恒生銀行
HANG SENG BANK

YEARS

2022 ANNUAL REPORT

A TRUSTED BANK SERVING THE COMMUNITY FOR 90 YEARS

As Hang Seng Bank marks its 90th anniversary in 2023, we can look back proudly at the bond established with the local community that has grown ever stronger over the years.

From humble beginnings in 1933 as a money-changing shop tucked away in an old building in Sheung Wan, Hang Seng is now a leading domestic bank with a network of more than 260 outlets in Hong Kong and outlets in almost 20 major cities in the mainland, Macau and Singapore.

Throughout these years of tremendous growth and transformation, the vision of our founders has never faltered – to welcome Hong Kong people from all walks of life and treat each one of them as an honoured guest. For 90 years, Hang Seng has nurtured and supported the dreams of our customers by helping them fulfil their potential.

Currently, Hang Seng is the trusted banking partner of over half of the Hong Kong adult population.

Maintaining that trust while holding fast to our founding principles, Hang Seng has evolved with the times to ensure we meet our customers' changing needs. In today's digitalised world, our in-person services are complemented by innovative digital options that offer a seamless, convenient, omni-channel experience. We have also been expanding in the mainland market to address rising demand for cross-boundary banking and wealth management services in the Greater Bay Area.

As a socially responsible and community-oriented financial institution, Hang Seng also dedicates itself to enhancing the future skills and financial literacy of the younger generation, and to making sustainable and green finance a reality.

No matter how society has changed, our customer-centric spirit remains constant. In the same manner that Hang Seng Ngan Ho served its customers with respect and integrity 90 years ago, Hang Seng Bank is committed to providing customers with best-in-class services to support their dreams for many years to come.

We share the dreams of
Hong Kong people and serve
our communities with pride.
We provide best-in-class, trusted
and friendly financial services
to drive their success – today and
for generations to come.

CONTENTS

* Where possible, percentages in this section have been rounded to the nearest percentage point to facilitate easy reading. Percentage-based indicators remain at 1 or 2 decimal places as appropriate.

The abbreviations 'HK$m' and 'HK$bn' represent millions and billions of Hong Kong dollars respectively.

2022 PERFORMANCE AT A GLANCE

Scan this QR Code with your smart phone or tablet to see a summary of our 2022 performance.
Alternatively, visit https://www.hangseng.com/cms/fin/fld/statement/annual-report-2022/index-eng.html

CORPORATE PROFILE

Hang Seng Bank is celebrating its 90th anniversary this year. Founded in 1933, Hang Seng Bank has continually innovated to provide best-in-class, customer-centric banking, investment and wealth management services for individuals and businesses. It is widely recognised as the leading domestic bank in Hong Kong, currently serving more than 3.5 million customers.

Combining its award-winning mobile app and strong digital capabilities with a vast network of more than 260 service outlets in Hong Kong, Hang Seng offers a seamless omni-channel experience for customers to take care of their banking and financial needs anytime, anywhere.

Its wholly owned subsidiary, Hang Seng Bank (China) Limited, operates a strategic network of outlets in almost 20 major cities in mainland China to serve a growing base of mainland customers locally and those with cross-boundary banking needs. The Bank also operates branches in Macau and Singapore, and a representative office in Taipei.

As a homegrown financial institution, Hang Seng is closely tied to the Hong Kong community. It supports the community with a dedicated programme of social and environmental initiatives focused on future skills for the younger generation, sustainable finance and financial literacy, addressing climate change and caring for the community.

Hang Seng is a principal member of the HSBC Group, one of the world's largest banking and financial services organisations. More information on Hang Seng Bank is available at www.hangseng.com.

RATINGS 2022

Moody's

Long-term Bank Deposit
(local and foreign currency)

Aa3

Short-term Bank Deposit
(local and foreign currency)

Prime-1

Outlook

Stable

Standard & Poor's

Long-term Issuer Credit
(local and foreign currency)

AA-

Short-term Issuer Credit
(local and foreign currency)

A-1+

Outlook

Stable

RESULTS IN BRIEF

For the Year

Profit attributable to shareholders
10,165 HK$m
2021 13,960 HK$m

Profit before tax
11,439 HK$m
2021 16,385 HK$m

Operating profit
11,557 HK$m
2021 16,231 HK$m

Net operating income before change in expected credit losses and other credit impairment charges
33,972 HK$m
2021 33,182 HK$m

Return on average ordinary shareholders' equity
5.5%
2021 7.7%

Cost efficiency ratio
43.5%
2021 42.6%

Earnings per share
4.95 HK$
2021 6.93 HK$

Dividends per share
4.10 HK$
2021 5.10 HK$

At Year-end (at 31 December)

Shareholders' equity
183,896 HK$m
2021 184,332 HK$m

Total assets
1,893,805 HK$m
2021 1,820,185 HK$m

Capital ratios

Common Equity Tier 1 ('CET1') Capital Ratio
15.2%
2021 15.9%

Tier 1 Capital Ratio
16.8%
2021 17.5%

Total Capital Ratio
18.1%
2021 18.9%

Liquidity ratios

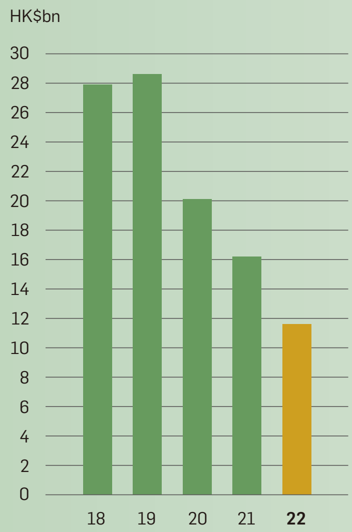
Liquidity Coverage Ratio
281.3%
2021 192.7%

Net Stable Funding Ratio
163.8%
2021 147.4%

FIVE-YEAR FINANCIAL SUMMARY

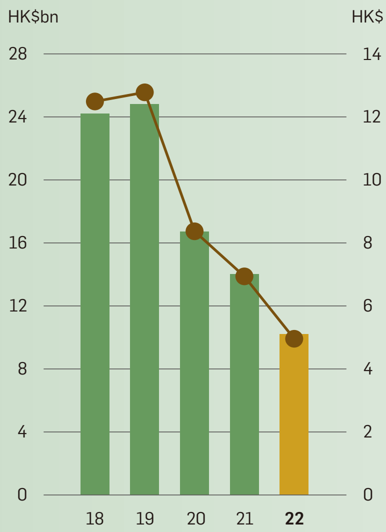
	2018	2019	2020	2021	**2022**
For the Year	HK$bn	HK$bn	HK$bn	HK$bn	**HK$bn**
Operating profit	27.9	28.6	20.1	16.2	**11.6**
Profit before tax	28.4	28.8	19.4	16.4	**11.4**
Profit attributable to shareholders	24.2	24.8	16.7	14.0	**10.2**
At Year-end	HK$bn	HK$bn	HK$bn	HK$bn	**HK$bn**
Shareholders' equity	162.1	178.8	183.1	184.3	**183.9**
Issued and paid-up capital	9.7	9.7	9.7	9.7	**9.7**
Total assets	1,571.3	1,677.0	1,759.8	1,820.2	**1,893.8**
Total liabilities	1,409.2	1,498.1	1,576.6	1,635.8	**1,709.8**
Per Share	HK$	HK$	HK$	HK$	**HK$**
Earnings per share	12.48	12.77	8.36	6.93	**4.95**
Dividends per share					
– 1st to 4th interim dividends	7.50	8.20	5.50	5.10	**4.10**
Ratios	%	%	%	%	**%**
Return on average ordinary shareholders' equity	16.0	15.2	9.6	7.7	**5.5**
Post-tax return on average total assets	1.6	1.5	1.0	0.8	**0.5**
Capital ratios					
– Common Equity Tier 1 ('CET1') Capital Ratio	16.6	16.9	16.8	15.9	**15.2**
– Tier 1 Capital Ratio	17.8	18.7	18.5	17.5	**16.8**
– Total Capital Ratio	20.2	20.8	20.0	18.9	**18.1**
Cost efficiency ratio	29.5	30.0	36.6	42.6	**43.5**

Operating Profit



Operating profit

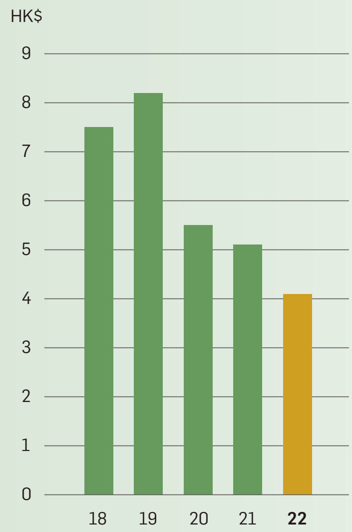
Profit Attributable to Shareholders and Earnings per Share



Profit attributable to shareholders

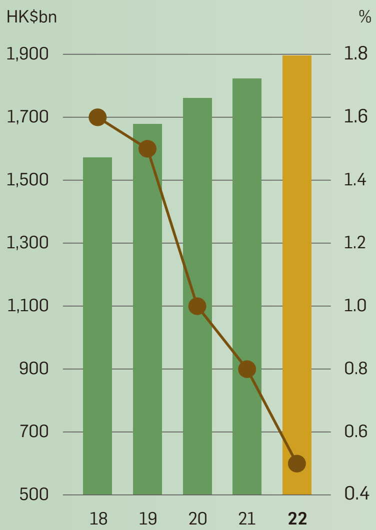
Earnings per share

Dividends per Share



Dividends per share

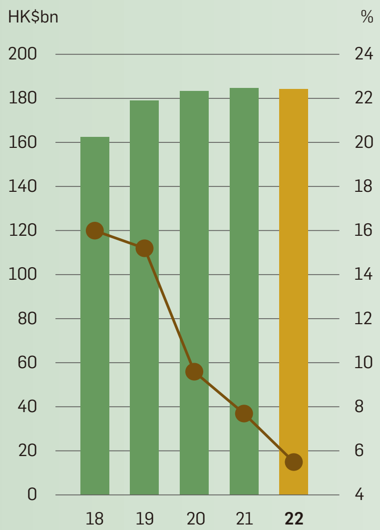
Total Assets and Return on Average Total Assets



Total assets

Return on average total assets

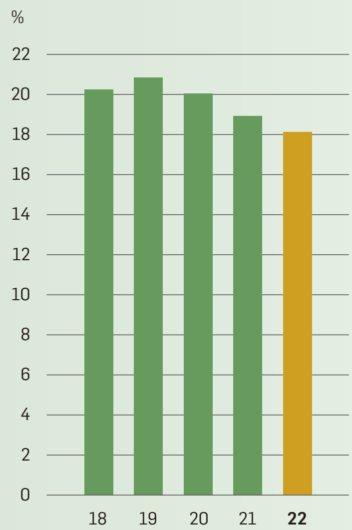
Shareholders' Equity and Return on Average Ordinary Shareholders' Equity



Shareholders' equity

Return on average ordinary shareholders' equity

Total Capital Ratio



Total capital ratio

CHAIRMAN'S STATEMENT

As a bank with deep local roots and a long-term growth perspective, we are well positioned to capitalise on the opportunities the Greater Bay Area presents. We have already made significant progress. Our commitment to our brand is at the heart of all our decisions. This focus will not change.

As we approach our 90th anniversary in March, we will apply the same determination, creativity and teamwork that have been evident throughout the history of Hang Seng. The celebration is an important milestone and I look forward to continuing our commitment to Hong Kong, our colleagues, our customers and our shareholders.

Recent challenges have demonstrated the importance of creative thinking and working together to find effective solutions. It is likely that this trend will continue and we would like to be on the forefront of initiatives to build an inclusive community to maximise all the talents Hong Kong has to offer.

As a leading international finance and trade centre, our home is a key city in the Greater Bay Area which is already a major global nexus for technological advancement, new-economy business and wealth management services. Year-on-year GDP growth in the region has been about 7% over the past decade, even with the impact of the pandemic. GDP is forecast to reach US$2.8 trillion by 2027, up almost US$1 trillion from 2021.

As a bank with deep local roots and a long-term growth perspective, we are well positioned to capitalise on the opportunities the Greater Bay Area presents. We have already made significant progress. Our commitment to our brand is at the heart of all our decisions. This focus will not change.

Transformation

Our strategy last year included building a foundation that will enable us to be an industry innovator that moves beyond conventional ideas. The way we interact with customers and partners is evolving rapidly with new requirements and delivery channels becoming part of day-to-day life. At the same time, banking standards and integrity continue to be fundamental to our credibility. This means that a lot of work has been undertaken to ensure a robust infrastructure is in place to manage risks.

We are working with new-economy start-ups by supporting incubation, sharing business advice and collaborating with them to co-develop fintech services and products. We are also connecting with industry regulators and technology associations to expand the ecosystem and advance the government's Fintech 2025 strategy. For example, we are a leading advocate in the development of central bank digital currency, which will be essential to the Greater Bay Area's future growth as the mainland moves towards becoming one of the world's first cashless economies. Additionally, we are extending our servicing channels to the Metaverse and other virtual spaces to engage with customers and the community.

Our colleagues are at the heart of the Hang Seng brand. We encourage entrepreneurial mindsets and empower staff to work together with customers to develop solutions. The bank-wide Data Literacy Empowerment Programme is an important initiative to future-skill the Hang Seng team. I believe we are well positioned to respond quickly as challenges emerge.

Innovation

The focus on generational wealth has increased partly because of demographics and partly because of a rapidly expanding middle class amongst the Greater Bay Area's 86 million residents. Government authorities on both sides of the boundary are committed to expanding mutual access via various Connect Schemes.

Amongst many initiatives, our appointment as the new manager of The Tracker Fund of Hong Kong last year has reinforced our position as a local leader for wealth management and asset management services. We now manage two of the first four funds made available through the southbound link of the ETF Connect Scheme.

The Hang Seng Indexes Company is developing new indexes that facilitate investment strategies and product development around future mega-themes including technology, climate change and the Metaverse.

Sustainability

We believe that building a sustainable future requires a definition of 'wealth' that is not purely financial.

We are expanding services that will assist customers in their sustainability journey and we are actively participating in collective actions to address climate change. We aim to reduce carbon emissions from our own operations to net zero by 2030. We are also contributing to the HSBC Group's ambitions of becoming net zero in its supply chain by 2030 and aligning the financed emissions in its portfolio of customers to net zero by 2050.

We are proud to have had our actions acknowledged with a Services and Trading – Gold Award in the Hong Kong Awards for Environmental Excellence, which are sponsored by the Government-established Environment and Conservation Fund.

Board of Directors and Senior Management

John Chan and Vincent Lo stepped down as Independent Non-Executive Director and Non-Executive Director of the Bank respectively in 2022 after many years of distinguished service. I wish to reiterate the Board's heartfelt thanks to John and Vincent for their guidance and contributions to the Bank's long-term success. I also wish to express sincere gratitude to Chiang Lai Yuen, who stepped down as an Independent Non-Executive Director with effect from 1 January 2023, for her wise counsel and contributions during her tenure of office.

We welcomed Cordelia Chung, Patricia Lam, Lin Huey Ru and Wang Xiao Bin as new Independent Non-Executive Directors during 2022. Each is a distinguished leader with recognised expertise in their fields. We are delighted to be benefiting from the new insights and diverse perspectives they bring to the Board. Kenneth Ng was re-designated from a Non-Executive Director to an Independent Non-Executive Director.

I would like to extend my appreciation to Andrew Leung who retired from his position as Chief Financial Officer in September 2022 after 22 years of dedicated service. His deep knowledge of the industry and markets have played an important role in shaping our long-term vision. Picking up the reins, Saw Say Pin has been appointed Chief Financial Officer and Executive Director.

With these changes, 8 of our 12 Board Directors are women.

Growing Together

The challenges of COVID have enabled us to develop deeper relationships with partners, customers and our staff. This collaborative approach will remain.

As we approach our 90th anniversary in March, we will apply the same determination, creativity and teamwork that have been evident throughout the history of Hang Seng. The celebration is an important milestone and I look forward to continuing our commitment to Hong Kong, our colleagues, our customers and our shareholders.

Irene Lee
Chairman
21 February 2023

CHIEF EXECUTIVE'S REPORT

Our financial fundamentals are strong and our long-term growth drivers are gaining traction. We have enhanced our position and capabilities in key areas such as wealth management, sustainability and business in the GBA.

Next month, Hang Seng Bank will celebrate our 90th anniversary. We have lived through times of turbulent changes and times of exceptional growth. The underlying strength of Hang Seng has only been increased with experience. I am confident we are well-positioned for the future and as the largest local bank in Hong Kong, we will advance inclusivity and prosperity for the betterment of our community.

2022 has been a challenging year with market volatilities arising from new COVID outbreaks, international geopolitical tensions and global economic conditions. The adverse impact on our financial performance has been exacerbated by two additional factors:

1. A significant increase in change in expected credit losses ('ECL') by 172% year-on-year, primarily related to mainland China commercial real estate. Developments in the last two years have brought the risks into sharp focus and it has been necessary to make upward adjustments to our ECL provisions.

2. A negative Market Condition Update of HK$3.1bn, caused by unfavourable performance of equities in the life insurance investment portfolio, together with the discounting impact of rising interest rates.

As a result, our attributable profit was down 27% year-on-year.

That said, the performance also reflects positive effects of the implementation of our long-term transformation strategy. The growth momentum of key future income drivers is accelerating and we are recording increased volumes in target business and customer segments. Excluding the impact of the life insurance investment portfolio, our net operating income before change in ECL grew by 12% year-on-year.

As the easing of COVID restrictions brought gradual relief to the economy, we were able to respond swiftly to customers' changing needs, capture the surge in financial activities and further harness the tailwinds provided by higher interest rates. It is encouraging to note that our second-half performance was markedly improved from the first half:

- We grew our deposit balance by 2% and achieved a 35% increase in net interest income.
- Net operating income before change in ECL increased by 27%.
- Net interest margin was up 48 basis points to 2.00%.
- Cost efficiency ratio was reduced by 9.7 percentage points to 39.2%.

New and continued investments in technology, people and innovation have made us more agile and resilient. By focusing on customer experience and value creation, we expanded core business lines and made significant in-roads into new areas. Enhancements to our branch network and digital capabilities also positioned us well to accelerate momentum. These include:

- Double-digit growth in targeted customer groups in Hong Kong, driven by new service propositions, easier onboarding journeys and wider brand exposure through strategic partnerships.
- Hang Seng Investment Management became manager of The Tracker Fund of Hong Kong. We are now Hong Kong's leading exchange-traded fund ('ETF') manager in terms of assets under management, and manage two of the first four funds made available through the ETF Connect Scheme southbound link.
- Recognition throughout the industry as a leading advocate of fintech development. We were the first foreign bank in the mainland to provide e-CNY services to corporate clients. We are also an active participant in e-HKD pilot projects led by the Hong Kong Monetary Authority ('HKMA').
- First in Hong Kong market to launch a Mobile Cheque Deposit service and US equity-linked investments on mobile and e-Banking platforms.
- Significantly increased the total amount of newly approved green and sustainability-linked loans for business clients year-on-year. Also, for personal customers, we launched Green Mortgages, Green Receipts, electric vehicle loans and the first SFC-authorised ESG ETF that invests in the constituents of the Hang Seng Index.
- Developed new infrastructure to support major emerging business themes, including a dedicated Cross-boundary Wealth Management Centre and a Business Banking Centre with an ESG-focused service concept.

The Directors have declared a fourth interim dividend of HK$2.00 per share. Together with interim dividends for the first three quarters, the total distribution for 2022 will be HK$4.10 per share. In other words, 77% of our attributable profit will be paid to shareholders.

Wealth and Personal Banking

We achieved 16% year-on-year growth in targeted Wealth and Personal Banking customer groups, with a particular focus on the young, emerging affluent and high-net-worth segments. This strengthened the balance sheet whilst loans and advances rose by 2% and customer deposits by 6%.

Investments in our mobile banking infrastructure propelled an increase of 11% in active users. We recorded a 98% rise in the number of digital deposit and loans transactions and we now provide a full range of online investment trading services. We also worked with local artists to launch our first collectible Non-Fungible Tokens. Digital transformation remains central to our strategy.

Net insurance premium income rose by 44% year-on-year and the number of digital policies increased by 135%. Also striking is that our Olive Wellness App recorded a 29% increase in active users. We maintain a top-three market position in digital insurance.

On the investment side of the business, our fixed-income offerings achieved a 291% year-on-year rise in sales turnover. Additionally, customers embraced foreign exchange products with a 166% increase in the number of customers using this service.

Commercial Banking and Global Banking

New Commercial Banking customers increased by 38% year-on-year and Financial Institution clients grew by 74%. Deposits from large corporate clients also recorded an uptick of 5%.

Our digital transformation strategy is now delivering faster turnarounds, simpler transaction journeys and more convenient services. The end result of these enhancements is that customers can better capture new developments in the rapidly changing operating environment. One main focus is to build our cross-boundary and sustainability-linked services to help clients achieve their long-term growth ambitions.

We also improved our trade platform with the introduction of digital receivables finance. This enables more efficient supply chains, particularly for businesses with a wider footprint in the Greater Bay Area ('GBA'). Our corporate API has streamlined cash management of supply chains and was publicly recognised with a 'Best in Payments and Collection' award.

By leveraging the HKMA's Commercial Data Interchange platform, collaboration with strategic partners is already enabling customers to make quicker decisions. This is making a real difference to business practices.

We achieved strong year-on-year growth in green and sustainability-linked loan approvals for wholesale customers. We are working closely with customers to support the transition to the low-carbon economy.

Customers using our new Green Deposits service can enjoy deposit returns whilst knowing that their funds will only be used to finance sustainability initiatives. Staff at our new Business Banking Centre have completed ESG training and can provide customers with information on ways to further embed sustainability into their business operations.

Global Markets

Global Markets recorded a 31% increase in non-interest income as a result of our initiatives to diversify revenue streams. Income from foreign exchange and option trading doubled. Joint initiatives between Global Markets and Wealth and Personal Banking have been effective. As an example, this resulted in an 11-fold increase in capital protected investment deposit business volume.

We continued with actions to support the development of Hong Kong's sustainability-related debt markets.

Hang Seng China

Hang Seng China leveraged its market expertise to achieve an increase of 4% in total operating income. In a very challenging environment, there has been growth in both net interest income and non-interest income.

Global markets income grew by 39% and profit before tax by 63%, with a near-doubling in year-on-year revenue from product sales in the GBA. Solid growth was recorded in trade loan revenue. The personal consumer loans portfolio balance also doubled.

Due to increased ECL provisions on lending in the commercial real estate sector, operating profit was down by 77%. However, with operating costs contained, operating profit before change in ECL was up by 9% year-on-year.

Financial Overview

We further strengthened our assets and liabilities portfolios to amplify the benefits of rising interest rates. We achieved a 22% year-on-year increase in net interest income to HK$28,981m and improved the net interest margin by 28 basis points to 1.77%. Net interest income in the second half grew by 35% compared with the first half.

Wealth management income was affected by temporary branch closures due to COVID in the first half and reduced investor activity, as well as the impact of market movements on the life insurance business investment portfolio. Fee income from credit facilities and trade business were down, but we achieved solid growth in both account services and remittance fees.

Overall, we grew net operating income before change in ECL and other credit impairment charges by 2% to HK$33,972m. Net operating income before change in ECL in the second half was up by 27% compared with the first half.

Operating expenses rose by 5% year-on-year to HK$14,778m. Our investments in people, technology and brand presence are delivering operational efficiencies and enhanced customer experiences. Excluding the impact of the life insurance investment portfolio, we achieved positive jaws of 7.5%, which is one indication that we are getting the balance right. However, we will maintain a firm hand on costs going forward, particularly in the current inflation environment.

