant Inline Warrants.

(d) *Cash Settlement.* Subject to automatic exercise of Inline Warrants in accordance with these Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant Inline Warrantholder equal to the Cash Settlement Amount less any Exercise Expenses. If the Cash Settlement Amount is equal to, or less than, the determined Exercise Expenses, no Cash Settlement Amount shall be payable by the Issuer.

The Cash Settlement Amount less the determined Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Inline Warrantholder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Inline Warrantholder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Inline Warrantholder for any interest in respect of the amount due or any loss or damage that such Inline Warrantholder may suffer as a result of the existence of the Settlement Disruption Event.

If the Issuer determines, in its sole discretion (acting in good faith and in a commercially reasonable manner), that a Market Disruption Event has occurred on any Valuation Date, then that Valuation Date shall be postponed until the first succeeding Business Day on which there is no Market Disruption Event, irrespective of whether that postponed Valuation Date would fall on a Business Day that is already or is deemed to be a Valuation Date. For the avoidance of doubt, in the event that a Market Disruption Event has occurred and a Valuation Date is postponed as aforesaid, the closing price of the Shares on the first succeeding Business Day will be used more than once in determining the Average Price, so that in no event shall there be less than five closing prices used to determine the Average Price. If the postponement of the Valuation Date as aforesaid would result in the Valuation Date falling on or after the Expiry Date, then: (i) the Business Day immediately preceding the Expiry Date (the "**Last Valuation Date**") shall be deemed to be the Valuation Date notwithstanding the Market Disruption Event; and (ii) the Issuer shall determine the closing price of the Shares on the basis of its good faith estimate of the price that would have prevailed on the Last Valuation Date but for the Market Disruption Event.

5. Register

The Issuer will at all times maintain or arrange for the maintenance of a register in Hong Kong.

6. Adjustments

(a) *Rights Issues.* If and whenever the Company shall, by way of Rights (as defined below), offer new Shares for subscription at a fixed subscription price to the holders of existing Shares pro rata to existing holdings (a "**Rights Offer**"), the Upper Strike Price and the Lower Strike Price (which shall be rounded to the nearest 0.001) will be adjusted to take effect on the Business Day on which trading in the Shares of the Company becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Upper Strike Price (rounded to the nearest 0.001)} = \text{Upper Strike Price} \div \text{Adjustment Factor}$$

$$\text{Adjusted Lower Strike Price (rounded to the nearest 0.001)} = \text{Lower Strike Price} \div \text{Adjustment Factor}$$

Where:

$$\text{Adjustment Factor} = \frac{1 + M}{1 + (R/S) \times M}$$

S: Cum-Rights Share price being the closing price of the Shares on the Stock Exchange on the last Business Day on which the Shares are traded on a cum-Rights basis

R: Subscription price per new Share as specified in the Rights Offer plus an amount equal to any dividends or other benefits foregone to exercise the Rights

M: Number of new Share(s) (whether a whole or a fraction) per existing Share each holder thereof is entitled to subscribe

Provided that no adjustment will be made if the Adjustment Factor is equal to or less than 1.

For the purposes of these Conditions:

"**Rights**" means the right(s) attached to each existing Share or needed to acquire one new Share (as the case may be) which are given to the holders of existing Shares to subscribe at a fixed subscription price for new Shares pursuant to the Rights Offer (whether by the exercise of one Right, a part of a Right or an aggregate number of Rights).

For the avoidance of doubt, the entitlement of the Inline Warrants is always 1 Share and no adjustment will be made to the entitlement.

(b) *Bonus Issues.* If and whenever the Company shall make an issue of Shares credited as fully paid to the holders of Shares generally by way of capitalisation of profits or reserves (other than pursuant to a scrip dividend or similar scheme for the time being operated by the Company or otherwise in lieu of a cash dividend and without any payment or other consideration being made or given by such holders) (a "**Bonus Issue**") the Upper Strike Price and the Lower Strike Price (which shall be rounded to the nearest 0.001) will be adjusted on the Business Day on which trading in the Shares of the Company becomes ex-entitlement in accordance with the following formula:

Adjusted Upper Strike Price (rounded to the nearest 0.001)	=	Upper Strike Price ÷ Adjustment Factor
Adjusted Lower Strike Price (rounded to the nearest 0.001)	=	Lower Strike Price ÷ Adjustment Factor

Where:

Adjustment Factor = 1 + N

N: Number of additional Shares (whether a whole or a fraction) received by a holder of existing Shares for each Share held prior to the Bonus Issue

For the avoidance of doubt, the entitlement of the Inline Warrants is always 1 Share and no adjustment will be made to the entitlement.

(c) *Share Subdivisions or Consolidations.* If and whenever the Company shall subdivide its Shares or any class of its outstanding share capital comprised of the Shares into a greater number of shares (a "**Subdivision**") or consolidate the Shares or any class of its outstanding share capital comprised of the Shares into a smaller number of shares (a "**Consolidation**") then:

(i) in the case of a Subdivision, the Upper Strike Price and the Lower Strike Price (which shall be rounded to the nearest 0.001) will be decreased in the same ratio as the Subdivision; and

(ii) in the case of a Consolidation, the Upper Strike Price and the Lower Strike Price (which shall be rounded to the nearest 0.001) will be increased in the same ratio as the Consolidation.

in each case on the day on which the relevant Subdivision or Consolidation shall have taken effect.

For the avoidance of doubt, the entitlement of the Inline Warrants is always 1 Share and no adjustment will be made to the entitlement.

(d) *Merger or Consolidation.* If it is announced that the Company is to or may merge or consolidate with or into any other corporation (including becoming, by agreement or otherwise, a subsidiary of any corporation or controlled by any person or corporation) (except where the Company is the surviving corporation in a merger) or that it is to or may sell or transfer all or substantially all of its assets, the rights attaching to the Inline Warrants may in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner) be amended no later than the Business Day preceding the consummation of such merger, consolidation, sale or transfer (each a "**Restructuring Event**") (as determined by the Issuer in its absolute discretion (acting in good faith and in a commercially reasonable manner)) so that the interests of the Inline Warrantholders generally are not materially prejudiced as a consequence of such Restructuring Event (without considering the individual circumstances of any Inline Warrantholder or the tax or other consequences that may result in any particular jurisdiction).

For the avoidance of doubt, the entitlement of the Inline Warrants is always 1 Share and no adjustment will be made to the entitlement.

(e) *Cash Distributions.* Generally, no adjustment will be made for an ordinary cash dividend (whether or not it is offered with a scrip alternative). For any other forms of cash distribution (each a "**Cash Distribution**") announced by the Company, such as a cash bonus, special dividend or extraordinary dividend, no adjustment will be made unless the value of the Cash Distribution accounts for two per cent. or more of the Share's closing price on the day of announcement by the Company.

If and whenever the Company shall make a Cash Distribution credited as fully paid to the holders of Shares generally, the Upper Strike Price and the Lower Strike Price (which shall be rounded to the nearest 0.001) will be adjusted to take effect on the Business Day on which trading in the Shares of the Company becomes ex-entitlement in accordance with the following formula:

Adjusted Upper Strike Price (rounded to the nearest 0.001)	=	Upper Strike Price ÷ Adjustment Factor
Adjusted Lower Strike Price (rounded to the nearest 0.001)	=	Lower Strike Price ÷ Adjustment Factor

Where:

$$\text{Adjustment Factor} = \frac{S - OD}{S - OD - CD}$$

OD: Amount of the relevant ordinary cash dividend per Share, provided that OD shall be deducted from S only if the Business Day on which trading in the Shares of the Company becomes ex-entitlement with respect to the Cash Distribution and the distribution of the ordinary cash dividend by the Company falls on the same date. For the avoidance of doubt, OD shall be deemed to be zero if the ex-entitlement dates of the relevant ordinary cash dividend and the Cash Distribution are different

CD: Amount of the relevant Cash Distribution per Share

S: Cum-Cash Distribution Share price being the closing price of the Shares on the Stock Exchange on the last Business Day on which the Shares of the Company are traded on a cum-Cash Distribution basis

For the avoidance of doubt, the entitlement of the Inline Warrants is always 1 Share and no adjustment will be made to the entitlement.

(f) *Other Adjustments.* Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the Inline Warrants as appropriate where any event (including the events as contemplated in the applicable Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Conditions, provided that such adjustment is:

(i) not materially prejudicial to the interests of the Inline Warrantholders generally (without considering the circumstances of any individual Inline Warrantholder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(ii) determined by the Issuer in good faith to be appropriate and commercially reasonable.

For the avoidance of doubt, the entitlement of the Inline Warrants is always 1 Share and no adjustment will be made to the entitlement.

(g) *Notice of Adjustments.* All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Inline Warrantholders. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment and of the date from which such adjustment is effective by publication in accordance with Condition 11.

7. Illegality or Impracticability

The Issuer is entitled to terminate the Inline Warrants if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the Inline Warrants, in whole or in part, as a result of: (i) the adoption of, any change in, any relevant law or regulation (including any tax law); or (ii) the promulgation of, or any change in the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law), (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the Inline Warrants due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by applicable law or regulation, pay to each Inline Warrantholder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each Inline Warrant held by such Inline Warrantholder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement and any charges or expenses including any taxes or duties which are incurred or withheld as determined by the Issuer in its sole and absolute discretion (acting in good faith and in a commercially reasonable manner). Payment will be made in such manner as shall be notified to the Inline Warrantholders in accordance with Condition 11.

8. Purchases

The Issuer and/or any of its subsidiaries and affiliates may at any time purchase Inline Warrants at any price in the open market or by tender or by private treaty. Any Inline Warrants so purchased may be held or resold or surrendered for cancellation.

9. Global Certificate

The Inline Warrants are represented by the Global Certificate registered in the name of HKSCC Nominees Limited and deposited with CCASS in accordance with the CCASS Rules. Inline Warrantholders will not be entitled to definitive certificates in respect of any Inline Warrants issued or transferred to them.

10. Meetings of Inline Warrantholders; Modification

(a) *Meetings of Inline Warrantholders.* The Instrument contains provisions for convening meetings of the Inline Warrantholders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution (as defined in the Instrument) of a modification of the provisions of the Inline Warrants or of the Global Certificate.

Any resolution to be passed in a meeting of the Inline Warrantholders shall be decided by poll. Such a meeting may be convened by the Issuer or by Inline Warrantholders holding not less than 10 per cent. of the Inline Warrants for the time being remaining unexercised. The quorum at any such meeting for passing an Extraordinary Resolution will be two or more persons holding or representing not less than 25 per cent. of the Inline Warrants for the time being remaining unexercised, or at any adjourned meeting two or more persons being or representing Inline Warrantholders whatever the number of Inline Warrants so held or represented.

A resolution will be an Extraordinary Resolution when it has been passed at a duly convened meeting by not less than three-quarters of the votes cast by such Inline Warrantholders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the Inline Warrantholders shall be binding on all the Inline Warrantholders, whether or not they are present at the meeting.

Resolutions can be passed in writing without a meeting of the Inline Warrantholders being held if passed unanimously.

(b) *Modification.* The Issuer may, without the consent of the Inline Warrantholders, effect any modification of the terms and conditions of the Inline Warrants or the Global Certificate which, in the opinion of the Issuer, is:

(i) not materially prejudicial to the interests of the Inline Warrantholders generally (without considering the circumstances of any individual Inline Warrantholder or the tax or other consequences of such modification in any particular jurisdiction);

(ii) of a formal, minor or technical nature;

(iii) made to correct a manifest error; or

(iv) necessary in order to comply with mandatory provisions of the laws or regulations of Hong Kong.

Any such modification shall be binding on the Inline Warrantholders and shall be notified to them by the Issuer as soon as practicable in accordance with Condition 11.

11. Notices

All notices to Inline Warrantholders will be validly given if published in English and in Chinese on the website of Hong Kong Exchanges and Clearing Limited. Such notices shall be deemed to have been given on the date of the first such publication. If publication is not practicable, notice will be given in such other manner as the Issuer may determine.

12. Liquidation

In the event of a liquidation or dissolution or winding up of the Company or the appointment of a liquidator, receiver or administrator or analogous person under applicable law in respect of the whole or substantially the whole of the undertaking, property or assets of the Company, all unexercised Inline Warrants will lapse and shall cease to be valid for any purpose, in the case of a voluntary liquidation or winding up, on the effective date of the relevant resolution and, in the case of an involuntary liquidation or dissolution or winding up, on the date of the relevant court order or, in the case of the appointment of a liquidator or receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of the undertaking, property or assets of the Company, on the date when such appointment is effective but subject (in any such case) to any contrary mandatory requirement of applicable law.

13. Further Issues

The Issuer shall be at liberty from time to time, without the consent of the Inline Warrantholders, to create and issue further Inline Warrants so as to form a single series with the Inline Warrants.

14. Delisting

(a) If at any time the Shares cease to be listed on the Stock Exchange, the Issuer shall give effect to these Conditions in such manner and make such adjustments to the rights attaching to the Inline Warrants as it shall, in its absolute discretion (acting in good faith and in a commercially reasonable manner), consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the Inline Warrantholders generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of any Inline Warrantholder or the tax or other consequences that may result in any particular jurisdiction).

(b) Without prejudice to the generality of Condition 14(a), where the Shares are, or, upon the delisting, become, listed on any other stock exchange, these Conditions may, in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner), be amended to the extent necessary to allow for the substitution of that other stock exchange in place of the Stock Exchange and the Issuer may, without the consent of the Inline Warrantholders, make such adjustments to the entitlements of Inline Warrantholders on exercise (including, if appropriate, by converting foreign currency amounts at prevailing market rates into the relevant currency) as may be appropriate in the circumstances.

(c) The Issuer shall determine, in its absolute discretion (acting in good faith and in a commercially reasonable manner), any adjustment or amendment and its determination shall be conclusive and binding on the Inline Warrantholders save in the case of manifest error. Notice of any adjustments or amendments shall be given to the Inline Warrantholders in accordance with Condition 11 as soon as practicable after they are determined.

15. Contracts (Rights of Third Parties) Ordinance

A person who is not a party to these Conditions has no right under the Contracts (Rights of Third Parties) Ordinance (Cap. 623 of the Laws of Hong Kong) to enforce or to enjoy the benefit of any term of the Inline Warrants.

16. Governing Law

The Inline Warrants, the Global Certificate and the Instrument will be governed by and construed in accordance with the laws of the Hong Kong Special Administrative Region of the People's Republic of China ("**Hong Kong**"). The Issuer and each Inline Warrantholder (by its purchase of the Inline Warrants) shall be deemed to have submitted for all purposes in connection with the Inline Warrants, the Global Certificate and the Instrument to the non-exclusive jurisdiction of the courts of Hong Kong.

17. Language

In the event of any inconsistency between the Chinese translation of these Conditions and the English version of these Conditions, the English version of these Conditions shall prevail.

The relevant terms and conditions will, together with the supplemental provisions contained in the relevant launch announcement and supplemental listing document and subject to completion and amendment, be endorsed on the global certificate. The applicable launch announcement and supplemental listing document in relation to the issue of any series of structured products may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the relevant terms and conditions, replace or modify the relevant terms and conditions for the purpose of such series of structured products. Capitalised terms used in the relevant terms and conditions and not otherwise defined therein shall have the meaning given to them in the relevant launch announcement and supplemental listing document.

TERMS AND CONDITIONS OF THE INDEX INLINE WARRANTS (CASH SETTLED)

1. Form, Status, Transfer and Title

(a) *Form.* The inline warrants (the "**Inline Warrants**") (which expression shall, unless the context otherwise requires, include any further Inline Warrants issued pursuant to Condition 12) relating to the Index as published by the Index Compiler are issued in registered form subject to and with the benefit of a global certificate by way of deed poll (the "**Global Certificate**") dated the Issue Date, made by The Hongkong and Shanghai Banking Corporation Limited (the "**Issuer**") and an instrument by way of deed poll dated 2 April 2012 executed by the Issuer (the "**Instrument**"). Copies of the Global Certificate and the Instrument are available for inspection at the specified office of the Issuer. The Inline Warrantholders (as defined below) are entitled to the benefit of, are bound by and are deemed to have notice of all the provisions of the Global Certificate and the Instrument.

(b) *Status.* The Inline Warrants represent general, unsecured, contractual obligations of the Issuer and of no other person and rank pari passu among themselves and (save for certain obligations required to be preferred by law) equally with all other unsecured obligations of the Issuer.

(c) *Transfer.* Transfers of beneficial interests in the Inline Warrants may be effected only in Board Lots or integral multiples thereof in CCASS (as defined below) in accordance with the CCASS Rules (as defined below).

(d) *Title.* Each person who is for the time being shown in the register kept by the Issuer as entitled to a particular number of Inline Warrants shall be treated by the Issuer as the absolute owner and holder of such number of Inline Warrants. The expression "**Inline Warrantholder**" shall be construed accordingly.

2. Inline Warrant Rights and Exercise Expenses

(a) *Inline Warrant Rights.* Every Board Lot entitles each Inline Warrantholder, upon due exercise and compliance with Condition 4, to payment of the Cash Settlement Amount (as defined below), less any Exercise Expenses (as defined below).

(b) *Exercise Expenses.* On exercise of the Inline Warrants, Inline Warrantholders are required to pay Exercise Expenses. To effect such payment, an irrevocable authorisation to deduct all Exercise Expenses from the applicable Cash Settlement Amount is deemed to be given by the Inline Warrantholder to the Issuer upon purchase of the Inline Warrants. Any Exercise Expenses which have not been determined on the Expiry Date shall be notified to the Inline Warrantholder as soon as practicable after determination thereof by the Issuer and shall be paid by the Inline Warrantholder immediately upon demand.

(c) *Definitions.* For the purposes of these Conditions:

"**Board Lot**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange (as defined below) is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Cash Settlement Amount**" means in respect of every Board Lot, an amount, converted (if applicable) into the Settlement Currency at the Exchange Rate, calculated by the Issuer as equal to:

(1) if the Closing Level is at or below the Upper Strike Level and at or above the Lower Strike Level:

Cash Settlement Amount per Board Lot = Maximum Payoff Amount per Inline Warrant x one Board Lot

OR

(2) if the Closing Level is above the Upper Strike Level or below the Lower Strike Level:

Cash Settlement Amount per Board Lot = Minimum Payoff Amount per Inline Warrant x one Board Lot

"**CCASS**" means the Central Clearing and Settlement System established and operated by Hong Kong Securities Clearing Company Limited ("**HKSCC**");

"**CCASS Rules**" means the General Rules of CCASS and the CCASS Operational Procedures in effect from time to time;

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the General Rules of CCASS, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Closing Level**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Exchange Rate**" means the rate specified in the relevant Launch Announcement and Supplemental Listing Document (if applicable);

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred or withheld in respect of the exercise of the Inline Warrants;

"**Expiry Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Index**" means the index specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Index Compiler**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Index Exchange**" means the exchange specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Lower Strike Level**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Market Disruption Event**" means:

(1) the occurrence or existence, on the Valuation Date during the one-half hour period that ends at the close of trading on the Index Exchange, of any of:

 (i) the suspension or material limitation of the trading of a material number of securities that comprise the Index; or

 (ii) the suspension or material limitation of the trading of options or futures contracts relating to the Index on any exchanges on which such contracts are traded; or

 (iii) the imposition of any exchange controls in respect of any currencies involved in determining the Cash Settlement Amount;

 for the purposes of paragraph (1), (x) the limitation of the number of hours or days of trading will not constitute a Market Disruption Event if it results from an announced change in the regular business hours of any relevant exchange, and (y) a limitation on trading imposed by reason of the movements in price exceeding the levels permitted by any relevant exchange will constitute a Market Disruption Event; or

(2) where the Index Exchange is the Stock Exchange, the occurrence of any severe weather condition or other event on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for opening of trading on any day as a result of such severe weather condition or other event; or

(3) a limitation or closure of the Index Exchange due to any unforeseen circumstances; or

(4) any circumstances beyond the control of the Issuer in which the Closing Level or, if applicable, the Exchange Rate cannot be determined by the Issuer in the manner set out in these Conditions or in such other manner as the Issuer considers appropriate at such time after taking into account all the relevant circumstances;

"**Minimum Payoff Amount per Inline Warrant**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Maximum Payoff Amount per Inline Warrant**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Currency**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after the later of: (i) the Expiry Date; and (ii) the day on which the Closing Level is determined in accordance with these Conditions;

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment electronically through CCASS to the relevant bank account designated by the relevant Inline Warrantholder ("**Designated Bank Account**");

"**Stock Exchange**" means The Stock Exchange of Hong Kong Limited;

"**Upper Strike Level**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document; and

"**Valuation Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document.

3. Exercise of Inline Warrants and Automatic Exercise

(a) *Exercise of Inline Warrants.* The Inline Warrants are exercisable only on the Expiry Date.

(b) *Automatic Exercise.* Any Inline Warrant will automatically be exercised on the Expiry Date (without notice being given to the Inline Warrantholders). The Inline Warrantholders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Inline Warrantholders the Cash Settlement Amount less any Exercise Expenses in accordance with Condition 4(d).

4. Exercise of Inline Warrants

(a) Inline Warrants may only be exercised in a Board Lot or integral multiples thereof.

(b) *No requirement to deliver an exercise notice.* The Inline Warrantholders will not be required to deliver an exercise notice for any purpose in relation to the Inline Warrants.

(c) *Cancellation.* The Issuer will, with effect from the first Business Day following the Expiry Date, remove from its register the name of the person in respect of the Inline Warrants which are the subject of an exercise pursuant to automatic exercise in accordance with these Conditions, and thereby cancel the relevant Inline Warrants.

(d) *Cash Settlement.* Subject to automatic exercise of Inline Warrants in accordance with these Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant Inline Warrantholder equal to the Cash Settlement Amount less any Exercise Expenses. If the Cash Settlement Amount is equal to, or less than, the determined Exercise Expenses, no Cash Settlement Amount shall be payable by the Issuer.

The Cash Settlement Amount less the determined Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Inline Warrantholder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Inline Warrantholder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Inline Warrantholder for any interest in respect of the amount due or any loss or damage that such Inline Warrantholder may suffer as a result of the existence of the Settlement Disruption Event.

If the Issuer determines, in its sole discretion (acting in good faith and in a commercially reasonable manner), that on the Valuation Date a Market Disruption Event has occurred, then the Issuer shall determine the Closing Level or, if applicable, the Exchange Rate on the basis of its good faith estimate of the Closing Level or, if applicable, the Exchange Rate that would have prevailed on that day but for the occurrence of the Market Disruption Event provided that in the case of determining the Closing Level, the Issuer, if applicable, may, but shall not be obliged to, determine such Closing Level by having regard to the manner in which futures contracts relating to the Index are calculated.

5. Register

The Issuer will at all times maintain or arrange for the maintenance of a register in Hong Kong.

6. Adjustments to the Index

(a) *Successor Index Compiler Calculates and Reports Index.* If the Index is (i) not calculated and announced by the Index Compiler but is calculated and published by a successor to the Index Compiler (the "**Successor Index Compiler**") acceptable to the Issuer or (ii) replaced by a successor index using, in the determination of the Issuer, the same or a substantially similar formula for and method of calculation as used in the calculation of the Index, then the Index will be deemed to be the index so calculated and announced by the Successor Index Compiler or that successor index, as the case may be.

(b) Modification and Cessation of Calculation of Index.

If:

(i) on or prior to a Valuation Date the Index Compiler or (if applicable) the Successor Index Compiler makes a material change in the formula for or the method of calculating the Index or in any other way materially modifies the Index (other than a modification prescribed in that formula or method to maintain the Index in the event of changes in constituent stock, contracts or commodities and other routine events); or

(ii) on a Valuation Date the Index Compiler or (if applicable) the Successor Index Compiler fails to calculate and publish the Index (other than as a result of a Market Disruption Event),

then the Issuer shall determine the Closing Level using, in lieu of a published level for the Index, the level for the Index as at that Valuation Date as determined by the Issuer in accordance with the formula for and method of calculating the Index last in effect prior to that change or failure, but using only those securities, contracts or commodities that comprised the Index immediately prior to that change or failure.

(c) *Other Adjustments.* Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the Inline Warrants as appropriate where any event (including the events as contemplated in the applicable Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Conditions, provided that such adjustment is:

(i) not materially prejudicial to the interests of the Inline Warrantholders generally (without considering the circumstances of any individual Inline Warrantholder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(ii) determined by the Issuer in good faith to be appropriate and commercially reasonable.

(d) *Notice of Adjustments.* All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Inline Warrantholders. The Issuer will give, or procure that there is given, notice as soon as practicable of any determinations by publication in accordance with Condition 11.

7. Illegality or Impracticability

The Issuer is entitled to terminate the Inline Warrants if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the Inline Warrants, in whole or in part, as a result of: (i) the adoption of, any change in, any relevant law or regulation (including any tax law); or (ii) the promulgation of, or any change in the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law), (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the Inline Warrants due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by applicable law or regulation, pay to each Inline Warrantholder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each Inline Warrant held by such Inline Warrantholder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement and any charges or expenses including any taxes or duties which are incurred or withheld as determined by the Issuer in its sole and absolute discretion (acting in good faith and in a commercially reasonable manner). Payment will be made in such manner as shall be notified to the Inline Warrantholders in accordance with Condition 11.

8. Purchases

The Issuer and/or any of its subsidiaries and affiliates may at any time purchase Inline Warrants at any price in the open market or by tender or by private treaty. Any Inline Warrants so purchased may be held or resold or surrendered for cancellation.

9. Global Certificate

The Inline Warrants are represented by the Global Certificate registered in the name of HKSCC Nominees Limited and deposited with CCASS in accordance with the CCASS Rules. Inline Warrantholders will not be entitled to definitive certificates in respect of any Inline Warrants issued or transferred to them.

10. Meetings of Inline Warrantholders; Modification

(a) *Meetings of Inline Warrantholders.* The Instrument contains provisions for convening meetings of the Inline Warrantholders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution (as defined in the Instrument) of a modification of the provisions of the Inline Warrants or of the Global Certificate.

Any resolution to be passed in a meeting of the Inline Warrantholders shall be decided by poll. Such a meeting may be convened by the Issuer or by Inline Warrantholders holding not less than 10 per cent. of the Inline Warrants for the time being remaining unexercised. The quorum at any such meeting for passing an Extraordinary Resolution will be two or more persons holding or representing not less than 25 per cent. of the Inline Warrants for the time being remaining unexercised, or at any adjourned meeting two or more persons being or representing Inline Warrantholders whatever the number of Inline Warrants so held or represented.

A resolution will be an Extraordinary Resolution when it has been passed at a duly convened meeting by not less than three-quarters of the votes cast by such Inline Warrantholders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the Inline Warrantholders shall be binding on all the Inline Warrantholders, whether or not they are present at the meeting.

Resolutions can be passed in writing without a meeting of the Inline Warrantholders being held if passed unanimously.

(b) *Modification.* The Issuer may, without the consent of the Inline Warrantholders, effect any modification of the terms and conditions of the Inline Warrants or the Global Certificate which, in the opinion of the Issuer, is:

(i) not materially prejudicial to the interests of the Inline Warrantholders generally (without considering the circumstances of any individual Inline Warrantholder or the tax or other consequences of such modification in any particular jurisdiction);

(ii) of a formal, minor or technical nature;

(iii) made to correct a manifest error; or

(iv) necessary in order to comply with mandatory provisions of the laws or regulations of Hong Kong.

Any such modification shall be binding on the Inline Warrantholders and shall be notified to them by the Issuer as soon as practicable in accordance with Condition 11.

11. **Notices**

All notices to Inline Warrantholders will be validly given if published in English and in Chinese on the website of Hong Kong Exchanges and Clearing Limited. Such notices shall be deemed to have been given on the date of the first such publication. If publication is not practicable, notice will be given in such other manner as the Issuer may determine.

12. **Further Issues**

The Issuer shall be at liberty from time to time, without the consent of the Inline Warrantholders, to create and issue further Inline Warrants so as to form a single series with the Inline Warrants.

13. **Contracts (Rights of Third Parties) Ordinance**

A person who is not a party to these Conditions has no right under the Contracts (Rights of Third Parties) Ordinance (Cap. 623 of the Laws of Hong Kong) to enforce or to enjoy the benefit of any term of the Inline Warrants.

14. **Governing Law**

The Inline Warrants, the Global Certificate and the Instrument will be governed by and construed in accordance with the laws of the Hong Kong Special Administrative Region of the People's Republic of China ("**Hong Kong**"). The Issuer and each Inline Warrantholder (by its purchase of the Inline Warrants) shall be deemed to have submitted for all purposes in connection with the Inline Warrants, the Global Certificate and the Instrument to the non-exclusive jurisdiction of the courts of Hong Kong.

15. **Language**

In the event of any inconsistency between the Chinese translation of these Conditions and the English version of these Conditions, the English version of these Conditions shall prevail.

The relevant terms and conditions will, together with the supplemental provisions contained in the relevant launch announcement and supplemental listing document and subject to completion and amendment, be endorsed on the global certificate. The applicable launch announcement and supplemental listing document in relation to the issue of any series of structured products may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the relevant terms and conditions, replace or modify the relevant terms and conditions for the purpose of such series of structured products. Capitalised terms used in the relevant terms and conditions and not otherwise defined therein shall have the meaning given to them in the relevant launch announcement and supplemental listing document.

TERMS AND CONDITIONS OF THE EQUITY CALLABLE BULL/BEAR CONTRACTS (CASH SETTLED)

1. Form, Status, Transfer and Title

(a) *Form.* The Callable Bull/Bear Contracts (the "**CBBCs**") (which expression shall, unless the context otherwise requires, include any further CBBCs issued pursuant to Condition 13) relating to the Shares of the Company are issued in registered form subject to and with the benefit of a global certificate by way of deed poll (the "**Global Certificate**") dated the Issue Date, made by The Hongkong and Shanghai Banking Corporation Limited (the "**Issuer**") and an instrument by way of deed poll dated 2 April 2012 executed by the Issuer (the "**Instrument**"). Copies of the Global Certificate and the Instrument are available for inspection at the specified office of the Issuer. The CBBC Holders (as defined below) are entitled to the benefit of, are bound by and are deemed to have notice of all the provisions of the Global Certificate and the Instrument.

(b) *Status.* The CBBCs represent general, unsecured, contractual obligations of the Issuer and of no other person and rank *pari passu* among themselves and (save for certain obligations required to be preferred by law) equally with all other unsecured obligations of the Issuer.

(c) *Transfer.* Transfers of beneficial interests in the CBBCs may be effected only in Board Lots or integral multiples thereof in CCASS (as defined below) in accordance with the CCASS Rules (as defined below).

(d) *Title.* Each person who is for the time being shown in the register kept by the Issuer as entitled to a particular number of CBBCs shall be treated by the Issuer as the absolute owner and holder of such number of CBBCs. The expression "**CBBC Holder**" shall be construed accordingly.

2. CBBC Rights and Exercise Expenses

(a) *CBBC Rights.* Every Board Lot gives each CBBC Holder, (i) upon due exercise and compliance with Condition 4, the right to receive the payment of the Cash Settlement Amount, (if any) less any Exercise Expenses or (ii) upon compliance with Condition 4, the right to receive the payment of the Residual Value, (if any) less any Exercise Expenses following the occurrence of a Mandatory Call Event (all as defined below).

(b) *Exercise Expenses.* On expiry of the CBBCs or upon the occurrence of a Mandatory Call Event, CBBC Holders are required to pay the Exercise Expenses. To effect such payment, an irrevocable authorisation to deduct the Exercise Expenses from the applicable Cash Settlement Amount or the Residual Value (as the case may be) is deemed to be given by a CBBC Holder to the Issuer upon purchase of the CBBCs. Any Exercise Expenses which have not been determined on the Expiry Date or

following the Mandatory Call Event shall be notified to the CBBC Holder as soon as practicable after determination thereof by the Issuer and shall be paid by the CBBC Holder immediately upon demand.

(c) *Definitions.* For the purposes of these Conditions:

"**Board Lot**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange (as defined below) is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Call Price**" means the price of the Shares specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Cash Settlement Amount**" means:

(1) in the case of a series of bull CBBCs and in respect of every Board Lot, an amount in the Settlement Currency calculated by the Issuer as equal to:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Closing Price – Strike Price) x one Board Lot}}{\text{Number of CBBCs per Entitlement}}$$

(2) in the case of a series of bear CBBCs and in respect of every Board Lot, an amount in the Settlement Currency calculated by the Issuer as equal to:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Strike Price – Closing Price) x one Board Lot}}{\text{Number of CBBCs per Entitlement}}$$

provided that if the Cash Settlement Amount is a negative amount it shall be deemed to be zero;

"**CCASS**" means the Central Clearing and Settlement System established and operated by Hong Kong Securities Clearing Company Limited ("**HKSCC**");

"**CCASS Rules**" means the General Rules of CCASS and the CCASS Operational Procedures in effect from time to time;

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the General Rules of CCASS, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Closing Price**" means the official closing price of one Share (as derived from the Daily Quotation Sheet of the Stock Exchange, subject to any adjustment to such closing price as may be necessary to reflect any event as contemplated in Condition 6 such as capitalisation, rights issue, distribution or the like) on the Valuation Date (as defined below);

"**Company**" means the company specified as such in the relevant Launch Announcement and Supplemental Listing Document;

“**Entitlement**” means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

“**Exercise Expenses**” means any charges or expenses including any taxes or duties which are incurred or withheld in respect of the expiry of the CBBCs or the occurrence of a Mandatory Call Event (as the case may be);

“**Expiry Date**” means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

“**IEP**” means the indicative equilibrium price, as determined in accordance with the Rules and Regulations of the Stock Exchange prescribed by the Stock Exchange from time to time (the “**Trading Rules**”);

“**Mandatory Call Event**” occurs:

(1) in the case of a series of bull CBBCs, if the Spot Price is at or below the Call Price at any time during a Trading Day in the Observation Period; and

(2) in the case of a series of bear CBBCs, if the Spot Price is at or above the Call Price at any time during a Trading Day in the Observation Period;

“**Market Disruption Event**” means:

(1) the occurrence or existence on any Trading Day during the one-half hour period that ends at the close of trading of any suspension of or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Stock Exchange or otherwise) on the Stock Exchange in (i) the Shares; and/or (ii) any options or futures contracts relating to the Shares if, in any such case, that suspension or limitation is, in the determination of the Issuer, material;

(2) the occurrence of any severe weather condition or other event on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for opening of trading on any day as a result of such severe weather condition or other event; or

(3) a limitation or closure of the Stock Exchange due to any unforeseen circumstances;

“**Maximum Trade Price**” means the highest Spot Price (subject to any adjustment to such Spot Price as may be necessary to reflect any event as contemplated in Condition 6 such as capitalisation, rights issue, distribution or the like) during the MCE Valuation Period;

“**MCE Valuation Period**” means the period commencing from and including the moment upon which the Mandatory Call Event occurs (the trading session during which the Mandatory Call Event occurs is the “**First Session**”) and up to the end of the trading session on the Stock Exchange immediately following the First Session (the “**Second Session**”) unless, in the determination of the Issuer in good faith, the

Second Session for any reason (including, without limitation, a Market Disruption Event occurring and subsisting in the Second Session) does not contain any continuous period of one hour or more than one hour during which trading in the Shares is permitted on the Stock Exchange with no limitation imposed, in which case the MCE Valuation Period shall be extended to the end of the subsequent trading session following the Second Session during which trading in the Shares is permitted on the Stock Exchange with no limitation imposed for a continuous period of at least one hour notwithstanding the existence or continuance of a Market Disruption Event in such postponed trading session, unless the Issuer determines in good faith that each trading session on each of the four Trading Days immediately following the date on which the Mandatory Call Event occurs does not contain any continuous period of one hour or more than one hour during which trading in the Shares is permitted on the Stock Exchange with no limitation imposed. In that case:

(i) the period commencing from the First Session up to, and including, the last trading session on the Stock Exchange of the fourth Trading Day immediately following the date on which the Mandatory Call Event occurs shall be deemed to be the MCE Valuation Period; and

(ii) the Issuer shall determine the Maximum Trade Price or the Minimum Trade Price (as the case may be) having regard to the then prevailing market conditions, the last reported Spot Price and such other factors as the Issuer may determine to be relevant in good faith.

For the avoidance of doubt, all Spot Prices available throughout the extended MCE Valuation Period shall be taken into account to determine the Maximum Trade Price or the Minimum Trade Price (as the case may be) for the calculation of the Residual Value.

For the purposes of this definition,

(a) the pre-opening session, the morning session and, in the case of half day trading, the closing auction session (if any) of the same day; and

(b) the afternoon session and the closing auction session (if any) of the same day,

shall each be considered as one trading session only;

"**Minimum Trade Price**" means the lowest Spot Price (subject to any adjustment to such Spot Price as may be necessary to reflect any event as contemplated in Condition 6 such as capitalisation, rights issue, distribution or the like) during the MCE Valuation Period;

"**Observation Commencement Date**" has the meaning specified in the relevant Launch Announcement and Supplemental Listing Document;

"**Observation Period**" means the period from the Observation Commencement Date to the Trading Day immediately preceding the Expiry Date (both dates inclusive);

"**Post MCE Trades**" means, subject to such modification and amendment prescribed by the Stock Exchange from time to time, (i) if the Mandatory Call Event occurs during a pre-opening session or a closing auction session (if applicable), as the case may be, of the Stock Exchange, all auction trades in the CBBCs concluded in such session and all manual trades concluded after the end of the pre-order matching period in such session; or (ii) if the Mandatory Call Event occurs during a continuous trading session of the Stock Exchange, all trades in the CBBCs concluded via auto-matching or manually after the time of the occurrence of a Mandatory Call Event;

"**Price Determination Date**" means the date on which the Maximum Trade Price or the Minimum Trade Price (as the case may be) is determined by the Issuer;

"**Residual Value**" means an amount in the Settlement Currency calculated in accordance with the formula specified below:

(1) in the case of a series of bull CBBCs and in respect of every Board Lot:

$$\frac{\text{Entitlement x (Minimum Trade Price – Strike Price) x one Board Lot}}{\text{Number of CBBCs per Entitlement}}$$

(2) in the case of a series of bear CBBCs and in respect of every Board Lot:

$$\frac{\text{Entitlement x (Strike Price – Maximum Trade Price) x one Board Lot}}{\text{Number of CBBCs per Entitlement}}$$

provided that if the Residual Value is a negative amount it shall be deemed to be zero;

"**Settlement Currency**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after (i) the end of the MCE Valuation Period or (ii) the later of (a) the Expiry Date; and (b) the day on which the Closing Price is determined in accordance with these Conditions (as the case may be);

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment electronically through CCASS to the relevant bank account designated by the relevant CBBC Holder ("**Designated Bank Account**");

"**Shares**" means the shares of Company specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Spot Price**" means:

(i) in respect of a continuous trading session of the Stock Exchange, the price per Share concluded by means of automatic order matching on the Stock Exchange as reported in the official real-time dissemination mechanism for the Stock Exchange during such continuous trading session in accordance with the Trading Rules, excluding direct business (as defined in the Trading Rules); and

(ii) in respect of a pre-opening session or a closing auction session (if applicable) of the Stock Exchange (as the case may be), the final IEP of the Share (if any) calculated at the end of the pre-order matching period of such pre-opening session or closing auction session (if applicable) (as the case may be) in accordance with the Trading Rules, excluding direct business (as defined in the Trading Rules),

subject to such modification and amendment prescribed by the Stock Exchange from time to time;

"**Stock Exchange**" means The Stock Exchange of Hong Kong Limited;

"**Strike Price**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Trading Day**" means a day on which the Stock Exchange is scheduled to open for trading for its regular trading sessions; and

"**Valuation Date**" means the Trading Day immediately preceding the Expiry Date.

3. Exercise of CBBCs, Mandatory Call Event, Automatic Exercise and Expiry

(a) *Exercise of CBBCs.* The CBBCs are exercisable on the Expiry Date, provided that a Mandatory Call Event has not occurred.

(b) *Mandatory Call Event.*

(i) Any CBBC in respect of which a Mandatory Call Event has occurred will automatically expire upon the occurrence of a Mandatory Call Event and every Board Lot will entitle the CBBC Holder to receive the Residual Value (if any) less any Exercise Expenses on the Settlement Date. Trading in the CBBCs will be suspended immediately upon the occurrence of a Mandatory Call Event and all Post MCE Trades will be cancelled and will not be recognised by the Issuer or the Stock Exchange.

Revocation

(ii) A Mandatory Call Event is irrevocable unless it is triggered due to the occurrence of one of the following events:

(1) report of system malfunction or other technical errors of the Stock Exchange (e.g. the setting up of the wrong Call Price or other parameters) by the Stock Exchange to the Issuer; or

(2) report of manifest errors caused by the relevant third party price sources where applicable by the Issuer to the Stock Exchange.

and, in each case, the Issuer agrees with the Stock Exchange that such Mandatory Call Event is to be revoked provided that such mutual agreement must be reached no later than 30 minutes before the commencement of trading (including the pre-opening session) (Hong Kong time) on the Trading Day of the Stock Exchange immediately following the day on which the Mandatory Call Event occurs, or such other time as prescribed by the Stock Exchange from time to time.

(c) *Automatic Exercise.* Any CBBC which has not automatically expired will automatically be exercised if, on the Expiry Date, the value of the Cash Settlement Amount is greater than zero (without prior notice being given to the CBBC Holders). The CBBC Holders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the CBBC Holders the Cash Settlement Amount (if any) less any Exercise Expenses in accordance with Condition 4(d).

(d) *Issuer's Obligations.* For the avoidance of doubt, where the CBBCs have been exercised on the Expiry Date or have automatically expired upon the occurrence of a Mandatory Call Event (as the case may be), payment of the Cash Settlement Amount or the Residual Value (if any) (as the case may be) less any Exercise Expenses shall constitute full and final settlement of the obligations of the Issuer with respect to the CBBCs. Subject to such payment having been made, the Issuer shall have no obligation towards the relevant CBBC Holder under the CBBCs subsequent to such Expiry Date or the date on which a Mandatory Call Event occurs (as the case may be).

(e) *Expiry.* Any CBBC which does not automatically expire in accordance with Condition 3(b) or which has not been automatically exercised in accordance with Condition 3(c) (as the case may be) shall expire immediately without value thereafter and all rights of the CBBC Holder and obligations of the Issuer with respect to such CBBC shall cease.

4. Exercise of CBBCs, Cancellation and Payment

(a) *Board Lots.* CBBCs may only be exercised in a Board Lot or integral multiples thereof.

(b) *No requirement to deliver an exercise notice.* The CBBC Holders will not be required to deliver an exercise notice for any purpose in relation to the CBBCs.

(c) *Cancellation.* The Issuer will, with effect from the first Business Day following the date on which a Mandatory Call Event occurs or the Expiry Date (as the case may be), remove from its register the name of the person in respect of the CBBCs which (i) are the subject of an occurrence of a Mandatory Call Event; (ii) are the subject of an exercise pursuant to automatic exercise in accordance with these Conditions; or (iii) have expired worthless, and thereby cancel the relevant CBBCs.

(d) *Cash Settlement.* Subject to automatic exercise of CBBCs or the occurrence of a Mandatory Call Event in accordance with these Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant CBBC Holder equal to the Cash Settlement Amount or the Residual Value (if any) (as the case may be) less any Exercise Expenses. If the Cash Settlement Amount or the Residual Value is equal to, or less than, the determined Exercise Expenses, no Cash Settlement Amount or Residual Value shall be payable by the Issuer.

The Cash Settlement Amount or the Residual Value (as the case may be) less the determined Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the CBBC Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the CBBC Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the CBBC Holder for any interest in respect of the amount due or any loss or damage that such CBBC Holder may suffer as a result of the existence of the Settlement Disruption Event, nor shall the Issuer be liable under any circumstances for any acts or defaults of CCASS in relation to the performance of its duties in relation to the CBBCs.

If the Issuer determines, in its sole discretion (acting in good faith and in a commercially reasonable manner), that a Market Disruption Event has occurred on the Valuation Date, then that Valuation Date shall be postponed to the first succeeding Trading Day on which the Issuer determines that there is no Market Disruption Event, unless the Issuer determines that there is a Market Disruption Event on each of the four Trading Days immediately following the original date that, but for the Market Disruption Event, would have been the Valuation Date. In that case:

(i) the fourth Trading Day immediately following the original date shall be deemed to be the Valuation Date, notwithstanding the Market Disruption Event; and

(ii) the Issuer shall determine the closing price of the Shares having regard to the then prevailing market conditions, the last reported Spot Price and such other factors as the Issuer determines to be relevant in good faith.

5. Register

The Issuer will at all times maintain or arrange for the maintenance of a register in Hong Kong.

6. Adjustments

(a) *Rights Issues.* If and whenever the Company shall, by way of Rights (as defined below), offer new Shares for subscription at a fixed subscription price to the holders of existing Shares pro rata to existing holdings (a "**Rights Offer**"), the Entitlement will be adjusted to take effect on the Business Day on which trading in the Shares of the Company becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{1 + M}{1 + (R/S) \times M}$$

E: Existing Entitlement immediately prior to the Rights Offer

S: Cum-Rights Share price being the closing price of the Shares on the Stock Exchange on the last Business Day on which the Shares are traded on a cum–Rights basis

R: Subscription price per new Share as specified in the Rights Offer plus an amount equal to any dividends or other benefits foregone to exercise the Rights

M: Number of new Share(s) (whether a whole or a fraction) per existing Share each holder thereof is entitled to subscribe

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Call Price and/or Strike Price in accordance with the following formulas:

$$\underset{\text{(rounded to the nearest 0.001)}}{\text{Adjusted Call Price}} = \text{Call Price} \div \text{Adjustment Factor}$$

$$\underset{\text{(rounded to the nearest 0.001)}}{\text{Adjusted Strike Price}} = \text{Strike Price} \div \text{Adjustment Factor}$$

Adjustment to the Call Price and/or Strike Price shall take effect on the same day that the Entitlement is adjusted.

For the purposes of these Conditions:

"**Rights**" means the right(s) attached to each existing Share or needed to acquire one new Share (as the case may be) which are given to the holders of existing Shares to subscribe at a fixed subscription price for new Shares pursuant to the Rights Offer (whether by the exercise of one Right, a part of a Right or an aggregate number of Rights).

(b) *Bonus Issues.* If and whenever the Company shall make an issue of Shares credited as fully paid to the holders of Shares generally by way of capitalisation of profits or reserves (other than pursuant to a scrip dividend or similar scheme for the time being operated by the Company or otherwise in lieu of a cash dividend and without any payment or other consideration being made or given by such holders) (a "**Bonus Issue**") the Entitlement will be increased on the Business Day on which trading in the Shares of the Company becomes ex-entitlement in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

Adjustment Factor = 1 + N

E: Existing Entitlement immediately prior to the Bonus Issue

N: Number of additional Shares (whether a whole or a fraction) received by a holder of existing Shares for each Share held prior to the Bonus Issue

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Call Price and/or Strike Price in accordance with the following formulas:

Adjusted Call Price (rounded to the nearest 0.001)	=	Call Price	÷	Adjustment Factor
Adjusted Strike Price (rounded to the nearest 0.001)	=	Strike Price	÷	Adjustment Factor

Adjustment to the Call Price and/or Strike Price shall take effect on the same day that the Entitlement is adjusted.

(c) *Share Subdivisions or Consolidations.* If and whenever the Company shall subdivide its Shares or any class of its outstanding share capital comprised of the Shares into a greater number of shares (a "**Subdivision**") or consolidate the Shares or any class of its outstanding share capital comprised of the Shares into a smaller number of shares (a "**Consolidation**"), the Entitlement in effect immediately prior thereto will be increased (in the case of a Subdivision) or decreased (in the case of a Consolidation) accordingly in each case on the day on which the relevant Subdivision or Consolidation shall have taken effect. In addition, the Call Price and/or Strike Price (each of which shall be rounded to the nearest 0.001) will be decreased (in the case of a Subdivision) or increased (in the case of a Consolidation) accordingly.

Adjustment to the Call Price and/or Strike Price shall take effect on the same day that the Entitlement is adjusted.

(d) *Merger or Consolidation.* If it is announced that the Company is to or may merge or consolidate with or into any other corporation (including becoming, by agreement or otherwise, a subsidiary of any corporation or controlled by any person or corporation) (except where the Company is the surviving corporation in a merger) or that it is to or may sell or transfer all or substantially all of its assets, the rights attaching to the CBBCs may in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner) be amended no later than the Business Day preceding the consummation of such merger, consolidation, sale or transfer (each a "**Restructuring Event**") (as determined by the Issuer in its absolute discretion (acting in good faith and in a commercially reasonable manner)).

The rights attaching to the CBBCs after the adjustment shall, after such Restructuring Event, relate to the number of shares of the corporation(s) resulting from or surviving such Restructuring Event or other securities ("**Substituted Securities**") and/or cash offered in substitution for the affected Shares, as the case may be, to which the holder of such number of Shares to which the CBBCs related immediately before such Restructuring Event would have been entitled upon such Restructuring Event. Thereafter the provisions hereof shall apply to such Substituted Securities, provided that any Substituted Securities may, in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner), be deemed to be replaced by an amount in the relevant currency equal to the market value or, if no market value is available, fair value, of such Substituted Securities in each case as determined by the Issuer as soon as practicable after such Restructuring Event is effected.

For the avoidance of doubt, any remaining Shares shall not be affected by this paragraph (d) and, where cash is offered in substitution for Shares or is deemed to replace Substituted Securities as described above, references in these Conditions to the Shares shall include any such cash.

(e) *Cash Distributions.* Generally, no adjustment will be made for an ordinary cash dividend (whether or not it is offered with a scrip alternative). For any other forms of cash distribution (each a "**Cash Distribution**") announced by the Company, such as a cash bonus, special dividend or extraordinary dividend, no adjustment will be made unless the value of the Cash Distribution accounts for two per cent. or more of the Share's closing price on the day of announcement by the Company.

If and whenever the Company shall make a Cash Distribution credited as fully paid to the holders of Shares generally, the Entitlement will be adjusted to take effect on the Business Day on which trading in the Shares of the Company becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{S - OD}{S - OD - CD}$$

OD: Amount of the relevant ordinary cash dividend per Share, provided that OD shall be deducted from S only if the Business Day on which trading in the Shares of the Company becomes ex-entitlement with respect to the Cash Distribution and the distribution of the ordinary cash dividend by the Company falls on the same date. For the avoidance of doubt, OD shall be deemed to be zero if the ex-entitlement dates of the relevant ordinary cash dividend and the Cash Distribution are different

CD: Amount of the relevant Cash Distribution per Share

E: Existing Entitlement immediately prior to the Cash Distribution

S: Cum-Cash Distribution Share price being the closing price of the Shares on the Stock Exchange on the last Business Day on which the Shares of the Company are traded on a cum-Cash Distribution basis

In addition, the Issuer shall adjust the Call Price and/or Strike Price in accordance with the following formulas:

$$\text{Adjusted Call Price (rounded to the nearest 0.001)} = \text{Call Price} \div \text{Adjustment Factor}$$

$$\text{Adjusted Strike Price (rounded to the nearest 0.001)} = \text{Strike Price} \div \text{Adjustment Factor}$$

Adjustment to the Call Price and/or Strike Price shall take effect on the same day that the Entitlement is adjusted.

(f) *Other Adjustments.* Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the CBBCs as appropriate where any event (including the events as contemplated in the applicable Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Conditions, provided that such adjustment is:

(i) not materially prejudicial to the interests of the CBBC Holders generally (without considering the circumstances of any individual CBBC Holder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(ii) determined by the Issuer in good faith to be appropriate and commercially reasonable.

For the avoidance of doubt, such adjustments may, but need not, be determined by reference to the adjustment(s) made in respect of such event or events by an options exchange to options on the relevant Shares traded on such options exchange.

(g) *Notice of Adjustments.* All determinations made by the Issuer pursuant hereto will be conclusive and binding on the CBBC Holders. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment and of the date from which such adjustment is effective by publication in accordance with Condition 11.

7. Illegality or Impracticability

The Issuer is entitled to terminate the CBBCs if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the CBBCs, in whole or in part, as a result of: (i) the adoption of, any change in, any relevant law or regulation (including any tax law); or (ii) the promulgation of, or any change in the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law), (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the CBBCs due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by applicable law or regulation, pay to each CBBC Holder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each CBBC held by such CBBC Holder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement and any charges or expenses including any taxes or duties which are incurred or withheld as determined by the Issuer in its sole and absolute discretion (acting in good faith and in a commercially reasonable manner). Payment will be made in such manner as shall be notified to the CBBC Holders in accordance with Condition 11.

8. Purchases

The Issuer and/or any of its subsidiaries and affiliates may at any time purchase CBBCs at any price in the open market or by tender or by private treaty. Any CBBCs so purchased may be held or resold or surrendered for cancellation.

9. Global Certificate

The CBBCs are represented by the Global Certificate registered in the name of HKSCC Nominees Limited and deposited with CCASS in accordance with the CCASS Rules. CBBC Holders will not be entitled to definitive certificates in respect of any CBBCs issued or transferred to them.

10. Meetings of CBBC Holders; Modification

(a) *Meetings of CBBC Holders.* The Instrument contains provisions for convening meetings of the CBBC Holders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution (as defined in the Instrument) of a modification of the provisions of the CBBCs or of the Global Certificate.

Any resolution to be passed in a meeting of the CBBC Holders shall be decided by poll. Such a meeting may be convened by the Issuer or by CBBC Holders holding not less than 10 per cent. of the CBBCs for the time being remaining unexercised. The quorum at any such meeting for passing an Extraordinary Resolution will be two or more persons holding or representing not less than 25 per cent. of the CBBCs for the time being remaining unexercised, or at any adjourned meeting two or more persons being or representing CBBC Holders whatever the number of CBBCs so held or represented.

A resolution will be an Extraordinary Resolution when it has been passed at a duly convened meeting by not less than three-quarters of the votes cast by such CBBC Holders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the CBBC Holders shall be binding on all the CBBC Holders, whether or not they are present at the meeting.

Resolutions can be passed in writing without a meeting of the CBBC Holders being held if passed unanimously.

(b) *Modification.* The Issuer may, without the consent of the CBBC Holders, effect any modification of the terms and conditions of the CBBCs or the Global Certificate which, in the opinion of the Issuer, is:

(i) not materially prejudicial to the interests of the CBBC Holders generally (without considering the circumstances of any individual CBBC Holder or the tax or other consequences of such modification in any particular jurisdiction);

(ii) of a formal, minor or technical nature;

(iii) made to correct a manifest error; or

(iv) necessary in order to comply with mandatory provisions of the laws or regulations of Hong Kong.

Any such modification shall be binding on the CBBC Holders and shall be notified to them by the Issuer as soon as practicable in accordance with Condition 11.

11. Notices

All notices to CBBC Holders will be validly given if published in English and in Chinese on the website of Hong Kong Exchanges and Clearing Limited. Such notices shall be deemed to have been given on the date of the first such publication. If publication is not practicable, notice will be given in such other manner as the Issuer may determine.

12. Liquidation

In the event of a liquidation or dissolution or winding up of the Company or the appointment of a liquidator, receiver or administrator or analogous person under applicable law in respect of the whole or substantially the whole of the undertaking, property or assets of the Company (each an "**Insolvency Event**"), all unexercised CBBCs will terminate automatically upon the occurrence of the Insolvency Event and the Issuer shall have no further obligation under such CBBCs, save in the case of a series of bear CBBCs:

(a) if the Issuer determines in good faith and in a commercially reasonable manner that there is any residual value in the bear CBBCs upon the occurrence of such Insolvency Event:

(i) the Issuer will pay to each CBBC Holder the residual value of the bear CBBCs in cash representing the fair market value in respect of each bear CBBC held by such CBBC Holder on or about the occurrence of such Insolvency Event less the cost to the Issuer of unwinding any related hedging arrangement and any charges or expenses including any taxes or duties which are incurred or withheld as determined by the Issuer in its sole and absolute discretion (acting in good faith and in a commercially reasonable manner). Payment will be made in such manner as shall be notified to the CBBC Holders in accordance with Condition 11; and

(ii) the Issuer may, but shall not be obliged to, determine such cash amount by having regard to the manner in which options contracts or futures contracts relating to the Shares traded on the Stock Exchange (if any) are calculated; and

(b) for the avoidance of doubt, if the Issuer determines in good faith and in a commercially reasonable manner that there is no residual value in the bear CBBCs upon the occurrence of such Insolvency Event, the bear CBBCs will lapse and cease to be valid for any purpose upon the occurrence of the Insolvency Event.

For the purposes of this Condition 12, an Insolvency Event occurs, (i) in the case of a voluntary liquidation or winding up of the Company, on the effective date of the relevant resolution; or (ii) in the case of an involuntary liquidation or dissolution or winding up of the Company, on the date of the relevant court order; or (iii) in the case of the appointment of a liquidator or receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of the undertaking, property or assets of the Company, on the date when such appointment is effective but subject (in any such case) to any contrary mandatory requirement of applicable law.

13. Further Issues

The Issuer shall be at liberty from time to time, without the consent of the CBBC Holders, to create and issue further CBBCs so as to form a single series with the CBBCs.

14. Delisting

(a) If at any time the Shares cease to be listed on the Stock Exchange, the Issuer shall give effect to these Conditions in such manner and make such adjustments to the rights attaching to the CBBCs as it shall, in its absolute discretion (acting in good faith and in a commercially reasonable manner), consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the CBBC Holders generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of any CBBC Holder or the tax or other consequences that may result in any particular jurisdiction).

(b) Without prejudice to the generality of Condition 14(a), where the Shares are, or, upon the delisting, become, listed on any other stock exchange, these Conditions may, in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner), be amended to the extent necessary to allow for the substitution of that other stock exchange in place of the Stock Exchange and the Issuer may, without the consent of the CBBC Holders, make such adjustments to the entitlements of CBBC Holders on exercise (including, if appropriate, by converting foreign currency amounts at prevailing market rates into the relevant currency) as may be appropriate in the circumstances.

(c) The Issuer shall determine, in its absolute discretion (acting in good faith and in a commercially reasonable manner), any adjustment or amendment and its determination shall be conclusive and binding on the CBBC Holders save in the case of manifest error. Notice of any adjustments or amendments shall be given to the CBBC Holders in accordance with Condition 11 as soon as practicable after they are determined.

15. Contracts (Rights of Third Parties) Ordinance

A person who is not a party to these Conditions has no right under the Contracts (Rights of Third Parties) Ordinance (Cap. 623 of the Laws of Hong Kong) to enforce or to enjoy the benefit of any term of the CBBCs.

16. Governing Law

The CBBCs, the Global Certificate and the Instrument will be governed by and construed in accordance with the laws of the Hong Kong Special Administrative Region of the People's Republic of China ("**Hong Kong**"). The Issuer and each CBBC Holder (by its purchase of the CBBCs) shall be deemed to have submitted for all purposes in connection with the CBBCs, the Global Certificate and the Instrument to the non-exclusive jurisdiction of the courts of Hong Kong.

17. Language

In the event of any inconsistency between the Chinese translation of these Conditions and the English version of these Conditions, the English version of these Conditions shall prevail.

The relevant terms and conditions will, together with the supplemental provisions contained in the relevant launch announcement and supplemental listing document and subject to completion and amendment, be endorsed on the global certificate. The applicable launch announcement and supplemental listing document in relation to the issue of any series of structured products may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the relevant terms and conditions, replace or modify the relevant terms and conditions for the purpose of such series of structured products. Capitalised terms used in the relevant terms and conditions and not otherwise defined therein shall have the meaning given to them in the relevant launch announcement and supplemental listing document.

TERMS AND CONDITIONS OF THE INDEX CALLABLE BULL/BEAR CONTRACTS (CASH SETTLED)

1. Form, Status, Transfer and Title

(a) *Form.* The Callable Bull/Bear Contracts (the "**CBBCs**") (which expression shall, unless the context otherwise requires, include any further CBBCs issued pursuant to Condition 12) relating to the Index as published by the Index Compiler are issued in registered form subject to and with the benefit of a global certificate by way of deed poll (the "**Global Certificate**") dated the Issue Date, made by The Hongkong and Shanghai Banking Corporation Limited (the "**Issuer**") and an instrument by way of deed poll dated 2 April 2012 executed by the Issuer (the "**Instrument**"). Copies of the Global Certificate and the Instrument are available for inspection at the specified office of the Issuer. The CBBC Holders (as defined below) are entitled to the benefit of, are bound by and are deemed to have notice of all the provisions of the Global Certificate and the Instrument.

(b) *Status.* The CBBCs represent general, unsecured, contractual obligations of the Issuer and of no other person and rank *pari passu* among themselves and (save for certain obligations required to be preferred by law) equally with all other unsecured obligations of the Issuer.

(c) *Transfer.* Transfers of beneficial interests in the CBBCs may be effected only in Board Lots or integral multiples thereof in CCASS (as defined below) in accordance with the CCASS Rules (as defined below).

(d) *Title.* Each person who is for the time being shown in the register kept by the Issuer as entitled to a particular number of CBBCs shall be treated by the Issuer as the absolute owner and holder of such number of CBBCs. The expression "**CBBC Holder**" shall be construed accordingly.

2. CBBC Rights and Exercise Expenses

(a) *CBBC Rights.* Every Board Lot entitles each CBBC Holder, (i) upon due exercise and compliance with Condition 4, the right to receive the payment of the Cash Settlement Amount, (if any) less any Exercise Expenses or (ii) upon compliance with Condition 4, the right to receive the payment of the Residual Value, (if any) less any Exercise Expenses following the occurrence of a Mandatory Call Event (all as defined below).

(b) *Exercise Expenses.* On expiry of the CBBCs or upon the occurrence of a Mandatory Call Event, CBBC Holders are required to pay the Exercise Expenses. To effect such payment, an irrevocable authorisation to deduct the Exercise Expenses from the applicable Cash Settlement Amount or the Residual Value (as the case may be) is deemed to be given by a CBBC Holder to the Issuer upon purchase of the CBBCs. Any Exercise Expenses which have not been determined on the Expiry Date or

following the Mandatory Call Event shall be notified to the CBBC Holder as soon as practicable after determination thereof by the Issuer and shall be paid by the CBBC Holder immediately upon demand.

(c) *Definitions.* For the purposes of these Conditions:

"**Board Lot**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange (as defined below) is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Call Level**" means the level of the Index specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Cash Settlement Amount**" means:

(1) in the case of a series of bull CBBCs and in respect of every Board Lot, an amount, converted (if applicable) into the Settlement Currency at the Exchange Rate, calculated by the Issuer as equal to:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{(Closing Level – Strike Level) x one Board Lot x Index Currency Amount}}{\text{Divisor}}$$

(2) in the case of a series of bear CBBCs and in respect of every Board Lot, an amount, converted (if applicable) into the Settlement Currency at the Exchange Rate, calculated by the Issuer as equal to:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{(Strike Level – Closing Level) x one Board Lot x Index Currency Amount}}{\text{Divisor}}$$

provided that if the Cash Settlement Amount is a negative amount it shall be deemed to be zero;

"**CCASS**" means the Central Clearing and Settlement System established and operated by Hong Kong Securities Clearing Company Limited ("**HKSCC**");

"**CCASS Rules**" means the General Rules of CCASS and the CCASS Operational Procedures in effect from time to time;

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the General Rules of CCASS, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Closing Level**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Divisor**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document;

“**Exchange Rate**” means the rate specified in the relevant Launch Announcement and Supplemental Listing Document (if applicable);

“**Exercise Expenses**” means any charges or expenses including any taxes or duties which are incurred or withheld in respect of the expiry of the CBBCs or the occurrence of a Mandatory Call Event (as the case may be);

“**Expiry Date**” means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

“**Index**” means the index specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

“**Index Business Day**” means a day on which the Index Exchange is scheduled to open for trading for its regular trading sessions;

“**Index Compiler**” has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

“**Index Currency Amount**” has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

“**Index Exchange**” means the exchange specified as such in the relevant Launch Announcement and Supplemental Listing Document;

“**Mandatory Call Event**” occurs:

(1) in the case of a series of bull CBBCs, if the Spot Level is at or below the Call Level at any time during an Index Business Day in the Observation Period; and

(2) in the case of a series of bear CBBCs, if the Spot Level is at or above the Call Level at any time during an Index Business Day in the Observation Period;

“**Market Disruption Event**” means:

(1) the occurrence or existence, on any Index Business Day during the one-half hour period that ends at the close of trading on the Index Exchange, of any:

  (i) suspension or material limitation of the trading of a material number of securities that comprise the Index; and/or

  (ii) suspension or material limitation of the trading of options or futures contracts relating to the Index on any exchanges on which such contracts are traded; and/or

  (iii) imposition of any exchange controls in respect of any currencies involved in determining the Cash Settlement Amount or the Residual Value (as the case may be);

  for the purposes of paragraph (1), (x) the limitation of the number of hours or days of trading will not constitute a Market Disruption Event if it results from an announced change in the regular business hours of any relevant exchange, and (y) a limitation on trading imposed by reason of the movements in price exceeding the levels permitted by any relevant exchange will constitute a Market Disruption Event; or

(2) where the Index Exchange is the Stock Exchange, the occurrence of any severe weather condition or other event on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for opening of trading on any day as a result of such severe weather condition or other event; or

(3) a limitation or closure of the Index Exchange due to any unforeseen circumstances; or

(4) any circumstances beyond the control of the Issuer in which the Closing Level or, if applicable, the Exchange Rate cannot be determined by the Issuer in the manner set out in these Conditions or in such other manner as the Issuer considers appropriate at such time after taking into account all the relevant circumstances;

"**Maximum Index Level**" means the highest Spot Level during the MCE Valuation Period;

"**MCE Valuation Period**" means the period commencing from and including the moment upon which the Mandatory Call Event occurs (the trading session during which the Mandatory Call Event occurs is the "**First Session**") and up to the end of the trading session on the Index Exchange immediately following the First Session (the "**Second Session**") unless, in the determination of the Issuer in good faith, the Second Session for any reason (including, without limitation, a Market Disruption Event occurring and subsisting in the Second Session) does not contain any continuous period of one hour or more than one hour during which Spot Levels are available, in which case the MCE Valuation Period shall be extended to the end of the subsequent trading session on the Index Exchange following the Second Session during which Spot Levels are available for a continuous period of at least one hour notwithstanding the existence or continuance of a Market Disruption Event in such postponed trading session, unless the Issuer determines in good faith that each trading session on each of the four Index Business Days immediately following the date on which the Mandatory Call Event occurs does not contain any continuous period of one hour or more than one hour during which Spot Levels are available. In that case:

(i) the period commencing from the First Session up to, and including, the last trading session of the fourth Index Business Day on the Index Exchange immediately following the date on which the Mandatory Call Event occurs shall be deemed to be the MCE Valuation Period; and

(ii) the Issuer shall determine the Maximum Index Level or the Minimum Index Level (as the case may be) having regard to the then prevailing market conditions, the last reported Spot Level of the Index and such other factors as the Issuer may determine to be relevant in good faith.

For the avoidance of doubt, all Spot Levels available throughout the extended MCE Valuation Period shall be taken into account to determine the Maximum Index Level or the Minimum Index Level (as the case may be) for the calculation of the Residual Value.

For the purposes of this definition,

(a) the pre-opening session, the morning session and, in the case of half day trading, the closing auction session (if any) of the same day; and

(b) the afternoon session and the closing auction session (if any) of the same day,

shall each be considered as one trading session only;

"**Minimum Index Level**" means the lowest Spot Level during the MCE Valuation Period;

"**Observation Commencement Date**" has the meaning specified in the relevant Launch Announcement and Supplemental Listing Document;

"**Observation Period**" means the period from the Observation Commencement Date to the Trading Day immediately preceding the Expiry Date (both dates inclusive);

"**Post MCE Trades**" means, subject to such modification and amendment prescribed by the Stock Exchange from time to time, (i) if the Mandatory Call Event occurs during a pre-opening session or a closing auction session (if applicable), as the case may be, of the Stock Exchange, all auction trades in the CBBCs concluded in such session and all manual trades concluded after the end of the pre-order matching period in such session; or (ii) if the Mandatory Call Event occurs during a continuous trading session of the Stock Exchange, all trades in the CBBCs concluded via auto-matching or manually after the time of the occurrence of a Mandatory Call Event;

"**Price Determination Date**" means the date on which the Maximum Index Level or the Minimum Index Level (as the case may be) is determined by the Issuer;

"**Residual Value**" means, an amount, converted (if applicable) into the Settlement Currency at the Exchange Rate, calculated in accordance with the formula specified below:

(1) in the case of a series of bull CBBCs and in respect of every Board Lot:

$$\frac{(\text{Minimum Index Level} - \text{Strike Level}) \times \text{one Board Lot} \times \text{Index Currency Amount}}{\text{Divisor}}$$

(2) in the case of a series of bear CBBCs and in respect of every Board Lot:

$$\frac{(\text{Strike Level} - \text{Maximum Index Level}) \times \text{one Board Lot} \times \text{Index Currency Amount}}{\text{Divisor}}$$

provided that if the Residual Value is a negative amount it shall be deemed to be zero;

"**Settlement Currency**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after (i) the end of the MCE Valuation Period or (ii) the later of (a) the Expiry Date; and (b) the day on which the Closing Level is determined in accordance with these Conditions (as the case may be);

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment electronically through CCASS to the relevant bank account designated by the relevant CBBC Holder ("**Designated Bank Account**");

"**Spot Level**" means the spot level of the Index as compiled and published by the Index Compiler;

"**Stock Exchange**" means The Stock Exchange of Hong Kong Limited;

"**Strike Level**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Trading Day**" means a day on which the Stock Exchange is scheduled to open for trading for its regular trading sessions; and

"**Valuation Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document.

3. Exercise of CBBCs, Mandatory Call Event, Automatic Exercise and Expiry

(a) *Exercise of CBBCs.* The CBBCs are exercisable on the Expiry Date, provided that a Mandatory Call Event has not occurred.

(b) *Mandatory Call Event.*

(i) Any CBBC in respect of which a Mandatory Call Event has occurred will automatically expire upon the occurrence of a Mandatory Call Event and every Board Lot will entitle the CBBC Holder to receive the Residual Value (if any) less any Exercise Expenses on the Settlement Date. Trading in the CBBCs will be suspended immediately upon the occurrence of a Mandatory Call Event and all Post MCE Trades will be cancelled and will not be recognised by the Issuer or the Stock Exchange.

Revocation

(ii) A Mandatory Call Event is irrevocable unless it is triggered due to the occurrence of one of the following events:

(1) report of system malfunction or other technical errors of the Stock Exchange (e.g. the setting up of the wrong Call Level or other parameters) by the Stock Exchange to the Issuer; or

(2) report of manifest errors caused by the relevant third party price sources where applicable (e.g. miscalculation of the index level by the relevant index compiler) by the Issuer to the Stock Exchange.

and, in each case, the Issuer agrees with the Stock Exchange that such Mandatory Call Event is to be revoked provided that such mutual agreement must be reached no later than 30 minutes before the commencement of trading (including the pre-opening session) (Hong Kong time) on the Trading Day of the Stock Exchange immediately following the day on which the Mandatory Call Event occurs, or such other time as prescribed by the Stock Exchange from time to time.

(c) *Automatic Exercise.* Any CBBC which has not automatically expired will automatically be exercised if, on the Expiry Date, the value of the Cash Settlement Amount is greater than zero (without prior notice being given to the CBBC Holders). The CBBC Holders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the CBBC Holders the Cash Settlement Amount (if any) less any Exercise Expenses in accordance with Condition 4(d).

(d) *Issuer's Obligations.* For the avoidance of doubt, where the CBBCs have been exercised on the Expiry Date or have automatically expired upon the occurrence of a Mandatory Call Event (as the case may be), payment of the Cash Settlement Amount or the Residual Value (if any) (as the case may be) less any Exercise Expenses shall constitute full and final settlement of the obligations of the Issuer with respect to the CBBCs. Subject to such payment having been made, the Issuer shall have no obligation towards the relevant CBBC Holder under the CBBCs subsequent to such Expiry Date or the date on which a Mandatory Call Event occurs (as the case may be).

(e) *Expiry.* Any CBBC which does not automatically expire in accordance with Condition 3(b) or which has not been automatically exercised in accordance with Condition 3(c) (as the case may be) shall expire immediately without value thereafter and all rights of the CBBC Holder and obligations of the Issuer with respect to such CBBC shall cease.

4. Exercise of CBBCs, Cancellation and Payment

(a) *Board Lots.* CBBCs may only be exercised in a Board Lot or integral multiples thereof.

(b) *No requirement to deliver an exercise notice.* The CBBC Holders will not be required to deliver an exercise notice for any purpose in relation to the CBBCs.

(c) *Cancellation.* The Issuer will, with effect from the first Business Day following the date on which a Mandatory Call Event occurs or the Expiry Date (as the case may be), remove from its register the name of the person in respect of the CBBCs which (i) are the subject of an occurrence of a Mandatory Call Event; (ii) are the subject of an exercise pursuant to automatic exercise in accordance with these Conditions or (iii) have expired worthless, and thereby cancel the relevant CBBCs.

(d) *Cash Settlement.* Subject to automatic exercise of CBBCs or the occurrence of a Mandatory Call Event in accordance with these Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant CBBC Holder equal to the Cash Settlement Amount or the Residual Value (if any) (as the case may be) less any Exercise Expenses. If the Cash Settlement Amount or the Residual Value is equal to, or less than, the determined Exercise Expenses, no Cash Settlement Amount or Residual Value shall be payable by the Issuer.

The Cash Settlement Amount or the Residual Value (as the case may be) less the determined Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the CBBC Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the CBBC Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the CBBC Holder for any interest in respect of the amount due or any loss or damage that such CBBC Holder may suffer as a result of the existence of the Settlement Disruption Event, nor shall the Issuer be liable under any circumstances for any acts or defaults of CCASS in relation to the performance of its duties in relation to the CBBCs.

If the Issuer determines, in its sole discretion (acting in good faith and in a commercially reasonable manner), that a Market Disruption Event has occurred on the Valuation Date, then the Issuer shall determine the Closing Level or, if applicable, the Exchange Rate on the basis of its good faith estimate of the Closing Level or, if applicable, the Exchange Rate that would have prevailed on that day but for the occurrence of the Market Disruption Event provided that in the case of determining the Closing Level, the Issuer, if applicable, may, but shall not be obliged to, determine such Closing Level by having regard to the manner in which futures contracts relating to the Index are calculated.

5. Register

The Issuer will at all times maintain or arrange for the maintenance of a register in Hong Kong.

6. Adjustments to the Index

(a) *Successor Index Compiler Calculates and Reports Index.* If the Index is (i) not calculated and announced by the Index Compiler but is calculated and published by a successor to the Index Compiler (the "**Successor Index Compiler**") acceptable to the Issuer or (ii) replaced by a successor index using, in the determination of the Issuer, the same or a substantially similar formula for and method of calculation as used in the calculation of the Index, then the Index will be deemed to be the index so calculated and announced by the Successor Index Compiler or that successor index, as the case may be.

(b) *Modification and Cessation of Calculation of Index.*

If:

(i) on or prior to a Valuation Date the Index Compiler or (if applicable) the Successor Index Compiler makes a material change in the formula for or the method of calculating the Index or in any other way materially modifies the Index (other than a modification prescribed in that formula or method to maintain the Index in the event of changes in constituent stock, contracts or commodities and other routine events); or

(ii) on a Valuation Date the Index Compiler or (if applicable) the Successor Index Compiler fails to calculate and publish the Index (other than as a result of a Market Disruption Event),

then the Issuer shall determine the Closing Level using, in lieu of a published level for the Index, the level for the Index as at that Valuation Date as determined by the Issuer in accordance with the formula for and method of calculating the Index last in effect prior to that change or failure, but using only those securities, contracts or commodities that comprised the Index immediately prior to that change or failure.

(c) *Other Adjustments.* Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the CBBCs as appropriate where any event (including the events as contemplated in the applicable Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Conditions, provided that such adjustment is:

   (i) not materially prejudicial to the interests of the CBBC Holders generally (without considering the circumstances of any individual CBBC Holder or the tax or other consequences of such adjustment in any particular jurisdiction); or

   (ii) determined by the Issuer in good faith to be appropriate and commercially reasonable.

(d) *Notice of Determinations.* All determinations made by the Issuer pursuant hereto will be conclusive and binding on the CBBC Holders. The Issuer will give, or procure that there is given, notice as soon as practicable of any determinations by publication in accordance with Condition 11.

7. Illegality or Impracticability

The Issuer is entitled to terminate the CBBCs if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the CBBCs, in whole or in part, as a result of: (i) the adoption of, any change in, any relevant law or regulation (including any tax law); or (ii) the promulgation of, or any change in the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law), (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the CBBCs due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by applicable law or regulation, pay to each CBBC Holder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each CBBC held by such CBBC Holder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement and any charges or expenses including any taxes or duties which are incurred or withheld as determined by the Issuer in its sole and absolute discretion (acting in good faith and in a commercially reasonable manner). Payment will be made in such manner as shall be notified to the CBBC Holders in accordance with Condition 11.

8. Purchases

The Issuer and/or any of its subsidiaries and affiliates may at any time purchase CBBCs at any price in the open market or by tender or by private treaty. Any CBBCs so purchased may be held or resold or surrendered for cancellation.

9. Global Certificate

The CBBCs are represented by the Global Certificate registered in the name of HKSCC Nominees Limited and deposited with CCASS in accordance with the CCASS Rules. CBBC Holders will not be entitled to definitive certificates in respect of any CBBCs issued or transferred to them.

10. Meetings of CBBC Holders; Modification

(a) *Meetings of CBBC Holders.* The Instrument contains provisions for convening meetings of the CBBC Holders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution (as defined in the Instrument) of a modification of the provisions of the CBBCs or of the Global Certificate.

Any resolution to be passed in a meeting of the CBBC Holders shall be decided by poll. Such a meeting may be convened by the Issuer or by CBBC Holders holding not less than 10 per cent. of the CBBCs for the time being remaining unexercised. The quorum at any such meeting for passing an Extraordinary Resolution will be two or more persons holding or representing not less than 25 per cent. of the CBBCs for the time being remaining unexercised, or at any adjourned meeting two or more persons being or representing CBBC Holders whatever the number of CBBCs so held or represented.

A resolution will be an Extraordinary Resolution when it has been passed at a duly convened meeting by not less than three-quarters of the votes cast by such CBBC Holders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the CBBC Holders shall be binding on all the CBBC Holders, whether or not they are present at the meeting.

Resolutions can be passed in writing without a meeting of the CBBC Holders being held if passed unanimously.