As mentioned above, we have responded to fresh developments in the mainland commercial real estate market by making notable adjustments to our ECL provisions. We are progressively de-risking our portfolio and taking other actions to maintain the quality of our lending portfolio. We will continue to monitor the situation closely.

Year-on-year, change in ECL and other credit impairment charges rose by HK$4,819m to HK$7,626m. As at 31 December 2022, gross impaired loans and advances as a percentage of gross loans and advances to customers was 2.56% compared with 1.92% at 30 June 2022 and 1.04% at the end of 2021.

Profit before tax was down by 30% year-on-year at HK$11,439m. Attributable profit declined by 27% to HK$10,165m. Earnings per share fell by 29% to HK$4.95 per share. At a business segment level, profit before tax for Wealth and Personal Banking, Commercial Banking and Global Banking fell by 10%, 81% and 60% respectively. Global Markets' profit before tax rose by 1%.

Nonetheless, while we have been challenged by operating conditions in 2022, we have responded swiftly and effectively. The positive impacts are demonstrated in our strong second-half versus first-half performance, notably a 16% increase in attributable profit.

Return on average ordinary shareholders' equity was 5.5%, compared with 7.7% in 2021. Return on average total assets was 0.5%, compared with 0.8% in the previous year.

On 31 December 2022, our common equity tier 1 capital ratio was 15.2%, our tier 1 capital ratio was 16.8% and our total capital ratio was 18.1%. Our liquidity coverage ratio was 281.3%, which is comfortably above the statutory requirement.

Gross loans and advances to customers were down by HK$60bn, or 6%, compared with a year earlier.

We grew customer deposits, including certificates of deposit and other debt securities in issue, by HK$50bn, or 4%, compared with the end of 2021.

Values

Against a demanding environment, we have continued to deliver on our purpose which is to provide best-in-class, trusted and friendly financial services to customers to drive their success – now and for generations to come.

Our financial fundamentals are strong and our long-term growth drivers are gaining traction. We have enhanced our position and capabilities in key areas such as wealth management, sustainability and business in the GBA. We will continue with our prudent approach on risk management whilst diversifying income streams. Our investments in technology and staff development are future-proofing our operations and the skills of our colleagues.

Easing of COVID-related restrictions and opening of international borders are positive developments that will enable an upturn in commercial activity and consumer spending. New actions by the government to broaden scope of the various Connect schemes will also boost investor sentiment and help restore the confidence in financial markets.

I would like to thank my Hang Seng colleagues for their relentless commitment and positive attitude even in very difficult situations. We all continue to live and breathe our core values that put customer needs and shareholder return at the heart of our actions. This will not change.

Next month, Hang Seng Bank will celebrate our 90th anniversary. We have lived through times of turbulent changes and times of exceptional growth. The underlying strength of Hang Seng has only been increased with experience. I am confident we are well-positioned for the future and as the largest local bank in Hong Kong, we will advance inclusivity and prosperity for the betterment of our community.

Diana Cesar
Executive Director and Chief Executive
21 February 2023

EXPANDING HORIZONS


恒生銀行
HANG SENG BANK

FIRING UP TOMORROW'S SOLUTIONS


SUCCESS
Hang Seng Biz Virtual+ Account

VISION FOR A LASTING FUTURE

BUSINESS REVIEW

The operating environment remained difficult in 2022. A fifth COVID wave in Hong Kong during the first half of the year had an adverse impact on commercial activity. Developments in the external environment resulted in disruptions to the international supply chain, growing inflationary pressures and increased uncertainty over the global economic outlook. Financial markets continued to experience heightened volatility.

Amid the challenging operating conditions, we maintained good growth momentum in key business areas and achieved significant progress with our transformation strategy. Through actions to future-proof our business we are in a better position to further leverage our existing competitive strengths and establish a leading market position in new and emerging areas of long-term growth.

Customer loans and advances (net of allowances for expected credit losses ('ECL')) fell by HK$66bn, or 7%, to HK$931bn. Loan growth was muted, reflecting both market conditions and our risk mitigation actions. Loans for use in Hong Kong decreased by 4%. Lending to industrial, commercial and financial sectors dropped by 9%. Trade finance lending decreased by 15%, due mainly to the slowdown of global trade volumes and loan repayment during the year. Lending to individuals grew by 3%.

In commercial and corporate lending, loans for property development and property investment were down by 11%. There was increased lending to information technology and financial concerns sectors, but these were more than offset by the decline in loans outstanding from the wholesale and retail trade, manufacturing, transport and transport equipment and 'Others' sectors.

In loans to retail customers, residential mortgages and Government Home Ownership Scheme/ Private Sector Participation Scheme/Tenants Purchase Scheme lending grew by 4% and 1% respectively in the less active property market. Credit card advances grew by 1%, while other personal lending dropped by 2%.

Loans for use outside Hong Kong were down by 12%, due to decreased lending by Hang Seng China and our Hong Kong operations.

Customer deposits, including certificates of deposit and other debt securities in issue, increased by HK$50bn, or 4%, to HK$1,389bn against the end of 2021. Growth in time deposits in response to rising interest rates was partly offset by the decrease in current and savings account deposits.

Expanding
Cross-boundary Services

The Bank has taken significant steps to expand and enhance cross-boundary services to meet the growing demand in the Greater Bay Area. These include the opening of our strategically located Cross-boundary Wealth Management Centre in Sheung Shui, along with strengthened support for corporate clients looking to tap into business opportunities in the Greater Bay Area. This focus on meeting our customers' evolving needs will establish us as the preferred financial services provider across the markets.

Wealth and Personal Banking

Wealth and Personal Banking recorded a 1% year-on-year decrease in net operating income before change in ECL and other credit impairment charges to HK$18,287m. Operating profit and profit before tax dropped by 9% to HK$8,707m and by 10% to HK$8,697m respectively.

Our business remained resilient against the backdrop of the fifth COVID wave in Hong Kong and increased volatility in investment markets. Net operating income before change in ECL and other credit impairment charges fell by HK$219m year-on-year. Financial market movements had a HK$3,084m adverse impact on life insurance manufacturing. This was partly offset by the 32% year-on-year increase in net interest income, riding on the interest rate hike cycle. Revenue from interest-earning activities accelerated during the second half of 2022, with net interest income growing by 53% compared with the first half of the year.

Our balance sheet remains strong. In the second half of 2022, intensified market competition in retail deposits accelerated the shift of funds from current and savings accounts to time deposits. Despite the headwinds, we strengthened client relationships and increased customer deposits by 6% year-on-year. Gross loans and advances to customers grew by 2% and we maintained a strong market position in various areas, including mortgage registrations, card receivables and personal loans. To meet our customers' needs for sustainable solutions, we introduced Green Mortgages and electric vehicle loans.

Growth in our strategic customer segments further strengthened our robust foundation for the long-term expansion of our business. Supported by enhanced customer propositions and journeys, and the use of modern messaging platforms to provide personalised product and service offerings, we deepened existing customer relationships and attracted new clients. We achieved a 16% year-on-year increase in key segments, including high-net-worth and emerging affluent customers.

Our insurance business maintained good momentum amid the unfavourable macroeconomic environment and the disruptive effects of the pandemic. Enhancements to our savings and protection products further strengthened our retirement and legacy planning proposition, which helped us capture growth in strategic customer segments. We grew net insurance premiums income by 44% year-on-year. We continued to invest in service innovations and advance our strategic imperatives. We maintained a top-three market position in digital insurance, supported in part by the 135% year-on-year increase in the number of digital insurance policies sold.

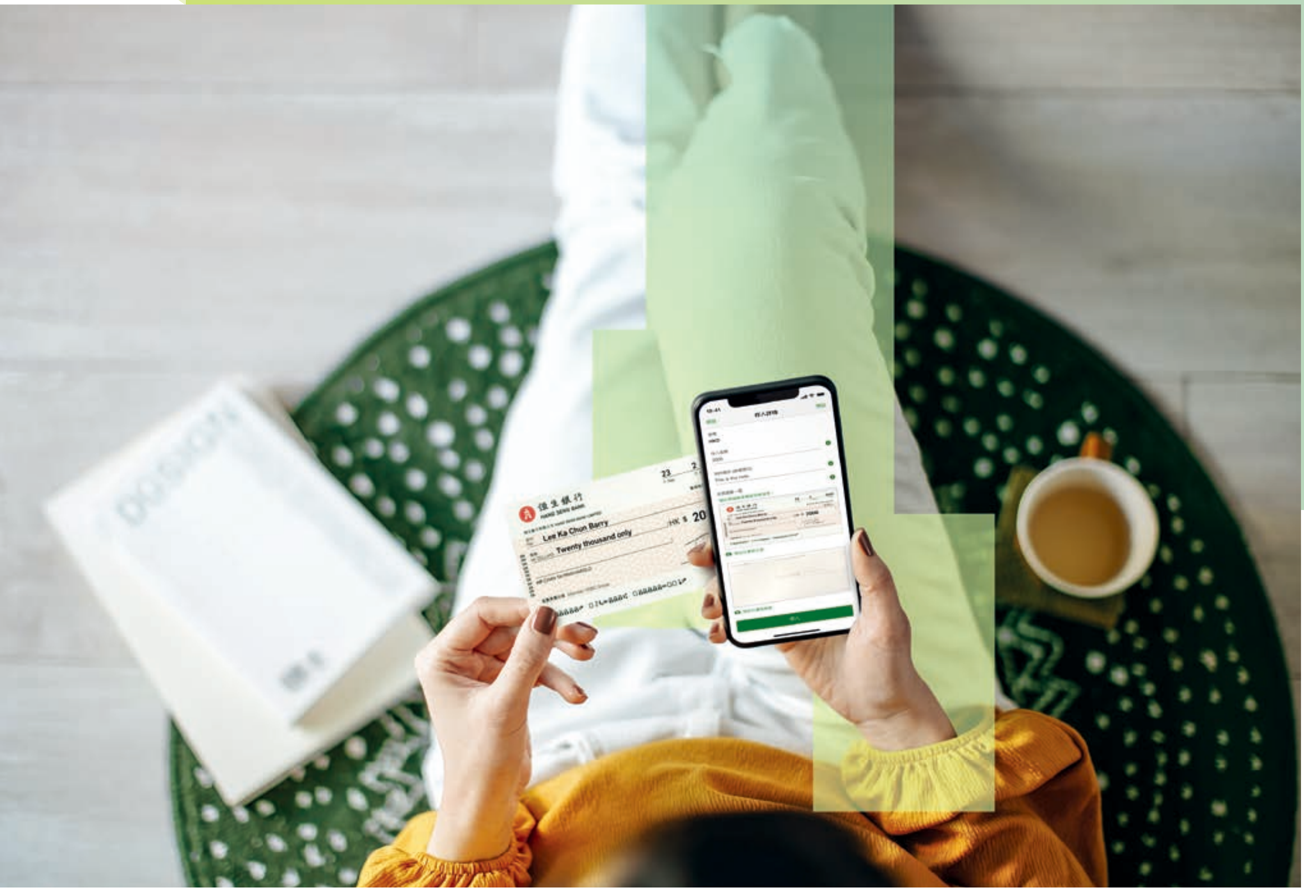
Our wholly owned subsidiary, Hang Seng Investment Management Limited, became the new manager of The Tracker Fund of Hong Kong, the largest exchange-traded fund ('ETF') in Hong Kong. Due in part to taking up this new role, which further strengthens our leadership in the local asset management market, our asset management business grew by 75% year-on-year. In February 2022, Hang Seng Investment Management launched the first Hong Kong-listed ESG ETF based on the Hang Seng Index to further increase product choice for investors.

Digital Innovations

24/7

Enhance Customer Experience

As a leading bank incorporating the latest digital and lifestyle trends, Hang Seng launched Hong Kong's first Mobile Cheque Deposit service and we continue to reinforce our omni-channel strategy by enhancing the digital services available at our branches. Hang Seng also became the first bank in Hong Kong to offer US equity-linked investments on both mobile and e-Banking platforms. In the past year, we launched hundreds of new and enhanced digital initiatives, inspired by customer-centric creativity and our ongoing commitment to improving the customer experience.



Our broad spectrum of foreign exchange investment products provided a variety of options for customers looking to capture opportunities in the volatile market conditions. We recorded a 166% year-on-year increase in foreign exchange investment customers and record growth in sales of our capital protected investment deposit product. We enriched our fixed-income offerings with the relaunching of certificates of deposit and extended fixed-income trading to our digital channel. This latter development is a major digital service milestone, with all our investment product offerings now available on our digital platform. Our fixed-income customer base increased significantly and sales turnover of our fixed-income products grew by 291% year-on-year.

Digital transformation remains a core part of our strategy. We successfully delivered over 460 new digital innovations and enhancements in 2022. Our first-in-market services in Hong Kong include Mobile Cheque Deposit, a Green Receipt service at branches and the introduction of US equity-linked investments on both mobile and online banking platforms.

Other digital developments include a securities profit-and-loss tracking service, and an omni-channel shopping cart that allows for the offline-to-online completion of investment fund transactions and a document centre function that provides the convenience of reviewing investment documents online. Customers can also now enjoy online installment payment services with instant approval when making card purchases or bill payments online.

Catering for the

Special Needs of SMEs

As a trusted partner of SMEs, we understand the financial challenges SME owners may encounter in a competitive and ever-changing business environment. Our support includes enhanced digital banking solutions to ensure seamless cross-channel services, as well as simpler digital account opening procedures offering shorter processing times. Additionally, to support the green agenda of business customers, staff at our new Business Banking Centre who have completed ESG training can provide our customers with information on ways to further embed sustainability into their business operations.

We introduced a new Relationship Management platform and have equipped all our Prestige Relationship Managers with 'Prestige RM Connect', which enables them to engage more easily with our customers. Supported by our digital innovations and enhancements, we recorded an 11% year-on-year increase in the number of monthly mobile active customers and our digital transaction count for deposits, foreign exchange and loans rose by 98% year-on-year.

We introduced Hazel, Hong Kong's first digital influencer in the banking sector. Riding on our 'Green Moments' campaign, we also launched our first Non-Fungible Tokens, co-created with local Hong Kong artists.

Our initiatives have been well recognised throughout the year with a number of industry awards from different organisations, including 'Best Mobile Banking Service Award' in *The Asian Banker* Hong Kong Awards 2022 and 'Outstanding Digital Banking Service' in the *Capital* Outstanding eCommerce Awards 2021/22.

To further drive innovation, we have entered into strategic alliances with various business partners, including to develop an immersive experience for our customers in The Sandbox Metaverse. We are also continuing to work with various stakeholders, including fintech partners, to help support central bank digital currency development in Hong Kong.

Green Actions for a Green Future

We aim to reduce carbon emissions from our own operations to net zero by 2030. We are also contributing to the HSBC Group's ambitions of becoming net zero in its supply chain by 2030 and aligning the financed emissions in its portfolio of customers to net zero by 2050. We actively support the green initiatives of our personal banking customers through our banking products and services, such as Green Mortgages, Green Receipts and electric vehicle loans, as well as Green Deposits for our commercial customers.

Commercial Banking

Commercial Banking recorded an 8% increase in net operating income before change in ECL and other credit impairment charges to HK$9,625m. Operating profit and profit before tax both dropped by 81% to HK$775m.

We achieved good growth in net interest income, which increased by 16% year-on-year. Continuous efforts to acquire new quality customers helped enhance our portfolio and amplify the positive impacts of interest rate hikes.

Non-interest income fell by 22% year-on-year, with developments in the external environment having an adverse effect on commercial activity and trade flows. In insurance, we continued to provide tailor-made solutions to meet the specific needs of our customers and recorded strong growth in sales of keyperson insurance. However, the movements in the financial markets had an unfavourable impact on our insurance business.

Net operating income before change in ECL and other credit impairment charges in the second half of 2022 increased by 17% against the first half of the year, supported in part by higher market interest rates and the relaxation of social distancing restrictions.

We moved forward with digital transformation to keep pace with the rapidly evolving financial services ecosystem and to fulfil customer expectations for seamless and simplified bank experiences. We are one of the first batch of banks to use the Commercial Data Interchange, a next-generation financial data exchange platform built by Hong Kong Monetary Authority to enhance decision-making and shorten loan application times for SMEs. We enriched our online foreign exchange service with real-time rate quotes to allow customers manage their foreign currency cash flows more effectively.

To better serve customers' daily operations, we revamped our trade platform to improve processing efficiency. This is enabling us to capture new structured trade opportunities in the Greater Bay Area. The introduction of digital receivables finance has significantly shortened onboarding times. Our new Virtual Card payment service allows customers to handle each transaction with a unique card number for safer online business and easier reconciliation.

We have also prioritised our resources in supporting customers with their sustainability performance and the transition to the low-carbon economy. Our new Wan Chai Business Banking Centre has an ESG-focused service concept and an eco-aware design. Staff at the Centre have completed specialised training in order to provide customers with suggestions and tips for integrating sustainability elements into their business operations.

Green loans and sustainability-linked finance approvals in Hong Kong increased year-on-year. We also launched a Green Deposit service, which provides customers with a way to support greater sustainability as such deposits are only lent to borrowers to finance sustainability initiatives.

Quality new customer acquisition remained a key focus. Supported by improved customer onboarding experiences, as well as strategic partnerships with local industry associations and organisations, the number of new customers acquired grew by 38% year-on-year.

We increased our ECL in response to the further deterioration in credit conditions in the mainland commercial real estate sector. Overall, our asset quality remains healthy. We will continue to closely monitor our portfolio.

Global Banking

Global Banking maintained net operating income before change in ECL and other credit impairment charges in line with 2021 at HK$2,756m. Operating profit and profit before tax both dropped by 60% to HK$380m.

Net interest income grew by 2% to HK$2,411m compared with 2021. Our customer deposit balance increased by 5% year-on-year, which helped drive the 5% growth in deposit interest income. We took steps to enhance our loan portfolio, focusing on greater diversification. We also placed more emphasis on trade financing to support our customers' business operations.

Reduced business activity in the market due to pandemic-related disruptions and the slowdown in the global economy resulted in an 11% year-on-year drop in non-interest income to HK$345m.

We proactively developed new solutions to meet our customers' current and future needs. With our strong market knowledge and in-depth understanding of our clients' businesses, we used our corporate API solution to help them streamline cash management by integrating the process more deeply into their day-to-day business operations.

Year-on-year, we increased our trade loan balance by 41% to HK$22bn, leading to a 75% increase in the related net interest income. Trade-related non-interest income grew by 15%.

Leveraging our strong customer relationships, we continued to develop and diversify our income streams, particularly through our newly established Bond Management team. To further broaden our sources of non-interest income, we proactively expanded our insurance business by offering keyperson insurance to senior executives of our corporate customers.

We continued to support the sustainability agenda, with strong growth recorded in newly approved green and sustainability-linked loans in Hong Kong. We also launched a Green Deposit service to corporate customers, enabling them to enjoy deposit returns and support greater sustainability in the business community.

In the high interest rate environment, we collaborated closely with the Global Markets team to capture more business providing hedging solutions to customers.

Global Markets

Global Markets maintained net operating income before change in ECL and other credit impairment charges in line with 2021 at HK$2,671m. Operating profit and profit before tax both increased by 1% to HK$2,024m.

Net interest income declined by 15% to HK$1,524m, with rising interest rates during the year challenging the net interest margin. The Markets Treasury team continued to actively seek good market opportunities and take actions to enhance and diversify the portfolio while upholding appropriate risk management standards.

Non-interest income increased by 31% to HK$1,147m, due mainly to strong revenue growth in sales and trading. We successfully captured opportunities in the volatile foreign exchange markets, with revenue from foreign exchange and option trading recording significant growth compared with 2021. We made further good progress with enhancing our service capabilities by implementing new digital solutions to support business growth.

Supporting Customers'

Wealth Management Aspirations

Hang Seng provides trusted wealth management services that meet the diverse needs of our customers across the Greater Bay Area. Backed by our market and investment specialists, strong digital capabilities and full suite of products, our Relationship Managers work closely with clients to achieve their wealth goals and aspirations at all stages of life. With our 24-hour Wealth Service team and omni-channel service platform, customers enjoy round-the-clock wealth management advice and support.

Achievements in the further diversification of our revenue base include the expansion of our Repo business portfolio by 40% year-on-year. We enhanced our hedging capacity in equity derivatives by including Hong Kong-listed equity index futures in the fourth quarter of 2022. We continued with initiatives to deepen Global Markets' product penetration among Bank customers through close collaboration with the Wealth and Personal Banking, Commercial Banking and Global Banking teams. In particular, we promoted Hang Seng certificates of deposit through collaboration with the Commercial Banking Wealth Management team.

We continued with actions to support the development of the green and social bond secondary market.

Hang Seng Indexes

Wholly owned subsidiary Hang Seng Indexes Company ('Hang Seng Indexes') continued to strengthen its position as a leading index compiler in Hong Kong. The Company's deep understanding of the Hong Kong and mainland markets, as well as emerging investment trends, facilitated the timely launch of new indexes to support a diverse range of portfolio strategies based on various global megatrends, cross-boundary activity and ESG-related themes.

These efforts earned Hang Seng Indexes positive industry recognition during the year, including 'Best ESG Index Provider – Hong Kong' and 'Most Innovative Index – Hong Kong' in *Asia Asset Management's* Best of the Best Awards 2022, 'Index Provider of the Year – Regional' and 'ESG Innovation of the Year' in *Insights & Mandate's* Professional Investment Awards 2022 and 'Best ESG Solution' at the SRP Asia Pacific Awards 2022 organised by *Structured Retail Products*.

As at the end of 2022, the Hang Seng Family of Indexes comprised more than 1,600 indexes covering Hong Kong and mainland markets, including 218 real-time indexes. There were 113 exchange-traded products based on the Hang Seng Family of Indexes worldwide – with listings on 16 different stock exchanges. Assets under management in products passively tracking indexes in the Hang Seng

AWARDS AND RECOGNITION 2022

Sustainable Finance Award Hong Kong
Safest Bank in Hong Kong
GLOBAL FINANCE

No. 1 in Hong Kong for Gender Equality
EQUILEAP

Outstanding Digital Banking Service
CAPITAL MAGAZINE

Best Mobile Banking Service (Hong Kong)
Best Payments Bank in Hong Kong
THE ASIAN BANKER

Commercial Banking Outstanding Award (China Greater Bay Area)
BLOOMBERG BUSINESSWEEK

Best Fintech for Digital CX – Cross Border Payments
THE DIGITAL BANKER

Best Supply Chain Solution
Best Hedging and Risk Solution: Rates
THE ASSET

Best Trade Finance Foreign Bank
TRADING FINANCE

The Golden Brand Bank
SECURITIES TIMES

GBA Best Wealth Management Service
YANGCHENG EVENING NEWS

Sustainable Financial Innovation
CBN

Outstanding Public Welfare Innovation Enterprise of the Year
21ST CENTURY BUSINESS HERALD

Family of Indexes at 2022 year-end had reached a total of about US$57.6 billion, which increased by 32% year-on-year despite market correction in 2022, implying net inflows into the universe. Five ETFs linked to the Hang Seng Family of Indexes have been included in the list of all securities that are eligible for trading through the ETF Connect scheme.

The Hang Seng TECH Index ('HSTECH'), the newest of Hang Seng Indexes' three flagship benchmarks, continued to attract strong local and overseas interest as the basis for the development of various financial products. As at 2022 year-end, Hang Seng Indexes had licensed the HSTECH for use as the basis for 25 ETFs in nine markets, including Hong Kong, Singapore, South Korea, the US and the UK. The total number of futures and options contracts traded on the HSTECH in 2022 grew by almost 400% to 19 million.