(b) *Modification.* The Issuer may, without the consent of the CBBC Holders, effect any modification of the terms and conditions of the CBBCs or the Global Certificate which, in the opinion of the Issuer, is:

(i) not materially prejudicial to the interests of the CBBC Holders generally (without considering the circumstances of any individual CBBC Holder or the tax or other consequences of such modification in any particular jurisdiction);

(ii) of a formal, minor or technical nature;

(iii) made to correct a manifest error; or

(iv) necessary in order to comply with mandatory provisions of the laws or regulations of Hong Kong.

Any such modification shall be binding on the CBBC Holders and shall be notified to them by the Issuer as soon as practicable in accordance with Condition 11.

11. Notices

All notices to CBBC Holders will be validly given if published in English and in Chinese on the website of Hong Kong Exchanges and Clearing Limited. Such notices shall be deemed to have been given on the date of the first such publication. If publication is not practicable, notice will be given in such other manner as the Issuer may determine.

12. Further Issues

The Issuer shall be at liberty from time to time, without the consent of the CBBC Holders, to create and issue further CBBCs so as to form a single series with the CBBCs.

13. Contracts (Rights of Third Parties) Ordinance

A person who is not a party to these Conditions has no right under the Contracts (Rights of Third Parties) Ordinance (Cap. 623 of the Laws of Hong Kong) to enforce or to enjoy the benefit of any term of the CBBCs.

14. Governing Law

The CBBCs, the Global Certificate and the Instrument will be governed by and construed in accordance with the laws of the Hong Kong Special Administrative Region of the People's Republic of China ("**Hong Kong**"). The Issuer and each CBBC Holder (by its purchase of the CBBCs) shall be deemed to have submitted for all purposes in connection with the CBBCs, the Global Certificate and the Instrument to the non-exclusive jurisdiction of the courts of Hong Kong.

15. Language

In the event of any inconsistency between the Chinese translation of these Conditions and the English version of these Conditions, the English version of these Conditions shall prevail.

The relevant terms and conditions will, together with the supplemental provisions contained in the relevant launch announcement and supplemental listing document and subject to completion and amendment, be endorsed on the global certificate. The applicable launch announcement and supplemental listing document in relation to the issue of any series of structured products may specify additional terms and conditions which shall, to the extent so specified or to the extent inconsistent with the relevant terms and conditions, replace or modify the relevant terms and conditions for the purpose of such series of structured products. Capitalised terms used in the relevant terms and conditions and not otherwise defined therein shall have the meaning given to them in the relevant launch announcement and supplemental listing document.

TERMS AND CONDITIONS OF THE FUND CALLABLE BULL/BEAR CONTRACTS (CASH SETTLED)

1. Form, Status, Transfer and Title

(a) *Form.* The Callable Bull/Bear Contracts (the "**CBBCs**") (which expression shall, unless the context otherwise requires, include any further CBBCs issued pursuant to Condition 13) relating to the Units of the Fund are issued in registered form subject to and with the benefit of a global certificate by way of deed poll (the "**Global Certificate**") dated the Issue Date, made by The Hongkong and Shanghai Banking Corporation Limited (the "**Issuer**") and an instrument by way of deed poll dated 2 April 2012 executed by the Issuer (the "**Instrument**") Copies of the Global Certificate and the Instrument are available for inspection at the specified office of the Issuer. The CBBC Holders (as defined below) are entitled to the benefit of, are bound by and are deemed to have notice of all the provisions of the Global Certificate and the Instrument.

(b) *Status.* The CBBCs represent general, unsecured, contractual obligations of the Issuer and of no other person and rank *pari passu* among themselves and (save for certain obligations required to be preferred by law) equally with all other unsecured obligations of the Issuer.

(c) *Transfer.* Transfers of beneficial interests in the CBBCs may be effected only in Board Lots or integral multiples thereof in CCASS (as defined below) in accordance with the CCASS Rules (as defined below).

(d) *Title.* Each person who is for the time being shown in the register kept by the Issuer as entitled to a particular number of CBBCs shall be treated by the Issuer as the absolute owner and holder of such number of CBBCs. The expression "**CBBC Holder**" shall be construed accordingly.

2. CBBC Rights and Exercise Expenses

(a) *CBBC Rights.* Every Board Lot gives each CBBC Holder, (i) upon due exercise and compliance with Condition 4, the right to receive the payment of the Cash Settlement Amount, (if any) less any Exercise Expenses or (ii) upon compliance with Condition 4, the right to receive the payment of the Residual Value, (if any) less any Exercise Expenses following the occurrence of a Mandatory Call Event (all as defined below).

(b) *Exercise Expenses.* On expiry of the CBBCs or upon the occurrence of a Mandatory Call Event, CBBC Holders are required to pay the Exercise Expenses. To effect such payment, an irrevocable authorisation to deduct the Exercise Expenses from the applicable Cash Settlement Amount or the Residual Value (as the case may be) is deemed to be given by a CBBC Holder to the Issuer upon purchase of the CBBCs. Any Exercise Expenses which have not been determined on the Expiry Date or

following the Mandatory Call Event shall be notified to the CBBC Holder as soon as practicable after determination thereof by the Issuer and shall be paid by the CBBC Holder immediately upon demand.

(c) *Definitions.* For the purposes of these Conditions:

"**Board Lot**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange (as defined below) is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Call Price**" means the price of the Units specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Cash Settlement Amount**" means:

(1) in the case of a series of bull CBBCs and in respect of every Board Lot, an amount in the Settlement Currency calculated by the Issuer as equal to:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Closing Price – Strike Price) x one Board Lot}}{\text{Number of CBBCs per Entitlement}}$$

(2) in the case of a series of bear CBBCs and in respect of every Board Lot, an amount in the Settlement Currency calculated by the Issuer as equal to:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Strike Price – Closing Price) x one Board Lot}}{\text{Number of CBBCs per Entitlement}}$$

provided that if the Cash Settlement Amount is a negative amount it shall be deemed to be zero;

"**CCASS**" means the Central Clearing and Settlement System established and operated by Hong Kong Securities Clearing Company Limited ("**HKSCC**");

"**CCASS Rules**" means the General Rules of CCASS and the CCASS Operational Procedures in effect from time to time;

"**CCASS Settlement Day**" has the meaning ascribed to the term "Settlement Day" in the General Rules of CCASS, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Closing Price**" means the official closing price of one Unit (as derived from the Daily Quotation Sheet of the Stock Exchange, subject to any adjustment to such closing price as may be necessary to reflect any event as contemplated in Condition 6 such as capitalisation, rights issue, distribution or the like) on the Valuation Date (as defined below);

"**Entitlement**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred or withheld in respect of the expiry of the CBBCs or the occurrence of a Mandatory Call Event (as the case may be);

"**Expiry Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Fund**" means the unit trust or exchange-traded fund (as the case may be) specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**IEP**" means the indicative equilibrium price, as determined in accordance with the Rules and Regulations of the Stock Exchange prescribed by the Stock Exchange from time to time (the "**Trading Rules**");

"**Mandatory Call Event**" occurs:

(1) in the case of a series of bull CBBCs, if the Spot Price is at or below the Call Price at any time during a Trading Day in the Observation Period; and

(2) in the case of a series of bear CBBCs, if the Spot Price is at or above the Call Price at any time during a Trading Day in the Observation Period;

"**Market Disruption Event**" means:

(1) the occurrence or existence on any Trading Day during the one-half hour period that ends at the close of trading of any suspension of or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Stock Exchange or otherwise) on the Stock Exchange in (i) the Units; and/or (ii) any options or futures contracts relating to the Units if, in any such case, that suspension or limitation is, in the determination of the Issuer, material;

(2) the occurrence of any severe weather condition or other event on any day which either (i) results in the Stock Exchange being closed for trading for the entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for opening of trading on any day as a result of such severe weather condition or other event; or

(3) a limitation or closure of the Stock Exchange due to any unforeseen circumstances;

"**Maximum Trade Price**" means the highest Spot Price (subject to any adjustment to such Spot Price as may be necessary to reflect any event as contemplated in Condition 6 such as capitalisation, rights issue, distribution or the like) during the MCE Valuation Period;

"**MCE Valuation Period**" means the period commencing from and including the moment upon which the Mandatory Call Event occurs (the trading session during which the Mandatory Call Event occurs is the "**First Session**") and up to the end of the trading session on the Stock Exchange immediately following the First Session (the "**Second Session**") unless, in the determination of the Issuer in good faith, the Second Session for any reason (including, without limitation, a Market Disruption

Event occurring and subsisting in the Second Session) does not contain any continuous period of one hour or more than one hour during which trading in the Units is permitted on the Stock Exchange with no limitation imposed, in which case the MCE Valuation Period shall be extended to the end of the subsequent trading session following the Second Session during which trading in the Units is permitted on the Stock Exchange with no limitation imposed for a continuous period of at least one hour notwithstanding the existence or continuance of a Market Disruption Event in such postponed trading session, unless the Issuer determines in good faith that each trading session on each of the four Trading Days immediately following the date on which the Mandatory Call Event occurs does not contain any continuous period of one hour or more than one hour during which trading in the Units is permitted on the Stock Exchange with no limitation imposed. In that case:

(i) the period commencing from the First Session up to, and including, the last trading session on the Stock Exchange of the fourth Trading Day immediately following the date on which the Mandatory Call Event occurs shall be deemed to be the MCE Valuation Period; and

(ii) the Issuer shall determine the Maximum Trade Price or the Minimum Trade Price (as the case may be) having regard to the then prevailing market conditions, the last reported Spot Price and such other factors as the Issuer may determine to be relevant in good faith.

For the avoidance of doubt, all Spot Prices available throughout the extended MCE Valuation Period shall be taken into account to determine the Maximum Trade Price or the Minimum Trade Price (as the case may be) for the calculation of the Residual Value.

For the purposes of this definition,

(a) the pre-opening session, the morning session and, in the case of half day trading, the closing auction session (if any) of the same day; and

(b) the afternoon session and the closing auction session (if any) of the same day,

shall each be considered as one trading session only;

“**Minimum Trade Price**” means the lowest Spot Price (subject to any adjustment to such Spot Price as may be necessary to reflect any event as contemplated in Condition 6 such as capitalisation, rights issue, distribution or the like) during the MCE Valuation Period;

“**Observation Commencement Date**” has the meaning specified in the relevant Launch Announcement and Supplemental Listing Document;

“**Observation Period**” means the period from the Observation Commencement Date to the Trading Day immediately preceding the Expiry Date (both dates inclusive);

“**Post MCE Trades**” means, subject to such modification and amendment prescribed by the Stock Exchange from time to time, (i) if the Mandatory Call Event occurs during a pre-opening session or a closing auction session (if applicable), as the case may be, of the Stock Exchange, all auction trades in the CBBCs concluded in such session and all manual trades concluded after the end of the pre-order matching period in such session; or (ii) if the Mandatory Call Event occurs during a continuous trading session of the Stock Exchange, all trades in the CBBCs concluded via auto-matching or manually after the time of the occurrence of a Mandatory Call Event;

"**Price Determination Date**" means the date on which the Maximum Trade Price or the Minimum Trade Price (as the case may be) is determined by the Issuer;

"**Residual Value**" means an amount in the Settlement Currency calculated in accordance with the formula specified below:

(1) in the case of a series of bull CBBCs and in respect of every Board Lot:

$$\frac{\text{Entitlement x (Minimum Trade Price – Strike Price) x one Board Lot}}{\text{Number of CBBCs per Entitlement}}$$

(2) in the case of a series of bear CBBCs and in respect of every Board Lot:

$$\frac{\text{Entitlement x (Strike Price – Maximum Trade Price) x one Board Lot}}{\text{Number of CBBCs per Entitlement}}$$

provided that if the Residual Value is a negative amount it shall be deemed to be zero;

"**Settlement Currency**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after (i) the end of the MCE Valuation Period or (ii) the later of (a) the Expiry Date; and (b) the day on which the Closing Price is determined in accordance with these Conditions (as the case may be);

"**Settlement Disruption Event**" means an event beyond the control of the Issuer as a result of which the Issuer is unable to procure payment electronically through CCASS to the relevant bank account designated by the relevant CBBC Holder ("**Designated Bank Account**");

"**Spot Price**" means:

(i) in respect of a continuous trading session of the Stock Exchange, the price per Unit concluded by means of automatic order matching on the Stock Exchange as reported in the official real-time dissemination mechanism for the Stock Exchange during such continuous trading session in accordance with the Trading Rules, excluding direct business (as defined in the Trading Rules); and

(ii) in respect of a pre-opening session or a closing auction session (if applicable) of the Stock Exchange (as the case may be), the final IEP of the Unit (if any) calculated at the end of the pre-order matching period of such pre-opening session or closing auction session (if applicable) (as the case may be) in accordance with the Trading Rules, excluding direct business (as defined in the Trading Rules),

subject to such modification and amendment prescribed by the Stock Exchange from time to time;

"**Stock Exchange**" means The Stock Exchange of Hong Kong Limited;

"**Strike Price**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Condition 6;

"**Trading Day**" means a day on which the Stock Exchange is scheduled to open for trading for its regular trading sessions;

"**Units**" means the units or shares (as the case may be) of the Fund specified as such in the relevant Launch Announcement and Supplemental Listing Document; and

"**Valuation Date**" means the Trading Day immediately preceding the Expiry Date.

3. Exercise of CBBCs, Mandatory Call Event, Automatic Exercise and Expiry

(a) *Exercise of CBBCs.* The CBBCs are exercisable on the Expiry Date, provided that a Mandatory Call Event has not occurred.

(b) *Mandatory Call Event.*

(i) Any CBBC in respect of which a Mandatory Call Event has occurred will automatically expire upon the occurrence of a Mandatory Call Event and every Board Lot will entitle the CBBC Holder to receive the Residual Value (if any) less any Exercise Expenses on the Settlement Date. Trading in the CBBCs will be suspended immediately upon the occurrence of a Mandatory Call Event and all Post MCE Trades will be cancelled and will not be recognised by the Issuer or the Stock Exchange.

Revocation

(ii) A Mandatory Call Event is irrevocable unless it is triggered due to the occurrence of one of the following events:

(1) report of system malfunction or other technical errors of the Stock Exchange (e.g. the setting up of the wrong Call Price or other parameters) by the Stock Exchange to the Issuer; or

(2) report of manifest errors caused by the relevant third party price sources where applicable by the Issuer to the Stock Exchange.

and, in each case, the Issuer agrees with the Stock Exchange that such Mandatory Call Event is to be revoked provided that such mutual agreement must be reached no later than 30 minutes before the commencement of trading (including the pre-opening session) (Hong Kong time) on the Trading Day of the Stock Exchange immediately following the day on which the Mandatory Call Event occurs, or such other time as prescribed by the Stock Exchange from time to time.

(c) *Automatic Exercise.* Any CBBC which has not automatically expired will automatically be exercised if, on the Expiry Date, the value of the Cash Settlement Amount is greater than zero (without prior notice being given to the CBBC Holders). The CBBC Holders will not be required to deliver any exercise notice and the Issuer or its agent will pay to the CBBC Holders the Cash Settlement Amount (if any) less any Exercise Expenses in accordance with Condition 4(d).

(d) *Issuer's Obligations.* For the avoidance of doubt, where the CBBCs have been exercised on the Expiry Date or have automatically expired upon the occurrence of a Mandatory Call Event (as the case may be), payment of the Cash Settlement Amount or the Residual Value (if any) (as the case may be) less any Exercise Expenses shall constitute full and final settlement of the obligations of the Issuer with respect to the CBBCs. Subject to such payment having been made, the Issuer shall have no obligation towards the relevant CBBC Holder under the CBBCs subsequent to such Expiry Date or the date on which a Mandatory Call Event occurs (as the case may be).

(e) *Expiry.* Any CBBC which does not automatically expire in accordance with Condition 3(b) or which has not been automatically exercised in accordance with Condition 3(c) (as the case may be) shall expire immediately without value thereafter and all rights of the CBBC Holder and obligations of the Issuer with respect to such CBBC shall cease.

4. Exercise of CBBCs, Cancellation and Payment

(a) *Board Lots.* CBBCs may only be exercised in a Board Lot or integral multiples thereof.

(b) *No requirement to deliver an exercise notice.* The CBBC Holders will not be required to deliver an exercise notice for any purpose in relation to the CBBCs.

(c) *Cancellation.* The Issuer will, with effect from the first Business Day following the date on which a Mandatory Call Event occurs or the Expiry Date (as the case may be), remove from its register the name of the person in respect of the CBBCs which (i) are the subject of an occurrence of a Mandatory Call Event; (ii) are the subject of an exercise pursuant to automatic exercise in accordance with these Conditions; or (iii) have expired worthless, and thereby cancel the relevant CBBCs.

(d) *Cash Settlement.* Subject to automatic exercise of CBBCs or the occurrence of a Mandatory Call Event in accordance with these Conditions, the Issuer will make a payment, in respect of every Board Lot, to the relevant CBBC Holder equal to the Cash Settlement Amount or the Residual Value (if any) (as the case may be) less any Exercise Expenses. If the Cash Settlement Amount or the Residual Value is equal to, or less than, the determined Exercise Expenses, no Cash Settlement Amount or Residual Value shall be payable by the Issuer.

The Cash Settlement Amount or the Residual Value (as the case may be) less the determined Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of a Settlement Disruption Event, it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the CBBC Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the CBBC Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the CBBC Holder for any interest in respect of the amount due or any loss or damage that such CBBC Holder may suffer as a result of the existence of the Settlement Disruption Event, nor shall the Issuer be liable under any circumstances for any acts or defaults of CCASS in relation to the performance of its duties in relation to the CBBCs.

If the Issuer determines, in its sole discretion (acting in good faith and in a commercially reasonable manner), that a Market Disruption Event has occurred on the Valuation Date, then that Valuation Date shall be postponed to the first succeeding Trading Day on which the Issuer determines that there is no Market Disruption Event, unless the Issuer determines that there is a Market Disruption Event on each of the four Trading Days immediately following the original date that, but for the Market Disruption Event, would have been the Valuation Date. In that case:

(i) the fourth Trading Day immediately following the original date shall be deemed to be the Valuation Date, notwithstanding the Market Disruption Event; and

(ii) the Issuer shall determine the closing price of the Units having regard to the then prevailing market conditions, the last reported Spot Price and such other factors as the Issuer determines to be relevant in good faith.

5. Register

The Issuer will at all times maintain or arrange for the maintenance of a register in Hong Kong.

6. Adjustments

(a) *Rights Issues.* If and whenever the Fund shall, by way of Rights (as defined below), offer new Units for subscription at a fixed subscription price to the holders of existing Units pro rata to existing holdings (a "**Rights Offer**"), the Entitlement will be adjusted to take effect on the Business Day on which trading in the Units of the Fund becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{1 + M}{1 + (R/S) \times M}$$

E: Existing Entitlement immediately prior to the Rights Offer

S: Cum-Rights Unit price being the closing price of the Units on the Stock Exchange on the last Business Day on which the Units are traded on a cum–Rights basis

R: Subscription price per new Unit as specified in the Rights Offer plus an amount equal to any distributions or other benefits foregone to exercise the Rights

M: Number of new Unit(s) (whether a whole or a fraction) per existing Unit each holder thereof is entitled to subscribe

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Call Price and/or Strike Price in accordance with the following formulas:

Adjusted Call Price (rounded to the nearest 0.001)	=	Call Price ÷ Adjustment Factor
Adjusted Strike Price (rounded to the nearest 0.001)	=	Strike Price ÷ Adjustment Factor

Adjustment to the Call Price and/or Strike Price shall take effect on the same day that the Entitlement is adjusted.

For the purposes of these Conditions:

"**Rights**" means the right(s) attached to each existing Unit or needed to acquire one new Unit (as the case may be) which are given to the holders of existing Units to subscribe at a fixed subscription price for new Units pursuant to the Rights Offer (whether by the exercise of one Right, a part of a Right or an aggregate number of Rights).

(b) *Bonus Issues.* If and whenever the Fund shall make an issue of Units credited as fully paid to the holders of Units generally (other than pursuant to a scrip dividend or distribution or similar scheme for the time being operated by the Fund or otherwise in lieu of a cash dividend or distribution and without any payment or other consideration being made or given by such holders) (a "**Bonus Issue**") the Entitlement will be increased on the Business Day on which trading in the Units of the Fund becomes ex-entitlement in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

Adjustment Factor = 1 + N

E: Existing Entitlement immediately prior to the Bonus Issue

N: Number of additional Units (whether a whole or a fraction) received by a holder of existing Units for each Unit held prior to the Bonus Issue

Provided that if the adjustment to be made would result in the Entitlement being changed by one per cent. or less, then no adjustment will be made. In addition, the Issuer shall adjust the Call Price and/or Strike Price in accordance with the following formulas:

Adjusted Call Price (rounded to the nearest 0.001)	=	Call Price	÷	Adjustment Factor
Adjusted Strike Price (rounded to the nearest 0.001)	=	Strike Price	÷	Adjustment Factor

Adjustment to the Call Price and/or Strike Price shall take effect on the same day that the Entitlement is adjusted.

(c) *Unit Subdivisions or Consolidations.* If and whenever the Fund shall subdivide its Units or any class of its outstanding units or shares into a greater number of units or shares (a "**Subdivision**") or consolidate the Units or any class of its outstanding units or shares into a smaller number of units or shares (a "**Consolidation**"), the Entitlement in effect immediately prior thereto will be increased (in the case of a Subdivision) or decreased (in the case of a Consolidation) accordingly in each case on the day on which the relevant Subdivision or Consolidation shall have taken effect. In addition, the Call Price and/or Strike Price (each of which shall be rounded to the nearest 0.001) will be decreased (in the case of a Subdivision) or increased (in the case of a Consolidation) accordingly.

Adjustment to the Call Price and/or Strike Price shall take effect on the same day that the Entitlement is adjusted.

(d) *Merger or Consolidation.* If it is announced that the Fund is to or may merge or consolidate with or into any other fund or corporation (including becoming, by agreement or otherwise, controlled by any person or corporation) (except where the Fund is the surviving entity in a merger) or that it is to or may sell or transfer all or substantially all of its assets, the rights attaching to the CBBCs may in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner) be amended no later than the Business Day preceding the consummation of such merger, consolidation, sale or transfer (each a "**Restructuring Event**") (as determined by the Issuer in its absolute discretion (acting in good faith and in a commercially reasonable manner)).

The rights attaching to the CBBCs after the adjustment shall, after such Restructuring Event, relate to the number of units or shares of the fund(s) or corporation(s) resulting from or surviving such Restructuring Event or other securities ("**Substituted Securities**") and/or cash offered in substitution for the affected Units, as the case may be, to which the holder of such number of Units to which the CBBCs related immediately before such Restructuring Event would have been entitled upon such Restructuring Event. Thereafter the provisions hereof shall apply to such Substituted Securities, provided that any Substituted Securities may, in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner), be deemed to be replaced by an amount in the relevant currency equal to the market value or, if no market value is available, fair value, of such Substituted Securities in each case as determined by the Issuer as soon as practicable after such Restructuring Event is effected.

For the avoidance of doubt, any remaining Units shall not be affected by this paragraph (d) and, where cash is offered in substitution for Units or is deemed to replace Substituted Securities as described above, references in these Conditions to the Units shall include any such cash.

(e) *Cash Distributions.* Generally, no adjustment will be made for an ordinary cash distribution (whether or not it is offered with a scrip alternative). For any other forms of cash distribution (each a "**Cash Distribution**") announced by the Fund, no adjustment will be made unless the value of the Cash Distribution accounts for two per cent. or more of the Unit's closing price on the day of announcement by the Fund.

If and whenever the Fund shall make a Cash Distribution credited as fully paid to the holders of Units generally, the Entitlement will be adjusted to take effect on the Business Day on which trading in the Units of the Fund becomes ex-entitlement in accordance with the following formula:

$$\text{Adjusted Entitlement} = \text{Adjustment Factor} \times E$$

Where:

$$\text{Adjustment Factor} = \frac{S - OD}{S - OD - CD}$$

OD: Amount of the relevant ordinary cash distribution per Unit, provided that OD shall be deducted from S only if the Business Day on which trading in the Units of the Fund becomes ex-entitlement with respect to the Cash Distribution and the distribution of the ordinary cash distribution by the Fund falls on the same date. For the avoidance of doubt, OD shall be deemed to be zero if the ex-entitlement dates of the relevant ordinary cash distribution and the Cash Distribution are different

CD: Amount of the relevant Cash Distribution per Unit

E: Existing Entitlement immediately prior to the Cash Distribution

S: Cum-Cash Distribution Unit price being the closing price of the Units on the Stock Exchange on the last Business Day on which the Units of the Fund are traded on a cum-Cash Distribution basis

In addition, the Issuer shall adjust the Call Price and/or Strike Price in accordance with the following formulas:

Adjusted Call Price (rounded to the nearest 0.001)	=	Call Price ÷ Adjustment Factor
Adjusted Strike Price (rounded to the nearest 0.001)	=	Strike Price ÷ Adjustment Factor

Adjustment to the Call Price and/or Strike Price shall take effect on the same day that the Entitlement is adjusted.

(f) *Other Adjustments.* Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the CBBCs as appropriate where any event (including the events as contemplated in the applicable Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Conditions, provided that such adjustment is:

(i) not materially prejudicial to the interests of the CBBC Holders generally (without considering the circumstances of any individual CBBC Holder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(ii) determined by the Issuer in good faith to be appropriate and commercially reasonable.

For the avoidance of doubt, such adjustments may, but need not, be determined by reference to the adjustment(s) made in respect of such event or events by an options exchange to options on the relevant Units traded on such options exchange.

(g) *Notice of Adjustments.* All determinations made by the Issuer pursuant hereto will be conclusive and binding on the CBBC Holders. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment and of the date from which such adjustment is effective by publication in accordance with Condition 11.

7. Illegality or Impracticability

The Issuer is entitled to terminate the CBBCs if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the CBBCs, in whole or in part, as a result of: (i) the adoption of, any change in, any relevant law or regulation (including any tax law); or (ii) the promulgation of, or any change in the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law), (each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the CBBCs due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by applicable law or regulation, pay to each CBBC Holder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each CBBC held by such CBBC Holder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement and any charges or expenses including any taxes or duties which are incurred or withheld as determined by the Issuer in its sole and absolute discretion (acting in good faith and in a commercially reasonable manner). Payment will be made in such manner as shall be notified to the CBBC Holders in accordance with Condition 11.

8. Purchases

The Issuer and/or any of its subsidiaries and affiliates may at any time purchase CBBCs at any price in the open market or by tender or by private treaty. Any CBBCs so purchased may be held or resold or surrendered for cancellation.

9. Global Certificate

The CBBCs are represented by the Global Certificate registered in the name of HKSCC Nominees Limited and deposited with CCASS in accordance with the CCASS Rules. CBBC Holders will not be entitled to definitive certificates in respect of any CBBCs issued or transferred to them.

10. Meetings of CBBC Holders; Modification

(a) *Meetings of CBBC Holders.* The Instrument contains provisions for convening meetings of the CBBC Holders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution (as defined in the Instrument) of a modification of the provisions of the CBBCs or of the Global Certificate.

Any resolution to be passed in a meeting of the CBBC Holders shall be decided by poll. Such a meeting may be convened by the Issuer or by CBBC Holders holding not less than 10 per cent. of the CBBCs for the time being remaining unexercised. The quorum at any such meeting for passing an Extraordinary Resolution will be two or more persons holding or representing not less than 25 per cent. of the CBBCs for the time being remaining unexercised, or at any adjourned meeting two or more persons being or representing CBBC Holders whatever the number of CBBCs so held or represented.

A resolution will be an Extraordinary Resolution when it has been passed at a duly convened meeting by not less than three-quarters of the votes cast by such CBBC Holders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the CBBC Holders shall be binding on all the CBBC Holders, whether or not they are present at the meeting.

Resolutions can be passed in writing without a meeting of the CBBC Holders being held if passed unanimously.

(b) *Modification.* The Issuer may, without the consent of the CBBC Holders, effect any modification of the terms and conditions of the CBBCs or the Global Certificate which, in the opinion of the Issuer, is:

(i) not materially prejudicial to the interests of the CBBC Holders generally (without considering the circumstances of any individual CBBC Holder or the tax or other consequences of such modification in any particular jurisdiction);

(ii) of a formal, minor or technical nature;

(iii) made to correct a manifest error; or

(iv) necessary in order to comply with mandatory provisions of the laws or regulations of Hong Kong.

Any such modification shall be binding on the CBBC Holders and shall be notified to them by the Issuer as soon as practicable in accordance with Condition 11.

11. Notices

All notices to CBBC Holders will be validly given if published in English and in Chinese on the website of Hong Kong Exchanges and Clearing Limited. Such notices shall be deemed to have been given on the date of the first such publication. If publication is not practicable, notice will be given in such other manner as the Issuer may determine.

12. Liquidation

In the event of (i) a liquidation, dissolution, termination or winding up of the Fund or (ii) a liquidation or dissolution or winding up of the trustee of the Fund (including any successor trustee appointed from time to time) ("**Trustee**") or where applicable, the Trustee ceases to be authorised under the Fund to hold the property of the Fund in its name and perform its obligations under the trust deed constituting the Fund or (iii) the appointment of a liquidator, receiver or administrator or analogous person under applicable law in respect of the whole or substantially the whole of the Fund's or the Trustee's (as the case may be) undertaking, property or assets or (iv) the withdrawal of the Securities and Futures Commission's authorisation of the Fund under the Securities and Futures Ordinance, all unexercised CBBCs will lapse and shall cease to be valid for any purpose, in the case of (i) a voluntary liquidation or winding up, on the effective date of the relevant resolution, (ii) an involuntary liquidation or dissolution or winding up, on the date of the relevant court order, (iii) a termination, on the effective date of the termination, (iv) the appointment of a liquidator or receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of the Fund's or the Trustee's (as the case may be) undertaking, property or assets, on the date on which such appointment is effective, or (v) withdrawal of authorisation, on the date on which such withdrawal becomes effective, but subject (in any such case) to any contrary mandatory requirement of applicable law.

13. Further Issues

The Issuer shall be at liberty from time to time, without the consent of the CBBC Holders, to create and issue further CBBCs so as to form a single series with the CBBCs.

14. Delisting

(a) If at any time the Units cease to be listed on the Stock Exchange, the Issuer shall give effect to these Conditions in such manner and make such adjustments to the rights attaching to the CBBCs as it shall, in its absolute discretion (acting in good faith and in a commercially reasonable manner), consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the CBBC Holders generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of any CBBC Holder or the tax or other consequences that may result in any particular jurisdiction).

(b) Without prejudice to the generality of Condition 14(a), where the Units are, or, upon the delisting, become, listed on any other stock exchange, these Conditions may, in the absolute discretion of the Issuer (acting in good faith and in a commercially reasonable manner), be amended to the extent necessary to allow for the substitution of that other stock exchange in place of the Stock Exchange and the Issuer may, without the consent of the CBBC Holders, make such adjustments to the entitlements of CBBC Holders on exercise (including, if appropriate, by converting foreign currency amounts at prevailing market rates into the relevant currency) as may be appropriate in the circumstances.

(c) The Issuer shall determine, in its absolute discretion (acting in good faith and in a commercially reasonable manner), any adjustment or amendment and its determination shall be conclusive and binding on the CBBC Holders save in the case of manifest error. Notice of any adjustments or amendments shall be given to the CBBC Holders in accordance with Condition 11 as soon as practicable after they are determined.

15. Contracts (Rights of Third Parties) Ordinance

A person who is not a party to these Conditions has no right under the Contracts (Rights of Third Parties) Ordinance (Cap. 623 of the Laws of Hong Kong) to enforce or to enjoy the benefit of any term of the CBBCs.

16. Governing Law

The CBBCs, the Global Certificate and the Instrument will be governed by and construed in accordance with the laws of the Hong Kong Special Administrative Region of the People's Republic of China ("**Hong Kong**"). The Issuer and each CBBC Holder (by its purchase of the CBBCs) shall be deemed to have submitted for all purposes in connection with the CBBCs, the Global Certificate and the Instrument to the non-exclusive jurisdiction of the courts of Hong Kong.

17. Language

In the event of any inconsistency between the Chinese translation of these Conditions and the English version of these Conditions, the English version of these Conditions shall prevail.

INFORMATION ABOUT US

Incorporation and Business

On 14 August 1866, "The Hongkong and Shanghai Banking Corporation" was established with limited liability in the Hong Kong Special Administrative Region (the "**Hong Kong SAR**") by The Hongkong and Shanghai Bank Ordinance 1866, as subsequently amended by The Hongkong and Shanghai Banking Corporation Limited Ordinance (Cap. 70) of Hong Kong (the "**Ordinance**"). On 6 October 1989, it was registered under the name of "The Hongkong and Shanghai Banking Corporation Limited" pursuant to Part IX of the then Companies Ordinance (Cap. 32) of Hong Kong, which is now Part 17 of the Companies Ordinance (Cap. 622) of Hong Kong. On 6 June 1997, Memorandum and Articles of Association (the "**M&A**") were adopted, replacing the Ordinance in part and superseding The Hongkong and Shanghai Bank Regulations (Cap. 70A) of Hong Kong which formerly were the constitutive documents of the Bank. Subsequently, a new set of Articles of Association was adopted in substitution for and to the exclusion of the M&A on 19 May 2014. Its registered and head office is situated at 1 Queen's Road Central, Hong Kong. Its business registration number is 00173611.

Established in Hong Kong and Shanghai in 1865, The Hongkong and Shanghai Banking Corporation Limited is the founding member of HSBC Holdings plc and its subsidiaries (the "**HSBC Group**") – one of the world's largest banking and financial services organisations. It is the largest bank incorporated in Hong Kong and one of Hong Kong's three note-issuing banks. It is a wholly-owned subsidiary of HSBC Holdings plc, the holding company of the HSBC Group, which has an international network covering: Europe, Asia, Middle East and North Africa, North America and Latin America.

Directors and Secretary

As of the date of this base listing document, the Directors and Secretary of the Bank are set out below.

Names of Directors

Dr Peter Tung Shun WONG#, GBS, JP, *Chairman*
David Gordon ELDON#, GBS, CBE, JP, *Deputy Chairman*
David Yi Chien LIAO, *Co-Chief Executive Officer*
Surendranath Ravi ROSHA, *Co-Chief Executive Officer*
Paul Jeremy BROUGH*
Edward Wai Sun CHENG*, GBS, JP
Sonia Chi Man CHENG*
Yiu Kwan CHOI*
Andrea Lisa DELLA MATTEA*
Pam KAUR#
Rajnish KUMAR*
Beau Khoon Chen KUOK*
Irene Yun-lien LEE*
Annabelle Yu LONG*
Kevin Anthony WESTLEY*, BBS

* *independent non-executive Director*
\# *non-executive Director*

Name of Secretary

Paul Stafford, FCG HKFCG

Main Subsidiaries

The main subsidiaries of the Bank as at 31 December 2023 are:

Name	Place of Incorporation	Principal activity	The Bank Group's interest in issued share capital/ registered or charter capital (per cent.)
Hang Seng Bank Limited[1]	Hong Kong	Banking	62.14
HSBC Bank (China) Company Limited	mainland China	Banking	100
HSBC Bank Malaysia Berhad	Malaysia	Banking	100
HSBC Bank Australia Limited[2]	Australia	Banking	100
HSBC Bank (Taiwan) Limited[2]	Taiwan	Banking	100
HSBC Bank (Singapore) Limited	Singapore	Banking	100
HSBC Life (International) Limited[2]	Bermuda	Retirement benefits and life insurance	100

Note:

1 In addition to the strategic holding disclosed above, the Bank and its subsidiaries held 0.09% shareholding as part of its trading books.

2 Held indirectly.

The principal places of business are the same as the places of incorporation except for HSBC Life (International) Limited which operates mainly in Hong Kong.

Share capital

The following shows the share capital of the Bank Group as at 31 December 2023:

The issued and fully paid up ordinary share capital of the Bank was HK$180,181 million, comprising 49,579,391,798 ordinary shares, which included HK$123,949 million paid up in HK$ and HK$56,232 million paid up in U.S.$. The paid up share capital in U.S.$ represents preference shares which were redeemed or bought back via payment out of distributable profits and for which the amount was transferred from retained earnings to share capital in accordance with the requirements of the Companies Ordinance (Cap. 622) of Hong Kong.

Total shareholders' equity

The total shareholders' equity of the Bank Group as at 31 December 2023 was HK$812,726 million comprising HK$180,181 million of share capital, HK$52,465 million of other equity instruments, HK$117,214 million of other reserves and HK$462,866 million of retained earnings.

Subordinated liabilities

The Bank Group had no subordinated liabilities issued to third parties measured at amortised cost as at 31 December 2023. Subordinated liabilities of the Bank Group issued to third parties measured at amortised cost, as at 31 December 2022, consisted of undated floating rate primary capital notes. Subordinated liabilities issued to group entities are not included in the below.

	2023	**2022**
	HK$m	*HK$m*
Subordinated liabilities	–	3,119

Debt Securities in Issue

The debt securities in issue of the Bank Group measured at amortised cost as at 31 December 2023 were HK$87,745 million.

SALES AND TRANSFER RESTRICTIONS

General

We have not or will not take any action that would permit a public offering of structured products or possession or distribution of any offering material in relation to the structured products in any jurisdiction where action for that purpose is required. No offers, sales or deliveries of any structured products, or distribution of any offering material relating to the structured products, may be made in or from any jurisdiction except in circumstances which will result in compliance with any applicable laws or regulations and will not impose any obligations on us. You are required to inform yourself about, and to observe, all such applicable laws and regulations.

United States of America

The structured products have not been and will not be registered under the United States Securities Act of 1933, as amended (the "**Securities Act**"), and will not be offered, sold, delivered or traded, at any time, indirectly or directly, in the United States or to, or for the account or benefit of, (a) a U.S. Person (as defined in Regulation S of the Securities Act), (b) a U.S. person as defined in 17 C.F.R. § 23.23(a)(23) (a "**CFTC U.S. Person**") or to others for offer or sale to or for the account or benefit of any such CFTC U.S. person or (c) a "United States person" as defined in U.S. Executive Order 13959, as amended by U.S. Executive Order 14032, or in the Chinese Military-Industrial Complex Sanctions Regulations (31 C.F.R. Part 586) ("**E.O. 13959 U.S. Persons**"), to the extent that the underlyings for the relevant structured products include (i) securities whose purchase or sale by E.O. 13959 U.S. Persons is restricted under Executive Order 13959 (as amended) or (ii) provide any investment exposure to any such securities ((i) and (ii) collectively, "**E.O. 13959 Restricted Underlyings**").

E.O. 13959 U.S. Persons are restricted from purchasing or selling the structured products with E.O. 13959 Restricted Underlyings after the effective date of the Executive Order 13959 (as amended) restrictions applicable to those underlyings and investors should seek their own independent legal advice regarding compliance with Executive Order 13959 (as amended).

European Economic Area – Prohibition of Sales to EEA Retail Investors

The structured products which are the subject of the offering contemplated by this base listing document has not been offered, sold or otherwise made available and will not be offered, sold or otherwise made available to any retail investor in the European Economic Area. For the purposes of this provision:

(a) the expression "**retail investor**" means a person who is one (or more) of the following:

 (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "**MiFID II**"); or

 (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended, the "**Insurance Distribution Directive**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or

 (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (as amended, the "**Prospectus Regulation**"); and

(b) the expression "**offer**" includes the communication in any form and by any means of sufficient information on the terms of the offer and the structured products to be offered so as to enable an investor to decide to purchase or subscribe for the structured products.

United Kingdom – Prohibition of Sales to UK Retail Investors

The structured products which are the subject of the offering contemplated by this base listing document has not been offered, sold or otherwise made available and will not be offered, sold or otherwise made available to any retail investor in the United Kingdom. For the purposes of this provision:

(a) the expression "**retail investor**" means a person who is one (or more) of the following:

  (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 ("**EUWA**"); or

  (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 (the "**FSMA**") and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or

  (iii) not a qualified investor as defined in Article 2 of Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA; and

(b) the expression an "**offer**" includes the communication in any form and by any means of sufficient information on the terms of the offer and the structured products to be offered so as to enable an investor to decide to purchase or subscribe for the structured products.

United Kingdom – Other Regulatory Restrictions

In respect of the United Kingdom, each dealer has further represented and agreed, and each further dealer to be appointed will be required to further represent and agree, that:

(a) in relation to any structured products which have a maturity of less than one year, (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business; and (ii) it has not offered or sold and will not offer or sell any structured products other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or as agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the structured products would otherwise constitute a contravention of Section 19 of the FSMA by the Issuer;

(b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of any structured products in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and

(c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any structured products in, from or otherwise involving the United Kingdom.

TAXATION

The comments below are of a general nature and are only a summary of the law and practice currently applicable under the relevant law. The comments relate to the position of persons who are the absolute beneficial owners of the structured products and may not apply equally to all persons. If you are in any doubt as to your tax position on purchase, ownership, transfer or exercise of any structured product, you should consult your own tax advisers.

GENERAL

You may be required to pay stamp duties, taxes and other charges in accordance with the laws and practices of the country or territory of purchase in addition to the issue price of each structured product.

HONG KONG

Profits tax

No tax is payable in Hong Kong by way of withholding or otherwise in respect of dividends of any company or in respect of any capital gains arising on the sale of any shares or structured products, except that Hong Kong profits tax may be chargeable on any such gains in the case of certain persons carrying on a trade, profession or business in Hong Kong.

Stamp duty

Stamp duty is not chargeable on the transfer of purely cash settled structured products in Hong Kong.

UNITED STATES OF AMERICA

The following section on "U.S. Foreign Account Tax Compliance Act" is applicable to all investors. If you are uncertain about the tax consequences of investing in our structured products, you should consult your own tax adviser.

U.S. Foreign Account Tax Compliance Act

We and other financial institutions through which payments on the structured products are made may be required to withhold U.S. tax at a rate of 30 per cent. on all, or a portion of, payments made after the second anniversary of the date on which final U.S. Treasury Regulations defining the term "foreign passthru payments" are published with the U.S. Federal Register in respect of (i) any structured products characterised as obligations for U.S. federal tax purposes that are issued after (or are materially modified after) the date that is six months after the date on which final U.S. Treasury Regulations defining the term "foreign passthru payments" are filed with the U.S. Federal Register and (ii) any structured products not characterised as obligations for U.S. federal tax purposes, whenever issued, pursuant to Sections 1471 through 1474 of the U.S. Internal Revenue Code ("**FATCA**") or similar law implementing an intergovernmental approach to FATCA.

In addition, we and other financial institutions through which payments on the structured products are made may be required to withhold U.S. tax pursuant to FATCA at a rate of 30 per cent. on payments made in respect of any structured products characterised as obligations for U.S. federal tax purposes that are issued after (or are materially modified after) the date that is six months after the date on which such products are treated as giving rise to "dividend equivalent" payments as described below under "Legislation Affecting Dividend Equivalent Payments".

FATCA withholding tax may apply to an investor or to any non-U.S. financial institution through which payment on the structured products is made if the Investor or non-U.S. financial institution does not fulfill its obligations under FATCA, including if (i) that investor (unless otherwise exempt from FATCA) does not provide information or consent to determine whether the investor is a U.S. person or should otherwise be treated as holding a "United States account" of the Issuer or (ii) that non-U.S. financial institution does not become a Participating Foreign Financial Institution (as defined by FATCA) by entering into an agreement with the U.S. Internal Revenue Service ("**IRS**") to provide the IRS with certain information in respect of its account holders and investors or is not otherwise deemed FATCA compliant or exempt from FATCA withholding tax. Structured product holders therefore may receive less settlement amount than expected. We are not required to pay any additional amounts with respect to amounts so withheld.

Each holder of structured products should consult its own tax advisor as to the application of FATCA to an investment in the structured products.

Further information on FATCA may be found at *https://www.irs.gov/corporations* under the section headed "Foreign Account Tax Compliance Act (FATCA)". Any information appearing on such website does not form part of this base listing document.

The following section on "Legislation Affecting Dividend Equivalent Payments" is applicable to structured products that are linked to U.S. equities and to all investors of such structured products.

Legislation Affecting Dividend Equivalent Payments

U.S. Treasury Regulations under Section 871(m) of the U.S. Internal Revenue Code require withholding of up to 30% (depending on whether an income tax treaty or other exemption applies) on payments or deemed payments made to non-U.S. persons on certain financial instruments to the extent that such payments are contingent upon or determined by reference to U.S.-source dividends. These rules differentiate between "Delta-One" and "Non-Delta-One" transactions. This withholding should generally apply to structured products, but should not apply to Non-Delta-One structured products issued before 1 January 2025 (unless the Non-Delta-One structured products are "significantly modified" on or after 1 January 2025). Significant aspects of the application of these regulations to the structured products are uncertain. Payments on structured products, other than Non-Delta-One structured products that are issued before 1 January 2025, that are treated by the applicable Treasury regulations as being contingent upon, or determined by reference to, any U.S. source dividends may be subject to this withholding.

Withholding in respect of dividend equivalents amounts will generally be required when the relevant payment is made on a structured product or upon the date of maturity, lapse or other disposition by a non-U.S. investor of the structured products. Structured products may be treated as paying dividend equivalent amounts to the extent U.S. source dividends are expected to be paid on the underlying equity securities, even if no corresponding payment on the structured product is explicitly linked to such dividends and even if, upon maturity, lapse or other disposition by the non-U.S. investor, the investor realizes a loss. The regulations provide exceptions to withholding, in particular for certain instruments linked to certain broad-based indices. In the event any withholding would be required pursuant to Section 871(m) with respect to payments on the structured products, no person will be required to pay additional amounts as a result of the withholding. Prospective investors should consult their tax advisers regarding the potential application of Section 871(m) and the applicable regulations to the structured products.

Who is responsible for this base listing document?

We accept full responsibility for the accuracy of the information contained in this base listing document.

We have included references to websites to guide you to sources of freely available information. The information on these websites does not form part of our listing document. We do not accept any responsibility for the information on those websites. Such information has not been prepared for the purposes of our structured products. You should conduct your own web searches and consult publicly available information to ensure that you are viewing the most up-to-date information.

This base listing document is accurate at the date stated on the cover. You must not assume, however, that information in this base listing document is accurate at any time after the date of this base listing document.

This document has not been reviewed by the Securities and Futures Commission. You are advised to exercise caution in relation to the offer of the structured products.

The liquidity provider is not responsible in any way for ensuring the accuracy of our listing documents.

Is there any guarantee or collateral for the structured products?

No. Our obligations under the structured products are neither guaranteed by any third party, nor collateralised with any of our assets or other collaterals. When you purchase our structured products, you are relying on our creditworthiness only, and of no other person. If we become insolvent or default on our obligations under the structured products, you can only claim as an unsecured creditor of the Issuer. In such event, you may not be able to recover all or even part of the amount due under the structured products (if any).

Are we regulated by the Hong Kong Monetary Authority referred to in rule 15A.13(2) or the Securities and Futures Commission referred to in rule 15A.13(3)?

We are a licensed bank regulated by the Hong Kong Monetary Authority, and a registered institution under the Securities and Futures Ordinance (Cap. 571) of Hong Kong to carry on type 1 (Dealing in Securities), type 2 (Dealing in Futures Contracts), type 4 (Advising on Securities), type 5 (Advising on Futures Contracts), type 6 (Advising on Corporate Finance) and type 9 (Asset Management) regulated activities.

What are our credit ratings?

Our long-term credit ratings are:

Rating agency	Rating as of the day immediately preceding the date of this base listing document
Moody's Investors Service, Inc. ("**Moody's**")	Aa3 (negative outlook)
S&P Global Ratings ("**S&P**")	AA- (stable outlook)

The long-term credit ratings are only an assessment by the credit rating agencies of the Issuer's overall financial capacity to pay its debts.

Aa3 is among the top three major credit rating categories and is the fourth highest investment-grade of the ten investment-grade credit ratings (including 1, 2 and 3 sub-grades) assigned by Moody's.

AA- is among the top three major credit rating categories and is the fourth highest investment-grade of the ten investment-grade credit ratings (including + or – sub-grades) assigned by S&P.

Please refer to Exhibit C to this base listing document for further information on credit ratings.

Rating agencies usually receive a fee from the companies that they rate. When evaluating our creditworthiness, you should not solely rely on our credit ratings because:

(a) a credit rating is not a recommendation to buy, sell or hold our structured products;

(b) ratings of companies may involve difficult-to-quantify factors such as market competition, the success or failure of new products and markets and managerial competence;

(c) a high credit rating is not necessarily indicative of low risk. Our credit ratings as of the day immediately preceding the date of this document are for reference only. Any downgrading of our ratings could result in a reduction in the value of the structured products;

(d) a credit rating is not an indication of the liquidity or volatility of the structured products; and

(e) a credit rating may be downgraded if the credit quality of the Issuer declines.

Our structured products are not rated.

Our credit ratings are subject to change or withdrawal at any time within each rating agency's sole discretion. You should conduct your own research using publicly available sources to obtain the latest information with respect to our ratings from time to time.

Are we subject to any litigation?

Except as set out in Exhibit A and Exhibit B of this base listing document, there are no legal or arbitration proceedings (including any such proceedings which are pending or threatened of which we are aware) which may have, or have had in the previous 12 months, a significant effect on us and our subsidiaries.

Has our financial position changed since last financial year?

Except as set out in Exhibit A and Exhibit B of this base listing document, there has been no material adverse change in our financial or trading position or prospects or indebtedness since 31 December 2023.

If, after the date of this document, you receive this document or purchase any structured products issued pursuant to this document you should not assume that there have been no changes in our affairs or financial condition since the date of this document. You should ask us if we have published any addenda to this document or any subsequent base listing document relating to our programme. Any such addenda will be available for inspection in the manner described under the section headed *"Where can you find out information about us?"* below.

Who is authorised to give information or make representations?

No person has been authorised to give any information or make any representations other than those contained in this document and the applicable launch announcement and supplemental listing document. If any person gives any such information or makes any such representations you should not rely on them as having been authorised by us.

Who are our authorised representatives?

Our authorised representatives are Martin Mrosek, c/o The Hongkong and Shanghai Banking Corporation Limited, Level 18, HSBC Main Building, 1 Queen's Road Central, Hong Kong, and Queenie Lun, c/o The Hongkong and Shanghai Banking Corporation Limited, Level 33, HSBC Main Building, 1 Queen's Road Central, Hong Kong.

Who makes determinations and calculations?

We will make any necessary determinations or calculations in respect of the structured products.

Where can you find out information about us?

You can find out more about us on the website of the group of companies to which we belong, which is *www.hsbc.com*.

The following documents are also available on the website of the HKEX at *www.hkexnews.hk* and our website which is presently at *https://www.warrants.hsbc.com.hk/en/warrant/latest-document-and-notice* during the period in which the structured products are listed on the stock exchange:

(a) a copy of this document and any addendum to this document (both the English version and the Chinese translation);

(b) a copy of our latest publicly available annual report and interim report (if any); and

(c) a copy of the consent letter from our auditor referred to in this document.

Please refer to the base listing document dated 31 March 2023 for the extract of the Annual Report and Accounts 2022 of the Issuer, including the auditor's report and the audited consolidated financial statements of the Issuer as at and for the year ended 31 December 2022.

Are there any experts/auditors involved?

Our auditor ("**Auditor**"), PricewaterhouseCoopers, has given and has not withdrawn its written consent to the inclusion of auditor's report dated 21 February 2024 on the consolidated financial statements of the Issuer as at and for the year ended 31 December 2023, and/or references to its name in this base listing document, in the form and context in which they are included. Its report was not prepared exclusively for incorporation into this base listing document. The Auditor does not own any of our shares or shares in any member of our group, nor does it have the right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for our securities or securities in any member of our group.

Do the stock exchange and the Securities and Futures Commission charge any fees?

For each transaction effected on the stock exchange, the following trading fees and levies calculated on the value of the consideration for the relevant structured products will be payable by each of the seller and the buyer:

(a) a trading fee of 0.00565 per cent. charged by the stock exchange;

(b) a transaction levy of 0.0027 per cent. charged by the Securities and Futures Commission; and

(c) a transaction levy of 0.00015 per cent. charged by the Accounting and Financial Reporting Council.

The levy for the investor compensation fund is currently suspended.

Under the terms and conditions of the structured products, you are required to pay all charges or expenses which are incurred or withheld in respect of the exercise of the structured products.

Your broker may charge commission or other fees. You should check with your broker what fees will be chargeable.

You should be aware that you may be required to pay taxes including stamp taxes or other documentary charges in accordance with the laws and practices of the country or territory where the structured products are transferred, or where the issuer of the underlying asset is organised or resident. Please refer to the section headed "Taxation" for further information. If you are in any doubt as to your tax position, you should consult your own independent tax advisers. You should also be aware that tax regulations and their application by the relevant taxation authorities may change from time to time.

How are the structured products transferred and settled?

Settlement of transactions between members of the stock exchange on any business day must take place on or before the second business day thereafter. Securities executed on the stock exchange would normally be settled under the continuous net settlement system in CCASS.

Dealings in the structured products will take place in relevant board lots in the relevant settlement currency. For further details on transfers of structured products and their exercise, termination pursuant to mandatory call event or settlement, you should refer to the terms and conditions of the relevant issue of structured products.

Waiver from compliance with the rules

We have applied for, and the stock exchange has granted, a waiver from compliance with rule 15A.24A of the rules in respect of securities promotional campaigns (the "**Incentive**") offered by our Wealth and Personal Banking Division for the period from 1 January 2024 to 31 December 2024 (the "**Waiver**").

The Incentive is applicable equally under the same terms to all listed securities regardless of product type or issuer. Any incentives given by our Wealth and Personal Banking Division will not be recovered (directly or indirectly) from our Global Banking and Markets Division which operates the structured products business.

The Waiver is granted subject to the following conditions:

(a) the inclusion of a risk factor in supplemental listing documents and a reminder to investors in all marketing materials of the Incentive. The risk factor and the reminder to investors should contain the following:

    (i) a statement to the effect that the Incentive is offered as part of the ordinary course of business of our securities business; and

    (ii) a reminder to investors to the effect that they should focus their assessment on product features of the structured products and assess the risks against their investment objectives before making investment decisions, without regard to the benefit of the Incentive.

(b) the disclosure of details of the Waiver granted in this document and/or the supplemental listing documents.

Please refer to the risk factor headed "We and/or members of our group (acting as a dealer) may offer commission rebates or other incentives" on page 24 of this document and the relevant supplemental listing documents for further details.

EXHIBIT A

THE EXTRACT OF THE ANNUAL REPORT AND ACCOUNTS INCLUDING THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS OF THE ISSUER AS AT AND FOR THE YEAR ENDED 31 DECEMBER 2023

The information in this Exhibit A has been extracted from the Annual Report and Accounts 2023 of the Issuer. References to page numbers (i.e. the numeric page numbers as referred to within this Exhibit A and the numeric page numbers which appear on the bottom of the pages of this base listing document) in this Exhibit A are to the page numbers of the Annual Report and Accounts 2023. The extracts set out in this Exhibit A are not complete and reference should be made to the Annual Report and Accounts 2023 which is available on the website of the HKEX at *www.hkexnews.hk* and our website which is presently at *https://www.warrants.hsbc.com.hk/en/warrant/latest-document-and-notice*.

References in this Exhibit A to "**HSBC**", "**HSBC Group**" or "**the Group**" are to HSBC Holdings plc and its subsidiaries and references in this Exhibit A to "**the Bank**" are to The Hongkong and Shanghai Banking Corporation Limited and "**the group**" are to The Hongkong and Shanghai Banking Corporation Limited and its subsidiaries.

Independent Auditor’s Report

To the Shareholder of The Hongkong and Shanghai Banking Corporation Limited (incorporated in Hong Kong with limited liability)

Opinion

What we have audited

The consolidated financial statements of The Hongkong and Shanghai Banking Corporation Limited (the 'Bank’) and its subsidiaries (the 'group’), which are set out on pages 83 to 151, comprise:

- the consolidated balance sheet as at 31 December 2023;
- the consolidated income statement for the year then ended;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes[1] on the consolidated financial statements, comprising material accounting policies and other explanatory information.

1 *Certain required disclosures as described in Note 1.1(d) on the consolidated financial statements have been presented elsewhere in the* Annual Report and Accounts 2023*, rather than in the notes on the consolidated financial statements. These are cross-referenced from the consolidated financial statements and are identified as audited.*

Our opinion

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the group as at 31 December 2023, and of its consolidated financial performance and its consolidated 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 for 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 Consolidated Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the group 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.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters identified in our audit are summarised as follows:

- Allowances for expected credit losses on loans and advances to customers
- Impairment assessment of investment in associate – Bank of Communications Co., Ltd (‘BoCom’)
- Insurance contract liabilities

Allowances for expected credit losses on loans and advances to customers

Nature of the Key Audit Matter	How our audit addressed the Key Audit Matter
At 31 December 2023, the group recorded allowances for expected credit losses ('ECL') on loans and advances to customers of HK$38.9bn. The determination of the ECL on non-credit-impaired loans and advances to customers requires the use of complex credit risk methodologies that are applied in models using the group's historic experience of the correlations between defaults and losses, borrower creditworthiness, segmentation of customers or portfolios and economic conditions. It also requires the determination of assumptions which involve estimation uncertainty. The assumptions used for ECL that we focused on for non-credit-impaired loans and advances to customers included those with greater levels of management judgement and for which variations have the most significant impact on ECL on loans and advances to customers. Specifically, these included economic scenarios and their likelihood, as well as customer risk ratings. Likewise, there is inherent uncertainty with the consensus economic forecast data from external economists. Impacts related to the mainland China commercial real estate sector, the geopolitical landscape and other current macroeconomic conditions effect the inherent risk and estimation uncertainty involved in determining the ECL on loans and advances to customers. Management judgemental adjustments to ECL on non-credit-impaired loans and advances to customers therefore continue to be made. The above ongoing conditions continue to result in significant credit-impaired corporate exposures related to the unsecured offshore mainland China commercial real estate sector. The assumptions with the most significant impact here are those applied in estimating the recoverability of these exposures. **Matters discussed with the Audit Committee** We discussed the appropriateness of the methodologies, their application, significant assumptions and related disclosures with the Audit Committee, giving consideration to the current macroeconomic conditions. This included economic scenarios and their likelihood, management judgemental adjustments made to derive the ECL on loans and advances to customers, and future recoverability of certain significant credit-impaired wholesale exposures.	We tested controls in place relating to the methodologies, their application, significant assumptions and data used to determine the ECL on loans and advances to customers. These included controls relating to: – Model development, validation and monitoring; – Approval of economic scenarios; – Approval of the probability weightings assigned to economic scenarios; – Assigning customer risk ratings; – Approval of management judgemental adjustments; and – Review of input and assumptions applied in estimating the recoverability of credit-impaired wholesale exposures. We performed substantive audit procedures over the compliance of ECL methodologies with the requirements of HKFRS 9. We engaged professionals with experience in ECL modelling to assess the appropriateness of methodologies and related models. We further performed the following to assess the significant assumptions and data: – We challenged the appropriateness of the significant assumptions and obtained corroborating evidence; – We involved our economic experts in assessing the reasonableness of the severity and likelihood of certain economic scenarios; – We tested a sample of customer risk ratings assigned to wholesale exposures; and – We tested a sample of critical data used to determine ECL. For a sample of management judgemental adjustments and a sample of credit-impaired wholesale exposures, we challenged the appropriateness of these and assessed the ECL determined. We further considered whether the judgements made in selecting the significant assumptions, as well as determining the management judgemental adjustments and credit-impaired wholesale exposures, would give rise to indicators of possible management bias. We assessed the adequacy of the disclosures in relation to ECL on loans and advances to customers made in the consolidated financial statements in the context of the applicable financial reporting framework.

Relevant references in the consolidated financial statements
Risk: Credit risk, as cross-referenced from the consolidated financial statements (only information identified as audited), page 35-58
Note 1.2 (i) on the consolidated financial statements: Basis of preparation and material accounting policies – Summary of material accounting policies - Impairment of amortised cost and FVOCI financial assets, page 94-96
Note 2 (e) on the consolidated financial statements: Operating profit – Change in expected credit losses and other credit impairment charges, page 101
Note 10 on the consolidated financial statements: Loans and advances to customers, page 116-117

Impairment assessment of investment in associate – Bank of Communications Co., Ltd ('BoCom')

<table>
<tr><th>Nature of the Key Audit Matter</th><th>How our audit addressed the Key Audit Matter</th></tr>
<tr><td>At 31 December 2023, the fair value of the investment in BoCom, based on the share price, was lower than the carrying value. This is an indicator of potential impairment. An impairment test was performed by management, with supporting sensitivity analysis, using a value in use ('VIU') model. On this basis, the group impaired the value of the investment in BoCom by HK$24.0bn. The carrying value of the investment in BoCom after impairment amounted to HK$166.2bn at 31 December 2023.

The methodology applied in the VIU model is dependent on various assumptions, both short-term and long-term in nature. These assumptions, which are subject to estimation uncertainty, are derived from a combination of management's judgement, analysts' forecasts, market data or other relevant information.

The assumptions that we focused our audit on were those with greater levels of management judgement and subjectivity, and for which variations had the most significant impact on the VIU. Specifically, these significant assumptions included the discount rate, operating income growth rate, loans and advances to customers growth rate, long-term profit and asset growth rates, cost-income ratio, expected credit losses as a percentage of loans and advances to customers, long-term effective tax rate, capital requirements – capital adequacy ratio, capital requirements – tier 1 capital adequacy ratio and risk-weighted assets as a percentage of total assets.

Matters discussed with the Audit Committee

We discussed the appropriateness of the methodology, its application and significant assumptions with the Audit Committee. We also discussed the disclosures made in relation to BoCom, including the use of sensitivity analysis to explain estimation uncertainty.</td><td>We tested controls in place relating to significant assumptions, the methodology and its application used to determine the VIU. We assessed the appropriateness of the methodology used and its application. In respect of the significant assumptions, we performed the following:
– Challenged the appropriateness of the significant assumptions and, where relevant, their interrelationships;
– Obtained corroborating evidence for data supporting significant assumptions which as relevant included past experience, external market information, third-party sources including analyst reports, information from BoCom management and historical publicly available BoCom financial information;
– Determined a reasonable range for the discount rate assumption, with the assistance of our valuation experts, and compared it to the discount rate used by management; and
– Assessed whether the judgements made in selecting the significant assumptions would give rise to indicators of possible management bias.

We observed meetings between management and BoCom management to identify facts and circumstances impacting significant assumptions relevant to the determination of the VIU.

Representations were obtained from the Bank that assumptions used were consistent with information currently available to the Bank.

We assessed the adequacy of the disclosures in relation to BoCom made in the consolidated financial statements in the context of the applicable financial reporting framework.</td></tr>
<tr><th colspan="2">Relevant references in the consolidated financial statements</th></tr>
<tr><td colspan="2">Note 1.2 (a) on the consolidated financial statements: Basis of preparation and material accounting policies – Summary of material accounting policies – Consolidation and related policies, page 91

Note 14 on the consolidated financial statements: Interests in associates and joint ventures, page 119-122</td></tr>
</table>

Insurance contract liabilities

<table>
<tr><th>Nature of the Key Audit Matter</th><th>How our audit addressed the Key Audit Matter</th></tr>
<tr><td>The group has adopted HKFRS 17 ‘Insurance contracts’. The standard sets out the requirements that an entity should apply in accounting for insurance contracts it issues, reinsurance contracts it holds and investment contracts with discretionary participating features it issues.

At 31 December 2023, the group recorded insurance contract liabilities of HK$730.8bn.

Insurance contract liabilities under HKFRS 17 are measured as the total of fulfilment cash flows and contractual service margin, the determination of which requires judgement and interpretation. This includes the selection of accounting policies and the use of complex methodologies that are applied in models. The selection and application of appropriate methodology requires significant professional judgement. It also requires the determination of assumptions which involve estimation uncertainty.

Matters discussed with the Audit Committee

We discussed the appropriateness of the accounting policies, methodologies, their application, significant assumptions and related disclosures with the Audit Committee. Perspectives were also shared on the control environment related to accounting for insurance contract liabilities.</td><td>We tested certain controls in place relating to accounting policies, methodologies, their application, significant assumptions and data used in determining insurance contract liabilities, these included controls relating to:
– Selection and approval of the accounting policies;
– Policy data reconciliations from the policyholder administration systems to the actuarial valuation models;
– Assumption setting; and
– Review and determination of methodologies used, and their application in the models.

With the assistance of our actuarial professionals, we performed the following substantive audit procedures to assess the accounting policies, methodologies, their application, significant assumptions, data and disclosures:
– We assessed the adherence of the accounting policies with the requirements in HKFRS 17;
– We assessed the appropriateness of the methodologies used and their application in models;
– We challenged the appropriateness of the judgements made in selecting significant assumptions and, where relevant, their interrelationships. We have assessed these significant assumptions and obtained relevant corroborating evidence. We further considered whether the judgements made in selecting the significant assumptions would give risk to indicators of susceptibility to management bias;
– We performed substantive audit procedures over a sample of critical data used to ensure these are relevant and reliable; and
– We assessed the adequacy of the relevant disclosures in the context of the applicable financial reporting framework.</td></tr>
<tr><th colspan="2">Relevant references in the consolidated financial statements</th></tr>
<tr><td colspan="2">Risk: Insurance manufacturing operations risk as cross-referenced from the consolidated financial statements (only information identified as audited), page 72-76
Note 1.1 (a) on the consolidated financial statements: Basis of preparation and material accounting policies – Basis of preparation – Compliance with Hong Kong Financial Reporting Standards, page 89-90
Note 1.2 (j) on the consolidated financial statements: Basis of preparation and material accounting policies – Summary of material accounting policies – Insurance contracts, page 97-98
Note 3 on the consolidated financial statements: Insurance business, page 102-107
Note 38 on the consolidated financial statements: Effects of adoption of HKFRS 17, page 147-150</td></tr>
</table>

Other Information

The directors of the Bank are responsible for the other information. The other information comprises all of the information included in the *Annual Report and Accounts 2023*, Banking Disclosure Statement at 31 December 2023 and List of the directors of the Bank's subsidiary undertakings (during the period from 1 January 2023 to 21 February 2024) other than the consolidated financial statements and our auditor’s report thereon. We have obtained some of the other information including Certain defined terms, Cautionary statement regarding forward-looking statements, Chinese translation, Financial Highlights, Report of the Directors, Task Force on Climate-related Financial Disclosures, Financial Review, Risk, Statement of Directors' Responsibilities and Additional information sections of the *Annual Report and Accounts 2023* prior to the date of this auditor’s report. The remaining other information, including Banking Disclosure Statement at 31 December 2023 and List of the directors of the Bank's subsidiary undertakings (during the period from 1 January 2023 to 21 February 2024), is expected to be made available to us after that date. The other information does not include the specific information presented therein that is identified as being an integral part of the consolidated financial statements and, therefore, covered by our audit opinion on the consolidated financial statements.

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

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

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor’s report, 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.

When we read the remaining other information, if we conclude that there is a material misstatement therein, we are required to communicate the matter to the Audit Committee and take appropriate action considering our legal rights and obligations.

Responsibilities of Directors and the Audit Committee for the Consolidated Financial Statements

The directors of the Bank are responsible for the preparation of the consolidated 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 consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the group’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 group or to cease operations, or have no realistic alternative but to do so.

The Audit Committee is responsible for overseeing the group’s financial reporting process.

Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated 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. We report our opinion 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 consolidated 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 consolidated 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.
- 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 group'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 group’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 consolidated 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 group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated 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 group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group 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 to 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 consolidated 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 Lars Christian Jordy Nielsen.

PricewaterhouseCoopers

Certified Public Accountants

Hong Kong, 21 February 2024

Consolidated Financial Statements

Consolidated income statement

for the year ended 31 December

	Notes	2023 HK$m	2022 HK$m (restated)[1]
Net interest income	2a	**130,780**	109,878
– interest income		**295,212**	163,124
– interest expense		**(164,432)**	(53,246)
Net fee income	2b	**38,043**	38,565
– fee income		**51,025**	50,053
– fee expense		**(12,982)**	(11,488)
Net income from financial instruments held for trading or managed on a fair value basis	2c	**74,435**	41,276
Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss	2c	**48,959**	(94,914)
Changes in fair value of designated debts issued and related derivatives	2c	**8**	(703)
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	2c	**252**	40
Gains less losses from financial investments		**(3,791)**	52
Insurance finance income/(expense)		**(48,798)**	97,187
Insurance service result	3	**6,558**	4,977
– Insurance revenue		**13,007**	10,723
– Insurance service expense		**(6,449)**	(5,746)
Other operating income	2d	**3,233**	4,445
Net operating income before change in expected credit losses and other credit impairment charges		**249,679**	200,803
Change in expected credit losses and other credit impairment charges	2e	**(12,843)**	(16,370)
Net operating income		**236,836**	184,433
Employee compensation and benefits	4	**(38,547)**	(38,322)
General and administrative expenses	2f	**(54,538)**	(53,097)
Depreciation and impairment of property, plant and equipment	2g	**(9,724)**	(9,096)
Amortisation and impairment of intangible assets		**(7,184)**	(6,023)
Total operating expenses		**(109,993)**	(106,538)
Operating profit		**126,843**	77,895
Share of profit in associates and joint ventures	14	**18,555**	18,792
Impairment of interest in associate	14	**(23,955)**	—
Profit before tax		**121,443**	96,687
Tax expense	5	**(23,916)**	(15,996)
Profit for the year		**97,527**	80,691
Attributable to:			
– ordinary shareholders of the parent company		**87,191**	73,662
– other equity holders		**3,556**	2,739
– non-controlling interests		**6,780**	4,290
Profit for the year		**97,527**	80,691

1 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

Consolidated statement of comprehensive income

for the year ended 31 December

	2023 HK$m	2022 HK$m (restated)[1]
Profit for the year	**97,527**	80,691
Other comprehensive income/(expense)		
Items that will be reclassified subsequently to profit or loss when specific conditions are met:		
Debt instruments at fair value through other comprehensive income	**7,953**	(13,705)
– fair value gains/(losses)	**6,256**	(17,121)
– fair value (gains)/losses transferred to the income statement	**3,799**	(124)
– expected credit (recoveries)/losses recognised in the income statement	**(372)**	331
– income taxes	**(1,730)**	3,209
Cash flow hedges	**3,605**	(1,965)
– fair value gains	**7,581**	5,851
– fair value gains reclassified to the income statement	**(3,282)**	(8,228)
– income taxes	**(694)**	412
Share of other comprehensive income/(expense) of associates and joint ventures	**736**	(1,964)
Exchange differences	**(9,043)**	(32,040)
Items that will not be reclassified subsequently to profit or loss:		
Property revaluation	**4,496**	3,863
– fair value gains	**5,330**	4,683
– income taxes	**(834)**	(820)
Equity instruments designated at fair value through other comprehensive income	**(899)**	865
– fair value gains/(losses)	**(895)**	868
– income taxes	**(4)**	(3)
Changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	**(5,410)**	4,588
– before income taxes	**(6,457)**	5,461
– income taxes	**1,047**	(873)
Remeasurement of defined benefit asset/liability	**21**	185
– before income taxes	**26**	232
– income taxes	**(5)**	(47)
Other comprehensive income/(expense) for the year, net of tax	**1,459**	(40,173)
Total comprehensive income for the year	**98,986**	40,518
Attributable to:		
– ordinary shareholders of the parent company	**88,289**	34,497
– other equity holders	**3,556**	2,739
– non-controlling interests	**7,141**	3,282
Total comprehensive income for the year	**98,986**	40,518

1 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

Consolidated balance sheet

at 31 December

	Notes	31 Dec 2023 HK$m	31 Dec 2022 HK$m (restated)[1]	1 Jan 2022 HK$m (restated)[1]
Assets				
Cash and balances at central banks		**232,987**	232,740	276,857
Items in the course of collection from other banks		**22,049**	28,557	21,632
Hong Kong Government certificates of indebtedness		**328,304**	341,354	332,044
Trading assets	*7*	**941,250**	699,805	777,450
Derivatives	*8*	**409,253**	502,877	365,167
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	*9*	**707,573**	653,030	675,853
Reverse repurchase agreements – non-trading		**831,186**	927,976	803,775
Loans and advances to banks		**563,801**	515,847	427,811
Loans and advances to customers	*10*	**3,557,076**	3,695,068	3,830,956
Financial investments	*11*	**2,029,212**	1,749,707	1,630,612
Amounts due from Group companies	*32*	**158,592**	140,485	112,621
Interests in associates and joint ventures	*14*	**170,206**	185,898	188,485
Goodwill and intangible assets	*15*	**38,923**	36,863	31,416
Property, plant and equipment	*16*	**129,675**	130,926	129,827
Deferred tax assets	*5*	**9,315**	7,582	7,444
Prepayments, accrued income and other assets	*17*	**370,991**	349,128	266,466
Total assets		**10,500,393**	10,197,843	9,878,416
Liabilities				
Hong Kong currency notes in circulation		**328,304**	341,354	332,044
Items in the course of transmission to other banks		**27,536**	33,073	25,701
Repurchase agreements – non-trading		**521,984**	351,093	255,374
Deposits by banks		**182,146**	198,908	280,310
Customer accounts	*18*	**6,261,051**	6,113,709	6,177,182
Trading liabilities	*19*	**103,050**	142,453	92,723
Derivatives	*8*	**450,216**	551,729	355,791
Financial liabilities designated at fair value	*20*	**170,728**	167,743	138,965
Debt securities in issue	*21*	**87,745**	100,909	67,364
Retirement benefit liabilities	*4*	**1,362**	1,655	1,890
Amounts due to Group companies	*32*	**465,476**	398,261	356,277
Accruals and deferred income, other liabilities and provisions	*22*	**258,113**	246,614	227,245
Insurance contract liabilities	*3*	**730,829**	654,922	690,991
Current tax liabilities		**15,344**	6,009	2,385
Deferred tax liabilities	*5*	**23,923**	21,912	22,043
Subordinated liabilities	*23*	**—**	3,119	4,053
Total liabilities		**9,627,807**	9,333,463	9,030,338
Equity				
Share capital	*24*	**180,181**	180,181	172,335
Other equity instruments	*25*	**52,465**	52,386	44,615
Other reserves		**117,214**	108,837	151,510
Retained earnings		**462,866**	466,148	422,462
Total shareholders' equity		**812,726**	807,552	790,922
Non-controlling interests		**59,860**	56,828	57,156
Total equity		**872,586**	864,380	848,078
Total liabilities and equity		**10,500,393**	10,197,843	9,878,416

1 From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. We have restated 2022 comparative data and the HKFRS 17 transition impact on the balance sheet at 1 January 2022.

Consolidated statement of changes in equity

for the year ended 31 December

				Other reserves							
	Share capital[1]	Other equity instruments	Retained earnings	Property revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Other[4]	Total share-holders' equity	Non-controlling interests	Total equity
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 1 Jan 2023	**180,181**	**52,386**	**466,148**	**65,148**	**(11,186)**	**(1,487)**	**(38,470)**	**94,832**	**807,552**	**56,828**	**864,380**
Profit for the year	—	—	90,747	—	—	—	—	—	90,747	6,780	97,527
Other comprehensive income/(expense) (net of tax)	—	—	(5,415)	4,186	7,840	3,342	(8,698)	(157)	1,098	361	1,459
– debt instruments at fair value through other comprehensive income	—	—	—	—	7,784	—	—	—	7,784	169	7,953
– equity instruments designated at fair value through other comprehensive income	—	—	—	—	(689)	—	—	—	(689)	(210)	(899)
– cash flow hedges	—	—	—	—	—	3,334	—	—	3,334	271	3,605
– changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	—	—	(5,413)	—	—	—	—	—	(5,413)	3	(5,410)
– property revaluation	—	—	—	4,186	—	—	—	—	4,186	310	4,496
– remeasurement of defined benefit asset/ liability	—	—	(7)	—	—	—	—	—	(7)	28	21
– share of other comprehensive income/ (expense) of associates and joint ventures	—	—	5	—	888	—	—	(157)	736	—	736
– exchange differences	—	—	—	—	(143)	8	(8,698)	—	(8,833)	(210)	(9,043)
Total comprehensive income/(expense) for the year	—	—	85,332	4,186	7,840	3,342	(8,698)	(157)	91,845	7,141	98,986
Other equity instruments issued[2]	—	7,850	—	—	—	—	—	—	7,850	—	7,850
Other equity instruments redeemed[3]	—	(7,771)	(406)	—	—	—	—	—	(8,177)	—	(8,177)
Dividends to shareholders[5]	—	—	(86,356)	—	—	—	—	—	(86,356)	(3,843)	(90,199)
Movement in respect of share-based payment arrangements	—	—	(99)	—	—	—	—	(208)	(307)	12	(295)
Transfers and other movements[6]	—	—	(1,753)	(4,055)	800	(4)	(731)	6,062	319	(278)	41
At 31 Dec 2023	**180,181**	**52,465**	**462,866**	**65,279**	**(2,546)**	**1,851**	**(47,899)**	**100,529**	**812,726**	**59,860**	**872,586**

Consolidated statement of changes in equity (continued)

for the year ended 31 December (restated[7])

	Share capital[1]	Other equity instruments	Retained earnings	Other reserves: Property revaluation reserve	Other reserves: Financial assets at FVOCI reserve	Other reserves: Cash flow hedge reserve	Other reserves: Foreign exchange reserve	Other reserves: Other[4]	Total share-holders' equity	Non-controlling interests	Total equity
	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m
At 31 Dec 2021	172,335	44,615	488,055	64,990	3,869	153	(7,130)	89,922	856,809	66,702	923,511
Impact on transition to HKFRS 17[8]	—	—	(65,593)	—	(294)	—	—	—	(65,887)	(9,546)	(75,433)
At 1 Jan 2022	172,335	44,615	422,462	64,990	3,575	153	(7,130)	89,922	790,922	57,156	848,078
Profit for the year	—	—	76,401	—	—	—	—	—	76,401	4,290	80,691
Other comprehensive income/(expense) (net of tax)	—	—	4,772	3,646	(14,804)	(1,639)	(31,340)	200	(39,165)	(1,008)	(40,173)
– debt instruments at fair value through other comprehensive income	—	—	—	—	(13,394)	—	—	—	(13,394)	(311)	(13,705)
– equity instruments designated at fair value through other comprehensive income	—	—	—	—	745	—	—	—	745	120	865
– cash flow hedges	—	—	—	—	—	(1,639)	—	—	(1,639)	(326)	(1,965)
– changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	—	—	4,590	—	—	—	—	—	4,590	(2)	4,588
– property revaluation	—	—	—	3,646	—	—	—	—	3,646	217	3,863
– remeasurement of defined benefit asset/ liability	—	—	191	—	—	—	—	—	191	(6)	185
– share of other comprehensive income of associates and joint ventures	—	—	(9)	—	(2,155)	—	—	200	(1,964)	—	(1,964)
– exchange differences	—	—	—	—	—	—	(31,340)	—	(31,340)	(700)	(32,040)
Total comprehensive income/(expense) for the year	—	—	81,173	3,646	(14,804)	(1,639)	(31,340)	200	37,236	3,282	40,518
Shares issued[1]	7,846	—	—	—	—	—	—	—	7,846	—	7,846
Other equity instruments issued[2]	—	7,771	—	—	—	—	—	—	7,771	—	7,771
Dividends to shareholders[5]	—	—	(34,821)	—	—	—	—	—	(34,821)	(2,845)	(37,666)
Movement in respect of share-based payment arrangements	—	—	135	—	—	—	—	(137)	(2)	13	11
Transfers and other movements[6]	—	—	(2,801)	(3,488)	43	(1)	—	4,847	(1,400)	(778)	(2,178)
At 31 Dec 2022	180,181	52,386	466,148	65,148	(11,186)	(1,487)	(38,470)	94,832	807,552	56,828	864,380

1 *Ordinary share capital includes preference shares which have been redeemed or bought back via payments out of distributable profits in previous years. During 2022, 3,138.4m new ordinary shares were issued at an issue price of HK\$2.5 each.*
2 *During 2023, an additional tier 1 capital instrument amounting to US\$1,000m was issued for which there were no issuance costs. During 2022, an additional tier 1 capital instrument amounting to US\$1,000m was issued for which there were US\$10m issuance costs.*
3 *During 2023, an additional tier 1 capital instrument was redeemed at fair value US\$(1,041)m.*
4 *The other reserves mainly comprise share of associates' other reserves, purchase premium arising from transfer of business from fellow subsidiaries, property revaluation reserve relating to transfer of properties to a fellow subsidiary and the share-based payment reserve. The share-based payment reserve is used to record the amount relating to share awards and options granted to employees of the group directly by HSBC Holdings plc.*
5 *Including distributions paid on perpetual subordinated loans classified as equity under HKFRS.*
6 *The movements include transfers from retained earnings to other reserves in associates according to local regulatory requirements, and from the property revaluation reserve to retained earnings in relation to depreciation of revalued properties.*
7 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*
8 *The impact of HKFRS 17 on previously reported total equity was HK\$(76,883)m at 31 December 2022.*

Consolidated statement of cash flows

for the year ended 31 December

	2023 HK$m	2022 HK$m (restated)[1]
Profit before tax	**121,443**	96,687
Adjustments for non-cash items:		
Depreciation and amortisation	**16,908**	15,119
Net loss from investing activities	**4,247**	123
Share of profit in associates and joint ventures	**(18,555)**	(18,792)
Impairment of interest in associate	**23,955**	—
Gain on disposal of businesses and associate	**(4)**	(4)
Gain on acquisition of subsidiary	**—**	(665)
Change in expected credit losses gross of recoveries and other credit impairment charges	**13,707**	17,249
Provisions	**369**	592
Share-based payment expense	**976**	837
Other non-cash items included in profit before tax	**(26,335)**	(2,366)
Elimination of exchange differences	**(3,505)**	45,970
Changes in operating assets and liabilities		
Change in net trading securities and derivatives	**(288,737)**	185,309
Change in loans and advances to banks and customers	**76,084**	76,805
Change in reverse repurchase agreements – non-trading	**55,259**	(166,542)
Change in financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**(51,239)**	50,565
Change in other assets	**(77,121)**	(70,588)
Change in deposits by banks and customer accounts	**130,580**	(144,875)
Change in repurchase agreements – non-trading	**170,891**	95,719
Change in debt securities in issue	**(13,164)**	33,545
Change in financial liabilities designated at fair value	**2,985**	26,028
Change in other liabilities	**149,791**	3,669
Dividends received from associates	**5,878**	6,003
Contributions paid to defined benefit plans	**(628)**	(345)
Tax paid	**(15,725)**	(11,463)
Net cash from operating activities	**278,060**	238,580
Purchase of financial investments	**(3,563,846)**	(3,278,568)
Proceeds from the sale and maturity of financial investments	**3,270,020**	3,140,253
Purchase of property, plant and equipment	**(2,176)**	(2,802)
Proceeds from sale of property, plant and equipment and assets held for sale	**36**	73
Proceeds from disposal of customer loan portfolios	**967**	1,449
Net investment in intangible assets	**(9,641)**	(11,771)
Net cash inflow from disposal of businesses and associate	**4,869**	—
Net cash outflow on purchase of subsidiaries	**—**	(4,166)
Net cash from investing activities	**(299,771)**	(155,532)
Issue of ordinary share capital and other equity instruments	**7,850**	15,617
Purchase of non-controlling interest	**(159)**	(1,548)
Redemption of other equity instruments	**(8,177)**	—
Subordinated loan capital issued[2]	**66,521**	81,014
Subordinated loan capital repaid[2]	**(74,277)**	(22,367)
Dividends paid to shareholders of the parent company and non-controlling interests	**(90,199)**	(37,666)
Net cash from financing activities	**(98,441)**	35,050
Net increase/(decrease) in cash and cash equivalents	**(120,152)**	118,098
Cash and cash equivalents at 1 Jan	**1,121,695**	1,055,084
Exchange differences in respect of cash and cash equivalents	**(4,905)**	(51,487)
Cash and cash equivalents at 31 Dec[3]	**996,638**	1,121,695
Cash and cash equivalents comprise		
– cash and balances at central banks	**232,987**	232,740
– items in the course of collection from other banks	**22,049**	28,557
– loans and advances to banks of one month or less	**355,725**	368,946
– net settlement accounts and cash collateral	**55,053**	58,473
– reverse repurchase agreements with banks of one month or less	**223,563**	286,100
– treasury bills, other bills and certificates of deposit less than three months	**134,797**	179,952
– less: items in the course of transmission to other banks	**(27,536)**	(33,073)
Cash and cash equivalents at 31 Dec[3]	**996,638**	1,121,695

Interest received was HK$294,111m (2022: HK$180,879m), interest paid was HK$157,280m (2022: HK$50,873m) and dividends received were HK$8,261m (2022: HK$6,971m).

1 *Comparatives have been restated reflecting the implementation of HKFRS 17. In addition, certain debt instruments have been voluntarily re-presented in the comparative year, between investing and operating activities, to better align with other HSBC Group entities. This re-presentation does not impact the net change in cash and cash equivalents during the reporting periods.*

2 *Changes in subordinated loan capital (including those issued to Group companies) during the year included amounts from issuance and repayments as presented above, and non-cash changes from foreign exchange loss of HK$216m in 2023 (2022: exchange loss of HK$1,991m) and fair value gain after hedging of HK$9,899m in 2023 (2022: HK$25,579m loss). These balances are presented under 'Amounts due to Group companies' in the consolidated balance sheet.*

3 *At 31 December 2023, HK$150,537m (2022: HK$161,252m) was not available for use by the group due to a range of restrictions, including currency exchange and other restrictions.*

Notes on the Consolidated Financial Statements

1 Basis of preparation and material accounting policies

1.1 Basis of preparation

(a) Compliance with Hong Kong Financial Reporting Standards

The consolidated financial statements of The Hongkong and Shanghai Banking Corporation Limited ('the Bank') and its subsidiaries (together 'the group') have been prepared in accordance with Hong Kong Financial Reporting Standards ('HKFRSs') as issued by the Hong Kong Institute of Certified Public Accountants ('HKICPA') and accounting principles generally accepted in Hong Kong. These consolidated financial statements also comply with the requirements of the Hong Kong Companies Ordinance (Cap. 622) which are applicable to the preparation of the financial statements.

Standards adopted during the year ended 31 December 2023

HKFRS 17 'Insurance Contracts'

On 1 January 2023, the group adopted the requirements of HKFRS 17 'Insurance Contracts' retrospectively with comparatives restated from the transition date, 1 January 2022. These include comparative data presented in the primary financial statements, Note 2 (a to g) 'Operating profit', Note 3 'Insurance business', Note 4 'Employee compensation and benefits', Note 5 'Tax', Note 8 'Derivatives', Note 9 'Financial assets designated and otherwise mandatorily measured at fair value through profit or loss', Note 10 'Loans and advances to customers', Note 11 'Financial investments', Note 13 'Investments in subsidiaries', Note 15 'Goodwill and intangible assets', Note 16 'Property, plant and equipment', Note 17 'Prepayments, accrued income and other assets', Note 22 'Accruals and deferred income, other liabilities and provisions', Note 26 'Maturity analysis of assets and liabilities', Note 27 'Analysis of cash flows payable under financial liabilities by remaining contractual maturities', Note 30 'Offsetting of financial assets and financial liabilities', Note 31 'Segmental analysis', Note 32 (a) 'Related party transactions', Note 33 'Fair values of financial instruments carried at fair value' and Note 34 'Fair values of financial instruments not carried at fair value'. At transition, the group's total equity reduced by HK$75,433m. For further details, see Note 38 'Effects of adoption of HKFRS 17'.

On adoption of HKFRS 17, balances based on HKFRS 4, including the present value of in-force long-term insurance business ('PVIF') asset in relation to the upfront recognition of future profits of in-force insurance contracts, were derecognised. Insurance contract liabilities have been remeasured under HKFRS 17 based on groups of insurance contracts, which include the fulfilment cash flows comprising the best estimate of the present value of the future cash flows (for example premiums and payouts for claims, benefits, and expenses), together with a risk adjustment for non-financial risk, as well as the contractual service margin ('CSM'). The CSM represents the unearned profits that will be released and systematically recognised in Insurance revenue as services are provided over the expected coverage period.

In addition, the group has made use of the option under the standard to re-designate certain eligible financial assets held to support insurance contract liabilities, which were predominantly measured at amortised cost, as financial assets measured at fair value through profit or loss, with comparatives restated from the transition date.

The key differences between HKFRS 4 and HKFRS 17 are summarised in the following table:

	HKFRS 4	HKFRS 17
Balance sheet	– Insurance contract liabilities for non-linked life insurance contracts are calculated by local actuarial principles. Liabilities under unit-linked life insurance contracts are at least equivalent to the surrender or transfer value, by reference to the value of the relevant underlying funds or indices. Grouping requirements follow local regulations. – An intangible asset for the PVIF is recognised, representing the upfront recognition of future profits associated with in-force insurance contracts.	– Insurance contract liabilities are measured for groups of insurance contracts at current value, comprising the fulfilment cash flows and the CSM. – The fulfilment cash flows comprise the best estimate of the present value of the future cash flows, together with a risk adjustment for non-financial risk. – The CSM represents the unearned profit.
Profit emergence / recognition	– The value of new business is reported as revenue on Day 1 as an increase in PVIF. – The impact of the majority of assumption changes is recognised immediately in the income statement. – Variances between actual and expected cash flows are recognised in the period they arise.	– The CSM is systematically recognised in revenue as services are provided over the expected coverage period of the group of contracts (i.e. no Day 1 profit). – Contracts are measured using the general measurement model ('GMM') or the variable fee approach ('VFA') model for insurance contracts with direct participation features upon meeting the eligibility criteria. Under the VFA model, the group's share of the investment experience and assumption changes are absorbed by the CSM and released over time to profit or loss. For contracts measured under GMM, the group's share of the investment volatility is recorded in profit or loss as it arises. – Losses from onerous contracts are recognised in the income statement immediately.
Investment return assumptions (discount rate)	– PVIF is calculated based on long-term investment return assumptions based on assets held. It therefore includes investment margins expected to be earned in future.	– Under the market consistent approach, expected future investment spreads are not included in the investment return assumption. Instead, the discount rate includes an illiquidity premium that reflects the nature of the associated insurance contract liabilities.
Expenses	– Total expenses to acquire and maintain the contract over its lifetime are included in the PVIF calculation. – Expenses are recognised across operating expenses and fee expense as incurred and the allowances for those expenses are released from the PVIF simultaneously.	– Projected lifetime expenses that are directly attributable costs are included in the insurance contract liabilities and recognised in the insurance service result. – Non-attributable costs are reported in operating expenses.

Transition

In applying HKFRS 17 for insurance contracts retrospectively, the full retrospective approach ('FRA') has been used unless it was impracticable. When the FRA is impracticable such as when there is a lack of sufficient and reliable data, an entity has an accounting policy choice to use either the modified retrospective approach ('MRA') or the fair value approach ('FVA'). The group has applied the FRA for new business from 2018 at the earliest, subject to practicability, and the FVA for contracts for which the FRA is impracticable.

Under the FVA, the valuation of insurance liabilities on transition is based on the applicable requirements of HKFRS 13 'Fair Value Measurement'. This requires consideration of the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). The CSM is calculated as the difference between what a market participant would demand for assuming the unexpired risk associated with insurance contracts, including required profit, and the fulfilment cash flows that are determined using HKFRS 17 principles.

In determining the fair value, the group considered the estimated profit margin that a market participant would demand in return for assuming the insurance liabilities with the consideration of the level of capital that a market participant would be required to hold, and the discount rate with an allowance for an illiquidity premium that takes into account the level of 'matching' between the group's assets and related liabilities. These assumptions were set taking into account the assumptions that a hypothetical market participant operating in each local jurisdiction would consider.

Amendments to HKAS 12 'International Tax Reform — Pillar Two Model Rules'

In July 2023, the HKICPA issued amendments to Hong Kong Accounting Standard ('HKAS') 12 'International Tax Reform – Pillar Two Model Rules', which became effective immediately. On 20 June 2023, legislation was substantively enacted in the UK (the jurisdiction of the group's ultimate parent entity) to introduce the Organisation for Economic Cooperation and Development ('OECD')'s Pillar Two global minimum tax rules and a UK qualified domestic minimum top-up tax, with effect from 1 January 2024. The Hong Kong Qualified Domestic Minimum Top-up Tax is expected to be effective from 1 January 2025. Information about the group's exposure to Pillar Two income taxes is described in Note 5.

There were no other new standards or amendments to standards that had an effect on these financial statements.

(b) Future accounting developments

Minor amendments to HKFRSs

The HKICPA has published a number of minor amendments to HKFRSs that are effective from 1 January 2024 and 1 January 2025. The group is continuing to assess the impact of *Lack of Exchangeability (Amendments to HKAS 21).* The group expects the remainder will have an insignificant effect, when adopted, on the consolidated financial statements.

(c) Foreign currencies

Items included in each of the group's entities are measured using the currency of the primary economic environment in which the entity operates (the 'functional currency'). The group's consolidated financial statements are presented in Hong Kong dollars.

Transactions in foreign currencies are recorded at the rate of exchange on the date of the transaction. Assets and liabilities denominated in foreign currencies are translated at the rate of exchange at the balance sheet date except non-monetary assets and liabilities measured at historical cost which are translated using the rate of exchange at the initial transaction date. Exchange differences are included in other comprehensive income ('OCI') or in the income statement depending on where the gain or loss on the underlying item is recognised.

In the consolidated financial statements, the assets, liabilities and results of foreign operations whose functional currency is not Hong Kong dollars are translated into the group's presentation currency at the rate of exchange at the balance sheet date, while their results are translated into Hong Kong dollars at the average rates of exchange for the reporting period. Exchange differences arising are recognised in OCI. On disposal of a foreign operation, exchange differences previously recognised in OCI are reclassified to the income statement.

(d) Presentation of information

Certain disclosures required by HKFRSs have been included in the sections marked as ('Audited') in this Annual Report and Accounts as follows:

– Consolidated income statement and balance sheet data by reportable segments are included in the 'Financial Review' on page 19 as specified as 'Audited'.
– Disclosures concerning the nature and extent of risks relating to banking and insurance activities are included in the 'Risk' section on pages 35 to 66 and pages 72 to 76 as specified as 'Audited'.
– Capital disclosures are included in the 'Treasury Risk' section on pages 58 to 59 as specified as 'Audited'.

In accordance with the group's policy to provide disclosures that help stakeholders understand the group's performance, financial position and changes to them, the information provided in the Risk section goes beyond the minimum levels required by accounting standards, statutory and regulatory requirements. In addition, the group assesses good practice recommendations issued from time to time by relevant regulators and standard setters and will assess the applicability and relevance of such guidance, enhancing disclosures where appropriate.

(e) Critical estimates and judgements

The preparation of financial information requires the use of estimates and judgements about future conditions. In view of the inherent uncertainties and the high level of subjectivity involved in the recognition or measurement of items highlighted as the critical estimates and judgements in Note 1.2 below, it is possible that the outcomes in the next financial year could differ from those on which management's estimates are based. This could result in materially different estimates and judgements from those reached by management for the purposes of the consolidated financial statements. Management's selection of the group's accounting policies that contain critical estimates and judgements reflects the materiality of the items to which the policies are applied and the high degree of judgement and estimation uncertainty involved.

Management has considered the impact of climate-related risks on the group's financial position and performance. While the effects of climate change are a source of uncertainty, as at 31 December 2023 management did not consider there to be a material impact on our critical judgements and estimates from the physical, transition and other climate-related risks in the short to medium term. In particular, management has considered the known and observable potential impacts of climate-related risks of associated judgements and estimates in our value in use ('VIU') calculations.

(f) Going concern

The consolidated financial statements are prepared on a going concern basis, as the Directors are satisfied that the group has the resources to continue in business for the foreseeable future. In making this assessment, the Directors have considered a wide range of information relating to present and future conditions, including future projections of profitability, cash flows, capital requirements and capital resources.

These considerations include stressed scenarios that reflect the uncertainty in the macroeconomic environment following disrupted supply chains, slower economic activity and ongoing geopolitical tensions. They also considered other top and emerging risks, including climate change, as well as the related impacts on profitability, capital and liquidity.

1.2 Summary of material accounting policies

(a) Consolidation and related policies

Investments in subsidiaries

Where an entity is governed by voting rights, the group consolidates when it holds, directly or indirectly, the necessary voting rights to pass resolutions by the governing body. In all other cases, the assessment of control is more complex and requires judgement of other factors, including having exposure to variability of returns, power to direct relevant activities and whether power is held as agent or principal.

Business combinations are accounted for using the acquisition method. The amount of non-controlling interest is measured either at fair value or at the non-controlling interest's proportionate share of the acquiree's identifiable net assets. This election is made for each business combination.

The Bank's investments in subsidiaries are stated at cost less impairment losses.

Goodwill

Goodwill is allocated to cash-generating units ('CGU') for the purpose of impairment testing, which is undertaken at the lowest level at which goodwill is monitored for internal management purposes. Impairment testing is performed at least once a year, or whenever there is an indication of impairment, by comparing the recoverable amount of a CGU with its carrying amount.

Interests in associates

The group classifies investments in entities over which it has significant influence, and that are neither subsidiaries nor joint arrangements, as associates.

Investments in associates are recognised using the equity method. The attributable share of the results and reserves of associates is included in the consolidated financial statements of the group based on either financial statements made up to 31 December or amounts adjusted for any material transactions or events occurring between the date the financial statements are available and 31 December.

Investments in associates are assessed at each reporting date and tested for impairment when there is an indication that the investment may be impaired, by comparing the recoverable amount of the relevant investment to its carrying amount. Goodwill on acquisitions of interests in associates is not tested separately for impairment, but is assessed as part of the carrying amount of the investment. Previously recognised impairments are assessed for reversal when there are indicators that they may no longer exist or have decreased. Any reversal, which may arise only from changes in estimates used to determine the prior impairment loss, is recognised to the extent that it does not increase the carrying amount above that had no impairment loss been previously recognised.

Critical estimates and judgements

The most significant critical estimates relate to the assessment of impairment of our investment in Bank of Communications Co., Limited ('BoCom'), which involves estimations of value in use.

Judgements	Estimates
	– The value in use calculation uses discounted cash flow projections based on management's best estimates of future earnings available to ordinary shareholders prepared in accordance with HKAS 36. – Key assumptions are used in estimating BoCom's value in use and the sensitivity of the value in use calculations to different assumptions are described in Note 14.

(b) Income and expense

Operating income

Interest income and expense

Interest income and expense for all financial instruments, excluding those classified as held for trading or designated at fair value, are recognised in 'Interest income' and 'Interest expense' in the income statement using the effective interest method. However, as an exception to this, interest on debt instruments issued by the group for funding purposes that are designated under the fair value option to reduce an accounting mismatch and on derivatives managed in conjunction with those debt instruments is included in interest expense.

Interest on credit-impaired financial assets is recognised by applying the effective interest rate to the amortised cost (i.e. gross carrying amount of the asset less allowance for expected credit losses ('ECL')).

Non-interest income and expense

The group generates fee income from services provided over time, such as account service and card fees, or when the group delivers a specific transaction at a point in time such as broking services and import/export services. With the exception of certain fund management and performance fees, all other fees are generated at a fixed price. Fund management and performance fees can be variable depending on the size of the customer portfolio and the group's performance as fund manager. Variable fees are recognised when all uncertainties are resolved. Fee income is generally earned from short term contracts with payment terms that do not include a significant financing component.

The group acts as principal in the majority of contracts with customers, with the exception of broking services. For brokerage trades where the group acts as an agent in the transaction it recognises broking income net of fees payable to other parties in the arrangement.

The group recognises fees earned on transaction-based arrangements at a point in time when it has fully provided the service to the customer. Where the contract requires services to be provided over time, income is recognised on a systematic basis over the life of the agreement.

Where the group offers a package of services that contains multiple non-distinct performance obligations, such as those included in account service packages, the promised services are treated as a single performance obligation. If a package of services contains distinct performance obligations, the corresponding transaction price is allocated to each performance obligation based on the estimated stand-alone selling prices.

Dividend income is recognised when the right to receive payment is established. This is the ex-dividend date for listed equity securities, and usually the date when shareholders approve the dividend for unlisted equity securities.

Net income/(expense) from financial instruments measured at fair value through profit or loss includes the following:

- 'Net income from financial instruments held for trading or managed on a fair value basis': This comprises net trading income, which includes all gains and losses from changes in the fair value of financial assets and financial liabilities held for trading and other financial instruments managed on a fair value basis, together with the related interest income, expense and dividends, excluding the effect of changes in the credit risk of liabilities managed on a fair value basis. It also includes all gains and losses from changes in the fair value of derivatives that are managed in conjunction with financial assets and liabilities measured at fair value through profit or loss.
- 'Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss': This includes all gains and losses from changes in the fair value, together with related interest income, expense and dividends in respect of financial assets and liabilities measured at fair value through profit or loss, and those derivatives managed in conjunction with the above that can be separately identifiable from other trading derivatives.
- 'Changes in fair value of designated debt instruments and related derivatives': Interest paid on debt instruments and interest cash flows on related derivatives is presented in interest expense where doing so reduces an accounting mismatch.
- 'Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss': This includes interest on instruments that fail the solely payments of principal and interest ('SPPI') test. See (d) below.

The accounting policies for insurance service result and insurance finance income/(expenses) are disclosed in Note 1.2(j).

(c) Valuation of financial instruments

All financial instruments are initially recognised at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value of a financial instrument on initial recognition is generally its transaction price (that is, the fair value of the consideration given or received). However, if there is a difference between the transaction price and the fair value of financial instruments whose fair value is based on a quoted price in an active market or a valuation technique that uses only data from observable markets, the group recognises the difference as a trading gain or loss at inception ('a day 1 gain or loss'). In all other cases, the entire day 1 gain or loss is deferred and recognised in the income statement over the life of the transaction until the transaction matures, is closed out, the valuation inputs become observable or the group enters into an offsetting transaction.

The fair value of financial instruments is generally measured on an individual basis. However, in cases where the group manages a group of financial assets and liabilities according to its net market or credit risk exposure, the fair value of the group of financial instruments is measured on a net basis but the underlying financial assets and liabilities are presented separately in the consolidated financial statements, unless they satisfy the HKFRSs offsetting criteria.

Critical estimates and judgements

The majority of valuation techniques employ only observable market data, which is assumed to include the potential effects of a variety of factors including climate-related risks. However, certain financial instruments are classified on the basis of valuation techniques that feature one or more significant market inputs that are unobservable, and for them, the measurement of fair value is more judgemental.

Judgements	Estimates
– An instrument in its entirety is classified as valued using significant unobservable inputs if, in the opinion of management, a significant proportion of the instrument's inception profit or greater than 5% of the instrument's valuation is driven by unobservable inputs. – 'Unobservable' in this context means that there is little or no current market data available from which to determine the price at which an arm's length transaction would be likely to occur. It generally does not mean that there is no data available at all upon which to base a determination of fair value (consensus pricing data may, for example, be used).	– Details on the group's level 3 financial instruments and the sensitivity of their valuation to the effect of applying reasonably possible alternative assumptions in determining their fair value are set out in Note 33.

(d) Financial instruments measured at amortised cost

Financial assets that are held to collect the contractual cash flows and which contain contractual terms that give rise on specified dates to cash flows that are solely payments of principal and interest are measured at amortised cost. Such financial assets include most loans and advances to banks and customers and some debt securities. In addition, most financial liabilities are measured at amortised cost. The group accounts for regular way amortised cost financial instruments using trade date accounting. The carrying amount of these financial assets at initial recognition includes any directly attributable transactions costs.

The group may commit to underwriting loans on fixed contractual terms for specified periods of time. When the loan arising from the lending commitment is expected to be sold shortly after origination, the commitment to lend is recorded as a derivative. When the group intends to hold the loan, the loan commitment is included in the impairment calculations set out below.

Non-trading reverse repurchase, repurchase and similar agreements

When debt securities are sold subject to a commitment to repurchase them at a predetermined price ('repos'), they remain on the balance sheet and a liability is recorded in respect of the consideration received. Securities purchased under commitments to resell ('reverse repos') are not recognised on the balance sheet and an asset is recorded in respect of the initial consideration paid. Non-trading repos and reverse repos are measured at amortised cost. The difference between the sale and repurchase price, or between the purchase and resale price, is treated as interest and recognised in net interest income over the life of the agreement.

Contracts that are economically equivalent to reverse repo or repo agreements (such as sales or purchases of debt securities entered into together with total return swaps with the same counterparty) are accounted for similarly to, and presented together with, reverse repo or repo agreements.

(e) Financial assets measured at fair value through other comprehensive income ('FVOCI')

Financial assets managed within a business model that is achieved by both collecting contractual cash flows and selling and which contain contractual terms that give rise on specified dates to cash flows that are solely payments of principal and interest are measured at FVOCI. These comprise primarily debt securities. They are recognised on trade date when the group enters into contractual arrangements to purchase and are generally derecognised when they are either sold or redeemed. They are subsequently remeasured at fair value with changes therein (except for those relating to impairment, interest income and foreign currency exchange gains and losses) recognised in OCI until the assets are sold. Upon disposal, the cumulative gains or losses in OCI are recognised in the income statement as 'Gains less losses from financial instruments'. Financial assets measured at FVOCI are included in the impairment calculations set out below and impairment is recognised in the income statement.

(f) Equity securities measured at fair value with fair value movements presented in OCI

The equity securities for which fair value movements are shown in OCI are business facilitation and other similar investments where the group holds the investments other than to generate a capital return. Dividends from such investments are recognised in the income statement. Gains or losses on the derecognition of these equity securities are not transferred to the income statement. Otherwise, equity securities are measured at fair value through profit or loss.

(g) Financial instruments designated at fair value through profit or loss

Financial instruments, other than those held for trading, are classified in this category if they meet one or more of the criteria set out below and are so designated irrevocably at inception:

- The use of the designation removes or significantly reduces an accounting mismatch.
- A group of financial assets and liabilities or a group of financial liabilities is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy.
- The financial liability contains one or more non-closely related embedded derivatives.

Designated financial assets are recognised when the group enters into contracts with counterparties, which is generally on trade date, and are normally derecognised when the rights to the cash flows expire or are transferred. Designated financial liabilities are recognised when the group enters into contracts with counterparties, which is generally on settlement date, and are normally derecognised when extinguished. Subsequent changes in fair values are recognised in the income statement in 'Net income from financial instruments held for trading or managed on a fair value basis' or 'Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss' or 'Changes in fair value of designated debt and related derivatives' except for the effect of changes in the liabilities' credit risk which is presented in OCI, unless that treatment would create or enlarge an accounting mismatch in profit or loss.

Under the above criteria, the main classes of financial instruments designated by the group are:

- Debt instruments for funding purposes that are designated to reduce an accounting mismatch: The interest and/or foreign exchange exposure on certain fixed rate debt securities issued has been matched with the interest and/or foreign exchange exposure on certain swaps as part of a documented risk management strategy.
- Financial assets and financial liabilities under unit-linked and non-linked investment contracts: A contract under which the group does not accept significant insurance risk from another party is not classified as an insurance contract, other than investment contracts with discretionary participation features ('DPF'), but is accounted for as a financial liability. Customer liabilities under linked and certain non-linked investment contracts issued by insurance subsidiaries are determined based on the fair value of the assets held in the linked funds or by a valuation method. The related financial assets and liabilities are managed and reported to management on a fair value basis. Designation at fair value of the financial assets and related liabilities allows changes in fair values to be recorded in the income statement and presented in the same line.
- Financial liabilities that contain both deposit and derivative components: These financial liabilities are managed and their performance evaluated on a fair value basis.

(h) Derivatives

Derivatives are financial instruments that derive their value from the price of underlying items such as equities, interest rates or other indices. Derivatives are recognised initially and are subsequently measured at fair value through profit or loss. Derivatives are classified as assets when their fair value is positive or as liabilities when their fair value is negative. This includes embedded derivatives in financial liabilities which are bifurcated from the host contract when they meet the definition of a derivative on a stand-alone basis.

Where the derivatives are managed with debt securities issued by the group that are designated at fair value where doing so reduces an accounting mismatch, the contractual interest is shown in 'Interest expense' together with the interest payable on the issued debt.

Hedge accounting

When derivatives are not part of fair value designated relationships, if held for risk management purposes they are designated in hedge accounting relationships where the required criteria for documentation and hedge effectiveness are met. The group uses these derivatives or, where allowed, other non-derivative hedging instruments in fair value hedges, cash flow hedges or hedges of net investments in foreign operations as appropriate to the risk being hedged.

Fair value hedge

Fair value hedge accounting does not change the recording of gains and losses on derivatives and other hedging instruments, but results in recognising changes in the fair value of the hedged assets or liabilities attributable to the hedged risk that would not otherwise be recognised in the income statement. If a hedge relationship no longer meets the criteria for hedge accounting, hedge accounting is discontinued and the cumulative adjustment to the carrying amount of the hedged item is amortised to the income statement on a recalculated effective interest rate, unless the hedged item has been derecognised, in which case it is recognised in the income statement immediately.

Cash flow hedge

The effective portion of gains and losses on hedging instruments is recognised in OCI and the ineffective portion of the change in fair value of derivative hedging instruments that are part of a cash flow hedge relationship is recognised immediately in the income statement within 'Net income from financial instruments held for trading or managed on a fair value basis'. The accumulated gains and losses recognised in OCI are reclassified to the income statement in the same periods in which the hedged item affects profit or loss. When a hedge relationship is discontinued, or partially discontinued, any cumulative gain or loss recognised in OCI remains in equity until the forecast transaction is recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss previously recognised in OCI is immediately reclassified to the income statement.

Derivatives that do not qualify for hedge accounting

Non-qualifying hedges are derivatives entered into as economic hedges of assets and liabilities for which hedge accounting was not applied.

(i) Impairment of amortised cost and FVOCI financial assets

Expected credit losses are recognised for loans and advances to banks and customers, non-trading reverse repurchase agreements, other financial assets held at amortised cost, debt instruments measured at FVOCI, and certain loan commitments and financial guarantee contracts. At initial recognition, an allowance (or provision in the case of some loan commitments and financial guarantees) is recognised for ECL resulting from possible default events within the next 12 months or less, where the remaining life is less than 12 months ('12-month ECL'). In the event of a significant increase in credit risk, an allowance (or provision) is recognised for ECL resulting from all possible default events over the expected life of the financial instrument ('lifetime ECL'). Financial assets where 12-month ECL is recognised are considered to be 'stage 1'; financial assets which are considered to have experienced a significant increase in credit risk are in 'stage 2'; and financial assets for which there is objective evidence of impairment, and so are considered to be in default or otherwise credit-impaired are in 'stage 3'. Purchased or originated credit-impaired financial assets ('POCI') are treated differently as set out below.

Credit-impaired (stage 3)

The group determines that a financial instrument is credit-impaired and in stage 3 by considering relevant objective evidence, primarily whether contractual payments of either principal or interest are past due for more than 90 days, there are other indications that the borrower is unlikely to pay such as that a concession has been granted to the borrower for economic or legal reasons relating to the borrower's financial condition, or the loan is otherwise considered to be in default.

If such unlikeliness to pay is not identified at an earlier stage, it is deemed to occur when an exposure is 90 days past due. Therefore, the definitions of credit-impaired and default are aligned as far as possible so that stage 3 represents all loans that are considered defaulted or otherwise credit-impaired.

Interest income is recognised by applying the effective interest rate to the amortised cost (i.e. gross carrying amount less allowance for ECL).

Write-off

Financial assets (and the related impairment allowances) are normally written off, either partially or in full, when there is no realistic prospect of recovery. Where loans are secured, this is generally after receipt of any proceeds from the realisation of security. In circumstances where the net realisable value of any collateral has been determined and there is no reasonable expectation of further recovery, write-off may be earlier.

Forbearance

Loans are identified as forborne and classified as either performing or non-performing when the group modifies the contractual terms due to financial difficulty of the borrower. Non-performing forborne loans are stage 3 and classified as non-performing until they meet the cure criteria, as specified by applicable credit risk policy (for example, when the loan is no longer in default and no other indicators of default have been present for at least 12 months). Any amount written off as a result of any modification of contractual terms upon entering forbearance would not be reversed.

The group applies the EBA Guidelines on the application of definition of default for our retail portfolios, which affect credit risk policies and our reporting in respect of the status of loans as credit impaired principally due to forbearance (or curing thereof). Further details are provided under 'Forborne loans and advances' on page 37.

Performing forborne loans are initially stage 2 and remain classified as forborne until they meet applicable cure criteria (for example, they continue to not be in default and no other indicators of default are present for a period of at least 24 months). At this point, the loan is either stage 1 or stage 2 as determined by comparing the risk of a default occurring at the reporting date (based on the modified contractual terms) and the risk of a default occurring at initial recognition (based on the original, unmodified contractual terms).

A forborne loan is derecognised if the existing agreement is cancelled and a new agreement is made on substantially different terms, or if the terms of an existing agreement are modified such that the forborne loan is a substantially different financial instrument. Any new loans that arise following derecognition events in these circumstances would generally be classified as POCI and will continue to be disclosed as forborne.

Loan modifications other than forborne loans

Loan modifications that are not identified as forborne are considered to be commercial restructurings. Where a commercial restructuring results in a modification (whether legalised through an amendment to the existing terms or the issuance of a new loan contract) such that the group's rights to the cash flows under the original contract have expired, the old loan is derecognised and the new loan is recognised at fair value. The rights to cash flows are generally considered to have expired if the commercial restructure is at market rates and no payment-related concession has been provided. Modifications of certain higher credit risk wholesale loans are assessed for derecognition having regard to changes in contractual terms that either individually or in combination are judged to result in a substantially different financial instrument. Mandatory and general offer loan modifications that are not borrower specific, for example market-wide customer relief programmes, generally do not result in derecognition, but their stage allocation is determined considering all available and supportable information under our ECL impairment policy. Changes made to these financial instruments that are economically equivalent and required by interest rate benchmark reform do not result in the derecognition or a change in the carrying amount of the financial instrument, but instead require the effective interest rate to be updated to reflect the change of the interest rate benchmark.

Significant increase in credit risk (stage 2)

An assessment of whether credit risk has increased significantly since initial recognition is performed at each reporting period by considering the change in the risk of default occurring over the remaining life of the financial instrument. The assessment explicitly or implicitly compares the risk of default occurring at the reporting date compared with that at initial recognition, taking into account reasonable and supportable information, including information about past events, current conditions and future economic conditions. The assessment is unbiased, probability-weighted, and to the extent relevant, uses forward-looking information consistent with that used in the measurement of ECL. The analysis of credit risk is multifactor. The determination of whether a specific factor is relevant and its weight compared with other factors depends on the type of product, the characteristics of the financial instrument and the borrower, and the geographical region. Therefore, it is not possible to provide a single set of criteria that will determine what is considered to be a significant increase in credit risk and these criteria will differ for different types of lending, particularly between retail and wholesale.

However, unless identified at an earlier stage, all financial assets are deemed to have suffered a significant increase in credit risk when 30 days past due. In addition, wholesale loans that are individually assessed, which are typically corporate and commercial customers, and included on a watch or worry list are included in stage 2.

For wholesale portfolios, the quantitative comparison assesses default risk using a lifetime probability of default ('PD') which encompasses a wide range of information including the obligor's customer risk rating ('CRR'), macroeconomic condition forecasts and credit transition probabilities. For origination CRRs up to 3.3, significant increase in credit risk is measured by comparing the average PD for the remaining term estimated at origination with the equivalent estimation at the reporting date.

The quantitative measure of significance varies depending on the credit quality at origination as follows:

Origination CRR	Significance trigger – PD to increase by
0.1–1.2	15bps
2.1– 3.3	30bps

For CRRs greater than 3.3 that are not impaired, a significant increase in credit risk is considered to have occurred when the origination PD has doubled. The significance of changes in PD was informed by expert credit risk judgement, referenced to historical credit migrations and to relative changes in external market rates.

For loans originated prior to the implementation of HKFRS 9, the origination PD does not include adjustments to reflect expectations of future macroeconomic conditions since these are not available without the use of hindsight. In the absence of this data, origination PD must be approximated assuming through-the-cycle PDs and through-the-cycle migration probabilities, consistent with the instrument's underlying modelling approach and the CRR at origination. For these loans, the quantitative comparison is supplemented with additional CRR deterioration based thresholds as set out in the table below:

Origination CRR	Additional significance criteria – number of CRR grade notches deterioration required to identify as significant credit deterioration (stage 2) (> or equal to)
0.1	5 notches
1.1– 4.2	4 notches
4.3 – 5.1	3 notches
5.2 – 7.1	2 notches
7.2 – 8.2	1 notch
8.3	0 notch

Further information about the 23-grade scale used for CRR can be found on page 36.

For retail portfolios, default risk is assessed using a reporting date 12-month PD derived from credit scores, which incorporate all available information about the customer. This PD is adjusted for the effect of macroeconomic forecasts for periods longer than 12 months and is considered to be a reasonable approximation of a lifetime PD measure. Retail exposures are first segmented into homogenous portfolios, generally by country, product and brand. Within each portfolio, the stage 2 accounts are defined as accounts with an adjusted 12-month PD greater than the average 12-month PD of loans in that portfolio 12 months before they become 30 days past due. The expert credit risk judgement is that no prior increase in credit risk is significant. This portfolio-specific threshold therefore identifies loans with a PD higher than would be expected from loans that are performing as originally expected and higher than that which would have been acceptable at origination. It therefore approximates a comparison of origination to reporting date PDs.

As additional data becomes available, the retail transfer criteria approach continues to be refined to utilise a more relative approach for certain portfolios. These enhancements take advantage of the increase in origination related data in the assessment of significant increases in credit risk by comparing remaining lifetime PD to the comparable remaining term lifetime PD at origination based on portfolio-specific origination segments.

Unimpaired and without significant increase in credit risk – (stage 1)

ECL resulting from default events that are possible within the next 12 months is recognised for financial instruments that remain in stage 1.

Purchased or originated credit-impaired ('POCI')

Financial assets that are purchased or originated at a deep discount that reflects the incurred credit losses are considered to be POCI. This population includes new financial instruments recognised in most cases following the derecognition of forborne loans. The amount of change in lifetime ECL for a POCI loan is recognised in profit or loss until the POCI loan is derecognised, even if the lifetime ECL are less than the amount of ECL included in the estimated cash flows on initial recognition.

Movement between stages

Financial assets can be transferred between the different categories (other than POCI) depending on their relative increase in credit risk since initial recognition. Financial instruments are transferred out of stage 2 if their credit risk is no longer considered to be significantly increased since initial recognition based on the assessments described above. In the case of non-performing forborne loans, such financial instruments are transferred out of stage 3 when they no longer exhibit any evidence of credit impairment and meet the curing criteria as described above.

Measurement of ECL

The assessment of credit risk, and the estimation of ECL, are unbiased and probability-weighted, and incorporate all available information which is relevant to the assessment including information about past events, current conditions and reasonable and supportable forecasts of future events and economic conditions at the reporting date. In addition, the estimation of ECL should take into account the time value of money and considers other factors such as climate-related risks.

In general, the group calculates ECL using three main components, a PD, a loss given default ('LGD') and the exposure at default ('EAD').

The 12-month ECL is calculated by multiplying the 12-month PD, LGD, and EAD. Lifetime ECL is calculated using the lifetime PD instead. The 12-month and lifetime PDs represent the probability of default occurring over the next 12 months and the remaining maturity of the instrument respectively.

The EAD represents the expected balance at default, taking into account the repayment of principal and interest from the balance sheet date to the default event together with any expected drawdowns of committed facilities. The LGD represents expected losses on the EAD given the event of default, taking into account, among other attributes, the mitigating effect of collateral value at the time it is expected to be realised and the time value of money.

The group makes use of the regulatory internal ratings-based ('IRB') framework where possible, with recalibration to meet the differing HKFRS 9 requirements as set out in the following table:

Model	Regulatory capital	HKFRS 9
PD	– Through the cycle (represents long-run average PD throughout a full economic cycle). – The definition of default includes a backstop of 90+ days past due.	– Point in time (based on current conditions, adjusted to take into account estimates of future conditions that will impact PD). – Default backstop of 90+ days past due for all portfolios.
EAD	– Cannot be lower than current balance.	– Amortisation captured for term products.
LGD	– Downturn LGD (consistent losses expected to be suffered during a severe but plausible economic downturn). – Regulatory floors may apply to mitigate risk of underestimating downturn LGD due to lack of historical data. – Discounted using cost of capital. – All collection costs included.	– Expected LGD (based on estimate of loss given default including the expected impact of future economic conditions such as changes in value of collateral). – No floors. – Discounted using the original effective interest rate of the loan. – Only costs associated with obtaining/selling collateral included.
Other		– Discounted back from point of default to balance sheet date.

While 12-month PDs are recalibrated from Basel models where possible, the lifetime PDs are determined by projecting the 12-month PD using a term structure. For the wholesale methodology, the lifetime PD also takes into account credit migration, i.e. a customer migrating through the CRR bands over its life.

The ECL for wholesale stage 3 is determined primarily on an individual basis using a discounted cash flow ('DCF') methodology. The expected future cash flows are based on estimates as of the reporting date, reflecting reasonable and supportable assumptions and projections of future recoveries and expected future receipts of interest.

Collateral is taken into account if it is likely that the recovery of the outstanding amount will include realisation of collateral based on its estimated fair value of collateral at the time of expected realisation, less costs for obtaining and selling the collateral.

The cash flows are discounted at a reasonable approximation of the original effective interest rate. For significant cases, cash flows under up to four different scenarios are probability-weighted by reference to the status of the borrower, economic scenarios applied more generally by the group and judgement in relation to the likelihood of the work-out strategy succeeding or receivership being required. For less significant cases where an individual assessment is undertaken, the effect of different economic scenarios and work-out strategies results in an ECL calculation based on a most likely outcome which is adjusted to capture losses resulting from less likely but possible outcomes. For certain less significant cases, the group may use a LGD-based modelled approach to ECL assessment, which factors in a range of economic scenarios.

Period over which ECL is measured

ECL is measured from the initial recognition of the financial asset. The maximum period considered when measuring ECL (be it 12-month or lifetime ECL) is the maximum contractual period over which the group is exposed to credit risk. However, where the financial instrument includes both a drawn and undrawn commitment and the contractual ability to demand repayment and cancel the undrawn commitment does not serve to limit the group's exposure to credit risk to the contractual notice period, the contractual period does not determine the maximum period considered. Instead, ECL is measured over the period the group remains exposed to credit risk that is not mitigated by credit risk management actions. This applies to retail overdrafts and credit cards, where the period is the average time taken for stage 2 exposures to default or close as performing accounts, determined on a portfolio basis and ranging from between two and six years. In addition, for these facilities it is not possible to identify the ECL on the loan commitment component separately from the financial asset component. As a result, the total ECL is recognised in the loss allowance for the financial asset unless the total ECL exceeds the gross carrying amount of the financial asset, in which case the ECL is recognised as a provision. For wholesale overdraft facilities, credit risk management actions are taken no less frequently than on an annual basis.

Forward-looking economic inputs

The group applies multiple forward-looking global economic scenarios determined with reference to external forecast distributions representative of its view of forecast economic conditions. This approach is considered sufficient to calculate unbiased expected credit losses in most economic environments. In certain economic environments, additional analysis may be necessary and may result in additional scenarios or adjustments, to reflect a range of possible economic outcomes sufficient for an unbiased estimate. The detailed methodology is disclosed in 'Measurement uncertainty and sensitivity analysis of ECL estimates' on pages 42 to 46.

Critical estimates and judgements

The calculation of the group's ECL under HKFRS 9 requires the group to make a number of judgements, assumptions and estimates. The most significant are set out below:

Judgements	Estimates
– Defining what is considered to be a significant increase in credit risk. – Determining the lifetime and point of initial recognition of overdrafts and credit cards. – Selecting and calibrating the PD, LGD and EAD models, which support the calculations, including making reasonable and supportable judgements about how models react to current and future economic conditions. – Selecting model inputs and economic forecasts, including determining whether sufficient and appropriately weighted economic forecasts are incorporated to calculate unbiased expected credit losses. – Making management adjustments to account for late breaking events, model and data limitations and deficiencies, and expert credit judgements. – Selecting applicable recovery strategies for certain wholesale credit-impaired loans.	– The section 'Measurement uncertainty and sensitivity analysis of ECL estimates' marked as audited from pages 42 to 46, set out the assumptions used in determining ECL and provides an indication of the sensitivity of the result to the application of different weightings being applied to different economic assumptions.

(j) Insurance contracts

A contract is classified as an insurance contract where the group accepts significant insurance risk from another party by agreeing to compensate that party if it is adversely affected by a specified uncertain future event. An insurance contract may also transfer financial risk, but is accounted for as an insurance contract if the insurance risk is significant. In addition, the group issues investment contracts with DPF, which are also accounted under HKFRS 17 'Insurance Contracts'.

Aggregation of insurance contracts

Individual insurance contracts that are managed together and subject to similar risks are identified as a portfolio. Contracts that are managed together usually belong to the same product group, and have similar characteristics such as being subject to a similar pricing framework or similar product management, and are issued by the same legal entity. If a contract is exposed to more than one risk, the dominant risk of the contract is used to assess whether the contract features similar risks. Each portfolio is further separated by the contract's expected profitability. The portfolios are split by their profitability into: (i) contracts that are onerous at initial recognition; (ii) contracts that at initial recognition have no significant possibility of becoming onerous subsequently; and (iii) the remaining contracts. These profitability groups are then divided by issue date, with contracts the group issues after the transition date being grouped into calendar quarter cohorts. For multi-currency groups of contracts, the group considers its groups of contracts as being denominated in a single currency.

The measurement of the insurance contract liability is based on groups of insurance contracts as established at initial recognition, and will include fulfilment cash flows as well as the CSM representing the unearned profit. The group has elected to update the estimates used in the measurement on a year-to-date basis.

Fulfilment cash flows

The fulfilment cash flows comprise the following:

Best estimates of future cash flows

The cash flows within the contract boundary of each contract in the group include amounts expected to be collected from premiums and payouts for claims, benefits and expenses, and are projected using a range of scenarios and assumptions in an unbiased way based on the group's demographic and operating experience along with external mortality data where the group's own experience data is not sufficiently large in size to be credible.

Adjustment for the time value of money and financial risks associated with the future cash flows

The estimates of future cash flows are adjusted to reflect the time value of money (i.e. discounting) and the financial risks to derive an expected present value. The group generally makes use of stochastic modelling techniques in the estimation for products with options and guarantees.

A bottom-up approach is used to determine the discount rate to be applied to a given set of expected future cash flows. This is derived as the sum of the risk-free yield and an illiquidity premium. The risk-free yield is determined based on observable market data, where such markets are considered to be deep, liquid and transparent. When information is not available, management judgement is applied to determine the appropriate risk-free yield. Illiquidity premiums reflect the liquidity characteristics of the associated insurance contracts.

Risk adjustment for non-financial risk

The risk adjustment reflects the compensation required for bearing the uncertainty about the amount and timing of future cash flows that arises from non-financial risk. It is calculated as a 75th percentile level of stress over a one-year period. The level of the stress is determined with reference to external regulatory stresses and internal economic capital stresses.

For the main insurance manufacturing entity in the group, the one-year 75th percentile level of stress corresponds to 60th percentile (2022: 59th percentile) based on an ultimate view of risk over all future years.

The group does not disaggregate changes in the risk adjustment between insurance service result (comprising insurance revenue and insurance service expense) and insurance finance income or expenses. All changes are included in the insurance service result.

Measurement models

The variable fee approach ('VFA') measurement model is used for most of the contracts issued by the group, which is mandatory upon meeting the following eligibility criteria at inception:

a. the contractual terms specify that the policyholder participates in a share of a clearly identified pool of underlying items;

b. the group expects to pay to the policyholder a substantial share of the fair value returns on the underlying items. The group considers that a substantial share is a majority of returns; and

c. the group expects a substantial proportion of any change in the amounts to be paid to the policyholder to vary with the change in fair value of the underlying items. The group considers that a substantial proportion is a majority proportion of change on a present value probability-weighted average of all scenarios.

The risk mitigation option is used for a number of economic offsets against the instruments that meet specific requirements.

The remaining contracts issued and the reinsurance contracts held are accounted for under the general measurement model ('GMM').

CSM and coverage units

The CSM represents the unearned profit and results in no income or expense at initial recognition when the group of contracts is profitable. The CSM is adjusted at each subsequent reporting period for changes in fulfilment cash flows relating to future service (e.g. changes in non-economic assumptions, including mortality and morbidity rates). For initial recognition of onerous groups of contracts and when groups of contracts become onerous subsequently, losses are recognised in insurance service expense immediately.

For groups of contracts measured using the VFA, changes in the group's share of the underlying items, and economic experience and economic assumption changes adjust the CSM, whereas these changes do not adjust the CSM under the GMM, but are recognised in profit or loss as they arise. However, under the risk mitigation option for VFA contracts, the changes in the fulfilment cash flows and the changes in the group's share in the fair value return on underlying items that the instruments mitigate are not adjusted in CSM but recognised in profit or loss. The risk mitigating instruments are primarily reinsurance contracts held.

The CSM is systematically recognised in insurance revenue to reflect the insurance contract services provided, based on the coverage units of the group of contracts. Coverage units are determined by the quantity of benefits and the expected coverage period of the contracts.

The group identifies the quantity of the benefits provided as follows:

- Insurance coverage: This is based on the expected net policyholder insurance benefit at each period after allowance for decrements, where net policyholder insurance benefit refers to the amount of sum assured less the fund value or surrender value.
- Investment services (including both investment-return service and investment-related service): This is based on a constant measure basis which reflects the provision of access for the policyholder to the facility.

For contracts that provide both insurance coverage and investment services, coverage units are weighted according to the expected present value of the future cash outflows for each service.

Insurance service result

Insurance revenue reflects the consideration to which the group expects to be entitled in exchange for the provision of coverage and other insurance contract services (excluding any investment components). Insurance service expenses comprise the incurred claims and other incurred insurance service expenses (excluding any investment components), and losses on onerous groups of contracts and reversals of such losses.

Insurance finance income and expenses

Insurance finance income or expenses comprise the change in the carrying amount of the group of insurance contracts arising from the effects of the time value of money, financial risk and changes therein. For VFA contracts, changes in the fair value of underlying items (excluding additions and withdrawals) are recognised in insurance finance income or expenses.

Critical estimates and judgements

The measurement of insurance contract liabilities under HKFRS 17 involves significant judgements that are set out below:

Judgements	Estimates
– The VFA measurement model is used for most of the contracts issued by the group. In applying the VFA eligibility criteria as described above under the accounting policies for insurance contracts, the group determined that for criterion (b) a substantial share is a majority of the returns, and for criterion (c) a substantial proportion is a majority proportion of the change on a present value probability-weighted average of all scenarios. – The CSM is systematically recognised in insurance revenue based on the coverage units of the group of contracts. The group determined that the coverage unit basis that best reflects the provision of investment services is the availability of the facility over time, and therefore the quantity of benefit selected is a constant measure. The coverage units are reviewed and updated at each reporting date.	

(k) Property

Land and buildings

Land and buildings held for own use are carried at their revalued amount, being the fair value at the date of the revaluation less any subsequent accumulated depreciation and impairment losses.

Revaluations are performed by professional qualified valuers, on a market basis, with sufficient regularity to ensure that the net carrying amount does not differ materially from the fair value. Surpluses arising on revaluation are credited firstly to the income statement, to the extent of any deficits arising on revaluation previously charged to the income statement in respect of the same land and buildings, and are thereafter taken to the 'Property revaluation reserve'. Deficits arising on revaluation are first set off against any previous revaluation surpluses included in the 'Property revaluation reserve' in respect of the same land and buildings, and are thereafter recognised in the income statement.

Leasehold land and buildings are depreciated on a straight-line basis over the shorter of the unexpired terms of the leases or the remaining useful lives.

The Government of Hong Kong owns all the land in Hong Kong and permits its use under leasehold arrangements. Similar arrangements exist in mainland China. The group accounts for its interests in own use leasehold land and land use rights in accordance with HKFRS 16 but discloses these as owned assets when the right of use are considered sufficient to constitute control.

Investment properties

The group holds certain properties as investments to earn rentals or for capital appreciation, or both, and those investment properties are included on balance sheet at fair value with changes in fair value being recognised in the income statement.

(l) Employee compensation and benefits

Post-employment benefit plans

The group operates a number of pension schemes including defined benefit, defined contribution, and post-employment benefit schemes.

Payments to defined contribution schemes are charged as an expense as the employees render service.

Defined benefit pension obligations are calculated using the projected unit credit method. The net charge to the income statement mainly comprises the service cost and the net interest on the net defined benefit asset or liability, and is presented in operating expenses.

Remeasurements of the net defined benefit asset or liability, which comprise actuarial gains and losses, return on plan assets excluding interest and the effect of the asset ceiling (if any, excluding interest), are recognised immediately in OCI. The net defined benefit asset or liability represents the present value of defined benefit obligations reduced by the fair value of plan assets, after applying the asset ceiling test, where the net defined benefit surplus is limited to the present value of available refunds and reductions in future contributions to the plan.

(m) Tax

Income tax comprises current tax and deferred tax. Income tax is recognised in the income statement except to the extent that it relates to items recognised in OCI or directly in equity, in which case the tax is recognised in the same statement as the related item appears.

Current tax is the tax expected to be payable on the taxable profit for the year and on any adjustment to tax payable in respect of previous years. The group provides for potential current tax liabilities that may arise on the basis of the amounts expected to be paid to the tax authorities.

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the balance sheet, and the amounts attributed to such assets and liabilities for tax purposes. Deferred tax is calculated using the tax rates expected to apply in the periods in which the assets will be realised or the liabilities settled.

In assessing the probability and sufficiency of future taxable profit, management considers the availability of evidence to support the recognition of deferred tax assets, taking into account the inherent risks in long-term forecasting, including climate change-related, and drivers of recent history of tax losses where applicable. Management also considers the future reversal of existing taxable temporary differences and tax planning strategies, including corporate reorganisations.

Current and deferred tax are calculated based on tax rates and laws enacted, or substantively enacted, by the balance sheet date.

(n) Provisions, contingent liabilities and guarantees

Provisions

Provisions are recognised when it is probable that an outflow of economic benefits will be required to settle a present legal or constructive obligation that has arisen as a result of past events and for which a reliable estimate can be made.

Contingent liabilities and guarantees

Contingent liabilities

Contingent liabilities, which include certain guarantees and letters of credit pledged as collateral security, and contingent liabilities related to legal proceedings or regulatory matters, are not recognised in the consolidated financial statements but are disclosed unless the probability of settlement is remote.

Financial guarantee contracts

Liabilities under financial guarantee contracts that are not classified as insurance contracts are recorded initially at their fair value, which is generally the fee received or present value of the fee receivable.

(o) Impairment of non-financial assets

Software under development is tested for impairment at least annually. Other non-financial assets such as property, plant and equipment, intangible assets (excluding goodwill) and right-of-use assets are tested for impairment at the individual asset level when there is indication of impairment at that level, or at the CGU level for assets that do not have a recoverable amount at the individual asset level. In addition, impairment is also tested at the CGU level when there is indication of impairment at that level. For this purpose, CGUs are considered to be the principal operating legal entities and branches divided in a similar manner as the group's operating segments.

Impairment testing compares the carrying amount of the non-financial asset or CGU with its recoverable amount, which is the higher of the fair value less costs of disposal or the value in use. The carrying amount of a CGU comprises the carrying amount of its assets and liabilities, including non-financial assets that are directly attributable to it and non-financial assets that can be allocated to it on a reasonable and consistent basis. Non-financial assets that cannot be allocated to an individual CGU are tested for impairment at an appropriate grouping of CGUs. The recoverable amount of the CGU is the higher of the fair value less costs of disposal of the CGU, which is determined by independent and qualified valuers where relevant, and the value in use, which is calculated based on appropriate inputs.

When the recoverable amount of a CGU is less than its carrying amount, an impairment loss is recognised in the income statement to the extent that the impairment can be allocated on a pro-rata basis to the non-financial assets by reducing their carrying amounts to the higher of their respective individual recoverable amount or nil. Impairment is not allocated to the financial assets in a CGU.

Impairment losses recognised in prior periods for non-financial assets are reversed when there has been a change in the estimate used to determine the recoverable amount. The impairment loss is reversed to the extent that the carrying amount of the non-financial assets would not exceed the amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised in prior periods.

2 Operating profit

(a) Net interest income

Net interest income includes:

	2023	2022
	HK$m	HK$m
Interest income recognised on impaired financial assets	**1,753**	821
Interest income recognised on financial assets measured at amortised cost	**247,908**	141,816
Interest income recognised on financial assets measured at FVOCI	**47,431**	21,326
Interest expense on financial instruments, excluding interest on financial liabilities held for trading or designated or otherwise mandatorily measured at fair value[1]	**(149,496)**	(47,525)

1 *Includes interest expenses on lease liabilities of HK$272m (2022: HK$265m).*

(b) Net fee income

Net fee income by reportable segments

	Wealth and Personal Banking[2]	Commercial Banking[2,3]	Global Banking[3]	Markets and Securities Services	Corporate Centre[1]	Other (GBM-other)	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Account services	**809**	**1,092**	**351**	**75**	**—**	**—**	**2,327**
Funds under management	**4,741**	**459**	**16**	**1,765**	**—**	**—**	**6,981**
Cards	**9,055**	**313**	**56**	**—**	**—**	**—**	**9,424**
Credit facilities	**310**	**1,360**	**1,173**	**24**	**—**	**—**	**2,867**
Broking income	**2,650**	**46**	**—**	**601**	**—**	**—**	**3,297**
Imports/exports	**—**	**2,326**	**790**	**2**	**—**	**—**	**3,118**
Unit trusts	**4,831**	**78**	**5**	**—**	**—**	**—**	**4,914**
Underwriting	**1**	**1**	**384**	**262**	**—**	**—**	**648**
Remittances	**265**	**1,959**	**755**	**4**	**—**	**—**	**2,983**
Global custody	**814**	**40**	**41**	**2,979**	**—**	**—**	**3,874**
Insurance agency commission	**1,510**	**117**	**—**	**—**	**—**	**—**	**1,627**
Other	**3,242**	**3,237**	**2,644**	**4,024**	**(3,601)**	**(581)**	**8,965**
Fee income	**28,228**	**11,028**	**6,215**	**9,736**	**(3,601)**	**(581)**	**51,025**
Fee expense	**(8,802)**	**(364)**	**(1,177)**	**(7,084)**	**3,871**	**574**	**(12,982)**
Year ended 31 Dec 2023	**19,426**	**10,664**	**5,038**	**2,652**	**270**	**(7)**	**38,043**
Account services	807	979	366	75	—	—	2,227
Funds under management	4,894	592	16	1,824	—	—	7,326
Cards	7,826	257	52	—	—	—	8,135
Credit facilities	332	1,303	1,186	25	—	—	2,846
Broking income	3,515	53	—	737	—	—	4,305
Imports/exports	—	2,465	667	—	—	—	3,132
Unit trusts	4,534	112	2	—	—	—	4,648
Underwriting	—	—	325	237	—	—	562
Remittances	264	1,902	723	3	—	—	2,892
Global custody	858	39	32	3,174	—	—	4,103
Insurance agency commission	1,434	107	5	—	—	—	1,546
Other	2,502	2,752	2,322	3,240	(2,269)	(216)	8,331
Fee income	26,966	10,561	5,696	9,315	(2,269)	(216)	50,053
Fee expense	(7,460)	(480)	(610)	(5,614)	2,516	160	(11,488)
Year ended 31 Dec 2022	19,506	10,081	5,086	3,701	247	(56)	38,565

1 *Includes inter-segment elimination.*
2 *From 1 January 2023, all balances within in the scope of HKFRS 17 of Hong Kong insurance manufacturing entities distributed by Commercial Banking ('CMB') are reported under Wealth and Personal Banking ('WPB'). Comparative data have been re-presented accordingly.*
3 *From 1 January 2023, we have transferred our portfolio of Global Banking ('GB') customers within Australia and Indonesia from GB to CMB for reporting purposes. Comparative data have not been re-presented.*

Net fee income includes:

	2023	2022
	HK$m	HK$m
Fees earned on financial assets that are not at fair value through profit and loss (other than amounts included in determining the effective interest rate)	**9,110**	9,286
– fee income	**15,927**	14,867
– fee expense	**(6,817)**	(5,581)
Fee earned on trust and other fiduciary activities	**8,861**	9,372
– fee income	**10,374**	11,290
– fee expense	**(1,513)**	(1,918)

(c) Net income from financial instruments measured at fair value through profit or loss

	2023	2022
	HK$m	HK$m
Net income/(expense) arising on:		
Net trading activities	**80,700**	42,740
Other instruments managed on a fair value basis	**(6,265)**	(1,464)
Net income from financial instruments held for trading or managed on a fair value basis	**74,435**	41,276
Financial assets held to meet liabilities under insurance and investment contracts	**49,907**	(98,716)
Liabilities to customers under investment contracts	**(948)**	3,802
Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss	**48,959**	(94,914)
Change in fair value of designated debt issued and related derivatives[1]	**8**	(703)
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	**252**	40
Year ended 31 Dec	**123,654**	(54,301)

1 *Includes debt instruments which are issued for funding purposes and are designated under the fair value option to reduce an accounting mismatch.*

(d) Other operating income

	2023 HK$m	2022 HK$m
Gain on acquisition of subsidiary[1]	—	665
Losses on investment properties	(35)	(133)
Losses on disposal of property, plant and equipment and assets held for sale	(421)	(42)
Gain on disposal of businesses and associate	4	4
Rental income from investment properties	502	437
Dividend income	283	233
Other[2,3]	2,900	3,281
Year ended 31 Dec	**3,233**	4,445

1 *Represents a gain of HK$665m from the acquisition of AXA Insurance Pte Limited in 2022.*
2 *Includes the gain on disposal of loans and receivables of HK$40m (2022: HK$84m).*
3 *Includes the recovery of operating expenses from other Group companies.*

(e) Change in expected credit losses and other credit impairment charges

Change in expected credit losses and other credit impairment charges arising from the following asset categories:

	2023 HK$m	2022 HK$m
Loans and advances to banks and customers	13,163	15,546
– new allowances net of allowance releases	14,021	16,425
– recoveries of amounts previously written off	(864)	(879)
– modification losses and other movements	6	—
Loan commitments and guarantees	9	410
Other financial assets	(329)	414
Year ended 31 Dec	**12,843**	16,370

Change in expected credit losses as a percentage of average gross customer advances was 0.36% for 2023 (2022: 0.40%).

(f) General and administrative expenses

	2023 HK$m	2022 HK$m
Premises and equipment	2,358	2,590
Marketing and advertising expenses	2,226	2,407
Other administrative expenses[1]	49,954	48,100
Year ended 31 Dec	**54,538**	53,097

1 *Includes recharges from fellow group entities. Further details are set out in Note 32.*

Included in operating expenses were direct operating expenses of HK$60m (2022: HK$47m) arising from investment properties that generated rental income in the year. Direct operating expenses arising from investment properties that did not generate rental income amounted to HK$8m (2022: HK$9m).

(g) Depreciation and impairment of property, plant and equipment

	2023 HK$m	2022 HK$m
Owned property, plant and equipment	7,361	6,550
Other right-of-use assets	2,363	2,546
Year ended 31 Dec	**9,724**	9,096

(h) Auditors’ remuneration

Auditors’ remuneration amounted to HK$199m (2022: HK$172m).

3 Insurance business

Insurance Service result

	Year ended 31 Dec 2023			Year ended 31 Dec 2022		
	Life direct participating and Investment DPF contracts[1]	**Life other contracts[2]**	**Total**	Life direct participating and Investment DPF contracts[1]	Life other contracts[2]	Total
	HK$m	**HK$m**	**HK$m**	HK$m	HK$m	HK$m
Insurance revenue						
Amounts relating to changes in liabilities for remaining coverage	**10,167**	**1,669**	**11,836**	8,798	1,613	10,411
– Contractual service margin recognised for services provided	**6,772**	**398**	**7,170**	5,285	522	5,807
– Change in risk adjustment for non-financial risk for risk expired	**108**	**43**	**151**	118	43	161
– Expected incurred claims and other insurance service expenses	**3,289**	**1,228**	**4,517**	3,001	1,048	4,049
– Other	**(2)**	**—**	**(2)**	394	—	394
Recovery of insurance acquisition cash flows	**867**	**304**	**1,171**	161	151	312
Total insurance revenue	**11,034**	**1,973**	**13,007**	8,959	1,764	10,723
Insurance service expenses						
Incurred claims and other insurance service expenses	**(3,274)**	**(1,305)**	**(4,579)**	(2,825)	(1,219)	(4,044)
Losses and reversal of losses on onerous contracts	**(173)**	**(515)**	**(688)**	(698)	(645)	(1,343)
Amortisation of insurance acquisition cash flows	**(867)**	**(304)**	**(1,171)**	(161)	(151)	(312)
Adjustments to liabilities for incurred claims	**(8)**	**(3)**	**(11)**	(27)	(20)	(47)
Total insurance service expenses	**(4,322)**	**(2,127)**	**(6,449)**	(3,711)	(2,035)	(5,746)
Total insurance service results	**6,712**	**(154)**	**6,558**	5,248	(271)	4,977

1 'Life direct participating and investment DPF contracts' are substantially measured under the variable fee approach measurement model.
2 'Life other contracts' are measured under the general measurement model and excludes reinsurance contracts.

Net investment return[1]

	Year ended 31 Dec 2023			Year ended 31 Dec 2022		
	Life direct participating and Investment DPF contracts	**Life other contracts**	**Total**	Life direct participating and Investment DPF contracts	Life other contracts	Total
	HK$m	**HK$m**	**HK$m**	HK$m	HK$m	HK$m
Total investment return[2]	**46,474**	**1,318**	**47,792**	(95,039)	(1,327)	(96,366)
Net finance income/(expense)						
Changes in fair value of underlying items of direct participating contracts	**(46,491)**	**—**	**(46,491)**	95,198	—	95,198
Effect of risk mitigation option	**(271)**	**—**	**(271)**	765	—	765
Interest accreted	**—**	**(981)**	**(981)**	—	(649)	(649)
Effect of changes in interest rates and other financial assumptions	**(96)**	**(944)**	**(1,040)**	—	1,844	1,844
Effect of measuring changes in estimates at current rates and adjusting the CSM at rates on initial recognition	**—**	**(15)**	**(15)**	—	29	29
Total net finance income/(expenses) from insurance contracts	**(46,858)**	**(1,940)**	**(48,798)**	95,963	1,224	97,187
Total net investment results	**(384)**	**(622)**	**(1,006)**	924	(103)	821

1 All items are recognised in the income statement.
2 Investment returns of HK$47,792m gain (2022: $96,366m loss) on underlying assets supporting insurance liabilities are reported in 'Net income/ (expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss'.

Movements in carrying amounts of insurance contracts - Analysis by remaining coverage and incurred claims

	Year ended 31 Dec 2023								
	Life direct participating and Investment DPF contracts				Life other contracts				
	Liabilities for remaining coverage:				Liabilities for remaining coverage:				
	Excluding loss component	Loss component	Incurred claims	Total	Excluding loss component	Loss component	Incurred claims	Total	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Opening assets	(35)	—	—	(35)	(480)	163	7	(310)	(345)
Opening liabilities	626,367	812	2,949	630,128	23,443	757	594	24,794	654,922
Net opening balance at 1 Jan 2023	626,332	812	2,949	630,093	22,963	920	601	24,484	654,577
Changes in the statement of profit or loss and other comprehensive income[2]									
Insurance revenue									
Contracts under the fair value approach	(3,105)	—	—	(3,105)	(369)	—	—	(369)	(3,474)
Other contracts[1]	(7,929)	—	—	(7,929)	(1,159)	—	—	(1,159)	(9,088)
Total insurance revenue	(11,034)	—	—	(11,034)	(1,528)	—	—	(1,528)	(12,562)
Insurance service expenses									
Incurred claims and other insurance service expenses	—	(43)	3,317	3,274	—	(178)	1,077	899	4,173
Amortisation of insurance acquisition cash flows	867	—	—	867	295	—	—	295	1,162
Losses and reversal of losses on onerous contracts	—	173	—	173	—	508	—	508	681
Adjustments to liabilities for incurred claims	—	—	8	8	—	—	3	3	11
Total insurance service expenses	867	130	3,325	4,322	295	330	1,080	1,705	6,027
Investment components	(44,797)	—	44,797	—	(5,824)	—	5,824	—	—
Insurance service result	(54,964)	130	48,122	(6,712)	(7,057)	330	6,904	177	(6,535)
Net finance (income)/expense from insurance contracts	46,858	—	—	46,858	1,917	23	—	1,940	48,798
Other movements recognised in the statement of profit or loss	3,899	7	(610)	3,296	(18)	5	(88)	(101)	3,195
Effect of movements in exchange rates	948	—	(255)	693	(9)	(12)	5	(16)	677
Total changes in the statement of profit or loss and other comprehensive income	(3,259)	137	47,257	44,135	(5,167)	346	6,821	2,000	46,135
Cash flows									
Premiums received	82,050	—	—	82,050	6,188	—	—	6,188	88,238
Claims and other insurance service expenses paid, including investment components, and other cash flows	374	—	(47,087)	(46,713)	4	—	(6,891)	(6,887)	(53,600)
Insurance acquisition cash flows	(3,919)	—	—	(3,919)	(1,693)	—	—	(1,693)	(5,612)
Total cash flows	78,505	—	(47,087)	31,418	4,499	—	(6,891)	(2,392)	29,026
Other movements	96	(96)	—	—	60	(60)	—	—	—
Net closing balance at 31 Dec 2023	701,674	853	3,119	705,646	22,355	1,206	531	24,092	729,738
Closing assets	(109)	5	6	(98)	(874)	(159)	40	(993)	(1,091)
Closing liabilities	701,783	848	3,113	705,744	23,229	1,365	491	25,085	730,829
Net closing balance at 31 Dec 2023	701,674	853	3,119	705,646	22,355	1,206	531	24,092	729,738

Movements in carrying amounts of insurance contracts - Analysis by remaining coverage and incurred claims (continued)

	Year ended 31 Dec 2022								
	Life direct participating and Investment DPF contracts				Life other contracts				
	Liabilities for remaining coverage:				Liabilities for remaining coverage:				
	Excluding loss component	Loss component	Incurred claims	Total	Excluding loss component	Loss component	Incurred claims	Total	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Opening assets	—	—	—	—	(187)	51	6	(130)	(130)
Opening liabilities	661,137	679	1,741	663,557	26,788	478	168	27,434	690,991
Net opening balance at 1 Jan 2022	661,137	679	1,741	663,557	26,601	529	174	27,304	690,861
Changes in the statement of profit or loss and other comprehensive income[2]									
Insurance revenue									
Contracts under the fair value approach	(3,828)	—	—	(3,828)	(666)	—	—	(666)	(4,494)
Other contracts[1]	(5,131)	—	—	(5,131)	(652)	—	—	(652)	(5,783)
Total insurance revenue	(8,959)	—	—	(8,959)	(1,318)	—	—	(1,318)	(10,277)
Insurance service expenses									
Incurred claims and other insurance service expenses	—	(36)	2,861	2,825	—	(70)	861	791	3,616
Amortisation of insurance acquisition cash flows	161	—	—	161	151	—	—	151	312
Losses and reversal of losses on onerous contracts	—	698	—	698	—	639	—	639	1,337
Adjustments to liabilities for incurred claims	—	—	27	27	—	—	11	11	38
Total insurance service expenses	161	662	2,888	3,711	151	569	872	1,592	5,303
Investment components	(26,648)	—	26,648	—	(3,715)	—	3,715	—	—
Insurance service result	(35,446)	662	29,536	(5,248)	(4,882)	569	4,587	274	(4,974)
Net finance (income)/expense from insurance contracts	(95,963)	—	—	(95,963)	(1,241)	12	—	(1,229)	(97,192)
Effect of movements in exchange rates	(1,502)	(40)	2	(1,540)	(565)	(15)	42	(538)	(2,078)
Total changes in the statement of profit or loss and other comprehensive income	(132,911)	622	29,538	(102,751)	(6,688)	566	4,629	(1,493)	(104,244)
Cash flows									
Premiums received	82,670	—	—	82,670	3,861	1	—	3,862	86,532
Claims and other insurance service expenses paid, including investment components, and other cash flows	371	—	(28,122)	(27,751)	—	(1)	(4,212)	(4,213)	(31,964)
Insurance acquisition cash flows	(3,180)	—	—	(3,180)	(910)	—	—	(910)	(4,090)
Total cash flows	79,861	—	(28,122)	51,739	2,951	—	(4,212)	(1,261)	50,478
Acquisition of subsidiaries and other movements	18,245	(489)	(208)	17,548	99	(175)	10	(66)	17,482
Net closing balance at 31 Dec 2022	626,332	812	2,949	630,093	22,963	920	601	24,484	654,577
Closing assets	(35)	—	—	(35)	(480)	163	7	(310)	(345)
Closing liabilities	626,367	812	2,949	630,128	23,443	757	594	24,794	654,922
Net closing balance at 31 Dec 2022	626,332	812	2,949	630,093	22,963	920	601	24,484	654,577

1 *'Other contracts' are those contracts measured by applying HKFRS 17 from inception of the contracts. These include contracts measured under the full retrospective approach at transition and contracts incepted after transition.*
2 *'Changes in the statement of profit or loss and other comprehensive income' do not include income and expenses with HSBC Group entities.*

Movements in carrying amounts of insurance contracts - Analysis by measurement component

	Year ended 31 Dec 2023								
	Life direct participating and investment discretionary participating contracts				Life other contracts				
		Contractual service margin				Contractual service margin			
	Estimates of present value of future cash flows and risk adjustment	Contracts under the fair value approach	Other contracts[1]	Total	Estimates of present value of future cash flows and risk adjustment	Contracts under the fair value approach	Other contracts[1]	Total	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Opening assets	(137)	26	76	(35)	(875)	413	152	(310)	(345)
Opening liabilities	569,705	33,138	27,285	630,128	22,631	1,429	734	24,794	654,922
Net opening balance at 1 Jan 2023	**569,568**	**33,164**	**27,361**	**630,093**	**21,756**	**1,842**	**886**	**24,484**	**654,577**
Changes in the statement of profit or loss and other comprehensive income[2]									
Changes that relate to current services									
Contractual service margin recognised for services provided	—	(1,351)	(5,421)	(6,772)	—	(154)	(227)	(381)	(7,153)
Change in risk adjustment for non-financial risk expired	(108)	—	—	(108)	(28)	—	—	(28)	(136)
Experience adjustments	(15)	—	—	(15)	75	—	—	75	60
Changes that relate to future services									
Contracts initially recognised in the year	(11,966)	—	12,062	96	(638)	—	891	253	349
Changes in estimates that adjust contractual service margin	(7,206)	2,954	4,252	—	273	(1)	(272)	—	—
Changes in estimates that result in losses and reversal of losses on onerous contracts	77	—	—	77	256	—	—	256	333
Changes that relate to past services									
Adjustments to liabilities for incurred claims	8	—	—	8	2	—	—	2	10
Other movements recognised in insurance service result	2	—	—	2	—	—	—	—	2
Insurance service result	**(19,208)**	**1,603**	**10,893**	**(6,712)**	**(60)**	**(155)**	**392**	**177**	**(6,535)**
Net finance (income)/expenses from insurance contract	46,858	—	—	46,858	1,869	40	31	1,940	48,798
Other movements recognised in the statement of profit or loss	2,007	1,146	143	3,296	(164)	57	6	(101)	3,195
Effect of movements in exchange rates	433	67	193	693	(25)	10	(1)	(16)	677
Total changes in the statement of profit or loss and other comprehensive income	**30,090**	**2,816**	**11,229**	**44,135**	**1,620**	**(48)**	**428**	**2,000**	**46,135**
Cash flows									
Premiums received	82,050	—	—	82,050	6,188	—	—	6,188	88,238
Claims, other insurance service expenses paid (including investment components) and other cash flows	(46,713)	—	—	(46,713)	(6,887)	—	—	(6,887)	(53,600)
Insurance acquisition cash flows	(3,919)	—	—	(3,919)	(1,693)	—	—	(1,693)	(5,612)
Total cash flows	**31,418**	**—**	**—**	**31,418**	**(2,392)**	**—**	**—**	**(2,392)**	**29,026**
Other movements	—	—	—	—	—	(2)	2	—	—
Net closing balance at 31 Dec 2023	**631,076**	**35,980**	**38,590**	**705,646**	**20,984**	**1,792**	**1,316**	**24,092**	**729,738**
Closing assets	(233)	25	110	(98)	(924)	62	(131)	(993)	(1,091)
Closing liabilities	631,309	35,955	38,480	705,744	21,908	1,730	1,447	25,085	730,829
Net closing balance at 31 Dec 2023	**631,076**	**35,980**	**38,590**	**705,646**	**20,984**	**1,792**	**1,316**	**24,092**	**729,738**

Movements in carrying amounts of insurance contracts - Analysis by measurement component (continued)

	Year ended 31 Dec 2022								
	Life direct participating and investment discretionary participating contracts				Life Other contracts				
		Contractual service margin				Contractual service margin			
	Estimates of present value of future cash flows and risk adjustment	Contracts under the fair value approach	Other contracts[1]	Total	Estimates of present value of future cash flows and risk adjustment	Contracts under the fair value approach	Other contracts[1]	Total	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Opening assets	—	—	—	—	(225)	45	50	(130)	(130)
Opening liabilities	598,776	44,347	20,434	663,557	25,281	1,548	605	27,434	690,991
Net opening balance at 1 Jan 2022	598,776	44,347	20,434	663,557	25,056	1,593	655	27,304	690,861
Changes in the statement of profit or loss and other comprehensive income[2]									
Changes that relate to current services									
Contractual service margin recognised for services provided	—	(1,862)	(3,423)	(5,285)	—	(298)	(216)	(514)	(5,799)
Change in risk adjustment for non-financial risk expired	(118)	—	—	(118)	(22)	—	—	(22)	(140)
Experience adjustments	(176)	—	—	(176)	160	—	—	160	(16)
Changes that relate to future services									
Contracts initially recognised in the year	(8,028)	—	8,091	63	(514)	—	527	13	76
Changes in estimates that adjust contractual service margin	8,345	(10,682)	2,337	—	31	62	(93)	—	—
Changes in estimates that result in losses and reversal of losses on onerous contracts	635	—	—	635	626	—	—	626	1,261
Changes that relate to past services									
Adjustments to liabilities for incurred claims	27	—	—	27	11	—	—	11	38
Other movements recognised in insurance service result	(394)	—	—	(394)	—	—	—	—	(394)
Insurance service result	291	(12,544)	7,005	(5,248)	292	(236)	218	274	(4,974)
Net finance (income)/expense from insurance contracts	(95,953)	—	(10)	(95,963)	(1,272)	29	14	(1,229)	(97,192)
Effect of movements in exchange rates	(1,462)	(10)	(68)	(1,540)	(536)	(1)	(1)	(538)	(2,078)
Total changes in the statement of profit or loss and other comprehensive income	(97,124)	(12,554)	6,927	(102,751)	(1,516)	(208)	231	(1,493)	(104,244)
Cash flows									
Premiums received	82,670	—	—	82,670	3,862	—	—	3,862	86,532
Claims, other insurance service expenses paid (including investment components) and other cash flows	(27,751)	—	—	(27,751)	(4,213)	—	—	(4,213)	(31,964)
Insurance acquisition cash flows	(3,180)	—	—	(3,180)	(910)	—	—	(910)	(4,090)
Total cash flows	51,739	—	—	51,739	(1,261)	—	—	(1,261)	50,478
Acquisition of subsidiaries and other movements	16,177	1,371	—	17,548	(523)	457	—	(66)	17,482
Net closing balance at 31 Dec 2022	569,568	33,164	27,361	630,093	21,756	1,842	886	24,484	654,577
Closing assets	(137)	26	76	(35)	(875)	413	152	(310)	(345)
Closing liabilities	569,705	33,138	27,285	630,128	22,631	1,429	734	24,794	654,922
Net closing balance at 31 Dec 2022	569,568	33,164	27,361	630,093	21,756	1,842	886	24,484	654,577

1 *'Other contracts' are those contracts measured by applying HKFRS 17 from inception of the contracts. These include contracts measured under the full retrospective approach at transition and contracts incepted after transition.*
2 *'Changes in the statement of profit or loss and other comprehensive income' do not include income and expenses with HSBC Group entities.*

Effect of contracts initially recognised in the year

	Year ended 31 Dec 2023			Year ended 31 Dec 2022		
	Profitable contracts issued	Onerous contracts issued	Total	Profitable contracts issued	Onerous contracts issued	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Life direct participating and investment DPF contracts						
Estimates of present value of cash outflows	**82,899**	**1,532**	**84,431**	62,839	834	63,673
– Insurance acquisition cash flows	**4,603**	**165**	**4,768**	3,073	133	3,206
– Claims and other insurance service expenses payable	**78,296**	**1,367**	**79,663**	59,766	701	60,467
Estimates of present value of cash inflows	**(95,191)**	**(1,447)**	**(96,638)**	(71,112)	(781)	(71,893)
Risk adjustment for non-financial risk	**230**	**11**	**241**	182	10	192
Contractual service margin	**12,062**	**—**	**12,062**	8,091	—	8,091
Losses recognised on initial recognition	**—**	**(96)**	**(96)**	—	(63)	(63)
Life other contracts						
Estimates of present value of cash outflows	**6,392**	**3,529**	**9,921**	3,154	642	3,796
– Insurance acquisition cash flows	**762**	**388**	**1,150**	446	69	515
– Claims and other insurance service expenses payable	**5,630**	**3,141**	**8,771**	2,708	573	3,281
Estimates of present value of cash inflows	**(7,387)**	**(3,314)**	**(10,701)**	(3,767)	(632)	(4,399)
Risk adjustment for non-financial risk	**104**	**38**	**142**	86	3	89
Contractual service margin	**891**	**—**	**891**	527	—	527
Losses recognised on initial recognition	**—**	**(253)**	**(253)**	—	(13)	(13)

Present value of expected future cash flows of insurance contract liabilities and contractual service margin

	less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5-10 years	10-20 years	Over 20 years	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Insurance liability future cash flows									
Life direct participating and investment DPF contracts	**(26,475)**	**(10,266)**	**11,783**	**12,531**	**20,017**	**70,271**	**181,383**	**368,698**	**627,942**
Life other contracts	**6,507**	**1,862**	**(420)**	**(387)**	**530**	**503**	**576**	**12,374**	**21,545**
Insurance liability future cash flows at 31 Dec 2023	**(19,968)**	**(8,404)**	**11,363**	**12,144**	**20,547**	**70,774**	**181,959**	**381,072**	**649,487**
Remaining contractual service margin									
Life direct participating and investment DPF contracts	**6,404**	**5,915**	**5,458**	**5,032**	**4,640**	**18,102**	**18,556**	**10,463**	**74,570**
Life other contracts	**706**	**406**	**289**	**274**	**234**	**400**	**503**	**296**	**3,108**
Remaining contractual service margin at 31 Dec 2023	**7,110**	**6,321**	**5,747**	**5,306**	**4,874**	**18,502**	**19,059**	**10,759**	**77,678**
Insurance liability future cash flows									
Life direct participating and investment DPF contracts	(41,859)	(17,921)	(1,908)	7,793	10,053	64,781	234,585	312,332	567,856
Life other contracts	4,076	6,145	3,200	14	393	1,474	1,100	6,130	22,532
Insurance liability future cash flows at 31 Dec 2022	(37,783)	(11,776)	1,292	7,807	10,446	66,255	235,685	318,462	590,388
Remaining contractual service margin									
Life direct participating and investment DPF contracts	4,966	4,612	4,270	3,941	3,650	14,529	15,351	9,206	60,525
Life other contracts	356	282	251	225	201	632	483	298	2,728
Remaining contractual service margin at 31 Dec 2022	5,322	4,894	4,521	4,166	3,851	15,161	15,834	9,504	63,253

Discount rates

The discount rates applied to expected future cash flows are determined through a bottom-up approach as set out in Note 1.2(j) 'Summary of material accounting policies – Insurance contracts' on page 97. The blended average of discount rates used within our most material manufacturing entities are as follows:

	HSBC Life (International) Ltd		Hang Seng Insurance Co Ltd	
	HK$	US$	HK$	US$
At 31 December 2023				
10 year discount rate (%)	**4.02**	**4.47**	**4.16**	**4.62**
20 year discount rate (%)	**4.21**	**4.91**	**4.34**	**5.06**
At 31 December 2022				
10 year discount rate (%)	4.56	4.59	4.70	4.80
20 year discount rate (%)	4.63	4.96	4.76	5.17

4 Employee compensation and benefits

	2023	2022
	HK$m	HK$m
Wages and salaries[1]	35,021	34,760
Social security costs	1,352	1,379
Post-employment benefits	2,174	2,183
– defined contribution pension plans	1,748	1,716
– defined benefit pension plans	426	467
Year ended 31 Dec	38,547	38,322

1 *'Wages and salaries' includes the effect of share-based payments arrangements of HK$1,101m (2022: HK$882m).*

Post-employment benefit plans

The group operates a number of post-employment benefit plans for its employees. Some of these plans are defined benefit plans, of which the largest plan is The HSBC Group Hong Kong Local Staff Retirement Benefit Scheme (the 'Principal Plan').