The total number of futures and options contracts traded on Hang Seng Index ('HSI'), the Hang Seng China Enterprises Index and the HSTECH in 2022 was 135 million in 2022, representing a year-on-year increase of around 40%.

With the aim of ensuring that the HSI remains the most representative benchmark of the Hong Kong stock market, the number of HSI constituents was increased to 76 during the year. This has resulted in a more balanced representation of the Hong Kong stock market, with the index's overall market capitalisation coverage improved to 62% as at the end of 2022.

On 31 December 2022, the Hang Seng Family of Indexes contained 18 ESG-related indexes. These indexes include the Hang Seng Climate Change 1.5°C Target Index, which aims to align with the climate objectives of the Paris Agreement, enabling investors to integrate climate factors into their investment strategy. Hang Seng Indexes became a signatory of the United Nations-supported Principles for Responsible Investment during the year as part of its efforts to facilitate the development of sustainable investment.

Corporate Social Responsibility Bronze Award
CIPRA

Constituent stock of FTSE4Good Developed Index (Since 2001)
FTSE RUSSELL

Constituent stock of MSCI Pacific ex Japan SRI Index (Since 2015)
MSCI

Constituent stock of Hang Seng Corporate Sustainability Index (Since 2010)
HANG SENG INDEXES

Constituent stock of Hong Kong Business Sustainability Index (Since 2015)
THE CHINESE UNIVERSITY OF HONG KONG CENTRE FOR BUSINESS SUSTAINABILITY

ESG Leading Enterprise Awards
Leading Social Initiative Awards
BLOOMBERG BUSINESSWEEK/CHINESE EDITION

Hong Kong Volunteer Award 2022
Outstanding Corporate & Non-Commercial Organization Volunteer Hours – Bronze
THE HOME AND YOUTH AFFAIRS BUREAU AND THE AGENCY FOR VOLUNTEER SERVICE

Caring Company (20th consecutive year)
HONG KONG COUNCIL OF SOCIAL SERVICE

Junzi Corporation Award (11th consecutive year)
Junzi Corporation Exemplary Award (3rd consecutive year)
THE HANG SENG UNIVERSITY OF HONG KONG

FINANCIAL REVIEW

Financial Performance

Income Analysis

Summary of financial performance

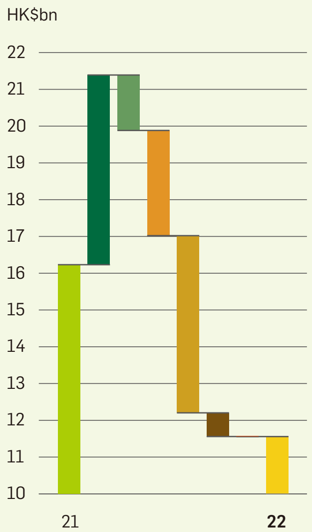
Figures in HK$m	2022	2021
Net operating income before change in expected credit losses and other credit impairment charges	**33,972**	33,182
Operating expenses	**14,778**	14,134
Operating profit	**11,557**	16,231
Profit before tax	**11,439**	16,385
Profit attributable to shareholders	**10,165**	13,960
Earnings per share (in HK$)	**4.95**	6.93

Operating conditions in 2022 were challenged by mounting macroeconomic and geopolitical uncertainties and market volatilities arising from pandemic outbreaks. Wealth management income was affected by the temporary branch closures due to pandemic in the first half and reduced investor activity, as well as the impact of market movements on the life insurance business investment portfolio. Developments in credit conditions for the mainland China commercial real estate sector led to an increase in impaired loans and related expected credit losses ('ECL') charges on our mainland China commercial real estate loan portfolios to reflect the higher risk level.

The Group's financial performance in the first half of 2022 ('1H22') was generally down when compared with the same period in 2021. Moving into the second half of 2022 ('2H22'), the Group captured opportunities to further grow its net interest income on the back of rising interest rates. With the gradual relaxation of travel and social-distancing restrictions, economic recovery continued at a modest pace despite weakened export growth. The Group gained growth momentum in 2H22 and achieved double-digit growth in net operating income before change in ECL compared with 1H22. These favourable results were partly offset by the notable increase in ECL charges in 2H22 for a number of mainland China commercial real estate developers.

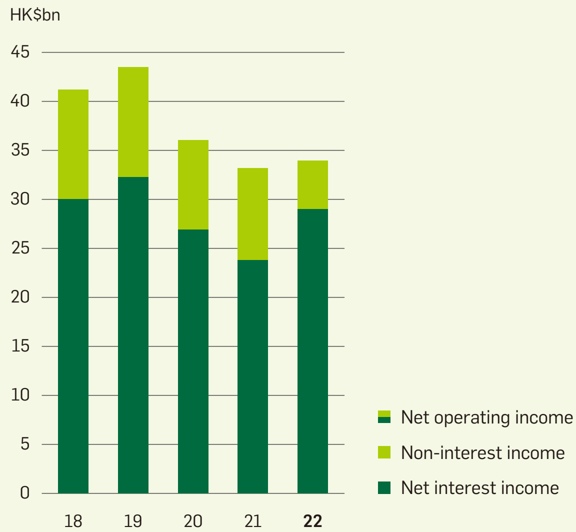
Net operating income before change in expected credit losses and other credit impairment charges was HK$33,972m, up 2%. In the difficult environment, the Group delivered a solid operating result. Net interest income rose by 22% as a result of rising interest rates. This was partly offset by the 47% reduction in non-interest income, reflecting the unfavourable impact of market movements on life insurance business and lower investment distribution revenue due to subdued investment activity. Operating expenses went up by 5% when compared with 2021, due to investment in people and technology to deliver operational efficiencies and enhanced customer experiences. Change in ECL increased by HK$4,819m to HK$7,626m, due mainly to the Group's exposure to the mainland China commercial real estate sector, which was experiencing more difficult credit conditions. We have downgraded certain corporates and made appropriate impairment allowances to reflect the higher risk from these exposures. This had an adverse impact on **operating profit**, which dropped by 29% to

Operating Profit Analysis



	HK$m
2021 Operating profit	16,231
Changes due to:	
Net interest income	**5,159**
Net fee income	**(1,508)**
Other operating income	**(2,861)**
Change in expected credit losses	**(4,819)**
Operating expenses	**(644)**
Impairment loss on intangible assets	**(1)**
2022 Operating profit	**11,557**

Net Operating Income
(Before change in expected credit losses and other credit impairment charges)



HK$11,557m. With investment property revaluation and share of associates' profits recording a deficit compared with a surplus for 2021, **profit before tax** dropped by 30% to HK$11,439m and **profit attributable to shareholders** was down by 27% at HK$10,165m.

Net interest income increased by HK$5,159m, or 22%, to HK$28,981m, supported by the 3% increase in average interest-earning assets and a 28-basis-points improvement in the net interest margin together with increased contribution from net-free funds amid rising interest rates. Average interest-earning assets grew by HK$46bn, or 3%, to HK$1,642bn, notably in financial investments and interbank placings. The growth in average interest-earning assets reflects the Bank's continuing efforts to strengthen its assets and liabilities and maintain a balanced growth strategy.

Net interest margin widened by 28 basis points to 1.77%, attributable mainly to the Group proactively managing its assets and liabilities amid global interest rate rises, which resulted in a widening of deposit spreads and an increase in net-free fund contribution. The net interest spread increased by 17 basis points to 1.59%. The contribution from net-free funds grew by 11 basis points to 0.18%, benefitting from the rising interest rates.

Figures in HK$m	2022	2021
Net interest income/(expense) arising from:		
– financial assets and liabilities that are not at fair value through profit or loss	**30,085**	24,719
– trading assets and liabilities	**177**	130
– financial instruments designated and otherwise mandatorily measured at fair value through profit or loss	**(1,281)**	(1,027)
	28,981	23,822
Average interest-earning assets	**1,641,898**	1,595,483
Net interest spread	**1.59%**	1.42%
Net interest margin	**1.77%**	1.49%

The HSBC Group reports interest income and interest expense arising from financial assets and financial liabilities held for trading and income arising from financial instruments designated at fair value through profit and loss as 'Net income/(loss) from financial instruments measured at fair value through profit or loss' (other than for debt securities in issue and subordinated liabilities, together with derivatives managed in conjunction with them).

The table below presents the net interest income of Hang Seng Bank, as included in the HSBC Group accounts:

Figures in HK$m	2022	2021
Net interest income and expense reported as 'Net interest income'		
– Interest income	**39,316**	28,030
– Interest expense	**(9,231)**	(3,315)
– Net interest income	**30,085**	24,715
Net interest income and expense reported as 'Net income from financial instruments measured at fair value through profit or loss'	**(1,104)**	(893)
Average interest-earning assets	**1,595,258**	1,556,663
Net interest spread	**1.70%**	1.52%
Net interest margin	**1.89%**	1.59%

Net fee income dropped by HK$1,508m, or 23%, to HK$5,069m, due mainly to reduced demand for wealth management products, as a result of muted investor sentiment and the impact of the fifth COVID wave in Hong Kong, which resulted in the temporary closure of parts of the Bank's branch network during 1H22. The volatility in global equity markets and the unfavourable investment climate dampened investor activity, leading to a 41% drop in fee income from retail investment funds. With lower stock turnover volumes, stockbroking and related services income was down by 30%. Card services income fell by 3%, due mainly to lower card spending and merchant sales with the persistence of the pandemic in Hong Kong especially in 1H22. Credit facilities fees was down by 32%, due to lower new corporate lending activities. Import and export fee income dropped by 16%. Insurance business fee income was down by 4%. These unfavourable factors were partly offset by higher fee income from account services and remittances, which were up by 8% and 4% respectively.

Net income/(loss) from financial instruments measured at fair value through profit or loss recorded a loss of HK$429m compared with a gain of HK$4,346m in 2021.

Net income/(loss) from assets and liabilities of insurance businesses measured at fair value through profit or loss recorded a loss of HK$2,049m compared with a gain of HK$2,610m in 2021. Investment returns on financial assets supporting insurance contract liabilities were adversely affected by unfavourable movements in the equity markets.

To the extent that these investment returns were attributable to policyholders, there was an offsetting effect in 'Net insurance claims and benefits paid and movement in liabilities to policyholders' or 'movement in present value of in-force long-term insurance business ('PVIF')' under other operating income/(loss).

Net trading income and net income from financial instruments designated at fair value through profit or loss together decreased by HK$128m, or 7%, to HK$1,611m, with higher revenue from funding swap transactions more than offset by the losses of equity-linked derivatives products in life insurance business investment portfolio and lower debt securities trading income.

Change in expected credit losses and other credit impairment charges increased by HK$4,819m, or 172%, to HK$7,626m.

Figures in HK$m	2022	2021
Loans and advances to banks and customers	**7,669**	2,844
– new allowances net of allowance releases	**7,367**	2,983
– recoveries of amounts previously written off	**(131)**	(167)
– other movements	**433**	28
Loan commitments and guarantees	**(8)**	(43)
Other financial assets	**(35)**	6
	7,626	2,807

In the fourth quarter of 2021, a number of mainland China property developers faced liquidity issues as a result of developments in the mainland China property market. The Bank updated its outlook for the mainland China commercial real estate sector, and took early actions to actively manage its portfolio and make higher provisions for ECL throughout 2021. In light of the ongoing refinancing risk facing the mainland China commercial property sector in 2022, the Bank has made further ECL charges on certain sizable corporations in the sector. The Bank will continue to proactively manage its portfolio in order to minimise further adverse impacts and maintain overall quality. Change in ECL for stage 1 and stage 2 unimpaired credit exposures recorded a net charge of HK$1,282m compared with HK$1,065m in 2021. This is a net impact of additional charges made during the year mainly in the mainland China commercial real estate sector and increase in ECL from the update of the economic outlook to reflect heightened economic uncertainty, inflation and rising interest rates, partly offset by the migration of previously provided stage 2 allowances to stage 3 allowances. Wealth and Personal Banking ('WPB') recorded a net ECL release in stage 1 and 2 of HK$3m, compared with a net release of HK$179m for 2021. Commercial Banking ('CMB') and Global Banking ('GB') together recorded net ECL charges in stage 1 and 2 for both years, with a collective increase of HK$38m to HK$1,280m in 2022 when compared with 2021.

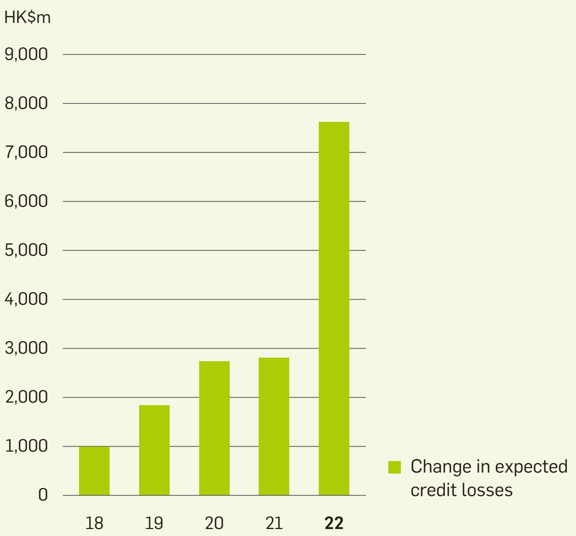
Change in ECL for stage 3 and purchased or originated credit-impaired exposures ('impaired credit exposures') increased by HK$4,602m to HK$6,344m when compared with 2021, driven primarily by an increase in ECL charges related to developments in the mainland China commercial real estate sector. WPB's position remained intact with a net charge of HK$500m for 2022. ECL charges for mainly CMB and GB increased by HK$4,595m to HK$5,844m, related primarily to the mainland China commercial real estate sector portfolio.

Gross impaired loans and advances increased by HK$13.8bn, to HK$24.2bn, against 2021 year-end. Certain impaired corporate loans were downgraded during the year to reflect the latest developments in the mainland China commercial real estate sector. Taking into account the provided collaterals and allowances for ECL, the Group considers that the current provision level is adequate. Gross impaired loans and advances as a percentage of gross loans and advances to customers stood at 2.56% as at 31 December 2022, compared 1.92% at 30 June 2022 and 1.04% at 31 December 2021. Overall credit quality remained robust.

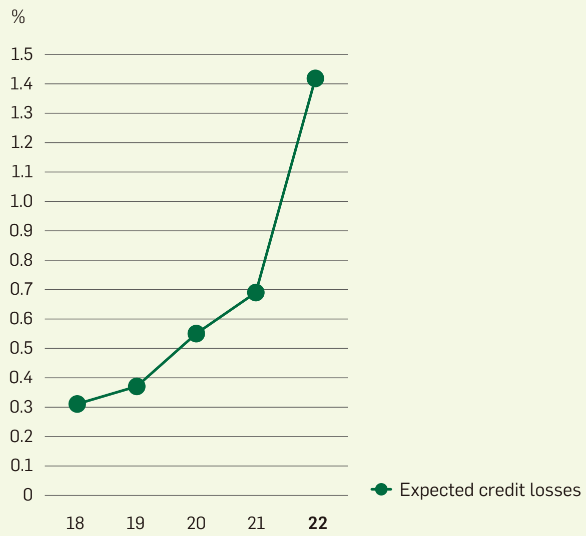
Expected credit losses and gross impaired loans and advances as a percentage of gross loans and advances to customers are as follow:

	At 31 December 2022	At 31 December 2021
Expected credit losses as a percentage of gross loans and advances to customers	**1.42%**	0.69%
Gross impaired loans and advances as a percentage of gross loans and advances to customers	**2.56%**	1.04%

Change in expected credit losses and other credit impairment charges



Expected credit losses as a percentage of gross loans and advances to customers



Net insurance premium income increased by HK$6,468m, or 46%, to HK$20,551m, contributed mainly from strong sales of the Bank's new whole-life product, especially single-pay payment mode, for the high-net-worth customer segment. Correspondingly, there was also an increase in **'Net insurance claims and benefits paid and movement in liabilities to policyholders'** which rose by HK$2,876m, or 18%, to HK$19,226m.

Other operating income/(loss) registered a loss of HK$1,274m compared with a profit of HK$322m for 2021, due mainly to the change in the movement in PVIF. The negative adjustment to PVIF has moved from HK$188m in 2021 to HK$1,743m in 2022, reflecting the combined effects of several factors. Negative adjustment to PVIF arising from actuarial assumption updates along with the unfavourable discounting impact of interest rate rises in the valuation of PVIF, offset by positive adjustment to PVIF to account for the sharing of unfavourable investment returns attributable to policyholders.

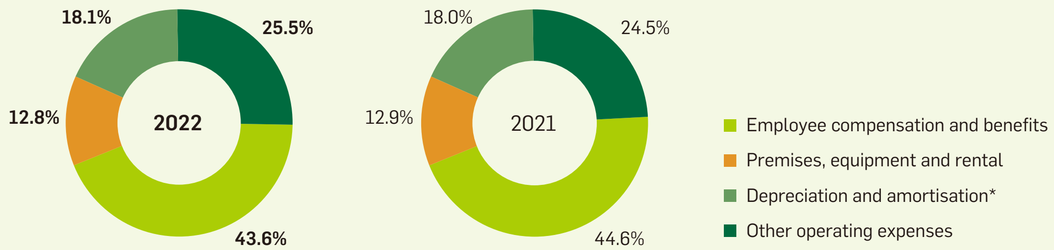
Operating expenses increased by HK$644m, or 5%, to HK$14,778m. This reflects an increase in investments, mainly IT-related costs to enhance our digital capabilities, as well as amortisation of intangible assets and staff costs.

Staff costs increased by 2%, mainly in wages and salaries, partly offset by lower performance-related pay and reduction in headcount. Depreciation charges were down by 4%. Amortisation of intangible assets increased by 49%, related mainly to capitalised IT systems development costs to support business growth within the Group. General and administrative expenses were up by 7%, reflecting continued investment in digital capabilities across all business segments and higher marketing and advertising expenses.

The cost efficiency ratio rose by 0.9 percentage points to 43.5%, as the increase in costs slightly outpaced the increase in total revenue.

	2022	2021
Cost efficiency ratio	**43.5%**	42.6%

Operating Expenses



* Included depreciation of right-of-use assets of HK$514m in 2022 (2021: HK$574m)

Full-time equivalent staff numbers by region	At 31 December 2022	At 31 December 2021
Hong Kong and others	**7,101**	7,708
Mainland China	**1,607**	1,688
	8,708	9,396

Reflecting the unfavourable property market as compared with 2021, **net surplus/(deficit) on property revaluation** recorded a net deficit of HK$108m compared with a net surplus of HK$82m in 2021. **Share of profits of associates** recorded a net deficit of HK$10m, compared with a net surplus of HK$72m in 2021, mainly reflecting the revaluation deficit of a property investment company.

Analysis of income from wealth management business

Figures in HK$m	2022	2021
Investment services income[1]:		
- retail investment funds	**903**	1,552
- structured investment products	**453**	390
- securities broking and related services	**1,411**	2,005
- margin trading and others	**65**	71
	2,832	4,018
Insurance income:		
– life insurance:		
– net interest income	**4,542**	4,273
– non-interest income/(expense)	**(81)**	(40)
– investment returns on life insurance funds (including share of associate's profits/(losses), net surplus/(deficit) on property revaluation backing insurance contracts and change in expected credit losses and other credit impairment charges)	**(2,399)**	2,879
– net insurance premium income	**20,551**	14,083
– net insurance claims and benefits paid and movement in liabilities to policyholders	**(19,226)**	(16,350)
claims, benefits and surrenders paid/payable	***(11,923)***	*(11,037)*
movement in liabilities to policyholders	***(7,303)***	*(5,313)*
– movement in present value of in-force long-term insurance business	**(1,743)**	(188)
	1,644	4,657
– general insurance and others	**243**	278
	1,887	4,935
	4,719	8,953
Of which: Market impacts	**(3,149)**	69

[1] Income from retail investment funds and securities broking and related services are net of fee expenses. Income from structured investment products includes income reported under net fee income on the sales of third-party structured investment products. It also includes profits generated from the selling of structured investment products in issue, reported under net income/(loss) from financial instruments measured at fair value through profit or loss.

Wealth management business income decreased by HK$4,234m, or 47%, to HK$4,719m, mainly due to the net adverse movements in market impacts in life insurance manufacturing, reflecting unfavourable movement in equity markets and discounting impact on PVIF. Investment distribution revenue, notably in retail investment funds and securities broking and related services, fell by HK$1,186m, or 30%, to HK$2,832m as muted customer sentiment led to lower activity in equity markets when compared with a more favourable investment sentiment in 2021.

Income from insurance business (included under 'net interest income', 'net fee income', 'net income/(loss) from financial instruments measured at fair value through profit or loss', 'net insurance premium income', 'movement in present value of in-force long-term insurance business' and 'others' within 'other operating income/(loss)', 'share of profits/(losses) of associates' and after deducting 'net insurance claims and benefits paid and movement in liabilities to policyholders' and 'change in expected credit losses and other credit impairment charges') decreased by HK$3,048m, or 62%, to HK$1,887m. This has included the market impacts with a loss of HK$3,149m compared with a gain of HK$69m in 2021.

Net insurance premium income increased by HK$6,468m, or 46%, to HK$20,551m, contributed from overwhelming sales of our new whole life product (combining the feature of asset accumulation with enhanced guaranteed cash value, legacy planning and whole-life protection in one single product), especially single pay payment mode, in the high net worth customer segment. Correspondingly, there was also an increase in 'Net insurance claims and benefits paid and movement in liabilities to policyholders'.

The market impact represents the total profit or loss impact on deviations of economic parameters (e.g. yield curve movement and investment return) at the start of the year or against the valuation assumptions, in coming up the income from insurance business. The deterioration in market impact was mainly due to the net effect of unfavourable discounting impact from interest rate increase in valuation of present value of in-force, coupled with the unfavourable investment performance in 2022; as compared with the market impacts dominated by favourable investment performance in 2021. In general, if the high interest rate is sustained, it should be beneficial to life insurance business in long run.

To the extent that the investment returns were attributable to policyholders, there was an offsetting effect in 'net insurance claims and benefits paid and movement in liabilities to policyholders' and 'movement in PVIF' under 'other operating income/(loss)'.

The negative adjustment to PVIF movement has moved from HK$188m in 2021 to HK$1,743m in 2022, reflecting the combined effect of several factors. Negative adjustment to PVIF arising from net impact from actuarial assumption updates along with unfavourable discounting impact of interest rate rises in the valuation of PVIF, offset by positive adjustment to PVIF to account for the sharing of unfavourable investment returns attributable to policyholders.

General insurance income and others decreased by HK$35m, or 13%, to HK$243m compared with 2021, mainly due to lower MPF commission income arising from the unfavourable fund performance, which aligned with major equities index movements in the markets.

2H22 compared with 1H22

Despite difficult operating conditions in 1H22, we used our competitive strength to serve the diverse financial needs of customers and maintain business momentum to deliver a strong performance in 2H22, with double-digit growth in net operating income before changes in ECL and profit attributable to shareholders.

Net operating income before change in expected credit losses and other credit impairment charges grew by HK$4,084m, or 27%, to HK$19,028m, driven by the 35% growth in net interest income, partly offset by the 7% drop in non-interest income. With the 2% increase in operating expenses and notable provisions made on ECL charges, **operating profit** increased by HK$491m, or 9%. **Profit attributable to shareholders** increased by HK$757m, or 16%, when compared with 1H22.

Net interest income was up HK$4,269m, or 35%, driven by a stronger net interest margin as the Group proactively managed its assets and liabilities on the back of rising interest rates. The net interest margin improved by 48 basis points to 2.00%, reflecting widened deposit spreads and increased contribution from net-free funds. However, the increasing competition for time deposits resulting in a change in less favourable deposit mix from current and savings account deposits ('CASA') to time deposits and will place downward pressure on deposit spreads.