The group's balance sheet includes the net surplus or deficit, being the difference between the fair value of plan assets and the discounted value of scheme liabilities at the balance sheet date for each plan. Surpluses are only recognised to the extent that they are recoverable through reduced contributions in the future or through potential future refunds from the schemes. In assessing whether a surplus is recoverable, the group has considered its current right to obtain a future refund or a reduction in future contributions.

Defined benefit pension plans

Net asset/(liability) under defined benefit pension plans

	Fair value of plan assets	Present value of defined benefit obligations	Net defined benefit liability
	HK$m	HK$m	HK$m
At 1 Jan 2023	8,266	(9,889)	(1,623)
Service cost	—	(362)	(362)
– current service cost	—	(360)	(360)
– past service cost and gains from settlements	—	(2)	(2)
Net interest income/(expense) on the net defined benefit asset/(liability)	292	(349)	(57)
Re-measurement effects recognised in other comprehensive income	243	(217)	26
– return on plan assets (excluding interest income)	243	—	243
– actuarial losses	—	(217)	(217)
Contributions by the group	628	—	628
Benefits paid	(1,053)	1,132	79
Exchange differences and other movements	(43)	43	—
At 31 Dec 2023	8,333	(9,642)	(1,309)
Retirement benefit liabilities recognised on the balance sheet			(1,362)
Retirement benefit assets recognised on the balance sheet (within 'Prepayments, accrued income and other assets')			53
At 1 Jan 2022	10,075	(11,945)	(1,870)
Service cost	—	(429)	(429)
– current service cost	—	(434)	(434)
– past service cost and gains from settlements	—	5	5
Net interest income/(expense) on the net defined benefit asset/(liability)	162	(197)	(35)
Re-measurement effects recognised in other comprehensive income	(841)	1,073	232
– return on plan assets (excluding interest income)	(841)	—	(841)
– actuarial gains	—	1,073	1,073
Contributions by the group	345	—	345
Benefits paid	(1,414)	1,487	73
Exchange differences and other movements	(61)	122	61
At 31 Dec 2022	8,266	(9,889)	(1,623)
Retirement benefit liabilities recognised on the balance sheet			(1,655)
Retirement benefit assets recognised on the balance sheet (within 'Prepayments, accrued income and other assets')			32

Fair value of plan assets by asset classes

	At 31 Dec 2023			At 31 Dec 2022		
	Value	Quoted market price in active market	Thereof HSBC	Value	Quoted market price in active market	Thereof HSBC
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Fair value of plan assets	**8,333**	**8,333**	**177**	8,266	8,266	195
– equities	**1,187**	**1,187**	**—**	1,078	1,078	—
– bonds	**4,458**	**4,458**	**—**	4,622	4,622	—
– alternative investments	**2,268**	**2,268**	**—**	2,112	2,112	—
– other[1]	**420**	**420**	**177**	454	454	195

1 *Other mainly consists of cash and cash deposits.*

The Principal Plan

In Hong Kong, the HSBC Group Hong Kong Local Staff Retirement Benefit Scheme, the Principal Plan, covers employees of the group and HSBC Global Services (Hong Kong) Limited (the 'ServCo'), which is a fellow subsidiary of the group set up in Hong Kong as part of the recovery and resolution planning to provide functional support services to the group, as well as certain other local employees of the Group. The Principal Plan comprises a funded defined benefit scheme (which provides a lump sum benefit on retirement and is now closed to new members) and a defined contribution scheme. The latter was established on 1 January 1999 for new employees, and the group has been providing defined contribution plans to all new employees. Since the defined benefit scheme of the Principal Plan is a final salary lump sum scheme, its exposure to longevity risk and interest rate risk is limited compared to a scheme that provides annuity payments.

The Principal Plan is a funded plan with assets which are held in trust funds separate from the group. The investment strategy of the defined benefit scheme of the Principal Plan is to hold the majority of assets in fixed income investments, with a smaller portion in equities. The target asset allocation for the portfolio is as follows: Fixed income investments 75% and Equity 25%. Each investment manager has been assigned a benchmark applicable to their respective asset class. The actuarial funding valuation of the Principal Plan is conducted at least on a triennial basis in accordance with the local practice and regulations. The actuarial assumptions used to conduct the actuarial funding valuation of the Principal Plan vary according to the economic conditions.

The trustee, which is a subsidiary of the Bank, assumes the overall responsibility for the Principal Plan and the group has established a management committee and a number of sub-committees to broaden the governance and manage the concomitant issues.

Both the group and ServCo participate in the Principal Plan that shares risks between the entities which are under common control of the Group. As agreed between the group and ServCo, the net defined benefit cost of the defined benefit scheme of the Principal Plan shall be charged separately. Details on the defined benefit scheme of the Principal Plan are disclosed below.

Net asset/(liability) under the defined benefit scheme of the Principal Plan

	Included within the group			Included within ServCo		
	Fair value of plan assets	Present value of defined benefit obligations	Net defined benefit liability	Fair value of plan assets	Present value of defined benefit obligations	Net defined benefit liability
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 1 Jan 2023	**3,585**	**(3,902)**	**(317)**	**3,170**	**(3,265)**	**(95)**
Service cost	**—**	**(128)**	**(128)**	**—**	**(110)**	**(110)**
– current service cost	**—**	**(128)**	**(128)**	**—**	**(110)**	**(110)**
Net interest income/(expense) on the net defined benefit asset/(liability)	**118**	**(131)**	**(13)**	**110**	**(111)**	**(1)**
Re-measurement effects recognised in other comprehensive income	**50**	**(170)**	**(120)**	**41**	**(123)**	**(82)**
– return on plan assets (excluding interest income)	**50**	**—**	**50**	**41**	**—**	**41**
– actuarial losses	**—**	**(170)**	**(170)**	**—**	**(123)**	**(123)**
Contributions	**173**	**—**	**173**	**114**	**—**	**114**
Benefits paid	**(406)**	**406**	**—**	**(422)**	**422**	**—**
Exchange differences and other movements	**(29)**	**31**	**2**	**26**	**(31)**	**(5)**
At 31 Dec 2023	**3,491**	**(3,894)**	**(403)**	**3,039**	**(3,218)**	**(179)**
Retirement benefit liabilities recognised on the balance sheet			**(403)**			**(179)**
At 1 Jan 2022	4,424	(4,915)	(491)	3,945	(4,191)	(246)
Service cost	—	(162)	(162)	—	(141)	(141)
– current service cost	—	(162)	(162)	—	(141)	(141)
Net interest income/(expense) on the net defined benefit asset/(liability)	56	(61)	(5)	50	(52)	(2)
Re-measurement effects recognised in other comprehensive income	(409)	566	157	(364)	537	173
– return on plan assets (excluding interest income)	(409)	—	(409)	(364)	—	(364)
– actuarial gains	—	566	566	—	537	537
Contributions	191	—	191	123	—	123
Benefits paid	(737)	737	—	(515)	515	—
Exchange differences and other movements	60	(67)	(7)	(69)	67	(2)
At 31 Dec 2022	3,585	(3,902)	(317)	3,170	(3,265)	(95)
Retirement benefit liabilities recognised on the balance sheet			(317)			(95)

The group expects to make HK$168m of contributions to the defined benefit scheme of the Principal Plan during 2024 (during 2023: HK$180m) and ServCo expects to make HK$105m contributions to the defined benefit scheme of the Principal Plan during 2024 (during 2023: HK$116m). These expected contributions are determined separately by the group and ServCo by reference to the actuarial funding valuation carried out by the Principal Plan's local actuary.

Benefits expected to be paid from the defined benefit scheme of the Principal Plan over each of the next five years, and in aggregate for the five years thereafter, are as follows:

Benefits expected to be paid from the defined benefit scheme of the Principal Plan[1]

	Within one year	One to two years	Two to three years	Three to four years	Four to five years	Five to ten years
As at 31 December 2023 as reported by:	**HK$m**	**HK$m**	**HK$m**	**HK$m**	**HK$m**	**HK$m**
– The group	**275**	**376**	**363**	**408**	**374**	**2,002**
– ServCo	**244**	**322**	**255**	**308**	**331**	**1,809**
As at 31 December 2022 as reported by:						
– The group	292	373	382	371	396	1,892
– ServCo	187	299	340	271	338	1,825

1 *The duration of the defined benefit obligation is six years for the Principal Plan under the disclosed assumptions (2022: six years).*

Fair value of plan assets of the defined benefit scheme of the Principal Plan by asset classes

	At 31 Dec 2023			At 31 Dec 2022		
	Value	**Quoted market price in active market**	**Thereof HSBC**	Value	Quoted market price in active market	Thereof HSBC
	HK$m	**HK$m**	**HK$m**	HK$m	HK$m	HK$m
Fair value of plan assets	**6,530**	**6,530**	**59**	6,755	6,755	51
– equities	**1,691**	**1,691**	**—**	1,581	1,581	—
– bonds	**3,467**	**3,467**	**—**	3,725	3,725	—
– alternative investments	**1,313**	**1,313**	**—**	1,398	1,398	—
– other[1]	**59**	**59**	**59**	51	51	51

1 *Other mainly consists of cash and cash deposits.*

The Principal Plan's key actuarial financial assumptions

The group and ServCo determine the discount rate to be applied to the defined benefit scheme's obligations in consultation with the Principal Plan's local actuary, on the basis of the current average yields of Hong Kong Government Bonds and Hong Kong Exchange Fund Notes, with maturities consistent with that of the defined benefit obligations.

The key actuarial assumptions used to calculate the group's obligations for the defined benefit scheme of the Principal Plan for the year, and used as the basis for measuring the expenses were as follows:

Key actuarial assumptions for the defined benefit scheme of the Principal Plan

	Discount rate	Rate of pay increase
	% p.a.	**% p.a.**
At 31 Dec 2023	**2.95**	**3.00**
At 31 Dec 2022	3.50	3.50% p.a. for 2023 and 3.00% p.a. thereafter

Actuarial assumption sensitivities

The discount rate and rate of pay increase are sensitive to changes in market conditions arising during the reporting period. The following table shows the financial impact of assumption changes on the defined benefit scheme of the Principal Plan at year end:

The effect of changes in key assumptions on the defined benefit scheme of the Principal Plan

	Impact on HSBC Group Hong Kong Local Staff Retirement Benefit Scheme obligation			
	Financial impact of increase		Financial impact of decrease	
	2023	2022	**2023**	2022
	HK$m	HK$m	**HK$m**	HK$m
Discount rate – increase/decrease of 0.25%	**(106)**	(111)	**108**	114
Rate of pay increase – increase/decrease of 0.25%	**109**	115	**(107)**	(112)

Directors' emoluments

The aggregate emoluments of the Directors of the Bank disclosed pursuant to section 4 of the Companies (Disclosure of Information about Benefits of Directors) Regulation were HK$115m (2022: HK$111m). This comprises fees (which represent the aggregate emoluments paid to or receivable by directors in respect of their services as a director) of HK$37m (2022: HK$37m) and other emoluments of HK$78m (2022: HK$74m) which includes contributions to pension schemes of HK$3m (2022: HK$3m). Non-cash benefits which are included in other emoluments mainly relate to share-based payment awards, and the provision of housing and furnishings.

Details on loans to directors are set out in Note 32.

5 Tax

The Bank and its subsidiaries in Hong Kong have provided for Hong Kong profits tax at the rate of 16.5% (2022: 16.5%) on the profits for the year assessable in Hong Kong. Overseas branches and subsidiaries have similarly provided for tax in the countries in which they operate at the appropriate rates of tax in force in 2023. Deferred taxation is provided for in accordance with the group's accounting policy in Note 1.2(m) 'Summary of material accounting policies – Tax' on page 98-99.

Tax expense

	2023	2022
	HK$m	HK$m
Current tax	25,764	14,839
– Hong Kong taxation – on current year profit	11,157	5,072
– Hong Kong taxation – adjustments in respect of prior years	(37)	(492)
– overseas taxation – on current year profit	14,596	10,692
– overseas taxation – adjustments in respect of prior years	48	(433)
Deferred tax	(1,848)	1,157
– origination and reversal of temporary differences	(1,631)	643
– adjustments in respect of prior years	(217)	514
Year ended 31 Dec	**23,916**	15,996

Tax reconciliation

The tax charged to the income statement differs from the tax charge that would apply if all profits had been taxed at the applicable tax rates in the countries concerned as follows:

Reconciliation between taxation charge and accounting profit at applicable tax rates

	2023	2022
	HK$m	HK$m
Profit before tax	121,443	96,687
Notional tax on profit before tax, calculated at the rates applicable to profits in the countries concerned	24,403	20,369
Effects of profits in associates and joint ventures	(3,072)	(3,100)
Effects of impairment of interest in associate	3,953	—
Non-taxable income and gains	(5,059)	(3,525)
Local taxes and overseas withholding taxes	2,336	1,856
Permanent disallowables	836	740
Others	519	(344)
Year ended 31 Dec	**23,916**	15,996

On 20 June 2023, legislation was substantively enacted in the UK, the jurisdiction of the Bank's ultimate parent entity, HSBC Holdings plc, to introduce the 'Pillar Two' global minimum tax model rules of the OECD's Inclusive Framework on Base Erosion and Profit Shifting ('BEPS'), with effect from 1 January 2024. Legislation has been enacted in Mauritius and Vietnam to implement a Qualified Domestic Minimum Top-up Tax ('QDMTT'). Additionally, in the Asia-Pacific region the governments of Australia, Hong Kong, Indonesia, Japan, Malaysia and Singapore, have announced their intention to introduce Pillar Two legislation and a QDMTT.

Under these rules, a top-up tax liability arises where the effective tax rate of the group's operations in a jurisdiction, calculated based on principles set out in the OECD's Pillar Two model rules, is below 15%. Any additional tax arising in relation to jurisdictions in which a QDMTT applies will be payable to the tax authority in that jurisdiction. Where there is no QDMTT, any resulting tax is payable by HSBC Holdings plc, being the group's ultimate parent, to the UK tax authority.

Based on the Group's forecasts, no material top-up tax liability is expected to arise in Mauritius or Vietnam. For those jurisdictions that have announced their intention to introduce Pillar Two legislation and a QDMTT, a top-up tax liability is expected to arise in Hong Kong due to the low effective tax rate, driven primarily by income from tax-exempt instruments. The Hong Kong QDMTT is expected to be effective from 1 January 2025. The application of the Pillar Two global minimum tax rules and the introduction of QDMTT, if enacted, is expected to increase the annual effective tax rate of the group by approximately 0.5%. However, the impact is dependent upon the ongoing evolution of rules and guidance in the UK and other jurisdictions.

Movements of deferred tax assets and liabilities

	Accelerated capital allowances	Insurance business	Expense provisions	Impairment allowance on financial instruments	Revaluation of properties	Other[2]	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Assets	112	4,059	1,192	3,289	—	1,004	9,656
Liabilities	(467)	(189)	(30)	—	(14,823)	(8,477)	(23,986)
At 1 Jan 2023	(355)	3,870	1,162	3,289	(14,823)	(7,473)	(14,330)
Exchange and other adjustments	1	111	(31)	(26)	38	(36)	57
Charge/(credit) to income statement	(22)	1,802	167	(519)	830	(410)	1,848
Charge/(credit) to other comprehensive income	—	—	—	133	(830)	(1,486)	(2,183)
At 31 Dec 2023	(376)	5,783	1,298	2,877	(14,785)	(9,405)	(14,608)
Assets[1]	115	5,783	1,329	2,877	—	2,880	12,984
Liabilities[1]	(491)	—	(31)	—	(14,785)	(12,285)	(27,592)

Movements of deferred tax assets and liabilities (continued)

	Accelerated capital allowances	Insurance business	Expense provisions	Impairment allowance on financial instruments	Revaluation of properties	Other[2]	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Assets	145	4,236	1,557	2,597	—	827	9,362
Liabilities	(459)	(100)	(19)	—	(14,992)	(8,391)	(23,961)
At 1 Jan 2022	(314)	4,136	1,538	2,597	(14,992)	(7,564)	(14,599)
Exchange and other adjustments	(15)	(186)	(157)	(318)	222	(95)	(549)
Charge/(credit) to income statement	(32)	(80)	(229)	1,010	759	(2,585)	(1,157)
Charge/(credit) to other comprehensive income	6	—	10	—	(812)	2,771	1,975
At 31 Dec 2022	(355)	3,870	1,162	3,289	(14,823)	(7,473)	(14,330)
Assets[1]	112	4,059	1,192	3,289	—	1,004	9,656
Liabilities[1]	(467)	(189)	(30)	—	(14,823)	(8,477)	(23,986)

1 *After netting off balances within countries, the balances as disclosed in the consolidated financial statements are as follows: deferred tax assets HK$9,315m (2022: HK$7,582m); and deferred tax liabilities HK$23,923m (2022: HK$21,912m).*
2 *Other includes deferred tax liability of HK$6,402m (2022: HK$5,847m) provided in respect of distributable reserves or post-acquisition reserves of associates that, on distribution, would attract withholding tax.*

The amount of unused tax losses for which no deferred tax asset is recognised in the balance sheet is HK$4,898m (2022: HK$4,537m). Of this amount, HK$1,906m (2022: HK$1,536m) has no expiry date and the remaining will expire within 10 years.

Deferred tax is not recognised in respect of the group's investments in subsidiaries and branches where remittance or other realisation is not probable, and for those associates and interests in joint ventures where it has been determined that no additional tax will arise.

6 Dividends

Dividends to shareholders of the parent company

	2023		2022	
	HK$ per share	**HK$m**	HK$ per share	HK$m
Dividends paid on ordinary shares				
In respect of previous year:				
– fourth interim dividend	**0.27**	**13,500**	0.23	10,584
In respect of current year:				
– first interim dividend paid	**0.44**	**22,000**	0.17	7,761
– second interim dividend paid	**0.43**	**21,500**	0.12	5,887
– special dividend paid	**0.16**	**7,800**	—	—
– third interim dividend paid	**0.36**	**18,000**	0.16	7,850
Total	**1.66**	**82,800**	0.68	32,082
Distributions on other equity instruments		**3,556**		2,739
Dividends to shareholders		**86,356**		34,821

On 19 February 2024, the Directors declared a fourth interim dividend in respect of the financial year ended 31 December 2023 of HK$0.41 per ordinary share (HK$20,300m) (2022: HK$0.27 per ordinary share (HK$13,500m)).

Total coupons on other equity instruments

	2023	2022
	HK$m	HK$m
US$900m Fixed rate perpetual subordinated loan (interest rate fixed at 6.510%)	**459**	460
US$900m Fixed rate perpetual subordinated loan (interest rate fixed at 6.030%)	**425**	426
US$1,000m Fixed rate perpetual subordinated loan (interest rate fixed at 6.090%)	**478**	477
US$1,200m Fixed rate perpetual subordinated loan (interest rate fixed at 6.172%)	**581**	580
US$600m Fixed rate perpetual subordinated loan (interest rate fixed at 5.910%)	**277**	278
US$1,100m Fixed rate perpetual subordinated loan (interest rate fixed at 6.000%)	**516**	518
US$1,000m Floating rate perpetual subordinated loan (interest rate at compounded SOFR plus 5.090%)[1]	**545**	—
US$1,000m Fixed rate perpetual subordinated loan (interest rate fixed at 8.000%)[2]	**275**	—
Total	**3,556**	2,739

1 *This subordinated loan was early repaid in the first half of 2023 and distributions were made on repayment.*
2 *This subordinated loan was issued in March 2023.*

7 Trading assets

	2023 HK$m	2022 HK$m
Treasury and other eligible bills	**132,659**	132,737
Debt securities	**351,734**	231,601
Equity securities	**375,590**	264,447
Reverse repurchase agreements and other similar secured lending	**62,710**	59,398
Other[1]	**18,557**	11,622
At 31 Dec	**941,250**	699,805

1 *'Other' includes term lending and other accounts with customers and banks.*

8 Derivatives

Notional contract amounts and fair values of derivatives by product contract type

	Notional contract amount		Fair value – Assets			Fair value – Liabilities		
	Trading HK$m	Hedging HK$m	Trading HK$m	Hedging HK$m	Total HK$m	Trading HK$m	Hedging HK$m	Total HK$m
Foreign Exchange	**20,216,483**	**166,680**	**201,790**	**6,640**	**208,430**	**218,927**	**1,382**	**220,309**
Interest rate	**32,976,189**	**452,160**	**401,534**	**12,898**	**414,432**	**438,882**	**4,160**	**443,042**
Equity	**879,049**	**—**	**16,464**	**—**	**16,464**	**15,246**	**—**	**15,246**
Credit	**446,998**	**—**	**2,277**	**—**	**2,277**	**2,889**	**—**	**2,889**
Commodity and other	**179,417**	**—**	**3,011**	**—**	**3,011**	**4,091**	**—**	**4,091**
Gross total	**54,698,136**	**618,840**	**625,076**	**19,538**	**644,614**	**680,035**	**5,542**	**685,577**
Offset					**(235,361)**			**(235,361)**
At 31 Dec 2023					**409,253**			**450,216**
Foreign Exchange	19,574,143	34,877	263,237	3,226	266,463	281,461	14	281,475
Interest rate	32,534,469	456,741	529,411	12,416	541,827	575,656	3,326	578,982
Equity	785,281	—	18,363	—	18,363	14,017	—	14,017
Credit	462,180	—	2,386	—	2,386	2,708	—	2,708
Commodity and other	159,242	—	3,230	—	3,230	3,939	—	3,939
Gross total	53,515,315	491,618	816,627	15,642	832,269	877,781	3,340	881,121
Offset					(329,392)			(329,392)
At 31 Dec 2022					502,877			551,729

The notional contract amounts of derivatives held for trading purposes and derivatives designated in hedge accounting relationships indicate the nominal value of transactions outstanding at the balance sheet date. They do not represent amounts at risk.

Use of derivatives

The group transacts derivatives for three primary purposes: to create risk management solutions for clients, to manage the portfolio risk arising from client business, and to manage and hedge the group's own risks. Derivatives (except for derivatives which are designated as effective hedging instruments) are held for trading. Within the held for trading classification are two types of derivative instruments: those used in sales and trading activities, and those used for risk management purposes but which for various reasons do not meet the qualifying criteria for hedge accounting. The second category includes derivatives managed in conjunction with financial instruments designated at fair value. These activities are described more fully below.

The group's derivative activities give rise to significant open positions in portfolios of derivatives. These positions are managed constantly to ensure that they remain within acceptable risk levels. When entering into derivative transactions, the group employs the same credit risk management framework to assess and approve potential credit exposures that it uses for traditional lending.

Trading derivatives

Most of the group's derivative transactions relate to sales and trading activities. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Trading activities include market-making and risk management. Market-making entails quoting bid and offer prices to other market participants for the purpose of generating revenues based on spread and volume. Risk management activity is undertaken to manage the risk arising from client transactions, with the principal purpose of retaining client margin. Other derivatives classified as held for trading include non-qualifying hedging derivatives.

Derivatives valued using models with unobservable inputs

Any initial gain or loss on financial instruments where the valuation is dependent on unobservable parameters is deferred over the life of the contract or until the instrument is redeemed, transferred or sold or the fair value becomes observable. All derivatives that are part of qualifying hedging relationships have valuations based on observable market parameters.

The aggregate unobservable inception profit yet to be recognised in the income statement is immaterial.

Hedge accounting derivatives

The group applies hedge accounting to manage interest rate and foreign exchange risk. The group uses derivatives (principally interest rate and currency swaps) for hedging purposes in the management of its own asset and liability portfolios and structural positions. This enables the group to optimise its overall costs of accessing debt capital markets, and to mitigate the market risk which would otherwise arise from structural imbalances in the maturity and other profiles of its assets and liabilities. The accounting treatment of hedging transactions varies according to the nature of the instrument hedged and the type of hedging transaction. Derivatives may qualify as hedges for accounting purposes if they are fair value hedges, or cash flow hedges.

Hedged risk components

The group designates a portion of cash flows of a financial instrument or a group of financial instruments for a specific interest rate or foreign currency risk component in a fair value or cash flow hedge. The designated risks and portions are either contractually specified or otherwise separately identifiable components of the financial instrument that are reliably measurable. Risk-free or benchmark interest rates generally are regarded as being both separately identifiable and reliably measurable, except for the Ibor reform transition where the group designates alternative benchmark rates as the hedged risk which may not have been separately identifiable upon initial designation, provided the group reasonably expects it will meet the requirement within 24 months from the first designation date. The designated risk component accounts for a significant portion of the overall changes in fair value or cash flows of the hedged item(s).

Fair value hedges

The group enters into to fixed-for-floating-interest-rate swaps to manage the exposure to changes in fair value due to movements in market interest rates on certain fixed rate financial instruments which are not measured at fair value through profit or loss, including debt securities held and issued.

HSBC hedging instrument by hedged risk

	Hedging instrument				
		Carrying amount			
	Notional amount[1,3]	Assets	Liabilities	Balance sheet presentation	Change in fair value[2]
Hedged risk	HK$m	HK$m	HK$m		HK$m
Interest rate	**240,001**	**9,293**	**3,700**	**Derivatives**	**(3,259)**
At 31 Dec 2023	**240,001**	**9,293**	**3,700**		**(3,259)**
Interest rate	309,450	11,761	2,281	Derivatives	6,130
At 31 Dec 2022	309,450	11,761	2,281		6,130

1 *The notional contract amounts of derivatives designated in qualifying hedge accounting relationships indicate the nominal value of transactions outstanding at the balance sheet date. They do not represent amounts at risk.*
2 *Used in effectiveness testing, which uses the full fair value change of the hedging instrument not excluding any component.*
3 *The notional amount of non-dynamic fair value hedges is equal to US$4,500m (2022: US$4,500m), of which the weighted-average maturity date is December 2030 and the weighted-average swap rate is 2.67% (2022: 2.67%).*

HSBC hedged item by hedged risk

	Hedged item						Ineffectiveness	
	Carrying amount		Accumulated fair value hedge adjustments included in carrying amount[2]			Change in fair value[1]	Recognised in profit and loss	Profit and loss presentation
	Assets	Liabilities	Assets	Liabilities	Balance sheet presentation			
Hedged risk	HK$m	HK$m	HK$m	HK$m		HK$m	HK$m	
Interest rate	**190,469**		**(4,791)**		**Financial investments measured at fair value through other comprehensive income**	**3,135**	**(245)**	**Net income from financial instruments held for trading or managed on a fair value basis**
	6,449		**(210)**		**Loans and advances to customers**	**242**		
		—		**—**	**Debt securities in issue**	**—**		
		32,484		**(1,898)**	**Subordinated liabilities[3]**	**(363)**		
At 31 Dec 2023	**196,918**	**32,484**	**(5,001)**	**(1,898)**		**3,014**	**(245)**	
Interest rate	257,126		(10,312)		Financial investments measured at fair value through other comprehensive income	(10,716)	(237)	Net income from financial instruments held for trading or managed on a fair value basis
	5,755		(435)		Loans and advances to customers	(351)		
		1,161		—	Debt securities in issue	8		
		33,113		(2,260)	Subordinated liabilities[3]	4,692		
At 31 Dec 2022	262,881	34,274	(10,747)	(2,260)		(6,367)	(237)	

1 *Used in effectiveness testing, which comprise an amount attributable to the designated hedged risk that can be a risk component.*
2 *The accumulated amount of fair value adjustments remaining in the statement of financial position for hedged items that have ceased to be adjusted for hedging gains and losses were liabilities of HK$396m (2022: assets of HK$143m) for FVOCI assets, and assets of HK$1,067m (2022: HK$1,243m) for subordinated liabilities.*
3 *Represents Loss Absorbing Capacity ('LAC') instruments issued by the Bank to HSBC Asia Holdings Limited, the balance of which is included in 'amounts due to Group companies'.*

Sources of hedge ineffectiveness may arise from basis risk including but not limited to the discount rates used for calculating the fair value of derivatives, hedges using instruments with a non-zero fair value and notional and timing differences between the hedged items and hedging instruments.

The interest rate risk of the group's fixed rate debt securities issued is managed in a non-dynamic risk management strategy.

Cash flow hedges

The group's cash flow hedging instruments consist principally of interest rate swaps and cross-currency swaps that are used to manage the variability in future interest cash flows of non-trading financial assets and liabilities, arising due to changes in market interest rates and foreign-currency basis.

The group applies macro cash flow hedging for interest-rate risk exposures on portfolios of replenishing current and forecasted issuances of non-trading assets and liabilities that bear interest at variable rates, including rolling such instruments. The amounts and timing of future cash flows, representing both principal and interest flows, are projected for each portfolio of financial assets and liabilities on the basis of their contractual terms and other relevant factors, including estimates of prepayments and defaults. The aggregate cash flows representing both principal balances and interest cash flows across all portfolios are used to determine the effectiveness and ineffectiveness. Macro cash flow hedges are considered to be dynamic hedges.

The group also hedges the variability in future cash-flows on foreign-denominated financial assets and liabilities arising due to changes in foreign exchange market rates with cross-currency swaps; these are considered dynamic hedges.

Hedging instrument by hedged risk

	Hedging instrument					Hedged item	Ineffectiveness	
		Carrying amount						
Hedged risk	Notional amount[1] HK$m	Assets HK$m	Liabilities HK$m	Balance sheet presentation	Change in fair value[2] HK$m	Change in fair value[3] HK$m	Recognised in profit and loss HK$m	Profit and loss presentation
Foreign currency	**166,680**	**6,640**	**1,382**	**Derivatives**	**5,422**	**5,422**	**—**	**Net income from financial instruments held for trading or managed on a fair value basis**
Interest rate	**212,159**	**3,605**	**460**	**Derivatives**	**1,834**	**1,803**	**31**	
At 31 Dec 2023	**378,839**	**10,245**	**1,842**		**7,256**	**7,225**	**31**	
Foreign currency	34,877	3,226	14	Derivatives	5,461	5,461	—	Net income from financial instruments held for trading or managed on a fair value basis
Interest rate	147,291	655	1,045	Derivatives	(448)	(448)	—	
At 31 Dec 2022	182,168	3,881	1,059		5,013	5,013	—	

1 *The notional contract amounts of derivatives designated in qualifying hedge accounting relationships indicate the nominal value of transactions outstanding at the balance sheet date. They do not represent amounts at risk.*
2 *Used in effectiveness testing; comprising the full fair value change of the hedging instrument not excluding any component.*
3 *Used in effectiveness assessment; comprising amount attributable to the designated hedged risk that can be a risk component.*

Sources of hedge ineffectiveness may arise from basis risk, including but not limited to timing differences between the hedged items and hedging instruments, and hedges using instruments with a non-zero fair value.

Reconciliation of equity and analysis of other comprehensive income by risk type

	Interest rate HK$m	Foreign currency HK$m
Cash flow hedging reserve at 1 Jan 2023	**(338)**	**(1,149)**
Fair value gains	**1,803**	**5,422**
Fair value (gains)/losses reclassified from the cash flow hedge reserve to the income statement in respect of:		
Hedged items that have affected profit or loss[1]	**856**	**(4,107)**
Income taxes	**(423)**	**(217)**
Others	**—**	**5**
Cash flow hedging reserve at 31 Dec 2023	**1,898**	**(46)**
Cash flow hedging reserve at 1 Jan 2022	108	45
Fair value gains/(losses)	(448)	5,461
Fair value (gains) reclassified from the cash flow hedge reserve to the income statement in respect of:		
Hedged items that have affected profit or loss[1]	(109)	(6,891)
Income taxes	112	236
Others	(1)	—
Cash flow hedging reserve at 31 Dec 2022	(338)	(1,149)

1 *Hedged items that have affected profit or loss are primarily recorded within interest income.*

Interest rate benchmark reform

At 31 December 2023, HK$33,127m (2022: HK$157,460m) of the notional amounts of interest rate derivatives designated in hedge accounting relationships are expected to be directly affected by market-wide Ibors reform and in scope of HKFRS Interest Rate Benchmark Reform Phase 1 amendments. They do not represent the extent of the risk exposure managed by the group.
At 31 December 2022, the Hong Kong interbank offered rate ('HIBOR') was included given that the reform of this benchmark was considered possible. At 31 December 2023, HIBOR is no longer expected to be directly affected by ibors reform following the successful transition of all major LIBOR settings and the HKMA affirmation that there were no plans to discontinue HIBOR.

9 Financial assets designated and otherwise mandatorily measured at fair value through profit or loss

	2023			2022		
	Designated at fair value	**Mandatorily measured at fair value**	**Total**	Designated at fair value	Mandatorily measured at fair value	Total
	HK$m	**HK$m**	**HK$m**	HK$m	HK$m	HK$m
Treasury and other eligible bills	**2**	**5,565**	**5,567**	—	6,777	6,777
Debt securities	**12,128**	**444,653**	**456,781**	18,882	418,571	437,453
Equity securities	**—**	**222,980**	**222,980**	—	186,718	186,718
Reverse repurchase agreements and other similar secured lending	**—**	**514**	**514**	—	1,764	1,764
Other[1]	**2,900**	**18,831**	**21,731**	—	20,318	20,318
At 31 Dec	**15,030**	**692,543**	**707,573**	18,882	634,148	653,030

1 *'Other' includes term lending to customers and banks, and default fund contribution.*

10 Loans and advances to customers

	2023	2022
	HK$m	HK$m
Gross loans and advances to customers	**3,595,929**	3,734,987
Expected credit loss allowances	**(38,853)**	(39,919)
At 31 Dec	**3,557,076**	3,695,068

The following table provides an analysis of gross loans and advances to customers by industry sector based on the Statistical Classification of economic activities in the European Community ('NACE').

Analysis of gross loans and advances to customers

	2023	2022
	HK$m	HK$m
Residential mortgages	**1,224,325**	1,177,615
Credit card advances	**101,257**	92,023
Other personal	**237,440**	254,729
Total personal	**1,563,022**	1,524,367
Real estate & Construction	**537,393**	616,517
Wholesale and retail trade	**350,492**	377,326
Manufacturing	**359,914**	371,718
Transportation and storage	**96,789**	104,933
Other	**396,760**	437,269
Total corporate and commercial	**1,741,348**	1,907,763
Non-bank financial institutions	**291,559**	302,857
At 31 Dec	**3,595,929**	3,734,987
By geography[1]		
Hong Kong	**2,211,592**	2,322,684
Mainland China	**349,116**	396,989
Australia	**294,502**	269,937
Singapore	**238,537**	240,590
India	**143,657**	116,840
Taiwan	**90,396**	88,738
Malaysia	**81,898**	84,931
Indonesia	**30,141**	29,528
Other	**156,090**	184,750

1 *The geographical information shown above is classified by the location of the principal operations of the subsidiary or the branch responsible for advancing the funds.*

Finance lease receivables and hire purchase contracts

The group leases a variety of assets to third parties under finance leases. At the end of lease terms, assets may be sold to third parties or leased for further terms. Rentals are calculated to recover the cost of assets less their residual value, and earn finance income. Loans and advances to customers include receivables under finance leases and hire purchase contracts having the characteristics of finance leases.

Net investment in finance leases and hire purchase contracts

	2023			2022		
	Total future minimum payments	**Unearned finance income**	**Present value**	Total future minimum payments	Unearned finance income	Present value
	HK$m	**HK$m**	**HK$m**	HK$m	HK$m	HK$m
Amounts receivable						
– within one year	**2,395**	**(963)**	**1,432**	2,971	(783)	2,188
– one to two years	**2,310**	**(876)**	**1,434**	2,538	(724)	1,814
– two to three years	**2,360**	**(828)**	**1,532**	2,287	(677)	1,610
– three to four years	**2,285**	**(782)**	**1,503**	2,226	(644)	1,582
– four to five years	**2,134**	**(736)**	**1,398**	2,172	(619)	1,553
– after five years	**25,740**	**(5,725)**	**20,015**	24,585	(4,729)	19,856
	37,224	**(9,910)**	**27,314**	36,779	(8,176)	28,603
Expected credit loss allowances			**(274)**			(309)
At 31 Dec			**27,040**			28,294

11 Financial investments

	2023	2022
	HK$m	HK$m
Financial investments measured at fair value through other comprehensive income	**1,410,271**	1,239,941
– treasury and other eligible bills	**700,863**	612,990
– debt securities	**703,459**	619,826
– equity securities	**5,949**	7,125
Debt instruments measured at amortised cost	**618,941**	509,766
– treasury and other eligible bills	**52,758**	129,174
– debt securities	**566,183**	380,592
At 31 Dec	**2,029,212**	1,749,707

Equity instruments measured at fair value through other comprehensive income

	2023		2022	
	Fair value	**Dividends recognised**	Fair value	Dividends recognised
Type of equity instruments	**HK$m**	**HK$m**	HK$m	HK$m
Business facilitation	**5,435**	**267**	6,615	217
Investments required by central institutions	**400**	**5**	404	3
Others	**114**	**—**	106	—
At 31 Dec	**5,949**	**272**	7,125	220

12 Assets pledged, assets transferred and collateral received

Assets pledged

Financial assets pledged to secure liabilities

	2023	2022
	HK$m	HK$m
Treasury bills and other eligible securities	**119,861**	121,131
Loans and advances to banks	**3,019**	4,372
Loans and advances to customers	**17,710**	22,512
Debt securities	**343,226**	149,687
Equity securities	**78,246**	34,388
Cash collateral included in other assets	**118,633**	129,025
Assets pledged at 31 Dec	**680,695**	461,115
Amount of liabilities secured	**514,795**	354,146

The table above shows assets where a charge has been granted to secure liabilities on a legal and contractual basis. These transactions are conducted under terms that are usual and customary to collateralised transactions including repurchase agreements, securities lending, derivative margining, and include assets pledged to cover short positions and to facilitate settlement processes with clearing houses as well as swaps of equity and debt securities. The group places both cash and non-cash collateral in relation to derivative transactions.

Hong Kong currency notes in circulation are secured by the deposit of funds in respect of which the Hong Kong Government certificates of indebtedness are held.

Financial assets pledged as collateral which the counterparty has the right to sell or repledge was HK$373,138m (2022: HK$193,461m).

Assets transferred

Transferred financial assets not qualifying for full derecognition and associated financial liabilities

	2023		2022	
	Carrying amount of:		Carrying amount of:	
	Transferred assets	Associated liabilities	Transferred assets	Associated liabilities
	HK$m	HK$m	HK$m	HK$m
Repurchase agreements	**364,502**	**330,073**	167,260	151,677
Securities lending agreements	**87,227**	**1,187**	70,036	3,644
	451,729	**331,260**	237,296	155,321

The assets pledged include transfers to third parties that do not qualify for derecognition, notably secured borrowings such as debt securities held by counterparties as collateral under repurchase agreements and equity securities lent under securities lending agreements, as well as swaps of equity and debt securities. For secured borrowings, the transferred asset collateral continues to be recognised in full while a related liability, reflecting the group's obligation to repurchase the assets for a fixed price at a future date, is also recognised on the balance sheet. Where securities are swapped, the transferred asset continues to be recognised in full. There is no associated liability as the non-cash collateral received is not recognised on the balance sheet. The group is unable to use, sell or pledge the transferred assets for the duration of the transaction, and remains exposed to interest rate risk and credit risk on these pledged assets.

Collateral received

Assets accepted as collateral relate primarily to standard securities borrowing, reverse repurchase agreements, swaps of securities and derivative margining. The group is obliged to return equivalent securities. These transactions are conducted under terms that are usual and customary to standard securities borrowing, reverse repurchase agreements and derivative margining.

Fair value of collateral accepted as security for assets

	2023	2022
	HK$m	HK$m
Fair value of collateral permitted to sell or repledge in the absence of default	**1,307,234**	1,337,822
Fair value of collateral actually sold or repledged	**482,415**	520,756

13 Investments in subsidiaries

Main subsidiaries of the Bank

	Place of incorporation	Principal activity	The group's interest in issued share capital/ registered or charter capital
Hang Seng Bank Limited[1]	Hong Kong	Banking	62.14%
HSBC Bank (China) Company Limited	mainland China	Banking	100%
HSBC Bank Malaysia Berhad	Malaysia	Banking	100%
HSBC Bank Australia Limited[2]	Australia	Banking	100%
HSBC Bank (Taiwan) Limited[2]	Taiwan	Banking	100%
HSBC Bank (Singapore) Limited	Singapore	Banking	100%
HSBC Life (International) Limited[2]	Bermuda	Retirement benefits and life insurance	100%

1 *In addition to the strategic holding disclosed above, the group held 0.09% (2022: 0.07%) shareholding as part of its trading books.*
2 *Held indirectly.*

All of the above subsidiaries are included in the group's consolidated financial statements. These subsidiaries make their financial statements up to 31 December.

The principal places of business are the same as the places of incorporation except for HSBC Life (International) Limited which operates mainly in Hong Kong.

The proportion of voting rights held is the same as the proportion of ownership interest held.

The main subsidiaries are regulated banking and insurance entities in the Asia-Pacific region and, as such, are required to maintain certain minimum levels of capital and liquid assets to support their operations. The effect of these regulatory requirements is to limit the extent to which the subsidiaries may transfer funds to the Bank in the form of repayment of shareholder loans or cash dividends.

Subsidiary with significant non-controlling interest

	2023	2022
	HK$m	HK$m
Hang Seng Bank Limited		
Proportion of ownership interests and voting rights held by non-controlling interests (%)[1]	**37.86**	37.86
Profit attributable to non-controlling interests	**6,730**	4,264
Accumulated non-controlling interests of the subsidiary	**59,115**	56,121
Dividends paid to non-controlling interests	**3,836**	2,823
Summarised financial information (before intra-group eliminations):		
– total assets	**1,692,094**	1,854,446
– total liabilities	**1,523,910**	1,694,448
– net operating income before change in expected credit losses and other credit impairment charges	**40,789**	34,291
– profit for the year	**17,838**	11,272
– other comprehensive income/(expense) for the year, net of tax	**1,215**	(2,316)
– total comprehensive income for the year	**19,053**	8,956

1 *Includes the group's shareholding held 0.09% (2022: 0.07%) as part of its trading books.*

14 Interests in associates and joint ventures

Associates and joint ventures

	2023	2022
	HK$m	HK$m
Share of net assets	**190,479**	182,137
Goodwill originally arising on acquisition	**3,713**	3,815
Impairment	**(23,986)**	(54)
At 31 Dec	**170,206**	185,898

As 31 December 2023, the group’s interests in associates amounted to HK$170,196m (2022: HK$185,888m).

Principal associate

	Place of incorporation	The group’s interest in issued share capital
Bank of Communications Co., Ltd	mainland China	19.03%

Bank of Communications Co., Ltd. is listed on recognised stock exchanges. The fair value represents valuation based on the quoted market price of the shares held (Level 1 in the fair value hierarchy) and amounted to HK$68,841m at 31 December 2023 (2022: HK$63,469m).

Bank of Communications Co., Ltd. (‘BoCom’)

We maintain a 19.03% interest in BoCom. The group’s investment in BoCom is classified as an associate. Significant influence in BoCom was established with consideration of all relevant factors, including representation on BoCom’s Board of Directors and participation in a resource and experience sharing agreement (‘RES’). Under the RES, HSBC staff have been seconded to assist in the maintenance of BoCom’s financial and operating policies. Investments in associates are recognised using the equity method of accounting in accordance with HKAS 28, whereby the investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the group’s share of associate’s net assets. An impairment test is required if there is any indication of impairment.

Impairment testing

The fair value of the group’s investment in BoCom had been below the carrying value for approximately twelve years. We have previously disclosed that the excess of the value in use ('VIU') calculation over its balance sheet value has been marginal in recent years, and that reasonably possible changes in assumptions could generate an impairment.

Recent macroeconomic, policy and industry-wide factors resulted in a wider range of possible VIU calculation outcomes, and our VIU calculation uses both historical experience and market participant views to estimate future cash flows, relevant discount rates and associated capital assumptions.

At 31 December 2023, the group performed an impairment test on the carrying value, which resulted in an impairment of HK$24.0bn, as the recoverable amount as determined by a VIU calculation was lower than the carrying value.

	At					
	31 Dec 2023			31 Dec 2022		
	VIU	Carrying value	Fair value	VIU	Carrying value	Fair value
	HK$bn	HK$bn	HK$bn	HK$bn	HK$bn	HK$bn
BoCom	**166.2**	**166.2**	**68.8**	183.0	182.3	63.5

The impairment test will be updated in future periods, reflecting updated assumptions in the VIU impairment calculation. Going forward, the carrying value will be aligned to the updated VIU calculation and capped at carrying value that would have been determined had no impairment loss been recognised, rather than at cost and adjusted thereafter for the post-acquisition change in the group's share of associate's net assets, and therefore there is a risk of reversals or further impairments in future periods.

The VIU may increase or decrease depending on the effect of changes to model inputs. The main model inputs are described below and are based on factors observed at period-end. The factors that could result in increases or reductions in the VIU include changes in BoCom's short-term performance, a change in regulatory capital requirements or revisions to the forecast of BoCom's future profitability.

If the group did not have significant influence in BoCom, the investment would be carried at fair value rather than the current carrying value.

Basis of recoverable amount

The impairment test was performed by comparing the recoverable amount of BoCom, determined by a VIU calculation, with its carrying value. The VIU calculation uses discounted cash flow projections based on management's best estimates of future earnings available to ordinary shareholders prepared in accordance with HKAS 36. Significant management judgement is required in arriving at the best estimate.

There are two main components to the VIU calculation. The first component is management's best estimate of BoCom's earnings. Forecast earnings growth over the short to medium term is lower than recent (within the last five years) actual growth and reflects the impact of recent macroeconomic, policy and industry factors in mainland China. As a result of management's intent to continue to retain its investment, earnings beyond the short to medium term are then extrapolated into perpetuity using a long-term growth rate to derive a terminal value, which comprises the majority of the VIU. The second component is the capital maintenance charge ('CMC'), which is management's forecast of the earnings that need to be withheld in order for BoCom to meet capital requirements over the forecast period, meaning that CMC is deducted when arriving at management's estimate of future earnings available to ordinary shareholders. The CMC reflects the revised capital requirements arising from revisions of the ratio of risk-weighted assets to total assets assumption. The principal inputs to the CMC calculation include estimates of asset growth, the ratio of risk-weighted assets to total assets and the expected capital requirements. An increase in the CMC as a result of a change to these principal inputs would reduce VIU. Additionally, management considers other qualitative factors, to ensure that the inputs to the VIU calculation remain appropriate.

Key assumptions in value in use calculation

We used a number of assumptions in our VIU calculation, in accordance with the requirements of HKAS 36:

- Long-term profit growth rate: 3% (2022: 3%) for periods after 2027, which does not exceed forecast GDP growth in mainland China and is similar to forecasts by external analysts.
- Long-term asset growth rate: 3% (2022: 3%) for periods after 2027, which is the rate that assets are expected to grow to achieve long-term profit growth of 3%.
- Discount rate: 9.00% (2022: 10.04%), which is based on a capital asset pricing model ('CAPM'), using market data. The discount rate used is within the range of 7.9% to 9.7% (2022: 8.4% to 10.4%) indicated by the CAPM, and decreased as a consequence of a market driven reduction in beta. While the CAPM range sits at the lower end of the range adopted by selected external analysts of 8.8% to 13.5% (2022: 8.8% to 13.5%), we continue to regard the CAPM range as the most appropriate basis for determining this assumption.
- Expected credit losses ('ECL') as a percentage of loans and advances to customers: ranges from 0.80% to 0.97% (2022: 0.99% to 1.05%) in the short to medium term, reflecting reported credit experience in mainland China. For periods after 2027, the ratio is 0.97% (2022: 0.97%), which is higher than BoCom's average ECL as a percentage of loans and advances to customers in recent years prior to the pandemic.
- Risk-weighted assets as a percentage of total assets: ranges from 62.0% to 63.7% (2022: 61.0% to 64.4%) in the short to medium term, reflecting higher risk-weights in the short term followed by an expected reversion to recent historical levels. For periods after 2027, the ratio is 62.0% (2022: 61.0%), which is similar to BoCom's actual results in recent years.
- Loans and advances to customers growth rate: ranges from 9.0% to 10.0% (2022: 7.1% to 11.0%) in the short to medium term, reflecting higher growth rate in loans and advances to customers as a result of recent macroeconomic, policy and industry factors in mainland China. Increases in the forecast growth rate of loans and advances to customers results in higher forecast ECL.
- Operating income growth rate: ranges from -0.4% to 9.7% (2022: 1.9% to 7.7%) in the short to medium term, which is lower than BoCom's actual results in recent years, and is impacted by projections of net interest income in the short term as a consequence of recent macroeconomic, policy and industry factors in mainland China.
- Cost-income ratio: ranges from 35.5% to 39.8% (2022: 35.5% to 36.3%) in the short to medium term. These ratios are higher than BoCom's actual results in recent years and forecasts disclosed by external analysts.
- Effective tax rate ('ETR'): ranges from 5.3% to 15.0% (2022: 4.4% to 15.0%) in the short to medium term, reflecting BoCom's actual results and an expected increase towards the long-term assumption through the forecast period. For periods after 2027, the rate is 15.0% (2022: 15.0%), which is higher than the recent historical average, and aligned to the minimum tax rate as proposed by the OECD/Group of 20 ('G20') Inclusive Framework on Base Erosion and Profit Shifting.
- Capital requirements: capital adequacy ratio of 12.5% (2022: 12.5%) and tier 1 capital adequacy ratio of 9.5% (2022: 9.5%), based on BoCom's capital risk appetite and capital requirements respectively.

The following table further illustrates the impact on VIU of reasonably possible changes to key assumptions. This reflects the sensitivity of the VIU to each key assumption on its own and it is possible that more than one favourable and/or unfavourable change may occur at the same time. Loans and advances to customers growth rate has been added to the list of key assumptions detailed in the table to reflect the greater potential variability associated with the assumption as a result of recent macroeconomic, policy and industry factors in mainland China. The selected rates of reasonably possible changes to key assumptions are based on external analysts' forecasts, statutory requirements and other relevant external data sources, which can change period to period. Unless specified, favourable and unfavourable changes are consistently applied throughout short-to-medium and long term forecast years, based on a straight-line average of the base case assumption.

Sensitivity of VIU to reasonably possible changes in key assumptions

	Favourable change			Unfavourable change		
	bps	Increase in VIU HK$bn	VIU HK$bn	bps	Decrease in VIU HK$bn	VIU HK$bn
At 31 December 2023						
Long-term profit growth rate[1]	**58**	**25.2**	**191.4**	**(79)**	**(27.3)**	**138.9**
Long-term asset growth rate[1]	**(79)**	**34.9**	**201.1**	**58**	**(31.7)**	**134.5**
Discount rate	**(110)**	**34.5**	**200.7**	**280**	**(48.4)**	**117.8**
Expected credit losses as a percentage of loans and advances to customers	**2023 to 2027: 78 2028 onwards: 91**	**22.1**	**188.3**	**2023 to 2027: 120 2028 onwards: 104**	**(34.8)**	**131.4**
Risk-weighted assets as a percentage of total assets	**(150)**	**6.2**	**172.4**	**216**	**(12.8)**	**153.4**
Loans and advances to customers growth rate	**(213)**	**24.6**	**190.8**	**207**	**(23.4)**	**142.8**
Operating income growth rate	**57**	**19.7**	**185.9**	**(81)**	**(20.7)**	**145.5**
Cost-income ratio	**(212)**	**5.3**	**171.5**	**99**	**(23.4)**	**142.8**
Long-term effective tax rate	**(426)**	**12.0**	**178.2**	**1,000**	**(28.1)**	**138.1**
Capital requirements – capital adequacy ratio	**—**	**—**	**166.2**	**215**	**(59.5)**	**106.7**
Capital requirements – tier 1 capital adequacy ratio	**—**	**—**	**166.2**	**248**	**(29.2)**	**137.0**
At 31 December 2022						
Long-term profit growth rate[1]	75	28.1	211.1	(71)	(21.1)	161.9
Long-term asset growth rate[1]	(71)	24.2	207.2	75	(31.8)	151.2
Discount rate	(164)	54.3	237.3	136	(28.7)	154.3
Expected credit losses as a percentage of loans and advances to customers	2022 to 2026: 95 2027 onwards: 91	14.9	197.9	2022 to 2026: 120 2027 onwards: 104	(22.5)	160.5
Risk-weighted assets as a percentage of total assets	(118)	0.6	183.6	239	(17.5)	165.5
Loans and advances to customers growth rate	(75)	8.9	191.9	295	(24.7)	158.3
Operating income growth rate	44	10.5	193.5	(83)	(19.3)	163.7
Cost-income ratio	(122)	8.1	191.1	174	(16.5)	166.5
Long-term effective tax rate	(426)	11.8	194.8	1,000	(27.7)	155.3
Capital requirements – capital adequacy ratio	—	—	183.0	191	(48.8)	134.2
Capital requirements – tier 1 capital adequacy ratio	—	—	183.0	266	(24.8)	158.2

1 *The favourable and unfavourable ranges of the long-term profit growth rate and long-term asset growth rate assumptions reflect the close relationship between these assumptions, which would result in offsetting changes to each assumption.*

Considering the interrelationship of the changes set out in the table above, management estimates that the reasonably possible range of VIU is HK$102.3bn to HK$225.2bn (2022: HK$131.9bn to HK$223.9bn), acknowledging that the fair value of the group's investment has ranged from HK$52.6bn to HK$90.9bn over the last five years as at the date of the impairment tests. The possible range of VIU is based on impacts set out in the table above arising from the favourable/unfavourable change in the earnings in the short to medium term, the long-term expected credit losses as a percentage of loans and advances to customers and a 50bps increase/decrease in the discount rate. All other long-term assumptions, and the basis of the CMC have been kept unchanged when determining the reasonably possible range of the VIU.

Selected financial information of BoCom

The statutory accounting reference date of BoCom is 31 December. For the year ended 31 December 2023, the group included the associate's results on the basis of financial statements made up for the 12 months to 30 September 2023, but taking into account the financial effect of known significant transactions or events in the period from 1 October 2023 to 31 December 2023.

Selected balance sheet information of BoCom

	At 30 Sep **2023** **HK$m**	At 31 Dec 2022 HK$m
Cash and balances with central banks	**881,237**	911,654
Due from and placements with banks and other financial institutions	**784,860**	780,826
Loans and advances to customers	**8,496,811**	8,069,782
Other financial assets	**4,593,262**	4,551,920
Other assets	**465,521**	383,391
Total assets	**15,221,691**	14,697,573
Due to and placements from banks and other financial institutions	**2,281,718**	2,301,346
Deposits from customers	**9,504,593**	8,989,936
Other financial liabilities	**1,962,818**	1,942,935
Other liabilities	**287,310**	289,638
Total liabilities	**14,036,439**	13,523,855
Total equity	**1,185,252**	1,173,718

Reconciliation of BoCom's net assets to carrying amount in the group's consolidated financial statements

	At 30 Sep	
	2023	2022
	HK$m	HK$m
The group's share of ordinary shareholders' equity	**186,578**	178,526
Goodwill originally arising on acquisition	**3,626**	3,728
Impairment	**(23,955)**	—
Carrying amount	**166,249**	182,254

Selected income statement information of BoCom

	For the 9 months ended 30 Sep	
	2023	2022
	HK$m	HK$m
Net interest income	**137,151**	148,814
Net fee and commission income	**37,695**	40,572
Credit and impairment losses	**(53,514)**	(59,834)
Depreciation and amortisation	**(15,474)**	(13,975)
Tax expense	**(4,321)**	(3,415)
– profit for the year	**76,993**	79,102
– other comprehensive income/(expense)	**4,942**	(292)
Total comprehensive income	**81,935**	78,810
Dividends received from BoCom	**5,762**	5,881

Using the latest period for which BoCom has disclosed this information (at 30 June 2023), the group's share of associate's contingent liabilities was HK$463,564m (2022: HK$442,884m).

15 Goodwill and intangible assets

Goodwill and intangible assets include goodwill arising on business combinations and other intangible assets.

	2023	2022
	HK$m	HK$m
Goodwill	**6,817**	6,795
Other intangible assets[1]	**32,106**	30,068
At 31 Dec	**38,923**	36,863

1 *Included within other intangible assets is internally generated software with a net carrying value of HK$29,370m (2022: HK$27,209m). During the year, capitalisation of internally generated software was HK$9,391m (2022: HK$11,570m), the amortisation charge was HK$6,922m (2022: HK$5,495m) and the impairment charge was HK$122m (2022: HK$332m).*

16 Property, plant and equipment

	2023	2022
	HK$m	HK$m
Owned property, plant and equipment[1]	**123,301**	123,491
Other right-of-use assets	**6,374**	7,435
At 31 Dec	**129,675**	130,926

1 *Included leasehold land and buildings of HK$112,308m (2022: HK$112,591m) for which the right of use are considered sufficient to constitute control. They are therefore presented as owned assets.*

Movement in owned property, plant and equipment

	2023				2022			
	Land and buildings	Investment properties	Equipment	Total	Land and buildings	Investment properties	Equipment	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Cost or valuation								
At 1 Jan	**101,427**	**16,199**	**16,659**	**134,285**	102,367	13,465	15,747	131,579
Exchange and other adjustments	**(326)**	**(13)**	**(52)**	**(391)**	(797)	8	(661)	(1,450)
Additions	**674**	**57**	**1,705**	**2,436**	3,183	324	2,253	5,760
Disposals	**(22)**	**—**	**(1,087)**	**(1,109)**	(55)	—	(680)	(735)
Transfers	**—**	**—**	**—**	**—**	—	—	—	—
Elimination of accumulated depreciation on revalued land and buildings	**(5,723)**	**—**	**—**	**(5,723)**	(5,105)	—	—	(5,105)
Surplus/(deficit) on revaluation	**5,330**	**(35)**	**—**	**5,295**	4,683	(133)	—	4,550
Reclassifications	**(89)**	**3**	**(10)**	**(96)**	(2,849)	2,535	—	(314)
At 31 Dec	**101,271**	**16,211**	**17,215**	**134,697**	101,427	16,199	16,659	134,285
Accumulated depreciation								
At 1 Jan	**91**	**—**	**10,703**	**10,794**	87	—	10,420	10,507
Exchange and other adjustments	**(5)**	**—**	**(29)**	**(34)**	(42)	—	(496)	(538)
Charge for the year	**5,876**	**—**	**1,485**	**7,361**	5,151	—	1,399	6,550
Disposals	**(6)**	**—**	**(996)**	**(1,002)**	—	—	(620)	(620)
Transfers	**—**	**—**	**—**	**—**	—	—	—	—
Elimination of accumulated depreciation on revalued land and buildings	**(5,723)**	**—**	**—**	**(5,723)**	(5,105)	—	—	(5,105)
At 31 Dec	**233**	**—**	**11,163**	**11,396**	91	—	10,703	10,794
Net book value at 31 Dec	**101,038**	**16,211**	**6,052**	**123,301**	101,336	16,199	5,956	123,491

The carrying amount of land and buildings, had they been stated at cost less accumulated depreciation, would have been as follows:

	2023	2022
	HK$m	HK$m
Cost less accumulated depreciation	**18,297**	18,584

Valuation of land and buildings and investment properties

The group's land and buildings and investment properties were revalued as at 31 December 2023. The basis of valuation for land and buildings and investment properties was open market value. The resultant values are Level 3 in the fair value hierarchy. The fair values for land and buildings are determined by using a direct comparison approach which values the properties in their respective existing states and uses, assuming sale with immediate vacant possession and by making reference to comparable sales evidence. The valuations take into account the characteristics of the properties (unobservable inputs) which include the location, size, shape, view, floor level, year of completion and other factors collectively. The premium or discount applied to the characteristics of the properties is within minus 20% and plus 20%. In determining the open market value of investment properties, expected future cash flows have been discounted to their present values. The net book value of 'Land and buildings' includes HK$7,253m (2022: HK$6,839m) in respect of properties which were valued using the depreciated replacement cost method.

Valuation of land and buildings and investment properties in Hong Kong, Macau and mainland China were largely carried out by Cushman & Wakefield Limited, who have recent experience in the location and type of properties and who are members of the Hong Kong Institute of Surveyors. This represents 93% by value of the group's properties subject to valuation. Other properties were valued by different independent professionally qualified valuers.

17 Prepayments, accrued income and other assets

	2023	2022
	HK$m	HK$m
Prepayments and accrued income	**42,613**	32,314
Bullion	**52,544**	50,253
Acceptances and endorsements	**53,389**	57,118
Insurance contract assets	**1,092**	345
Reinsurance contract assets	**36,214**	32,863
Current tax assets	**2,145**	2,144
Settlement accounts	**54,756**	38,607
Cash collateral and margin receivables	**78,194**	94,847
Other assets	**50,044**	40,637
At 31 Dec	**370,991**	349,128

Prepayments, accrued income and other assets included HK$275,917m (2022: HK$260,616m) of financial assets, the majority of which were measured at amortised cost.

18 Customer accounts

Customer accounts by country/territory

	2023 HK$m	2022 HK$m
Hong Kong	4,246,041	4,229,531
Singapore	574,574	479,241
Mainland China	437,542	443,954
Australia	250,550	222,222
India	190,439	176,466
Malaysia	123,487	124,792
Taiwan	132,410	119,400
Indonesia	43,744	45,529
Other	262,264	272,574
At 31 Dec	**6,261,051**	6,113,709

19 Trading liabilities

	2023 HK$m	2022 HK$m
Net short positions in securities	70,592	80,564
Repurchase agreements and other similar secured lending	32,360	61,404
Customer accounts	98	485
At 31 Dec	**103,050**	142,453

20 Financial liabilities designated at fair value

	2023 HK$m	2022 HK$m
Deposits by banks and customer accounts	89,604	89,258
Debt securities in issue	51,239	45,454
Liabilities to customers under investment contracts	29,885	33,031
At 31 Dec	**170,728**	167,743

The carrying amount of financial liabilities designated at fair value was HK$456m higher than the contractual amount at maturity (2022: HK$370m lower). The cumulative gain in fair value attributable to changes in credit risk was HK$45m (2022: HK$138m gain).

21 Debt securities in issue

	2023 HK$m	2022 HK$m
Bonds and medium-term notes	83,903	78,537
Other debt securities in issue	55,081	67,826
Total debt securities in issue	**138,984**	146,363
Included within:		
– financial liabilities designated at fair value (Note 20)	(51,239)	(45,454)
At 31 Dec	**87,745**	100,909

22 Accruals and deferred income, other liabilities and provisions

	2023	2022
	HK$m	HK$m
Accruals and deferred income	**49,176**	34,698
Acceptances and endorsements	**53,441**	57,210
Settlement accounts	**32,951**	33,552
Cash collateral and margin payables	**50,461**	58,964
Reinsurance contract liabilities	**6,079**	5,518
Share-based payment liability to HSBC Holdings plc	**1,883**	1,564
Lease liabilities	**6,830**	7,850
Other liabilities[1]	**55,259**	45,347
Provisions for liabilities and charges	**2,033**	1,911
At 31 Dec	**258,113**	246,614

1 *Mainly includes marginal deposit on letter of credit and credit card settlement account.*

Accruals and deferred income, other liabilities and provisions included HK$239,779m (2022: HK$228,240m) of financial liabilities which were measured at amortised cost.

Movement in provisions

Provisions (excluding contractual commitments)	**Restructuring costs HK$m**	**Other HK$m**	**Total HK$m**
At 31 Dec 2022	**271**	**481**	**752**
Additions	**204**	**298**	**502**
Amounts utilised	**(188)**	**(148)**	**(336)**
Unused amounts reversed	**(102)**	**(31)**	**(133)**
Exchange and other movements	**1**	**(2)**	**(1)**
At 31 Dec 2023	**186**	**598**	**784**
Contractual commitments[1]			
At 31 Dec 2022			**1,159**
Net change in expected credit loss provision and other movements			**90**
At 31 Dec 2023			**1,249**
Total Provisions at 31 Dec 2023			**2,033**
At 31 Dec 2021	148	466	614
Additions	468	243	711
Amounts utilised	(307)	(174)	(481)
Unused amounts reversed	(35)	(84)	(119)
Exchange and other movements	(3)	30	27
At 31 Dec 2022	271	481	752
Contractual commitments[1]			
At 31 Dec 2021			785
Net change in expected credit loss provision and other movements			374
At 31 Dec 2022			1,159
Total Provisions at 31 Dec 2022			1,911

1 *Contractual commitments include provisions for contingent liabilities measured under HKFRS 9 'Financial Instruments' in respect of financial guarantees and expected credit loss provisions in relation to off-balance sheet guarantees and commitments.*

23 Subordinated liabilities[1]

		2023	2022
		HK$m	HK$m
US$400m	Undated floating rate primary capital notes[2]	**–**	3,119
At 31 Dec		**–**	3,119

1 *Subordinated liabilities to Group entities are not included in the above table.*
2 *The undated floating rate primary capital notes were called in July 2023.*

24 Share capital

	2023	2022
	HK$m	HK$m
Paid up share capital in HK$	123,949	123,949
Paid up share capital in US$[1]	56,232	56,232
At 31 Dec	**180,181**	180,181

Ordinary shares issued and fully paid

	2023		2022	
	HK$m	Number	HK$m	Number
At 1 Jan	180,181	49,579,391,798	172,335	46,440,991,798
Shares issued during the year	—	—	7,846	3,138,400,000
At 31 Dec	**180,181**	**49,579,391,798**	180,181	49,579,391,798

1 *Paid up share capital in US$ represents preference shares which were redeemed or bought back via payment out of distributable profits and for which the amount was transferred from retained earnings to share capital in accordance with the requirements of the Companies Ordinance.*

There were no new ordinary shares issued during 2023 (2022: 3,138.4m). The holder of the ordinary shares is entitled to receive dividends as declared from time to time, rank equally with regard to the Bank's residual assets and are entitled to one vote per share at shareholder meetings of the Bank.

25 Other equity instruments

Other equity instruments comprise additional tier 1 capital instruments in issue which are accounted for as equity.

		2023	2022
		HK$m	HK$m
US$1,000m	Fixed rate perpetual subordinated loan, callable from Mar 2025[1]	7,834	7,834
US$900m	Fixed rate perpetual subordinated loan, callable from Sep 2026[2]	7,063	7,063
US$700m	Fixed rate perpetual subordinated loan, callable from Mar 2025[3]	5,467	5,467
US$500m	Fixed rate perpetual subordinated loan, callable from Mar 2025[3]	3,905	3,905
US$600m	Fixed rate perpetual subordinated loan, callable from May 2027[4]	4,685	4,685
US$900m	Fixed rate perpetual subordinated loan, callable from Sep 2024[5]	7,044	7,044
US$1,100m	Fixed rate perpetual subordinated loan, callable from Jun 2024[6]	8,617	8,617
US$1,000m	Floating rate perpetual subordinated loan, callable from May 2027[7]	—	7,771
US$1,000m	Fixed rate perpetual subordinated loan, callable from Mar 2028[8]	7,850	—
At 31 Dec		**52,465**	52,386

1 *Interest rate fixed at 6.090%.*
2 *Interest rate fixed at 6.510%.*
3 *Interest rate fixed at 6.172%.*
4 *Interest rate fixed at 5.910%.*
5 *Interest rate fixed at 6.030%.*
6 *Interest rate fixed at 6.000%.*
7 *This subordinated loan was early repaid in the first half of 2023.*
8 *Interest rate fixed at 8.000%.*

The additional tier 1 capital instruments above are held by HSBC Asia Holdings Limited. These are perpetual subordinated loans on which coupon payments may be cancelled at the sole discretion of the Bank. The subordinated loans will be written down at the point of non-viability on the occurrence of a trigger event as defined in the Banking (Capital) Rules. They rank higher than ordinary shares in the event of a wind-up.

26 Maturity analysis of assets and liabilities

The following tables provide an analysis of consolidated total assets and liabilities by residual contractual maturity at the balance sheet date. These balances are included in the maturity analysis as follows:

- Trading assets and liabilities (including trading derivatives but excluding reverse repos, repos and debt securities in issue) are included in the 'Due not more than 1 month' time bucket, because trading balances are typically held for short periods of time.
- Financial assets and liabilities with no contractual maturity (such as equity securities) are included in the 'Due over 5 years' time bucket. Undated or perpetual instruments are classified based on the contractual notice period which the counterparty of the instrument is entitled to give. Where there is no contractual notice period, undated or perpetual contracts are included in the 'Due over 5 years' time bucket.
- Financial instruments included within assets and liabilities of disposal groups held for sale are classified on the basis of the contractual maturity of the underlying instruments and not on the basis of the disposal transaction.
- Non-financial assets and liabilities with no contractual maturity are included in the 'Due over 5 years' time bucket.
- Insurance contract liabilities included in 'non-financial liabilities' are, irrespective of contractual maturity, included in the 'Due over 5 years' time bucket in the maturity table provided below. An analysis of the expected maturity of insurance contract liabilities based on discounted cash flows is provided on page 107. Liabilities under investment contracts are classified in accordance with their contractual maturity. Undated investment contracts are included in the 'Due over 5 years' time bucket, however, such contracts are subject to surrender and transfer options by the policyholders.