Non-interest income fell by HK$185m, or 7%, mainly reflecting lower levels of customer activity across the Group's fee-generating business, notably in stockbroking, retail investment funds and credit facilities fee income, partly offset by the increase in card services income.

Operating expenses increased by HK$152m, or 2%, driven mainly by higher general and administrative expenses with increases in marketing and advertising costs, consultancy fees, data-processing fees and IT-related investment. The Group will continue to actively manage operating expenses to facilitate the continued direction of resources towards further optimising its digital capabilities and customer experience. The cost efficiency ratio improved by 9.7 percentage points to 39.2%, as revenue grew at a faster pace than the increase in operating expenses in 2H22. The Group achieved a positive jaw of 25.2% when compared with 1H22.

The Group continued to make significant provisions to its ECL in 2H22 in response to the challenges faced by the mainland China commercial real estate developers. Total **ECL charges** increased by HK$3,434m to HK$5,530m, due to higher impairment charges under stage 3 impaired credit exposures. Stage 1 and 2 ECL charges recorded a net charge of HK$2,077m in 2H22 due to higher ECL made against the mainland China commercial real estate sector. This compared with a net release of HK$795m in 1H22, due to the migration of previously provided stage 2 allowances to stage 3 allowances on mainland China commercial real estate sector. Stage 3 ECL charges increased by HK$562m when compared with 1H22 to HK$3,453m, reflecting the downgrade of certain corporate customers related to mainland China commercial real estate sector.

Net deficit on property revaluation was broadly the same when compared with 1H22. **Share of profits/(losses) of associates** recorded a profit compared with a loss in 1H22, mainly reflecting the property revaluation movement of a property investment company.

Segmental Analysis

The table below sets out the profit before tax contributed by the business segments.

Figures in HK$m	Wealth and Personal Banking	Commercial Banking	Global Banking	Global Markets	Other	Total
Year ended 31 December 2022						
Profit/(loss) before tax	**8,697**	**775**	**380**	**2,024**	**(437)**	**11,439**
Share of profit/(loss) before tax	**76.0%**	**6.8%**	**3.3%**	**17.7%**	**(3.8)%**	**100.0%**
Year ended 31 December 2021 (re-presented)						
Profit/(loss) before tax	9,682	4,147	962	2,003	(409)	16,385
Share of profit/(loss) before tax	59.1%	25.3%	5.9%	12.2%	(2.5)%	100.0%

Wealth and Personal Banking ('WPB') recorded a 1% year-on-year decrease in net operating income before change in ECL and other credit impairment charges to HK$18,287m. Operating profit and profit before tax dropped by 9% to HK$8,707m and by 10% to HK$8,697m respectively.

WPB remained resilient against the backdrop of the fifth COVID wave in Hong Kong and increased volatility in investment markets. Net operating income before change in ECL and other credit impairment charges fell by HK$219m year-on-year which was driven by the adverse impact of financial market movements on life insurance manufacturing of HK$3,084m. This was partly offset by the 32% growth in net interest income, particularly in 2H22, riding on the interest rate hike cycle. Net interest income grew by 53% in 2H22 compared with 1H22.

Our balance sheet remains strong. In 2H22, intensified market competition in retail deposits accelerated the shift of funds from current/savings accounts to time deposits. Despite the headwinds, we deepened customer relationships and increased our customer deposits by 6% year-on-year. Gross loans and advances to customers grew by 2% and we sustained market position in various areas, including mortgage registrations, card receivables and personal loans. To meet our customers' needs for sustainable solutions, we introduced Green Mortgages and Electric Vehicle Loans.

Growth in our strategic customer segments further strengthened our robust foundation for the long-term expansion of our business. Supported by enhanced customer propositions and journeys, and modern messaging platform into personalised product service offering, we deepened existing customer relationships and attracted new clients. We achieved a 16% year-on-year increase in key segments, including high-net-worth and mass & emerging affluent customers.

Our insurance business remained resilient, despite the unfavourable macroeconomic environment and the disruptive effects of the pandemic. Enhancements to our savings/protection products further strengthening our retirement and legacy planning proposition and helped us to capture growth in strategic customer segments. We grew net insurance premiums income by 44% year-on-year. We continued to invest in service innovations and advanced our strategic imperatives. We maintained a top 3 market position in digital insurance, supported in part by the 135% year-on-year increase in the number of digital insurance policies sold.

Our wholly owned subsidiary, Hang Seng Investment Management Limited ('HSVM'), was named the new manager of the Tracker Fund of Hong Kong, the largest exchange-traded fund ('ETF') in Hong Kong. Due in part to taking up this new role, which further strengthens our leadership in the local asset management market, our asset management business grew by 75% year-on-year. In February 2022, HSVM launched the first Hong Kong-listed ESG ETF based on the Hang Seng Index to further enrich product choice in meeting the different needs of investors.

Our broad spectrum of foreign exchange investment products provided a variety of options for customers looking to capture opportunities in the volatile market conditions. We recorded a 166% year-on-year increase in foreign exchange investment customers and the solid sales performance of our Capital Protected Investment deposit ('CPI') has achieved a record growth. We enriched our fixed-income offerings with the relaunching of certificates of deposit, and extended fixed-income trading to our digital channel. This latter development is a major digital service milestone, with all our investment product offerings now available on our digital platform. The fixed-income customer base increased significantly, and sales turnover of fixed-income products grew by 291% year-on-year.

Digital transformation remains a core part of our strategy. We successfully delivered over 460 new digital innovations and enhancements in 2022. Our first-in-market services in Hong Kong include Mobile Cheque Deposit, a Green Receipt (transaction e-Advice) service at branches and the introduction of US equity-linked investments on both mobile and online banking platforms.

Other digital developments include a securities profit and loss tracking service, and an omni-channel shopping cart and document centre function that allows for the offline-to-online completion of investment fund transactions and the convenience of reviewing investment documents online. Customers can also now enjoy the flexibility and convenience of online instalment payment services with instant approval when making card purchases or bill payments online.

We introduced a new Relationship Management platform and have equipped all our Prestige Relationship Managers with 'Prestige RM Connect', which enables them to more easily engage with our customers. Supported by all these innovations and enhancements, we recorded an 11% year-on-year increase in the number of monthly mobile active customers and our digital transaction count for deposits, foreign exchange and loans rose by 98% year-on-year.

We introduced our digital influencer, Hazel, who is Hong Kong's first digital influencer in the banking sector. Riding on our 'Green Moments' campaign, we also launched our first non-fungible token ('NFT'), co-created with local Hong Kong artists.

Our initiatives have been well recognised throughout the year with a number of industry awards from different organisations, including 'The Asian Banker Hong Kong Awards 2022 – Best Mobile Banking Service Award' and 'Capital Outstanding eCommerce Awards 2021/22 – Outstanding Digital Banking Service'.

To further drive innovation, we have entered into strategic alliances with various business partners, including to develop an immersive experience for our customers in the Sandbox. We are also continuing to work with the various stakeholders, including fintech partners, to help support central bank digital currency development in Hong Kong.

Commercial Banking ('CMB') recorded an 8% increase in net operating income before change in ECL and other credit impairment charges to HK$9,625m. Operating profit and profit before tax both dropped by 81% to HK$775m.

We achieved good growth in net interest income, which increased by 16% year-on-year. Continuous efforts to acquire new quality customers helped enhance our portfolio and amplify the positive impacts of interest rates hikes.

Non-interest income fell by 22% year-on-year, with external factors such as Hong Kong's fifth COVID wave, signs of weakness in the global economy and increased market volatility having an adverse impact on commercial activity and trade flows. The movements in the financial markets also unfavourably affected our insurance business.

As we moved into the second-half of 2022 with the increasing market interest rate and the relaxation of social distancing restriction, net operating income before change in ECL increased 17% against first half of 2022. We continued to provide tailor-made solutions to meet the specific needs of our customers. Sales of keyperson insurance recorded strong growth.

We moved forward with digital transformation to keep pace with the rapidly evolving financial services ecosystem and to fulfil customer expectations for seamless and simplified bank experiences. We are one of the first batch of banks to use the Commercial Data Interchange, a next-generation financial data exchange platform built by Hong Kong Monetary Authority ('HKMA') to enhance decision-making and shorten loan application times for SMEs. We enhanced our online foreign exchange service with real-time rate quotes to allow customers manage their foreign currency cash flows more effectively.

To better serve customers' daily operations, we revamped our trade platform to improve processing efficiency. This is enabling us to capture new structured trade opportunities in the GBA. The introduction of digital receivables finance has significantly shortened onboarding times. Our new Virtual Card payment service allows customers to handle each transaction with a unique card number for safer online business and easier reconciliation.

We have also prioritised our resources in supporting customers with their sustainability performance and the transition to the low-carbon economy. Our new Wan Chai Business Banking Centre has an ESG-focused service concept and an eco-aware design. ESG specialists at the Centre have completed specialised training in order to provide customers with suggestions and tips for integrating sustainability elements into their business operations.

Green loans and sustainability-linked finance approvals in Hong Kong increased year-on-year. We also launched a Green Deposit service, which provides customers with one way to support greater sustainability, with deposits only being lent to borrowers to finance green and sustainability initiatives.

Quality new customer acquisition remains a key focus. Supported by improved customer experiences in onboarding journey, as well as strategic partnerships with local industry associations and organisations, the number of new customers acquired grew 38% year-on-year.

We increased our ECL provisions in response to the further deterioration in credit conditions in the mainland China commercial real estate sector. Overall, our asset quality remains healthy. We will continue to closely monitor our mainland China commercial real estate sector portfolio.

Global Banking ('GB') maintained net operating income before change in ECL and other credit impairment charges broadly in line with 2021 at HK$2,756m. Operating profit and profit before tax both dropped by 60% to HK$380m.

Net interest income grew by 2% to HK$2,411m compared with 2021. Our customer deposit balance increased by 5% year-on-year, which supported the 5% growth in deposit interest income. We took steps to enhance our loan portfolio, focusing greater diversification. We are also placing more emphasis on trade financing to support our customers' business operation.

With the impact of the fifth wave of COVID in Hong Kong and the slowdown in the global economy, reduced business activity in the market resulted in an 11% year-on-year drop in non-interest income to HK$345m.

We proactively developed new solutions to meet our customers' current and future needs. With our in-depth market knowledge and understanding of our clients' businesses, we used our corporate Application Programming Interface ('API') solution to help them streamline cash management by integrating the process more deeply into their day-to-day business operations.

Year-on-year, we increased our trade loan balance by 41% to HK$22bn which boost up the related net interest income by 75%. Trade related non-interest income also achieved a 15% growth.

Leveraging our strong customer relationships, we continue to develop and diversify our income stream, particularly through our newly established Bond Management team. To further broaden our sources of non-interest income, we proactively expanded our insurance business by offering keyperson insurance to senior executives of our corporate customers.

We continued to support the sustainability agenda with strong growth recorded in newly approved green and sustainability-linked loans in Hong Kong. We also launched a Green Deposit service to corporate customers, enabling them to enjoy deposit returns and support greater sustainability in the business community.

In close collaboration with the Global Market team, we were captured more business providing hedging solutions in the high interest rate environment.

Global Markets ('GM') maintained net operating income before change in ECL and other credit impairment charges largely in line with last year at HK$2,671m. Operating profit and profit before tax both increased by 1% to HK$2,024m.

Net interest income decreased by 15% to HK$1,524m, due to the rapid tightening of global financial conditions in 2022, with rising interest rates challenging the net interest margin. The Markets Treasury team continued to actively seek good market opportunities, and take actions to enhance and diversify the portfolio, while upholding appropriate risk management standards.

Non-interest income increased by 31% to HK$1,147m. The increase is mainly due to strong revenue growth in sales and trading. We successfully captured opportunities in the volatile foreign exchange markets, with revenue from foreign exchange and option trading recording significant growth compared with 2021. We made further good progress with enhancing our service capabilities by implementing new digital solutions to support business growth.

Achievements in the further diversification of our revenue base include the expansion of our Repo business' portfolio by 40% year-on-year. We enhanced our hedging capacity in equity derivatives by including Hong Kong listed equity index futures in the fourth quarter of 2022. We continued with initiatives to deepen GM product penetration among Bank customers through close collaboration with the WPB, CMB and GB teams. In particular, we promoted Hang Seng certificates of deposit ('CD') through collaboration with the CMB Wealth Management team to offer incentives for promoting CD.

We continued with actions to support the development of the green and social bond secondary market.

Balance sheet Analysis

Assets

Total assets increased by HK$74bn, or 4%, to HK$1,894bn compared with 2021 year-end, with the Group maintaining resilient business momentum and progressing with its strategy of enhancing long-term profitability through sustainable growth.

Cash and balances at central banks increased by HK$1bn, or 4%, to HK$18bn. Trading assets and financial assets designated at fair value were down by HK$3bn, or 3%, to HK$76bn.

Customer loans and advances (net of allowances for ECL) decreased by HK$66bn, or 7%, to HK$931bn. Loan growth was muted, partly reflecting the adverse impact of the fifth COVID wave in Hong Kong and disruptions to the global supply chain, as well as the Group's risk mitigation efforts. Loans for use in Hong Kong decreased by 4%. Lending to industrial, commercial and financial sectors decreased by 9%. Lending for property development and property investment was down by 11%. There was increased lending to information technology and financial concerns sectors, but these were more than offset by the decline in loans outstanding from the wholesale and retail trade, manufacturing, transport and transport equipment and 'Others' sectors. Lending to individuals grew by 3%.

With a less active property market, residential mortgages and Government Home Ownership Scheme/Private Sector Participation Scheme/Tenants Purchase Scheme lending grew by 4% and 1% respectively. Credit card advances grew by 1% while other personal lending dropped by 2%.

Trade finance lending decreased by 15%, due mainly to the slowdown of global trade volumes and loan repayment during the year.

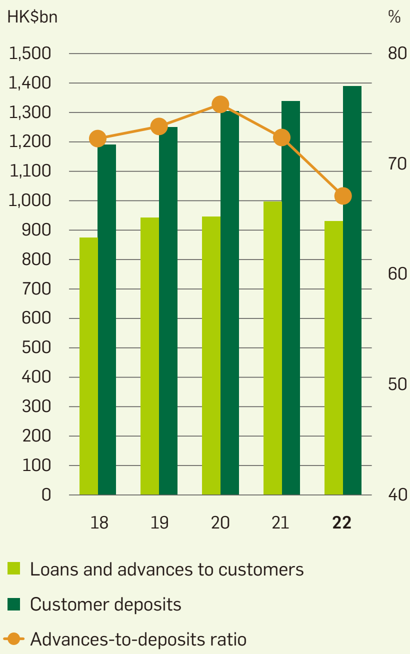
Loans for use outside Hong Kong were down by 12%, due mainly to decreased lending by the Group's mainland banking subsidiary and loans for use outside Hong Kong granted by the Hong Kong office, reflecting the Group's risk mitigation efforts.

Whilst customer lending was sluggish, financial investments grew by HK$122bn, or 24%, to HK$623bn, reflecting the partial redeployment of the commercial surplus and yields enhancement.

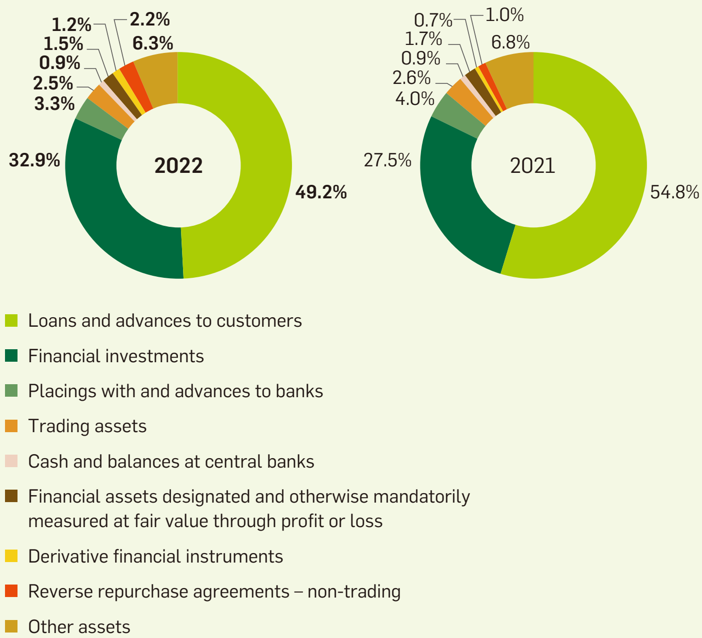
Assets Deployment

Figures in HK$m	At 31 December 2022	%	At 31 December 2021	%
Cash and balances at central banks	**17,609**	**0.9**	16,896	0.9
Trading assets	**47,373**	**2.5**	47,433	2.6
Derivative financial instruments	**22,761**	**1.2**	13,224	0.7
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**28,861**	**1.5**	31,326	1.7
Reverse repurchase agreements – non-trading	**42,364**	**2.2**	18,821	1.0
Placings with and advances to banks	**62,326**	**3.3**	72,493	4.0
Loans and advances to customers	**931,334**	**49.2**	997,397	54.8
Financial investments	**622,616**	**32.9**	500,386	27.5
Other assets	**118,561**	**6.3**	122,209	6.8
Total assets	**1,893,805**	**100.0**	1,820,185	100.0
Return on average total assets	**0.5%**		0.8%	

Loans and Advances to Customers and Customer Deposits



Assets Deployment

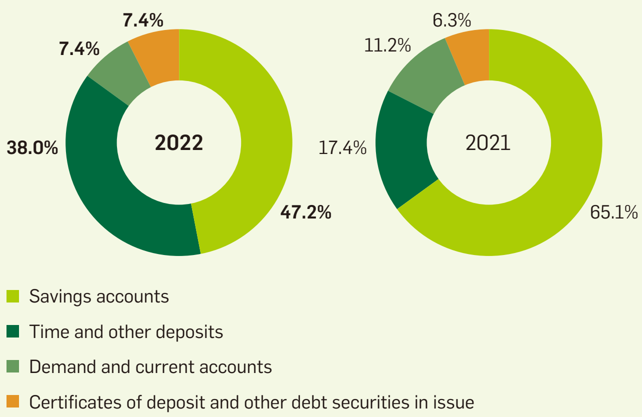


Liabilities and equity

Customer deposits, including certificates of deposit and other debt securities in issue, increased by HK$50bn, or 4%, to HK$1,389bn against the end of 2021. Growth in time deposits in response to rising interest rates was partly offset by the decrease in CASA. CASA as a percentage of total customer deposits fell from 76% at year-end 2021 to 55% at year-end 2022. At 31 December 2022, the advances-to-deposits ratio was 67.1%, compared with 74.5% at 31 December 2021.

Figures in HK$m	At 31 December 2022	At 31 December 2021
Customer loans and advances (net of allowances for ECL)	**931,334**	997,397
Customer deposits, including certificates of deposit and other debt securities in issue	**1,388,841**	1,338,800
Advances-to-deposits ratio	**67.1%**	74.5%

Customer Deposits



Shareholders' equity

Figures in HK$m	At 31 December 2022	At 31 December 2021
Share capital	**9,658**	9,658
Retained profits	**142,680**	140,100
Other equity instruments	**11,744**	11,744
Premises revaluation reserve	**18,338**	18,428
Cash flow hedging reserve	**(816)**	46
Financial assets at fair value through other comprehensive income reserve	**1,737**	2,499
Other reserves	**555**	1,857
Total reserves	**174,238**	174,674
Total shareholders' equity	**183,896**	184,332
Return on average ordinary shareholders' equity	**5.5%**	7.7%

At 31 December 2022, shareholders' equity was HK$184bn, broadly the same level as at the end of 2021. Retained profits increased by HK$2.6bn, or 2%, reflecting profit accumulation after the appropriation of dividends paid during the year. Financial assets at fair value through other comprehensive income reserve decreased by HK$0.8bn, or 30%, mainly reflecting the fair value movement of the Group's investments in financial assets measured at fair value through other comprehensive income. Other reserves dropped by HK$1.3bn, or 70%, mainly reflecting the decrease in the foreign currency exchange reserve as a result of the depreciation of the RMB currency. The cash flow hedging reserve recorded a negative reserve of HK$0.8bn, compared with a positive reserve of HK$46m at the end of 2021, mainly reflecting the interest rate movements of hedging derivatives during the year.

Our approach to risk

Our risk appetite

We recognise the importance of a strong risk culture, which refers to our shared attitudes, 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.

We seek to build our business for the long term by balancing social, environmental and economic considerations in the decisions we make. Our strategic priorities are underpinned by our endeavour to operate in a sustainable way. This helps us to carry out our social responsibility and manage the risk profile of the business. We are committed to managing and mitigating climate-related risks, both physical and transition risks, and continue to incorporate consideration of these into how we manage and oversee risks internally and with our customers.

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 business.
- We are committed to managing the climate risks that have an impact on our financial position, and contributing to HSBC Group's 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 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 a result of failed internal processes, people and systems or from external events.

Our risk appetite is expressed in both quantitative and qualitative terms. 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 twice a year to make sure it remains fit for purpose. The 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 Risk Committee ('RC'). Setting out our risk appetite ensures 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 consists of qualitative statements and quantitative metrics, covering financial and non-financial risks. It is applied to the development of business line strategies, strategic and business planning, and remuneration.

Performance against the RAS is reported to the Risk Management Meeting ('RMM') regularly 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.

Risk Management

We recognise that the primary role of risk management is to 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.

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 safe operation.

We aim to use a comprehensive risk management approach across the organisation and across all risk types, underpinned by our 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 identify, assess, manage and report the risks we accept and incur in our activities. We continue to enhance our approach to manage 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 and structure, our risk management tools and our risk culture, which together help align employee behaviour with our risk appetite.

Key components of our risk management framework

Our Values and Risk Culture

Risk governance	Non-executive risk governance	The Board approves the risk appetite, plans and performance targets. It sets the 'tone from the top' and is advised by the RC.
	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 function helps ensure the necessary balance in risk/return decisions.
Processes and tools	Risk appetite	The Group has processes in place to identify/assess, monitor, manage and report risks to help ensure we remain within our risk appetite.
	Enterprise-wide risk management tools	
	Active risk management: identification/assessment, monitoring, management and reporting	
Internal controls	Policies and procedures	Policies and procedures define the minimum requirements for the controls required to manage our risks.
	Control activities	Non-financial risk stewards define the minimum control standards for managing non-financial risks.
	Systems and infrastructure	The Group has systems and/or 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 Chief Risk Officer, supported by 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 reside with Chief Compliance Officer. Oversight is maintained by the Chief Risk Officer in line with her enterprise 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.

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.

A Product Oversight Committee reporting to the RMM and comprising senior executives from Risk, Legal, Compliance, Finance, and Operations/IT, is responsible for reviewing and approving the launch of such new products and services. Each new service and product launch is also subject to an operational risk self-assessment process, which includes identification, evaluation and mitigation of risk arising from the new initiative. Internal Audit is consulted on the internal control aspect of new products and services in development prior to implementation.

Our roles and 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 structure.

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. This 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 sets the policy and guidelines for managing specific risk areas, provides advice and guidance in relation to the risk, and challenges the first line of defence on effective risk management.
- The third line of defence is our Internal Audit function, which provides independent assurance that our risk management, governance and internal control processes are designed and operating effectively.

Independent risk function

The Group's Risk function, headed by the 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 function is made up of sub-functions covering all risks to our operations and forms part of the second line of defence. It is independent from the 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 various specialist Risk Stewards, along with our aggregate overview through Chief Risk Officer.

Risk management tools

The Group uses a range of tools to identify, monitor and manage risk. The key tools are summarised below.

Risk appetite

Risk Appetite ('RA') is defined as the level and types of risks that the Group is willing to take to achieve our strategic objectives. RA is articulated through RAS, which consists of qualitative statements and quantitative metrics covering both financial and non-financial risks that are material to the Group.

RA supports senior management in allocating capital, funding, and liquidity optimally to finance strategic growth within acceptable risk levels, while monitoring exposure of non-financial risks which may impact our customers or lead to sub-optimal returns to shareholders, regulatory censure, or reputational damage. The RMM reviews the Group's actual risk appetite profile in which the quantitative metrics have pre-defined Risk Appetite and Risk Tolerance thresholds against which performance is measured and monitored. The actual risk appetite profile is also reported to the RC and the Board by Chief Risk Officer including breach commentary.

Risk map

The Group uses a risk map to provide a point-in-time view of its residual risk profile across both financial and non-financial risks. This highlights the potential for these risks to materially affect our financial results, reputation or business sustainability. Risk stewards assign risk ratings, supported by commentary. Risks that have an 'Amber' or 'Red' risk rating require monitoring and mitigating action plans being either in place or initiated to manage the risk down to acceptable levels.

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 organisation and global businesses, for any risks that may require escalation, updating our top and emerging risks as necessary.

Stress testing and recovery planning

The Group operates a wide-ranging stress testing programme that is a key part of our risk management and capital planning. 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.

Our stress testing programme assesses our capital strength through a rigorous examination of our resilience to external shocks. 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 business-as-usual mitigating actions.

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 and operational risk events, as well as other potential events that are specific to the Group.

The selection of scenarios is based upon the output of our top and emerging risks identified and our risk appetite. Stress testing analysis helps management understand the nature and extent of vulnerabilities which the Group is exposed to. Using this information, management decides whether risks can or should be mitigated through management actions or, if they were to crystallise, should be absorbed through capital. This in turn informs decisions about preferred capital levels and allocations.

The Group also participate, as required, in the regulatory stress testing programmes of the jurisdictions in which they operate, and the stress tests of the HKMA. Functions and businesses also perform bespoke stress testing to inform their assessment of risks in 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, RC and the Board.

Recovery and resolution plans

Recovery and resolution plans form an integral framework in the safeguarding of the Group's financial stability. Together with stress testing, it helps us understand the outcomes of adverse business or economic conditions and the identification of mitigating actions.

Key developments in 2022

We continued to actively manage the risks related to macroeconomic and geopolitical uncertainties, as well as the risks resulting from the COVID-19 pandemic and its impacts on our customers and operations during 2022 as well as other key risks described in this section.

In 2022, we enhanced our risk management in the following areas:

- We continued to improve our risk governance decision making, particularly with regard to the governance of treasury risk to ensure senior executives have appropriate oversight and visibility of macroeconomic trends around inflation and interest rates.
- We continued to develop our approach to emerging risk identification and management, including the use of forward-looking indicators to support our analysis.
- We enhanced our enterprise risk reporting processes to place a greater focus on our emerging risks, including by capturing the materiality, oversight and individual monitoring of these risks.
- We further strengthened our third-party risk policy and processes to improve control and oversight of our material third parties to maintain our operational resilience, and to meet new and evolving regulatory requirements.
- We made progress with our comprehensive regulatory reporting programme to strengthen our global processes, improve consistency, and enhance controls.
- We enhanced, and continued to embed, the governance and oversight around model adjustments and related processes for HKFRS 9 models and Sarbanes-Oxley controls.
- We continued to embed climate considerations throughout the organisation, including expanding the scope of climate related training and developing new climate risk metrics to monitor and manage exposures, and the development of internal climate scenario exercise.
- We continued to improve the effectiveness of our financial crime controls, deploying advanced analytics capabilities. We are refreshing our financial crime policies, ensuring they remain up-to-date and address changing and emerging risks. We continue to monitor regulatory changes.

Areas of special interest

(unaudited)

During 2022, a number of areas were identified and considered as part of our top and emerging risks because of the effect they may have on the Group. We place particular focus in this section on geopolitical and macroeconomic risks, technology and cyber security risk, financial crime risk environment, IBOR transition, risks related to COVID-19 and climate related risks.

Geopolitical and macroeconomic risks

The Russia-Ukraine war has had far-reaching geopolitical and economic implications. The Group is monitoring the impacts of the war and continues to respond to the extensive sanctions and trade restrictions that have been imposed, noting the challenges that arise in implementing the complex, novel and ambiguous aspects of certain of these sanctions. Sanctions were targeted against numerous Russian government officials and politically exposed individuals. Russia has implemented certain countermeasures in response. Further sanctions and counter sanctions in connection with Russia may adversely affect the Group, its customers and the markets in which the Group operates by creating regulatory, reputational and market risks.

Global commodity markets have been significantly impacted by the Russia-Ukraine war and localised COVID-19 outbreaks, leading to continued supply chain disruptions. This has resulted in product shortages appearing across several regions, and increased prices for both energy and non-energy commodities, such as food. We do not expect these to ease significantly in the near term. In turn, this has had a significant impact on global inflation.

Rising global inflation has prompted central banks to tighten monetary policy. The combined pressure of inflation and interest rate rises may lead to pressures on customers and their ability to repay debt. We continue to monitor our risk profile closely in the context of uncertainty over global macroeconomic policies. Higher inflation and interest rate expectations around the world, and the resulting economic uncertainty, have had an impact on Expected Credit Loss ('ECL').

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.

The US-China relationship remains complex, with divisions over a number of critical issues. However, the recent meetings between senior officials of the two nations signal an effort to reduce tensions by allowing more working-level discussions and confidence-building measures. The US, the UK, the EU, Canada and other countries have imposed various sanctions and trade restrictions on Chinese persons and companies. These include the freezing of assets of government officials, and the implementation of investment and import/export restrictions targeting certain Chinese companies.

There is a continued risk of additional sanctions being imposed by the US and other governments in relation to human rights and other issues with China, and this 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. China has also promulgated laws that provide a legal framework for imposing further sanctions. These and any future measures and countermeasures that may be taken by the US, China and other countries may affect the Group, its customers, and the markets in which we operate.

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.

China's expanding data privacy, national security and cybersecurity laws could pose potential challenges to intragroup data sharing. These developments could increase financial institutions' compliance burdens in respect of cross-border transfers of personal information, and degrade our enterprise-wide financial crime risk management capabilities. In Hong Kong, there is also an increasing focus by regulators on the use of big data and artificial intelligence.

Market participants remain concerned about the repercussions for the Chinese domestic economy from instability in its commercial real estate sector, including deteriorating operating performance and challenging liquidity conditions, and China's elevated COVID-19 infections. Despite the announcements of relaxation of 10 COVID-19 controls at end 2022 and the borders reopening on 8 January 2023, we continue to monitor the situation closely, including potential indirect impacts, and take mitigating actions as required.

Mitigation actions

- We closely monitor the economic developments in key markets and sectors and actively manage our credit portfolio through enhanced monitoring, thematic reviews, internal stress tests, etc. We will continue to support our customers and manage risk and exposures as appropriate.
- We regularly review key portfolios to help ensure that individual customer or portfolio risks are understood and 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, and enhancement to, our existing controls.

Technology and cyber security risk

We operate an extensive and complex technology landscape, which must remain resilient in order to support customers and the Group. Risks arise where technology is not understood, maintained, or developed appropriately. Together with other organisations, we continue to operate in an increasingly hostile cyber threat environment. These threats include potential unauthorised access to customer accounts, attacks on our systems or those of our third-party suppliers and require ongoing investment in business and technical controls to defend against them.

Mitigating actions

- We continue to invest in transforming how software solutions are developed, delivered and maintained. We invest both to improve system resilience and test service continuity. We continue to ensure security is built into our software development life cycle and improve our testing processes and tools.
- We continue to upgrade our IT systems, simplify our service provision and replace older IT infrastructure and publications.
- We continually evaluate threat levels for the most prevalent attack types and their potential outcomes. To further protect the Group and our customers and help ensure the safe expansion of our global businesses, we continue to strengthen our controls to 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 third-party security reviews. An important part of our defence strategy is ensuring our colleagues remain aware of cybersecurity issues and know how to report incidents.
- We report and review cyber risk and control effectiveness at executive and non-executive Board level. We also report across our global businesses, functions and markets to help ensure appropriate visibility and governance of the risk and mitigating actions.
- The Group participates globally in industry bodies and working groups to share information about tactics employed by cybercrime groups and to collaborate in fighting, detecting and preventing cyber-attacks on financial organisations.

Financial crime risk environment

Financial institutions remain under considerable regulatory scrutiny regarding their ability to prevent and detect financial crime which continues to evolve. Challenges include managing conflicting laws and approaches to legal and regulatory regimes, and implementing the unprecedented volume and diverse set of sanctions notably as a result of the Russia-Ukraine war.

Amid rising inflation and increasing cost of living pressures, we face increasing regulatory expectations with respect to increases in internal and external fraud and the abuse of vulnerable customers.

The digitisation of financial services continues to have an impact on the payments 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.

Expectations with respect to the intersection of ESG issues and financial crime as our organisation, customers and suppliers transition to net zero, continue to increase, 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 holistically and effectively.

Mitigating actions

- We continue to manage sanctions and trade restrictions through the use of, and enhancements to, our existing controls.
- We are strengthening our fraud controls and investing in next generation capabilities to fight financial crime through the application of advanced analytics and artificial intelligence.
- We are looking at the impact of a rapidly changing payments ecosystem, as well as the risks associated with direct and indirect exposure to digital assets and currencies, in an effort to ensure our financial crime controls remain appropriate.
- We are assessing our existing policies and control framework in an effort to ensure that developments in the ESG space are considered and the risks mitigated.
- We work with jurisdictions and relevant international bodies to address data privacy challenges through international standards, guidance, and legislation.

IBOR transition

Interbank offered rates ('IBORs') have previously been 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 and Japanese yen (JPY) London interbank offered rate ('LIBOR') interest rate benchmarks, as well as Euro Overnight Index Average ('EONIA'), ceased from the end of 2021. Our IBOR transition programme – which is tasked with the development of new near risk-free rate ('RFR') products and the transition of legacy IBOR products – has continued to support the transition of a limited number of remaining contracts in these benchmarks to RFRs, or alternative reference rates.

For the cessation of the publication of US dollar LIBOR from 30 June 2023, we have implemented the majority of required processes, technology and RFR product capabilities in preparation for upcoming market events and continue to transition outstanding legacy contracts through the first half of 2023. We have completed the transition of the majority of our committed lending facilities and continue to make steady progress with the transition of the outstanding legacy committed lending facilities. Transition of our derivatives portfolio is progressing well with most clients reliant on industry mechanisms to transition to RFRs. For certain products and contracts, including syndicated loans, we remain reliant on the continued support of agents and third parties, but we continue to progress those contracts requiring transition. We will continue to monitor contracts that may be potentially more challenging to transition and need to rely upon legislative solutions. Additionally, following the FCA's consultation in November 2022 proposing that US dollar LIBOR is to be published using a 'synthetic' methodology for a defined period, we will continue to work with our clients to support them through the transition of their products if transition is not completed by 30 June 2023.

We remain mindful of the various factors that impact on IBOR remediation strategy for our regulatory capital instruments, including but not limited to timescales for cessation of relevant IBOR rate, constraints relating to the governing law of outstanding instruments, and the potential relevance of legislative solutions and industry best practice guidance. We remain committed in seeking to remediate or mitigate relevant risks relating to IBOR-demise, as appropriate, on our outstanding regulatory capital instruments before the relevant calculation, which may occur post-cessation of the relevant IBOR rate.

For US dollar LIBOR and other demising IBORs, we continue to be exposed to, actively monitor, risks including:

- regulatory compliance and conduct risks, as the transition of legacy contracts to RFRs or alternative rates, or sales of products referencing RFRs, may not deliver fair client outcomes;
- resilience and operational risks, as changes to manual and automated processes, made in support of new RFR methodologies, and the transition of large volumes of IBOR contracts may lead to operational issues;
- legal risk, as issues arising from the use of legislative solutions and from legacy contracts that the Group is unable to transition may result in unintended or unfavourable outcomes for clients and market participants. This could potentially increase the risk of disputes;
- model risk, as there is a risk that changes to our models to replace IBOR-related data, adversely affect the accuracy of model outputs; and
- market risk, because as a result of differences in LIBOR and RFRs interest rates, we are exposed to basis risk resulting from the asymmetric adoption of rates across assets, liabilities and products.

We will monitor these risks through the remainder of the transition of legacy contracts, with a focus on fair client outcomes. The level of risk is diminishing in line with our process implementation and continued transition of contracts. Throughout 2023, we continue to be committed on engaging with our clients and investors to complete an orderly transition of contracts that reference the remaining demising LIBORs.

Mitigating actions

- Our IBOR transition programme, which is overseen by the Chief Risk Officer, will continue to deliver IT and operational processes to meet its objectives.
- We carry out extensive training, communication and client engagement to facilitate appropriate selection of new rates and products.
- We have dedicated teams in place to support the transition.
- We have actively transition legacy contracts and ceased new issuance of LIBOR and demising regional rate based contracts, other than those allowed under regulatory exemptions with associated monitoring and controls.
- We assess, monitor and dynamically manage risks arising from IBOR transition, and implement specific mitigating controls when required.
- We continue to actively engage with regulatory and industry bodies to mitigate risks relating to 'tough legacy' contracts.

Financial instruments impacted by IBOR reform

(audited)

Amendments to HKFRSs issued in October 2020 (Interest Rate Benchmark Reform Phase 2) represents the second phase of the project on the effects of interest rate benchmark reform, addressing issues affecting financial statements when changes are made to contractual cash flows and hedging relationships as a result of reform.

Under these amendments, changes made to a financial instrument measured at other than fair value through profit or loss 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. Instead, they require the effective interest rate to be updated to reflect the change in the interest rate benchmark. In addition, hedge accounting will not be discontinued solely because of the replacement of the interest rate benchmark if the hedge meets other hedge accounting criteria.

The Group has adopted the amendments from 1 January 2020.

	Financial instruments yet to transition to alternative benchmarks, by main benchmark			
	USD LIBOR (HK$m)	GBP LIBOR (HK$m)	JPY LIBOR (HK$m)	CDOR (HK$m)
At 31 December 2022				
Non-derivative financial assets[1]	**31,224**	**–**	**–**	**1,439**
Non-derivative financial liabilities	**–**	**–**	**–**	**–**
Derivative notional contract amount	**76,489**	**–**	**–**	**–**
At 31 December 2021				
Non-derivative financial assets[1]	33,372	6,422	380	–
Non-derivative financial liabilities	3,119	–	–	–
Derivative notional contract amount	81,944	–	–	–

1 Gross carrying amount excluding allowances for expected credit losses.

The amounts in the above table relate to the Group's main operating entities and 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.

Risks related to COVID-19

COVID-19 remains a risk to our customers and organisation. However, the policy for broad lockdowns and public health restrictions has been eased following successful vaccine rollouts, and as societies have adapted. Countries continue to differ to a degree in their approach, although China has recently reversed many restrictions on activity and mobility. In China and Hong Kong, adherence to more stringent public health restrictions had adverse economic implications through much of 2022. Government imposed lockdowns of major cities in China and restrictions on travel, adversely affected global tourism and supply chains.

With the relaxation of restrictions in China in December 2022 and also the borders reopening on 8 January 2023, the prospect of a sustained recovery has emerged, given the opportunity for the persistent disruptions to activity to abate and for travel and tourism to resume. There are still short term risks, however, as the recent surge in infections may dampen confidence and activity, while there are also fears that the surge in infections risks given opportunity for the emergence of a new variant of the virus.

Hong Kong Government has deployed extensive measures to support local populations. Measures implemented by the Government included but not limited to consumption voucher scheme and funding support to businesses. As the epidemic situation stablises, the Government has also relaxed inbound control measures aiming at resuming the international connection at end 2022.

We continue to support our personal and business customers through market-specific measures initiated during the COVID-19 pandemic, and by supporting Hong Kong Government schemes that focus on the parts of the economy most impacted by the pandemic. These measures have been well received and we remain responsive to our customers' changing needs.

The rapid introduction and varying nature of the Government support schemes introduced throughout the COVID-19 pandemic has led to increased operational risks, including complex conduct considerations, increased reputational risk and increased risk of fraud. These risks are likely to be heightened further as and when those Government support schemes are unwound.

We continue to monitor the situation closely, and given the continuing uncertainties related to the post-pandemic landscape, additional mitigating actions may be required.

Climate related risk

Focus on climate related risk increased over 2022, owing to the pace and volume of policy and regulatory changes globally particularly on climate risk management, stress testing and scenario analysis and disclosures. If we fail to meet evolving regulatory expectations or requirements on climate risk management, this could have regulatory compliance and reputational impacts.

We could face direct impact owing to the increase in frequency and severity of weather events and chronic shifts in weather patterns, which could impact our ability to conduct our day-to-day operations.

Our customers may find that their business models fail to align to a low carbon economy or face disruption to their operations or deterioration to their assets as a result of extreme weather events.

We face increased reputational, legal and regulatory risk as we make progress towards our carbon neutrality targets, with stakeholders likely to place greater focus on our actions such as the development of climate-related policies, our disclosures and financing and investment decisions relating to our ambition.

We will face additional risks if we are perceived to mislead stakeholders in respect of our climate strategy, the climate impact of a product or service, or the commitments of our customers.

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

To track and report on progress towards achieving our carbon neutrality targets, we rely on internal and, external data, guided by industry standards. While carbon emissions reporting has improved over time, we are continually enhancing the quality and consistency of the data. The Bank's calculation methodologies of carbon emissions may evolve over time in line with market practice, regulations, and developments in climate science. Any developments in data and methodologies could result in revisions to reported data going forward, meaning that reported figures may not be reconcilable or comparable year-on-year. We may also have to reevaluate our progress towards our climate-related targets in future and this could result in reputational, legal and regulatory risks.

Mitigating actions

- We continue to deepen our understanding of the drivers of climate risk. A dedicated Climate Risk Working Group is responsible for overseeing our climate related risk management.
- We continue to accelerate 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.
- In December 2022, our energy policy and thermal coal phase-out policy has revised and we will leverage on our relationships to partner with customers in this sector to help them transition to cleaner, safer and cheaper energy alternatives.
- Climate stress tests and scenarios are being used to further improve our understanding of our risk exposures for use in risk management and business decision making.
- We continue to engage with our customers, investors and regulators proactively on the management of climate related risks.

Our material banking and insurance risks

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 certain other products such as guarantees and derivatives.	Credit risk is: – measured as the amount which could be lost if a customer or counterparty fails to make repayments; – monitored 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.
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 foreign exchange exposures and changes in market interest rates, and including the financial risks arising from historic and current provision of pensions and other post-employment benefits to staff and their dependants.	Treasury risk arises from changes to the respective resources and risk profiles driven by customer behaviour, management decisions, or pension plan fiduciary decisions. It also arises from the external environment, including changes to market parameters such as interest rates or foreign exchange rates, together with updates to the regulatory requirements.	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 that movements in market factors, such as foreign exchange rates, interest rates, credit spreads, equity prices and commodity prices, will reduce our income or the value of our portfolios.	Exposure to market risk is separated into two portfolios: trading and non-trading. Market risk for non-trading portfolios is discussed in the 'Treasury risk' section. Market risk exposures arising from our insurance operations are discussed in 'Insurance manufacturing operation risk' section.	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 Chief Risk Officer. These limits are allocated across the Group's legal entities and business lines.
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 greener 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; and	Climate risk is: – measured using a variety of risk appetite metrics and Key Management Indicators, which assess the impact of climate risk across the risk taxonomy; – monitored using stress testing; and – managed through adherence to risk appetite thresholds and via specific policies.

Risks	Arising from	Measurement, monitoring and management of risk
***Climate risk** continued*		
	– greenwashing risk, which arises from the act of knowingly or unknowingly misleading stakeholders regarding our strategy relating to climate, the climate impact/benefit of a produce or service, or the climate commitments or performance of our customers.	
Resilience risk		
Resilience risk is the risk that we are unable to provide critical services to our customers, affiliates and counterparties as a result of sustained and significant operational disruption.	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 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 the Group'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.

Description of risks – banking operations continued

Risks	Arising from	Measurement, monitoring and management of risk
Model risk		
Model risk is the potential for adverse consequences from business decisions arising from the use of models that have been inadequately designed, implemented or used or that model does not perform in line with expectations and predictions.	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 review function, 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.

Description of risks – insurance manufacturing operations

Our insurance manufacturing subsidiary is separately regulated from our banking operations. Risks in the insurance entities are managed using methodologies and processes appropriate to insurance manufacturing operations, but remain subject to oversight at Group level. Our insurance operations are also subject to some of the same risks as our banking operations, which are covered by the Group's respective risk management processes.

Risks	Arising from	Measurement, monitoring and management of risk
Insurance risk		
Insurance risk is the risk that, over time, the cost of acquiring and administering an insurance contract, and paying claims and benefits may exceed the total amount of premiums received and investment income.	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.
Financial risk		

Our ability to effectively match the liabilities arising under insurance contracts with the asset portfolios that back them is contingent on the management of financial risks and the extent to which these risks are borne by the policyholders.	Exposure to financial risks arises from:
	– market risk of changes in 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 separately for each type of risk:
		  – market risk is measured in terms of economic capital, internal metrics and fluctuations in key financial variables;
		  – credit risk is measured in terms of economic capital and the amount that could be lost if a counterparty fails to make repayments; and
		  – liquidity risk is measured 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.

The following information describes the Group's management and control of risks, in particular, those associated with its use of financial instruments ('financial risks'). Major types of risks to which the Group is exposed include credit risk, treasury risk, market risk, climate risk, resilience risk, regulatory compliance risk, financial crime risk, model risk, and insurance risk.

(a) Credit Risk

Overview

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

(audited)

Key developments in 2022

There were no material changes to the policies and practices for the management of credit risk in 2022. We continued to apply the requirements of HKFRS 9 '*Financial Instruments*' within Credit Risk sub-function.

For our Wholesale portfolios, we adopted the EBA 'Guidelines on the application of definition of default' in 2021 and, for our retail portfolios, these guidelines were adopted during 2022. Adoption of these guidelines did not have a material impact on our portfolios and comparative disclosures have not been restated.

We actively managed the risks related to macroeconomic uncertainties, including fiscal and monetary policy, the Russia-Ukraine war, broader geopolitical uncertainties, and the continued risks resulting from the COVID-19 pandemic.

Governance and structure

We have established credit risk management and related HKFRS 9 processes throughout the Group. 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 action, 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)

With the delegation from the Board, credit approval authorities are further delegated by the Executive Committee to the Chief Executive together with the authority to sub-delegate them. The Credit Risk sub-function is responsible for the key policies and processes for managing credit risk, which include formulating the Group's 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 across the Group 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 causes and their mitigation.

Key risk management processes

HKFRS 9 'Financial Instruments' process

The HKFRS 9 process comprises three main areas: modelling and data; implementation; and governance.

Modelling and data

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.

Implementation

A centralised impairment engine performs the expected credit losses ('ECL') 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.

(a) Credit Risk

Credit risk management continued

(audited)

Key risk management processes continued

Governance

Management review forums are established in order to review and approve the impairment results. Management review forums have representatives from Credit Risk and Finance. The approvals are subsequently reported up to the Impairment Committee for final approval of the Group's ECL for the period. Required members of the Impairment Committee are the heads of Wholesale Credit Risk Management and Wealth and Personal Banking Risk, as well as the Chief Risk Officer, the Chief Financial Officer and the Chief Accounting Officer.