Maturity analysis of assets and liabilities

	Due not more than 1 month HK$m	Due over 1 month but not more than 3 months HK$m	Due over 3 months but not more than 6 months HK$m	Due over 6 months but not more than 9 months HK$m	Due over 9 months but not more than 1 year HK$m	Due over 1 year but not more than 2 years HK$m	Due over 2 years but not more than 5 years HK$m	Due over 5 years HK$m	Total HK$m
Financial assets									
Cash and balances at central banks	232,987	—	—	—	—	—	—	—	232,987
Items in the course of collection from other banks	22,049	—	—	—	—	—	—	—	22,049
Hong Kong Government certificates of indebtedness	328,304	—	—	—	—	—	—	—	328,304
Trading assets	936,087	4,606	246	311	—	—	—	—	941,250
Derivatives	401,888	995	1,030	528	243	2,135	1,592	842	409,253
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	10,922	4,784	4,567	3,532	3,942	34,442	90,413	554,971	707,573
Reverse repurchase agreements – non-trading	535,819	160,830	76,520	23,052	9,977	24,755	233	—	831,186
Loans and advances to banks	326,805	135,883	33,392	19,308	20,237	19,192	8,984	—	563,801
Loans and advances to customers	532,822	334,021	279,076	212,426	160,823	389,969	540,929	1,107,010	3,557,076
Financial investments	252,730	411,275	278,073	87,712	91,225	236,575	488,372	183,250	2,029,212
Amounts due from Group companies	68,894	35,486	6,440	3,395	3,674	25,877	2,350	1	146,117
Accrued income and other financial assets	203,363	39,520	23,853	2,990	3,119	709	918	1,445	275,917
Financial assets at 31 Dec 2023	**3,852,670**	**1,127,400**	**703,197**	**353,254**	**293,240**	**733,654**	**1,133,791**	**1,847,519**	**10,044,725**
Non-financial assets	—	—	—	—	—	—	—	455,668	455,668
Total assets at 31 Dec 2023	**3,852,670**	**1,127,400**	**703,197**	**353,254**	**293,240**	**733,654**	**1,133,791**	**2,303,187**	**10,500,393**
Financial liabilities									
Hong Kong currency notes in circulation	328,304	—	—	—	—	—	—	—	328,304
Items in the course of transmission to other banks	27,536	—	—	—	—	—	—	—	27,536
Repurchase agreements – non-trading	494,630	18,078	5,392	2,344	1,540	—	—	—	521,984
Deposits by banks	165,535	954	14,988	537	132	—	—	—	182,146
Customer accounts	4,768,955	805,337	467,986	92,664	59,839	37,514	28,749	7	6,261,051
Trading liabilities	100,324	2,726	—	—	—	—	—	—	103,050
Derivatives	448,517	60	50	66	278	267	488	490	450,216
Financial liabilities designated at fair value	47,717	30,532	20,425	8,748	7,702	16,845	8,781	29,978	170,728
Debt securities in issue	5,244	4,824	19,662	11,492	5,897	16,443	20,668	3,515	87,745
Amounts due to Group companies	186,851	17,171	1,653	77	174	9,666	117,754	131,907	465,253
Accruals and other financial liabilities	140,199	50,862	28,258	5,046	4,256	3,924	5,475	1,759	239,779
Subordinated liabilities[1]	—	—	—	—	—	—	—	—	—
Total financial liabilities at 31 Dec 2023	**6,713,812**	**930,544**	**558,414**	**120,974**	**79,818**	**84,659**	**181,915**	**167,656**	**8,837,792**
Non-financial liabilities	—	—	—	—	—	—	—	790,015	790,015
Total liabilities at 31 Dec 2023	**6,713,812**	**930,544**	**558,414**	**120,974**	**79,818**	**84,659**	**181,915**	**957,671**	**9,627,807**

Maturity analysis of assets and liabilities (continued)[1]

	Due not more than1 month	Due over 1 month but not more than 3 months	Due over 3 months but not more than 6 months	Due over 6 months but not more than 9 months	Due over 9 months but not more than 1 year	Due over 1 year but not more than 2 years	Due over 2 years but not more than 5 years	Due over 5 years	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Financial assets									
Cash and balances at central banks	232,740	—	—	—	—	—	—	—	232,740
Items in the course of collection from other banks	28,557	—	—	—	—	—	—	—	28,557
Hong Kong Government certificates of indebtedness	341,354	—	—	—	—	—	—	—	341,354
Trading assets	691,744	1,764	3,089	—	163	3,045	—	—	699,805
Derivatives	495,891	691	205	142	474	1,840	2,556	1,078	502,877
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	9,876	5,486	10,123	4,922	4,251	13,597	101,560	503,215	653,030
Reverse repurchase agreements – non-trading	585,333	256,887	54,039	7,679	7,172	13,402	3,464	—	927,976
Loans and advances to banks	321,798	99,242	39,386	5,973	13,563	16,445	19,440	—	515,847
Loans and advances to customers	567,448	370,158	300,760	151,447	146,744	441,127	631,192	1,086,192	3,695,068
Financial investments	309,588	511,786	128,596	67,945	69,423	208,325	302,114	151,930	1,749,707
Amounts due from Group companies	101,287	4,646	4,356	716	2,419	10,236	7,729	19	131,408
Accrued income and other financial assets	191,474	38,366	21,515	3,864	3,573	767	675	382	260,616
Financial assets at 31 Dec 2022	3,877,090	1,289,026	562,069	242,688	247,782	708,784	1,068,730	1,742,816	9,738,985
Non-financial assets	—	—	—	—	—	—	—	458,858	458,858
Total assets at 31 Dec 2022	3,877,090	1,289,026	562,069	242,688	247,782	708,784	1,068,730	2,201,674	10,197,843
Financial liabilities									
Hong Kong currency notes in circulation	341,354	—	—	—	—	—	—	—	341,354
Items in the course of transmission to other banks	33,073	—	—	—	—	—	—	—	33,073
Repurchase agreements – non-trading	335,467	2,173	2,557	—	5,027	5,869	—	—	351,093
Deposits by banks	193,147	1,249	3,513	811	176	12	—	—	198,908
Customer accounts	5,050,054	540,611	304,705	81,349	85,465	22,028	29,490	7	6,113,709
Trading liabilities	142,432	21	—	—	—	—	—	—	142,453
Derivatives	550,725	4	62	60	157	175	489	57	551,729
Financial liabilities designated at fair value	35,661	35,229	12,142	10,593	8,957	20,585	11,436	33,140	167,743
Debt securities in issue	13,723	13,266	24,251	13,388	1,054	9,674	22,382	3,171	100,909
Amounts due to Group companies	129,641	12,841	808	272	304	70,332	49,935	133,987	398,120
Accruals and other financial liabilities	139,464	43,325	22,513	5,099	6,601	4,904	5,228	1,106	228,240
Subordinated liabilities[1]	—	—	—	—	—	—	—	3,119	3,119
Financial liabilities at 31 Dec 2022	6,964,741	648,719	370,551	111,572	107,741	133,579	118,960	174,587	8,630,450
Non-financial liabilities	—	—	—	—	—	—	—	703,013	703,013
Total liabilities at 31 Dec 2022	6,964,741	648,719	370,551	111,572	107,741	133,579	118,960	877,600	9,333,463

1 *The maturity for subordinated liabilities is based on the earliest date on which the group is required to pay, i.e. the callable date.*

27 Analysis of cash flows payable under financial liabilities by remaining contractual maturities

	Due not more than 1 month HK$m	Due over 1 month but not more than 3 months HK$m	Due between 3 and 12 months HK$m	Due between 1 and 5 years HK$m	Due after 5 years HK$m	Total HK$m
At 31 Dec 2023						
Hong Kong currency notes in circulation	**328,304**	**—**	**—**	**—**	**—**	**328,304**
Items in the course of transmission to other banks	**27,536**	**—**	**—**	**—**	**—**	**27,536**
Repurchase agreements – non-trading	**495,424**	**18,281**	**9,496**	**—**	**—**	**523,201**
Deposits by banks	**166,594**	**955**	**15,681**	**—**	**—**	**183,230**
Customer accounts	**4,782,131**	**817,944**	**635,862**	**72,290**	**48**	**6,308,275**
Trading liabilities	**103,050**	**—**	**—**	**—**	**—**	**103,050**
Derivatives	**448,542**	**46**	**37**	**705**	**530**	**449,860**
Financial liabilities designated at fair value	**48,616**	**31,052**	**37,555**	**27,007**	**30,013**	**174,243**
Debt securities in issue	**5,285**	**5,541**	**38,620**	**40,717**	**3,813**	**93,976**
Amounts due to Group companies	**187,263**	**20,553**	**10,424**	**174,035**	**182,676**	**574,951**
Other financial liabilities	**132,291**	**42,012**	**30,108**	**7,581**	**1,729**	**213,721**
Subordinated liabilities	**—**	**—**	**—**	**—**	**—**	**—**
	6,725,036	**936,384**	**777,783**	**322,335**	**218,809**	**8,980,347**
Loan and other credit-related commitments	**3,411,371**	**—**	**545**	**—**	**—**	**3,411,916**
Financial guarantees	**53,483**	**—**	**—**	**—**	**—**	**53,483**
	10,189,890	**936,384**	**778,328**	**322,335**	**218,809**	**12,445,746**
Proportion of cash flows payable in period	**81%**	**8%**	**6%**	**3%**	**2%**	
At 31 Dec 2022						
Hong Kong currency notes in circulation	341,354	—	—	—	—	341,354
Items in the course of transmission to other banks	33,073	—	—	—	—	33,073
Repurchase agreements – non-trading	335,951	2,194	7,708	5,877	—	351,730
Deposits by banks	193,748	1,250	4,542	14	—	199,554
Customer accounts	5,053,321	552,623	481,006	55,739	16	6,142,705
Trading liabilities	142,453	—	—	—	—	142,453
Derivatives	551,079	67	253	603	60	552,062
Financial liabilities designated at fair value	37,062	36,310	32,404	33,198	33,170	172,144
Debt securities in issue	13,917	14,305	40,630	34,698	3,400	106,950
Amounts due to Group companies	129,728	14,509	11,198	155,038	170,299	480,772
Other financial liabilities	137,987	40,157	30,306	9,306	1,126	218,882
Subordinated liabilities	—	36	108	577	4,561	5,282
	6,969,673	661,451	608,155	295,050	212,632	8,746,961
Loan and other credit-related commitments	3,191,864	—	—	—	—	3,191,864
Financial guarantees	41,991	—	—	—	—	41,991
	10,203,528	661,451	608,155	295,050	212,632	11,980,816
Proportion of cash flows payable in period	85%	6%	5%	2%	2%	

The balances in the above tables incorporate all cash flows relating to principal and future coupon payments on an undiscounted basis. Trading liabilities and trading derivatives have been included in the 'On demand' time bucket as they are typically held for short periods of time. The undiscounted cash flows payable under hedging derivative liabilities are classified according to their contractual maturity. Investment contract liabilities have been included in financial liabilities designated at fair value, whereby the policyholders have the options to surrender or transfer at any time, and are reported in the 'Due after 5 years' time bucket. A maturity analysis prepared on the basis of the earliest possible contractual repayment date (assuming that all surrender and transfer options are exercised) would result in all investment contracts being presented as falling due within one year or less. The undiscounted cash flows potentially payable under loan commitments and financial guarantee contracts are classified on the basis of the earliest date they can be called. Cash flows payable in respect of customer accounts are primarily contractually repayable on demand or at short notice.

28 Contingent liabilities, contractual commitments and guarantees

	2023	2022
	HK$m	HK$m
Guarantees and contingent liabilities:		
– financial guarantees[1]	**53,483**	41,991
– performance and other guarantees[2]	**380,953**	354,794
– other contingent liabilities	**1,161**	1,222
At 31 Dec	**435,597**	398,007
Commitments[3]:		
– documentary credits and short-term trade-related transactions	**26,908**	26,324
– forward asset purchases and forward forward deposits placed	**71,708**	48,560
– undrawn formal standby facilities, credit lines and other commitments to lend	**3,313,300**	3,116,980
At 31 Dec	**3,411,916**	3,191,864

1 *Financial guarantees are contracts that require the issuer to make specified payments to reimburse the holder for a loss incurred because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument.*
2 *Performance and other guarantees include re-insurance letters of credit related to particular transactions, trade-related letters of credit issued without provision for the issuing entity to retain title to the underlying shipment, performance bonds, bid bonds, standby letters of credit and other transaction-related guarantees.*
3 *Includes HK$1,978,328m of commitments at 31 December 2023 (2022: HK$1,892,401m) to which the impairment requirements in HKFRS 9 are applied where the group has become party to an irrevocable commitment.*

The above table discloses the nominal principal amounts of commitments (excluding other commitments as disclosed in Note 29), guarantees and other contingent liabilities, which represent the amounts at risk should contracts be fully drawn upon and clients default. As a significant proportion of guarantees and commitments are expected to expire without being drawn upon, the total of the nominal principal amounts is not representative of future liquidity requirements.

It also reflects the group's maximum exposure under a large number of individual guarantee undertakings. The risks and exposures from guarantees are captured and managed in accordance with HSBC's overall credit risk management policies and procedures. Guarantees are subject to an annual credit review process.

Other contingent liabilities at 31 December 2023 included amounts in relation to legal and regulatory matters as set out in Note 40.

29 Other commitments

Capital commitments

At 31 December 2023, capital commitments, mainly related to the commitment for purchase of properties, were HK$3,907m (2022: HK$3,834m).

30 Offsetting of financial assets and financial liabilities

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously ('the offset criteria').

The 'Amounts not set off in the balance sheet' include transactions where:

- the counterparty has an offsetting exposure with the group and a master netting or similar arrangement is in place with a right to set off only in the event of default, insolvency or bankruptcy, or the offset criteria are otherwise not satisfied; and
- cash and non-cash collateral (debt securities and equities) has been received/pledged for derivatives and reverse repurchase/repurchase, stock borrowing/lending and similar agreements to cover net exposure in the event of default or other predetermined events.

The effect of over-collateralisation is excluded.

'Amounts not subject to enforceable netting agreements' include contracts executed in jurisdictions where the rights of set off may not be upheld under the local bankruptcy laws, and transactions where a legal opinion evidencing enforceability of the right of offset may not have been sought, or may have been unable to obtain.

For risk management purposes, the net amounts of loans and advances to customers are subject to limits, which are monitored and the relevant customer agreements are subject to review and updated, as necessary, to ensure that the legal right to set off remains appropriate.

Offsetting of financial assets and financial liabilities

	Amounts subject to enforceable netting arrangements							
				Amounts not offset in the balance sheet				
	Gross amounts	Amounts offset	Net amounts reported in the balance sheet	Financial instruments, including non-cash collateral	Cash collateral	Net amount	Amounts not subject to enforceable netting arrange-ments[1]	Balance sheet total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 31 Dec 2023								
Financial assets[2]								
Derivatives	620,134	(235,361)	384,773	(332,456)	(28,217)	24,100	24,480	409,253
Reverse repos, stock borrowing and similar agreements classified as:								
– trading assets	66,865	—	66,865	(64,526)	(2,323)	16	10,824	77,689
– third party	51,886	—	51,886	(51,620)	(266)	—	10,824	62,710
– amounts due from Group companies	14,979	—	14,979	(12,906)	(2,057)	16	—	14,979
– reverse repurchase agreements - non-trading	887,389	(48,798)	838,591	(838,533)	(6)	52	42,442	881,033
– third party	835,167	(46,423)	788,744	(788,688)	(6)	50	42,442	831,186
– amounts due from Group companies	52,222	(2,375)	49,847	(49,845)	—	2	—	49,847
– financial assets designated and otherwise mandatorily measured at fair value through profit or loss								
– third party	514	—	514	(514)	—	—	—	514
	1,574,902	(284,159)	1,290,743	(1,236,029)	(30,546)	24,168	77,746	1,368,489
Financial liabilities[3]								
Derivatives	658,545	(235,361)	423,184	(331,004)	(52,842)	39,338	27,032	450,216
Repos, stock lending and similar agreements classified as:								
– trading liabilities	32,429	—	32,429	(31,959)	—	470	—	32,429
– third party	32,360	—	32,360	(31,890)	—	470	—	32,360
– amounts due to Group companies	69	—	69	(69)	—	—	—	69
– repurchase agreements - non-trading	630,963	(48,798)	582,165	(581,584)	(10)	571	73,350	655,515
– third party	495,057	(46,423)	448,634	(448,071)	(10)	553	73,350	521,984
– amounts due to Group companies	135,906	(2,375)	133,531	(133,513)	—	18	—	133,531
	1,321,937	(284,159)	1,037,778	(944,547)	(52,852)	40,379	100,382	1,138,160
At 31 Dec 2022								
Financial assets[2]								
Derivatives	795,934	(329,392)	466,542	(397,121)	(39,022)	30,399	36,335	502,877
Reverse repos, stock borrowing and similar agreements classified as:								
– trading assets	57,505	—	57,505	(57,273)	(227)	5	4,177	61,682
– third party	55,221	—	55,221	(54,994)	(227)	—	4,177	59,398
– amounts due from Group companies	2,284	—	2,284	(2,279)	—	5	—	2,284
– reverse repurchase agreements - non-trading	932,272	(29,470)	902,802	(901,205)	(1,597)	—	63,031	965,833
– third party	891,131	(26,186)	864,945	(863,840)	(1,105)	—	63,031	927,976
– amounts due from Group companies	41,141	(3,284)	37,857	(37,365)	(492)	—	—	37,857
– financial assets designated and otherwise mandatorily measured at fair value through profit or loss								
– third party	1,764	—	1,764	(1,764)	—	—	—	1,764
	1,787,475	(358,862)	1,428,613	(1,357,363)	(40,846)	30,404	103,543	1,532,156
Financial liabilities[3]								
Derivatives	849,566	(329,392)	520,174	(390,421)	(70,825)	58,928	31,555	551,729
Repos, stock lending and similar agreements classified as:								
– trading liabilities	61,437	—	61,437	(61,436)	(1)	—	22	61,459
– third party	61,382	—	61,382	(61,381)	(1)	—	22	61,404
– amounts due to Group companies	55	—	55	(55)	—	—	—	55
– repurchase agreements - non-trading	403,019	(29,470)	373,549	(373,126)	(352)	71	37,064	410,613
– third party	340,215	(26,186)	314,029	(313,747)	(256)	26	37,064	351,093
– amounts due to Group companies	62,804	(3,284)	59,520	(59,379)	(96)	45	—	59,520
	1,314,022	(358,862)	955,160	(824,983)	(71,178)	58,999	68,641	1,023,801

1 *These exposures continue to be secured by financial collateral, but the group may not have sought or been able to obtain a legal opinion evidencing enforceability of the offsetting right.*
2 *Include balances due from Group companies of HK$202,680m (2022: HK$208,343m).*
3 *Include balances due to Group companies of HK$275,775m (2022: HK$213,726m).*

31 Segmental analysis

The Executive Committee ('EXCO') is considered the Chief Operating Decision Maker ('CODM') for the purpose of identifying the group's operating segments. Operating segment results are assessed by the CODM on the basis of performance measured in accordance with HKFRSs. Although the CODM reviews information on a number of bases, business performance is assessed and capital resources are allocated by operating segments, and the segmental analysis is presented based on reportable segments as assessed under HKFRS 8 'Operating Segments'.

Our operations are closely integrated and, accordingly, the presentation of data includes internal allocations of certain items of income and expenses. These allocations include the costs of certain support services and global functions to the extent that they can be meaningfully attributed to operational business lines and geographical regions. While such allocations have been made on a systematic and consistent basis, they necessarily involve a degree of subjectivity. Costs which are not allocated to other operating segments are included in the 'Corporate Centre'.

Where relevant, income and expense amounts presented include the results of inter-segment funding along with inter-company and inter-business line transactions. All such transactions are undertaken on arm's length terms. The intra-group elimination items for the operating segments are presented in the Corporate Centre.

Our global businesses and reportable segments

The group provides a comprehensive range of banking and related financial services to our customers in our global businesses: Wealth and Personal Banking ('WPB'), Commercial Banking ('CMB') and Global Banking and Markets ('GBM'). The products and services offered to customers are organised by these global businesses.

- WPB provides a full range of retail banking and wealth products to our customers from personal banking to ultra high net worth individuals. Typically, customer offerings include retail banking products, such as current and savings accounts, mortgages and personal loans, credit cards, debit cards and local and international payment services. We also provide wealth management services, including insurance and investment products, global asset management services, investment management and Private Wealth Solutions for customers with more sophisticated and international requirements.
- CMB offers a broad range of products and services to serve the needs of our commercial customers, including small and medium-sized enterprises, mid-market enterprises and corporates. These include credit and lending, international trade and receivables finance, treasury management and liquidity solutions (payments and cash management and commercial cards) and investments. CMB also offers its customers access to products and services offered by other global businesses, such as GBM, which include foreign exchange products, raising capital on debt and equity markets and advisory services.
- GBM comprises of two separate reportable segments: Global Banking ('GB') and Markets and Securities Services ('MSS'). GB provides tailored financial solutions to major government, corporate and institutional clients and private investors worldwide. The client-focused business lines deliver a full range of banking capabilities including financing, advisory and transaction services. MSS provides services in credit, rates, foreign exchange, equities, money markets and securities services, and principal investment activities.
- Corporate Centre includes strategic investments such as our investment in BoCom, Central Treasury revenue, and costs which are not allocated to global businesses, mainly in relation to investments in technology.
- Other (GBM-other) mainly comprises other business activities which are jointly managed by GB and MSS.

Performance by reportable segments is presented in the 'Financial Review' on page 19 as specified as 'Audited'.

Information by geographical region

	Hong Kong HK$m	Rest of Asia-Pacific HK$m	Intra-segment elimination HK$m	Total HK$m
For the year ended 31 Dec 2023				
Net operating income before change in expected credit losses and other credit impairment charges	**156,171**	**93,546**	**(38)**	**249,679**
Profit before tax	**78,765**	**42,678**	**—**	**121,443**
At 31 Dec 2023				
Total assets	**7,485,995**	**3,977,785**	**(963,387)**	**10,500,393**
Total liabilities	**7,059,770**	**3,531,424**	**(963,387)**	**9,627,807**
Credit commitments and contingent liabilities (contract amounts)	**1,977,725**	**1,869,788**	**—**	**3,847,513**
For the year ended 31 Dec 2022				
Net operating income before change in expected credit losses and other credit impairment charges	117,535	82,358	910	200,803
Profit before tax	42,349	54,338	—	96,687
At 31 Dec 2022				
Total assets	7,332,182	3,889,906	(1,024,245)	10,197,843
Total liabilities	6,908,027	3,449,681	(1,024,245)	9,333,463
Credit commitments and contingent liabilities (contract amounts)	1,894,046	1,695,824	—	3,589,870

Information by country/territory

	Revenue[1]		Non-current assets[2]	
	For the year ended 31 Dec		At 31 Dec	
	2023	2022	**2023**	2022
	HK$m	HK$m	**HK$m**	HK$m
Hong Kong	**156,171**	117,535	**140,646**	138,717
Mainland China	**19,934**	20,847	**180,166**	196,844
Australia	**8,886**	7,815	**1,659**	1,691
India	**13,773**	11,708	**2,711**	2,426
Indonesia	**3,609**	3,188	**3,253**	3,289
Malaysia	**6,708**	5,790	**1,833**	1,981
Singapore	**18,275**	15,193	**3,331**	3,433
Taiwan	**5,038**	3,823	**2,429**	2,473
Other	**17,285**	14,904	**2,775**	2,833
Total	**249,679**	200,803	**338,803**	353,687

1 *Revenue (defined as 'Net operating income before change in expected credit losses and other impairment charges') is attributable to countries based on the location of the principal operations of the branch, subsidiary, associate or joint venture.*
2 *Non-current assets consist of property, plant and equipment, goodwill, other intangible assets, interests in associates and joint ventures and certain other assets.*

32 Related party transactions

The group's related parties include the parent, fellow subsidiaries, associates, joint ventures, post-employment benefit plans for the group's employees, Key Management Personnel ('KMP') as defined by HKAS 24, close family members of KMP and entities that are controlled or jointly controlled by KMP or their close family members.

Particulars of transactions with related parties are set out below.

(a) Inter-company

The group is wholly owned by HSBC Asia Holdings Limited, which in turn is a wholly-owned subsidiary of HSBC Holdings plc (incorporated in England).

The group entered into transactions with its fellow subsidiaries in the normal course of business, including the acceptance and placement of interbank deposits, correspondent banking transactions and off-balance sheet transactions. The Bank also acted as agent for the distribution of retail investment funds for fellow subsidiaries and paid professional fees for services provided by fellow subsidiaries.

The group shared the costs of certain IT projects and also used certain processing services of fellow subsidiaries. These costs are reported under 'General and administrative expenses – other administrative expenses' in the income statement.

The balances of amounts due to and from the relevant parties at the year end were as follows:

	2023			2022		
	Immediate holding company	**Ultimate holding company**	**Fellow subsidiaries**	Immediate holding company	Ultimate holding company	Fellow subsidiaries
	HK$m	**HK$m**	**HK$m**	HK$m	HK$m	HK$m
At 31 Dec						
Assets	**5**	**2,655**	**293,786**	24	3,403	305,260
– trading assets[1,5]	**—**	**48**	**14,995**	—	33	2,300
– derivative assets	**—**	**2**	**137,852**	—	2	168,200
– other assets[1,4,6]	**5**	**2,605**	**140,939**	24	3,368	134,760
Liabilities	**262,111**	**2,772**	**342,768**	256,031	3,804	292,577
– trading liabilities[1,7]	**—**	**36**	**72**	—	—	55
– financial liabilities designated at fair value[1,2]	**224,073**	**—**	**6**	183,760	—	6
– derivative liabilities	**—**	**2,609**	**139,566**	—	3,677	150,474
– other liabilities[1,4,8]	**2,811**	**127**	**203,022**	1,842	64	141,947
– insurance contract liabilities[1]	**—**	**—**	**102**	—	—	95
– subordinated liabilities[1,3,4]	**35,227**	**—**	**—**	70,429	63	—
Guarantees	**—**	**—**	**27,997**	—	—	23,289
Commitments	**—**	**—**	**925**	—	—	1,405

1 *These balances are presented under 'Amounts due from/to Group companies' in the consolidated balance sheet.*
2 *The balance at 31 December 2023 included capital and loss-absorbing capacity ('LAC') instruments of HK$224,073m (2022: HK$183,760m). During the year, there were repayment of HK$36,128m (2022: HK$21,512m) and issuance of HK$66,521m (2022: HK$51,579m). The carrying amount of financial liabilities designated at fair value was HK$3,121m lower than the contractual amount at maturity (2022: HK$13,593m lower). The cumulative loss in fair value attributable to changes in credit risk was HK$2,917m (2022: HK$3,456m gain). The balances are under Level 2.*
3 *The balance at 31 December 2023 included subordinated liabilities of HK$35,227m to meet TLAC requirements (2022: HK$70,429m). During the year, there were repayment of HK$34,962m (2022: no repayment) and no issuance (2022: HK$29,435m).*
4 *The fair value hierarchy of assets and liabilities at amortised cost are under level 2 and the fair value has no material difference with carrying value.*
5 *Includes trading reverse repo agreements and other similar secured lending of HK$14,979m (2022: HK$2,284m).*
6 *Includes non-trading reverse repo agreements and other similar secured lending of HK$49,847m (2022: HK$37,857m).*
7 *Includes trading repurchase agreements and other similar secured lending of HK$69m (2022: HK$55m).*
8 *Includes non-trading repurchase agreements and other similar secured lending of HK$133,531m (2022: HK$59,520m).*

The group routinely enters into related party transactions with other entities in the Group. These include transactions to facilitate third-party transactions with customers, transactions for internal risk management, and other transactions relevant to Group processes. These transactions and the above outstanding balances arose in the ordinary course of business and on substantially the same terms, including interest rates and security, as for comparable transactions with third-party counterparties.

(b) Share option and share award schemes

The group participates in various share option and share plans operated by HSBC whereby share options or shares of HSBC are granted to employees of the group. The group recognises an expense in respect of these share options and share awards. The cost borne by the ultimate holding company in respect of share options is treated as a capital contribution and is recorded within 'Other reserves'. In respect of share awards, the group recognises a liability to the ultimate holding company over the vesting period. This liability is measured at the fair value of the shares at each reporting date, with changes since the award dates adjusted through the capital contribution account within 'Other reserves'. The balances of the capital contribution and the liability at 31 December 2023 amounted to HK$3,091m and HK$1,883m respectively (2022: HK$3,299m and HK$1,564m respectively).

(c) Post-employment benefit plans

At 31 December 2023, HK$7.4bn (2022: HK$7.7bn) of the group's post-employment plan assets were under management by group companies, earning management fees of HK$58m in 2023 (2022: HK$59m). At 31 December 2023, the group's post-employment benefit plans had placed deposits of HK$736m (2022: HK$735m) with its banking subsidiaries, earning interest payable to the schemes of HK$8.8m (2022: HK$1.1m). The above outstanding balances arose from the ordinary course of business and on substantially the same terms, including interest rates and security, as comparable transactions with third-party counterparties.

(d) Associates and joint ventures

The group provides certain banking and financial services to associates and joint ventures, including loans, overdrafts, interest and non-interest bearing deposits and current accounts. Details of interests in associates and joint ventures are set out in Note 14.

The disclosure of the year-end balance and the highest amounts outstanding during the year is considered to be the most meaningful information to represent the amount of transactions and outstanding balances during the year.

Transactions and balances during the year with associates and joint ventures

	2023		2022	
	Highest balance during the year	**Balance at 31 December**	Highest balance during the year	Balance at 31 December
	HK$m	**HK$m**	HK$m	HK$m
Amounts due from associates – unsubordinated	**61,769**	**46,173**	57,513	51,402
Amounts due to associates	**23,450**	**13,033**	19,862	10,099
Amounts due to joint ventures	**42**	**14**	40	16
Fair value of derivative assets with associates	**11,826**	**6,212**	9,394	6,559
Fair value of derivative liabilities with associates	**34,281**	**23,142**	33,673	28,440
Guarantees and Commitments	**1,569**	**377**	1,769	287

The above outstanding balances arose in the ordinary course of business and on substantially the same terms, including interest rates and security, as comparable transactions with third-party counterparties.

(e) Key Management Personnel

Key Management Personnel are defined as those persons having authority and responsibility for planning, directing and controlling the activities of the Bank and the group. It includes members of the Board of Directors and Executive Committee of the Bank and the Board of Directors and Group Executive Committee members of HSBC Holdings plc.

Compensation of Key Management Personnel

	2023	2022
	HK$m	HK$m
Salaries and other short-term benefits	**362**	320
Post employment benefits	**11**	12
Termination benefits	**—**	2
Share-based payments	**126**	87
Total	**499**	421

Transactions, arrangements and agreements involving Key Management Personnel

	2023	2022
	HK$m	HK$m
During the year		
Highest average assets[1]	**78,447**	97,366
Highest average liabilities[1]	**74,273**	81,323
Contribution to group's profit before tax	**3,372**	1,858
At the year end		
Guarantees	**3,842**	12,007
Commitments	**9,147**	12,186

1 *The disclosure of the highest average balance during the year is considered the most meaningful information to represent transactions during the year.*

Transactions, arrangements and agreements are entered into by the group with companies that may be controlled by Key Management Personnel of the group and their immediate relatives. These transactions are primarily loans and deposits, and were entered into in the ordinary course of business and on substantially the same terms, including interest rates and security, as comparable transactions with persons or companies of a similar standing or, where applicable, with other employees. The transactions did not involve more than the normal risk of repayment or present other unfavourable features. Change in expected credit losses recognised for the year, and expected credit loss allowances against balances outstanding at the end of the year, in respect of Key Management Personnel were insignificant (2022: insignificant).

On 8 October 2019, the group acted as Joint Global Co-ordinator and Underwriter on aggregated EUR4.25bn and GBP800m Senior Note issuances for CK Hutchison Group Telecom Finance S.A. in 6 tranches, with tenors of 4 to 15 years and coupon rates of 0.375% to 2.625%. CK Hutchison Group Telecom Finance S.A. is a wholly-owned subsidiary of an associated body corporate (CK Hutchison Holdings Limited) of Mr Victor Li, a non-executive Director of the Bank during the financial year. In October 2023, CK Hutchison Group Telecom Finance S.A. redeemed one of Senior Note tranches for EUR1.5bn.

(f) Loans to directors

Directors are defined as the Directors of the Bank, its ultimate holding company, HSBC Holdings plc and intermediate holding companies. Loans to directors also include loans to companies that are controlled by, and entities that are connected with these directors. Particulars of loans to directors disclosed pursuant to section 17 of the Companies (Disclosure of Information about Benefits of Directors) Regulation are as follows:

	Aggregate amount outstanding at 31 Dec		Maximum aggregate amount outstanding during the year	
	2023	2022	**2023**	2022
	HK$m	HK$m	**HK$m**	HK$m
By the Bank	**2,530**	1,483	**2,631**	2,769
By subsidiaries	**1**	12	**13**	14
	2,531	1,495	**2,644**	2,783

These amounts include principal and interest, and the maximum liability that may be incurred under guarantees.

33 Fair values of financial instruments carried at fair value

Control framework

Fair values are subject to a control framework designed to ensure that they are either determined, or validated, by a function independent of the risk taker.

Where fair values are determined by reference to externally quoted prices or observable pricing inputs to models, independent price determination or validation is utilised. For inactive markets, the group sources alternative market information, with greater weight given to information that is considered to be more relevant and reliable. Examples of the factors considered are price observability, instrument comparability, consistency of data sources, underlying data accuracy and timing of prices.

Fair value of investment funds are sourced from the underlying fund managers which are based upon an assessment of the underlying investees' financial positions, results, risk profile and prospects.

For fair values determined using valuation models, the control framework includes development or validation by independent support functions of the model logic, inputs, model outputs and adjustments. Valuation models are subject to a process of due diligence before becoming operational and are calibrated against external market data on an ongoing basis.

Changes in fair value are generally subject to a profit and loss analysis process and are disaggregated into high-level categories including portfolio changes, market movements and other fair value adjustments.

The majority of financial instruments measured at fair value are in MSS and Insurance. The group's fair value governance structure comprises its Finance function and Valuation Committees. Finance is responsible for establishing procedures governing valuation and ensuring fair values are in compliance with accounting standards. The fair values are reviewed by the group's relevant Valuation Committees, which consist of independent support functions and consider all material subjective valuations. Within MSS and Insurance, these Committees are overseen by the Group's Valuation Committee Review Group and the Group Insurance Valuation and Impairment Committee respectively.

Financial liabilities measured at fair value

In certain circumstances, the group records its own debt in issue at fair value, based on quoted prices in an active market for the specific instrument. When quoted market prices are unavailable, the own debt in issue is valued using valuation techniques, the inputs for which are either based on quoted prices in an inactive market for the instrument or are estimated by comparison with quoted prices in an active market for similar instruments. In both cases, the fair value includes the effect of applying the credit spread which is appropriate to the group's liabilities. The change in fair value of issued debt securities attributable to the group's own credit spread is computed as follows: for each security at each reporting date, an externally verifiable price is obtained or a price is derived using credit spreads for similar securities issued by the Group. Then, using discounted cash flow, each security is valued using an appropriate market discount curve. The difference in the valuations is attributable to the group's own credit spread. This methodology is applied consistently across all securities.

Structured notes issued and certain other hybrid instruments are included within 'Financial liabilities designated at fair value' and are measured at fair value. The credit spread applied to these instruments is derived from the spreads at which the group issues structured notes.

Gains and losses arising from changes in the credit spread of liabilities issued by the group, recorded in other comprehensive income, reverse over the contractual life of the debt, provided that the debt is not repaid at a premium or a discount.

Fair value hierarchy

Fair values of financial assets and liabilities are determined according to the following hierarchy:

- Level 1 – valuation technique using quoted market price. These are financial instruments with quoted prices for identical instruments in active markets that the group can access at the measurement date.
- Level 2 – valuation technique using observable inputs. These are financial instruments with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets and financial instruments valued using models where all significant inputs are observable.
- Level 3 – valuation technique with significant unobservable inputs. These are financial instruments valued using valuation techniques where one or more significant inputs are unobservable.

Financial instruments carried at fair value and bases of valuation

	Fair Value Hierarchy					
	Level 1	Level 2	Level 3	Third-party total	Inter-company[2]	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 31 Dec 2023						
Assets						
Trading assets[1]	**637,806**	**294,184**	**9,260**	**941,250**	**—**	**941,250**
Derivatives	**938**	**268,318**	**2,143**	**271,399**	**137,854**	**409,253**
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**182,874**	**402,113**	**122,586**	**707,573**	**—**	**707,573**
Financial investments	**1,077,040**	**329,689**	**3,542**	**1,410,271**	**—**	**1,410,271**
Liabilities						
Trading liabilities[1]	**66,685**	**36,363**	**2**	**103,050**	**—**	**103,050**
Derivatives	**2,048**	**303,584**	**2,409**	**308,041**	**142,175**	**450,216**
Financial liabilities designated at fair value[1]	**—**	**142,071**	**28,657**	**170,728**	**—**	**170,728**
At 31 Dec 2022						
Assets						
Trading assets[1]	486,547	203,975	9,283	699,805	—	699,805
Derivatives	1,018	330,356	3,301	334,675	168,202	502,877
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	155,276	395,935	101,819	653,030	—	653,030
Financial investments	959,318	276,315	4,308	1,239,941	—	1,239,941
Liabilities						
Trading liabilities[1]	74,201	68,246	6	142,453	—	142,453
Derivatives	2,422	393,444	1,712	397,578	154,151	551,729
Financial liabilities designated at fair value[1]	—	133,009	34,734	167,743	—	167,743

1 *These balances exclude HK$15,043m Level 2 assets (2022: HK$2,333m) and HK$224,187m Level 2 liabilities (2022: HK$183,821m) held with HSBC Group entities.*
2 *Derivatives balances with HSBC Group entities are largely under 'Level 2'.*

Transfers between Level 1 and Level 2 fair values

	Assets				Liabilities		
	Financial investments	Trading assets	Designated and otherwise mandatorily measured at fair value	Derivatives	Trading liabilities	Designated at fair value	Derivatives
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 31 Dec 2023							
Transfers from Level 1 to Level 2	**94,475**	**60,546**	**13,386**	**—**	**296**	**—**	**—**
Transfers from Level 2 to Level 1	**69,552**	**40,626**	**19,403**	**—**	**1,591**	**—**	**—**
At 31 Dec 2022							
Transfers from Level 1 to Level 2	29,781	23,312	20,020	—	132	—	—
Transfers from Level 2 to Level 1	60,104	36,025	26,053	—	1,443	—	—

Transfers between levels of the fair value hierarchy are deemed to occur at the end of each quarter. Transfers into and out of levels of the fair value hierarchy are primarily attributable to changes in observability of valuation inputs and price transparency.

Fair value adjustments

We adopt the use of fair value adjustments when we take into consideration additional factors not incorporated within the valuation model that would otherwise be considered by a market participant. We classify fair value adjustments as either 'risk-related' or 'model-related'. The majority of these adjustments relate to MSS. Movements in the level of fair value adjustments do not necessarily result in the recognition of profits or losses within the income statement. For example, as models are enhanced, fair value adjustments may no longer be required. Similarly, fair value adjustments will decrease when the related positions are unwound, but this may not result in profit or loss.

Bid-offer

HKFRS 13 requires use of the price within the bid-offer spread that is most representative of fair value. Valuation models will typically generate mid-market values. The bid-offer adjustment reflects the extent to which bid-offer costs would be incurred if substantially all residual net portfolio market risks were closed using available hedging instruments or by disposing of, or unwinding the position.

Uncertainty

Certain model inputs may be less readily determinable from market data, and/or the choice of model itself may be more subjective. In these circumstances, an adjustment may be necessary to reflect the likelihood that market participants would adopt more conservative values for uncertain parameters and/or model assumptions, than those used in the group's valuation model.

Credit valuation adjustment ('CVA') and debit valuation adjustment ('DVA')

The CVA is an adjustment to the valuation of over-the-counter ('OTC') derivative contracts to reflect the possibility that the counterparty may default and the group may not receive the full market value of the transactions.

The DVA is an adjustment to the valuation of OTC derivative contracts to reflect the possibility that the group may default, and that the group may not pay the full market value of the transactions.

The group calculates a separate CVA and DVA for each legal entity, and for each counterparty to which the entity has exposure. With the exception of central clearing parties, all third-party counterparties are included in the CVA and DVA calculations, and these adjustments are not netted across group entities.

The group calculates the CVA by applying the probability of default ('PD') of the counterparty, conditional on the non-default of the group, to the group's expected positive exposure to the counterparty and multiplying the result by the loss expected in the event of default. Conversely, the group calculates the DVA by applying the PD of the group, conditional on the non-default of the counterparty, to the expected positive exposure of the counterparty to the group and multiplying the result by the loss expected in the event of default. Both calculations are performed over the life of the potential exposure.

For most products the group uses a simulation methodology, which incorporates a range of potential exposures over the life of the portfolio, to calculate the expected positive exposure to a counterparty. The simulation methodology includes credit mitigants, such as counterparty netting agreements and collateral agreements with the counterparty.

The methodologies do not, in general, account for 'wrong-way risk'. Wrong-way risk is an adverse correlation between the counterparty's probability of default and the mark-to-market value of the underlying transaction. The risk can either be general, perhaps related to the currency of the issuer country, or specific to the transaction concerned. When there is significant wrong-way risk, a trade-specific approach is applied to reflect this risk in the valuation.

Funding fair value adjustment ('FFVA')

The FFVA is calculated by applying future market funding spreads to the expected future funding exposure of any uncollateralised component of the OTC derivative portfolio. The expected future funding exposure is calculated by a simulation methodology, where available and is adjusted for events that may terminate the exposure, such as the default of the group or the counterparty. The FFVA and DVA are calculated independently.

Model limitation

Models used for portfolio valuation purposes may be based upon a simplifying set of assumptions that do not capture all current and future material market characteristics. In these circumstances, model limitation adjustments are adopted.

Inception profit (Day 1 profit or loss reserves)

Inception profit adjustments are adopted when the fair value estimated by a valuation model is based on one or more significant unobservable inputs.

Fair value valuation bases

Financial instruments measured at fair value using a valuation technique with significant unobservable inputs – Level 3

	Assets					Liabilities			
	Financial investments	Trading assets	Designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Total	Trading liabilities	Designated at fair value	Derivatives	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Private equity and related investments	**2,886**	**48**	**108,278**	**—**	**111,212**	**1**	**—**	**—**	**1**
Structured notes	**—**	**—**	**23**	**—**	**23**	**—**	**28,657**	**—**	**28,657**
Others	**656**	**9,212**	**14,285**	**2,143**	**26,296**	**1**	**—**	**2,409**	**2,410**
At 31 Dec 2023	**3,542**	**9,260**	**122,586**	**2,143**	**137,531**	**2**	**28,657**	**2,409**	**31,068**
Private equity and related investments	3,742	16	90,773	—	94,531	6	—	—	6
Structured notes	—	—	—	—	—	—	34,734	—	34,734
Others	566	9,267	11,046	3,301	24,180	—	—	1,712	1,712
At 31 Dec 2022	4,308	9,283	101,819	3,301	118,711	6	34,734	1,712	36,452

Private equity and related investments

The fair value of a private equity investment (including private equity, infrastructure and private credit, primarily held to support our Insurance business, and strategic investments) is estimated on the basis of an analysis of the investee's financial position and results, risk profile, prospects and other factors; by reference to market valuations for similar entities quoted in an active market; the price at which similar companies have changed ownership; or from published net asset values ('NAVs') received. If necessary, adjustments are made to the NAV of funds to obtain the best estimate of fair value.

Structured notes

The fair value of Level 3 structured notes is derived from the fair value of the underlying debt security, and the fair value of the embedded derivative is determined as described in the paragraph below on derivatives. These structured notes comprise principally equity-linked notes issued by HSBC, which provide the counterparty with a return linked to the performance of equity securities and other portfolios.

Examples of the unobservable parameters include long-dated equity volatilities and correlations between equity prices, and interest and foreign exchange rates.

Derivatives

OTC derivative valuation models calculate the present value of expected future cash flows, based upon 'no arbitrage' principles. For many vanilla derivative products, the modelling approaches used are standard across the industry. For more complex derivative products, there may be some differences in market practice. Inputs to valuation models are determined from observable market data wherever possible, including prices available from exchanges, dealers, brokers or providers of consensus pricing. Certain inputs may not be observable in the market directly, but can be determined from observable prices via model calibration procedures or estimated from historical data or other sources.

Reconciliation of fair value measurements in Level 3 of the fair value hierarchy

Movement in Level 3 financial instruments

	Assets				Liabilities		
	Financial investments	Trading assets	Designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Trading liabilities	Designated at fair value[1]	Derivatives
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 1 Jan 2023	4,308	9,283	101,819	3,301	6	34,734	1,712
Total gains or losses recognised in profit or loss	—	(441)	7,105	(1,411)	(9)	(218)	488
– net income or losses from financial instruments held for trading or managed on a fair value basis	—	(441)	—	(1,411)	(9)	(218)	488
– changes in fair value of financial instruments mandatorily measured at fair value through profit or loss[2]	—	—	7,105	—	—	—	—
Total gains or losses recognised in other comprehensive income ('OCI')	(664)	(90)	120	14	—	(154)	(7)
– financial investments: fair value gains or losses	(618)	—	—	—	—	11	—
– exchange differences	(46)	(90)	120	14	—	(165)	(7)
Purchases	2,112	6,169	24,749	—	—	—	—
New issuances	—	—	—	—	—	6,360	—
Sales	(212)	(2,278)	(4,249)	—	—	—	—
Settlements	(2,004)	(5,501)	(10,657)	10	1	(5,249)	(322)
Transfers out	(696)	(1,505)	—	(370)	(6)	(8,367)	(266)
Transfers in	698	3,623	3,699	599	10	1,551	804
At 31 Dec 2023	3,542	9,260	122,586	2,143	2	28,657	2,409
Unrealised gains or losses recognised in profit or loss relating to assets and liabilities held at 31 Dec 2023	—	(1,183)	1,428	837	—	(21)	(591)
– net income or losses from financial instruments held for trading or managed on a fair value basis	—	(1,183)	—	837	—	—	(591)
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	—	—	1,428	—	—	(21)	—

Movement in Level 3 financial instruments (continued)

	Assets				Liabilities		
	Financial investments	Trading assets	Designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Trading liabilities	Designated at fair value	Derivatives
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 31 Dec 2021	3,674	3,246	74,652	3,294	—	20,449	2,130
Impact on transition to HKFRS17			11,352				
At 1 Jan 2022	3,674	3,246	86,004	3,294	—	20,449	2,130
Total gains or losses recognised in profit or loss	—	(952)	1,337	669	3	(851)	214
– net income or losses from financial instruments held for trading or managed on a fair value basis	—	(952)	—	669	3	—	214
– changes in fair value of financial instruments mandatorily measured at fair value through profit or loss[2]	—	—	1,337	—	—	(851)	—
Total gains or losses recognised in other comprehensive income ('OCI')	676	(81)	(39)	(25)	—	(1,001)	(83)
– financial investments: fair value gains or losses	812	—	—	—	—	(5)	—
– exchange differences	(136)	(81)	(39)	(25)	—	(996)	(83)
Purchases	1,670	6,480	28,923	—	—	—	—
New issuances	—	—	—	—	—	5,936	—
Sales	(71)	(644)	(214)	—	—	—	—
Settlements	(1,641)	(4,742)	(14,003)	(557)	—	12,130	(553)
Transfers out	—	(772)	(289)	(394)	—	(2,671)	(190)
Transfers in	—	6,748	100	314	3	742	194
At 31 Dec 2022	4,308	9,283	101,819	3,301	6	34,734	1,712
Unrealised gains or losses recognised in profit or loss relating to assets and liabilities held at 31 Dec 2022	—	(734)	(1,691)	2,631	—	(19)	(78)
– net income or losses from financial instruments held for trading or managed on a fair value basis	—	(734)	—	2,631	—	—	(78)
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	—	—	(1,691)	—	—	(19)	—

1 *Includes structured deposits where the settlement balance represents the net of matured and new deposits.*
2 *Includes net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss of HK$6,780m (2022: HK$1,065m).*

Transfers between levels of the fair value hierarchy are deemed to occur at the end of each quarter. Transfers into and out of levels of the fair value hierarchy are primarily attributable to observability of valuation inputs and price transparency.

Effect of changes in significant unobservable assumptions to reasonably possible alternatives

Sensitivity of fair values to reasonably possible alternative assumptions

	2023				2022			
	Reflected in profit or loss		**Reflected in OCI**		Reflected in profit or loss		Reflected in OCI	
	Favourable changes	**Un-favourable changes**	**Favourable changes**	**Un-favourable changes**	Favourable changes	Un-favourable changes	Favourable changes	Un-favourable changes
	HK$m	**HK$m**	**HK$m**	**HK$m**	HK$m	HK$m	HK$m	HK$m
Derivatives, trading assets and trading liabilities[1]	**284**	**(345)**	**—**	**—**	242	(308)	—	—
Financial assets and liabilities designated and otherwise mandatorily measured at fair value through profit or loss	**6,163**	**(6,163)**	**—**	**—**	5,101	(5,101)	—	—
Financial investments	**—**	**—**	**170**	**(170)**	—	—	187	(187)
At 31 Dec	**6,447**	**(6,508)**	**170**	**(170)**	5,343	(5,409)	187	(187)

1 *'Derivatives, trading assets and trading liabilities' are presented as one category to reflect the manner in which these instruments are risk-managed.*

The sensitivity analysis aims to measure a range of fair values consistent with the application of a 95% confidence interval. Methodologies take account of the nature of the valuation technique employed, as well as the availability and reliability of observable proxy and historical data.

When the fair value of a financial instrument is affected by more than one unobservable assumption, the above table reflects the most favourable or the most unfavourable change from varying the assumptions individually.

Key unobservable inputs to Level 3 financial instruments

The following table lists key unobservable inputs to Level 3 financial instruments and provides the range of those inputs at 31 December 2023.

Quantitative information about significant unobservable inputs in Level 3 valuations

	Fair value				2023		2022	
					Full range of inputs		Full range of inputs	
	Assets HK$m	Liabilities HK$m	Key valuation techniques	Key unobservable inputs	Lower	Higher	Lower	Higher
Private equity and related investments	111,212	1	See below	See below				
Structured notes	23	28,657						
– equity-linked notes	23	10,021	Model – Option model	Equity volatility	6%	71%	6%	142%
			Model – Option model	Equity correlation	34%	98%	38%	98%
– FX-linked notes	—	13,424	Model – Option model	FX volatility	3%	34%	4%	37%
– other	—	5,212						
Others[1]	26,296	2,410						
At 31 Dec 2023	**137,531**	**31,068**						

1 *'Others' includes a range of smaller asset holdings.*

Private equity and related investments

Given the bespoke nature of the analysis in respect of each holding, it is not practical to quote a range of key unobservable inputs. The key unobservable inputs would be price and correlation. The valuation approach includes using a range of inputs that include company specific financials, traded comparable companies multiples, published net asset values and qualitative assumptions, which are not directly comparable or quantifiable.

Volatility

Volatility is a measure of the anticipated future variability of a market price. It varies by underlying reference market price, and by strike and maturity of the option. Certain volatilities, typically those of a longer-dated nature, are unobservable and are estimated from observable data. The range of unobservable volatilities reflects the wide variation in volatility inputs by reference market price.

Correlation

Correlation is a measure of the inter-relationship between two market prices and is expressed as a number between minus one and one. It is used to value more complex instruments where the payout is dependent upon more than one market price. There is a wide range of instruments for which correlation is an input, and consequently a wide range of both same-asset correlations and cross-asset correlations is used. In general, the range of same-asset correlations will be narrower than the range of cross-asset correlations.

Unobservable correlations may be estimated based upon a range of evidence, including consensus pricing services, group's trade prices, proxy correlations and examination of historical price relationships. The range of unobservable correlations quoted in the table reflects the wide variation in correlation inputs by market price pair.

Inter-relationships between key unobservable inputs

Key unobservable inputs to Level 3 financial instruments may not be independent of each other. As described above, market variables may be correlated. This correlation typically reflects the manner in which different markets tend to react to macroeconomic or other events. Furthermore, the effect of changing market variables on the group's portfolio will depend on the group's net risk position in respect of each variable.

34 Fair values of financial instruments not carried at fair value

Fair values of financial instruments not carried at fair value and bases of valuation

		Fair Value Hierarchy			
	Carrying amount	Quoted market price Level 1	Observable inputs Level 2	Significant unobservable inputs Level 3	Total
	HK$m	HK$m	HK$m	HK$m	HK$m
At 31 Dec 2023					
Assets[1]					
Reverse repurchase agreements – non-trading	**831,186**	**—**	**831,199**	**—**	**831,199**
Loans and advances to banks	**563,801**	**—**	**554,613**	**9,093**	**563,706**
Loans and advances to customers	**3,557,076**	**—**	**96,749**	**3,410,874**	**3,507,623**
Financial investments – at amortised cost	**618,941**	**523,921**	**87,610**	**—**	**611,531**
Liabilities[1]					
Repurchase agreements – non-trading	**521,984**	**—**	**521,850**	**—**	**521,850**
Deposits by banks	**182,146**	**—**	**182,135**	**—**	**182,135**
Customer accounts	**6,261,051**	**—**	**6,261,771**	**—**	**6,261,771**
Debt securities in issue	**87,745**	**—**	**88,050**	**—**	**88,050**
Subordinated liabilities	**—**	**—**	**—**	**—**	**—**
At 31 Dec 2022					
Assets[1]					
Reverse repurchase agreements – non-trading	927,976	—	927,190	—	927,190
Loans and advances to banks	515,847	—	511,173	4,452	515,625
Loans and advances to customers	3,695,068	—	56,307	3,619,294	3,675,601
Financial investments – at amortised cost	509,766	404,442	93,420	780	498,642
Liabilities[1]					
Repurchase agreements – non-trading	351,093	—	349,133	—	349,133
Deposits by banks	198,908	—	198,905	—	198,905
Customer accounts	6,113,709	—	6,114,290	—	6,114,290
Debt securities in issue	100,909	—	101,414	—	101,414
Subordinated liabilities	3,119	—	2,191	—	2,191

1 *Amounts with HSBC Group entities are not reflected here. Further details are set out in Note 32.*

The fair values above are stated at a specific date and may be significantly different from the amounts which will actually be paid on the maturity or settlement dates of the instruments. In many cases, it would not be possible to realise immediately the estimated fair values given the size of the portfolios measured. Accordingly, these fair values do not represent the value of these financial instruments to the group as a going concern.

Other financial instruments not carried at fair value are typically short term in nature or re-priced to current market rates frequently. Accordingly, their carrying amount is a reasonable approximation of fair value. They include cash and balances at central banks, items in the course of collection from and transmission to other banks, Hong Kong Government certificates of indebtedness, Hong Kong currency notes in circulation, other financial assets and other financial liabilities, all of which are measured at amortised cost.

Valuation

Fair value is an estimate of the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It does not reflect the economic benefits and costs that the group expects to flow from an instrument's cash flow over its expected future life. Our valuation methodologies and assumptions in determining fair values for which no observable market prices are available may differ from those of other companies.

Repurchase and reverse repurchase agreements – non-trading

Fair values approximate carrying amounts as these balances are generally short dated.

Loans and advances to banks and customers

To determine the fair value of loans and advances to banks and customers, loans are segregated, as far as possible, into portfolios of similar characteristics. Fair values are based on observable market transactions, when available. When they are unavailable, fair values are estimated using valuation models incorporating a range of input assumptions. These assumptions may include: value estimates from third-party brokers reflecting over-the-counter trading activity; forward-looking discounted cash flow models, taking account of expected customer prepayment rates, using assumptions that the group believes are consistent with those that would be used by market participants in valuing such loans; new business rates estimates for similar loans; and trading inputs from other market participants including observed primary and secondary trades. From time to time, we may engage a third-party valuation specialist to measure the fair value of a pool of loans.

The fair value of loans reflects expected credit losses at the balance sheet date and estimates of market participants' expectations of credit losses over the life of the loans, and the fair value effect of repricing between origination and the balance sheet date. For credit impaired loans, fair value is estimated by discounting the future cash flows over the time period they are expected to be recovered.

Financial investments

The fair values of listed financial investments are determined using bid market prices. The fair values of unlisted financial investments are determined using valuation techniques that incorporate the prices and future earnings streams of equivalent quoted securities.

Deposits by banks and customer accounts

The fair values of on-demand deposits are approximated by their carrying value. For deposits with longer-term maturities, fair values are estimated using discounted cash flows, applying current rates offered for deposits of similar remaining maturities.

Debt securities in issue and subordinated liabilities

Fair values are determined using quoted market prices at the balance sheet date where available, or by reference to quoted market prices for similar instruments.

35 Interest rate benchmark reform

	Financial instruments yet to transition to alternative benchmarks, by main benchmark					
	USD Libor	JPY Libor	Sibor	THBFIX	SOR	Others[1]
At 31 Dec 2023	**HK$m**	**HK$m**	**HK$m**	**HK$m**	**HK$m**	**HK$m**
Non-derivative financial assets[2]	**9,805**	**—**	**14,607**	**182**	**—**	**2,723**
Non-derivative financial liabilities	**93,634**	**4,426**	**—**	**—**	**—**	**73**
Derivative notional contract amount	**974**	**—**	**—**	**59,541**	**34,468**	**—**
At 31 Dec 2022						
Non-derivative financial assets[2]	172,370	—	30,338	1,036	799	3,577
Non-derivative financial liabilities	120,096	9,192	—	—	—	264
Derivative notional contract amount	8,506,925	—	—	215,868	159,923	59,472

1 *Comprises financial instruments referencing other significant benchmark rates yet to transition to alternative benchmarks (GBP Libor, Mumbai Interbank Forward Offer Rate ('MIFOR'), Canadian dollar offered rate ('CDOR') and Mexican Interbank equilibrium interest rate ('TIIE')).*
2 *Gross carrying amount excluding allowances for expected credit losses.*

The amounts in the above table relate to the group's main operating entities where the group has material exposures impacted by Ibor reform including Hong Kong, Singapore, Thailand, Australia, India and Japan. The amounts provide an indication of the extent of the group's exposure to the Ibor benchmarks which are due to be replaced. Amounts are in respect of financial instruments that:

- contractually reference an interest rate benchmark that is planned to transition to an alternative benchmark;
- have a contractual maturity date beyond the date by which the reference interest rate benchmark is expected to cease; and
- are recognised on the group's consolidated balance sheet.

36 Structured entities

The group is involved with both consolidated and unconsolidated structured entities through the securitisation of financial assets, conduits and investment funds, established either by the group or a third party.

Consolidated structured entities

The group primarily uses consolidated structured entities to securitise customer loans and advances it originates to diversify its sources of funding for asset origination and capital efficiency purposes. The loans and advances are transferred by the group to the structured entities for cash or synthetically through credit default swaps, and the structured entities issue debt securities to investors. The group's transactions with these entities are not significant.

Unconsolidated structured entities

The term 'unconsolidated structured entities' refers to all structured entities not controlled by the group. The group enters into transactions with unconsolidated structured entities in the normal course of business to facilitate customer transactions and for specific investment opportunities.

Nature and risks associated with the group's interests in unconsolidated structured entities

Total asset values of the entities (HK$bn)	Securitisations	HSBC managed funds	Non-HSBC managed funds	Other	Total
0–4	91	106	244	28	469
4–15	3	41	200	—	244
15–39	—	12	101	—	113
39–196	—	3	71	—	74
196+	—	1	3	—	4
Number of entities at 31 Dec 2023	**94**	**163**	**619**	**28**	**904**
	HK$m	HK$m	HK$m	HK$m	HK$m
Total assets in relation to the group's interests in the unconsolidated structured entities	23,907	44,309	121,399	7,868	197,483
– trading assets	—	3,970	—	7	3,977
– financial assets designated and otherwise mandatorily measured at fair value through profit or loss	—	40,339	121,399	—	161,738
– derivatives	—	—	—	1	1
– loans and advances to customers	23,907	—	—	7,785	31,692
– other assets	—	—	—	75	75
Total liabilities in relation to the group's interests in the unconsolidated structured entities	—	—	—	274	274
– derivatives	—	—	—	274	274
Other off balance sheet commitments	22	14,969	33,263	6,888	55,142
The group's maximum exposure at 31 Dec 2023	**23,929**	**59,278**	**154,662**	**14,482**	**252,351**

Total asset values of the entities (HK$bn)	Securitisations	HSBC managed funds	Non-HSBC managed funds	Other	Total
0–4	55	92	271	27	445
4–15	7	42	173	—	222
15–39	—	12	98	—	110
39–196	—	3	59	—	62
196+	—	1	11	—	12
Number of entities at 31 Dec 2022	62	150	612	27	851
	HK$m	HK$m	HK$m	HK$m	HK$m
Total assets in relation to the group's interests in the unconsolidated structured entities	17,564	34,071	109,351	5,245	166,231
– trading assets	—	2,527	—	82	2,609
– financial assets designated and otherwise mandatorily measured at fair value through profit or loss	—	31,544	109,351	—	140,895
– derivatives	—	—	—	10	10
– loans and advances to customers	17,564	—	—	5,070	22,634
– other assets	—	—	—	83	83
Total liabilities in relation to the group's interests in the unconsolidated structured entities	—	—	—	223	223
– derivatives	—	—	—	223	223
Other off balance sheet commitments	1,395	11,753	30,862	11,342	55,352
The group's maximum exposure at 31 Dec 2022	18,959	45,824	140,213	16,364	221,360

The maximum exposure to loss from the group's interests in unconsolidated structured entities represents the maximum loss it could incur as a result of its involvement with these entities regardless of the probability of the loss being incurred.

- For commitments, guarantees and written credit default swaps, the maximum exposure to loss is the notional amount of potential future losses.
- For retained and purchased investments in and loans to unconsolidated structured entities, the maximum exposure to loss is the carrying value of these interests at the balance sheet reporting date.

The maximum exposure to loss is stated gross of the effects of hedging and collateral arrangements entered into to mitigate the group's exposure to loss.

Securitisations

The group has interests in unconsolidated securitisation vehicles through holding notes issued by these entities.

HSBC managed funds

The group establishes and manages money market funds and non-money market investment funds to provide customers with investment opportunities. The group, as fund manager, may be entitled to receive management and performance fees based on the assets under management. The group may also retain units in these funds.

Non-HSBC managed funds

The group purchases and holds units of third-party managed funds in order to facilitate business and meet customer needs.

Other

The group has established structured entities in the normal course of business, such as structured credit transactions for customers, to provide finance to public and private sector infrastructure projects, and for asset and structured finance transactions. In addition to the interest disclosed above, the group enters into derivative contracts, reverse repos and stock borrowing transactions with structured entities. These interests arise in the normal course of business for the facilitation of third-party transactions and risk management solutions.

Structured entities sponsored by the group

The amount of assets transferred to and income received from such sponsored entities during 2023 and 2022 were not significant.

37 Bank balance sheet and statement of changes in equity

Bank balance sheet at 31 December 2023

	2023 HK$m	2022 HK$m
Assets		
Cash and balances at central banks	**186,468**	169,595
Items in the course of collection from other banks	**18,186**	22,886
Hong Kong Government certificates of indebtedness	**328,304**	341,354
Trading assets	**797,026**	587,760
Derivatives	**394,366**	481,979
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**4,184**	5,431
Reverse repurchase agreements – non-trading	**480,579**	468,799
Loans and advances to banks	**368,246**	298,225
Loans and advances to customers	**1,903,294**	1,951,155
Financial investments	**1,229,117**	947,830
Amounts due from Group companies	**528,903**	720,765
Investments in subsidiaries	**112,544**	109,211
Interests in associates and joint ventures	**39,830**	39,830
Goodwill and intangible assets	**25,288**	23,659
Property, plant and equipment	**71,465**	71,555
Deferred tax assets	**1,019**	1,304
Prepayments, accrued income and other assets	**228,031**	214,624
Total assets	**6,716,850**	6,455,962
Liabilities		
Hong Kong currency notes in circulation	**328,304**	341,354
Items in the course of transmission to other banks	**22,201**	26,601
Repurchase agreements – non-trading	**433,902**	307,661
Deposits by banks	**127,980**	155,423
Customer accounts	**3,942,813**	3,740,697
Trading liabilities	**66,851**	95,097
Derivatives	**432,976**	532,325
Financial liabilities designated at fair value	**52,120**	49,396
Debt securities in issue	**33,434**	26,584
Retirement benefit liabilities	**993**	898
Amounts due to Group companies	**632,493**	563,368
Accruals and deferred income, other liabilities and provisions	**146,633**	132,141
Current tax liabilities	**10,368**	3,537
Deferred tax liabilities	**10,700**	9,267
Subordinated liabilities	**—**	3,119
Total liabilities	**6,241,768**	5,987,468
Equity		
Share capital	**180,181**	180,181
Other equity instruments	**52,465**	52,386
Other reserves	**12,578**	3,143
Retained earnings	**229,858**	232,784
Total equity	**475,082**	468,494
Total equity and liabilities	**6,716,850**	6,455,962

Bank statement of changes in equity for the year ended 31 December 2023

				Other reserves					
	Share capital[1]	Other equity instruments	Retained earnings	Property revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Other[4]	Total equity
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 1 Jan 2023	180,181	52,386	232,784	37,768	(9,303)	(930)	(20,368)	(4,024)	468,494
Profit for the year	—	—	86,734	—	—	—	—	—	86,734
Other comprehensive income/(expense) (net of tax)	—	—	(5,421)	3,766	6,388	2,913	(811)	—	6,835
– debt instruments at fair value through other comprehensive income	—	—	—	—	6,860	—	—	—	6,860
– equity instruments designated at fair value through other comprehensive income	—	—	—	—	(346)	—	—	—	(346)
– cash flow hedges	—	—	—	—	—	2,904	—	—	2,904
– changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	—	—	(5,354)	—	—	—	—	—	(5,354)
– property revaluation	—	—	—	3,766	—	—	—	—	3,766
– remeasurement of defined benefit asset/liability	—	—	(67)	—	—	—	—	—	(67)
– exchange differences	—	—	—	—	(126)	9	(811)	—	(928)
Total comprehensive income/(expense) for the year	—	—	81,313	3,766	6,388	2,913	(811)	—	93,569
Other equity instruments issued[2]	—	7,850	—	—	—	—	—	—	7,850
Other equity instruments redeemed[3]	—	(7,771)	(406)	—	—	—	—	—	(8,177)
Dividends to shareholders[5]	—	—	(86,356)	—	—	—	—	—	(86,356)
Movement in respect of share-based payment arrangements	—	—	(105)	—	—	—	—	(157)	(262)
Transfers and other movements[6]	—	—	2,628	(2,665)	404	2	(405)	—	(36)
At 31 Dec 2023	180,181	52,465	229,858	38,869	(2,511)	1,985	(21,584)	(4,181)	475,082
At 1 Jan 2022	172,335	44,615	205,791	36,900	1,524	63	(15,369)	(3,900)	441,959
Profit for the year	—	—	54,987	—	—	—	—	—	54,987
Other comprehensive income/(expense) (net of tax)	—	—	4,600	2,948	(10,829)	(993)	(4,999)	—	(9,273)
– debt instruments at fair value through other comprehensive income	—	—	—	—	(11,369)	—	—	—	(11,369)
– equity instruments designated at fair value through other comprehensive income	—	—	—	—	540	—	—	—	540
– cash flow hedges	—	—	—	—	—	(993)	—	—	(993)
– changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	—	—	4,432	—	—	—	—	—	4,432
– property revaluation	—	—	—	2,948	—	—	—	—	2,948
– remeasurement of defined benefit asset/liability	—	—	168	—	—	—	—	—	168
– exchange differences	—	—	—	—	—	—	(4,999)	—	(4,999)
Total comprehensive income/(expense) for the year	—	—	59,587	2,948	(10,829)	(993)	(4,999)	—	45,714
Shares issued[1]	7,846	—	—	—	—	—	—	—	7,846
Other equity instruments issued[2]	—	7,771	—	—	—	—	—	—	7,771
Dividends to shareholders[5]	—	—	(34,821)	—	—	—	—	—	(34,821)
Movement in respect of share-based payment arrangements	—	—	127	—	—	—	—	(127)	—
Transfers and other movements[6]	—	—	2,100	(2,080)	2	—	—	3	25
At 31 Dec 2022	180,181	52,386	232,784	37,768	(9,303)	(930)	(20,368)	(4,024)	468,494

1 *Ordinary share capital includes preference shares which have been redeemed or bought back via payments out of distributable profits in previous years. During 2022, 3,138.4m new ordinary shares were issued at an issue price of HK$2.5 each.*
2 *During 2023, an additional tier 1 capital instrument amounting to US$1,000m was issued for which there were no issuance costs. During 2022, an additional tier 1 capital instrument amounting to US$1,000m was issued for which there were US$10m issuance costs.*
3 *During 2023, an additional tier 1 capital instrument was redeemed at fair value US$(1,041)m.*
4 *The other reserves mainly comprise share of associates' other reserves, purchase premium arising from transfer of business from fellow subsidiaries, property revaluation reserve relating to transfer of properties to a fellow subsidiary and the share-based payment reserve. The share-based payment reserve is used to record the amount relating to share awards and options granted to employees of the group directly by HSBC Holdings plc.*
5 *Including distributions paid on perpetual subordinated loans classified as equity under HKFRS.*
6 *The movements include transfers from the property revaluation reserve to retained earnings in relation to depreciation of revalued properties.*

38 Effects of adoption of HKFRS 17

On 1 January 2023 the group adopted HKFRS 17 'Insurance Contracts' and as required by the standard applied the requirements retrospectively with comparatives restated from the transition date, 1 January 2022. The tables below provide the transition restatement impact on the group's consolidated balance sheet as at 1 January 2022, as well as the group consolidated income statement and the group consolidated statement of comprehensive income for the year ended 31 December 2022.

Further information about the effect of adoption of HKFRS 17 is provided in Note 1 Basis of preparation and material accounting policies on page 89 to 99.

HKFRS 17 transition impact on the group consolidated balance sheet at 1 January 2022

	Under HKFRS 4	Removal of PVIF and HKFRS 4 balances	Remeasure-ment effect of HKFRS 9 re-designations	Recognition of HKFRS 17 fulfilment cash flows	Recognition of HKFRS 17 contractual service margin	Tax effect	Under HKFRS 17	Total movements
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Assets								
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**202,399**	**—**	**473,454**	**—**	**—**	**—**	**675,853**	**473,454**
Loans and advances to banks	**432,247**	**—**	**(4,436)**	**—**	**—**	**—**	**427,811**	**(4,436)**
Loans and advances to customers	**3,840,939**	**—**	**(9,983)**	**—**	**—**	**—**	**3,830,956**	**(9,983)**
Financial investments	**2,051,575**	**—**	**(420,963)**	**—**	**—**	**—**	**1,630,612**	**(420,963)**
Goodwill and intangible assets	**95,181**	**(63,765)**	**—**	**—**	**—**	**—**	**31,416**	**(63,765)**
Deferred tax assets	**3,353**	**—**	**—**	**—**	**—**	**4,091**	**7,444**	**4,091**
All other assets	**3,277,699**	**(34,272)**	**—**	**31,213**	**(316)**	**—**	**3,274,324**	**(3,375)**
Total assets	**9,903,393**	**(98,037)**	**38,072**	**31,213**	**(316)**	**4,091**	**9,878,416**	**(24,977)**
Liabilities and equity								
Liabilities								
Insurance contract liabilities	**638,145**	**(638,145)**	**—**	**624,056**	**66,935**	**—**	**690,991**	**52,846**
Deferred tax liabilities	**32,522**	**—**	**—**	**—**	**—**	**(10,479)**	**22,043**	**(10,479)**
All other liabilities	**8,309,215**	**431**	**—**	**7,908**	**(250)**	**—**	**8,317,304**	**8,089**
Total liabilities	**8,979,882**	**(637,714)**	**—**	**631,964**	**66,685**	**(10,479)**	**9,030,338**	**50,456**
Total shareholders' equity	**856,809**	**492,823**	**35,612**	**(548,755)**	**(58,262)**	**12,695**	**790,922**	**(65,887)**
Non-controlling interests	**66,702**	**46,854**	**2,460**	**(51,996)**	**(8,739)**	**1,875**	**57,156**	**(9,546)**
Total equity	**923,511**	**539,677**	**38,072**	**(600,751)**	**(67,001)**	**14,570**	**848,078**	**(75,433)**
Total liabilities and equity	**9,903,393**	**(98,037)**	**38,072**	**31,213**	**(316)**	**4,091**	**9,878,416**	**(24,977)**

Transition drivers

Removal of PVIF and HKFRS 4 balances

The PVIF intangible asset of HK$63,765m previously reported under HKFRS 4 within 'Goodwill and intangible assets' arose from the upfront recognition of future profits associated with in-force insurance contracts. The PVIF intangible asset is no longer reported following the transition to HKFRS 17, as future profits are deferred within the CSM. Other HKFRS 4 insurance contract assets (shown above within 'All other assets') and insurance contract liabilities are removed on transition, to be replaced with HKFRS 17 balances.

Remeasurement effect of HKFRS 9 re-designations

Loans and advances and debt securities supporting associated insurance liabilities of HK$429,016m were re-designated from an amortised cost classification to fair value through profit and loss, and HK$6,366m from fair value through other comprehensive income to fair value through profit or loss. The re-designations were made in order to more closely align the asset accounting with the valuation of the associated insurance liabilities. The re-designation of amortised cost assets generated a net increase to assets of HK$38,072m because the fair value measurement on transition was higher than the previous amortised cost carrying amount.

Recognition of HKFRS 17 fulfilment cash flows

The measurement of the insurance contracts liabilities under HKFRS 17 is based on groups of insurance contracts and includes a liability for fulfilling the insurance contract, such as premiums, expenses, insurance benefits and claims including policyholder returns and the cost of guarantees. These are recorded within the fulfilment cash flow component of the insurance contract liability, together with the risk adjustment for non-financial risk.

Recognition of the HKFRS 17 contractual service margin

The CSM is a component of the insurance contract liability and represents the future unearned profit associated with insurance contracts that will be released to the profit and loss over the expected coverage period.

Tax effect

The removal of deferred tax liabilities primarily results from the removal of the associated PVIF intangible asset, and new deferred tax assets are reported, where appropriate, on temporary differences between the new HKFRS 17 accounting balances and their associated tax bases.

HKFRS 17 transition impact on the reported group consolidated income statement for the year ended 31 December 2022

	Under HKFRS 4	Removal of PVIF and HKFRS 4 balances	Remeasurement effect of HKFRS 9 re-designations	Insurance finance income/ (expense)	Contractual service margin	Onerous contracts	Experience variance and other	Attributable expenses	Tax effect	Under HKFRS 17
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Net interest income	126,852	—	(16,974)	—	—	—	—	—	—	109,878
Net fee income	36,600	—	—	—	—	—	—	1,965	—	38,565
Net income from financial instruments held for trading or managed on a fair value basis	41,674	—	(398)	—	—	—	—	—	—	41,276
Net expense from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss	(13,194)	—	(81,720)	—	—	—	—	—	—	(94,914)
Changes in fair value of designated debts issued and related derivatives	(703)	—	—	—	—	—	—	—	—	(703)
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	34	—	6	—	—	—	—	—	—	40
Gains less losses from financial investments	47	—	5	—	—	—	—	—	—	52
Net insurance premium income	80,415	(80,415)	—	—	—	—	—	—	—	—
Insurance finance income/ (expense)	—	—	—	97,187	—	—	—	—	—	97,187
Insurance service result	—	—	—	—	5,968	(1,343)	352	—	—	4,977
– insurance revenue	—	—	—	—	5,968	—	4,755	—	—	10,723
– insurance service expense	—	—	—	—	—	(1,343)	(4,403)	—	—	(5,746)
Other operating income/(loss)	3,781	707	—	274	—	—	(317)	—	—	4,445
Total operating income	275,506	(79,708)	(99,081)	97,461	5,968	(1,343)	35	1,965	—	200,803
Net insurance claims and benefits paid and movement in liabilities to policyholders	(69,814)	69,814	—	—	—	—	—	—	—	—
Net operating income before change in expected credit losses and other credit impairment charges	205,692	(9,894)	(99,081)	97,461	5,968	(1,343)	35	1,965	—	200,803
Change in expected credit losses and other credit impairment charges	(16,365)	—	(5)	—	—	—	—	—	—	(16,370)
Net operating income	189,327	(9,894)	(99,086)	97,461	5,968	(1,343)	35	1,965	—	184,433
Total operating expenses	(110,508)	—	—	—	—	—	—	3,970	—	(106,538)
Operating profit	78,819	(9,894)	(99,086)	97,461	5,968	(1,343)	35	5,935	—	77,895
Share of profit in associates and joint ventures	18,792	—	—	—	—	—	—	—	—	18,792
Profit before tax	97,611	(9,894)	(99,086)	97,461	5,968	(1,343)	35	5,935	—	96,687
Tax expense	(15,507)	—	—	—	—	—	—	—	(489)	(15,996)
Profit for the year	82,104	(9,894)	(99,086)	97,461	5,968	(1,343)	35	5,935	(489)	80,691

Transition drivers

Removal of PVIF and HKFRS 4 balances

As a result of the removal of the PVIF intangible asset, the associated revenue of HK$256m in 2022 that was previously reported within 'Other operating income' is no longer reported under HKFRS 17. This includes the removal of the value of new business and changes to PVIF intangible asset from valuation adjustments and experience variances.

On the implementation of HKFRS 17 new income statement line items associated with insurance contract accounting were introduced. Consequently, the previously reported HKFRS 4 line items 'Net insurance premium income', and 'Net insurance claims and benefits paid and movement in liabilities to policyholders' were also removed.

Remeasurement effect of HKFRS 9 re-designations

Following the re-designation of financial assets supporting associated insurance liabilities to fair value through profit or loss classification, the related income statement reporting also changed. Under our previous HKFRS 4 based reporting convention, these assets generated interest income of HK$16,974m in 2022, which is no longer reported in 'Net interest income' under HKFRS 17. To the extent that this interest income was shared with policyholders, the corresponding policyholder sharing obligation was previously included within the 'Net insurance claims and benefits paid and movement in liabilities to policyholders' line.

Following re-designation to fair value through profit or loss, gains and losses from changes in the fair value of underlying assets, together with interest income earned, are both reported within 'Net expense from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss'. Similar to an HKFRS 4 basis, HKFRS 17 accounting provides for an offset. While this offset was reported within the claims line under HKFRS 4, under HKFRS 17 it is reported within the 'Insurance finance income/(expense)' line described below.

Introduction of HKFRS 17 income statement

Insurance finance income/(expense)

'Insurance finance income' of HK$97,187m in 2022 represents the change in the carrying amount of insurance contracts arising from the effect of, and changes in, the time value of money and financial risk. For VFA contracts, which represent more than 97% of insurance contracts, the 'insurance finance income/(expense)' includes the changes in the fair value of underlying items (excluding additions and withdrawals). It therefore has an offsetting impact to investment income earned on underlying assets supporting insurance contracts. This includes an offsetting impact to the gains and losses on assets re-designated on transition to fair value through profit or loss, and which is now included in 'Net expense from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss'.

Contractual service margin

Revenue is recognised for the release of the CSM associated with the in-force business, which was allocated at a rate of approximately 8.4% during 2022. The CSM release is largely impacted by the constant measure allocation approach for investment services, but may vary over time primarily due to changes in the total amount of CSM reported on the balance sheet from factors such as new business written, changes to levels of actual returns earned on underlying assets, or changes to assumptions.

Onerous contracts

Losses on onerous contracts are taken to the income statement as incurred.

Experience variance and other

Experience variance and other represents the expected expenses, claims and recovery of acquisition cash flows which are reported as part of the insurance service revenue. This is offset with the actual expenses and claims incurred in the year and amortisation of acquisition cash flows which are reported as part of insurance service expense.