Concentration of exposure

(audited)

Concentrations of credit risk arise when a number of counterparties or exposures that have comparable economic characteristics, or such counterparties are engaged in similar activities or operate in the same geographical areas or industry sectors. As such 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 each 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

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

Retail lending credit quality is based on a 12-month probability-weighted PD.

Credit quarity classification

(unaudited)

	Sovereign debt securities and bills	Other debt securities and bills	Wholesale lending		Retail lending	
Credit quality classification[1,2]	**External credit rating**	**External credit rating**	**Internal credit rating**	**12-month Basel probability of default %**	**Internal credit rating**	**12-month probability-weighted PD %**
Strong	BBB and above	A- and above	CRR 1 to CRR 2	0-0.169	Band 1 and 2	0-0.500
Good	BBB- to BB	BBB+ to BBB-	CRR3	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-weighted probability of default ('PD').

(a) Credit Risk

Credit risk management continued

(audited)

Key risk management processes continued

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 on note 2(j) on the Consolidated Financial Statements.

Forborne loans and forbearance

(audited)

Forbearance measures consist of concessions towards an obligor that is experiencing or is about to experience difficulties in meeting its financial commitments ('financial difficulties').

Up until the end of 2021, the Group classed loans as forborne when we modified the contractual payment terms where we had significant concerns about the borrowers' ability to meet contractual payments when falling due.

In 2022, our definition of forborne has been expanded to capture non-payment related concessions (e.g. covenant waivers).

The comparative disclosures have been presented under the prior definition of forborne for the wholesale and retail portfolios.

For details of our policy on derecognised renegotiated loans, see note 2(j) on the Consolidated Financial Statements.

Credit quality of renegotiated loans

(unaudited)

On execution of a renegotiation, the loan will also be classified as credit-impaired if it is not already so classified. In wholesale lending, all facilities with a customer, including loans that have not been modified, are considered credit-impaired following the identification of a renegotiated loan under our existing disclosures.

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.

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 2(j) on the Consolidated Financial Statements.

Write-off of loans and advances

(audited)

For details of our policy on the write-off of loans and advances, see note 2(j) on the Consolidated Financial Statements.

Unsecured personal facilities, including credit cards, are generally written off at 180 days contractually delinquent. Write-off periods may be earlier, e.g. bankruptcy.

For secured personal 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. 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.

(a) Credit Risk

Credit risk management continued

(audited)

Key risk management processes continued

Write-off of loans and advances continued

(audited)

Any secured assets maintained on the balance sheet beyond 60 months of consecutive delinquency-driven default require additional monitoring and review to assess the prospect of recovery.

The write-off of wholesale facilities is conducted when all recovery actions (including legal proceedings) have been exhausted with remote chance of further recovery. Write-off, either partially or in full, may be earlier when there is no reasonable expectation of further recovery, for example, in the event of a bankruptcy or equivalent legal proceedings. Collection procedures may continue after write-off.

Summary of credit risk

(audited)

The following tables analyse the financial instruments to which the impairment requirements of HKFRS 9 are applied and the related allowance for ECL.

Summary of financial instruments to which the impairment requirements in HKFRS 9 are applied

	At 31 December 2022		At 31 December 2021	
	Gross carrying/ nominal amount	Allowance for ECL[1]	Gross carrying/ nominal amount	Allowance for ECL[1]
Loans and advances to customers at amortised cost:	944,728	(13,394)	1,004,325	(6,928)
Placings with and advances to banks at amortised cost	62,329	(3)	72,494	(1)
Other financial assets measured at amortised costs:	358,894	(127)	214,623	(167)
– cash and balances at central banks	17,612	(3)	16,896	–
– reverse repurchase agreements – non-trading	42,364	–	18,821	–
– financial investments	261,719	(94)	141,380	(153)
– other assets[2]	37,199	(30)	37,526	(14)
Total gross carrying amount on balance sheet	1,365,951	(13,524)	1,291,442	(7,096)
Loans and other credit related commitments	357,265	(169)	365,054	(162)
Financial guarantee and similar contracts	1,727	(2)	2,431	(3)
Total nominal amount off balance sheet[3]	358,992	(171)	367,485	(165)
Total	1,724,943	(13,695)	1,658,927	(7,261)
	Fair value	Memorandum Allowance for ECL	Fair value	Memorandum Allowance for ECL
Debt instruments measured at Fair Value through Other Comprehensive Income ('FVOCI')[4]	356,058	(6)	353,892	(9)

1 For retail unsecured revolving facilities, e.g. overdrafts and credit cards, the total ECL is recognised against the financial asset unless the total ECL exceeds the gross carrying amount of the financial asset, in which case the ECL is recognised against the loan commitments.

2 Includes only those financial instruments which are subject to the impairment requirements of HKFRS 9. 'Other assets' as presented within the Consolidated Balance Sheet includes both financial and non-financial assets.

3 The figure does not include some loan commitments and financial guarantee contracts not subject to impairment requirements under HKFRS 9. As such, the amount does not agree with the figure shown in note 45 of the Consolidated Financial Statements, which represents the maximum amount at risk should the contracts be fully drawn upon and clients default.

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 Consolidated Income Statement.

(a) Credit Risk

The following table provides an overview of the Group's credit risk by stage 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

(audited)

	Gross carrying/nominal amount[1]					Allowance for ECL					ECL coverage %				
	Stage 1	Stage 2	Stage 3	POCI[2]	Total	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Loans and advances to customers at amortised cost:	759,642	160,874	23,911	301	944,728	(755)	(4,818)	(7,802)	(19)	(13,394)	0.10%	2.99%	32.63%	6.31%	1.42%
– personal	365,249	16,568	923	–	382,740	(203)	(1,029)	(141)	–	(1,373)	0.06%	6.21%	15.28%	N/A	0.36%
– corporate and commercial	362,629	142,378	22,988	301	528,296	(420)	(3,785)	(7,661)	(19)	(11,885)	0.12%	2.66%	33.33%	6.31%	2.25%
– non-bank financial institutions	31,764	1,928	–	–	33,692	(132)	(4)	–	–	(136)	0.42%	0.21%	N/A	N/A	0.40%
Placings with and advances to banks at amortised cost	62,135	194	–	–	62,329	(2)	(1)	–	–	(3)	0.00%	0.52%	N/A	N/A	0.00%
Other financial assets measured at amortised cost	353,919	4,975	–	–	358,894	(98)	(29)	–	–	(127)	0.03%	0.58%	N/A	N/A	0.04%
Loans and other credit-related commitments:	339,402	17,835	28	–	357,265	(70)	(99)	–	–	(169)	0.02%	0.56%	0.00%	N/A	0.05%
– personal	239,954	7,260	5	–	247,219	(4)	–	–	–	(4)	0.00%	0.00%	0.00%	N/A	0.00%
– corporate and commercial	86,843	10,071	23	–	96,937	(63)	(99)	–	–	(162)	0.07%	0.98%	0.00%	N/A	0.17%
– non-bank financial institutions	12,605	504	–	–	13,109	(3)	–	–	–	(3)	0.02%	0.00%	N/A	N/A	0.02%
Financial guarantee and similar contracts:	1,029	694	4	–	1,727	–	(2)	–	–	(2)	0.00%	0.29%	0.00%	N/A	0.12%
– personal	2	5	–	–	7	–	–	–	–	–	0.00%	0.00%	N/A	N/A	0.00%
– corporate and commercial	637	689	4	–	1,330	–	(2)	–	–	(2)	0.00%	0.29%	0.00%	N/A	0.15%
– non-bank financial institutions	390	–	–	–	390	–	–	–	–	–	0.00%	N/A	N/A	N/A	0.00%
At 31 December 2022	1,516,127	184,572	23,943	301	1,724,943	(925)	(4,949)	(7,802)	(19)	(13,695)	0.06%	2.68%	32.59%	6.31%	0.79%

1 Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.

2 Purchased or originated credit-impaired ('POCI').

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 disclosure below presents the aging of stage 2 loans and advances to customers by those less than 30 and greater than 30 days past due and therefore presents those amounts classified as stage 2 due to aging (30 days past due) and those identified at an earlier stage (less than 30 days past due).

(a) Credit Risk

Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage continued

(audited)

Stage 2 days past due analysis for loans and advances to customers

	At 31 December 2022											
	Gross carrying amount				Allowance for ECL				ECL coverage %			
	Stage 2	Of which: Up-to-date	Of which: 1 to 29 DPD[1]	Of which: 30 and > DPD	Stage 2	Of which: Up-to-date	Of which: 1 to 29 DPD	Of which: 30 and > DPD	Stage 2	Of which: Up-to-date	Of which: 1 to 29 DPD	Of which: 30 and > DPD
Loans and advances to customers at amortised cost												
– personal	**16,568**	**14,210**	**1,614**	**744**	**(1,029)**	**(887)**	**(62)**	**(80)**	**6.21%**	**6.24%**	**3.84%**	**10.75%**
– corporate and commercial	**142,378**	**142,029**	**195**	**154**	**(3,785)**	**(3,774)**	**(10)**	**(1)**	**2.66%**	**2.66%**	**5.13%**	**0.65%**
– non-bank financial institutions	**1,928**	**1,928**	**–**	**–**	**(4)**	**(4)**	**–**	**–**	**0.21%**	**0.21%**	**N/A**	**N/A**
	160,874	**158,167**	**1,809**	**898**	**(4,818)**	**(4,665)**	**(72)**	**(81)**	**2.99%**	**2.95%**	**3.98%**	**9.02%**

1 Days past due ('DPD').

(restated)[1]

	Gross carrying/nominal amount[2]					Allowance for ECL					ECL coverage %				
	Stage 1	Stage 2	Stage 3	POCI[3]	Total	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Loans and advances to customers at amortised cost:	852,149	141,747	9,457	972	1,004,325	(762)	(3,466)	(2,700)	–	(6,928)	0.09%	2.45%	28.55%	0.00%	0.69%
– personal	358,508	15,358	858	–	374,724	(291)	(833)	(157)	–	(1,281)	0.08%	5.42%	18.30%	N/A	0.34%
– corporate and commercial	463,676	124,606	8,495	972	597,749	(350)	(2,621)	(2,515)	–	(5,486)	0.08%	2.10%	29.61%	0.00%	0.92%
– non-bank financial institutions	29,965	1,783	104	–	31,852	(121)	(12)	(28)	–	(161)	0.40%	0.67%	26.92%	N/A	0.51%
Placings with and advances to banks at amortised cost	72,311	183	–	–	72,494	(1)	–	–	–	(1)	0.00%	0.00%	N/A	N/A	0.00%
Other financial assets measured at amortised cost	210,364	4,259	–	–	214,623	(99)	(68)	–	–	(167)	0.05%	1.60%	N/A	N/A	0.08%
Loans and other credit-related commitments:	357,016	8,038	–	–	365,054	(57)	(105)	–	–	(162)	0.02%	1.31%	N/A	N/A	0.04%
– personal	243,639	–	–	–	243,639	–	–	–	–	–	0.00%	N/A	N/A	N/A	0.00%
– corporate and commercial	98,530	7,035	–	–	105,565	(53)	(105)	–	–	(158)	0.05%	1.49%	N/A	N/A	0.15%
– non-bank financial institutions	14,847	1,003	–	–	15,850	(4)	–	–	–	(4)	0.03%	0.00%	N/A	N/A	0.03%
Financial guarantee and similar contracts:	2,283	148	–	–	2,431	(2)	(1)	–	–	(3)	0.09%	0.68%	N/A	N/A	0.12%
– personal	8	–	–	–	8	–	–	–	–	–	0.00%	N/A	N/A	N/A	0.00%
– corporate and commercial	1,885	148	–	–	2,033	(2)	(1)	–	–	(3)	0.11%	0.68%	N/A	N/A	0.15%
– non-bank financial institutions	390	–	–	–	390	–	–	–	–	–	0.00%	N/A	N/A	N/A	0.00%
At 31 December 2021	1,494,123	154,375	9,457	972	1,658,927	(921)	(3,640)	(2,700)	–	(7,261)	0.06%	2.36%	28.55%	0.00%	0.44%

1 Comparative figures for Loans and advances to customers have been restated to update the counterparty classification for certain facilities from corporate and commerical to non-bank financial institutions.

2 Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.

3 Purchased or originated credit-impaired ('POCI').

(a) Credit Risk

Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage continued

(audited)

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 disclosure below presents the aging of stage 2 loans and advances to customers by those less than 30 and greater than 30 days past due and therefore presents those amounts classified as stage 2 due to aging (30 days past due) and those identified at an earlier stage (less than 30 days past due).

Stage 2 days past due analysis for loans and advances to customers

	At 31 December 2021											
	Gross carrying amount				Allowance for ECL				ECL coverage %			
	Stage 2	Of which: Up-to-date	Of which: 1 to 29 DPD[1]	Of which: 30 and > DPD	Stage 2	Of which: Up-to-date	Of which: 1 to 29 DPD	Of which: 30 and > DPD	Stage 2	Of which: Up-to-date	Of which: 1 to 29 DPD	Of which: 30 and > DPD
Loans and advances to customers at amortised cost												
– personal	15,358	13,430	1,391	537	(833)	(711)	(54)	(68)	5.42%	5.29%	3.88%	12.66%
– corporate and commercial	124,606	124,358	243	5	(2,621)	(2,618)	(3)	–	2.10%	2.11%	1.23%	0.00%
– non-bank financial institutions	1,783	1,783	–	–	(12)	(12)	–	–	0.67%	0.67%	N/A	N/A
	141,747	139,571	1,634	542	(3,466)	(3,341)	(57)	(68)	2.45%	2.39%	3.49%	12.55%

1 Days past due ('DPD').

(i) Maximum exposure to credit risk before collateral held or other credit enhancements

(audited)

Our credit exposure is spread across a broad range of asset classes, including derivatives, trading assets, loans and advances to customers, loans and advances to banks and financial investments.

The following table presents the maximum exposure to credit risk from balance sheet and off-balance sheet financial instruments, before taking account of any collateral held or other credit enhancements (unless such credit enhancements meet accounting offsetting requirements). For financial assets recognised on the balance sheet, the maximum exposure to credit risk equals their carrying amount; for financial guarantees and similar contracts 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.

	2022	2021 (restated)
Cash and balances at central banks	**17,609**	16,896
Trading assets	**47,330**	47,392
Derivative financial instruments	**22,761**	13,224
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**866**	1,041
Reverse repurchase agreements – non-trading	**42,364**	18,821
Placings with and advances to banks	**62,326**	72,493
Loans and advances to customers	**931,334**	997,397
Financial investments	**617,683**	495,119
Other assets	**37,386**	37,533
Financial guarantees and other credit related contingent liabilities[1]	**24,943**	28,870
Loan commitments and other credit related commitments[2]	**518,838**	514,920
	2,323,440	2,243,706

1 Performance and other guarantees were included.

2 Comparative figures for Loan commitments and other credit related commitments have been restated to exclude pre-approval loan programmes.

(a) Credit Risk

(ii) Measurement uncertainty and sensitivity analysis of ECL estimates

(audited)

Amid a deterioration in the economic and geopolitical environment, management judgements and estimates continued to be subject to a high degree of uncertainty in relation to assessing economic scenarios for impairment allowances in 2022.

Economic contraction and high interest rates combined with an unstable geopolitical environment and the effects of global supply chain disruption contributed to elevated levels of uncertainty during the year.

At 31 December 2022, as a result of this uncertainty, additional stage 1 and 2 allowances have been recorded while management judgement and estimates continue to reflect a degree of caution both in selection of economic scenarios and their weightings, and in the use of management judgemental adjustments, described in more detail below.

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 judgmental adjustments are used to address late-breaking events, data and model limitations, and expert credit judgements.

Methodology

Four economic scenarios are used to capture the current economic environment and to articulate management's view of the range of potential outcomes. Scenarios produced to calculate ECL are aligned to the Group's Emerging Risks.

Three of the scenarios are drawn from consensus forecasts and distributional estimates. The central scenarios is deemed the 'most likely' scenario, and usually attracts the largest probability weighting, while the outer scenarios represent the tails of the distribution which are less likely to occur. The central scenario is created using the average of a panel of external forecasters. Consensus upside and downside scenarios are created with reference to distributions for select markets that capture forecasters' views of the entire range of outcomes.

In the later years of the scenarios, projections revert to long-term consensus trend expectations. In the consensus outer scenarios, reversion to trend expectations is done mechanically with reference to historically observed quarterly changes in the values of macroeconomic variables.

The fourth scenario, Downside 2, is designed to represent Management's view of severe downside risks. It is a globally consistent, narrative driven, scenario that explores more extreme economic outcomes than those captured by the consensus scenarios. In this scenario, variables do not, by design, revert to long-term trend expectations. They 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 20% probability. The Downside 2 is constructed with a 5% probability. The Central Scenario is assigned the remaining 55%. This weighting scheme is deemed appropriate for the unbiased estimation of ECL in light of uncertainties.

Description of Consensus Economic Scenarios

The economic assumptions presented in this section have been formed internally with reference to external forecasts and estimates, specifically for the purpose of calculating ECL.

Economic growth is slow in 2022 and economic forecasts in our key markets deteriorated in the fourth quarter. The effects of higher interest rate expectations and lower growth are also evident in asset price expectations and house prices forecasts, in particular, have been lowered significantly.

In Asia, economic forecasts have also been lowered, with expectations for Hong Kong and mainland China trimmed following weaker than expected Q3 GDP growth and mainland China's adherence to stringent pandemic-related public health policy response. That policy saw an abrupt reversal during December, but amid uncertainty, to both the upside and downside, forecasts are slow to adjust. The uncertainty over the lifting restrictions has been reflected in management's assessment of scenario probabilities.

Economic forecasts remain subject to a high degree of uncertainty. In Q4, risks to the economic outlook included the persistence of inflation and the consequences that has for monetary policy. Rapid changes to public policy also increased forecast uncertainty.

(a) Credit Risk

(ii) Measurement uncertainty and sensitivity analysis of ECL estimates continued

(audited)

Methodology continued

Description of Consensus Economic Scenarios continued

Geopolitical risks also remain significant and include the possibility of a prolonged and escalating Russia-Ukraine war, continued differences between the US and other countries with China over a range of economic and strategic issues.

The scenarios used to calculate ECL in the Annual Report 2022 are described below.

The consensus Central scenario

The Central scenario features a recovery in economic growth after 2022 slowdown as activity and employment gradually return to the levels reached prior to the outbreak of COVID-19.

In Hong Kong and mainland China, GDP growth is expected to be stronger in 2023 relative to 2022 following several quarters of negative GDP growth and the suspension of COVID-19 restrictions. Hong Kong GDP is expected to grow by 2.7% over the five-year forecast period in the Central scenario from 2023. This is above the average growth rate over the five-year period prior to the onset of the pandemic.

The key features of our Central scenario are:

- Economic activity continues its recovery, growing at a moderate rate after 2022.
- Unemployment in mainland China has recovered to pre-pandemic levels. In Hong Kong, unemployment declines to levels only slightly higher than existed pre-pandemic.
- COVID-19 related fiscal spending recedes in 2022 as fewer restrictions on activity allow fiscal support to be withdrawn. Deficits remain high in key markets as they embark on multi-year investment programmes to support recovery, productivity growth and climate transition.
- Policy interest rates in key markets will continue to rise in the near term but at a slower pace. It is expected interest rates will stay elevated.

The Central scenario was first created with forecasts available in November, and reviewed continuously until late December.

The following table describes key macroeconomic variables and the probabilities assigned in the consensus Central scenario.

Central scenario

	Hong Kong %	Mainland China %
GDP growth rate		
2023: Annual average growth rate	2.7	4.6
2024: Annual average growth rate	3.0	4.8
2025: Annual average growth rate	2.7	4.7
5 years average (2023 – 2027)	2.7	4.6
Unemployment rate		
2023: Annual average growth rate	3.7	5.2
2024: Annual average growth rate	3.5	5.1
2025: Annual average growth rate	3.4	5.0
5 years average (2023 – 2027)	3.4	5.0
House price growth		
2023: Annual average growth rate	(10.0)	(0.1)
2024: Annual average growth rate	(3.0)	2.9
2025: Annual average growth rate	1.7	3.5
5 years average (2023 – 2027)	(1.0)	2.9
Probability	55	55

The consensus Upside scenario

Compared with the consensus Central scenario, the consensus Upside scenario features stronger economic activity in the near term, before converging to long-run trend expectations.

The scenario is consistent with a number of key upside risk themes. These include faster resolution of supply chain issues; a rapid conclusion to the Russia-Ukraine war; de-escalation of tensions between the US and China; and relaxation of COVID-19 policies in Asia.

The following table describes key macroeconomic variables and the probabilities assigned in the consensus Upside scenario.

Consensus Upside scenario best outcome

	Hong Kong %	Mainland China %
GDP growth rate	9.0 (3Q23)	10.3 (2Q23)
Unemployment rate	3.0 (4Q23)	4.7 (3Q24)
House price growth	1.4 (4Q24)	6.9 (4Q24)
Probability	20	20

Note: Extreme point in the consensus Upside is 'best outcome' in the scenario, for example the highest GDP growth and the lowest unemployment rate etc, in the first two years of the scenario.

(a) Credit Risk

(ii) Measurement uncertainty and sensitivity analysis of ECL estimates continued

(audited)

Downside scenarios

Downside scenarios explore the intensification and crystallisation of a number of key economic and financial risks.

There also remains a risk that energy and food prices rise further due to the Russia-Ukraine war, exacerbating global inflation and further pressuring household budgets and firm costs.

The risks relating to COVID-19 are centred on the emergence of a new variant with greater vaccine resistance that necessitates the imposition of stringent public health policies. In Asia, despite the re-opening of China in December, management of COVID-19 remains a key source of uncertainty, with the rapid spread of the virus posing a heightened risk of a new variant emerging.

The geopolitical environment also present risks, including:

- a prolonged Russia-Ukraine war with escalation beyond Ukraine's borders;
- continued long-term differences between the US and other countries with China, which could affect sentiment and restrict global economic activity.

The consensus Downside scenario

In the consensus Downside scenario, the economic recovery is considerably weaker compared with the Central scenario. GDP growth is expected to be lower, unemployment rates rise moderately and asset and commodity prices fall before gradually recovering towards their long-run trend expectations. The scenario is consistent with the key downside risks articulated above.

In the consensus Downside scenario, economic activity is considerably weaker compared with the Central scenario. In this scenario, GDP growth weakens below the Central scenario, unemployment rates rise and asset prices fall.

The following table describes key macroeconomic variables and the probabilities assigned in the consensus Downside scenario.

Consensus Downside scenario worst outcome

	Hong Kong %	Mainland China %
GDP growth rate	(2.2) (4Q23)	(1.2) (4Q23)
Unemployment rate	5.2 (3Q24)	5.9 (4Q23)
House price growth	(14.9) (2Q23)	(1.9) (1Q23)
Probability	20	20

Note: Extreme point in the consensus Downside is 'worst outcome' in the scenario, for example the lowest GDP growth and the highest unemployment rate etc, in the first two years of 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 further escalation of the Russia-Ukraine war, worsening of supply chain disruptions and the emergence of a vaccine-resistant COVID-19 variant that necessitates a stringent public health policy response globally.

This scenario features an initial supply-side shock that pushes interest rates higher. This impulse is expected to prove short lived as a large downside demand pressures causes commodity prices to correct sharply and global price inflation to fall as a severe and prolonged recession takes hold.

The following table describes key macroeconomic variables and the probabilities assigned in the Downside 2 scenario.

Downside 2 scenario worst outcome

	Hong Kong %	Mainland China %
GDP growth rate	(9.2) (4Q23)	(6.9) (4Q23)
Unemployment rate	5.8 (1Q24)	6.8 (4Q24)
House price growth	(18.2) (1Q24)	(18.5) (4Q23)
Probability	5	5

Note: Extreme point in the Downside 2 is 'worst outcome' in the scenario, for example the lowest GDP growth and the highest unemployment rate, in the first two years of the scenario.

(a) Credit Risk

(ii) Measurement uncertainty and sensitivity analysis of ECL estimates continued

(audited)

Scenario weighting

In reviewing the economic conjuncture, the level of uncertainty and risks, management has considered both global and market-specific factors. This has led management to assign scenario probabilities that are tailored to its view of uncertainty in individual markets.

At the balance sheet date, key consideration around uncertainty attached to the Central scenario projections focused on:

- the progression of the COVID-19 pandemic in Asian countries and announcement of removal of COVID-19 measures and travel restrictions in mainland China and Hong Kong;
- further tightening of monetary policy and impact on borrowing costs in interest rate sensitive sectors, such as housing; and
- The ongoing risks to global supply chains.

In mainland China and Hong Kong, there has been recent announcement of relaxation of COVID-19 measures and travel restrictions. It was management's view that easing of policy could increase chance to the upside in form of increased spending and travel. This led management to assign a combined weighting of 75% to the consensus Upside and Central scenarios in both markets.

Critical accounting estimates and judgements

The calculation of ECL under HKFRS 9 involves significant judgements, assumptions and estimates. The level of estimation uncertainty and judgement has remained elevated since 31 December 2021, including significant judgements relating to:

- the selection and weighting of economic scenarios, given rapidly changing economic conditions and a wide distribution of economic forecasts. There is judgement in making assumptions about the effects of interest, global growth, supply chain disruption;
- estimating the economic effects of those scenarios on ECL, particularly as the historical relationship between macroeconomic variables and defaults might not reflect the dynamics of current macroeconomic conditions; and
- determining the management judgmental adjustments for high-risk and vulnerable sectors, including the higher risk China commercial real estate exposures. The identification of higher risk customers and the estimation of the parameters such as default rate and loss severity involve significant uncertainty.

How economic scenarios are reflected in the calculation of ECL calculation

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 2022, and management judgemental adjustments were still required to support modelled outcomes.

The HSBC Group has developed a globally consistent methodology for the application of forward economic guidance into the calculation of ECL for wholesale and retail credit risk. The Group has continued to follow the HSBC Group methodology. These standard approaches are described below, followed by the management judgemental adjustments made, including those to reflect the circumstances experienced in 2022.

For our wholesale portfolios, we estimate 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 market. For LGD calculations we consider the correlation of forward economic guidance to collateral values and realization rates for a particular market and industry. PDs and LGDs are estimated for the entire term structure of each instrument.

For impaired loans, LGD estimates take into account independent recovery valuations provided by external consultants where available, or internal forecasts corresponding to anticipated economic conditions and individual company conditions. In estimating the ECL on impaired loans that are individually considered not to be significant, we incorporate forward economic guidance proportionate to the probability-weighted outcome and the Central scenario outcome for non-stage 3 populations.

(a) Credit Risk

(ii) Measurement uncertainty and sensitivity analysis of ECL estimates continued

(audited)

How economic scenarios are reflected in the calculation of ECL calculation continued

For retail, the impact of economic scenarios on PD is modelled at a portfolio level. Historical relationships between observed default rates and macroeconomic variables are integrated into HKFRS 9 ECL estimates by using economic response models. The impact of these scenarios on PD is modelled over a period equal to the remaining maturity of the underlying asset or assets. The impact on LGD is modelled for mortgage portfolios by forecasting future loan-to-value ('LTV') profiles for the remaining maturity of the asset by using market level forecasts of the house price index and applying the corresponding LGD expectation.

These models are based largely on historical observations and correlations with default rates. Management judgemental adjustments are described below.

Management judgemental adjustments

In the context of HKFRS 9, management judgemental adjustments are short-term increases or decreases to the ECL at either a customer, segment or portfolio level to account for late breaking events, model and data limitations and deficiencies, and expert credit judgement applied following management review and challenge.

This includes refining model inputs and outputs and using adjustments to ECL based on management judgement and higher level quantitative analysis for impacts that are difficult to model.

The effect of management judgmental adjustments are considered for balances and ECL when determining whether or not a significant increase in credit risk has occurred and are attributed or allocated to a stage as 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). Review and challenge focus on the rationale and quantum of the adjustments with further review 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.

At 31 December 2022, management judgement adjustments reduced by HK$517m compared with 31 December 2021.

Management judgemental adjustments made in estimating the scenario-weighted reported ECL at 31 December 2022 are set out in the following table.

Management judgemental adjustments to ECL[1]:

	Retail	Wholesale	Total
(HK$m)	31 December 2022		
Low risk counterparties (banks, sovereigns and government entities)	–	(36)	(36)
Corporate lending adjustments	–	1,464	1,464
Macroeconomic-related adjustments	141	–	141
Pandemic-related economic recovery adjustments	–	–	–
Other lending adjustments	3	44	47
Total	144	1,472	1,616

(a) Credit Risk

(ii) Measurement uncertainty and sensitivity analysis of ECL estimates continued

(audited)

Management judgemental adjustments continued

Management judgemental adjustments to ECL[1]: continued

(HK$m)	Retail	Wholesale	Total
		31 December 2021	
Low risk counterparties (banks, sovereigns and government entities)	–	85	85
Corporate lending adjustments	–	2,082	2,082
Macroeconomic-related adjustments	(259)	–	(259)
Pandemic-related economic recovery adjustments	193	–	193
Other lending adjustments	3	29	32
Total	(63)	2,196	2,133

1 Management judgemental adjustments presented in the table reflect Increases or (Decreases) to ECL, respectively.

At 31 December 2022, wholesale management judgemental adjustments to ECL reduced to HK$1,472m, as a result mainly from the decrease in Corporate lending adjustments by HK$618m. These principally reflected the outcome of management judgements for high-risk and vulnerable sectors in our key markets, supported by credit experts' input, portfolio risk metrics, quantitative analyses and benchmarks. Considerations include risk of individual exposures under different macroeconomic scenarios and sub-sector analyses. The largest adjustment in ECL was observed in the real estate sector, including material adjustments to reflect the uncertainty of the higher-risk Chinese commercial real estate exposures.

For the retail portfolio, management judgemental adjustments mainly relate to macroeconomic conditions and customer support programmes with an ECL overlay of HK$144m as of 31 December 2022. Macroeconomic related adjustments ECL and other retail lending adjustments ECL recorded HK$141m and HK$3m respectively. These were primarily to address areas such as, management view on high debt burden and customer relief.

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 for loans at the balance sheet date.

The ECL calculated for the Upside and Downside scenarios should not be taken to represent the lower and upper 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 more severe risk scenarios when assigned a 100% weighting.

For wholesale credit risk exposures, the sensitivity analysis excludes ECL and financial instruments related to defaulted obligors because the measurement of ECL is relatively more sensitive to credit factors specific to the obligor than future economic scenarios. Therefore, it is impracticable to separate the effect of macroeconomic factors in individual assessments. When compared with the performing portfolio, the defaulted obligors represent a significantly smaller portion of the wholesale exposures, even if accounting for the larger portion of the allowance for ECL.

For retail credit risk exposures, the sensitivity analysis includes ECL for loans and advances to customers related to defaulted obligors.

(a) Credit Risk

(ii) Measurement uncertainty and sensitivity analysis of ECL estimates continued

(audited)

Wholesale and retail sensitivity

The wholesale and retail sensitivity analysis is stated inclusive of management judgemental adjustments, as appropriate to each scenario. The results tables exclude portfolios held by the insurance business and small portfolios and as such cannot be directly compared to personal and wholesale lending presented in other credit risk tables. Additionally in both the wholesale and retail analysis, the comparative period results for additional and alternative Downside scenarios are not directly comparable to the current period, because they reflect different risk profiles relative with the Consensus scenarios for the year end.

Wholesale analysis

HKFRS 9 ECL sensitivity to future economic conditions[1,3]

	Hong Kong	**Mainland China**
ECL of financial instruments subject to significant measurement uncertainty[2]	**31 December 2022**	
Reported ECL	**3,753**	**776**
Consensus scenarios		
Central scenario	**3,447**	**661**
Upside scenario	**2,515**	**421**
Downside scenario	**5,410**	**1,054**
Downside 2 scenario	**8,883**	**3,258**

HKFRS 9 ECL sensitivity to future economic conditions[1,3]

	Hong Kong	Mainland China
ECL of financial instruments subject to significant measurement uncertainty[2]	31 December 2021	
Reported ECL	2,921	370
Consensus scenarios		
Central scenario	2,550	288
Upside scenario	1,769	96
Downside scenario	4,048	508
Downside 2 scenario	7,947	2,234

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.

3 ECL sensitivity is calculated by applying a 100% weighting to each scenario described above, and then applying judgemental overlays where determined appropriate.

(a) Credit Risk

(ii) Measurement uncertainty and sensitivity analysis of ECL estimates continued

(audited)

Wholesale and retail sensitivity continued

Retail analysis

HKFRS 9 ECL sensitivity to future economic conditions[1]

ECL of loans and advances to customers[2]	Hong Kong	Mainland China
	31 December 2022	
Reported ECL	**1,284**	**23**
Consensus scenarios		
Central scenario	**1,112**	**22**
Upside scenario	**863**	**21**
Downside scenario	**1,987**	**23**
Downside 2 scenario	**3,211**	**44**

HKFRS 9 ECL sensitivity to future economic conditions[1]

ECL of loans and advances to customers[2]	Hong Kong	Mainland China
	31 December 2021	
Reported ECL	1,219	24
Consensus scenarios		
Central scenario	1,138	23
Upside scenario	918	22
Downside scenario	1,352	24
Downside 2 scenario	2,047	49

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.

(a) Credit Risk

(iii) Reconciliation of changes in gross carrying/nominal amount and allowances for placings with and advances to banks and loans and advances to customers

The following disclosure provides a reconciliation by stage of the Group's gross carrying/nominal amount and allowances for placings with and advances to banks and loans and advances to customers, including loan commitments and financial guarantees. Movements are calculated on a year-to-date basis and therefore reflect the opening and closing position of the financial instruments.

The transfers of financial instruments represents 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 CRR/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 'New financial assets originated and purchased', 'assets derecognised (including final repayments)' and 'changes to risk parameters – further lending/repayments' represent the impact from volume movements within the Group's lending portfolio.

Reconciliation of changes in gross carrying/nominal amount and allowances for placings with and advances to banks and loans and advances to customers, including loan commitments and financial guarantees[2]

(audited)

	Non-credit-impaired				Credit-impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI[1]			
	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
At 1 January 2022	**1,283,759**	**(822)**	**150,116**	**(3,572)**	**9,457**	**(2,700)**	**972**	**–**	**1,444,304**	**(7,094)**
Transfers of financial instruments:										
– transfers from Stage 1 to Stage 2	(108,899)	208	108,899	(208)	–	–	–	–	–	–
– transfers from Stage 2 to Stage 1	17,916	(263)	(17,916)	263	–	–	–	–	–	–
– transfers to Stage 3	(2,803)	5	(16,608)	1,385	19,411	(1,390)	–	–	–	–
– transfers from Stage 3	16	(3)	23	–	(39)	3	–	–	–	–
Net remeasurement of ECL arising from transfer of stage	–	105	–	(361)	–	(18)	–	–	–	(274)
New financial assets originated and purchased	316,455	(232)	18,990	(413)	199	(114)	203	(19)	335,847	(778)
Assets derecognised (including final repayments)	(475,393)	89	(53,559)	298	(1,570)	115	(764)	–	(531,286)	502
Changes to risk parameters – further lending/(repayment)	142,770	76	(9,118)	14	(2,355)	(628)	(109)	–	131,188	(538)
Changes in risk parameters – credit quality	–	8	–	(2,343)	–	(4,055)	–	–	–	(6,390)
Changes to model used for ECL calculation	–	–	–	(2)	–	–	–	–	–	(2)
Assets written off	–	–	–	–	(899)	899	–	–	(899)	899
Credit related modifications that resulted in derecognition	–	–	–	–	(155)	–	–	–	(155)	–
Foreign exchange and others	(11,613)	2	(1,230)	19	(106)	86	(1)	–	(12,950)	107
At 31 December 2022	**1,162,208**	**(827)**	**179,597**	**(4,920)**	**23,943**	**(7,802)**	**301**	**(19)**	**1,366,049**	**(13,568)**

	Total
Change in ECL in income statement (charge)/release for the year	(7,480)
Add: Recoveries	131
Add/(less): Others	(313)
Total ECL (charge)/release for the year	(7,662)

(a) Credit Risk

(iii) Reconciliation of changes in gross carrying/nominal amount and allowances for placings with and advances to banks and loans and advances to customers continued

Reconciliation of changes in gross carrying/nominal amount and allowances for placings with and advances to banks and loans and advances to customers, including loan commitments and financial guarantees[2] continued

(audited)

	At 31 December 2022		For the year ended 31 December 2022
	Gross carrying/ nominal amount	Allowance for ECL	ECL (charge)/ release
Placings with and advances to banks and loans and advances to customers, including loan commitments and financial guarantees	**1,366,049**	**(13,568)**	**(7,662)**
Other financial assets measured at amortised cost	**358,894**	**(127)**	**34**
Summary of financial instruments to which the impairment requirements in HKFRS 9 are applied	**1,724,943**	**(13,695)**	**(7,628)**
Debt instruments measured at FVOCI[2]	**357,641**	**(6)**	**1**
Performance and other guarantees not considered for HKFRS 9	**23,216**	**(2)**	**1**
Total allowance for ECL/consolidated income statement ECL charge for the year	**2,105,800**	**(13,703)**	**(7,626)**

1 Purchased or originated credit-impaired ('POCI') represented distressed restructuring.

2 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 Consolidated Balance Sheet as it excludes fair value gains and losses.

	Non-credit-impaired				Credit-impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI[1]			
	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
At 1 January 2021	1,213,008	(1,421)	135,379	(1,896)	5,723	(2,044)	1	–	1,354,111	(5,361)
Transfers of financial instruments:										
– transfers from Stage 1 to Stage 2	(70,798)	237	70,798	(237)	–	–	–	–	–	–
– transfers from Stage 2 to Stage 1	43,558	(302)	(43,558)	302	–	–	–	–	–	–
– transfers to Stage 3	(5,131)	14	(1,302)	54	6,433	(68)	–	–	–	–
– transfers from Stage 3	10	(1)	42	(1)	(52)	2	–	–	–	–
Net remeasurement of ECL arising from transfer of stage	–	144	–	(607)	–	(13)	–	–	–	(476)
New financial assets originated and purchased	256,859	(275)	16,987	(840)	507	(47)	973	–	275,326	(1,162)
Assets derecognised (including final repayments)	(163,501)	127	(32,169)	254	(699)	95	–	–	(196,369)	476
Changes to risk parameters – further lending/(repayment)	5,207	223	4,368	161	(1,070)	46	(2)	–	8,503	430
Changes in risk parameters – credit quality	–	479	–	(757)	–	(1,885)	–	–	–	(2,163)
Changes to model used for ECL calculation	–	(38)	–	(8)	–	–	–	–	–	(46)
Assets written off	–	–	–	–	(1,233)	1,233	–	–	(1,233)	1,233
Credit related modifications that resulted in derecognition	–	–	(768)	6	(208)	–	–	–	(976)	6
Foreign exchange and others	4,547	(9)	339	(3)	56	(19)	–	–	4,942	(31)
At 31 December 2021	1,283,759	(822)	150,116	(3,572)	9,457	(2,700)	972	–	1,444,304	(7,094)

	Total
Change in ECL in income statement (charge)/release for the year	(2,935)
Add: Recoveries	167
Add/(less): Others	(37)
Total ECL (charge)/release for the year	(2,805)

(a) Credit Risk

(iii) Reconciliation of changes in gross carrying/nominal amount and allowances for placings with and advances to banks and loans and advances to customers continued

Reconciliation of changes in gross carrying/nominal amount and allowances for placings with and advances to banks and loans and advances to customers, including loan commitments and financial guarantees[2] continued

(audited)

	At 31 December 2021		For the year ended 31 December 2021
	Gross carrying/ nominal amount	Allowance for ECL	ECL (charge)/ release
Placings with and advances to banks and loans and advances to customers, including loan commitments and financial guarantees	1,444,304	(7,094)	(2,805)
Other financial assets measured at amortised cost	214,623	(167)	(6)
Summary of financial instruments to which the impairment requirements in HKFRS 9 are applied	1,658,927	(7,261)	(2,811)
Debt instruments measured at FVOCI[2]	354,050	(9)	–
Performance and other guarantees not considered for HKFRS 9	26,439	(3)	4
Total allowance for ECL/consolidated income statement ECL charge for the year	2,039,416	(7,273)	(2,807)

1 Purchased or originated credit-impaired ('POCI') represented distressed restructuring.

2 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 Consolidated Balance Sheet as it excludes fair value gains and losses.

(iv) 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 HKFRS 9 stages 1 and 2 are determined based on relative deterioration of credit quality since initial recognition. Accordingly, for non-credit-impaired financial instruments, there is no direct relationship between the credit quality assessments and HKFRS 9 stages 1 and 2, though typically the lowered credit quality bands exhibit a higher proportion in stage 2.

(a) Credit Risk

(iv) Credit quality of financial instruments continued

(audited)

Distribution of financial instruments by credit quality at 31 December 2022

	Gross carrying/notional amount							
	Strong	Good	Satisfactory	Sub-standard	Credit-impaired	Total	Allowance for ECL	Net
In-scope for HKFRS 9 impairment								
Loans and advances to customers at amortised cost	457,044	167,123	256,457	39,892	24,212	944,728	(13,394)	931,334
– personal	353,312	16,917	11,172	416	923	382,740	(1,373)	381,367
– corporate and commercial	95,808	143,049	226,674	39,476	23,289	528,296	(11,885)	516,411
– non-bank financial institutions	7,924	7,157	18,611	–	–	33,692	(136)	33,556
Placings with and advances to banks at amortised cost	62,098	203	28	–	–	62,329	(3)	62,326
Cash and balances at central banks	17,612	–	–	–	–	17,612	(3)	17,609
Reverse repurchase agreements – non-trading	38,438	3,926	–	–	–	42,364	–	42,364
Financial investments measured at amortised cost	228,977	30,444	2,298	–	–	261,719	(94)	261,625
Other assets	21,731	8,276	7,105	87	–	37,199	(30)	37,169
Debt instruments measured at fair value through other comprehensive income[1]	357,407	234	–	–	–	357,641	(6)	357,635
	1,183,307	210,206	265,888	39,979	24,212	1,723,592	(13,530)	1,710,062
Out-of-scope for HKFRS 9 impairment								
Trading assets	46,936	126	268	–	–	47,330	–	47,330
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	247	618	1	–	–	866	–	866
Derivative financial instruments	22,183	470	18	90	–	22,761	–	22,761
	69,366	1,214	287	90	–	70,957	–	70,957
	1,252,673	211,420	266,175	40,069	24,212	1,794,549	(13,530)	1,781,019
Percentage of total credit quality	70%	12%	15%	2%	1%	100%		
Loan and other credit related commitments[2]	263,697	53,415	38,414	1,711	28	357,265	(169)	357,096
Financial guarantee and similar contracts[2]	399	627	556	141	4	1,727	(2)	1,725

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 Consolidated Balance Sheet as it excludes fair value gains and losses.

2 Figures do not include commitments and financial guarantee contracts not subject to impairment requirements under HKFRS 9. As such, the amounts do not agree with the figures shown in note 45 on the Consolidated Financial Statements.

(a) Credit Risk

(iv) Credit quality of financial instruments continued

(audited)

Distribution of financial instruments by credit quality at 31 December 2021

(restated)[1]

	Gross carrying/notional amount							
	Strong	Good	Satisfactory	Sub-standard	Credit-impaired	Total	Allowance for ECL	Net
In-scope for HKFRS 9 impairment								
Loans and advances to customers at amortised cost	473,995	216,803	287,835	15,263	10,429	1,004,325	(6,928)	997,397
– personal	345,528	15,838	12,295	205	858	374,724	(1,281)	373,443
– corporate and commercial	122,080	193,188	257,956	15,058	9,467	597,749	(5,486)	592,263
– non-bank financial institutions	6,387	7,777	17,584	–	104	31,852	(161)	31,691
Placings with and advances to banks at amortised cost	72,243	238	13	–	–	72,494	(1)	72,493
Cash and balances at central banks	16,896	–	–	–	–	16,896	–	16,896
Reverse repurchase agreements – non-trading	14,728	3,100	993	–	–	18,821	–	18,821
Financial investments measured at amortised cost	109,359	28,965	3,056	–	–	141,380	(153)	141,227
Other assets	24,171	7,714	5,631	10	–	37,526	(14)	37,512
Debt instruments measured at fair value through other comprehensive income[2]	353,816	234	–	–	–	354,050	(9)	354,041
	1,065,208	257,054	297,528	15,273	10,429	1,645,492	(7,105)	1,638,387
Out-of-scope for HKFRS 9 impairment								
Trading assets	47,028	165	199	–	–	47,392	–	47,392
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	267	771	3	–	–	1,041	–	1,041
Derivative financial instruments	10,267	2,923	27	7	–	13,224	–	13,224
	57,562	3,859	229	7	–	61,657	–	61,657
	1,122,770	260,913	297,757	15,280	10,429	1,707,149	(7,105)	1,700,044
Percentage of total credit quality	66%	15%	17%	1%	1%	100%		
Loan and other credit related commitments[3]	279,705	47,077	38,053	219	–	365,054	(162)	364,892
Financial guarantee and similar contracts[3]	424	893	1,108	6	–	2,431	(3)	2,428

1 Comparative figures for Loans and advances to customers have been restated to update the counterparty classification for certain facilities from corporate and commercial to non-bank financial institutions.

2 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 Consolidated Balance Sheet as it excludes fair value gains and losses.

3 Figures do not include commitments and financial guarantee contracts not subject to impairment requirements under HKFRS 9. As such, the amounts do not agree with the figures shown in note 45 on the Consolidated Financial Statements.

(a) Credit Risk

(iv) Credit quality of financial instruments continued

(audited)

Distribution of financial instruments to which the impairment requirements in HKFRS 9 are applied, by credit quality and stage distribution at 31 December 2022

	Gross carrying/notional amount							
	Strong	Good	Satisfactory	Sub-standard	Credit-impaired	Total	Allowance for ECL	Net
Loans and advances to customers at amortised cost	457,044	167,123	256,457	39,892	24,212	944,728	(13,394)	931,334
– stage 1	453,000	148,598	156,787	1,257	–	759,642	(755)	758,887
– stage 2	4,044	18,525	99,670	38,635	–	160,874	(4,818)	156,056
– stage 3	–	–	–	–	23,911	23,911	(7,802)	16,109
– POCI	–	–	–	–	301	301	(19)	282
Placings with and advances to banks at amortised cost	62,098	203	28	–	–	62,329	(3)	62,326
– stage 1	61,977	158	–	–	–	62,135	(2)	62,133
– stage 2	121	45	28	–	–	194	(1)	193
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Other financial assets measured at amortised cost	306,758	42,646	9,403	87	–	358,894	(127)	358,767
– stage 1	305,623	40,012	8,274	10	–	353,919	(98)	353,821
– stage 2	1,135	2,634	1,129	77	–	4,975	(29)	4,946
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Loan and other credit-related commitments[2]	263,697	53,415	38,414	1,711	28	357,265	(169)	357,096
– stage 1	262,015	46,581	30,460	346	–	339,402	(70)	339,332
– stage 2	1,682	6,834	7,954	1,365	–	17,835	(99)	17,736
– stage 3	–	–	–	–	28	28	–	28
– POCI	–	–	–	–	–	–	–	–
Financial guarantees and similar contracts[2]	399	627	556	141	4	1,727	(2)	1,725
– stage 1	399	502	128	–	–	1,029	–	1,029
– stage 2	–	125	428	141	–	694	(2)	692
– stage 3	–	–	–	–	4	4	–	4
– POCI	–	–	–	–	–	–	–	–
	1,089,996	264,014	304,858	41,831	24,244	1,724,943	(13,695)	1,711,248
Debt instruments at FVOCI[1]								
– stage 1	357,407	234	–	–	–	357,641	(6)	357,635
– stage 2	–	–	–	–	–	–	–	–
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
	357,407	234	–	–	–	357,641	(6)	357,635

[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 Consolidated Balance Sheet as it excludes fair value gains and losses.