Attributable expenses

Directly attributable expenses are the costs associated with originating and fulfilling an identified portfolio of insurance contracts. These costs include distribution fees paid to third parties as part of originating insurance contracts together with appropriate allocations of fixed and variable overheads which are included within the fulfilment cash flows and are no longer shown on the operating expenses line.

HKFRS 17 transition impact on the group consolidated statement of comprehensive income

	2022 Under HKFRS 17 HK$m	2022 Under HKFRS 4 HK$m
Total equity at 1 Jan	**848,078**	923,511
of which:		
– Retained earnings	***422,462***	*488,055*
– Financial assets at FVOCI reserve	***3,575***	*3,869*
Profit for the year	**80,691**	82,104
Debt instruments at fair value through other comprehensive income	**(13,705)**	(13,675)
Equity instruments designated at fair value through other comprehensive income	**865**	865
Other comprehensive expense for the year, net of tax	**(27,333)**	(27,344)
Total comprehensive income for the year	**40,518**	41,950
Other movements	**(24,216)**	(24,198)
Total equity at 31 Dec	**864,380**	941,263

The group's consolidated balance sheet at transition date and at 31 December 2022

	Under HKFRS 17		Under HKFRS 4	
	31 Dec 2022	1 Jan 2022	31 Dec 2022	31 Dec 2021
	HK$m	HK$m	HK$m	HK$m
Assets				
Cash and balances at central banks	232,740	276,857	232,740	276,857
Items in the course of collection from other banks	28,557	21,632	28,557	21,632
Hong Kong Government certificates of indebtedness	341,354	332,044	341,354	332,044
Trading assets	699,805	777,450	699,805	777,450
Derivatives	502,877	365,167	502,771	365,167
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	653,030	675,853	226,451	202,399
Reverse repurchase agreements – non-trading	927,976	803,775	927,976	803,775
Loans and advances to banks	515,847	427,811	519,024	432,247
Loans and advances to customers	3,695,068	3,830,956	3,705,149	3,840,939
Financial investments	1,749,707	1,630,612	2,221,361	2,051,575
Amounts due from Group companies	140,485	112,621	140,546	112,719
Interests in associates and joint ventures	185,898	188,485	185,898	188,485
Goodwill and intangible assets	36,863	31,416	102,419	95,181
Property, plant and equipment	130,926	129,827	130,926	129,827
Deferred tax assets	7,582	7,444	3,856	3,353
Prepayments, accrued income and other assets	349,128	266,466	355,319	269,743
Total assets	10,197,843	9,878,416	10,324,152	9,903,393
Liabilities				
Hong Kong currency notes in circulation	341,354	332,044	341,354	332,044
Items in the course of transmission to other banks	33,073	25,701	33,073	25,701
Repurchase agreements – non-trading	351,093	255,374	351,093	255,374
Deposits by banks	198,908	280,310	198,908	280,310
Customer accounts	6,113,709	6,177,182	6,113,709	6,177,182
Trading liabilities	142,453	92,723	142,453	92,723
Derivatives	551,729	355,791	551,745	355,791
Financial liabilities designated at fair value	167,743	138,965	167,743	138,965
Debt securities in issue	100,909	67,364	100,909	67,364
Retirement benefit liabilities	1,655	1,890	1,655	1,890
Amounts due to Group companies	398,261	356,277	398,705	356,233
Accruals and deferred income, other liabilities and provisions	246,614	227,245	238,726	219,206
Insurance contract liabilities	654,922	690,991	700,758	638,145
Current tax liabilities	6,009	2,385	6,002	2,378
Deferred tax liabilities	21,912	22,043	32,937	32,522
Subordinated liabilities	3,119	4,053	3,119	4,054
Total liabilities	9,333,463	9,030,338	9,382,889	8,979,882
Equity				
Share capital	180,181	172,335	180,181	172,335
Other equity instruments	52,386	44,615	52,386	44,615
Other reserves	108,837	151,510	109,235	151,804
Retained earnings	466,148	422,462	533,518	488,055
Total shareholders' equity	807,552	790,922	875,320	856,809
Non-controlling interests	56,828	57,156	65,943	66,702
Total equity	864,380	848,078	941,263	923,511
Total liabilities and equity	10,197,843	9,878,416	10,324,152	9,903,393

39 Business disposals and acquisitions

Business disposals

Our New Zealand loan portfolio

In August 2023, the Hongkong and Shanghai Banking Corporation Limited (acting through its New Zealand Branch) entered into an agreement with Pepper New Zealand Limited, a wholly-owned subsidiary of Pepper Money Limited, to sell its New Zealand retail mortgage loan portfolio. The sale was classified as held for sale in the third quarter of 2023 and was completed on 1 December 2023.

Our retail business in Mauritius

In November 2023, the Hongkong and Shanghai Banking Corporation Limited (acting through its Mauritius Branch) entered into an agreement with ABSA Bank (Mauritius) Limited, a wholly-owned subsidiary of ABSA Bank Group Limited, to sell its Wealth and Personal Banking business. The sale is expected to complete in the second half of 2024 subject to regulatory approvals.

Business acquisitions

Acquisition of Citibank China's wealth management portfolio

In October 2023, HSBC Bank (China) Company Limited, a wholly-owned subsidiary of the Hongkong and Shanghai Banking Corporation Limited, entered into an agreement to acquire Citibank China's retail wealth management portfolio in mainland China. The portfolio comprises assets under management and deposits, and the associated wealth customers. Upon completion, the acquired business will be integrated into HSBC Bank China's Wealth and Personal Banking operations. The transaction is expected to complete in the first half of 2024.

Acquisition of Silkroad Property Partners Singapore

In October 2023, HSBC Global Asset Management Singapore Limited entered into an agreement to acquire 100% of the shares of Silkroad Property Partners Pte Ltd ('Silkroad'). Silkroad is a Singapore headquartered Asia-Pacific-focused, real estate investment manager. The acquisition was completed on 31 January 2024.

40 Legal proceedings and regulatory matters

The group is party to legal proceedings and regulatory matters in a number of jurisdictions arising out of its normal business operations. Apart from the matters described below, the group considers that none of these matters are material. The recognition of provisions is determined in accordance with the accounting policies set out in Note 1.2(n) of the *Annual Report and Accounts 2023*. While the outcomes of legal proceedings and regulatory matters are inherently uncertain, management believes that, based on the information available to it, appropriate provisions have been made in respect of these matters as at 31 December 2023. Any provision recognised does not constitute an admission of wrongdoing or legal liability. It is not practicable to provide an aggregate estimate of potential liability for our legal proceedings and regulatory matters as a class of contingent liabilities.

Tax-related investigations

Various tax administration, regulatory and law enforcement authorities around the world are conducting investigations in connection with allegations of tax evasion or tax fraud, money laundering and unlawful cross-border banking solicitation. The Bank continues to cooperate with these investigations.

Based on the facts currently known, it is not practicable at this time for the Bank to predict the resolution of these matters, including the timing or any possible impact on the Bank, which could be significant.

Korean short selling investigation

In December 2023, the Korean Securities and Futures Commission issued a decision to impose a fine on the Bank in connection with trades in breach of Korean short selling rules and to refer the case to the Korean Prosecutors' Office for investigation.

There are many factors that may affect the range of outcomes, and the resulting financial impact, of this matter, which could be significant.

Other regulatory investigations, reviews and litigation

The Bank and/or certain of its affiliates are subject to a number of enquiries and examinations, requests for information, investigations and reviews by various regulators and competition and law enforcement authorities, as well as legal proceedings including litigation, arbitration and other contentious proceedings, in connection with various matters arising out of their ordinary course of businesses and operations.

At the present time, the Bank does not expect the ultimate resolution of any of these matters to be material to the Group's financial position; however, given the uncertainties involved in legal proceedings and regulatory matters, there can be no assurance regarding the eventual outcome of a particular matter or matters.

41 Ultimate holding company

The ultimate holding company of the Bank is HSBC Holdings plc, which is incorporated in England.

The largest group in which the accounts of the Bank are consolidated is that headed by HSBC Holdings plc. The consolidated accounts of HSBC Holdings plc are available to the public on the HSBC Group's website at www.hsbc.com or may be obtained from 8 Canada Square, London E14 5HQ, United Kingdom.

42 Events after the balance sheet date

On 31 January 2024, HSBC Global Asset Management Singapore Limited completed the acquisition of the Asia-Pacific-focused, real estate investment manager, Silkroad Property Partners Pte Ltd.

43 Approval of financial statements

The consolidated financial statements were approved and authorised for issue by the Board of Directors on 21 February 2024.

Financial Review

Changes to presentation from 1 January 2023

(Unaudited)

HKFRS 17 ‘Insurance Contracts’

On 1 January 2023, the group adopted HKFRS 17 ‘Insurance Contracts’. As required by the standard, the group applied the requirements retrospectively with comparative data previously published under HKFRS 4 ‘Insurance Contracts’ restated from the 1 January 2022 transition date. Under HKFRS 17 there is no present value of in-force long-term insurance business (‘PVIF’) asset recognised up front. Instead the measurement of the insurance contract liability takes into account fulfilment cash flows and a contractual service margin (‘CSM’) representing the unearned profit. In contrast to the group’s previous HKFRS 4 accounting where profits are recognised up front, under HKFRS 17 they are deferred and systematically recognised in revenue as services are provided over the life of the contract. The CSM also includes attributable cost, which had previously been expensed as incurred and which is now incorporated within the insurance liability measurement and recognised over the life of the contract.

In conjunction with the implementation of HKFRS 17, the group has made use of the option to re-designate to fair value through profit or loss assets that were previously held at amortised cost totalling HK$429,016m, and assets previously held at fair value through other comprehensive income totalling HK$6,366m. The re-designation of amortised cost assets generated a net increase to assets of HK$38,072m because the new fair value measurement on transition was higher than the previous amortised cost carrying amount.

The impact of the transition was a reduction of HK$4,889m on the group’s full-year 2022 reported revenue and a reduction of HK$924m on the full-year 2022 reported profit before tax. The group’s total equity reduced by HK$75.4bn to HK$848.1bn on the transition at 1 January 2022. For further details, see Note 1 'Basis of preparation and material accounting policies' and Note 38 ‘Effects of adoption of HKFRS 17’.

Results for 2023

(Unaudited)

Profit before tax for 2023 reported by The Hongkong and Shanghai Banking Corporation Limited (‘the Bank’) and its subsidiaries (together ‘the group’) increased by HK$24,756m, or 26%, to HK$121,443m.

Consolidated income statement by reportable segments[1]

(Audited)

	Wealth and Personal Banking[2]	Commercial Banking[2,3]	Global Banking[3]	Markets and Securities Services	Corporate Centre[4]	Other (GBM-other)[5]	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Year ended 31 Dec 2023							
Net interest income/(expense)	79,737	60,964	24,299	6,411	(42,064)	1,433	130,780
Net fee income/(expense)	19,426	10,664	5,038	2,652	270	(7)	38,043
Net income from financial instruments measured at fair value through profit or loss	54,190	4,604	164	23,888	40,432	376	123,654
Gains less losses from financial investments	(1,978)	(1,102)	—	—	—	(711)	(3,791)
Insurance finance expense	(48,798)	—	—	—	—	—	(48,798)
Insurance service result	6,589	—	—	—	(31)	—	6,558
Other operating income/(expense)	526	107	467	1,693	1,366	(926)	3,233
Net operating income/(expense) before change in expected credit losses and other credit impairment charges	109,692	75,237	29,968	34,644	(27)	165	249,679
– of which: external	*60,744*	*80,293*	*40,051*	*66,318*	*(19,895)*	*22,168*	*249,679*
inter-segment	*48,948*	*(5,056)*	*(10,083)*	*(31,674)*	*19,868*	*(22,003)*	—
Change in expected credit losses and other credit impairment charges	(2,113)	(9,378)	(1,360)	(26)	2	32	(12,843)
Net operating income/(expense)	107,579	65,859	28,608	34,618	(25)	197	236,836
Operating expenses	(50,664)	(22,205)	(10,825)	(15,653)	(8,382)	(2,264)	(109,993)
Operating profit/(loss)	56,915	43,654	17,783	18,965	(8,407)	(2,067)	126,843
Share of profit in associates and joint ventures	390	—	—	—	18,165	—	18,555
Impairment of interest in associate	—	—	—	—	(23,955)	—	(23,955)
Profit/(loss) before tax	57,305	43,654	17,783	18,965	(14,197)	(2,067)	121,443
Balance sheet data at 31 Dec 2023							
Loans and advances to customers (net)	1,567,893	1,154,648	791,061	37,366	1,178	4,930	3,557,076
Customer accounts	3,618,894	1,685,876	740,881	209,511	30	5,859	6,261,051

Consolidated income statement by reportable segments[1] (continued)

	Wealth and Personal Banking[2] HK$m	Commercial Banking[2,3] HK$m	Global Banking[3] HK$m	Markets and Securities Services HK$m	Corporate Centre[4] HK$m	Other (GBM-other)[5] HK$m	Total HK$m
Year ended 31 Dec 2022							
Net interest income/(expense)	55,686	41,723	18,703	4,370	(12,617)	2,013	109,878
Net fee income/(expense)	19,506	10,081	5,086	3,701	247	(56)	38,565
Net income/(expense) from financial instruments measured at fair value through profit or loss	(91,905)	3,918	(110)	22,372	11,079	345	(54,301)
Gains less losses from financial investments	(29)	64	—	—	—	17	52
Insurance finance income	97,167	—	—	—	20	—	97,187
Insurance service result	4,977	—	—	—	—	—	4,977
Other operating income/(expense)	2,649	155	369	1,208	315	(251)	4,445
Net operating income/(expense) before change in expected credit losses and other credit impairment charges	88,051	55,941	24,048	31,651	(956)	2,068	200,803
– of which: external	*72,095*	*58,981*	*26,413*	*40,870*	*(8,896)*	*11,340*	*200,803*
inter-segment	*15,956*	*(3,040)*	*(2,365)*	*(9,219)*	*7,940*	*(9,272)*	*—*
Change in expected credit losses and other credit impairment charges	(1,337)	(11,947)	(3,070)	22	1	(39)	(16,370)
Net operating income/(expense)	86,714	43,994	20,978	31,673	(955)	2,029	184,433
Operating expenses	(48,978)	(20,711)	(10,513)	(13,897)	(9,607)	(2,832)	(106,538)
Operating profit/(loss)	37,736	23,283	10,465	17,776	(10,562)	(803)	77,895
Share of profit in associates and joint ventures	140	—	—	—	18,652	—	18,792
Impairment of interest in associate	—	—	—	—	—	—	—
Profit/(loss) before tax	37,876	23,283	10,465	17,776	8,090	(803)	96,687
Balance sheet data at 31 Dec 2022							
Loans and advances to customers (net)	1,526,965	1,231,590	880,581	40,563	1,403	13,966	3,695,068
Customer accounts	3,443,694	1,665,463	805,600	195,775	11	3,166	6,113,709

1 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*
2 *From 1 January 2023, all balances within in the scope of HKFRS 17 of Hong Kong insurance manufacturing entities distributed by Commercial Banking ('CMB') are reported under Wealth and Personal Banking ('WPB'). Comparative data have been re-presented accordingly.*
3 *From 1 January 2023, we have transferred our portfolio of Global Banking ('GB') customers within Australia and Indonesia from GB to CMB for reporting purposes. Comparative data have not been re-presented.*
4 *Includes inter-segment elimination.*
5 *Mainly comprises other business activities which are jointly managed by GB and Markets and Securities Services ('MSS').*

Financial Review

(Unaudited)

The commentary in this financial review compares the group's financial performance for the year ended 31 December 2023 with the year ended 31 December 2022. On 1 January 2023, the group adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Financial performance for the year ended 31 December 2022 has been restated.

Results Commentary

(Unaudited)

The group reported profit before tax of HK$121,443m, an increase of HK$24,756m, or 26%. Net operating income before change in expected credit losses and other credit impairment charges increased by HK$48,876m, or 24%, primarily driven by higher net income from financial instruments held for trading or managed on a fair value basis and higher net interest income. The results include a charge relating to an impairment in interest in associate of HK$23,955m, relating to the Bank of Communications Co., Ltd ('BoCom').

Net interest income increased by HK$20,902m, or 19%. Excluding the unfavourable foreign exchange impact, net interest income increased by HK$22,332m, or 21%, driven by a 27 basis point ('bp') improvement in net interest margin and higher average interest-earning assets. In Hong Kong, net interest margin improved from higher customer deposit spreads and higher reinvestment yields as market interest rates increased. Net interest income in Malaysia, India and Singapore also increased, reflecting the favourable impact from higher interest rates.

Net fee income decreased by HK$522m, or 1%. Excluding the unfavourable foreign exchange impact, net fee income decreased by HK$86m, mainly in Hong Kong, as securities brokerage income fell due to lower equities turnover in the broader market and lower funds under management income. These were largely offset by an increase in unit trust income as client activities recovered, and higher net card services income in Hong Kong, in line with a recovery in retail sales.

Net income from financial instruments measured at fair value through profit or loss increased by HK$177,955m, or 328%.

Net income from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss increased by HK$143,873m, or 152% primarily in Hong Kong and Singapore reflecting fair value gains on financial assets measured at fair value through profit or loss which back insurance and investment contracts. An offsetting impact related to the associated insurance liabilities is reported in 'Insurance finance income/(expense)'.

Net income from financial instruments held for trading or managed on a fair value basis increased by HK$33,159m, or 80%, most notably in Hong Kong due to higher gains on derivatives trading benefiting from rising interest rates and favourable foreign exchange movements. There was also an increase in Singapore from dealing profits on treasury bills and debt securities.

Gains less losses from financial investments decreased by HK$3,843m driven by the loss on disposal of treasury bonds in Hong Kong, of which HK$3,695m was transferred from financial assets at fair value through other comprehensive income ('FVOCI') reserve.

Insurance finance income/(expense) decreased by HK$145,985m, or 150%, reflecting the extent to which the investment income earned on underlying assets supporting insurance contracts is shared with the policyholders.

Insurance service result increased by HK$1,581m, or 32% reflecting an increase to the release of CSM of HK$1,363m as a result of a

EXHIBIT B

RISK MANAGEMENT SYSTEM

The information in this Exhibit B describes the risk management system of the Issuer and references herein to the "**HSBC Group**" or the "**group**" are to the Issuer and its subsidiaries.

The information in this Exhibit B has been extracted from the Annual Report and Accounts 2023 of the Issuer. Reference to page numbers (i.e. the pages numbers which appear on the bottom of the pages) in this Exhibit B are to pages of the Annual Report and Accounts 2023. The extracts set out in this Exhibit B are not complete and reference should be made to the Annual Report and Accounts 2023 which is available on the website of the HKEX at *www.hkexnews.hk* and our website which is presently at *https://www.warrants.hsbc.com.hk/en/warrant/latest-document-and-notice*.

Risk

Our approach to risk

(Unaudited)

Our risk appetite

We recognise the importance of a strong culture, which refers to our shared attitudes, beliefs, values and standards that shape behaviours including those related to risk awareness, risk taking and risk management. All our people are responsible for the management of risk, with the ultimate accountability residing with the Board. Our risk appetite defines the level and types of risk that we are willing to take, while informing the financial planning process and guiding strategic decision making.

The following principles guide the group's overarching appetite for risk and determine how our businesses and risks are managed.

Financial position

- We aim to maintain a strong capital position, defined by regulatory and internal capital ratios.
- We carry out liquidity and funding management for each operating entity, on a stand-alone basis.

Operating model

- We seek to generate returns in line with our risk appetite and strong risk management capability.
- We aim to deliver sustainable and diversified earnings and consistent returns for shareholders.

Business practice

- We have no appetite for deliberately or knowingly causing detriment to consumers, or incurring a breach of the letter or spirit of regulatory requirements.
- We have no appetite for inappropriate market conduct by any member of staff or by any group business.
- We are committed to managing the climate risks that have an impact on our financial position, and delivering on our net zero ambition.
- We consider and, where appropriate, mitigate reputational risk that may arise from our business activities and decisions.
- We monitor non-financial risk exposure against risk appetite, including exposure related to inadequate or failed internal processes, people and systems, or events that impact our customers or can lead to sub-optimal returns to shareholders, censure, or reputational damage.

Enterprise-wide application

Our risk appetite encapsulates the consideration of financial and non-financial risks. We define financial risk as the risk of a financial loss as a result of business activities. We actively take these types of risks to maximise shareholder value and profits. Non-financial risk is the risk to achieving our strategy or objectives as the result of failed internal processes, people and systems or from external events.

Our risk appetite is expressed in both quantitative and qualitative terms and applied at the global business level and to material banking entities. It continues to evolve and expand its scope as part of our regular review process.

The Board reviews and approves the group's risk appetite regularly to make sure it remains fit for purpose. The group's risk appetite is considered, developed and enhanced through:

- an alignment with our strategy, purpose, values and customer needs;
- trends highlighted in other group risk reports;
- communication with risk stewards on the developing risk landscape;
- strength of our capital, liquidity and balance sheet;
- compliance with applicable laws and regulations;
- effectiveness of the applicable control environment to mitigate risk, informed by risk ratings from risk control assessments;
- functionality, capacity and resilience of available systems to manage risk; and
- the level of available staff with the required competencies to manage risks.

We formally articulate our risk appetite through our risk appetite statement ('RAS'), which is approved by the Board on the recommendation of the group Risk Committee ('RC'). Setting out our risk appetite helps ensure that we agree a suitable level of risk for our strategy. In this way, risk appetite informs our financial planning process and helps senior management to allocate capital to business activities, services and products.

The RAS is applied to the development of business line strategies, strategic and business planning, and remuneration. At a group level, performance against the RAS is reported to the group Risk Management Meeting ('RMM') alongside key risk indicators to support targeted insight and discussion on breaches of risk appetite and any associated mitigating actions. This reporting allows risks to be promptly identified and mitigated, and informs risk-adjusted remuneration to drive a strong risk culture.

Most global businesses and material banking entities are required to have their own RAS, which is monitored to help ensure it remains aligned with the group's RAS. Each RAS and business activity is guided and underpinned by qualitative principles and/or quantitative metrics.

Risk management

We recognise that the primary role of risk management is to help protect our customers, business, colleagues, shareholders and the communities that we serve, while ensuring we are able to support our strategy and provide sustainable growth. This is supported through our three lines of defence model described on page 27.

The implementation of our business strategy remains a key focus. As we implement change initiatives, we actively manage the execution risks. We also perform periodic risk assessments, including against strategies,to help ensure retention of key personnel for our continued effective operation.

We aim to use a comprehensive risk management approach across the organisation and across all risk types, underpinned by the group's culture and values. This is outlined in our risk management framework, including the key principles and practices that we employ in managing material risks, both financial and non-financial.

The framework fosters continual monitoring, promotes risk awareness and encourages a sound operational and strategic decision making and escalation process. It also supports a consistent approach to identifying, assessing, managing and reporting the risks we accept and incur in our activities, with clear accountabilities. We actively review and enhance our risk management framework and our approach to managing risk, through our activities with regard to people and capabilities, governance, reporting and management information, credit risk management models and data.

Our risk management framework

The following diagram and descriptions summarise key aspects of the risk management framework, including governance, structure, risk management tools and our culture, which together help align employee behaviour with risk appetite.

Key components of our risk management framework

HSBC values and risk culture		
Risk governance	**Non-executive risk governance**	The Board approves the group's risk appetite, plans and performance targets. It sets the 'tone from the top' and is advised by the group's Risk Committee.
	Executive risk governance	Our executive risk governance structure is responsible for the enterprise-wide management of all risks, including key policies and frameworks for the management of risk within the group.
Roles and responsibilities	**Three lines of defence model**	Our 'three lines of defence' model defines roles and responsibilities for risk management. An independent Risk and Compliance function helps ensure the necessary balance in risk/return decisions.
Processes and tools	**Risk appetite** **Enterprise-wide risk management tools** **Active risk management: identification/assessment, monitoring, management and reporting**	The group has processes in place to identify, assess, monitor, manage and report risks to help ensure we remain within our risk appetite.
Internal controls	**Policies and procedures**	Policies and procedures define the minimum requirements for the controls required to manage our risks.
	Control activities	Operational and resilience risk management defines minimum standards and processes for managing operational risks and internal controls.
	Systems and infrastructure	The group has systems and processes that support the identification, capture and exchange of information to support risk management activities.

Risk governance

The Board has ultimate responsibility for the effective management of risk and approves our risk appetite. It is advised on risk-related matters by the RC. The RC reviews the effectiveness of the group's risk management framework and internal controls systems (other than internal financial controls overseen by the group Audit Committee) and oversees the group's approach to conduct, fairness and prevention of financial crime. Through review and independent challenge of reports presented by management at RC meetings, the committee oversees the effectiveness of monitoring, assessment and management of the risk environment as well as the risk management framework.

The group's Chief Risk Officer, supported by members of the RMM, holds executive accountability for the ongoing monitoring, assessment and management of the risk environment and the effectiveness of the risk management framework.

The management of regulatory compliance risk and financial crime risk resides with the group's Chief Compliance Officer. Oversight is maintained by the group's Chief Risk Officer, in line with his enterprise-wide risk oversight responsibilities, through the RMM.

Day-to-day responsibility for risk management is delegated to senior managers with individual accountability for decision making. All our people have a role to play in risk management. These roles are defined using the three lines of defence model, which takes into account the group's business and functional structures as described in the following commentary, 'Our responsibilities'.

We use a defined executive risk governance structure to help ensure there is appropriate oversight and accountability of risk, which facilitates reporting and escalation to the RMM. This structure is summarised in the following table.

Governance structure for the management of risk

Authority	Membership	Responsibilities include:
Risk Management Meeting of the group	group Chief Risk Officer group General Counsel group Co-Chief Executive Officers group Chief Financial Officer group Chief Compliance Officer group Head of Internal Audit Chief Executive Officer of Hang Seng Bank Limited All other group Executive Committee members	– Supporting the group Chief Risk Officer in exercising Board-delegated risk management authority. – Overseeing the implementation of risk appetite and the risk management framework. – Forward-looking assessment of the risk environment, analysing possible risk impacts and taking appropriate action. – Monitoring all categories of risk and determining appropriate mitigating action. – Promoting a supportive group culture in relation to risk management and conduct.
Global business/ Market risk management meetings	Global business/Market Chief Risk and Compliance Officer/Market Chief Risk Officer Global business/Market Chief Executive Global business/Market Chief Financial Officer Global business/Market heads of global functions	– Supporting the group Chief Risk Officer in exercising Board-delegated risk management authority. – Forward-looking assessment of the risk environment, analysing the possible risk impact and taking appropriate action. – Implementation of risk appetite and the risk management framework. – Monitoring all categories of risk and determining appropriate mitigating actions. – Embedding a supportive culture in relation to risk management and controls.

The Board committees with responsibility for oversight of risk-related matters are set out on page 6.

Our responsibilities

All our people are responsible for identifying and managing risk within the scope of their roles. Roles are defined using the three lines of defence model, which takes into account our business and functional structures as described below.

Three lines of defence

To create a robust control environment to manage risks, we use an activity-based three lines of defence model. This model delineates management accountabilities and responsibilities for risk management and the control environment.

The model underpins our approach to risk management by clarifying responsibility and encouraging collaboration, as well as enabling efficient coordination of risk and control activities.

The three lines of defence are summarised below:

- The first line of defence owns the risks and is responsible for identifying, recording, reporting and managing them in line with risk appetite, and ensuring that the right controls and assessments are in place to mitigate them.
- The second line of defence challenges the first line of defence on effective risk management, and provides advice and guidance in relation to the risk.
- The third line of defence is our Global Internal Audit function, which provides independent assurance that our risk management approach and processes are designed and operating effectively.

Risk and Compliance function

The group's Risk sub-function, headed by the group's Chief Risk Officer, is responsible for the group's risk management framework. This responsibility includes establishing and monitoring of risk profiles, and identifying and managing forward-looking risk. The group's Risk sub-function is made up of sub-functions covering all risks to our business. Forming part of the second line of defence, the group's Risk sub-function is independent from the global businesses, including sales and trading functions, to provide challenge, appropriate oversight and balance in risk/return decisions.

Responsibility for minimising both financial and non-financial risk lies with our people. They are required to manage the risks of the business and operational activities for which they are responsible. We maintain adequate oversight of our risks through our various specialist risk stewards and the collective accountability held by our Chief Risk Officers at markets and global businesses.

We have continued to strengthen the control environment and our approach to the management of non-financial risk, as set out in our risk management framework. The management of non-financial risk focuses on governance and risk appetite, and provides a single view of the non-financial risks that matter the most and the associated controls. It incorporates a risk management system designed to enable the active management of non-financial risk. Our ongoing focus is on simplifying our approach to non-financial risk management, while driving more effective oversight and better end-to-end identification and management of non-financial risks. This is overseen by the Enterprise Risk sub-function, headed by the group Head of Enterprise Risk Management.

Stress testing and recovery planning

Our stress testing programme assesses our capital and liquidity strength through a rigorous examination of our resilience to external shocks, which forms part of our risk management and capital and liquidity planning. As well as undertaking regulatory-driven stress tests, we conduct our own internal stress tests in order to understand the nature and level of all material risks, quantify the impact of such risks and develop plausible mitigating actions.The outcome of a stress testing provides management with key insights into the impact of severely adverse events on the group, and provides confidence to regulators on the group's financial stability.

Internal stress tests

Our internal capital assessment uses a range of stress scenarios that explore risks identified by management. They include potential adverse macroeconomic, geopolitical, climate and operational risk events, as well as other potential events that are specific to the group.

The selection of stress scenarios is based upon the output of our identified top and emerging risks and our risk appetite. Stress testing analysis helps management understand the nature and extent of vulnerabilities to which the group is exposed. Using this information, management decides whether risks can or should be mitigated through management actions or, if they were to crystallise, be absorbed through capital and liquidity. This in turn informs decisions about preferred capital and liquidity levels and allocations.

During 2023, we completed a Group-wide Internal Stress Test alongside testing of the bank's strategy, otherwise known as the Corporate Plan to test and inform our strategy and assumptions. The stress scenario explored the potential impact of interest rate shocks and a deep recession. Under this scenario, inflation re-intensifies as accentuated geo-political tensions lead to severe global supply-chain disruptions and a rise in energy prices.

In addition to the group-wide stress testing scenarios, each major subsidiary conducts regular macroeconomic and event-driven scenario analysis specific to its region. They also participate, as required, in the regulatory stress testing programmes of the jurisdictions in which they operate, such as stress tests required by the Monetary Authority of Singapore, the Australian Prudential Regulation Authority and those required by the HKMA. Global functions and businesses also perform bespoke stress testing to inform their assessment of risks to potential scenarios.

We also conduct reverse stress tests each year at a group level and, where required, at subsidiary entity level to understand potential extreme conditions that would make our business model non-viable. Reverse stress testing identifies potential stresses and vulnerabilities we might face, and helps inform early warning triggers, management actions and contingency plans designed to mitigate risks.

The group stress testing programme is overseen by the RC and results are reported, where appropriate, to the RMM and RC.

Recovery and resolution plans

Recovery and resolution plans form part of the integral framework safeguarding the group's financial stability. The group's recovery plan, together with stress testing, helps us understand the likely outcomes of adverse business or economic conditions and in the identification of appropriate risk mitigating actions.

Ibor transition

Interbank offered rates ('Ibors') were previously used extensively to set interest rates on different types of financial transactions and for valuation purposes, risk measurement and performance benchmarking.

The publication of sterling, Swiss franc, euro, Japanese yen and US dollar Libor interest rate benchmarks, as well as the Euro Overnight Index Average ('Eonia') and other local interbank interest rates regionally has ceased following regulatory announcements and industry initiatives. To support any remaining contracts referencing sterling and US dollar Libor benchmarks, the UK's Financial Conduct Authority ('FCA') has compelled the ICE Benchmark Administration Limited to publish the three-month sterling Libor setting using an alternative 'synthetic' methodology until 31 March 2024, and one-month, three-month and six-month US dollar Libor settings until 30 September 2024. We continue to support our customers in the transition of the limited number of outstanding contracts relying on 'synthetic' Libor benchmarks in line with these dates.

There are approximately 70 of these contracts remaining, which are predominantly syndicated lending contracts, where Commercial or Global Banking customers have required additional time to enable refinancing or restructuring, with transition expected prior to 30 September 2024. Additionally, there are a small number of debt securities and retail mortgages that are contingent on demised Ibors, after the end of their fixed interest rate periods. HSBC remains committed to seeking to remediate and/or mitigate relevant risks relating to IBOR demise, as appropriate, for these contracts. HSBC expects to be able to remediate and/or mitigate these risks by the relevant calculation dates, which may occur post cessation of the relevant IBOR. All other contracts referencing benchmarks that are no longer published, where the group has contractual responsibility, have been transitioned in line with client and investor discussions.

We also have exposures referencing regional rates that are scheduled to demise at future dates. We are approaching transition of such exposures in a manner that is tailored to the risks and counterparty types involved.

While we continue to track the transition of remaining contracts to alternative interest rate benchmarks our regulatory compliance, conduct and legal risks have materially diminished. We will remain vigilant until all contracts are fully transitioned.

Key developments in 2023

We actively managed the risks related to macroeconomic and geopolitical uncertainties, as well as other key risks described in this section.

In addition, we sought to enhance our risk management in the following areas:

- We implemented two revised risk appetite frameworks to better manage and strengthen our controls with respect to concentration risks. These relate to concentration risks arising from exposures to countries and to single customer groups.
- We enhanced our processes, framework and reporting capabilities to improve the control and oversight of our material third parties, and to help maintain our operational resilience and meet new and evolving regulatory requirements.
- We continued to make progress with our comprehensive regulatory reporting programme to strengthen our global processes, improve consistency, and enhance controls across regulatory reports.
- Through our climate risk programme, we continued to embed climate considerations throughout the organisation, including through risk policy updates and the completion of our annual climate risk materiality assessment. We also developed risk metrics to monitor and manage exposures, and further enhanced our internal climate scenario analysis.
- We deployed industry-leading technology and advanced analytics capabilities into new markets to improve our ability to identify suspicious activities and prevent financial crime.
- We continued to develop and enhance our electronic communication policies and standards, to help ensured we acted on our most substantive issues.
- We are embedding our suite of regulatory management systems following the Group-wide roll-out of regulatory horizon scanning capabilities and enhanced regulation mapping tooling.
- We continued to increase the stabilisation of our net interest income ('NII') as interest rate expectations fluctuated, driven by central bank rate increases and a reassessment of the trajectory of inflation in major economies.

Top and emerging risks

(Unaudited)

We use a top and emerging risks process to provide a forward-looking view of issues with the potential to threaten the execution of our strategy or operations over the medium to long term.

We proactively assess the internal and external risk environment, as well as review the themes identified across our region and global businesses, for any risks that may require global escalation. We update our top and emerging risks as necessary.

Our current top and emerging risks are as follows:

Externally driven

Geopolitical and macroeconomic risks

The US-China relationship remains complex. To date, the US, the UK, the EU and other countries have imposed various sanctions and trade restrictions on Chinese persons and companies and the countries' respective approaches to strategic competition with China continue to develop. Although sanctions and trade restrictions are difficult to predict, increases in diplomatic tensions between China and the US and other countries could result in further sanctions and trade restrictions that could negatively impact the group, its customers and the markets in which the group operates. For example, there is a risk of additional sanctions and trade restrictions being imposed by the US and other governments in relation to human rights, technology, and other issues which could create a more complex operating environment for the group and its customers.

China has in turn announced a number of its own sanctions and trade restrictions that target, or provide authority to target, foreign individuals and companies. These, as well as law enforcement measures, have been imposed against certain Western consulting and data intelligence firms, defense companies, and public officials associated with the implementation of foreign sanctions against China.

The Russia-Ukraine war continues to have far-reaching geopolitical and economic implications beyond those two countries borders. There is also uncertainty about the scope, duration and potential escalation of the Israel-Hamas war. The group is monitoring the impacts of these wars. Additionally, recent attacks on shipping in the Red Sea and resulting counter-measures have disrupted supply chains.

The group continues to respond to evolving economic sanctions and trade restrictions, in particular significant sanctions and trade restrictions imposed against Russia by the UK, the US and the EU, as well as other countries. Such sanctions and restrictions have targeted certain Russian government officials, politically exposed persons, business people, Russian oil imports, energy products, financial institutions, and other major Russian companies and sanctions evasion networks. More generally applicable investment, export, and import bans and restrictions have also been implemented. In addition, US authorities have been granted significant and broad discretion to impose secondary sanctions on non-US banks engaged in certain transactions or services involving Russia's military-industrial base. In response to such sanctions and trade restrictions, as well as asset flight, Russia has implemented certain countermeasures including the expropriation of foreign assets.

Further sanctions, counter-sanctions, and trade restrictions across the markets in which the group operates may adversely affect the group, its customers and the markets by creating regulatory, reputational and market risks.

A fall in global energy prices from the highs of 2022 facilitated a sustained disinflation process across most key economies over the course of 2023. Global commodity markets were impacted by heightened geopolitical risks – including the Russia-Ukraine war and Israel-Hamas war – which fuelled concerns about supply disruptions, although weaker economic activity in China and Europe dampened demand growth. As of January 2024, geopolitical turmoil in the Middle East has not led to a sustained increase in energy prices. The Israel-Hamas war has not disrupted energy supply, while producers not from the Organisation of the Petroleum Exporting Countries ('OPEC'), including the US, increase output through the fourth quarter of 2023.

Mainland China commercial real estate conditions remain distressed as offshore financing conditions and buyer demand remain subdued. Signs of a material or sustained recovery are yet to emerge, with market data still reflecting reduced investment and weak homebuyer sales and sentiment. The Chinese government is expected to continue to expand fiscal and monetary support to the economy to boost growth and lending in 2024, including specific measures to support developers and stimulate housing demand but the risk of a slow and protracted recovery remains significant. The business and financial performance of corporates operating in this sector has been weak, and refinancing risks are likely to continue in 2024. State owned enterprises continue to outperform privately owned enterprises in general with above market average sales performance, market share gains and greater access to funding. The challenges in this sector could create further pressure on our customers. We continue to closely monitor and take actions to proactively risk manage our portfolio.

The reduction in global inflation rates prompted developed market central banks to pause monetary policy tightening, from the third quarter of 2023. A decrease in inflation trend is now visible across most major economies and interest rates are forecast to fall through 2024, although they are expected to remain materially higher than in recent years. 2024 will mark the biggest election year in history with more than half the world's population across more than 76 countries going to the polls. This has the potential to present policy continuity in some markets and significant political change in others.

Budget deficits are set to remain large for many economies as governments try to meet a range of spending demands. Alongside this, higher bond yields will increase interest payment burdens for many counterparties. We continue to monitor our risk profile closely in the context of uncertainty over global macroeconomic policies.

Higher inflation and interest rates, alongside lower growth have had an impact on expected credit losses and other credit impairment charges ('ECL'). The pressure on real disposable income of households and business costs may have impacted the ability of our customers to repay debt.

Our Central scenario, which has the highest probability weighting in our HKFRS 9 'Financial Instruments' calculations of ECL, assumes that GDP growth will fall below trend through 2024. Inflation is forecast to remain above central bank targets, but continues to fall. Interest rates also decline but remain materially higher than in recent years. Forecasts remain uncertain, however, and changing economic conditions and the materialisation of key risks could reduce the accuracy of the Central scenario forecast. In particular, forecasts in recent years have been sensitive to commodity price changes, changing supply chain conditions, monetary policy adjustments and inflation expectations. There is also uncertainty with respect to the relationship between the economic drivers and the historical loss experience, which has required adjustments to modelled ECL in cases where we determined that the model was unable to capture the material underlying risks.

Despite these risks, forecast stability and reduced forecast dispersion in our main markets, ensured that the Central scenario for impairment was assigned the same likelihood of occurrence across our key markets.

For further details of our Central and other scenarios, see 'Measurement uncertainty and sensitivity analysis of ECL estimates' on page 42.

Global tensions over trade, technology and ideology are manifesting themselves in divergent regulatory standards and compliance regimes, presenting long-term strategic challenges for multinational businesses.

As the geopolitical landscape evolves, compliance by multinational corporations with their legal or regulatory obligations in one jurisdiction may be seen as supporting the law or policy objectives of that jurisdiction over another, creating additional compliance, reputational and political risks for the group. We maintain dialogue with our regulators in various jurisdictions on the impact of legal and regulatory obligations on our business and customers.

While it is the group's policy to comply with all applicable laws and regulations of all jurisdictions in which it operates, geopolitical tensions, and potential ambiguities in the group's compliance obligations will continue to present challenges and risks for the group and could have a material adverse impact on the group's business, financial condition, results of operations, prospects, strategy and reputation, as well as on the group's customers.

Expanding data privacy, national security and cybersecurity laws in a number of markets could pose potential challenges to intra-group data sharing. These developments could increase financial institutions' compliance obligations in respect of cross-border transfers of personal information, which may affect our ability to manage financial crime risk across markets.

Mitigating actions

- We closely monitor geopolitical and economic developments in key markets and sectors, and undertake scenario analysis where appropriate. This helps us to take actions to manage our portfolios where necessary, including through enhanced monitoring, amending our risk appetite and/or reducing limits and exposures.
- We stress test portfolios of particular concern to identify sensitivity to loss under a range of scenarios, with management actions being taken to rebalance exposures and manage risk appetite where necessary.
- We regularly review key portfolios to help ensure that individual customer or portfolio risks are understood and that our ability to manage the level of facilities offered through any downturn is appropriate.
- We continue to manage sanctions and trade restrictions through the use of, testing and auditing of, and enhancements to, our existing controls.
- We have taken steps, where necessary, to enhance physical security in geographical areas deemed to be at high risk from terrorism and military conflicts.
- We continue to closely monitor, and take actions to proactively mange our commercial real estate portfolios against risk.

Technology and cyber security risk

Together with other organisations, we operate in an extensive and complex technology landscape, which needs to remain resilient in order to support customers, our organisation and financial markets globally. Risks arise where, for example, technology is not understood, maintained, or developed appropriately. We also continue to operate in an increasingly hostile cyber threat environment globally. These threats include potential unauthorised access to customer accounts and attacks on our and our suppliers' systems. These threats require ongoing investment in business and technical controls to defend against.

Mitigating actions

- We continue to invest in transforming how software solutions are developed, delivered and maintained to improve system resilience, minimising the impact to customers, as well as continuing to build security into our software development lifecycle and improve our testing processes and tools.
- We continue to upgrade many of our IT systems, simplify our service provision and replace older IT infrastructure and applications.
- Our cyber intelligence and threat analysis team continually evaluate threat levels for the most prevalent cyber-attack types and their potential outcomes. We continue to strengthen our controls to help reduce the likelihood and impact of advanced malware, data leakage, exposure through third parties and security vulnerabilities.
- We continue to enhance our cybersecurity capabilities, including Cloud security, identity and access management, metrics and data analytics, and supplier security reviews.
- We regularly report and review cyber risk and control effectiveness at executive level across global businesses, functions and markets, and at non-executive Board level to help ensure there is appropriate visibility and governance of the risk and its mitigating actions.
- We continue to invest in mitigating the potential threats of emerging technologies, such as the use of Artificial Intelligence ('AI').
- The Group participates globally in industry bodies and working groups to collaborate on tactics employed by cyber-crime groups and to work together to seek to prevent, detect and defend against cyber-attacks on financial organisations globally.

- We, like other financial institutions, experience numerous attempts to compromise our cybersecurity. We respond to these in accordance with our cybersecurity framework which adheres to applicable laws, rules and regulations. To date, none of these attacks have had a material impact.

Financial crime risk

Financial institutions remain under considerable regulatory scrutiny regarding their ability to detect and prevent financial crime. These risks were in 2023 exacerbated by rising geopolitical tensions and ongoing macroeconomic factors. These challenges include managing conflicting laws and approaches to legal and regulatory regimes, and implementing increasingly complex and less predictable sanctions and trade restrictions.

Amid high levels of inflation and increasing cost of living pressures, we face increasing regulatory expectations with respect to managing internal and external fraud and protecting vulnerable customers. In addition, the accessibility and increasing sophistication of generative AI brings financial crime risks. While there is potential for the technology to support financial crime detection, there is also material risk that criminals use generative AI to perpetrate fraud, particularly scams.

The digitisation of financial services continues to have an impact on the payments ecosystem, with an increasing number of new market entrants and payment mechanisms, not all of which are subject to the same level of regulatory scrutiny or regulations as banks. Developments around digital assets and currencies have continued at pace, with an increasing regulatory and enforcement focus on the financial crimes linked to these types of assets.

Expectations continue to increase with respect to the intersection of environmental, social and governance ('ESG') issues and financial crime, as our organisation, customers and suppliers transition to net zero. These are particularly focused on potential ‘greenwashing’, human rights issues and environmental crimes. In addition, climate change itself could heighten risks linked to vulnerable migrant populations in countries where financial crime is already more prevalent.

We also continue to face increasing challenges presented by national data privacy requirements, which may affect our ability to manage financial crime risks across markets.

Mitigating actions

- We continue to manage sanctions and trade restrictions through the use of, and enhancements to, our existing controls.
- We continue to develop our fraud controls, and invest in capabilities to fight financial crime through the application of advanced analytics and AI, while monitoring technological developments and engaging third parties.
- We are looking at the impact of a rapidly changing payments ecosystem, as well as risks associated with direct and indirect exposure to digital assets and currencies, in an effort to maintain appropriate financial crime controls.
- We regularly review our existing policies and control framework so that developments relating to ESG are considered and the risks mitigated to the extent possible.
- We engage with regulators, policymakers and relevant international bodies, seeking to address data privacy challenges through international standards, guidance, and legislation.

Environmental, social and governance risk

We are subject to financial and non-financial risks associated with ESG-related matters. Our current areas of focus include climate risks, nature-related risks and human rights risks. These can impact us both directly and indirectly through our business activities and relationships. For details of how climate risk is governed, see page 10.

Our assessment of climate risks covers three distinct time periods, comprising: short term, which in this context is up to 2025; medium term, which is between 2026 and 2035; and long term, which is between 2036 and 2050.

We may face credit losses if our customers business models fail to align to a net zero economy or if our customers face disruption to their operations or deterioration to their assets as a result of extreme weather.

We may face trading losses if we fail to accurately reflect the risks associated with climate risk within our trading book assets.

We may face impacts from physical risk on our own operations, owing to the increase in frequency and severity of weather events and chronic shifts in weather patterns, which could affect our ability to conduct our day-to-day operations.

We may face increased reputational, legal and regulatory risk if we fail to make sufficient progress towards the Group's net zero ambition, if we fail to meet evolving regulatory expectations and requirements on climate risk management, or if we knowingly or unknowingly make inaccurate, unclear, misleading, or unsubstantiated claims regarding sustainability to stakeholders.

We may face financial reporting risk in relation to our climate disclosures, as any data, methodologies and standards we have used may evolve over time in line with market practice, regulation or developments in climate science. We may also face the risk of making reporting errors due to data, system, process and control challenges. Any changes could result in revisions to our internal frameworks and reported data and could mean that reported figures are not reconcilable or comparable year on year. We may also have to re-evaluate our progress towards our climate-related targets in future and this could result in reputational, legal and regulatory risks.

We may face model risk, as the uncertain impacts of climate change and data and methodology limitations present challenges to creating reliable and accurate model outputs.

We may face climate related litigation risks, either directly if stakeholders feel we are not adequately managing climate risks or indirectly if our clients and customers are themselves the subject of litigation, potentially resulting in the revaluation of client assets.

We may also be exposed to nature-related risks beyond climate change. These risks arise when the provision of natural capital - such as water availability, air quality, and soil quality - is compromised by human activity/actions. Nature risk can manifest through macroeconomic, market, credit, reputational, legal and regulatory risks, for both the group and our customers.

Regulation and disclosure requirements in relation to human rights, and to modern slavery in particular, are increasing. Businesses are expected to be transparent about their efforts to identify and respond to the risk of negative human rights impacts arising from their business activities and relationships.

Mitigating actions

- A dedicated Environmental Risk Oversight Forum is responsible for overseeing risk activities relating to environmental risk management, including the transition and physical risks from climate change. For further details of the group’s climate governance is structured, see page 10.
- The group climate risk programme continues to support the development of our climate risk management capabilities across four key pillars: governance and risk appetite, risk management, stress testing and scenario analysis, and disclosures. We continue to enhance our approach and mitigation to the risk of greenwashing.
- In January 2024, the Group updated our energy policy covering the broader energy system including upstream oil and gas, oil and gas power generation, coal, hydrogen, renewables and hydropower, nuclear, biomass and energy from waste. We also updated our thermal coal phase-out policy, in which we committed to not provide new finance or advisory services for the specific purposes of new metallurgical coal mines.
- In 2023, we provided practical guidance and training, where relevant, to our colleagues across the group on human rights, covering fundamental human rights concepts and international standards, our public commitments and foundational principles for responding to human rights risks.

- The scope of financial reporting risk was expanded to explicitly include oversight over accuracy and completeness of ESG and climate reporting. In 2023, we updated the risk appetite statement to reference our ESG and climate-related disclosures. We also updated our risk taxonomy and control library to incorporate requirements for addressing the risk of misstatement in ESG and climate reporting. To support this, the Group has developed a framework to guide control implementation over ESG and climate reporting disclosures, which includes areas such as process and data governance, and risk assessment.
- We continue to engage with our customers, investors and regulators proactively on the management of ESG risks. The Group also engages with initiatives, including the Climate Financial Risk Forum, Equator Principles, Taskforce on Climate-related Financial Disclosures and CDP (formerly the Carbon Disclosure Project) to help drive best practice for climate risk management.

For further details on our approach to climate risk management, see 'Climate Risk' on page 66.

For further details on ESG risk management, see 'Financial crime risk environment' on page 30.

Our TCFD disclosures can be found on page 10.

Digitalisation and technological advances risk

Developments in technology and changes to regulations are enabling new entrants to the industry, particularly with respect to payments. This challenges the group to continue innovating to address evolving customer requirements, drive efficiency and adapt our products to attract and retain customers. As a result, we may need to increase our investment in our business to adapt or develop products and services to respond to our customers' evolving needs. We also need to ensure that new digital capabilities do not weaken our resilience or wider risk management capabilities.

New technologies such as generative AI, large language models, blockchain and quantum computing offer both business opportunities and potential risks for HSBC. As with all use of technologies, we aim to maximise their potential while seeking to ensure a robust control environment is in place to help manage the inherent risks, such as the impact on encryption algorithms.

Mitigating actions

- We continue to monitor this emerging risk and advances in technology, as well as changes in customer behaviours to understand how these may impact our business.
- We assess new technologies to help develop appropriate controls and maintain resilience.
- We closely monitor and assess financial crime risk and the impact on payment transparency and architecture.

Internally driven

Risks associated with workforce capability, capacity and environmental factors with potential impact on growth

Our global businesses and functions in all of our markets are exposed to risks associated with workforce capacity challenges, including challenges to retain, develop and attract high-performing employees in key labour markets, and compliance with employment laws and regulations. Failure to manage these risks may impact our delivery of our strategic objectives or lead to regulatory sanctions or legal claims.

Mitigating actions

- We seek to promote a diverse and inclusive workforce and provide health and well-being support. We continue to build our speak-up culture through active campaigns.
- We monitor hiring activities and levels of employee attrition, with each business and function putting in place plans to help ensure they have effective workforce forecasting to meet business demands.
- We monitor people risks that could arise due to organisational restructuring, helping to ensure we manage redundancies sensitively and support impacted employees. We encourage our people leaders to focus on talent retention at all levels, with an empathetic mindset and approach, while ensuring the whole proposition of working at HSBC is well understood.
- Our Future Skills curriculum helps provide skills that will help to enable employees and the group to be successful in the future.
- We develop succession plans for key management roles, with oversight from the group Executive Committee.

Risks arising from the receipt of services from third parties

(Unaudited)

We use third parties to provide a range of goods and services. It is critical that we ensure we have appropriate risk management policies, processes and practices over the selection, governance and oversight of third parties and their supply chain, particularly for key activities that could affect our operational resilience. Any deficiency in the management of risks associated with our third parties could affect our ability to support our customers and meet regulatory expectations.

Mitigating actions

- We continue to monitor the effectiveness of the controls operated by our third-party providers and request third-party control reports, where required.
- We continue to enhance the effective management of our intra-Group arrangements using the same control standards as we have for external third-party arrangements.
- We have strengthened the way third party risk is overseen and managed across all non-financial risks and have enhanced our processes, framework and reporting capabilities to improve the visibility of risk and enable more robust management of our material third parties by our global businesses, functions and markets.
- We are implementing the changes required by new regulations as set by our regulators.

Model risk

Model risk arises whenever business decision making includes reliance on models. We use models in both financial and non-financial contexts, as well as in a range of business applications such as customer selection, product pricing, financial crime transaction monitoring, creditworthiness evaluation and financial reporting. Assessing model performance is a continuous undertaking. Models can need redevelopment as market conditions change. Significant increases in global inflation and interest rates have impacted the reliability and accuracy of both credit and market risk models.

We continued to prioritise the redevelopment of internal ratings-based ('IRB') and internal model methods ('IMM') models, in relation to counterparty credit, as part of the IRB repair and Basel III programmes with a key focus on enhancing the quality of data used as model inputs. Some models have been approved and a number are pending approval decisions from the UK's Prudential Regulation Authority ('PRA'), the Hong Kong Monetary Authority ('HKMA') and other key regulators for feedback. Some IMM and internal model approach ('IMA') models have been approved for use, and feedback has been received for some IRB models. Climate risk modelling is a key focus for the group as HSBC's commitment to ESG has become a key part of the group's strategy. Focus is also on AI and machine learning where the pace of technological advances is driving significant changes n modelling techniques.

Model risk remains a key area of focus, with local regulatory exams taking place in many jurisdictions, new model risk guidance from the PRA (SS1/23) due to come into force in 2024, and further developments in policy expected from other regulators, including the HKMA.

Mitigating actions

- We have continued to embed the enhanced monitoring, review and challenge of expected credit loss model performance through our Model Risk Management sub-function as part of a broader quarterly process to determine loss levels. The Model Risk Management team aims to provide effective review and challenge of any future redevelopment of these models.
- Model Risk Governance forums at the group, business and functional levels continue to provide oversight of model risk.
- A full review of the firm's model landscape is being undertaken across the firm to ensure models are being deployed in line with global business strategy.
- Model Risk Management works closely with businesses to ensure that IRB/IMM/IMA models in development meet risk management, pricing and capital management needs. Global Internal Audit provides assurance over the risk management framework for models.
- Additional assurance work is performed by the model risk governance teams, which act as second lines of defence. The teams test whether controls implemented by model users comply with model risk policy and if model risk standards are adequate.
- Models using AI or generative AI techniques are validated and monitored to help ensure that risks that are determined by the algorithms have adequate oversight and review. A framework to manage the range of risks that are generated by these advanced techniques, and to recognise the multi-disciplinary nature of these risks, is being developed.

Data risk

We use multiple systems and growing quantities of data to support our customers. Risk arises if data is incorrect, unavailable, misused, or unprotected. Along with other banks and financial institutions, we need to meet external regulatory obligations and laws that cover data, such as the Basel Committee on Banking Supervision's 239 guidelines 'Principles for effective risk data aggregation and risk reporting' and the General Data Protection Regulation ('GDPR').

Mitigating actions

- Through our global data management framework, we monitor the quality, availability and security of data that supports our customers and internal processes. We work towards resolving any identified data issues in a timely manner.
- We continue to make improvements to our data policies and to our control framework - which includes trusted sources, data flows, and data quality - in order to enhance the end-to-end management of data risk.
- The Group has established a global data management utility, and continue to simplify and unify data management activities across the Group.
- We seek to protect customer data through our data privacy framework, which establishes practices, design principles and guidelines that enable us to demonstrate compliance with data privacy laws and regulations.
- We continue to modernise our data and analytics infrastructure through investments in Cloud technology, data visualisation, machine learning and AI.
- We continue to educate our employees on data risk and data management. We have delivered regular global mandatory training on how to protect and manage data appropriately.

Change execution risk

The needs of our customers are evolving faster than ever, particularly with regard to technological advancements and the global transition to a low-carbon economy. The resulting scale, complexity and pace of strategic and regulatory change has elevated the level of risk for executing such changes safely and efficiently.

Mitigating actions

- Change execution risk is part of our risk taxonomy and control library, so that it is defined, assessed, managed, reported and overseen in the same way as our other material risks.
- The Group Change Framework provides colleagues across all levels of the Group who deliver on strategic and organisational initiatives with a common and consistent understanding of their role in achieving value and outcomes.
- The Group Change Prioritisation and Oversight Committee oversees the prioritisation, strategic alignment and management of execution risk for all strategic change portfolios and initiatives.

Our material banking risks

(Unaudited)

The material risk types associated with our banking and insurance manufacturing operations are described in the following tables:

Description of risks – banking operations

Risks	Arising from	Measurement, monitoring and management of risk
Credit risk		
Credit risk is the risk of financial loss if a customer or counterparty fails to meet an obligation under a contract.	Credit risk arises principally from direct lending, trade finance and leasing business, but also from other products such as guarantees and derivatives.	Credit risk is: – measured as the amount that could be lost if a customer or counterparty fails to make repayments; – monitored using various internal risk management measures and within limits approved by individuals within a framework of delegated authorities; and – managed through a robust risk control framework, which outlines clear and consistent policies, principles and guidance for risk managers, and by setting limits and appetite across geographical markets, portfolios or sectors.
Treasury risk		
Treasury risk is the risk of having insufficient capital, liquidity or funding resources to meet financial obligations and satisfy regulatory requirements, including the risk of adverse impact on earnings or capital due to structural and transactional foreign exchange exposures and changes in market interest rates, together with pension and insurance risk.	Treasury risk arises from changes to the respective resources and risk profiles driven by customer behaviour, management decisions, or the external environment.	Treasury risk is: – measured through risk appetite and more granular limits, set to provide an early warning of increasing risk, minimum ratios of relevant regulatory metrics, and metrics to monitor the key risk drivers impacting treasury resources; – monitored and projected against appetites and by using operating plans based on strategic objectives together with stress and scenario testing; and – managed through control of resources in conjunction with risk profiles, strategic objectives and cash flows.
Market risk		
Market risk is the risk of an adverse financial impact on trading activities arising from changes in market parameters such as interest rates, foreign exchange rates, asset prices, volatilities, correlations and credit spreads.	Market risk arises from both trading portfolios and non-trading portfolios. Market risk for non-trading portfolios is discussed in the Treasury risk section on page 58. Market risk exposures arising from our insurance operations are discussed on page 73.	Market risk is: – measured using sensitivities, value at risk ('VaR') and stress testing, giving a detailed picture of potential gains and losses for a range of market movements and scenarios, as well as tail risks over specified time horizons; – monitored using VaR, stress testing and other measures; and – managed using risk limits approved by the Board for the group and the various global businesses.
Climate risk		
Climate risk relates to the financial and non-financial impacts that may arise as a result of climate change and the move to a net zero economy.	Climate risk is likely to materialise through: – physical risk, which arises from the increased frequency and severity of weather events; – transition risk, which arises from the process of moving to a low-carbon economy; – net zero alignment risk, which arises from failing to meet the Group's net zero commitments or to meet external expectations related to net zero because of inadequate ambition and/or plans, poor execution, or inability to adapt to changes in the external environment; and – the risk of greenwashing, which arises from the act of knowingly or unknowingly making inaccurate, unclear, misleading or unsubstantiated claims regarding sustainability to stakeholders.	Climate risk is: – measured using risk metrics and stress testing; – monitored against risk appetite statements; and – managed through adherence to risk appetite thresholds, through specific policies, and through enhancements to processes and development of tools and the development of portfolio steering capabilities to contribute to the Group's net zero targets.

Description of risks – banking operations (continued)

Risks	Arising from	Measurement, monitoring and management of risk
Resilience risk		
Resilience risk is the risk of sustained and significant business disruption from execution, delivery or physical security or safety events, causing the inability to provide critical services to our customers, affiliates and counterparties.	Resilience risk arises from failures or inadequacies in processes, people, systems or external events.	Resilience risk is: – measured through a range of metrics with defined maximum acceptable impact tolerances, and against our agreed risk appetite; – monitored through oversight of enterprise processes, risks, controls and strategic change programmes; and – managed by continual monitoring and thematic reviews.
Regulatory compliance risk		
Regulatory compliance risk is the risk associated with breaching our duty to clients and other counterparties, inappropriate market conduct (including unauthorised trading) and breaching related financial services regulatory standards.	Regulatory compliance risk arises from the failure to observe the relevant laws, codes, rules and regulations and can manifest itself in poor market or customer outcomes and lead to fines, penalties and reputational damage to our business.	Regulatory compliance risk is: – measured by reference to risk appetite, identified metrics, incident assessments, regulatory feedback and the judgement and assessment of our regulatory compliance teams; – monitored against the first line of defence risk and control assessments, the results of the monitoring and control assurance activities of the second line of defence functions, and the results of internal and external audits and regulatory inspections; and – managed by establishing and communicating appropriate policies and procedures, training employees in them, and monitoring activity to help ensure their observance. Proactive risk control and/or remediation work is undertaken where required.
Financial crime risk		
Financial crime risk is the risk that HSBC's products and services will be exploited for criminal activity. This includes fraud, bribery and corruption, tax evasion, sanctions and export control violations, money laundering, terrorist financing and proliferation financing.	Financial crime risk arises from day-to-day banking operations involving customers, third parties and employees.	Financial crime risk is: – measured by reference to risk appetite, identified metrics, incident assessments, regulatory feedback and the judgement and assessment of our financial crime risk teams; – monitored against the first line of defence risk and control assessments, the results of the monitoring and control assurance activities of the second line of defence functions, and the results of internal and external audits and regulatory inspections; and – managed by establishing and communicating appropriate policies and procedures, training employees in them and monitoring activity to help ensure their observance. Proactive risk control and/or remediation work is undertaken where required.
Model risk		
Model risk is the potential for adverse consequences from model errors or the inappropriate use of modelled outputs to inform business decisions.	Model risk arises in both financial and non-financial contexts whenever business decision making includes reliance on models.	Model risk is: – measured by reference to model performance tracking and the output of detailed technical reviews, with key metrics including model review statuses and findings; – monitored against model risk appetite statements, insight from the independent validations completed by the model risk management team, feedback from internal and external audits, and regulatory reviews; and – managed by creating and communicating appropriate policies, procedures and guidance, training colleagues in their application, and supervising their adoption to ensure operational effectiveness.

Our insurance manufacturing subsidiaries have additional regulations than those of our banking operations. Risks in the insurance entities are managed using methodologies and processes that are subject to oversight at group level. Our insurance operations are also subject to many of the same risks as our banking operations, and these are covered by the group's risk management processes. However, there are specific risks inherent to the insurance operations as noted below.

Description of risks – insurance manufacturing operations

Risks	Arising from	Measurement, monitoring and management of risk
Financial risk		
For insurance entities, financial risk includes the risk of not being able to match liabilities arising under insurance contracts with appropriate investments and that the expected sharing of financial performance with policyholders under certain contracts is not possible.	Exposure to financial risk arises from: – market risk affecting the fair values of financial assets or their future cash flows; – credit risk; and – liquidity risk of entities being unable to make payments to policyholders as they fall due.	Financial risk is: – measured (i) for credit risk, in terms of economic capital and the amount that could be lost if a counterparty fails to make repayments; (ii) for market risk, in terms of economic capital, internal metrics and fluctuations in key financial variables; and (iii) for liquidity risk, in terms of internal metrics including stressed operational cash flow projections; – monitored through a framework of approved limits and delegated authorities; and – managed through a robust risk control framework, which outlines clear and consistent policies, principles and guidance. This includes using product design, asset liability matching and bonus rates.
Insurance risk		
Insurance risk is the risk that, over time, the cost of insurance policies written, including claims and benefits, may exceed the total amount of premiums and investment income received.	The cost of claims and benefits can be influenced by many factors, including mortality and morbidity experience, as well as lapse and surrender rates.	Insurance risk is: – measured in terms of life insurance liabilities and economic capital allocated to insurance underwriting risk; – monitored through a framework of approved limits and delegated authorities; and – managed through a robust risk control framework which outlines clear and consistent policies, principles and guidance. This includes using product design, underwriting, reinsurance and claims-handling procedures.

Credit risk

Overview

(Audited)

Credit risk is the risk of financial loss if a customer or counterparty fails to meet an obligation under a contract. Credit risk arises principally from direct lending, trade finance and leasing business, but also from other products, such as guarantees and credit derivatives.

Credit risk management

Key developments in 2023

(Unaudited)

There were no material changes to the policies and practices for the management of credit risk in 2023. We continued to apply the requirements of HKFRS 9 'Financial Instruments' within the Credit Risk sub-function. For our wholesale portfolios, we introduced new policies for the management of country risk and subordinated debt assessments. Implementation of these polices did not have a material impact on our wholesale portfolios.

We actively managed the risks related to macroeconomic uncertainties, including interest rates, inflation, fiscal and monetary policy, broader geopolitical uncertainties and conflicts.

Governance and structure

(Unaudited)

We have established credit risk management and related HKFRS 9 processes. We continue to assess the impact of economic developments in key markets on specific customers, customer segments or portfolios. As credit conditions change, we take mitigating actions, including the revision of risk appetites or limits and tenors, as appropriate. In addition, we continue to evaluate the terms under which we provide credit facilities within the context of individual customer requirements, the quality of the relationship, local regulatory requirements, market practices and our local market position.

Credit risk sub-function

(Audited)

Credit approval authorities are delegated by the Board to the group Co-Chief Executives together with the authority to sub-delegate them. The Credit Risk sub-function in Global Risk and Compliance is responsible for the key policies and processes for managing credit risk, which include formulating group credit policies and risk rating frameworks, guiding the group's appetite for credit risk exposures, undertaking independent reviews and objective assessment of credit risk, and monitoring performance and management of portfolios.

The principal objectives of our credit risk management are:

- to maintain a strong culture of responsible lending, and robust risk policies and control frameworks;
- to both partner and challenge our businesses in defining, implementing and continually re-evaluating our risk appetite under actual and scenario conditions; and
- to ensure there is independent, expert scrutiny of credit risks, their costs and their mitigation.

Key risk management processes

HKFRS 9 'Financial Instruments' process

(Unaudited)

The HKFRS 9 process comprises three main areas: modelling and data; implementation; and governance.

Modelling and data

(Unaudited)

We have established HKFRS 9 modelling and data processes in various geographies, which are subject to internal model risk governance including independent review of significant model developments.

We have a centralised process at the Group for generating unbiased and independent global economic scenarios. Scenarios are subject to a process of review and challenge by a dedicated team at Group, as well as regional groupings. Each quarter, the scenarios and probability weights are reviewed and checked for consistency with the economic conjuncture and current economic and financial risks. These are subject to final review and approval by senior management in a Forward Economic Guidance Global Business Impairment Committee.

Implementation

(Unaudited)

A centralised impairment engine performs the expected credit losses calculation using data, which is subject to a number of validation checks and enhancements, from a variety of client, finance and risk systems. Where possible, these checks and processes are performed in a globally consistent and centralised manner.

Governance

(Unaudited)

Management review forums are established in key sites and at group level in order to review and approve the impairment results. Management review forums have representatives from Credit Risk and Finance. The key site and group approvals at the group Impairment Committee are subsequently reported to the global business impairment committee for final approval of the Group's ECL for the period.

Required members of the group Impairment Committee are the group's Chief Risk Officer, Chief Credit Officer, Wealth and Personal Banking Chief Risk Officer, as well as the group's Chief Financial Officer and Financial Controller.

The group Risk Committee reviews and provides independent challenge on the risk management report that may include impairment results presented at each Risk Committee meeting, and other reports on impairment results that are presented to the Risk Committee from time to time, to assess the risk profile of the Bank and how the risks arising from the Bank's businesses are controlled, monitored and mitigated.

Concentration of exposure

(Audited)

Concentrations of credit risk arise when a number of counterparties or exposures have comparable economic characteristics, or such counterparties, are engaged in similar activities or operate in the same geographical areas or industry sectors so that their collective ability to meet contractual obligations is uniformly affected by changes in economic, political or other conditions. We use a number of controls and measures to minimise undue concentration of exposure in our portfolios across industries, countries and global businesses. These include portfolio and counterparty limits, approval and review controls, and stress testing.

Credit quality of financial instruments

(Audited)

Our risk rating system facilitates the internal ratings-based approach under the Basel framework adopted by the group to support the calculation of our minimum credit regulatory capital requirement. The five credit quality classifications encompass a range of granular internal credit rating grades assigned to wholesale and retail customers, and the external ratings attributed by external agencies to debt securities.

For debt securities and certain other financial instruments, external ratings have been aligned to the five quality classifications based upon the mapping of related customer risk rating ('CRR') to external credit rating.

Wholesale lending

(Unaudited)

A CRR 10-grade scale summarises a more granular underlying 23-grade scale of obligor probability of default ('PD'). All corporate customers are rated using the 10 or 23-grade scale, depending on the degree of sophistication of the Basel approach adopted for the exposure.

Each CRR band is associated with an external rating grade by reference to long-run default rates for that grade, represented by the average of issuer-weighted historical default rates. This mapping between internal and external ratings is indicative and may vary over time.

Retail lending

(Unaudited)

Retail lending credit quality is based on a 12-month point-in-time probability-weighted PD.

Credit quality classification

(Unaudited)

	Sovereign debt securities and bills	Other debt securities and bills	Wholesale lending and derivatives		Retail lending	
	External credit rating	External credit rating	Internal credit rating	12-month Basel probability of default %	Internal credit rating	12 month probability-weighted PD %
Quality classification[1, 2]						
Strong	BBB and above	A- and above	CRR 1 to CRR 2	0 – 0.169	Band 1 and 2	0.000 – 0.500
Good	BBB- to BB	BBB+ to BBB-	CRR 3	0.170 – 0.740	Band 3	0.501 – 1.500
Satisfactory	BB- to B and unrated	BB+ to B and unrated	CRR 4 to CRR 5	0.741 – 4.914	Band 4 and 5	1.501 – 20.000
Sub-standard	B- to C	B- to C	CRR 6 to CRR 8	4.915 – 99.999	Band 6	20.001 – 99.999
Credit impaired	Default	Default	CRR 9 to CRR 10	100	Band 7	100

1 *Customer risk rating ('CRR').*
2 *12-month Point-in-time ('PIT') Probability of Default ('PD').*

Quality classification definitions
'Strong' exposures demonstrate a strong capacity to meet financial commitments, with negligible or low probability of default and/or low levels of expected loss.
'Good' exposures require closer monitoring and demonstrate a good capacity to meet financial commitments, with low default risk.
'Satisfactory' exposures require closer monitoring and demonstrate an average-to-fair capacity to meet financial commitments, with moderate default risk.
'Sub-standard' exposures require varying degrees of special attention and default risk is of greater concern.
'Credit-impaired' exposures have been assessed as described in Note 1.2(i) on the consolidated financial statements.

Forborne loans and advances

(Audited)

Forbearance measures consist of concessions towards an obligor that is experiencing or is about to experience difficulties in meeting its financial commitments.

We continue to class loans as forborne when we modify the contractual payment terms due to having significant concerns about the borrowers' ability to meet contractual payments when they were due. Our definition of forborne captures non-payment-related concessions, such as covenant waivers.

For details of our policy on derecognised renegotiated loans, see Note 1.2(i) on the financial statements.

Credit quality of forborne loans

(Unaudited)

For wholesale lending, where payment-related forbearance measures result in a diminished financial obligation, or if there are other indicators of impairment, the loan will be classified as credit impaired if it is not already so classified. All facilities with a customer, including loans that have not been modified, are considered credit impaired following the identification of a payment-related forborne loan. For retail lending, where a material payment-related concession has been granted, the loan will be classified as credit impaired. In isolation, non-payment forbearance measures may not result in the loan being classified as credit impaired unless combined with other indicators of credit impairment. These are classed as performing forborne loans for both wholesale and retail lending.

Wholesale and retail lending forborne loans are classified as credit-impaired until there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows, observed over a minimum one-year period, and there are no other indicators of impairment. Any forborne loans not considered credit impaired will remain forborne for a minimum of two years from the date that credit impairment no longer applies. For wholesale and retail lending, any forbearance measures granted on a loan already classed as forborne results in the customer being classed as credit impaired.

Forborne loans and recognition of expected credit losses

(Audited)

Forborne loans expected credit loss assessments reflect the higher rates of losses typically experienced with these types of loans such that they are in stage 2 and stage 3. The higher rates are more pronounced in unsecured retail lending requiring further segmentation. For wholesale lending, forborne loans are typically assessed individually. Credit risk ratings are intrinsic to the impairment assessments. The individual impairment assessment takes into account the higher risk of the future non-payment inherent in forborne loans.

Impairment assessment

(Audited)

For details of our impairment policies on loans and advances and financial investments, see Note 1.2(i) on the financial statements.

Write-off of loans and advances

(Audited)

For details of our policy on the write-off of loans and advances, see Note 1.2(i) on the financial statements.

Under the HKFRS9 standard, write-off should occur when there is no reasonable expectation of recovering further cash flows from the financial asset.

This principle does not prohibit early write-off which is defined in local policies to ensure effectiveness in the management of customers in the collections process.

Unsecured personal facilities, including credit cards, are generally written off at between 150 and 210 days past due. The standard period runs until the end of the month in which the account becomes 180 days contractually delinquent. However, in exceptional circumstances to avoid unfair customer outcomes, deliver customer duty or meet regulatory expectations, the period may be extended further.

For secured facilities, write-off should occur upon repossession of collateral, receipt of proceeds via settlement, or determination that recovery of the collateral will not be pursued. Where these assets are maintained on the balance sheet beyond 60 months of consecutive delinquency-driven default, the prospect of recovery is re-assessed.

Recovery activity, on both secured and unsecured assets, may continue after write-off.

Any unsecured exposures which are not written off at 180 days past due, and any secured exposures which are in 'default' status for 60 months or greater but are not written off, are subject to additional monitoring via the appropriate governance forums.

Summary of credit risk

The following disclosure presents the gross carrying/nominal amount of financial instruments to which the impairment requirements in HKFRS 9 are applied and the associated allowance for ECL.

Summary of financial instruments to which the impairment requirements in HKFRS 9 are applied

(Audited)

	2023		2022[5]	
	Gross carrying/ nominal amount	**Allowance for ECL[1]**	Gross carrying/ nominal amount	Allowance for ECL[1]
At 31 Dec	**HK$m**	**HK$m**	HK$m	HK$m
Loans and advances to customers at amortised cost	**3,595,929**	**(38,853)**	3,734,987	(39,919)
Loans and advances to banks	**563,852**	**(51)**	515,890	(43)
Other financial assets measured at amortised cost	**2,309,109**	**(393)**	2,303,654	(262)
– cash and balances at central banks	**232,988**	**(1)**	232,748	(8)
– items in the course of collection from other banks	**22,049**	**—**	28,557	—
– Hong Kong Government certificates of indebtedness	**328,304**	**—**	341,354	—
– reverse repurchase agreements – non-trading	**831,186**	**—**	927,976	—
– financial investments	**618,995**	**(57)**	509,811	(46)
– prepayments, accrued income and other assets[2]	**275,587**	**(335)**	263,208	(208)
Amounts due from Group companies	**131,071**	**—**	129,341	—
Total gross carrying amount on-balance sheet	**6,599,961**	**(39,297)**	6,683,872	(40,224)
Loans and other credit related commitments	**1,978,328**	**(841)**	1,892,401	(864)
Financial guarantee	**46,325**	**(54)**	35,646	(63)
Total nominal amount off-balance sheet[3]	**2,024,653**	**(895)**	1,928,047	(927)
	8,624,614	**(40,192)**	8,611,919	(41,151)

	Fair value	**Allowance for ECL**	Fair value	Allowance for ECL
	HK$m	**HK$m**	HK$m	HK$m
At 31 Dec				
Debt instruments measured at Fair Value through Other Comprehensive Income ('FVOCI')[4]	**1,404,323**	**(93)**	1,232,817	(329)

1 *The total ECL is recognised in the loss allowance for the financial asset unless the total ECL exceeds the gross carrying amount of the financial asset, in which case the ECL is recognised as a provision.*
2 *Includes only those financial instruments that are subject to the impairment requirements of HKFRS 9. 'Prepayments, accrued income and other assets', as presented within the consolidated balance sheet on page 85, which includes both financial and non-financial assets.*
3 *Represents the maximum amount at risk should the contracts be fully drawn upon and client defaults.*
4 *Debt instruments measured at FVOCI continue to be measured at fair value with the allowance for ECL as a memorandum item. Change in ECL is recognised in 'Change in expected credit losses and other credit impairment charges' in the consolidated income statement.*
5 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

The following table provides an overview of the group's credit risk by stage and industry, and the associated ECL coverage. The financial assets recorded in each stage have the following characteristics:

- Stage 1: These financial assets are unimpaired and without significant increase in credit risk on which a 12-month allowance for ECL is recognised.
- Stage 2: A significant increase in credit risk has been experienced on these financial assets since initial recognition for which a lifetime ECL is recognised.
- Stage 3: There is objective evidence of impairment and the financial assets are therefore considered to be in default or otherwise credit impaired on which a lifetime ECL is recognised.
- POCI: Financial assets that are purchased or originated at a deep discount are seen to reflect the incurred credit losses on which a lifetime ECL is recognised.

Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage by industry sector

(Audited)

	Gross carrying/nominal amount[1]					Allowance for ECL					ECL coverage %				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	%	%	%	%	%
Loans and advances to customers	**3,180,483**	**352,477**	**62,679**	**290**	**3,595,929**	**(2,681)**	**(8,575)**	**(27,433)**	**(164)**	**(38,853)**	**0.1**	**2.4**	**43.8**	**56.6**	**1.1**
– personal	1,495,142	60,473	7,406	—	1,563,021	(1,285)	(3,142)	(1,265)	—	(5,692)	0.1	5.2	17.1	—	0.4
– corporate[2]	1,405,747	280,699	54,613	290	1,741,349	(1,187)	(5,396)	(25,839)	(164)	(32,586)	0.1	1.9	47.3	56.6	1.9
– financial institutions[3]	279,594	11,305	660	—	291,559	(209)	(37)	(329)	—	(575)	0.1	0.3	49.8	—	0.2
Loans and advances to banks	**563,647**	**205**	**—**	**—**	**563,852**	**(50)**	**(1)**	**—**	**—**	**(51)**	**0.0**	**0.5**	**—**	**—**	**0.0**
Other financial assets	**2,296,216**	**12,497**	**396**	**—**	**2,309,109**	**(277)**	**(11)**	**(105)**	**—**	**(393)**	**0.0**	**0.1**	**26.5**	**—**	**0.0**
Loans and other credit-related commitments	**1,929,040**	**47,175**	**2,113**	**—**	**1,978,328**	**(455)**	**(285)**	**(101)**	**—**	**(841)**	**0.0**	**0.6**	**4.8**	**—**	**0.0**
– personal	1,416,939	19,362	1,742	—	1,438,043	(25)	(1)	—	—	(26)	0.0	0.0	—	—	0.0
– corporate[2]	381,803	25,661	371	—	407,835	(399)	(273)	(101)	—	(773)	0.1	1.1	27.2	—	0.2
– financial institutions[3]	130,298	2,152	—	—	132,450	(31)	(11)	—	—	(42)	0.0	0.5	—	—	0.0
Financial guarantee	**42,828**	**3,244**	**253**	**—**	**46,325**	**(20)**	**(10)**	**(24)**	**—**	**(54)**	**0.0**	**0.3**	**9.5**	**—**	**0.1**
– personal	4,654	6	—	—	4,660	—	—	—	—	—	—	—	—	—	—
– corporate[2]	33,169	3,131	253	—	36,553	(19)	(10)	(24)	—	(53)	0.1	0.3	9.5	—	0.1
– financial institutions[3]	5,005	107	—	—	5,112	(1)	—	—	—	(1)	—	—	—	—	0.02
At 31 Dec 2023	**8,012,214**	**415,598**	**65,441**	**290**	**8,493,543**	**(3,483)**	**(8,882)**	**(27,663)**	**(164)**	**(40,192)**	**0.0**	**2.1**	**42.3**	**56.6**	**0.5**

The above table does not include balances due from Group companies.

1 *Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.*
2 *Includes corporate and commercial.*
3 *Includes non-bank financial institutions.*

Unless identified at an earlier stage, all financial assets are deemed to have suffered a significant increase in credit risk when they are 30 days past due ('DPD') and are transferred from stage 1 to stage 2. The following disclosure presents the ageing of stage 2 financial assets, analysed between less than 30 DPD and greater than 30 DPD, and therefore presents those amounts classified as stage 2 due to ageing (30 DPD) and those identified at an earlier stage (less than 30 DPD).

Stage 2 days past due analysis for loans and advances to customers

(Audited)

	Gross carrying amount				Allowance for ECL				ECL coverage %			
	Stage 2	*of which: Up-to-date*	*of which: 1 to 29 DPD[1,2]*	*of which: 30 and > DPD[1,2]*	Stage 2	*of which: Up-to-date*	*of which: 1 to 29 DPD[1,2]*	*of which: 30 and > DPD[1,2]*	Stage 2	*of which: Up-to-date*	*of which: 1 to 29 DPD*	*of which: 30 and > DPD*
	HK$m	*HK$m*	*HK$m*	*HK$m*	HK$m	*HK$m*	*HK$m*	*HK$m*	%	*%*	*%*	*%*
At 31 Dec 2023												
Loans and advances to customers at amortised cost	352,477	*341,171*	*7,436*	*3,870*	(8,575)	*(7,844)*	*(299)*	*(432)*	2.4	*2.3*	*4.0*	*11.2*
– personal	60,473	*50,725*	*6,289*	*3,459*	(3,142)	*(2,507)*	*(220)*	*(415)*	5.2	*4.9*	*3.5*	*12.0*
– corporate and commercial	280,699	*279,144*	*1,146*	*409*	(5,396)	*(5,300)*	*(79)*	*(17)*	1.9	*1.9*	*6.9*	*4.2*
– non-bank financial institutions	11,305	*11,302*	*1*	*2*	(37)	*(37)*	*—*	*—*	0.3	*0.3*	*—*	*—*

1 *Days past due ('DPD').*
2 *The DPD amounts presented above are on a contractual basis and include the benefit of any customer relief payment holidays granted.*

Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage by industry sector (continued)[4]

(Audited)

	Gross carrying/nominal amount[1]					Allowance for ECL					ECL coverage %				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	%	%	%	%	%
Loans and advances to customers	3,209,940	461,665	62,760	622	3,734,987	(2,727)	(11,186)	(25,815)	(191)	(39,919)	0.1	2.4	41.1	30.5	1.1
– personal	1,447,851	67,809	8,705	—	1,524,365	(1,076)	(2,822)	(1,456)	—	(5,354)	0.1	4.2	16.7	—	0.4
– corporate[2]	1,484,030	369,973	53,141	620	1,907,764	(1,390)	(8,039)	(24,351)	(189)	(33,969)	0.1	2.2	45.8	30.5	1.8
– financial institutions[3]	278,059	23,883	914	2	302,858	(261)	(325)	(8)	(2)	(596)	0.1	1.4	0.9	100.0	0.2
Loans and advances to banks	514,442	1,448	—	—	515,890	(38)	(5)	—	—	(43)	0.0	0.3	—	—	0.0
Other financial assets	2,288,775	14,414	464	1	2,303,654	(163)	(40)	(59)	—	(262)	0.0	0.3	12.7	—	0.0
Loans and other credit-related commitments	1,821,355	65,288	5,758	—	1,892,401	(427)	(397)	(40)	—	(864)	0.0	0.6	0.7	—	0.0
– personal	1,321,908	22,721	4,940	—	1,349,569	(18)	(1)	—	—	(19)	0.0	0.0	—	—	0.0
– corporate[2]	383,717	39,191	818	—	423,726	(394)	(389)	(40)	—	(823)	0.1	1.0	4.8	—	0.2
– financial institutions[3]	115,730	3,376	—	—	119,106	(15)	(7)	—	—	(22)	0.0	0.2	—	—	0.0
Financial guarantee	30,738	4,840	68	—	35,646	(18)	(17)	(28)	—	(63)	0.1	0.4	41.2	—	0.2
– personal	4,176	6	1	—	4,183	—	—	—	—	—	—	—	—	—	—
– corporate[2]	24,093	4,483	67	—	28,643	(18)	(17)	(28)	—	(63)	0.1	0.4	41.2	—	0.2
– financial institutions[3]	2,469	351	—	—	2,820	—	—	—	—	—	—	—	—	—	—
At 31 Dec 2022	7,865,250	547,655	69,050	623	8,482,578	(3,373)	(11,645)	(25,942)	(191)	(41,151)	0.0	2.1	37.6	30.4	0.5

The above table does not include balances due from Group companies.

1 *Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.*
2 *Includes corporate and commercial.*
3 *Includes non-bank financial institutions.*
4 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

Stage 2 days past due analysis for loans and advances to customers (continued)[3]

(Audited)

	Gross carrying amount				Allowance for ECL				ECL coverage %			
	Stage 2	*of which: Up-to-date*	*of which: 1 to 29 DPD[1,2]*	*of which: 30 and > DPD[1,2]*	Stage 2	*of which: Up-to-date*	*of which: 1 to 29 DPD[1,2]*	*of which: 30 and > DPD[1,2]*	Stage 2	*of which: Up-to-date*	*of which: 1 to 29 DPD*	*of which: 30 and > DPD*
	HK$m	*HK$m*	*HK$m*	*HK$m*	HK$m	*HK$m*	*HK$m*	*HK$m*	%	*%*	*%*	*%*
At 31 Dec 2022												
Loans and advances to customers at amortised cost	461,665	*449,786*	*8,806*	*3,073*	(11,186)	*(10,635)*	*(196)*	*(355)*	2.4	*2.4*	*2.2*	*11.6*
– personal	67,809	*58,005*	*7,192*	*2,612*	(2,822)	*(2,304)*	*(170)*	*(348)*	4.2	*4.0*	*2.4*	*13.3*
– corporate and commercial	369,973	*368,023*	*1,491*	*459*	(8,039)	*(8,006)*	*(26)*	*(7)*	2.2	*2.2*	*1.7*	*1.5*
– non-bank financial institutions	23,883	*23,758*	*123*	*2*	(325)	*(325)*	*—*	*—*	1.4	*1.4*	*—*	*—*

1 *Days past due ('DPD').*
2 *The DPD amounts presented above are on a contractual basis and include the benefit of any customer relief payment holidays granted.*
3 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

Credit exposure

(Audited)

Maximum exposure to credit risk

This section provides information on the maximum exposure to credit risk associated with balance sheet items as well as loan and other credit-related commitments.

'Maximum exposure to credit risk' table

The following table presents our maximum exposure to credit risk before taking account of any collateral held or other credit enhancements (unless such enhancements meet accounting offsetting requirements). The table excludes financial instruments whose carrying amount best represents the net exposure to credit risk, and it excludes equity securities as they are not subject to credit risk. For the financial assets recognised on the balance sheet, the maximum exposure to credit risk equals their carrying amount and is net of allowance for ECL. For financial guarantees and other guarantees granted, it is the maximum amount that we would have to pay if the guarantees were called upon. For loan commitments and other credit-related commitments, it is generally the full amount of the committed facilities.

Other credit risk mitigants

There are arrangements in place that reduce our maximum exposure to credit risk. These include a charge over collateral on borrowers' specific assets, such as residential properties, collateral held in the form of financial instruments that are not held on the balance sheet and short positions in securities. In addition, for financial assets held as part of linked insurance/investment contracts the risk is predominantly borne by the policyholder.

Collateral available to mitigate credit risk is disclosed in the Collateral section on pages 54-57.

Maximum exposure to credit risk before collateral held or other credit enhancements

	2023	2022[1]
	HK$m	HK$m
Cash and balances at central banks	**232,987**	232,740
Items in the course of collection from other banks	**22,049**	28,557
Hong Kong Government certificates of indebtedness	**328,304**	341,354
Trading assets	**565,660**	435,358
Derivatives	**409,253**	502,877
Financial assets designated at fair value	**484,593**	466,312
Reverse repurchase agreements – non-trading	**831,186**	927,976
Loans and advances to banks	**563,801**	515,847
Loans and advances to customers	**3,557,076**	3,695,068
Financial investments	**2,023,263**	1,742,582
Amounts due from Group companies	**158,592**	140,487
Other assets	**275,917**	260,616
Total on-balance sheet exposure to credit risk	**9,452,681**	9,289,774
Total off-balance sheet	**3,845,103**	3,587,491
Financial guarantees and other similar contracts	**434,030**	396,491
Loan and other credit-related exposure	**3,411,073**	3,191,000
At 31 Dec	**13,297,784**	12,877,265

Total exposure to credit risk remained broadly unchanged in 2023 with loans and advances continuing to be the largest element.

1 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

Credit deterioration of financial instruments

A summary of our current policies and practices regarding the identification, treatment and measurement of stage 1, stage 2, stage 3 (credit impaired) and POCI financial instruments can be found in Note 1.2(i) on the consolidated financial statements.

Measurement uncertainty and sensitivity analysis of ECL estimates

(Audited)

The recognition and measurement of ECL involves the use of significant judgement and estimation. We form multiple economic scenarios based on economic forecasts, apply these assumptions to credit risk models to estimate future credit losses, and probability-weight the results to determine an unbiased ECL estimate.

Management assessed the current economic environment, reviewed the latest economic forecasts and discussed key risks before selecting the economic scenarios and their weightings.

Scenarios were constructed to reflect the latest geopolitical risks and macroeconomic developments, including the Israel-Hamas war and subsequent disruptions in the Red Sea, and current Inflation and monetary policy expectations.

Management judgemental adjustments are used where modelled ECL does not fully reflect the identified risks and related uncertainty, or to capture significant late breaking events.

At 31 December 2023, there was an overall reduction in management judgemental adjustments compared with 31 December 2022.

Methodology

At 31 December 2023, four scenarios were used to capture the latest economic expectations and to articulate management's view of the range of risks and potential outcomes. Each scenario is updated with the latest economic forecasts and estimates every quarter.

Three scenarios, the Upside, Central and Downside are drawn from external consensus forecasts, market data and distributional estimates of the entire range of economic outcomes. The fourth scenario, the Downside 2, represents management's view of severe downside risks.

The Central scenario is deemed the 'most likely' scenario, and usually attracts the largest probability weighting. It is created using consensus forecasts, which is the average of a panel of external forecasts.

The outer scenarios represent the tails of the distribution and are less likely to occur. The Consensus Upside and Downside scenarios are created with reference to distributions for select markets that capture forecasters' views of the entire range of economic outcomes. In the later years of those scenarios, projections revert to long-term consensus trend expectations. Reversion to trend expectations is done with reference to historically observed quarterly changes in the values of macroeconomic variables.

The fourth scenario, the Downside 2, is designed to represent management's view of severe downside risks. It is a globally consistent, narrative-driven scenario that explores a more extreme economic outcome than those captured by the consensus scenarios. In this scenario, variables do not, by design, revert to long-term trend expectations and may instead explore alternative states of equilibrium, where economic activity moves permanently away from past trends.

The consensus Downside and the consensus Upside scenarios are each constructed to be consistent with a 10% probability. The Downside 2 is constructed to a 5% probability. The Central scenario is assigned the remaining 75% probability. This weighting scheme is deemed appropriate for the unbiased estimation of ECL in most circumstances. However, management may depart from this probability-based scenario weighting approach when the economic outlook and forecasts are determined to be particularly uncertain and risks are elevated.

At 31 December 2023, the standard approach to scenario weightings was applied as key uncertainty and risk metrics were aligned to their historical averages. Economic forecasts for the Central scenario have remained stable and the dispersion within consensus forecast panels has remained low, even as the Israel-Hamas war escalated. Risks, including the economic consequences of a broader war in the Middle East, are reflected in downside scenarios.

Scenarios produced to calculate ECL are aligned to HSBC's top and emerging risks.

Description of economic scenarios

The economic assumptions presented in this section have been formed by HSBC with reference to external forecasts and estimates, specifically for the purpose of calculating ECL.

Forecasts remain subject to uncertainty and variability. Outer scenarios are constructed so that they capture risks that could alter the trajectory of the economy and are designed to encompass the potential crystallisation of number of key macro-financial risks.

In our key markets, Central scenario forecasts remained broadly stable in the fourth quarter of 2023. The key exception was with regard to monetary policy, where expectations for interest rate cuts were brought forward. There continues to be expectations that 2024 will be a period of below trend growth, with inflation remaining above central bank targets.

At the end of 2023, risks to the economic outlook included a number of significant geopolitical issues. Within our downside scenarios, the economic consequences from the crystallisation of those risks are captured by higher commodity and goods prices, the re-acceleration of inflation, a further rise in interest rates and a global recession.

The scenarios used to calculate ECL in the *Annual Report and Accounts 2023* are described below.

The consensus Central scenario

HSBC's Central scenario reflects expectations for a low growth and high interest rate environment across many of our key markets, where GDP growth is expected to be lower in 2024, than in the previous year.

In mainland China and Hong Kong, growth is also expected to be moderately slower in 2024 relative to 2023. The economic boost from post-pandemic re-opening has faded and slower global growth and low trade volumes are expected to moderate activity. In mainland China, the continued fall in investment in the property sector is expected to act as a further brake on the economy, while in Hong Kong, higher interest rates drive a further decline in property valuations. Despite these headwinds, a steeper downturn is expected to be avoided as authorities in mainland China are increasing fiscal and monetary support to the economy. Fiscal expansion is anticipated for 2024, alongside additional credit easing.

Global GDP is expected to grow by 2.2% in 2024 in the Central scenario, and the average rate of global GDP growth is forecast to be 2.6% over the five-year forecast period. This is below the average growth rate over the five-year period prior to the onset of the pandemic of 2.9%.

The key features of our Central scenario are:

- GDP growth rates in our key markets are expected to slow down in 2024, followed by a moderate recovery in 2025. The key driver of weaker growth is high interest rates, which act to deter consumption and investment. Lower trade volumes are also key driver of weaker growth in Asia.
- In most markets, unemployment is expected rise moderately as economic activity slows, although it remains low by historical standards.
- Inflation is expected to continue to fall as commodity prices decline, supply disruptions abate, and wage growth moderates. In mainland China, weak consumption and excess supply has caused inflation to drop sharply, but deflation is not projected to persist.
- Weak conditions in housing markets are expected to persist through 2024 and 2025, with high interest rates weighing on prices in Hong Kong and subdued confidence dampening demand in mainland China.
- Challenging conditions are also forecast to continue in the commercial property sector in a number of our key markets. Structural changes to demand in the office segment in particular have driven lower valuations.
- The Brent crude oil price is forecast to average around $75 per barrel over the projection period.

The Central scenario was created with forecasts available in late November, and reviewed continually until end-December 2023. In accordance with HSBC's scenario framework, a probability weight of 75% has been assigned to the Central scenario across all major markets.

The following table describes key macroeconomic variables in the consensus Central scenario.

Central scenario 2024-2028 (as at 4Q23)

	Hong Kong %	Mainland China %
GDP growth (annual average rate)		
2024	**2.6**	**4.5**
2025	**2.7**	**4.4**
2026	**2.6**	**4.3**
2027	**2.6**	**3.8**
2028	**2.6**	**3.9**
5 year average[1]	**2.6**	**4.2**
Unemployment rate		
2024	**3.0**	**5.2**
2025	**3.0**	**5.1**
2026	**3.2**	**5.1**
2027	**3.2**	**5.1**
2028	**3.2**	**5.1**
5 year average[1]	**3.1**	**5.1**
House price growth (annual average rate)		
2024	**(6.6)**	**(0.6)**
2025	**(0.7)**	**1.1**
2026	**2.6**	**2.6**
2027	**2.8**	**4.0**
2028	**3.0**	**4.5**
5 year average[1]	**0.2**	**2.3**
Inflation rate (annual average growth rate)		
2024	**2.1**	**1.8**
2025	**2.1**	**2.0**
2026	**2.2**	**2.1**
2027	**2.4**	**2.0**
2028	**2.4**	**2.0**
5 year average[1]	**2.2**	**2.0**
Central bank policy rate (annual average, %)		
2024	**5.4**	**4.1**
2025	**4.4**	**4.2**
2026	**4.1**	**4.4**
2027	**4.1**	**4.6**
2028	**4.1**	**4.8**
5 year average[1]	**4.4**	**4.4**

1 *The five-year average is calculated over a projected period of 20 quarters from 1Q24 to 4Q28.*

The consensus Upside scenario

Compared with the Central scenario, the consensus Upside scenario features stronger economic activity in the near term, before converging to long-run trend expectations. It also incorporates a faster fall in the rate of inflation than incorporated in the Central scenario.

The scenario is consistent with a number of key upside risk themes. These include a faster fall in the rate of inflation that allows central banks to reduce interest rates more quickly; an easing in financial conditions; and de-escalation in geopolitical tensions, as the Israel-Hamas and Russia-Ukraine wars move towards conclusions, and the US-China relationship improves.

The following table describes key macroeconomic variables in the consensus Upside scenario.

Consensus Upside scenario 2024-2028 (as at 4Q23)

	Hong Kong %	Mainland China %
GDP level (%, start-to-peak)[1]	**21.8 (4Q28)**	**30.4 (4Q28)**
Unemployment rate (%, min)[2]	**2.4 (3Q24)**	**4.8 (4Q25)**
House price index (%, start-to-peak)[1]	**17.9 (4Q28)**	**19.7 (4Q28)**
Inflation rate (YoY % change, min)[3]	**0.3 (4Q24)**	**0.6 (3Q24)**
Central bank policy rate (%, Min)[2]	**4.1 (1Q27)**	**4.0 (2Q24)**

1 *Cumulative change to the highest level of the series during the 20-quarter projection.*
2 *The lowest projected unemployment or policy rate in the scenario.*
3 *The lowest projected year-on-year percentage change in inflation in the scenario.*

Downside scenarios

Downside scenarios explore the intensification and crystallisation of a number of key economic and financial risks. These include an escalation of geopolitical tensions escalate, which disrupt key commodity and goods markets, causing inflation and interest rates to rise, and creating a global recession.

As the geopolitical environment remains volatile and complex, risks include:

- a broader and more prolonged conflict in the Middle East that undermines confidence, drives an increase in global energy costs and reduces trade and investment;
- a potential escalation in the Russia-Ukraine war, which expands beyond Ukraine's borders, and further disrupts energy, fertiliser and food supplies; and
- continued differences between the US and China, which could affect economic confidence, the global goods trade and supply chains for critical technologies.

High inflation and higher interest rates also remain key risks. Should geopolitical tensions escalate, energy and food prices could rise and increase pressure on household budgets and firms' costs.

A wage-price spiral, triggered by higher inflation and labour supply shortages could put sustained upward pressure on wages and services prices, aggravating cost pressures and increasing the squeeze on household real incomes and corporate margins. In turn, it raises the risk of a more forceful policy response from central banks, a steeper trajectory for interest rates, significantly higher defaults and, ultimately, a deep economic recession.

The consensus Downside scenario

In the consensus Downside scenario, economic activity is weaker compared with the Central scenario. In this scenario, GDP declines, unemployment rates rise, and asset prices fall. The scenario features an escalation of geopolitical tensions, which causes a rise in inflation, as supply chain constraints intensify and energy prices rise. The scenario also features a temporary increase in interest rates above the Central scenario, before the effects of weaker consumption demand begin to dominate and commodity prices and inflation fall again.

The following table describes key macroeconomic variables in the consensus Downside scenario.

Consensus Downside scenario 2024-2028 (as at 4Q23)

	Hong Kong	Mainland China
	%	%
GDP level (%, start-to-trough)[1]	**(1.6) (3Q25)**	**(1.5) (1Q24)**
Unemployment rate (%, max)[2]	**4.7 (4Q25)**	**6.9 (4Q25)**
House price index (%, start-to-trough)[1]	**(9.6) (4Q24)**	**(7.1) (3Q25)**
Inflation rate (YoY % change, max)[3]	**3.8 (3Q24)**	**3.5 (4Q24)**
Central bank policy rate (%, Max)[2]	**6.0 (1Q24)**	**4.1 (3Q24)**

1 *Cumulative change to the lowest level of the series during the 20-quarter projection.*
2 *The highest projected unemployment or policy rate in the scenario.*
3 *The highest projected year-on-year percentage change in inflation in the scenario.*

Downside 2 scenario

The Downside 2 scenario features a deep global recession and reflects management's view of the tail of the economic distribution. It incorporates the crystallisation of a number of risks simultaneously, including a further escalation of geopolitical crises globally, which creates severe supply disruptions to goods and energy markets. In the scenario, as inflation surges and central banks tighten monetary policy further, confidence evaporates. However, this impulse is expected to prove short-lived, as recession takes hold, causing commodity prices to correct sharply and global price inflation to fall.

The following table describes key macroeconomic variables in the Downside 2 scenario.

Downside 2 scenario 2024-2028 (as at 4Q23)

	Hong Kong	Mainland China
	%	%
GDP level (%, start-to-trough)[1]	**(8.2) (1Q25)**	**(6.4) (1Q25)**
Unemployment rate (%, max)[2]	**6.4 (4Q24)**	**7.0 (4Q25)**
House price index (%, start-to-trough)[1]	**(32.8) (3Q26)**	**(25.5) (4Q25)**
Inflation rate (YoY % change, max)[3]	**4.1 (3Q24)**	**4.1 (4Q24)**
Central bank policy rate (%, Max)[2]	**6.4 (1Q24)**	**4.8 (3Q24)**

1 *Cumulative change to the lowest level of the series during the 20-quarter projection.*
2 *The highest projected unemployment/policy rate in the scenario.*
3 *The highest projected year-on-year percentage change in inflation in the scenario.*

Scenario weighting

In reviewing the economic environment, the level of risk and uncertainty, management has considered both global and country-specific factors.

Key considerations around uncertainty attached to the Central scenario projections in the fourth quarter of 2023 focused on:

- the risk that the Israel-Hamas war escalates and affects economic expectations;
- the lagged impact of elevated interest rates on household finances and businesses and the implications of recent changes to monetary policy expectations on growth and employment; and
- the outlook for real estate in our key markets, namely Hong Kong and mainland China.

Although these risk factors remain significant, management assessed that they were adequately reflected in scenarios, at the standard weighting. It was noted that despite the escalation of geopolitical risk in the Middle East, economic forecasts had remained stable, and dispersion of forecasts around the consensus were either stable, or have moved lower. Financial market measures of volatility also remained low through the fourth quarter of 2023.

This has led management to assign scenario probabilities that are aligned to the standard scenario framework. This entailed assigning a 75% probability weighting to the Central scenario in our major markets. The consensus Upside is assigned a 10% weighting and the consensus Downside scenario is assigned 10%. The Downside 2 is assigned 5% weighting.

In support of the decision, it was noted that in mainland China recent policy announcements suggest fiscal and monetary stimulus will increase significantly through 2024. This suggests that there will be increased official support to economic headwinds, which would reduce the uncertainty attached to current forecasts.

The following table describes the probabilities assigned in each scenario.

Scenario weightings, %

	Standard weights	Hong Kong	Mainland China
4Q23			
Upside	**10.0**	**10.0**	**10.0**
Central	**75.0**	**75.0**	**75.0**
Downside	**10.0**	**10.0**	**10.0**
Downside 2	**5.0**	**5.0**	**5.0**

At 31 December 2023, the consensus Upside and Central scenarios for all markets had a combined weighting of 85%.

Critical estimates and judgements

The calculation of ECL under HKFRS 9 involves significant judgements, assumptions and estimates at 31 December 2023. These included:

- the selection of weights to apply to the economic scenarios given the rapidly changing economic conditions and the inherent uncertainty of the underlying forecast under each scenario;
- the selection of scenarios to consider given the changing nature of macroeconomic and geopolitical risks that the Bank and wider economy faces; and
- estimating the economic effects of those scenarios on ECL, particularly sector and portfolio specific risks and the uncertainty of default and recovery experience under all scenarios.

How economic scenarios are reflected in of ECL calculations

Models are used to reflect economic scenarios on ECL estimates. As described above, modelled assumptions and linkages based on historical information could not alone produce relevant information under the conditions experienced in 2023, and management judgemental adjustments were still required to support modelled outcomes.

We have developed globally consistent methodologies for the application of forward economic guidance into the calculation of ECL for wholesale and retail credit risk. These standard approaches are described below, followed by the management judgemental adjustments made, including those to reflect the circumstances experienced in 2023.

For our wholesale portfolios, a global methodology is used for the estimation of the term structure of probability of default ('PD') and loss given default ('LGD'). For PDs, we consider the correlation of forward economic guidance to default rates for a particular industry in a country. For LGD calculations we consider the correlation of forward economic guidance to collateral values and realisation rates for a particular country and industry. PDs and LGDs are estimated for the entire term structure of each instrument.

For impaired loans, ECL estimates are derived based on discounted cash flow ('DCF') calculations for internal forward-looking scenarios specific to individual company circumstances [see page 96]. Probability-weighted outcomes are applied, and depending on materiality and status of the borrower, the number of scenarios considered will change. Where relevant for the case being assessed, forward economic guidance is incorporated as part of these scenarios. LGD-driven proxy and modelled estimates are used for certain less material cases.

For our retail portfolios, the models are predominantly based on historical observations and correlations with default rates and collateral values. For PD, the impact of economic scenarios is modelled for each portfolio, leveraging historical relationships between default rates and macro-economic variables. These are included within HKFRS 9 ECL estimates using either economic response models or models which contain internal, external and macro-economic variables. The macro-economic impact on PD is modelled over the period equal to the remaining maturity of the underlying assets. For LGD, the impact is modelled for mortgage portfolios by forecasting future loan-to-value profiles for the remaining maturity of the asset, leveraging national level house price index forecast and applying the corresponding LGD expectation relative to the updated forecast collateral values. Management judgemental adjustments are described below.

Management judgemental adjustments

In the context of HKFRS 9, management judgemental adjustments are typically short-term increases or decreases to the modelled ECL at either a customer, segment or portfolio level where management believes ECL results do not sufficiently reflect the credit risk/ expected credit losses at the reporting date. These can relate to risks or uncertainties which are not reflected in the models and/or to any late breaking events with significant uncertainty, subject to management review and challenge.

This includes refining model inputs and outputs and using adjustments to ECL based on management judgement and quantitative analysis for impacts that are difficult to model.

The effects of management judgmental adjustments are considered for both balances and ECL when determining whether or not a significant increase in credit risk has occurred and is allocated to a stage where appropriate. This is in accordance with the internal adjustments framework.

Management judgmental adjustments are reviewed under the governance process for HKFRS 9 (as detailed in the section 'Credit risk management' on page 35). Review and challenge focuses on the rationale and quantum of the adjustments with a further review carried out by the second line of defence where significant. For some management judgemental adjustments, internal frameworks establish the conditions under which these adjustments should no longer be required and as such are considered as part of the governance process. This internal governance process allows management judgemental adjustments to be reviewed regularly and, where possible, to reduce the reliance on these through model recalibration or redevelopment, as appropriate.

The drivers of management judgemental adjustments continue to evolve with the economic environment, and as new risks emerge.

In addition to management judgemental adjustments there are also 'Other adjustments' which are made to address process limitations and data/model deficiencies.

'Management judgemental adjustments' and 'Other adjustments' constitute the total value of adjustments to modelled ECL.

At 31 December 2023, management judgement adjustments reduced by HK$1.7bn compared with 31 December 2022. For the wholesale portfolios this was due to modelled outcomes better reflecting the key risks at 31 December 2023. For retail there was an increase in other credit judgements due to the potential delayed impact of economic scenarios on unsecured portfolio defaults.

Management judgemental adjustments made in estimating the scenario-weighted reported ECL at 31 December 2023 are set out in the following table.

Management judgemental adjustments to ECL as at 31 December 2023[1]

	Retail $bn	Wholesale[2] HK$bn	Total HK$bn
Modelled ECL (A)[3]	**4.9**	**7.7**	**12.6**
Banks, sovereigns, government entities and low-risk counterparties	**—**	**—**	**—**
Corporate lending adjustments	**—**	**0.3**	**0.3**
Inflation related adjustments	**—**	**—**	**—**
Other credit judgements	**0.8**	**—**	**0.8**
Total management judgemental adjustments (B)[4]	**0.8**	**0.3**	**1.1**
Other adjustments (C)[5]	**—**	**(0.1)**	**(0.1)**
Final ECL (A + B + C)[6]	**5.7**	**7.9**	**13.6**

Management judgemental adjustments to ECL as at 31 December 2022[1]

	Retail HK$bn	Wholesale[2] HK$bn	Total HK$bn
Modelled ECL (A)[3]	5.3	8.1	13.4
Banks, sovereigns, government entities and low-risk counterparties	—	0.2	0.2
Corporate lending adjustments	—	2.1	2.1
Inflation related adjustments	—	—	—
Other credit judgements	0.5	—	0.5
Total management judgemental adjustments (B)[4]	0.5	2.3	2.8
Other adjustments (C)[5]	0.1	1.0	1.1
Final ECL (A + B + C)[6]	5.9	11.4	17.3

1 *Management judgemental adjustments presented in the table reflect increases or (decreases) to ECL, respectively.*
2 *The wholesale portfolio corresponds to adjustments to the performing portfolio (stage 1 and stage 2).*
3 *(A) refers to probability-weighted allowance for ECL before any adjustments are applied.*
4 *(B) refers to adjustments that are applied where management believes allowance for ECL does not sufficiently reflect the credit risk/ expected credit losses of any given portfolio at the reporting date. These can relate to risks or uncertainties that are not reflected in the model and/ or to any late breaking events.*
5 *(C) refers to adjustments made to allowance for ECL to address process limitations and data / model deficiencies.*
6 *As presented within our internal credit risk governance (see page 36).*

Management judgemental adjustments at 31 December 2023 were a decrease of ECL of HK$2.0bn for the wholesale portfolio and an increase to ECL of HK$0.3bn for the retail portfolio.

At 31 December 2023, wholesale management judgemental adjustments were an ECL increase of HK$0.3bn (31 December 2022: HK$2.3bn increase).

Management judgmental adjustments to corporate exposures increased ECL by HK$0.3bn at 31 December 2023 (31 December 2022: HK$2.1bn increase) mostly due to management judgements to reflect heightened uncertainty in specific sectors and geographies, including adjustments to exposures to the real estate sector in mainland China. The decrease in adjustments to ECL compared with 31 December 2022 is attributed to a crystallisation of existing risks at that date through downgrades, and an improved reflection of emerging risks in macroeconomic scenarios and modelled outcomes.

At 31 December 2023, retail management judgemental adjustments increased ECL by HK$0.8bn (31 December 2022: HK$0.5bn increase). The increase in adjustments to ECL compared with 31 December 2022 were primarily due to the increase in management judgemental adjustments in other credit judgements (detailed below).

- Management judgemental adjustments in relation to other credit judgements increased ECL by HK$0.74bn (31 December 2022: HK$0.5bn). These adjustments were primarily in relation to country-specific risks related to future macroeconomic conditions.
- Management judgemental adjustments in relation to inflation increased ECL by HK$0.04bn (31 December 2022: HK$0.05bn). These adjustments addressed where increasing inflation and interest rates result in affordability risks that were not fully captured by the modelled output.

Economic scenarios sensitivity analysis of ECL estimates

Management considered the sensitivity of the ECL outcome against the economic forecasts as part of the ECL governance process by recalculating the ECL under each scenario described above for selected portfolios, applying a 100% weighting to each scenario in turn. The weighting is reflected in both the determination of a significant increase in credit risk and the measurement of the resulting ECL. The ECL calculated for the Upside and Downside scenarios should not be taken to represent the upper and lower limits of possible ECL outcomes. The impact of defaults that might occur in the future under different economic scenarios is captured by recalculating ECL for loans at the balance sheet date.

There is a particularly high degree of estimation uncertainty in numbers representing tail risk scenarios when assigned a 100% weighting.

For wholesale credit risk exposures, the sensitivity analysis excludes ECL and financial instruments related to defaulted (stage 3) obligors. The measurement of stage 3 ECL is relatively more sensitive to credit factors specific to the obligor than future economic scenarios, and therefore the effect of macroeconomic factors are not necessarily the key consideration when performing individual assessments of ECL for obligors in default. Loans to defaulted obligors are a small portion of the overall wholesale lending exposure, even if representing the majority of the allowance for ECL. Due to the range and specificity of the credit factors to which the ECL is sensitive, it is not possible to provide a meaningful alternative sensitivity analysis for a consistent set of risks across all defaulted obligors.

For retail mortgage exposures, the sensitivity analysis includes ECL for loans and advances to customers related to defaulted obligors. This is because the retail ECL for secured mortgage portfolios including loans in all stages is sensitive to macroeconomic variables.

Wholesale and retail sensitivity

The wholesale and retail sensitivity tables present the 100% weighted results. These exclude portfolios held by the insurance business and small portfolios, and as such cannot be directly compared with personal and wholesale lending presented in other credit risk tables. In both the wholesale and retail analysis, the comparative period results for Downside 2 scenarios are also not directly comparable with the current period, because they reflect different risks relative to the consensus scenarios for the period end.

The wholesale and retail sensitivity analysis is stated inclusive of management judgemental adjustments, as appropriate to each scenario.

For both retail and wholesale portfolios, the gross carrying amount of financial instruments are the same under each scenario. For exposures with similar risk profile and product characteristics, the sensitivity impact is therefore largely the result of changes in macroeconomic assumptions.

Wholesale analysis

HKFRS 9 ECL sensitivity to future economic conditions[1]

	Hong Kong	Mainland China
ECL coverage of financial instruments subject to significant measurement uncertainty at 31 December 2023[2]	**HK$m**	**HK$m**
Reported ECL	**4,758**	**2,018**
Consensus scenarios ECL		
Central scenario	**4,422**	**1,697**
Upside scenario	**3,378**	**1,106**
Downside scenario	**6,304**	**3,237**
Alternative (Downside 2) scenario ECL	**10,881**	**7,384**

HKFRS 9 ECL sensitivity to future economic conditions[1]

	Hong Kong	Mainland China
ECL coverage of financial instruments subject to significant measurement uncertainty at 31 December 2022[2]	HK$m	HK$m
Reported ECL	7,211	2,302
Consensus scenarios		
Central scenario	6,386	1,887
Upside scenario	4,616	1,123
Downside scenario	10,252	3,235
Alternative scenarios	16,852	9,572

1 *Excludes ECL and financial instruments relating to defaulted obligors because the measurement of ECL is relatively more sensitive to credit factors specific to the obligor than future economic scenarios.*
2 *Includes off-balance sheet financial instruments that are subject to significant measurement uncertainty.*

Compared with 31 December 2022, the Downside 2 ECL impact was lower in Hong Kong and mainland China, mostly due to the crystallisation of defaults for certain high-risk exposures and decrease of the associated downside uncertainty.

Retail analysis

HKFRS 9 ECL sensitivity to future economic conditions[1]

	Reported ECL	Central Scenario	Upside Scenario	Downside Scenario	Alternative (Downside 2) scenario ECL
ECL coverage of loans and advances to customers	**HK$m**	**HK$m**	**HK$m**	**HK$m**	**HK$m**
At 31 December 2023[2]					
Hong Kong	**3,115**	**2,658**	**2,370**	**4,079**	**8,973**

HKFRS 9 ECL sensitivity to future economic conditions[1]

	Reported ECL	Central Scenario	Upside Scenario	Downside Scenario	Alternative (Downside 2) scenario ECL
ECL coverage of loans and advances to customers	HK$m	HK$m	HK$m	HK$m	HK$m
At 31 December 2022[2]					
Hong Kong	2,702	2,406	1,985	4,037	6,014

1 *ECL sensitivities exclude portfolios using less complex modelling approaches.*
2 *ECL sensitivity includes only on-balance sheet financial instruments to which HKFRS 9 impairment requirements are applied.*

At 31 December 2023, the most significant level of ECL sensitivity was observed in Hong Kong driven by the relative size of the portfolio in retail.

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers, including loan commitments and financial guarantees

(Unaudited)

The following disclosure provides a reconciliation by stage of the group's gross carrying/nominal amount and allowances for loans and advances to banks and customers, including loan commitments and financial guarantees.

Movements are calculated on a quarterly basis and therefore fully capture stage movements between quarters. If movements were calculated on a year-to-date basis they would reflect only the opening and closing position of the financial instrument.

The transfers of financial instruments represent the impact of stage transfers upon the gross carrying/nominal amount and associated allowance for ECL.

The net remeasurement of ECL arising from stage transfers represents the increase or decrease due to these transfers, for example, moving from a 12-month (stage 1) to a lifetime (stage 2) ECL measurement basis. Net remeasurement excludes the underlying customer risk rating ('CRR')/probability of default ('PD') movements of the financial instruments transferring stage. This is captured, along with other credit quality movements in the 'changes in risk parameters – credit quality' line item.

Changes in 'Net new and further lending/repayments' represents the impact from volume movements within the Group's lending portfolio and includes 'New financial assets originated or purchased', 'assets derecognised (including final repayments)' and 'changes to risk parameters – further lending/repayment'.

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers, including loan commitments and financial guarantees

(Audited)

	Stage 1		Stage 2		Stage 3		POCI		Total	
	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 1 Jan 2023	**5,574,139**	**(3,212)**	**533,242**	**(11,605)**	**68,585**	**(25,881)**	**623**	**(191)**	**6,176,589**	**(40,889)**
Transfers of financial instruments:	(64,485)	(1,974)	38,388	6,944	26,097	(4,970)	—	—	—	—
– transfers from stage 1 to stage 2	(422,711)	888	422,711	(888)	—	—	—	—	—	—
– transfers from stage 2 to stage 1	361,014	(2,808)	(361,014)	2,808	—	—	—	—	—	—
– transfers to stage 3	(4,009)	85	(24,460)	5,289	28,469	(5,374)	—	—	—	—
– transfers from stage 3	1,221	(139)	1,151	(265)	(2,372)	404	—	—	—	—
Net remeasurement of ECL arising from transfer of stage	—	1,147	—	(1,175)	—	(218)	—	—	—	(246)
Net new and further lending/ repayments	213,347	(222)	(166,049)	2,286	(15,378)	3,604	(332)	15	31,588	5,683
Changes in risk parameters – credit quality	—	1,143	—	(5,451)	—	(14,174)	—	208	—	(18,274)
Changes to model used for ECL calculation	—	(121)	—	109	—	43	—	—	—	31
Assets written off	—	—	—	—	(13,856)	13,856	(2)	2	(13,858)	13,858
Credit-related modifications that resulted in derecognition	—	—	—	—	—	—	—	—	—	—
Foreign exchange	(4,522)	21	(2,366)	12	(341)	173	—	—	(7,229)	206
Others	(5,800)	10	(116)	9	(57)	10	—	(197)	(5,973)	(168)
At 31 Dec 2023	**5,712,679**	**(3,208)**	**403,099**	**(8,871)**	**65,050**	**(27,557)**	**289**	**(163)**	**6,181,117**	**(39,799)**
ECL income statement charge for the year										(12,806)
Recoveries										864
Modification losses on contractual cash flows that did not result in derecognition										(6)
Others										(1,118)
Total ECL income statement charge for the year										**(13,066)**

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers, including loan commitments and financial guarantees (continued)

	At 31 Dec 2023		Year ended 31 Dec 2023
	Gross carrying/ nominal amount	**Allowance for ECL**	**ECL charge**
	HK$m	**HK$m**	**HK$m**
As above	**6,181,117**	**(39,799)**	**(13,066)**
Other financial assets measured at amortised cost	**2,309,109**	**(393)**	**(44)**
Non-trading reverse repurchase agreement commitments	**3,317**	**—**	**—**
Performance and other guarantees not considered for HKFRS 9	**N/A**	**N/A**	**(106)**
Amounts due from Group companies	**131,071**	**—**	**—**
Summary of financial instruments to which the impairment requirements in HKFRS 9 are applied/Summary consolidated income statement	**8,624,614**	**(40,192)**	**(13,216)**
Debt instruments measured at FVOCI	**1,404,323**	**(93)**	**373**
Total allowance for ECL/total income statement ECL charge for the year	**N/A**	**(40,285)**	**(12,843)**

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers, including loan commitments and financial guarantees (continued)[1]

(Audited)

	Stage 1		Stage 2		Stage 3		POCI		Total	
	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 1 Jan 2022	5,575,693	(2,857)	528,888	(9,721)	41,640	(19,689)	1,558	(334)	6,147,779	(32,601)
Transfers of financial	(246,161)	(1,866)	203,391	7,011	42,770	(5,145)	—	—	—	—
– transfers from stage 1 to stage 2	(724,574)	1,067	724,574	(1,067)	—	—	—	—	—	—
– transfers from stage 2 to stage 1	483,362	(2,721)	(483,362)	2,721	—	—	—	—	—	—
– transfers to stage 3	(7,041)	10	(39,496)	5,589	46,537	(5,599)	—	—	—	—
– transfers from stage 3	2,092	(222)	1,675	(232)	(3,767)	454	—	—	—	—
Net remeasurement of ECL arising from transfer of stage	—	1,353	—	(1,601)	—	(373)	—	—	—	(621)
Net new and further lending/ repayment	371,013	(907)	(176,230)	1,341	(7,372)	1,981	(858)	2	186,553	2,417
Changes in risk parameters – credit quality	—	1,074	—	(8,831)	—	(10,412)	—	214	—	(17,955)
Changes to model used for ECL calculation	—	(31)	—	11	—	(12)	—	—	—	(32)
Assets written off	—	—	—	—	(7,191)	7,191	(78)	78	(7,269)	7,269
Credit-related modifications that resulted in derecognition	—	—	—	—	(241)	60	—	—	(241)	60
Foreign exchange	(126,629)	32	(22,807)	180	(1,024)	526	1	(1)	(150,459)	737
Others	223	(10)	—	5	3	(8)	—	(150)	226	(163)
At 31 Dec 2022	5,574,139	(3,212)	533,242	(11,605)	68,585	(25,881)	623	(191)	6,176,589	(40,889)
ECL income statement charge for the year										(16,191)
Recoveries										879
Others										(563)
Total ECL income statement charge for the year										(15,875)

	At 31 Dec 2022		Year ended 31 Dec 2022
	Gross carrying/ nominal amount	Allowance for ECL	ECL charge
	HK$m	HK$m	HK$m
As above	6,176,589	(40,889)	(15,875)
Other financial assets measured at amortised cost	2,303,654	(262)	(83)
Non-trading reverse repurchase agreement commitments	2,335	—	—
Performance and other guarantees not considered for HKFRS 9	N/A	N/A	(81)
Amounts due from Group companies	129,341	—	—
Summary of financial instruments to which the impairment requirements in HKFRS 9 are applied/Summary consolidated income statement	8,611,919	(41,151)	(16,039)
Debt instruments measured at FVOCI	1,232,817	(329)	(332)
Total allowance for ECL/total income statement ECL charge for the year	N/A	(41,480)	(16,371)

1 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

Credit quality

Credit quality of financial instruments

(Audited)

We assess the credit quality of all financial instruments that are subject to credit risk. The credit quality of financial instruments is a point-in-time assessment of the probability of default of financial instruments, whereas stages 1 and 2 are determined based on relative deterioration of credit quality since initial recognition for the majority of portfolios. Accordingly, for non-credit-impaired financial instruments, there is no direct relationship between the credit quality assessment and stage 1 and 2, although typically the lower credit quality bands exhibit a higher proportion in stage 2.

The five credit quality classifications provided below each encompass a range of granular internal credit rating grades assigned to wholesale and personal lending businesses and the external ratings attributed by external agencies to debt securities, as shown in the table on page 36.

Distribution of financial instruments by credit quality at 31 December 2023

(Audited)

	Gross carrying/notional amount							
	Strong	Good	Satisfactory	Sub-standard	Credit impaired	Total	Allowance for ECL	Net
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
In-scope for HKFRS 9 impairment								
Loans and advances to customers held at amortised cost	2,074,847	688,167	698,123	71,823	62,969	3,595,929	(38,853)	3,557,076
– personal	1,336,990	128,108	85,097	5,420	7,406	1,563,021	(5,692)	1,557,329
– corporate and commercial	571,741	499,109	549,653	65,943	54,903	1,741,349	(32,586)	1,708,763
– non-bank financial institutions	166,116	60,950	63,373	460	660	291,559	(575)	290,984
Loans and advances to banks	553,184	7,768	758	2,142	—	563,852	(51)	563,801
Cash and balances at central banks	227,259	5,607	122	—	—	232,988	(1)	232,987
Items in the course of collection from other banks	22,049	—	—	—	—	22,049	—	22,049
Hong Kong Government certificates of indebtedness	328,304	—	—	—	—	328,304	—	328,304
Reverse repurchase agreements – non-trading	478,404	138,719	214,004	59	—	831,186	—	831,186
Financial investments held at amortised cost	586,404	29,796	2,792	3	—	618,995	(57)	618,938
Prepayments, accrued income and other assets	169,103	65,365	39,610	1,113	396	275,587	(335)	275,252
Debt instruments measured at fair value through other comprehensive income[1]	1,317,382	69,918	26,535	462	39	1,414,336	(93)	1,414,243
Out-of-scope for HKFRS 9 impairment						—		—
Trading assets	464,264	69,240	30,605	529	1,022	565,660	—	565,660
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	385,170	79,763	14,346	39	49	479,367	—	479,367
Derivatives	247,409	38,615	9,865	358	—	296,247	—	296,247
Total gross carrying amount on-balance sheet	6,853,779	1,192,958	1,036,760	76,528	64,475	9,224,500	(39,390)	9,185,110
Percentage of total credit quality	74%	13%	11%	1%	1%	100%		
Loans and other credit related commitments	2,059,689	793,540	525,376	29,092	3,295	3,410,992	(841)	3,410,151
Financial guarantee and similar contracts	186,629	142,828	72,758	3,339	883	406,437	(405)	406,032
Total nominal off-balance sheet amount	2,246,318	936,368	598,134	32,431	4,178	3,817,429	(1,246)	3,816,183

The above table does not include balances due from Group companies.

1 *For the purposes of this disclosure, gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.*

Distribution of financial instruments by credit quality at 31 December 2022 (continued)[2]

(Audited)

	Gross carrying/notional amount[2]							
	Strong	Good	Satisfactory	Sub-standard	Credit impaired	Total	Allowance for ECL	Net
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
In-scope for HKFRS 9 impairment								
Loans and advances to customers held at amortised cost	2,092,001	767,388	734,536	77,680	63,382	3,734,987	(39,919)	3,695,068
– personal	1,290,516	143,934	75,910	5,300	8,705	1,524,365	(5,354)	1,519,011
– corporate and commercial	640,240	539,936	602,436	71,391	53,761	1,907,764	(33,969)	1,873,795
– non-bank financial institutions	161,245	83,518	56,190	989	916	302,858	(596)	302,262
Loans and advances to banks	502,021	9,013	1,368	3,488	—	515,890	(43)	515,847
Cash and balances at central banks	226,479	6,047	222	—	—	232,748	(8)	232,740
Items in the course of collection from other banks	28,557	—	—	—	—	28,557	—	28,557
Hong Kong Government certificates of indebtedness	341,354	—	—	—	—	341,354	—	341,354
Reverse repurchase agreements – non-trading	503,956	132,390	291,608	—	22	927,976	—	927,976
Financial investments held at amortised cost	482,378	24,123	3,308	2	—	509,811	(46)	509,765
Prepayments, accrued income and other assets	168,757	59,634	33,578	796	443	263,208	(208)	263,000
Debt instruments measured at fair value through other comprehensive income[1]	1,188,399	51,597	15,281	1,030	39	1,256,346	(329)	1,256,017
Out-of-scope for HKFRS 9 impairment						—		—
Trading assets	335,477	65,188	32,910	788	999	435,362	—	435,362
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	367,285	82,980	11,461	26	3	461,755	—	461,755
Derivatives	270,028	52,467	11,351	823	5	334,674	—	334,674
Total gross carrying amount on-balance sheet	6,506,692	1,250,827	1,135,623	84,633	64,893	9,042,668	(40,553)	9,002,115
Percentage of total credit quality	72%	14%	12%	1%	1%	100%		
Loans and other credit related commitments	1,924,469	744,111	484,054	29,892	7,934	3,190,460	(864)	3,189,596
Financial guarantee and similar contracts	171,761	133,701	62,022	5,459	553	373,496	(293)	373,203
Total nominal off-balance sheet amount	2,096,230	877,812	546,076	35,351	8,487	3,563,956	(1,157)	3,562,799

The above table does not include balances due from Group companies.

1 *For the purposes of this disclosure, gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.*

2 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

Distribution of financial instruments to which the impairment requirements in HKFRS 9 are applied, by credit quality and stage allocation

(Audited)

	Gross carrying/notional amount							
	Strong	Good	Satisfactory	Sub-standard	Credit impaired	Total	Allowance for ECL	Net
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Loans and advances to banks	553,184	7,768	758	2,142	—	563,852	(51)	563,801
– stage 1	553,088	7,737	758	2,064	—	563,647	(50)	563,597
– stage 2	96	31	—	78	—	205	(1)	204
– stage 3	—	—	—	—	—	—	—	—
– POCI	—	—	—	—	—	—	—	—
Loans and advances to customers at amortised cost	2,074,847	688,167	698,123	71,823	62,969	3,595,929	(38,853)	3,557,076
– stage 1	2,051,644	624,138	498,644	6,057	—	3,180,483	(2,681)	3,177,802
– stage 2	23,203	64,029	199,479	65,766	—	352,477	(8,575)	343,902
– stage 3	—	—	—	—	62,679	62,679	(27,433)	35,246
– POCI	—	—	—	—	290	290	(164)	126
Other financial assets measured at amortised cost	1,811,523	239,487	256,528	1,175	396	2,309,109	(393)	2,308,716
– stage 1	1,810,577	233,634	251,694	311	—	2,296,216	(277)	2,295,939
– stage 2	946	5,853	4,834	864	—	12,497	(11)	12,486
– stage 3	—	—	—	—	396	396	(105)	291
– POCI	—	—	—	—	—	—	—	—
Loans and other credit-related commitments	1,498,322	320,777	150,205	6,911	2,113	1,978,328	(841)	1,977,487
– stage 1	1,495,419	303,188	126,282	4,151	—	1,929,040	(455)	1,928,585
– stage 2	2,903	17,589	23,923	2,760	—	47,175	(285)	46,890
– stage 3	—	—	—	—	2,113	2,113	(101)	2,012
– POCI	—	—	—	—	—	—	—	—
Financial guarantees	23,190	12,723	9,532	627	253	46,325	(54)	46,271
– stage 1	23,132	11,992	7,493	211	—	42,828	(20)	42,808
– stage 2	58	731	2,039	416	—	3,244	(10)	3,234
– stage 3	—	—	—	—	253	253	(24)	229
– POCI	—	—	—	—	—	—	—	—
At 31 Dec 2023	5,961,066	1,268,922	1,115,146	82,678	65,731	8,493,543	(40,192)	8,453,351
Debt instruments at FVOCI[1]								
– stage 1	1,317,382	69,918	26,535	—	—	1,413,835	(66)	1,413,769
– stage 2	—	—	—	462	—	462	(16)	446
– stage 3	—	—	—	—	39	39	(11)	28
– POCI	—	—	—	—	—	—	—	—
At 31 Dec 2023	1,317,382	69,918	26,535	462	39	1,414,336	(93)	1,414,243

The above table does not include balances due from Group companies.

1 *For the purposes of this disclosure, gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.*

Distribution of financial instruments to which the impairment requirements in HKFRS 9 are applied, by credit quality and stage allocation (continued) [2]

(Audited)

	Gross carrying/notional amount[2]							
	Strong	Good	Satisfactory	Sub-standard	Credit impaired	Total	Allowance for ECL	Net
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Loans and advances to banks	**502,021**	**9,013**	**1,368**	**3,488**	**—**	**515,890**	**(43)**	**515,847**
– stage 1	**501,130**	**8,731**	**1,338**	**3,243**	**—**	**514,442**	**(38)**	**514,404**
– stage 2	**891**	**282**	**30**	**245**	**—**	**1,448**	**(5)**	**1,443**
– stage 3	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
– POCI	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Loans and advances to customers at amortised cost	**2,092,001**	**767,388**	**734,536**	**77,680**	**63,382**	**3,734,987**	**(39,919)**	**3,695,068**
– stage 1	**2,061,021**	**650,576**	**487,558**	**10,785**	**—**	**3,209,940**	**(2,727)**	**3,207,213**
– stage 2	**30,980**	**116,812**	**246,978**	**66,895**	**—**	**461,665**	**(11,186)**	**450,479**
– stage 3	**—**	**—**	**—**	**—**	**62,760**	**62,760**	**(25,815)**	**36,945**
– POCI	**—**	**—**	**—**	**—**	**622**	**622**	**(191)**	**431**
Other financial assets measured at amortised cost	**1,751,481**	**222,194**	**328,716**	**798**	**465**	**2,303,654**	**(262)**	**2,303,392**
– stage 1	**1,749,522**	**216,767**	**322,244**	**242**	**—**	**2,288,775**	**(163)**	**2,288,612**
– stage 2	**1,959**	**5,427**	**6,472**	**556**	**—**	**14,414**	**(40)**	**14,374**
– stage 3	**—**	**—**	**—**	**—**	**464**	**464**	**(59)**	**405**
– POCI	**—**	**—**	**—**	**—**	**1**	**1**	**—**	**1**
Loans and other credit-related commitments	**1,421,125**	**312,185**	**142,824**	**10,509**	**5,758**	**1,892,401**	**(864)**	**1,891,537**
– stage 1	**1,414,708**	**284,689**	**116,144**	**5,814**	**—**	**1,821,355**	**(427)**	**1,820,928**
– stage 2	**6,417**	**27,496**	**26,680**	**4,695**	**—**	**65,288**	**(397)**	**64,891**
– stage 3	**—**	**—**	**—**	**—**	**5,758**	**5,758**	**(40)**	**5,718**
– POCI	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Financial guarantees	**14,274**	**11,643**	**8,649**	**1,012**	**68**	**35,646**	**(63)**	**35,583**
– stage 1	**13,938**	**9,994**	**6,627**	**179**	**—**	**30,738**	**(18)**	**30,720**
– stage 2	**336**	**1,649**	**2,022**	**833**	**—**	**4,840**	**(17)**	**4,823**
– stage 3	**—**	**—**	**—**	**—**	**68**	**68**	**(28)**	**40**
– POCI	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
At 31 Dec 2022	**5,780,902**	**1,322,423**	**1,216,093**	**93,487**	**69,673**	**8,482,578**	**(41,151)**	**8,441,427**
Debt instruments at FVOCI[1]								
– stage 1	**1,188,399**	**51,597**	**15,281**	**—**	**—**	**1,255,277**	**(60)**	**1,255,217**
– stage 2	**—**	**—**	**—**	**1,030**	**—**	**1,030**	**(269)**	**761**
– stage 3	**—**	**—**	**—**	**—**	**39**	**39**	**—**	**39**
– POCI	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
At 31 Dec 2022	**1,188,399**	**51,597**	**15,281**	**1,030**	**39**	**1,256,346**	**(329)**	**1,256,017**

The above table does not include balances due from Group companies.

1 *For the purposes of this disclosure, gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.*

2 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

Mainland China commercial real estate

The following table presents the group's exposure to borrowers classified in the CRE sector where the ultimate parent is based in mainland China, as well as all CRE exposures booked on mainland China balance sheets. The exposures at 31 December 2023 are split by country/territory and credit quality including allowances for ECL by stage.

Mainland China CRE exposure

(Audited)	At 31 Dec 2023			
	Hong Kong	**Mainland China**	**Rest of Asia-Pacific**	**Total**
	HK$m	**HK$m**	**HK$m**	**HK$m**
Loans and advances to customers[1]	**47,133**	**38,410**	**3,518**	**89,061**
Guarantees issued and others[2]	**1,993**	**518**	**86**	**2,597**
Total mainland China CRE exposure	**49,126**	**38,928**	**3,604**	**91,658**
Distribution of mainland China CRE exposure by credit quality				
– Strong	**6,100**	**13,458**	**57**	**19,615**
– Good	**4,719**	**7,445**	**3,283**	**15,447**
– Satisfactory	**5,308**	**13,313**	**84**	**18,705**
– Sub-standard	**10,142**	**2,557**	**180**	**12,879**
– Credit Impaired	**22,857**	**2,155**	**—**	**25,012**
	49,126	**38,928**	**3,604**	**91,658**
Allowance for ECL by credit quality				
– Strong	**—**	**(27)**	**—**	**(27)**
– Good	**(2)**	**(39)**	**(8)**	**(49)**
– Satisfactory	**(21)**	**(212)**	**—**	**(233)**
– Sub-standard	**(518)**	**(682)**	**(45)**	**(1,245)**
– Credit Impaired	**(13,484)**	**(977)**	**—**	**(14,461)**
	(14,025)	**(1,937)**	**(53)**	**(16,015)**
Allowance for ECL				
ECL Stage 1	**(4)**	**(77)**	**(8)**	**(89)**
ECL Stage 2	**(537)**	**(883)**	**(45)**	**(1,465)**
ECL Stage 3	**(13,484)**	**(977)**	**—**	**(14,461)**
	(14,025)	**(1,937)**	**(53)**	**(16,015)**
ECL coverage %	**28.5**	**5.0**	**1.5**	**17.5**

	At 31 Dec 2022			
	Hong Kong	Mainland China	Rest of Asia-Pacific	Total
	HK$m	HK$m	HK$m	HK$m
Loans and advances to customers[1]	71,148	44,843	3,570	119,561
Guarantees issued and others[2]	1,957	5,884	268	8,109
Total mainland China CRE exposure	73,105	50,727	3,838	127,670
Distribution of mainland China CRE exposure by credit quality				
– Strong	11,105	16,510	638	28,253
– Good	5,431	8,475	2,543	16,449
– Satisfactory	9,896	17,521	168	27,585
– Sub-standard	22,509	6,072	349	28,930
– Credit Impaired	24,164	2,149	140	26,453
	73,105	50,727	3,838	127,670
Allowance for ECL by credit quality				
– Strong	—	(39)	—	(39)
– Good	(2)	(60)	(5)	(67)
– Satisfactory	(153)	(637)	(3)	(793)
– Sub-standard	(3,570)	(326)	(14)	(3,910)
– Credit Impaired	(9,884)	(816)	0	(10,700)
	(13,609)	(1,878)	(22)	(15,509)
Allowance for ECL				
ECL Stage 1	(6)	(69)	(4)	(79)
ECL Stage 2	(3,719)	(993)	(18)	(4,730)
ECL Stage 3	(9,884)	(816)	—	(10,700)
	(13,609)	(1,878)	(22)	(15,509)
ECL coverage %	18.6	3.7	0.6	12.1

1 *Amounts represent gross carrying amount.*
2 *Amounts represent nominal amount for guarantees and other contingent liabilities.*

(Unaudited)

Commercial real estate financing refers to lending that focuses on commercial development and investment in real estate and covers commercial, residential and industrial assets. The exposures in the table are related to companies whose primary activities are focused on these activities. Lending is generally focused on tier 1 and 2 cities. The table also includes financing provided to a corporate or financial entity for the purchase or financing of a property which supports the overall operations of the business. Such exposures are outside of our normal definition of Commercial Real Estate, as applied elsewhere in this report, but are provided here for a more comprehensive view of our mainland property exposure.

The table above shows 59% (HK$54bn) of total exposure with a credit quality of 'satisfactory' or above, which was slightly higher in proportion compared with 31 December 2022 (57%, HK$72bn). Total 'credit impaired' exposures increased to 27% (HK$25bn) (31 December 2022: 21%, HK$26bn), reflecting sustained stress in the China commercial real estate market, including weakness in both property market fundamentals and financing conditions for borrowers operating in this sector.

Allowances for ECL are substantially against unsecured exposures. For secured exposures, allowances for ECL are minimal, reflecting the nature and value of the security held.

Facilities booked in Hong Kong continued to represent the largest proportion of mainland China commercial real estate exposures, although total exposures reduced to HK$49bn, down HK$24bn since 31 December 2022, as a result of de-risking measures, repayments and write-offs. This portfolio remains relatively higher risk, with 33% (31 December 2022: 36%) of exposure booked with a credit quality of 'satisfactory' or above and 47% 'credit impaired' (31 December 2022: 33%). At 31 December 2023, the group had allowances for ECL of HK$14bn (31 December 2022: HK$14bn) held against mainland China commercial real estate exposures booked in Hong Kong. ECL coverage increased to 29% (31 December 2022: 19%), reflecting a further credit deterioration during the year.

Approximately half of the unimpaired exposure in the Hong Kong portfolio is lending to state-owned enterprises and relatively strong private-owned enterprises. This is reflected in the relatively low ECL allowance in this part of the portfolio.

Market conditions are likely to remain subdued with a protracted recovery as sentiment and domestic residential demand remain weak, with ongoing refinancing and liquidity risk for corporates operating in this market. The divergence between Privately Owned Enterprises (POE) and State Owned Enterprises (SOE) is likely to continue, with SOEs achieving above market sales performance and benefitting from market share gains and better access to funding.

The group has additional exposures to mainland China commercial real estate as a result of lending to multinational corporates booked outside of mainland China. These are not incorporated in the table above.

Credit-impaired loans

(Audited)

We determine that a financial instrument is credit impaired and in stage 3 by considering relevant objective evidence, primarily whether:

- contractual payments of either principal or interest are past due for more than 90 days;
- there are other indications that the borrower is unlikely to pay, such as when a concession has been granted to the borrower for economic or legal reasons relating to the borrower's financial condition; and
- the loan is otherwise considered to be in default. If such unlikeliness to pay is not identified at an earlier stage, it is deemed to occur when an exposure is 90 days past due, even where regulatory rules permit default to be defined based on 180 days past due. Therefore, the definitions of credit impaired and default are aligned as far as possible so that stage 3 represents all loans that are considered defaulted or otherwise credit impaired.

Collateral and other credit enhancements

(Audited)

Although collateral can be an important mitigant of credit risk, it is the group's practice to lend on the basis of the customer's ability to meet their obligations out of cash flow resources rather than placing primary reliance on collateral and other credit risk enhancements. Depending on the customer's standing and the type of product, facilities may be provided without any collateral or other credit enhancements. For other lending, a charge over collateral is obtained and considered in determining the credit decision and pricing. In the event of default, the bank may utilise the collateral as a source of repayment.

Depending on its form, collateral can have a significant financial effect in mitigating our exposure to credit risk. Where there is sufficient collateral, an expected credit loss is not recognised. This is the case for reverse repurchase agreements and for certain loans and advances to customers where the loan to value ('LTV') is very low.

Mitigants may include a charge on borrowers' specific assets, such as real estate or financial instruments. Other credit risk mitigants include short positions in securities and financial assets held as part of linked insurance/investment contracts where the risk is predominantly borne by the policyholder.

Additionally, risk may be managed by employing other types of collateral and credit risk enhancements, such as second charges, other liens and unsupported guarantees. Guarantees are normally taken from corporates and export credit agencies. Corporates would normally provide guarantees as part of a parent/subsidiary relationship and span a number of credit grades. The export credit agencies will normally be investment grade.

Certain credit mitigants are used strategically in portfolio management activities. While single name concentrations arise in portfolios managed by Global Banking and Corporate Banking, it is only in Global Banking that their size requires the use of portfolio level credit mitigants. Across Global Banking, risk limits and utilisations, maturity profiles and risk quality are monitored and managed proactively. This process is key to the setting of risk appetite for these larger, more complex, geographically distributed customer groups. While the principal form of risk management continues to be at the point of exposure origination, through the lending decision-making process, Global Banking also utilises loan sales and credit default swap ('CDS') hedges to manage concentrations and reduce risk. These transactions are the responsibility of a dedicated Global Banking portfolio management team. Hedging activity is carried out within agreed credit parameters, and is subject to market risk limits and a robust governance structure. Where applicable, CDSs are entered into directly with a central clearing house counterparty. Otherwise, our exposure to CDS protection providers is diversified among mainly banking counterparties with strong credit ratings.

CDS mitigants are held at portfolio level and are not included in the expected credit loss calculations. CDS mitigants are not reported in the presentation below.

Collateral on loans and advances

(Audited)

The collateral measured in the following tables consists of fixed first charges on real estate, and charges over cash and marketable financial instruments. The values in the tables represent the expected market value on an open market basis; no adjustment has been made to the collateral for any expected costs of recovery. Marketable securities are measured at their fair value.

Other types of collateral such as unsupported guarantees and floating charges over the assets of a customer's business are not measured in the following tables. While such mitigants have value, often providing rights in insolvency, their assignable value is not sufficiently certain and they are therefore assigned no value for disclosure purposes.

The LTV ratios presented are calculated by directly associating loans and advances with the collateral that individually and uniquely supports each facility. When collateral assets are shared by multiple loans and advances, whether specifically or, more generally, by way of an all monies charge, the collateral value is pro-rated across the loans and advances protected by the collateral.

For credit-impaired loans, the collateral values cannot be directly compared with impairment allowances recognised. The LTV figures use open market values with no adjustments.

Impairment allowances are calculated on a different basis, by considering other cash flows and adjusting collateral values for costs of realising collateral.

Personal lending

(Unaudited)

The following table provides a quantification of the value of fixed charges we hold over specific assets where we have a history of enforcing, and are able to enforce, collateral in satisfying a debt in the event of the borrower failing to meet its contractual obligations, and where the collateral is cash or can be realised by sale in an established market.

The collateral valuation excludes any adjustments for obtaining and selling the collateral and, in particular, loans shown as not collateralised or partially collateralised may also benefit from other forms of credit mitigants.

Residential mortgages including loan commitments by level of collateral

(Audited)

	2023		2022	
	Gross carrying/ nominal amount	**ECL coverage**	Gross carrying/ nominal amount	ECL coverage
	HK$m	**%**	HK$m	%
Stage 1				
Fully collateralised	**1,182,015**	**0.0**	1,147,024	0.0
LTV ratio:				
– less than 70%	**909,167**	**0.0**	918,527	0.0
– 71% to 90%	**175,712**	**0.0**	147,785	0.0
– 91% to 100%	**97,136**	**0.0**	80,712	0.0
Partially collateralised (A):	**70,126**	**0.0**	50,317	0.0
– *collateral value on A*	***66,696***		*48,009*	
Total	**1,252,141**	**0.0**	1,197,341	0.0
Stage 2				
Fully collateralised	**25,573**	**0.3**	33,972	0.2
LTV ratio:				
– less than 70%	**17,326**	**0.2**	24,401	0.1
– 71% to 90%	**7,438**	**0.5**	8,730	0.4
– 91% to 100%	**809**	**0.6**	841	0.5
Partially collateralised (B):	**703**	**1.3**	425	0.7
– *collateral value on B*	***660***		*401*	
Total	**26,276**	**0.3**	34,397	0.2
Stage 3				
Fully collateralised	**4,555**	**4.0**	5,696	4.3
LTV ratio:				
– less than 70%	**3,477**	**3.5**	3,935	3.6
– 71% to 90%	**942**	**5.1**	1,270	5.6
– 91% to 100%	**136**	**11.0**	491	6.3
Partially collateralised (C):	**105**	**21.9**	113	40.7
– *collateral value on C*	***93***		*95*	
Total	**4,660**	**4.4**	5,809	5.0
At 31 Dec	**1,283,077**	**0.0**	1,237,547	0.0

Other personal lending

(Unaudited)

Other personal lending consists primarily of personal loans, overdrafts and credit cards, all of which are generally unsecured, except lending to private banking customers which are generally secured.

Commercial real estate loans and advances

(Unaudited)

The value of commercial real estate collateral is determined by using a combination of external and internal valuations and physical inspections. For commercial real estate, where the facility exceeds regulatory threshold requirements, group policy requires an independent review of the valuation at least every three years, or more frequently as the need arises. In Hong Kong, market practice is typically for lending to major property companies to be either secured by guarantees or unsecured.

Commercial real estate loans and advances including loan commitments by level of collateral[1]

(Audited)

	2023		2022	
	Gross carrying nominal amount	**ECL coverage**	Gross carrying/ nominal amount	ECL coverage
	HK$m	**%**	HK$m	%
Stage 1				
Not collateralised	**217,922**	**0.0**	239,954	0.0
Fully collateralised	**206,940**	**0.1**	262,850	0.1
Partially collateralised (A):	**33,909**	**0.1**	13,898	0.1
– *collateral value on A*	***21,536***		*7,292*	
Total	**458,771**	**0.0**	516,702	0.1
Stage 2				
Not collateralised	**27,679**	**4.8**	50,935	7.7
Fully collateralised	**81,164**	**2.8**	85,421	1.9
Partially collateralised (B):	**7,487**	**1.4**	7,941	2.0
– *collateral value on B*	***5,558***		*4,692*	
Total	**116,330**	**3.2**	144,297	4.0
Stage 3				
Not collateralised	**17,904**	**77.7**	16,725	57.2
Fully collateralised	**10,034**	**8.7**	8,724	11.1
Partially collateralised (C):	**508**	**21.1**	982	36.2
– *collateral value on C*	***355***		*697*	
Total	**28,446**	**52.4**	26,431	41.2
POCI				
Not collateralised	**—**	**—**	—	—
Fully collateralised	**—**	**—**	—	—
Partially collateralised (D):	**117**	**—**	145	—
– *collateral value on D*	***65***		*65*	
Total	**117**	**—**	145	—
At 31 Dec	**603,664**	**3.1**	687,575	2.5

1 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

Other corporate, commercial and non-bank financial institutions lending

(Unaudited)

Other corporate, commercial and financial (non-bank) loans are analysed separately in the following table. For financing activities in other corporate and commercial lending, collateral value is not strongly correlated to principal repayment performance.

Collateral values are generally refreshed when an obligor's general credit performance deteriorates and we have to assess the likely performance of secondary sources of repayment should it prove necessary to rely on them.

Accordingly, the following table reports values only for customers with CRR 8–10, recognising that these loans and advances generally have valuations that are comparatively recent.

Other corporate, commercial and non-bank financial institutions loans and advances including loan commitments by level of collateral[1]

(Audited)

	2023		2022	
	Gross carrying/ nominal amount	**ECL coverage**	Gross carrying/ nominal amount	ECL coverage
	HK\$m	**%**	HK\$m	%
Stage 1				
Not collateralised	**2,260,409**	**0.1**	2,155,095	0.1
Fully collateralised	**348,895**	**0.1**	371,035	0.1
Partially collateralised (A):	**260,554**	**0.0**	246,654	0.1
– *collateral value on A*	***96,226***		*97,058*	
Total	**2,869,858**	**0.1**	2,772,784	0.1
Stage 2				
Not collateralised	**297,925**	**0.3**	314,107	0.5
Fully collateralised	**83,629**	**1.3**	128,648	1.0
Partially collateralised (B):	**39,338**	**0.4**	55,804	0.6
– *collateral value on B*	***15,892***		*22,737*	
Total	**420,892**	**0.5**	498,559	0.6
Stage 3				
Not collateralised	**12,895**	**65.1**	14,373	68.2
Fully collateralised	**7,736**	**8.8**	5,689	7.2
Partially collateralised (C):	**7,675**	**33.7**	8,956	37.0
– *collateral value on C*	***3,618***		*4,480*	
Total	**28,306**	**41.2**	29,018	46.6
POCI				
Not collateralised	**—**	**—**	138	1.4
Fully collateralised	**173**	**94.8**	183	92.9
Partially collateralised (D):	**—**	**—**	156	12.2
– *collateral value on D*	***—***		*125*	
Total	**173**	**94.8**	477	40.0
At 31 Dec	**3,319,229**	**0.5**	3,300,838	0.6

1 From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.

Other credit risk exposures

(Unaudited)

In addition to collateralised lending described above, other credit enhancements are employed and methods used to mitigate credit risk arising from financial assets. These are summarised below:

- Some securities issued by governments, banks and other financial institutions may benefit from additional credit enhancements provided by government guarantees that cover the assets.
- Debt securities issued by banks and financial institutions include asset-backed securities ('ABSs') and similar instruments, which are supported by underlying pools of financial assets. Credit risk associated with ABSs is reduced through the purchase of credit default swap ('CDS') protection.
- The group's maximum exposure to credit risk includes financial guarantees and similar contracts granted, as well as loan and other credit-related commitments. Depending on the terms of the arrangement, we may use additional credit mitigation if a guarantee is called upon or a loan commitment is drawn and subsequently defaults.

Derivatives

(Unaudited)

We participate in transactions exposing us to counterparty credit risk. Counterparty credit risk is the risk of financial loss if the counterparty to a transaction defaults before satisfactorily settling it. It arises principally from over-the-counter ('OTC') derivatives and securities financing transactions and is calculated in both the trading and non-trading books. Transactions vary in value by reference to a market factor such as an interest rate, exchange rate or asset price.

The counterparty risk from derivative transactions is taken into account when reporting the fair value of derivative positions. The adjustment to the fair value is known as the credit value adjustment ('CVA').

Treasury Risk

Overview

(Unaudited)

Treasury risk is the risk of having insufficient capital, liquidity or funding resources to meet financial obligations and satisfy regulatory requirements, including the risk of adverse impact on earnings or capital due to structural or transactional foreign exchange exposures and changes in market interest rates, together with pension and insurance risk.

Treasury risk arises from changes to the respective resources and risk profiles driven by customer behaviour, management decisions or the external environment.

Approach and policy

Our objective in the management of treasury risk is to maintain appropriate levels of capital, liquidity, funding, foreign exchange and market risk to support our business strategy, and meet our regulatory and stress testing-related requirements.

Our approach to treasury management is driven by our strategic and organisational requirements, taking into account the regulatory, economic and commercial environment. We aim to maintain a strong capital and liquidity base to support the risks inherent in our business and invest in accordance with our strategy, meeting both consolidated and local regulatory requirements at all times.

Our policy is underpinned by our risk management framework. The risk management framework incorporates a number of measures aligned to our assessment of risks for both internal and regulatory purposes. These risks include credit, market, operational, pensions, structural and transactional foreign exchange risk, and interest rate risk in the banking book.

Treasury risk management

Key developments in 2023

(Unaudited)

- The roll out of our second line of defence capabilities, providing independent oversight of treasury activities across capital risk, liquidity and funding risk, interest rate risk in the banking book ('IRRBB') in Asia-Pacific sites have been completed during 2023.
- The implementation of hold-to-collect business model was completed for Asia-Pacific sites. Compared to previous years our portfolio of hold-to-collect assets now forms a larger part of the liquid asset buffer as well as a hedge to our structural interest rate risk. This allows us more flexibility in managing the hold-to-collect-and-sell portfolio to optimise returns from market movements while safeguarding the group capital and future earnings.
- Following high-profile US and Swiss banking failures in the first quarter of 2023, the existing risk management practices including stress testing and limit setting were validated. Additionally, liquidity monitoring and metric assumptions as part of the internal liquidity adequacy assessment process ('ILAAP') cycle were reviewed to ensure they continued to cover observed and emerging risks.
- Continued to improve our analysis and understanding of the drivers of capital volatility and the underlying sensitivities, ensuring these are actively considered in our risk appetite and limit setting processes.
- Continued to increase the stabilisation of our net interest income ('NII') as interest rate expectations fluctuated, driven by central bank rate increases and a reassessment of the trajectory of inflation in major economies.

Governance and structure

(Unaudited)

The Board approves the policy and risk appetite for capital risk, liquidity and funding risk, and IRRBB. It is supported and advised by the RC.

The Global Treasury sub-function manages capital, liquidity and funding risk and structural foreign exchange risk on an on-going basis and provides support to the Asset and Liability Management Committee ('ALCO'), and is overseen by the Treasury Risk Management sub-function ('TRM') and the RMM.

The Global Treasury sub-function also manages interest rate risk in the banking book, maintaining the transfer pricing framework and informing the regional and local ALCOs of the group and site's overall banking book interest rate exposure. Banking book interest rate positions may be transferred to be managed by the Global Treasury sub-function, within the market risk limits approved by the RMM.

Pension risk is managed through a network of local governance forums. The regional Pension Risk Management Meeting oversees all pension plans sponsored by HSBC in Asia-Pacific, and is chaired by the Regional Head of Traded and Treasury Risk Management.

The Treasury Risk Management sub-function carries out independent review, challenge and assurance of the appropriateness of the risk management activities undertaken by Global Treasury. Internal Audit provides independent assurance that risk is managed effectively.

Capital risk

Overview

(Audited)

Our approach to capital management is driven by our strategic and organisational requirements, taking into account the regulatory, economic and commercial environment in which we operate.

It is our objective to maintain a strong capital base to support the risks inherent in our business, to invest in accordance with our strategy and to meet regulatory capital requirements at all times. To achieve this, our policy is to hold capital in a range of different forms and all capital raising is agreed with major subsidiaries as part of their individual and the group's capital management processes.

Framework

(Audited)

Our capital management policy is underpinned by a capital management framework. The framework sets out our approach to determining key capital risk appetites for CET1, Tier1, Total capital, Loss Absorbing Capacity ('LAC') and the Leverage Ratio, which enables us to manage our capital in a consistent manner. Regulatory capital and economic capital are the two primary measures used for the management and control of capital.

Capital measures:

- regulatory capital is the capital which we are required to hold in accordance with the rules established by regulators; and
- economic capital is the internally calculated capital requirement to support risks to which we are exposed and forms a core part of the internal capital adequacy assessment process ('ICAAP').

Our ICAAP is an assessment of the group's capital position, outlining both regulatory and internal capital resources and requirements resulting from our business model, strategy, risk profile, performance and planning, and the findings arising from stress testing. Our assessment of capital adequacy is driven by an assessment of risks. These risks include credit, market, operational, pensions, insurance, structural foreign exchange and interest rate risk in the banking book. Climate risk is also considered as part of the ICAAP, and we are continuing to develop our approach for climate risk management.

The group's ICAAP supports the determination of the capital risk appetite and target ratios, as well as enables the assessment and determination of capital requirements by regulators. Banking subsidiaries prepare ICAAPs in line with global guidance, while considering their local regulatory regimes to determine their own risk appetites and ratios.

Our capital management process is articulated in our annual capital plan which is approved by the Board. The plan is designed with the objective of maintaining both an appropriate amount of capital and an optimal mix between the different components of capital. Capital and Risk-Weighted Assets ('RWAs') are monitored and managed against the plan, with capital forecasts reported to relevant governance committees. Each subsidiary manages its own capital to support its planned business growth and meet its local regulatory requirements within the context of the approved annual group capital plan. In accordance with our capital management objectives, capital generated by subsidiaries in excess of planned requirements is returned to the Bank, normally by way of dividends.

The Bank is the primary provider of capital to its subsidiaries and these investments are substantially funded by the Bank's own capital issuance and profit retention. As part of its capital management process, the Bank seeks to maintain a prudent balance between the composition of its capital and that of its investment in subsidiaries.

The principal forms of capital are included in the following balances on the consolidated balance sheet: share capital, other equity instruments, retained earnings, other reserves and subordinated liabilities.

Regulatory capital requirements

(Audited)

The Hong Kong Monetary Authority ('HKMA') supervises the group on both a consolidated and solo-consolidated basis and therefore receives information on the capital adequacy of, and sets capital requirements for, the group as a whole and on a solo-consolidated basis. Individual banking subsidiaries and branches are directly regulated by their local banking supervisors, who set and monitor their capital adequacy requirements. In most jurisdictions, non-banking financial subsidiaries are also subject to the supervision and capital requirements of local regulatory authorities.

The group uses the advanced internal ratings-based approach to calculate its credit risk for the majority of its non-securitisation exposures. For collective investment scheme exposures, the group uses the look-through approach and mandate-based approach to calculate the risk-weighted amount. For securitisation exposures, the group uses the securitisation internal ratings-based approach, securitisation external ratings-based approach or securitisation standardised approach to determine credit risk for its banking book securitisation exposures. For counterparty credit risk, the group uses both the standardised (counterparty credit risk) approach and the internal models (counterparty credit risk) approach to calculate its default risk exposures for derivatives, and the comprehensive approach for securities financing transactions. For market risk, the group uses an internal models method approach ('IMM') to calculate its general market risk for the risk categories of interest rate and foreign exchange (including gold) exposures, and equity exposures. The group also uses an IMM approach to calculate its market risk in respect of specific risk for interest rate exposures and equity exposures. The group uses the standardised (market risk) approach for calculating other market risk positions, as well as trading book securitisation exposures, and the standardised (operational risk) approach to calculate its operational risk.

During the year, the group complied with all the capital requirements of HKMA on both a consolidated and solo-consolidated basis.

Basel III

(Unaudited)

The Basel III capital rules set out the minimum CET1 capital requirement of 4.5% and total capital requirement of 8%. At 31 December 2023, the capital buffers applicable to the group include the Capital Conservation Buffer ('CCB'), the Countercyclical Capital Buffer ('CCyB') and the Higher Loss Absorbency ('HLA') requirement for Domestic Systemically Important Banks ('D-SIB'). The CCB is 2.5% and is designed to ensure banks build up capital outside periods of stress. The CCyB is set on an individual country/territory basis and is built up during periods of excess credit growth to protect against future losses. The CCyB for Hong Kong and the list of D-SIB are regularly reviewed and last announced by the HKMA on 03 November 2023 and 29 December 2023 respectively. In its latest announcement, the HKMA maintained the CCyB for Hong Kong at 1.0% and maintained the D-SIB designation as well as HLA requirement at 2.5% for the group.

The group is classified as a material subsidiary under the Financial Institutions (Resolution) (Loss-absorbing Capacity Requirements – Banking Sector) Rules ('LAC Rules') and therefore is subject to the LAC requirements to maintain its internal LAC risk-weighted ratio and the internal LAC leverage ratio at or above specified minimums.

Leverage ratio

(Unaudited)

Basel III introduces a simple non risk-based leverage ratio as a complementary measure to the risk-based capital requirements. It aims to constrain the build-up of excess leverage in the banking sector, introducing additional safeguards against model risk and measurement errors. The ratio is a volume-based measure calculated as Tier 1 capital divided by total exposures (both on-balance sheet and off-balance sheet).

	At	
	31 Dec 2023	31 Dec 2022
	%	%
Leverage ratio	**5.8**	5.9
Capital and leverage ratio exposure measure	**HK$m**	HK$m
Tier 1 capital	**562,454**	545,572
Total exposure measure	**9,672,960**	9,301,363

The decrease in the leverage ratio from 31 December 2022 to 31 December 2023 was mainly due to the rise in the exposure measure, partly offset by the increase in Tier 1 capital.

Further details regarding the group's leverage position can be viewed in the Banking Disclosure Statement at 31 December 2023, which will be available in the Regulatory Disclosure Section of our website: www.hsbc.com.hk.

Capital adequacy at 31 December 2023

(Unaudited)

The following tables show the capital ratios, RWAs and capital base as contained in the 'Capital Adequacy Ratio' return submitted to the HKMA on a consolidated basis under the requirements of section 3C(1) of the Banking (Capital) Rules.

The basis of consolidation for financial accounting purposes is described in Note 1 on the consolidated financial statements and differs from that used for regulatory purposes. Further information on the regulatory consolidation basis and a full reconciliation between the group's accounting and regulatory balance sheets can be viewed in the Banking Disclosure Statement 2023. Subsidiaries not included in the group's consolidation for regulatory purposes are primarily securities and insurance companies. The capital invested by the group in these companies is deducted from regulatory capital, subject to threshold.

The Bank and its banking subsidiaries maintain regulatory reserves to satisfy the provisions of the Banking Ordinance and local regulatory requirements for prudential supervision purposes.

At 31 December 2023, the effect of this regulatory reserve requirement is to reduce the amount of reserves which can be distributed to shareholders by HK$19,045m (31 December 2022: HK$16,413m).

We closely monitor and consider future regulatory change and continue to evaluate the impact upon our capital requirements of regulatory developments. This includes the Basel III Reforms package, which is scheduled for implementation by the HKMA on 1 January 2025. We continue to monitor progress on the implementation. Based on the results of the final HKMA rules, we foresee a positive impact on our capital ratios on initial application. The standardized risk-weighted asset ('RWA') output floor under the Basel III Reforms will be phased in over five years from initial implementation. Any impact from the output floor would be towards the end of the phase in period.

Capital ratios

(Unaudited)

	At	
	31 Dec 2023	31 Dec 2022
	%	%
Common Equity Tier 1 ('CET1') capital ratio	**15.8**	15.3
Tier 1 capital ratio	**17.5**	16.9
Total capital ratio	**19.7**	18.8

Risk-weighted assets by risk type

(Unaudited)

	At	
	31 Dec 2023	31 Dec 2022
	HK$m	HK$m
Credit risk	**2,536,239**	2,589,633
Counterparty credit risk	**136,866**	133,290
Market risk	**158,707**	160,533
Operational risk	**380,575**	337,004
Sovereign concentration risk	**—**	1,708
Total	**3,212,387**	3,222,168

Risk-weighted assets by reportable segments

(Unaudited)

	At	
	31 Dec 2023	31 Dec 2022
	HK$m	HK$m
Wealth and Personal Banking	**624,746**	640,626
Commercial Banking	**1,222,999**	1,209,888
Global Banking	**569,199**	562,404
Markets and Securities Services	**339,307**	410,401
Corporate Centre	**342,277**	338,254
Other (GBM-other)	**113,859**	60,595
Total	**3,212,387**	3,222,168

Capital base

(Unaudited)

The following table sets out the composition of the group's capital base under Basel III at 31 December 2023.

Capital base

(Unaudited)

	At	
	31 Dec 2023	31 Dec 2022
	HK$m	HK$m
Common Equity Tier 1 ('CET1') capital		
Shareholders' equity	**733,940**	727,880
– shareholders' equity per balance sheet	**812,726**	807,552
– revaluation reserve capitalisation issue	**(1,454)**	(1,454)
– other equity instruments	**(52,465)**	(52,386)
– unconsolidated subsidiaries	**(24,867)**	(25,832)
Non-controlling interests	**28,330**	30,106
– non-controlling interests per balance sheet	**59,860**	56,828
– non-controlling interests in unconsolidated subsidiaries	**(2,437)**	(2,250)
– surplus non-controlling interests disallowed in CET1	**(29,093)**	(24,472)
Regulatory deductions to CET1 capital	**(253,666)**	(266,424)
– valuation adjustments	**(2,291)**	(2,376)
– goodwill and intangible assets	**(33,949)**	(32,064)
– deferred tax assets net of deferred tax liabilities	**(3,754)**	(3,688)
– cash flow hedging reserve	**(2,018)**	233
– changes in own credit risk on fair valued liabilities	**2,264**	(3,494)
– defined benefit pension fund assets	**(50)**	(27)
– significant Loss-absorbing Capacity ('LAC') investments in unconsolidated financial sector entities	**(127,173)**	(140,987)
– property revaluation reserves[1]	**(67,650)**	(67,608)
– regulatory reserve	**(19,045)**	(16,413)
Total CET1 capital	**508,604**	491,562
Additional Tier 1 ('AT1') capital		
Total AT1 capital before regulatory deductions	**53,850**	54,019
– perpetual subordinated loans	**52,465**	52,386
– allowable non-controlling interests in AT1 capital	**1,385**	1,633
Regulatory deductions to AT1 capital	**—**	(9)
– significant LAC investments in unconsolidated financial sector entities	**—**	(9)
Total AT1 capital	**53,850**	54,010
Total Tier 1 capital	**562,454**	545,572
Tier 2 capital		
Total Tier 2 capital before regulatory deductions	**72,391**	68,118
– term subordinated debt	**26,060**	19,505
– property revaluation reserves[1]	**31,097**	31,078
– impairment allowances and regulatory reserve eligible for inclusion in Tier 2 capital	**14,260**	16,008
– allowable non-controlling interests in Tier 2 capital	**974**	1,527
Regulatory deductions to Tier 2 capital	**(3,144)**	(6,378)
– significant LAC investments in unconsolidated financial sector entities	**(3,144)**	(6,378)
Total Tier 2 capital	**69,247**	61,740
Total capital	**631,701**	607,312

1 *Includes the revaluation surplus on investment properties which is reported as part of retained earnings and adjustments made in accordance with the Banking (Capital) Rules issued by the HKMA.*

The impairment of BoCom has an insignificant impact on the group's total capital and CET1 capital due to the compensating release of regulatory capital deduction to offset the impairment charge.

A detailed breakdown of the group's CET1 capital, AT1 capital, Tier 2 capital and regulatory deductions can be viewed in the Banking Disclosure Statement 2023.

Non-trading book foreign exchange exposures

Structural foreign exchange exposures

(Unaudited)

Structural foreign exchange exposures arise from net assets or capital investments in foreign operations together with any associated hedging. A foreign operation is defined as a subsidiary, associate, joint arrangement or branch, where the activities are conducted in a currency other than that of the reporting entity. An entity's functional reporting currency is normally that of the primary economic environment in which the entity operates.

Exchange differences on structural exposures are recognised in other comprehensive income ('OCI'). We use Hong Kong dollar as our presentation currency in our consolidated financial statements. Therefore, our consolidated balance sheet is affected by exchange differences between Hong Kong dollar and all the non-Hong Kong dollar functional currencies of underlying foreign operations.

Our structural foreign exchange exposures are managed with the primary objective of ensuring, where practical, that our consolidated capital ratios and the capital ratios of individual banking subsidiaries and foreign branches subject to minimum regulatory capital requirements are largely protected from the effect of changes in exchange rates.

We hedge structural foreign exchange positions where it is capital efficient to do so, and subject to approved limits. Hedging positions are monitored and rebalanced periodically to manage RWA or downside risks associated with the group's foreign currency investments.

The group had the following net structural foreign currency exposures that were greater than 10% of the total net structural foreign currency exposures:

	Local Currency (m)	Equivalent (HK$m)
At 31 Dec 2023		
Renminbi	**232,642**	**255,961**
US dollars	**11,176**	**87,314**
At 31 Dec 2022[1]		
Renminbi	240,745	272,269
US dollars	10,891	84,902

1 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparatives data have been restated accordingly.*

Transactional foreign exchange exposures

(Unaudited)

Transactional foreign exchange exposures arise from transactions in the banking book generating profit and loss or OCI reserves in a currency other than the reporting currency of the operating entity. Transactional foreign exchange exposure generated through profit and loss is periodically transferred to Markets and Securities Services and managed within limits with the exception of limited residual foreign exchange exposure arising from timing differences or for other reasons. Transactional foreign exchange exposure generated through OCI reserves is managed by the Global Treasury sub-function within an agreed limit framework.

Liquidity and funding risk

Overview

(Audited)

Liquidity Risk is the risk that an entity does not have sufficient resources to meet its financial obligations when they fall due, or can only secure them at excessive cost. This may cause potential breaches in regulatory or internal metrics such as the Liquidity Coverage Ratio ('LCR') or the Internal Liquidity Metrics ('ILM'). Funding Risk is the risk that an entity does not have sufficiently stable and diverse sources of funding or the funding structure is inefficient. This may cause potential breaches in regulatory or internal metrics such as the Net Stable Funding Ratio ('NSFR').

The group has comprehensive policies, metrics and controls to manage liquidity and funding risk. The group manages liquidity and funding risk at an operating entity level to make sure that obligations can be met in the jurisdiction where they fall due, generally without reliance on other parts of the group.

Operating entities are required to meet internal and applicable regulatory requirements at all times. These requirements are assessed through the ILAAP, which ensures that operating entities have robust strategies, processes and systems for the identification, measurement, management and monitoring of liquidity and funding risk over an appropriate set of time horizons, including intra-day. The ILAAP supports determination of liquidity and funding risk appetite and also assesses the capability to manage liquidity and funding effectively in each major entity. Liquidity and funding risk metrics are set and managed locally but are subject to global review and challenge to ensure consistency of approach and application of the Group's policies and controls.

Framework

(Unaudited)

The Global Treasury sub-function is responsible for the application of policies and controls at a local operating entity level. The elements of liquidity and funding risk management framework are underpinned by a robust governance framework, with the two major elements being:

- Asset and Liability Management Committees ('ALCOs') at the group and entity level; and
- annual ILAAP support determination of risk appetite.

All operating entities are required to prepare an ILAAP document at appropriate frequency. Compliance with liquidity and funding requirements is monitored and reported to ALCO, RMM and Executive Committee on a regular basis.

Liquidity and Funding Risk management processes include:

- maintaining compliance with relevant regulatory requirements of the operating entity;
- projecting cash flows under various stress scenarios and considering the level of liquid assets necessary in relation thereto;
- monitoring liquidity and funding ratios against internal and regulatory requirements;
- maintaining a diverse range of funding sources with adequate back-up facilities;
- managing the concentration and profile of term funding;
- managing contingent liquidity commitment exposures within pre-determined limits;
- maintaining debt financing plans;
- monitoring of depositor concentration in order to avoid undue reliance on large individual depositors and ensuring a satisfactory overall funding mix; and
- maintaining liquidity and funding contingency plans. These plans identify early indicators of stress conditions and describe actions to be taken during stress, while minimising adverse long-term implications for the business.

Management of liquidity and funding risk

(Audited)

Funding and liquidity plans form part of the financial resource plan that is approved by the Board. The Board-level risk appetite measures are the LCR, ILM and NSFR. An appropriate funding and liquidity profile is managed through a wider set of measures:

- a minimum LCR requirement;
- a minimum NSFR requirement or other appropriate metric;
- an ILM requirement;
- a legal entity depositor concentration limit;
- cumulative term funding maturity concentrations limit;
- liquidity metrics to monitor minimum requirement by currency;
- intra-day liquidity;
- the application of liquidity funds transfer pricing; and
- forward-looking funding assessments.

Sources of funding

(Unaudited)

Our primary sources of funding are customer current accounts, customer savings deposits payable on demand or at short notice and term deposits. We issue wholesale securities (secured and unsecured) to supplement our customer deposits and change the currency mix, maturity profile or location of our liabilities.

Currency mismatch

(Unaudited)

Group policy requires all operating entities to manage currency mismatch risks for material currencies. Limits are set to ensure that outflows can be met, given assumptions on stressed capacity in the FX swap markets.

Additional collateral obligations

(Unaudited)

Under the terms of our current collateral obligations of derivative contracts (which are International Swaps and Derivatives Association ('ISDA') compliant credit support annex ('CSA') contracts), the additional collateral required to post in the event of one-notch and two-notch downgrade in credit ratings is immaterial.

Liquidity and funding risk in 2023

(Unaudited)

The group is required to calculate its LCR and NSFR on a consolidated basis in accordance with rule 11(1) of The Banking (Liquidity) Rules ('BLR'), and is required to maintain both LCR and NSFR of not less than 100%.

The average LCR of the group for the period are as follows:

	Quarter ended	
	31 Dec 2023	31 Dec 2022
	%	%
Average LCR	**168.9**	157.8

The 3-month average LCR increased by 11.1 percentage points from 157.8% for the quarter ended 31 December 2022 to 168.9% for the quarter ended 31 December 2023, mainly as a result of an increase in customer deposits.

The majority of high quality liquid assets ('HQLA') included in the LCR are Level 1 assets as defined in the BLR, which consist mainly of government debt securities.

The total weighted amount of HQLA of the group for the period are as follows:

	Weighted amount (average value) at quarter ended	
	31 Dec 2023	31 Dec 2022
	HK$m	HK$m
Level 1 assets	**1,789,314**	1,744,471
Level 2A assets	**87,633**	80,348
Level 2B assets	**61,953**	61,184
Total	**1,938,900**	1,886,003

The NSFR of the group for the period are as follows:

	Quarter ended	
	31 Dec 2023	31 Dec 2022
	%	%
Net stable funding ratio	**156.0**	152.3

The NSFR increased by 3.7 percentage points from 152.3% for the quarter ended 31 December 2022 to 156.0% for the quarter ended 31 December 2023.

Interdependent assets and liabilities included in the group's NSFR are certificates of indebtedness held and legal tender notes issued.

Interest Rate Risk in the Banking Book

(Unaudited)

Assessment and risk appetite

Interest rate risk in the banking book is the risk of an adverse impact to earnings or capital due to changes in market interest rates. It is generated by our non-traded assets and liabilities, specifically loans, deposits and financial instruments that are not held for trading intent or in order to hedge positions held with trading intent. Interest rate risk that can be economically hedged may be transferred to the Global Treasury sub-function. Hedging is generally executed through interest rate derivatives or fixed-rate government bonds. Any interest rate risk that Global Treasury sub-function cannot economically hedge is not transferred and will remain within the global business where the risks originate.

The Global Treasury sub-function uses a number of measures to monitor and control interest rate risk in the banking book, including:

- net interest income sensitivity; and
- economic value of equity sensitivity; and
- hold-to-collect-and-sell value at risk ('VaR') and
- hold-to-collect-and-sell present value of a basis point ('PVBP')

Net interest income sensitivity

A principal part of our management of non-traded interest rate risk is to monitor the sensitivity of expected net interest income ('NII') under varying interest rate scenarios (i.e. simulation modelling), where all other economic variables are held constant. This monitoring is undertaken at an entity level, where entities calculate both one-year and five-year NII sensitivities across a range of interest rate scenarios.

As at 31 December 2023, the 12 month sensitivity of our NII based on the HKMA reporting methodology is an adverse impact of HK$11.4bn to the HKMA's 'Parallel Up' scenario and a positive impact of HK$11.6bn to the HKMA's 'Parallel Down' scenario. NII sensitivity figures represent the effect of pro forma movements in projected yield curves based on a static balance sheet size and structure. The exception to this is where the size of the balances or repricing is deemed interest rate sensitive, for example, early prepayment of mortgages. These sensitivity calculations do not incorporate actions that would be taken by Global Treasury sub-function or in the business that originates the risk to mitigate the effect of interest rate movements.

The NII sensitivity calculations assume that interest rates of all maturities move by the same amount in the 'up-shock' scenario. The sensitivity calculations in the 'down-shock' scenarios reflect no floors to the shocked market rates. However, customer product-specific interest rate floors are recognised where applicable.

Economic value of equity sensitivity

Economic value of equity ('EVE') represents the present value of the future banking book cash flows that could be distributed to equity holders under a managed run-off scenario. This equates to the current book value of equity plus the present value of future NII in this scenario. EVE can be used to assess the economic capital required to support interest rate risk in the banking book. An EVE sensitivity represents the expected movement in EVE due to pre-specified interest rate shocks, where all other economic variables are held constant. Operating entities are required to monitor EVE sensitivities as a percentage of capital resources.

Further details of HSBC's risk management of interest rate risk in the banking book can be found in the Pillar 3 Disclosures at 31 December 2023.

Pension Risk

(Unaudited)

Our global pensions strategy is to move from defined benefit to defined contribution plans, where local law allows and it is considered competitive to do so.

In defined contribution pension plans, the contributions that HSBC is required to make are known, while the ultimate pension benefit will vary, typically with investment returns achieved by investment choices made by the employee. While the market risk to HSBC of defined contribution plans is low, the group is still exposed to operational and reputational risk.

In defined benefit pension plans, the level of pension benefit is known. Therefore, the level of contributions required by HSBC will vary due to a number of risks, including:

- investments delivering a return below that required to provide the projected plan benefits;
- the prevailing economic environment leading to corporate failures, thus triggering write-downs in asset values (both equity and debt);
- a change in interest rate expectations, causing an increase in the value of plan liabilities; and
- plan members living longer than expected (known as longevity risk).

Pension risk is assessed using an economic capital model that takes into account potential variations in these factors. The impact of these variations on both pension assets and pension liabilities is assessed using a 1-in-200-year stress test. Scenario analysis and other stress tests are also used to support pension risk management, including the review of de-risking opportunities. To fund the benefits associated with defined benefit plans, sponsoring group companies make regular contributions in accordance with advice from actuaries and in consultation with the plans' fiduciaries where relevant. These contributions are normally set to ensure that there are sufficient funds to meet the cost of the accruing benefits for the future service of active members. However, higher contributions are required when plan assets are considered insufficient to cover the existing pension liabilities. Contribution rates are typically revised annually or once every three years, depending on the plan.

The defined benefit plans invest contributions in a range of investments designed to limit the risk of assets failing to meet a plan's liabilities. Any changes in expected returns from the investments may also change future contribution requirements. In pursuit of these long-term objectives, an overall target allocation is established between asset classes of the defined benefit plan. In addition, each permitted asset class has its own benchmarks, such as stock-market indices. The target allocations are reviewed regularly, typically once every three to five years, and more frequently if required by local legislation or circumstances. The process generally involves an asset and liability review.

Market Risk

Overview

(Unaudited)

Market risk is the risk of an adverse financial impact on trading activities arising from changes in market parameters such as interest rates, foreign exchange rates, asset prices, volatilities, correlations and credit spreads.

Market risk management

Key developments in 2023

(Unaudited)

There were no material changes to our policies and practices for the management of market risk in 2023.

Governance and structure

(Unaudited)

The following diagram summarises the main business areas where trading market risks reside and the market risk measures used to monitor and limit exposures.

Risk types	Trading risk – Foreign exchange and commodities – Interest rates – Credit spreads – Equities
Global business	GBM
Risk measure	Value at risk | Sensitivity | Stress Testing

The objective of our risk management policies and measurement techniques is to manage and control market risk exposures to optimise return on risk while maintaining a market profile consistent with our established risk appetite.

Market risk is managed and controlled through limits approved by the group's Board of Directors. These limits are allocated across business lines and to the group's legal entities. The group has an independent market risk management and control sub-function, which is responsible for measuring, monitoring and reporting market risk exposures against limits on a daily basis. Each operating entity is required to assess the market risks arising in its business and to transfer them either to its local Markets and Securities Services or Market Treasury unit for management, or to separate books managed under the supervision of the local ALCO. The Traded Risk sub-function enforces the controls around trading in permissible instruments approved for each site as well as changes that follow completion of the new product approval process. Trading Risk also restricts trading in the more complex derivatives products to offices with appropriate levels of product expertise and control systems.

Key risk management processes

Monitoring and limiting market risk exposures

(Audited)

Our objective is to manage and control market risk exposures while maintaining a market profile consistent with our risk appetite.

We use a range of tools to monitor and limit market risk exposures including sensitivity analysis, value at risk ('VaR') and stress testing.

Sensitivity analysis

(Unaudited)

Sensitivity analysis measures the impact of movements in individual market factor on specific instruments or portfolios, including interest rates, foreign exchange rates and equity prices. We use sensitivity measures to monitor the market risk positions within each risk type. Granular sensitivity limits are set for trading desks with consideration of market liquidity, customer demand and capital constraints, among other factors.

Value at risk

(Audited)

VaR is a technique for estimating potential losses on risk positions as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence. The use of VaR is integrated into market risk management and calculated for all trading positions regardless of how we capitalise them. Where we do not calculate VaR explicitly, we use alternative tools as summarised in the 'Stress testing' section below.

Our models are predominantly based on historical simulation that incorporates the following features:

- historical market rates and prices, which are calculated with reference to foreign exchange rates, commodity prices, interest rates, equity prices and the associated volatilities;
- potential market movements that are calculated with reference to data from the past two years; and

- calculations to a 99% confidence level and using a one-day holding period.

The models also incorporate the effect of option features on the underlying exposures. The nature of the VaR models means that an increase in observed market volatility will lead to an increase in VaR without any changes in the underlying positions.

VaR model limitations

(Audited)

Although a valuable guide to risk, VaR is used with awareness of its limitations. For example:

- the use of historical data as a proxy for estimating future market moves may not encompass all potential market events, particularly those that are extreme in nature. As the model is calibrated on the last 500 business days, it does not adjust instantaneously to a change in the market regime.
- the use of a one-day holding period for risk management purposes of trading books assumes that this short period is sufficient to hedge or liquidate all positions.
- the use of a 99% confidence level by definition does not take into account losses that might occur beyond this level of confidence.
- VaR is calculated on the basis of exposures outstanding at the close of business and therefore does not reflect intra-day exposures.

Risk not in VaR framework

(Unaudited)

The risks not in VaR ('RNIV') framework captures and capitalises material market risks that are not adequately covered in the VaR model.

Risk factors are reviewed on a regular basis and are either incorporated directly in the VaR models, where possible, or quantified through either the VaR-based RNIV approach or a stress test approach within the RNIV framework. While VaR-based RNIVs are calculated by using historical scenarios, stress-type RNIVs are estimated on the basis of stress scenarios whose severity is calibrated to be in line with the capital adequacy requirements. The outcome of the VaR-based RNIV approach is included in the overall VaR calculation but excluded from the VaR measure used for regulatory back-testing. Stress-type RNIVs include a deal contingent derivatives capital charge to capture risk for these transactions.

Stress testing

(Unaudited)

Stress testing is an important procedure that is integrated into our market risk management framework to evaluate the potential impact on portfolio values of more extreme, although plausible, events or movements in a set of financial variables. In such scenarios, losses can be much greater than those predicted by VaR modelling. Stress testing and reverse stress testing provide senior management with insights regarding the 'tail risk' beyond VaR.

Stress testing is implemented at legal entity, regional and overall Group levels. A set of scenarios is used consistently across all regions within the Group. The market risk stress testing incorporates both historical and hypothetical events. Market risk reverse stress tests are designed to identify vulnerabilities in our portfolios by looking for scenarios that lead to loss levels considered severe for the relevant portfolio. These scenarios may be local or idiosyncratic in nature and complement the systematic top-down stress testing.

The risk appetite around potential stress losses for the group is set and monitored against limits.

Trading portfolios

(Audited)

Trading portfolios comprise positions held for client servicing and market-making, with the intention of short-term resale and/or to hedge risks resulting from such positions.

Back-testing

(Audited)

We routinely validate the accuracy of our VaR models by back-testing the VaR metric against both actual and hypothetical profit and loss. Hypothetical profit and loss excludes non-modelled items such as fees, commissions and revenue of intra-day transactions. The hypothetical profit and loss reflects the profit and loss that would be realised if positions were held constant from the end of one trading day to the end of the next.

The number of hypothetical loss back-testing exceptions, together with a number of other indicators, are used to assess model performance and to consider whether enhanced internal monitoring of a VaR model is required. We back-test our VaR at set levels of our group entity hierarchy.

Market risk in 2023

(Unaudited)

During 2023, global financial markets were mainly driven by the inflation outlook, interest rates expectations and recession risks, coupled with banking distress in March and rising geopolitical tensions in the Middle East from October. Major central banks maintained restrictive monetary policies and bond markets experienced a volatile year. After rising significantly in the second and third quarter, US treasury bond yields fell during 4Q23, as lower inflation pressures led markets to expect that key rates would be cut in 2024. The interest rates outlook was also a major driver of global equity markets performance, alongside resilient corporate earnings and positive sentiment in the technology sector. Developed markets equities advanced significantly amid low volatility, while emerging markets performance was more subdued. In foreign exchange markets, the US dollar fluctuated against other major currencies, mostly in line with the Federal Reserve policy and bond yields expectations. Investor sentiment remained resilient in credit markets. High-yield and investment-grade credit spreads narrow in general, as fears of contagion in the banking sector in 1Q23 abated and economic growth remained resilient throughout 2023.

We continued to manage market risk prudently during 2023. Sensitivity exposures and VaR remained within appetite as the business pursued its core market-making activity in support of our customers. Market risk was managed using a complementary set of risk measures and limits, including stress testing and scenario analysis.

Trading portfolios

(Audited)

Value at risk of the trading portfolios

Trading VaR was predominantly generated by the Markets and Securities Services business. Trading VaR was higher as at 31 December 2023 compared to 31 December 2022, mainly driven by increase in VaR exposed to interest rate risk and equity risk, partially offset by reduction in VaR from foreign exchange risk and credit spread risk.

The trading VaR for the year is shown in the table below.

Trading value at risk, 99% 1 day[1]

(Audited)

	Foreign exchange and commodity HK$m	Interest rate HK$m	Equity HK$m	Credit spread HK$m	Portfolio diversification[2] HK$m	Total[3] HK$m
At 31 Dec 2023						
Year end	**70**	**206**	**70**	**15**	**(114)**	**247**
Average	**67**	**223**	**110**	**24**		**266**
Maximum	**118**	**311**	**201**	**36**		**444**
At 31 Dec 2022						
Year end	95	195	48	18	(154)	202
Average	55	172	55	24		208
Maximum	99	272	98	42		357

1 *Trading portfolios comprise positions arising from the market-making and warehousing of customer-derived positions.*
2 *Portfolio diversification is the market risk dispersion effect of holding a portfolio containing different risk types. It represents the reduction in unsystematic market risk that occurs when combining a number of different risk types, for example, interest rate, equity and foreign exchange, together in one portfolio. It is measured as the difference between the sum of the VaR by individual risk type and the combined total VaR. A negative number represents the benefit of portfolio diversification. As the maximum and minimum occur on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit for these measures.*
3 *The total VaR is non-additive across risk types due to diversification effects.*

Climate risk (unaudited) TCFD

Overview

The Group's climate risk approach is aligned to the framework outlined by the Financial Stability Board's Task Force on Climate-related Financial Disclosures ('TCFD'), which identifies two primary drivers of climate risk:

- physical risk, which arises from the increased frequency and severity of extreme weather events, such as typhoons and floods (acute risk), or shifts in weather patterns or rises in sea level; and
- transition risk, which arises from the process of moving to a net zero economy, including changes in government policy and legislation, technology, market demand, and reputational implications triggered by a change in stakeholder expectations, actions or inaction.

In addition to these primary drivers of climate risk, the Group has identified the following thematic issues related to climate risk which are most likely to materialise in the form of reputational, regulatory compliance and litigation risks:

- net zero alignment risk, which arises from the risk of HSBC failing to meet its net zero commitments or failing to meet external expectations related to net zero, because of inadequate ambition and/or plans, poor execution, or inability to adapt to changes in external environment.
- the risk of greenwashing, which arises from the act of knowingly or unknowingly making inaccurate, unclear, misleading or unsubstantiated claims regarding sustainability to the group's stakeholders.

Approach

The group recognises that the physical impacts of climate change and the transition to net zero economy can create significant financial risks for the companies, investors and the financial system. The group may be affected by the financial or non-financial impacts of climate risks either directly or indirectly through its relationships with customers.

The Group's climate risk approach aims to effectively manage the material climate risks that could impact the Group operations, financial performance, stability and reputation. The approach is informed by the evolving expectations of the Group's regulators. Climate considerations and the thematic issues of net zero alignment risk and the risk of greenwashing are incorporated within the group's traditional risk types in line with the Group-wide risk management framework.
The Group's climate risk approach is aligned to the Group-wide risk management framework and three lines of defence model, which sets out how the group identifies, assesses and manages its risks. For further details of the three lines of defence framework, see page 27.

The Group aims to regularly review its approach to increase coverage and incorporate maturing data, climate analytics capabilities, frameworks and tools, as well as respond to emerging industry best practice and climate risk regulations.

This includes updating the approach to reflect how the risks associated with climate change continue to evolve in the real world, and maturing how the Group embeds climate risk factors into strategic planning, transactions and decision-making across its businesses.

The group is following a materiality based approach in developing its climate risk capabilities across its businesses by prioritising sectors, portfolios and counterparties with the highest impacts.

The group continues to make progress in enhancing its climate risk capabilities and recognise it is a long-term iterative process.

The tables below provide an overview of the climate risk drivers considered with the Group's climate risk approach. Primary risk drivers refer to risk drivers aligned to the TCFD, which sets a framework to help public companies and other organisations disclose climate-related risks and opportunities.

Climate risk – primary risk drivers		Details	Potential Impacts	Time horizons
Physical	Acute	Increased frequency and severity of weather events causing disruption to business operations.	– Decreased real estate values or stranded assets – Decreased household income and wealth – Increased costs of legal and compliance – Increased public scrutiny – Decreased profitability – Lower asset performance	Short term Medium term Long term
	Chronic	Longer-term shifts in climate patterns (e.g. sustained higher temperatures, sea level rise, shifting monsoons or chronic heat waves).		
Transition	Policy and legal	Mandates on, and regulation of products and services and/or policy support for low carbon alternatives. Litigation from parties who have suffered loss and damage from climate impacts.		
	Technology	Replacement of existing products with lower emissions and/or lower options.		
	End-demand (market)	Changing consumer demand from individuals and corporates.		
	Reputational	Increased scrutiny following a change in stakeholder perceptions of climate-related action or inaction.		

In 2023, the Group updated its climate risk materiality assessment, to understand how climate risk may impact across HSBC's risk taxonomy. The assessment focused on a 12-month time horizon, as well as time horizons for the short-term, medium-term and long-term periods. The Group defines short-term as time periods up to 2025; medium-term as between 2026 and 2035, and long-term as between 2036 and 2050. The assessment is refreshed annually, and the results may change as the Group's understanding of climate risk and how it impacts HSBC evolves (for further details, see the Group's *Annual Report and Accounts*). In addition to these assessments, the group also considers climate risk in its emerging risk reporting and scenario analysis, which consider potential impacts across longer time horizons (for further details, see 'Top and emerging risks' on page 28 and 'Insights from climate scenario analysis' on page 13).

Climate risk management

Key developments in 2023

The group's climate risk programme continues to support the development of its climate risk management capabilities. The following outlines key developments in 2023:

- The Group updated its climate risk approach to incorporate net zero alignment risk and developed guidance on how climate risk should be managed for non-financial risk types.
- The group provided climate-related training for Board and senior management, and sponsored nominated staff to take climate risk related professional certifications.
- The group has expanded the climate risk metrics beyond Hong Kong to assess the impact of physical risk on the group's retail mortgage portfolio in Australia, mainland China and Singapore.

While the group has made progress in enhancing its climate risk management capabilities, further work remains. This includes the need to develop additional metrics and tools to measure the group's exposures to climate-related risks and to incorporate these tools within decision making.

Governance and structure

The Board takes overall responsibility for the group's climate strategy, overseeing executive management in developing the approach, execution and associated reporting.

The group Chief Risk Officer is responsible for the management of climate-related risks, including governance, risk management, stress testing and scenario analysis. The group's Environmental Risk Oversight Forum oversees risk activities relating to environmental risk management, including the transition and physical risks from climate change.

The group Risk Management Meeting and the group Risk Committee receive regular updates on its climate risk profile and progress of its climate risk programme.

Risk appetite

The group's climate risk appetite forms part of the Group's risk appetite statement and supports the business in delivering the group's climate strategy effectively and sustainably.

The group's climate risk appetite statement is approved and overseen by the group Board. It is supported by risk appetite metrics and tolerance thresholds. The group has also defined additional key risk management information metrics. Both the risk appetite statement and key risk management information metrics are reported for oversight by the group Risk Management Meeting and the group Risk Committee.

Policies, processes and controls

The Group is integrating climate risk into policies, processes and controls across many areas of its organisation, and the Group will continue to update these as its climate risk management capabilities mature over time. For further details of how the group manages climate risk across its global businesses, see page 13.

Embedding the group's climate risk approach

The table below provides further details on how the group has embedded the management of climate risk across key risk types. For details of its internal scenario analysis, see 'Insights from climate scenario analysis' on page 13.

Risk type	Details
Wholesale Credit Risk	The group has metrics in place to monitor the exposure of its wholesale corporate lending portfolio to six high transition risk sectors. The group's relationship managers engage with their key wholesale customers through a transition and physical risk questionnaire and recently introduced an updated questionnaire, the transition engagement questionnaire. The questionnaire is used to gather information and assess the alignment of the wholesale customers' business models to net zero and their exposure to physical and transition risk. The group uses the responses to the questionnaire to create a climate risk score for its key wholesale customers. The Group's credit policies require that relationship managers comment on climate risk factors in credit applications for new money requests and annual credit reviews. The policies also require manual credit risk rating overrides if climate is deemed to have a material impact on credit risk under 12 months if not already captured under the original credit risk rating. Key developments to the group's framework in 2023 include expanding the scope of its questionnaire to capture new countries, territories and sectors. Key challenges for further embedding climate risk into credit risk management relate to the availability of adequate physical risk data to assess impacts to the group's wholesale customers.
Retail Credit Risk	The Group has implemented policies and tools to manage climate risk across all its retail mortgage markets. Within the group's mortgage portfolios, properties or areas with potentially heightened physical risk are identified and assessed locally and potential exposure is managed through quarterly metrics. In addition, the group has set risk appetite metrics in four key markets in the region namely Australia, Hong Kong, mainland China and Singapore. The Group's retail credit risk management policy requires each mortgage market to conduct an annual review of their climate risk management procedures, including perils and data sources, to ensure they remain fit for purpose. In 2023, the Group introduced a global 'soft trigger' monitoring and review process for physical risk exposure where a market reaches or exceeds a set threshold, as this ensures markets are actively considering their balance sheet risk exposure to peril events.
Treasury Risk	From a Capital perspective, climate risk has been considered as part of the ICAAP in 2023, and the group is continuing to develop its approach for climate risk management. As part of the ILAAP, an initial analysis has been conducted to identify the potential climate risk exposures across key liquidity risk drivers. The Group updated the Treasury Risk policies to ensure that the impact of climate risk is considered when assessing applicable treasury risks. The Group regularly discusses climate-related topics that may impact Global Treasury through climate-relevant governance forums, including the Treasury Risk Management Climate Risk Oversight Forum and the Group Treasury Sustainability Committee. Treasury portfolios are included within scope of the ICSA and the Hong Kong Monetary Authority's CRST, with potential quantitative impacts on relevant hold-to-collect-and-sell positions estimated. Pension Risk The Group conducts an annual exercise to monitor the exposure of its largest pension plans to climate risk. The Group has also updated its pension policies to explicitly reflect climate considerations. Insurance Risk The Group has an evolving programme to support the identification and management of climate risk. In 2023, the sustainability procedures were updated to align with the Group's updated energy and thermal coal-phase out policies.
Traded Risk	In 2023, the Group implemented metrics and thresholds to monitor exposure to high physical and transition risk sectors for the different asset classes in the Markets and Securities Services ('MSS') business. The metrics utilise a risk taxonomy which categorises countries and sectors into high, medium and low risk, for which the group has set corresponding thresholds. In addition, the group has identified key business lines that contribute the most to the total MSS high-climate sensitive exposures and developed reports to monitor trends and pockets of risks. The Group has developed tools to provide a better understanding of key profit and loss drivers under different climate scenarios along different dimensions (e.g. risk factor, business line, desk etc.). These reports are available to traded risk managers to help monitor and understand how climate sensitive exposures are impacted under different scenarios. Stress testing results have been presented to senior management for oversight during dedicated review and challenge sessions to provide awareness on impact to MSS portfolio and underlying business lines.

Risk type	Details
Reputational Risk	The group manages the reputational impact of climate risk through its broader reputational risk framework, supported by its sustainability risk policies and metrics. The Group's sustainability risk policies set out its appetite for financing activities in certain sectors. The Group's thermal coal phase-out and energy policies aim to drive down greenhouse gas emissions while supporting a just transition. The group's global and regional network of sustainability risk managers provides local policy guidance to relationship managers for the oversight of policy compliance and in support of implementation across the group's wholesale banking activities.
Regulatory compliance risk	The Group's policies set the standards that are required to manage the risk of breaches of regulatory duty to customers, including those related to climate risk, ensuring fair customer outcomes are achieved. To make sure responsibilities are met in this regard, the Group's policies are subject to continuous review and enhancement. There is also focus on the ongoing development and improvement of monitoring capabilities, ensuring appropriate alignment to the broader focus on regulatory compliance risks. Regulatory Compliance is particularly focused on mitigating climate risks inherent to the product lifecycle. To support this, the Group has enhanced a number of processes including: – ensuring Regulatory Compliance provides risk oversight and review of new product marketing materials with any reference to climate, sustainability and ESG; – developing the Group's product marketing controls to ensure climate claims are robustly evidenced and substantiated within product marketing materials; and – clarifying and improving product marketing framework, procedures and associated guidance, to ensure product-related marketing materials comply with both internal and external standards, and are subject to robust governance. Regulatory Compliance operates an ESG and Climate Risk Working Group to track and monitor the integration and embedding of climate risk management into the functions' activities, while monitoring regulatory and legislative changes across the ESG and climate risk agenda. In Asia-Pacific, a dedicated working group continues to coordinate the regional implementation of climate risk-related enhancements within the Regulatory Compliance function. Regulatory Compliance also continues to be an active member of the Group's and the group's Environmental Risk Oversight Forums.
Resilience Risk	Enterprise Risk Management function is responsible for overseeing the identification and assessment of physical and transition climate risks that may impact on the organisation's operational and resilience capabilities. The Group has developed metrics to assess how physical risk may impact the Group's critical properties. In 2023, the Group also developed an energy and travel risk appetite metric for its own operations to establish and monitors progress against the Group's net zero ambitions. Resilience risk policies are subject to continuous improvement to remain relevant to evolving climate risks. New developments relevant to the Group's own operations are reviewed to ensure climate risk considerations are effectively captured.
Model Risk	Group Model Risk published a new climate risk and ESG model category standard which sets out minimum control requirements for identifying, measuring and managing model risk for climate-related models. The group completed independent model validation for a number of models used for climate scenario analysis using both qualitative and quantitative assessments of modelling decisions and outputs.

Challenges

While the group continued to develop its climate risk framework, its remaining challenges include:

– the diverse range of internal and external data sources and data structures needed for climate related reporting, which introduces data accuracy and reliability risks;

– data limitations on customer assets and supply chains, and methodology gaps, which hinder the group's ability to assess physical risks accurately;

– industry-wide data gaps on customer emissions and transition plan and methodology gaps, which limit its ability to assess transition risks accurately; and

– limitations in the management of net zero alignment risk, which is undertaken at a Group level and supported by actions within Asia, is due to known and unknown factors, including the limited accuracy and reliability of data, merging methodologies, and the need to develop new tools to better inform decision making.

Resilience risk

(Unaudited)

Overview

Resilience risk is the risk of sustained and significant business disruption from execution, delivery, physical security or safety events, causing the inability to provide critical services to our customers, affiliates, and counterparties. Resilience risk arises from failures or inadequacies in processes, people, systems or external events.

Resilience risk management

Key developments in 2023

During the year, we carried out several initiatives to keep pace with geopolitical, regulatory and technology changes and strengthened the management of resilience risk:

- We focused on enhancing our understanding of our risk and control environment, by updating our risk taxonomy and control libraries, and refreshing risk and control assessments.
- We continued to monitor markets affected by the Russia-Ukraine and Israel-Hamas wars, as well as other geopolitical events, for any potential impact they may have on our colleagues and operations.
- We strengthened the way third party risk is overseen and managed across all non-financial risks, and enhanced the processes, framework and reporting capabilities used by our global businesses, functions and regions.
- We provided analysis and easy-to-access risk and control information and metrics to enable management to focus on non-financial risks in their decision-making and appetite setting.
- We further strengthened our non-financial risk governance and senior leadership, and improved our coverage and risk steward oversight for data risk and change execution.

We prioritise our efforts on material risks and areas undergoing strategic growth, aligning our location strategy to this need.

Governance and structure

The Enterprise Risk Management target operating model provides a globally consistent view across resilience risks, strengthening our risk management oversight while operating effectively as part of a simplified non-financial risk structure.

We view resilience risk across seven sub-risk types related to: third party risk; technology and cyber security risk; transaction processing risk; business interruption and incident risk; data risk; change execution risk; and facilities availability, safety and security risk. Risk appetite and key escalations for resilience risk are reported to the group Risk Management Meeting, chaired by the group Chief Risk Officer, with an escalation path to the Group Non-Financial Risk Management Board ('NFRMB'), chaired by the Group Chief Risk and Compliance Officer.

Key risk management processes

Operational resilience is our ability to anticipate, prevent, adapt, respond to, recover and learn from operational disruption while minimising customer, firm and market impact. Resilience is determined by assessing whether we can continue to provide our important business services, within an agreed impact tolerance. This is achieved via day-to-day oversight and periodic and ongoing assurance, such as deep dive reviews and controls testing, which may result in challenges being raised to the business by risk stewards. Further challenge is also raised in the form of quarterly risk steward opinion papers to formal governance. We accept we will not be able to prevent all disruption but we must prioritise investment to continually improve the response and recovery strategies for our important business services to meet regulatory expectations.

Regulatory compliance risk

(Unaudited)

Overview

Regulatory compliance risk is the risk associated with breaching our duty to clients and other counterparties, inappropriate market conduct (including unauthorised trading) and breaching related financial services regulatory standards. Regulatory compliance risk arises from the failure to observe relevant laws, codes, rules and regulations and can manifest itself in poor market or customer outcomes and lead to fines, penalties and reputational damage to our business.

Regulatory compliance risk management

Key developments in 2023

The dedicated programme to embed our updated purpose-led conduct approach has concluded. Work to map applicable regulations to our risks and controls continued in 2023, alongside the adoption of new tooling to support enterprise-wide horizon scanning for new regulatory obligations and supporting wider work on regulatory reporting enhancements. Climate risk has been integrated into regulatory compliance policies and processes, with enhancements made to the product governance framework and controls to ensure the effective consideration of climate – and in particular the risk of greenwashing – risks.

Governance and structure

The Compliance function has now been restructured and integrated into a combined Risk and Compliance function with the appointment of a Group Head of Regulatory Compliance reporting directly into the Group Chief Risk and Compliance Officer. The group Chief Compliance Officer is also the group Head of Regulatory Compliance. Regulatory Compliance and Financial Crime teams work together and with relevant stakeholders to achieve good conduct outcomes, and provide enterprise-wide support on the compliance risk agenda in close collaboration with colleagues from the Group Risk and Compliance function.

Key risk management processes

The Global Regulatory Compliance capability is responsible for setting global policies, standards and risk appetite to guide the Group's management of regulatory compliance risk. It also devises the required frameworks, support processes and tooling to protect against regulatory compliance risks. The Group capability provides oversight, review and challenge of the global market, regional and line of business teams to help them identify, assess and mitigate regulatory compliance risks, where required. The Group's regulatory compliance risk policies are regularly reviewed. Global policies and procedures require the identification and escalation of any actual or potential regulatory breaches, and relevant events and issues are escalated to group Risk Management Meeting and group Risk Committee, as appropriate. The group Chief Compliance Officer Co-chairs with the group Chief Risk Officer the group Risk and Compliance Executive Committee and is a member of the group Risk Management Meeting and an attendee to the group Risk Committee.

Financial crime risk

(Unaudited)

Overview

Financial crime risk is the risk that HSBC's products and services will be exploited for criminal activity. This includes fraud, bribery and corruption, tax evasion, sanctions and export control violations, money laundering, terrorist financing and proliferation financing. Financial crime risk arises from day-to-day banking operations involving customers, third parties and employees.

Financial crime risk management

Key developments in 2023

We regularly review the effectiveness of our financial crime risk management framework, which includes continued consideration of the complex and dynamic nature of sanctions compliance and export control risk. We continued to respond to the various financial sanctions and trade restrictions, including methods used to limit sanctions evasion.

We continued to make progress with several key financial crime risk management initiatives, including:

- We deployed our intelligence-led, dynamic risk assessment transaction monitoring capability for customer account monitoring in Hong Kong and Singapore, improving effectiveness in detecting financial crime risk. This capability will continue to be implemented in 2024 across further key markets in Asia.
- We successfully introduced the required changes to our transaction screening capability to accommodate the global change to payment systems formatting under ISO 20022 requirements.
- We made enhancements in response to the rapidly evolving and complex global payments landscape and refined our digital assets and currencies strategy.

Governance and structure

The structure of the Financial Crime function remained substantively unchanged in 2023, although we continued to review the effectiveness of our governance framework to manage financial crime risk. The group Head of Financial Crime reports to the Group Head of Financial Crime while remaining accountable to the group Chief Compliance Officer, and the group Risk Committee retains oversight of matters relating to financial crime.

Key risk management processes

We will not tolerate knowingly conducting business with individuals or entities believed to be engaged in criminal activity. We require everybody in HSBC to play their role in maintaining effective systems and controls to prevent and detect financial crime. Where we believe we have identified suspected criminal activity or vulnerabilities in our control framework, we will take appropriate mitigating action.

We manage financial crime risk because it is the right thing to do to protect our customers, shareholders, staff, the communities in which we operate, as well as the integrity of the financial system on which we all rely. We operate in a highly regulated industry in which these same policy goals are codified in law and regulation.

We are committed to complying with the laws and regulations of all the markets in which we operate and applying a consistently high financial crime standard globally.

We continue to assess the effectiveness of our end-to-end financial crime risk management framework and invest in enhancing our operational control capabilities and technology solutions to deter and detect criminal activity. We have simplified our framework and consolidated previously separate, financial crime policies into a single global financial crime policy to drive consistency and provide a more holistic assessment of financial crime risk. We further strengthened our financial crime risk taxonomy and control libraries and our monitoring capabilities through technology deployments. We developed more targeted metrics and continued to seek to enhance our governance and reporting.

We are committed to working in partnership with the wider industry and the public sector in managing financial crime risk and we participate in numerous public-private partnerships and information sharing initiatives around the world. In 2023, our focus remained on measures to improve the overall effectiveness of the global financial crime framework, notably by providing input into legislative and regulatory reform activities. We did this by contributing to the development of responses to consultation papers focused on how financial crime risk management frameworks can deliver more effective outcomes in detecting and deterring criminal activity. Through our work with the Wolfsberg Group and the Institute of International Finance, we supported the efforts of the global standard setter, the Financial Action Task Force. In addition, we participated in several public events related to enhancing public private partnerships, payment transparency, asset recovery, tackling forestry crimes, wildlife trafficking and human trafficking.

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Model Risk

(Unaudited)

Overview

Model risk is the potential for adverse consequences from model errors or the inappropriate use of modelled outputs to inform business decisions.

Model risk arises in both financial and non-financial contexts whenever business decision making includes reliance on models.

Key developments in 2023

In 2023, we continued to make improvements in our model risk management processes amid regulatory changes in model requirements.

Initiatives during the year included:

- Received regulatory feedback on a number of our submissions across internal ratings-based ('IRB') models for credit risk, internal model method ('IMM') for counterparty credit risk and internal model approach ('IMA') for market risk. Approved models for IMM and IMA have been implemented. A programme of work has been initiated to address feedback from the PRA and HKMA on the IRB models for Wholesale and Retail Credit.
- Made changes to the Value at Risk ('VaR') model in response to the interest rate changes by central banks across major markets to curb inflationary pressures.
- Following the changes to address gaps in the control framework that emerged as a result of increases in adjustments and overlays during the Covid-19 pandemic; the dependency on adjustments and overlays being applied to model outputs has reduced significantly as global economies stabilised.
- Models play an important role under HKFRS 17 implementation for our insurance business. Model developments to address related financial reporting risk has been progressing. In the meantime, we continue to monitor and manage any potential material adverse consequences in relation to both financial and capital reporting.
- The PRA published Supervisory Statement (SS1/23) which sets out guiding principles for how model risks should be managed across the industry. The principles set out the core disciplines necessary for a robust Model Risk Management ('MRM') framework to manage model risk effectively. A programme of work with representation from Businesses and Functions, including Internal Audit, has been initiated to uplift our MRM Framework to meet the enhanced model risk management requirements.
- Enhanced our frameworks and controls as more Climate Risk and Artificial Intelligence ('AI') and Machine Learning ('ML') models are being embedded in business processes. Focused also on

Generative AI due to the pace of technological changes where applicable model risks need to be managed.

- Continued to carry out regular review on model inventory completeness and accuracy, and increased awareness of model landscape and model limitations across the Region.
- Conducted model risk refresher sessions across the Region to strengthen the business ownership and management of model risk and the connection between model risk role holders and model developing areas.

Governance

The group's Model Risk Committee ('MRC') provides oversight of models used in the group and focuses on local delivery and requirements. The Committees is chaired by the group Chief Risk Officer and the Regional Heads of Businesses, senior executives from Risk, Finance and Compliance participate in these meetings. Authorised sub-forums operating under the remit of the group MRC, oversee model risk management activities based on associated model categories.

Key risk management processes

A variety of modelling approaches, including regression, simulation, sampling, machine learning and judgemental scorecards for a range of business applications were used. These activities include customer selection, product pricing, financial crime transaction monitoring, creditworthiness evaluation and financial reporting.

Our model risk management policies and procedures were regularly reviewed, and required the First Line of Defence to demonstrate comprehensive and effective controls based on a library of model risk controls provided by Model Risk Management.

Model Risk Management also reports on model risk to senior management and the Board Risk Committee on a regular basis through the use of the risk map, risk appetite and regular key updates.

The effectiveness of these processes, including the Regional model oversight structure, were regularly reviewed to ensure clarity in authority, coverage and escalations and that appropriate understanding and ownership of model risk continued to be embedded in the Businesses and Functions.

Insurance manufacturing operations risk

Overview

(Unaudited)

The key risks for our insurance manufacturing operations are market risks, in particular interest rate and equity, credit risks and insurance underwriting. These have a direct impact on the financial results and capital positions of the insurance operations. Liquidity risk, whilst significant in other parts of the group, is less material for our insurance operations.

HSBC's Insurance business

(Unaudited)

We sell insurance products through a range of channels including our branches, insurance sales forces, direct channels and third-party distributors. The majority of sales are through an integrated bancassurance model that provides insurance products principally for customers with whom we have a banking relationship, although the proportion of sales through other sources such as independent financial advisers, tied agents and digital platforms is increasing.

For the insurance products we manufacture, the majority of sales are of savings, universal life and protection contracts.

We choose to manufacture these insurance products in HSBC subsidiaries based on an assessment of operational scale and risk appetite. Manufacturing insurance allows us to retain the risks and rewards associated with writing insurance contracts by keeping part of the underwriting profit and investment income within the group.

We have life insurance manufacturing operations in Hong Kong, Singapore and mainland China. We also hold an interest in a life insurance manufacturing associate in India.

Where we do not have the risk appetite or operational scale to be an effective insurance manufacturer, we engage with a small number of leading external insurance companies in order to provide insurance products to our customers. These arrangements are generally structured with our exclusive strategic partners and earn the group a combination of commissions, fees and a share of profits.

Insurance products are sold predominantly by WPB and CMB through our branches and direct channels.

Insurance manufacturing operations risk management

Key developments in 2023

(Unaudited)

The insurance manufacturing subsidiaries follow the group's risk management framework. In addition, there are specific policies and practices relating to the risk management of insurance contracts, which did not change materially over 2023. During the year there has been continued market volatility observed over 2023 across interest rates, equity markets and foreign exchange rates. This has been predominantly driven by geopolitical factors and wider inflationary concerns. One key area of risk management focus during 2023 was the implementation of the new accounting standard, HKFRS 17 Insurance Contracts. Given the fundamental change the accounting standard represented in insurance accounting and the complexity of the new standard, this change presented additional financial reporting and model risks for the group, which were managed via the HKFRS 17 implementation project. Other areas of focus have been the ongoing integration of the insurance business that was acquired, AXA Insurance Pte Limited ('AXA Singapore'), and controls supporting HKFRS 17 implementation.

Governance and structure

(Unaudited)

Insurance risks are managed to a defined risk appetite, which is aligned to the group's risk appetite and risk management framework, including the group's 'Three lines of defence' model. The Global Insurance Risk Management Meeting oversees the risk and control framework for insurance business in the group.

The monitoring of the risks within our insurance operations is carried out by insurance risk teams. The Bank's risk stewardship sub-functions support the insurance risk teams in their respective areas of expertise.

Stress and scenario testing

(Unaudited)

Stress testing forms a key part of the risk management framework for the insurance business. We participate in local and group-wide regulatory stress tests, as well as internally developed stress and scenario tests, including Group internal stress test exercises. The results of these stress tests and the adequacy of management action plans to mitigate these risks are considered in the group ICAAP and the entities' regulatory Own Risk and Solvency Assessments which are produced by all material entities.

Key risk management processes

Market risk

(Audited)

All our insurance manufacturing subsidiaries have market risk mandates that specify the investment instruments in which they are permitted to invest and the maximum quantum of market risk that they may retain. They manage market risk by using, among others, some or all of the techniques listed below, depending on the nature of the contracts written:

- We are able to adjust bonus rates to manage the liabilities to policyholders for products with participating features. The effect is that a significant portion of the market risk is borne by the policyholder;
- We use asset and liability matching where asset portfolios are structured to support projected liability cash flows. The group manages its assets using an approach that considers asset quality, diversification, cash flow matching, liquidity, volatility and target investment return. We use models to assess the effect of a range of future scenarios on the values of financial assets and associated liabilities, and ALCOs employ the outcomes in determining how best to structure asset holdings to support liabilities;
- We use derivatives to protect against adverse market movements; and
- We design new products to mitigate market risk, such as changing the investment return sharing portion between policyholders and the shareholder.

Credit risk

(Audited)

Our insurance manufacturing subsidiaries also have credit risk mandates and limits within which they are permitted to operate, which consider the credit risk exposure, quality and performance of their investment portfolios. Our assessment of the creditworthiness of issuers and counterparties is based primarily upon internationally recognised credit ratings and other publicly available information.

Stress testing is performed on investment credit exposures using credit spread sensitivities and default probabilities.

We use a number of tools to manage and monitor credit risk. These include a credit report containing a watch-list of investments with current credit concerns, primarily investments that may be at risk of future impairment or where high concentrations to counterparties are present in the investment portfolio. Sensitivities to credit spread risk are assessed and monitored regularly.

Capital and liquidity risk

(Audited)

Capital risk for our insurance manufacturing subsidiaries is assessed in the ICAAP based on their financial capacity to support the risks to which they are exposed. Capital adequacy is assessed on both the group's economic capital basis, and the relevant local insurance regulatory basis.

Risk appetite buffers are set to ensure that the operations are able to remain solvent, allowing for business-as-usual volatility and extreme but plausible stress events.

Liquidity risk is managed by cash flow matching and maintaining sufficient cash resources, investing in high credit-quality investments with deep and liquid markets, monitoring investment concentrations and restricting them where appropriate, establishing committed contingency borrowing facilities and stress testing to understand the impact on liquidity in the event of a mass lapse.

Insurance manufacturing subsidiaries also complete quarterly liquidity risk reports and an annual review of the liquidity risks to which they are exposed.

Insurance underwriting risk

(Unaudited)

Our insurance manufacturing subsidiaries primarily use the following frameworks and processes to manage and mitigate insurance underwriting risks:

- a formal approval process for launching new products or making changes to products;
- a product pricing and profitability framework which requires initial and ongoing assessment of the adequacy of premiums charged on new insurance contracts to meet the risks associated with them;
- a framework for customer underwriting;
- reinsurance, which cedes risks to third party reinsurers to keep risks within risk appetite, reduce volatility and improve capital efficiency; and
- oversight by financial reporting committees in each of our entities of the methodology and assumptions that underpin HKFRS 17 reporting.

Insurance manufacturing operations risk in 2023

Measurement

(Unaudited)

The tables below show the composition of assets and liabilities by contract type. 88% (2022: 89%) of both assets and liabilities are derived from Hong Kong.

Balance sheet of insurance manufacturing subsidiaries by type of contract[5]

(Audited)

	Life direct participating and investment DPF contracts[2]	Life other contracts[3]	Other contracts[4]	Shareholders' assets and liabilities	Total
	HK$m	HK$m	HK$m	HK$m	HK$m
At 31 Dec 2023					
Financial assets	**675,860**	**26,482**	**34,021**	**40,415**	**776,778**
– financial assets designated and otherwise mandatorily measured at fair value	**649,932**	**25,348**	**21,426**	**580**	**697,286**
– derivatives	**1,099**	**76**	**3**	**—**	**1,178**
– financial investments measured at amortised cost	**8,388**	**523**	**8,996**	**37,106**	**55,013**
– financial investments measured at fair value through other comprehensive income	**—**	**—**	**36**	**—**	**36**
– other financial assets[5]	**16,441**	**535**	**3,560**	**2,729**	**23,265**
Insurance contract assets	**98**	**798**	**—**	**—**	**896**
Reinsurance contract assets	**—**	**36,633**	**—**	**—**	**36,633**
Other assets and investment properties	**14,258**	**524**	**275**	**11,487**	**26,544**
Total assets at 31 Dec 2023	**690,216**	**64,437**	**34,296**	**51,902**	**840,851**
Liabilities under investment contracts designated at fair value	**—**	**—**	**29,885**	**—**	**29,885**
Insurance contract liabilities	**700,691**	**25,505**	**—**	**—**	**726,196**
Reinsurance contract liabilities	**—**	**6,079**	**—**	**—**	**6,079**
Deferred tax	**—**	**9**	**—**	**—**	**9**
Other liabilities	**—**	**—**	**—**	**31,306**	**31,306**
Total liabilities	**700,691**	**31,593**	**29,885**	**31,306**	**793,475**
Total equity	**—**	**—**	**—**	**47,376**	**47,376**
Total equity and liabilities at 31 Dec 2023	**700,691**	**31,593**	**29,885**	**78,682**	**840,851**
At 31 Dec 2022[6]					
Financial assets	608,004	30,170	40,806	39,717	718,697
– financial assets designated and otherwise mandatorily measured at fair value	588,743	26,714	28,076	1,569	645,102
– derivatives	1,189	75	162	12	1,438
– financial investments measured at amortised cost	4,736	1,395	9,487	36,125	51,743
– financial investments measured at fair value through other comprehensive income	—	—	—	—	—
– other financial assets[5]	13,336	1,986	3,081	2,011	20,414
Insurance contract assets	35	301	—	—	336
Reinsurance contract assets	—	33,274	—	—	33,274
Other assets and investment properties	12,214	326	244	11,079	23,863
Total assets at 31 Dec 2022[6]	620,253	64,071	41,050	50,796	776,170
Liabilities under investment contracts designated at fair value	—	—	33,031	—	33,031
Insurance contract liabilities	626,424	24,982	—	—	651,406
Reinsurance contract liabilities	—	5,518	—	—	5,518
Deferred tax	179	—	—	17	196
Other liabilities	—	—	—	40,877	40,877
Total liabilities	626,603	30,500	33,031	40,894	731,028
Total equity	—	—	—	45,142	45,142
Total equity and liabilities at 31 Dec 2022[6]	626,603	30,500	33,031	86,036	776,170

1 Balance sheet of insurance manufacturing operations is shown before elimination of inter-company transactions with HSBC non-insurance operations.
2 'Life direct participating and investment DPF' contracts are substantially measured under the variable fee approach measurement model.
3 'Life other' contracts are measured under the general measurement model and mainly includes protection insurance contracts as well as reinsurance contracts. The reinsurance contracts primarily provide diversification benefits over the life participating and investment discretionary participation feature ('DPF') contracts.
4 'Other contracts' includes investment contracts for which HSBC does not bear significant insurance risk.
5 'Other financial assets' comprise mainly loans and advances to banks, cash and inter-company balances with other non-insurance legal entities.
6 From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.

Key risk types

Market risk

(Audited)

Description and exposure

Market risk is the risk of changes in market factors affecting capital or profit. Market factors include interest rates, equity and growth assets, credit spreads and foreign exchange rates.

Our exposure varies depending on the type of contract issued. Our most significant life insurance products are contracts with participating features. These products typically include some form of capital guarantee or guaranteed return on the sums invested by the policyholders, to which discretionary bonuses are added if allowed by the overall performance of the funds. These funds are primarily invested in fixed interest assets, with a proportion allocated to other asset classes to provide customers with the potential for enhanced returns.

Participating products expose the group to the risk of variation in asset returns, which will impact our participation in the investment performance.

For unit-linked contracts, market risk is substantially borne by the policyholders, but some market risk exposure typically remains as fees earned are related to the market value of the linked assets.

Sensitivities

(Unaudited)

The following table provides the impacts on the CSM, profit after tax and equity of our insurance manufacturing subsidiaries from reasonably possible effects of changes in selected interest rate, credit spreads, equity price, growth assets and foreign exchange rate scenarios for the year. These sensitivities are prepared in accordance with current HKFRSs and are based on changing one assumption at a time with other variables being held constant which in practice could be correlated.

Due in part to the impact of the cost of guarantees and hedging strategies, which may be in place, the relationship between the CSM, profit after tax and total equity and the risk factors is non-linear. Therefore, the results disclosed should not be extrapolated to measure sensitivities to different levels of stress. For the same reason, the impact of the stress is not necessarily symmetrical on the upside and downside. The sensitivities are stated before allowance for management actions, which may mitigate the effect of changes in the market environment.

The method used for deriving sensitivity information and significant market risk factors remain consistent between 2022 and 2023.In 2022, due to a lower CSM level, some portfolios generated onerous contracts in the 100bps up scenarios for interest rate and credit spread sensitivities, generating income statement losses and equity reductions in those scenarios. This was less prevalent in 2023 as the base CSMs were higher from changing market conditions and changes in lapse rate assumptions.

Sensitivity of the group's insurance manufacturing subsidiaries to market risk factors[1]

(Audited)

	2023			2022[2]		
	Effect on profit after tax	**Effect on CSM**	**Effect on total equity**	Effect on profit after tax	Effect on CSM	Effect on total equity
	HK$m	**HK$m**	**HK$m**	HK$m	HK$m	HK$m
+100 basis point parallel shift in yield curves	**453**	**(779)**	**453**	(1,702)	(912)	(1,702)
– Insurance and reinsurance contracts	**459**	**(779)**	**459**	(1,734)	(912)	(1,734)
– Financial instruments	**(6)**	**—**	**(6)**	32	—	32
–100 basis point parallel shift in yield curves	**(964)**	**(2,413)**	**(964)**	(243)	586	(243)
– Insurance and reinsurance contracts	**(908)**	**(2,413)**	**(908)**	(171)	586	(171)
– Financial instruments	**(56)**	**—**	**(56)**	(72)	—	(72)
+100 basis point shift in credit spreads	**(48)**	**(6,564)**	**(48)**	(2,497)	(6,295)	(2,497)
– Insurance and reinsurance contracts	**(48)**	**(6,564)**	**(48)**	(2,497)	(6,295)	(2,497)
– Financial instruments	**—**	**—**	**—**	—	—	—
–100 basis point shift in credit spreads	**772**	**5,931**	**772**	880	8,294	880
– Insurance and reinsurance contracts	**772**	**5,931**	**772**	880	8,294	880
– Financial instruments	**—**	**—**	**—**	—	—	—
10% increase in growth assets[3]	**289**	**2,762**	**289**	284	2,389	284
– Insurance and reinsurance contracts	**272**	**2,762**	**272**	258	2,389	258
– Financial instruments	**17**	**—**	**17**	26	—	26
10% decrease in growth assets[3]	**(338)**	**(3,325)**	**(338)**	(360)	(3,629)	(359)
– Insurance and reinsurance contracts	**(317)**	**(3,325)**	**(317)**	(331)	(3,629)	(330)
– Financial instruments	**(21)**	**—**	**(21)**	(29)	—	(29)
10% appreciation in US dollar exchange rate against local functional currency	**905**	**3,045**	**905**	741	2,124	741
– Insurance and reinsurance contracts	**211**	**3,045**	**211**	157	2,124	157
– Financial instruments	**694**	**—**	**694**	584	—	584
10% depreciation in US dollar exchange rate against local functional currency	**(905)**	**(3,045)**	**(905)**	(741)	(2,124)	(741)
– Insurance and reinsurance contracts	**(211)**	**(3,045)**	**(211)**	(157)	(2,124)	(157)
– Financial instruments	**(694)**	**—**	**(694)**	(584)	—	(584)

1 *Sensitivities presented for 'Insurance and reinsurance contracts' includes the impact of the sensitivity stress on underlying assets held to support insurance and reinsurance contracts. Sensitivities presented for 'Financial Instruments' includes the impact of the sensitivity stress on other financial instruments, primarily shareholder assets.*

2 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

3 *'Growth assets' primarily comprise equity securities and investment properties. Variability in growth asset fair value constitutes a market risk to HSBC insurance manufacturing subsidiaries.*

Credit risk

(Audited)

Description and exposure

Credit risk is the risk of financial loss if a customer or counterparty fails to meet their obligation under a contract. It arises in two main areas for our insurance manufacturers:

- risk associated with credit spread volatility and default by debt security counterparties after investing premiums to generate a return for policyholders and shareholders; and
- risk of default by reinsurance counterparties and non-reimbursement for claims made after ceding insurance risk.

The amounts outstanding at the balance sheet date in respect of these items are shown in the table on page 74.

The credit quality of the reinsurers' share of liabilities under insurance contracts is assessed as 'strong' or 'good' (as defined on page 36), with 100% of the exposure being neither past due nor impaired (2022: 100%).

Credit risk on assets supporting unit-linked liabilities is predominantly borne by the policyholders. Therefore our exposure is primarily related to liabilities under non-linked insurance and investment contracts and shareholders' funds. The credit quality of insurance financial assets is included in the table on page 49. The risk associated with credit spread volatility is to a large extent mitigated by holding debt securities to maturity, and sharing a degree of credit spread experience with policyholders.

Liquidity risk

(Audited)

Description and exposure

Liquidity risk is the risk that an insurance operation, though solvent, either does not have sufficient financial resources available to meet its obligations when they fall due, or can secure them only at excessive cost. Liquidity risk may be able to be shared with policyholders for products with participating features.

The remaining maturity of insurance contract liabilities is included in Note 3 on page 107.

The amounts of insurance contract liabilities that are payable on demand are set out by the product grouping below:

Amounts Payable on Demand

(Audited)

	2023		2022[1]	
	Amounts Payable on Demand	**Carrying Amount for these Contracts**	Amounts Payable on Demand	Carrying Amount for these Contracts
	HK$m	**HK$m**	HK$m	HK$m
Life direct participating and investment DPF contracts	**654,981**	**700,691**	587,973	626,424
Life other contracts	**20,021**	**25,505**	20,239	24,982
At 31 Dec	**675,002**	**726,196**	608,212	651,406

1 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

Insurance underwriting risk

Description and exposure

(Unaudited)

Insurance underwriting risk is the risk of loss through adverse experience, in either timing or amount, of insurance underwriting parameters (non-economic assumptions). These parameters include mortality, morbidity, longevity, lapses and expense rates. Lapse risk exposure on products with premium financing has increased over the year as rising interest rates have led to an increase in the cost of financing for customers.

The principal risk we face is that, over time, the cost of the contract, including claims and benefits may exceed the total amount of premiums and investment income received.

The table on page 74 analyses our life insurance underwriting risk exposures by type of contract.

The insurance underwriting risk profile and related exposures remain largely consistent with those observed at 31 December 2022.

Sensitivities

(Audited)

The table below shows the sensitivity of the CSM, profit and total equity to reasonably foreseeable changes in non-economic assumptions across all our insurance manufacturing subsidiaries.

These sensitivities are prepared in accordance with current HKFRS Accounting Standards, which have changed following the adoption of HKFRS 17 'Insurance Contracts', effective from 1 January 2023. Further information about the adoption of HKFRS 17 is provided on page 89-99 and 147-150.

Mortality and morbidity risk is typically associated with life insurance contracts. The effect on profit of an increase in mortality or morbidity depends on the type of business being written.

Sensitivity to lapse rates depends on the type of contracts being written. An increase in lapse rates typically has a negative effect on CSM (and therefore expected future profits) due to the loss of future income on the lapsed policies. However, some contract lapses have a positive effect on profit due to the existence of policy surrender charges.

Expense rate risk is the exposure to a change in the allocated cost of administering insurance contracts. To the extent that increased expenses cannot be passed on to policyholders, an increase in expense rates will have a negative effect on our profits. The risk is generally greater for Singapore and mainland China than for Hong Kong because these entities have smaller portfolios over which to spread costs.

The impact of changing insurance underwriting risk factors is primarily absorbed within the CSM, unless contracts are onerous in which case the impact is directly to profits. The impact of changes to the CSM is released to profits over the life of the related insurance contracts.

Sensitivity of the group's insurance manufacturing subsidiaries to insurance underwriting risk factors

(Audited)

	Effect on CSM (gross)[1]	**Effect on profit after tax (gross)[1]**	**Effect on profit after tax (net)[2]**	**Effect on total equity (gross)[1]**	**Effect on total equity (net)[2]**
At 31 Dec 2023	**HK$m**	**HK$m**	**HK$m**	**HK$m**	**HK$m**
10% increase in mortality and/or morbidity rates	**(2,361)**	**(259)**	**(138)**	**(259)**	**(138)**
10% decrease in mortality and/or morbidity rates	**2,677**	**111**	**163**	**111**	**163**
10% increase in lapse rates	**(1,753)**	**(156)**	**(100)**	**(156)**	**(100)**
10% decrease in lapse rates	**1,929**	**98**	**119**	**98**	**119**
10% increase in expense rates	**(237)**	**(25)**	**(26)**	**(25)**	**(26)**
10% decrease in expense rates	**242**	**36**	**37**	**36**	**37**
At 31 Dec 2022[3]					
10% increase in mortality and/or morbidity rates	(2,059)	(125)	(124)	(125)	(124)
10% decrease in mortality and/or morbidity rates	2,170	108	104	108	104
10% increase in lapse rates	(1,160)	(123)	(119)	(123)	(119)
10% decrease in lapse rates	1,181	127	112	127	112
10% increase in expense rates	(169)	(24)	(28)	(24)	(28)
10% decrease in expense rates	178	21	17	21	17

1 *The 'gross' sensitivities impacts are provided before considering the impacts of reinsurance contracts held as risk mitigation.*
2 *The 'net' sensitivities impacts are provided after considering the impacts of reinsurance contracts held as risk mitigation.*
3 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

EXHIBIT C

FURTHER INFORMATION ON CREDIT RATINGS

These are guidelines issued by Moody's and S&P on what each of their investment-grade ratings means as of the day immediately preceding the date of this base listing document. While we have correctly extracted and reproduced such information and take responsibility for such extraction and reproduction, there can be no assurance that the meaning of any such rating will not be revised by the relevant rating agency in the future and we have no responsibility to notify you of such change. If you are unsure about any information provided under this Exhibit C and/or what a credit rating means, you should seek independent professional advice.

A credit rating is forward looking opinion by a credit rating agency of a company's overall ability to meet its financial obligations. The focus is on the company's capacity to pay its debts as they become due. The rating does not necessarily apply to any specific obligation.

These are guidelines issued by Moody's and S&P on what each of their investment-grade ratings means as of the day immediately preceding the date of this base listing document.

Moody's long-term ratings definitions

Aaa

Obligations rated Aaa are judged to be of the highest quality, with minimal risk.

Aa

Obligations rated Aa are judged to be of high quality and are subject to very low credit risk.

A

Obligations rated A are considered upper medium-grade and are subject to low credit risk.

Baa

Obligations rated Baa are subject to moderate credit risk. They are considered medium-grade and as such may possess speculative characteristics.

Modifiers "1", "2" and "3"

Moody's appends numerical modifiers 1, 2 and 3 to each generic rating classification (except for Aaa). The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category.

Please refer to *https://ratings.moodys.io/ratings* for further details. If you do not understand what these credit ratings mean, you should obtain independent advice.

S&P long-term issuer credit ratings definitions

AAA

An obligor rated 'AAA' has extremely strong capacity to meet its financial commitments. 'AAA' is the highest issuer credit rating assigned by S&P.

AA

An obligor rated 'AA' has very strong capacity to meet its financial commitments. It differs from the highest-rated obligors only to a small degree.

A

An obligor rated 'A' has strong capacity to meet its financial commitments but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors in higher-rated categories.

BBB

An obligor rated 'BBB' has adequate capacity to meet its financial commitments. However, adverse economic conditions or changing circumstances are more likely to weaken the obligor's capacity to meet its financial commitments.

Plus (+) or minus (-)

The above ratings (except for 'AAA') may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the rating categories.

Please refer to *https://www.spglobal.com/ratings/en/about/intro-to-credit-ratings* (in English language version only) for further details. If you do not understand what these credit ratings mean, you should obtain independent advice.

Rating outlooks

A rating outlook is an opinion regarding the likely rating direction over the medium term. The rating outlook assigned by Moody's and S&P will usually indicate whether the rating direction is likely to be positive, negative, stable or developing.

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