[2] Figures do not include commitments and financial guarantee contracts not subject to impairment requirements under HKFRS 9. As such, the amounts do not agree with the figures shown in note 45 on the Consolidated Financial Statements.

(a) Credit Risk

(iv) Credit quality of financial instruments continued

(audited)

Distribution of financial instruments to which the impairment requirements in HKFRS 9 are applied, by credit quality and stage distribution at 31 December 2021

	Gross carrying/notional amount							
	Strong	Good	Satisfactory	Sub-standard	Credit-impaired	Total	Allowance for ECL	Net
Loans and advances to customers at amortised cost	473,995	216,803	287,835	15,263	10,429	1,004,325	(6,928)	997,397
– stage 1	460,810	186,463	204,354	522	–	852,149	(762)	851,387
– stage 2	13,185	30,340	83,481	14,741	–	141,747	(3,466)	138,281
– stage 3	–	–	–	–	9,457	9,457	(2,700)	6,757
– POCI	–	–	–	–	972	972	–	972
Placings with and advances to banks at amortised cost	72,243	238	13	–	–	72,494	(1)	72,493
– stage 1	72,204	94	13	–	–	72,311	(1)	72,310
– stage 2	39	144	–	–	–	183	–	183
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Other financial assets measured at amortised cost	165,154	39,779	9,680	10	–	214,623	(167)	214,456
– stage 1	164,041	38,481	7,842	–	–	210,364	(99)	210,265
– stage 2	1,113	1,298	1,838	10	–	4,259	(68)	4,191
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Loan and other credit-related commitments[2]	279,705	47,077	38,053	219	–	365,054	(162)	364,892
– stage 1	279,684	44,406	32,742	184	–	357,016	(57)	356,959
– stage 2	21	2,671	5,311	35	–	8,038	(105)	7,933
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Financial guarantees and similar contracts[2]	424	893	1,108	6	–	2,431	(3)	2,428
– stage 1	422	860	999	2	–	2,283	(2)	2,281
– stage 2	2	33	109	4	–	148	(1)	147
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
	991,521	304,790	336,689	15,498	10,429	1,658,927	(7,261)	1,651,666
Debt instruments at FVOCI[1]								
– stage 1	353,816	234	–	–	–	354,050	(9)	354,041
– stage 2	–	–	–	–	–	–	–	–
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
	353,816	234	–	–	–	354,050	(9)	354,041

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 Consolidated Balance Sheet as it excludes fair value gains and losses.

2 Figures do not include commitments and financial guarantee contracts not subject to impairment requirements under HKFRS 9. As such, the amounts do not agree with the figures shown in note 45 on the Consolidated Financial Statements.

(a) Credit Risk

(iv) Credit quality of financial instruments continued

Mainland China Commercial Real Estate

(unaudited)

The following table presents the Group's total exposures to mainland China commercial real estate ('CRE') by market and credit quality including allowances for ECL by stage. Mainland China reported CRE exposures comprise exposures booked in mainland China and offshore where ultimate parent and beneficial owner is based in mainland China, and all CRE exposures booked on mainland China balance sheets.

	At 31 December 2022		
	Hong Kong	Mainland China	Total
Loans and advances to customers[1]	37,524	11,821	49,345
Guarantees issued and others[2,3]	180	2,379	2,559
Total mainland China CRE exposure	37,704	14,200	51,904
Distribution of mainland China CRE exposure by credit quality			
– Strong	3,307	2,304	5,611
– Good	2,300	3,076	5,376
– Satisfactory	5,429	6,888	12,317
– Sub-standard	11,834	952	12,786
– Credit-impaired	14,834	980	15,814
	37,704	14,200	51,904
Allowance for ECL by credit quality			
– Strong	–	4	4
– Good	1	14	15
– Satisfactory	13	80	93
– Sub-standard	1,987	247	2,234
– Credit-impaired	4,973	578	5,551
	6,974	923	7,897
Allowance for ECL by stage			
– Stage 1	4	30	34
– Stage 2	1,997	315	2,312
– Stage 3	4,973	578	5,551
	6,974	923	7,897
ECL coverage %	18.5	6.5	15.2

1 Amounts represent gross carrying amount.

2 Amounts represent nominal amount.

3 Guarantees issued and others for Hong Kong and mainland China have been reported considering the nature of the exposures and the elimination impact of standby line of credit within the Group respectively. Comparative figures have been restated on this basis accordingly.

(a) Credit Risk

(iv) Credit quality of financial instruments continued

Mainland China Commercial Real Estate continued

(unaudited)

	At 31 December 2021		
(restated)[3]	Hong Kong	Mainland China	Total
Loans and advances to customers[1]	46,951	18,009	64,960
Guarantees issued and others[2,3]	–	5,297	5,297
Total mainland China CRE exposure	46,951	23,306	70,257
Distribution of mainland China CRE exposure by credit quality			
– Strong	11,461	5,763	17,224
– Good	11,762	8,658	20,420
– Satisfactory	12,069	7,997	20,066
– Sub-standard	8,607	94	8,701
– Credit-impaired	3,052	794	3,846
	46,951	23,306	70,257
Allowance for ECL by credit quality			
– Strong	107	7	114
– Good	139	26	165
– Satisfactory	604	53	657
– Sub-standard	1,139	2	1,141
– Credit-impaired	657	86	743
	2,646	174	2,820
Allowance for ECL by stage			
– Stage 1	13	56	69
– Stage 2	1,976	32	2,008
– Stage 3	657	86	743
	2,646	174	2,820
ECL coverage %	5.6	0.7	4.0

1 Amounts represent gross carrying amount.

2 Amounts represent nominal amount.

3 Guarantees issued and others for Hong Kong and mainland China have been reported considering the nature of the exposures and the elimination impact of standby line of credit within the Group respectively. Comparative figures have been restated on this basis accordingly.

(a) Credit Risk

(iv) Credit quality of financial instruments

continued

Mainland China Commercial Real Estate continued

(unaudited)

CRE refers to lending that focuses on commercial development and investment in real estate, and covers commercial, residential and industrial assets. CRE financing can also be provided to a corporate or financial entity for the purchase or financing of a property which supports overall operations of the business, known as self-use.

The Group's exposures are related to companies whose primary activities are focused on residential, commercial and mixed-use real estate activities. Lending is generally focused on tier 1 and 2 cities.

The mainland China CRE portfolio had 45% (2021: 82%) of exposure booked with a credit quality of 'satisfactory' or above. Following recent policy changes in mainland China in respect of the CRE sector, we expect the sector to stabilise during 2023, assuming that there continues to be sustained liquidity support in the market and an improvement in industry fundamentals especially property sale volumes.

The current credit quality distribution of the non-impaired portfolio reflects active risk management of the mainland China CRE portfolio, resulting in credit rating migration throughout the year.

The comparatively lower ECL allowance for this portfolio is driven by the composition of the book, with over one third exposure to state owned enterprises and much of the remaining to relatively strong privately owned enterprises.

With a range of policy measures announced to boost liquidity and credit supply in the mainland China CRE market coupled with market support in the recent past to the stronger privately owned enterprise names, the negative outlook for the industry has stabilised, specifically related to immediate refinancing challenges. However, we continue to monitor for the prevailing situation closely.

(v) 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 their cash flow resources rather than rely on the value of security offered. Depending on the customer's standing and the type of product, facilities may be provided unsecured. However, for certain lending decisions a charge over collateral is usually obtained, and is important for the credit decision and pricing, and it is the Group's practice to obtain that collateral and sell it in the event of default as a source of repayment.

Such collateral has a significant financial effect in mitigating our exposure to credit risk and the objective of the disclosure below is to quantify these forms. We may also manage our risk by employing other types of collateral and credit risk enhancements, such as second charges, other liens and unsupported guarantees, but the valuation of such mitigants is less certain and their financial effect has not been quantified in the loans shown below.

We have quantified below the value of fixed charges we hold over a specific asset (or assets) of a borrower for which we have a practical ability and history of enforcing in satisfying a debt in the event of a borrower failing to meet their contractual obligations and where the asset is cash or can be realised in the form of cash by sale in an established market.

Personal lending

(audited)

For personal lending, the collateral held has been analysed below separately for residential mortgages and other personal lending due to the different nature of collateral held on the portfolios.

(a) Credit Risk

(v) Collateral and other credit enhancements continued

(audited)

Residential mortgages

(audited)

The following table shows residential mortgage lending including off-balance sheet loan commitments by level of collateralisation.

	At 31 December 2022			At 31 December 2021		
	Gross carrying/ nominal amount	ECL	ECL coverage %	Gross carrying/ nominal amount	ECL	ECL coverage %
Stage 1						
Fully collateralised	**291,992**	**(4)**	**0.00**	303,236	(9)	0.00
LTV ratio:						
– Less than 70%	**228,553**	**(4)**	**0.00**	245,906	(9)	0.00
– 71% to 90%	**32,766**	**–**	**–**	48,846	(0)	0.00
– 91% to 100%	**30,673**	**–**	**–**	8,484	(0)	0.00
Partially collateralised (A)	**20,819**	**–**	**–**	42	–	–
Total	**312,811**	**(4)**	**0.00**	303,278	(9)	0.00
– *Collateral value on A*	**19,978**			41		
Stage 2						
Fully collateralised	**4,718**	**–**	**–**	5,636	(0)	0.01
LTV ratio:						
– Less than 70%	**4,194**	**–**	**–**	5,248	(0)	0.01
– 71% to 90%	**344**	**–**	**–**	358	–	–
– 91% to 100%	**180**	**–**	**–**	30	(0)	0.00
Partially collateralised (B)	**187**	**–**	**–**	–	–	–
Total	**4,905**	**–**	**–**	5,636	(0)	0.01
– *Collateral value on B*	**180**			–		
Stage 3						
Fully collateralised	**505**	**(17)**	**3.37**	432	(12)	2.72
LTV ratio:						
– Less than 70%	**485**	**(17)**	**3.51**	414	(12)	2.82
– 71% to 90%	**20**	**–**	**–**	18	(0)	0.52
– 91% to 100%	**–**	**–**	**–**	–	–	–
Partially collateralised (C)	**–**	**–**	**–**	–	–	–
Total	**505**	**(17)**	**3.37**	432	(12)	2.72
– *Collateral value on C*	**–**			–		
POCI						
Fully collateralised	**–**	**–**	**–**	–	–	–
LTV ratio:						
– Less than 70%	**–**	**–**	**–**	–	–	–
– 71% to 90%	**–**	**–**	**–**	–	–	–
– 91% to 100%	**–**	**–**	**–**	–	–	–
Partially collateralised (D)	**–**	**–**	**–**	–	–	–
Total	**–**	**–**	**–**	–	–	–
– *Collateral value on D*	**–**			–		
	318,221	**(21)**	**0.01**	309,346	(21)	0.01

The ECL coverage represents the actual ECL divided by gross carrying/nominal amount.

The collateral included in the table above consists of fixed first charges on residential real estate.

(a) Credit Risk

(v) Collateral and other credit enhancements continued

(audited)

Residential mortgages continued

(audited)

The loan-to-value ('LTV') ratio in the table above is calculated as the gross on-balance sheet carrying amount of the loan and any off-balance sheet loan commitment at the balance sheet date as a percentage of the current value of collateral. The current value of collateral is determined through a combination of professional valuations, physical inspections or house price indices. Valuations are updated on a regular basis and more frequently when market conditions or portfolio performance are subject to significant change or where a loan is identified and assessed as impaired. The collateral valuation excludes any adjustments for obtaining and selling the collateral.

Other personal lending

(audited)

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.

Corporate and commercial and financial (non-bank) lending

(audited)

For corporate and commercial and financial (non-bank) lending, the collateral held has been analysed below separately for commercial real estate and other corporate and commercial and financial (non-bank) lending due to the different nature of collateral held on the portfolios.

Commercial real estate

(audited)

Commercial real estate lending includes the financing of corporate and institutional customers who are investing primarily in income-producing assets and, to a lesser extent, in their construction and development.

(a) Credit Risk

(v) Collateral and other credit enhancements continued

(audited)

Commercial real estate continued

(audited)

The following table shows commercial real estate lending including off-balance sheet loan commitments by level of collateralisation.

	At 31 December 2022			At 31 December 2021		
	Gross carrying/ nominal amount	ECL	ECL coverage %	Gross carrying/ nominal amount	ECL	ECL coverage %
Stage 1						
Not collateralised	**62,767**	**(17)**	**0.03**	75,656	(32)	0.04
Fully collateralised	**92,736**	**(72)**	**0.08**	134,639	(84)	0.06
Partially collateralised (A)	**4,789**	**–**	**–**	4,721	(3)	0.06
Total	**160,292**	**(89)**	**0.06**	215,016	(119)	0.06
– *Collateral value on A*	**4,099**			2,948		
Stage 2						
Not collateralised	**17,384**	**(2,010)**	**11.56**	32,398	(1,986)	6.13
Fully collateralised	**42,635**	**(661)**	**1.55**	25,433	(175)	0.69
Partially collateralised (B)	**2,881**	**(87)**	**3.02**	778	(10)	1.29
Total	**62,900**	**(2,758)**	**4.38**	58,609	(2,171)	3.70
– *Collateral value on B*	**1,810**			361		
Stage 3						
Not collateralised	**8,497**	**(4,642)**	**54.63**	1,298	(414)	31.90
Fully collateralised	**5,857**	**(881)**	**15.04**	2,637	(342)	12.97
Partially collateralised (C)	**310**	**(47)**	**15.16**	–	–	–
Total	**14,664**	**(5,570)**	**37.98**	3,935	(756)	19.21
– *Collateral value on C*	**298**			–		
POCI						
Not collateralised	**–**	**–**	**–**	–	–	–
Fully collateralised	**–**	**–**	**–**	765	–	–
Partially collateralised (D)	**145**	**–**	**–**	–	–	–
Total	**145**	**–**	**–**	765	–	–
– *Collateral value on D*	**65**			–		
	238,001	**(8,417)**	**3.54**	278,325	(3,046)	1.09

The collateral included in the table above consists of fixed first charges on real estate and charges over cash for the commercial real estate sector. The table includes lending to major property developers which is typically secured by guarantees or is unsecured.

(a) Credit Risk

(v) Collateral and other credit enhancements

continued

(audited)

Commercial real estate continued

(audited)

The value of commercial real estate collateral is determined through a combination of professional and internal valuations and physical inspection. Due to the complexity of collateral valuations for commercial real estate, local valuation policies determine the frequency of review based on local market conditions. Revaluations are sought with greater frequency where, as part of the regular credit assessment of the obligor, material concerns arise in relation to the transaction which may reflect on the underlying performance of the collateral, or in circumstances where an obligor's credit quality has declined sufficiently to cause concern that the principal payment source may not fully meet the obligation (i.e. the obligor's credit quality classification indicates it is at the lower end e.g. sub-standard, or approaching impaired).

Commercial real estate lending includes the financing of corporate, institutional and high net worth customers who are investing primarily in income-producing assets and, to a lesser extent, in their construction and development.

Other corporate and commercial and financial (non-bank) lending

(audited)

The following table shows corporate, commercial and financial (non-bank) lending including off-balance sheet loan commitments by level of collateralisation.

	At 31 December 2022			At 31 December 2021		
	Gross carrying/ nominal amount	ECL	ECL coverage %	Gross carrying/ nominal amount	ECL	ECL coverage %
Stage 1						
Not collateralised	**282,001**	**(317)**	**0.11**	321,650	(280)	0.09
Fully collateralised	**120,657**	**(170)**	**0.14**	148,902	(104)	0.07
Partially collateralised (A)	**41,339**	**(42)**	**0.10**	53,498	(25)	0.05
Total	**443,997**	**(529)**	**0.12**	524,050	(409)	0.08
– *Collateral value on A*	**18,852**			23,659		
Stage 2						
Not collateralised	**45,063**	**(240)**	**0.53**	23,596	(204)	0.86
Fully collateralised	**69,599**	**(740)**	**1.06**	53,111	(335)	0.63
Partially collateralised (B)	**16,620**	**(150)**	**0.90**	9,259	(30)	0.32
Total	**131,282**	**(1,130)**	**0.86**	85,966	(569)	0.66
– *Collateral value on B*	**8,111**			3,532		
Stage 3						
Not collateralised	**1,916**	**(1,112)**	**58.04**	1,881	(1,252)	66.56
Fully collateralised	**3,231**	**(154)**	**4.77**	952	(6)	0.63
Partially collateralised (C)	**3,200**	**(825)**	**25.78**	1,831	(529)	28.89
Total	**8,347**	**(2,091)**	**25.05**	4,664	(1,787)	38.31
– *Collateral value on C*	**1,879**			1,159		
POCI						
Not collateralised	**–**	**–**	**–**	–	–	–
Fully collateralised	**–**	**–**	**–**	207	–	–
Partially collateralised (D)	**156**	**(19)**	**12.18**	–	–	–
Total	**156**	**(19)**	**12.18**	207	–	–
– *Collateral value on D*	**–**			–		
	583,782	**(3,769)**	**0.65**	614,887	(2,765)	0.45

(a) Credit Risk

(v) Collateral and other credit enhancements

continued

(audited)

Other corporate and commercial and financial (non-bank) lending continued

(audited)

The collateral used in the assessment of the above primarily includes first legal charges over real estate and charges over cash in the commercial and industrial sector and charges over cash and marketable financial instruments in the financial sector.

It should be noted that the table above excludes other types of collateral which are commonly taken for corporate and commercial lending such as unsupported guarantees and floating charges over the assets of a customer's business. While such mitigants have value, often providing rights in insolvency, their assignable value is insufficiently certain. They are assigned no value for disclosure purposes.

As with commercial real estate the value of real estate collateral included in the table above is generally determined through a combination of professional and internal valuations and physical inspection. The frequency of revaluation is undertaken on a similar basis to commercial real estate loans and advances; however, for financing activities in corporate and commercial lending that are not predominantly commercial real estate-oriented, collateral value is not as strongly correlated to principal repayment performance. Collateral values will generally be refreshed when an obligor's general credit performance deteriorates and it is necessary to assess the likely performance of secondary sources of repayment should reliance upon them prove necessary. For the purposes of the table above, cash is valued at its nominal value and marketable securities at their fair value.

Placings with and advances to banks

(audited)

Placings with and advances to banks are typically unsecured. At 31 December 2022, HK$62,326m (2021: HK$72,493m) of placings with and advances to banks rated CRR 1 to 5, including loan commitments, are uncollateralised.

Derivatives

(audited)

The ISDA Master Agreement is our preferred agreement for documenting derivatives activity. It provides the contractual framework within which dealing activity across a full range of over-the-counter ('OTC') products is conducted, and contractually binds both parties to apply close-out netting across all outstanding transactions covered by an agreement if either party defaults or another pre-agreed termination event occurs. It is common, and the Group's preferred practice, for the parties to execute a Credit Support Annex ('CSA') in conjunction with the ISDA Master Agreement. Under a CSA, collateral is passed between the parties to mitigate the counterparty risk inherent in outstanding positions. The majority of our CSAs are with financial institutional clients. Please refer to note 47 'Offsetting of financial assets and financial liabilities' for further details.

Other credit risk exposures

(audited)

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 described in more detail below.

Government, bank and other financial institution-issued securities may benefit from additional credit enhancement, notably through government guarantees that reference these assets. Corporate-issued debt securities are primarily unsecured. Debt securities issued by banks and financial institutions include asset-backed securities ('ABS') and similar instruments, which are supported by underlying pools of financial assets. Credit risk associated with ABS is reduced through the purchase of credit default swap ('CDS') protection.

The Group's maximum exposure to credit risk includes financial guarantees and similar arrangements that it issues or enters into, and loan commitments to which it is irrevocably committed. Depending on the terms of the arrangement, the Group may have recourse to additional credit mitigation in the event that a guarantee is called upon or a loan commitment is drawn and subsequently defaults. The risks and exposures from these are captured and managed in accordance with the Group's overall credit risk management policies and procedures.

Collateral and other credit enhancements obtained

(audited)

The Group obtained assets by taking possession of collateral held as security, or calling other credit enhancement. The nature of these assets held as at 31 December 2022 are residential properties with carrying amount of HK$87m (2021: residential properties of HK$35m).

(b) Treasury Risk

Overview

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 our earnings or capital due to structural 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

Main objective in the management of treasury risk is to maintain appropriate levels of capital, liquidity, funding, foreign exchange and market risk to support business strategy, and meet regulatory and stress testing-related requirements.

The 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, our internal capital adequacy assessment process ('ICAAP') and our internal liquidity adequacy assessment process ('ILAAP'). The risk framework incorporates a number of measures aligned to our assessment of risks for both internal and regulatory purposes.

Treasury risk management

Key developments in 2022

- We have rolled out second line of defence for capital risk, providing independent oversight of treasury activities across capital and recovery and resolution planning during 2022.
- The Board approved Risk Appetite for IRRBB was further enhanced in 2022 to include NII sensitivity metric to monitor the impact of 100bps interest rate shock on the forecasted earnings of the Bank over next 1 year against the Board approved Risk Appetite.
- During the periods of high market volatility in 2022, we enhanced the monitoring and forecasting of our capital positions. The mark-to-market movement in financial instruments that impacted our capital ratio arose from the portfolio of high-quality liquid assets ('HQLA') held by our Markets Treasury business as economic hedges of net interest income. This portfolio is largely accounted for at fair value through other comprehensive income ('FVOCI'), together with any derivative hedges held to offset the duration risk of the assets. During the year, we took steps to reduce the duration risk of this portfolio to reduce the capital impact from higher interest rates. The impact of this risk reduction reduced the hold-to-collect-and-sell stressed value at risk ('VaR') exposure from $1.44bn at the end of 2021 to $0.91bn at the end of 2022.
- Our portfolio of hold-to-collect-and-sell assets forms a material part of our liquid asset buffer, and the duration risk of the portfolio acts as a hedge to our structural interest rate risk. We have recently approved a new hold-to-collect business model, which is currently being implemented at legal entity level, and certain new purchases of securities will be booked under this model. In future, this portfolio of assets will also form a more material part of our structural interest rate hedging. This will allow more flexibility in managing the market risk of the current hold-to-collect-and-sell portfolio to optimise returns from market movements while still safeguarding capital and future earnings.

Governance and structure

The Board approves the policy and risk appetite for Liquidity and Capital. It is supported and advised by the RC.

The Asset, Liability and Capital Management ('ALCM') team actively manages capital and liquidity risk on an on-going basis and provides support to the Asset and Liability Management Committee ('ALCO') with risk appetites overseen by the Risk Management Meeting ('RMM'). Markets Treasury has the responsibility for cash and liquidity management. It also manages structural foreign exchange risk including implementing hedging strategies approved by Chief Financial Officer and supported by ALCO.

The ALCM team further manages interest rate risk in the non-trading banking book, maintaining the transfer pricing framework and informing the ALCO the overall banking book interest rate exposure. Banking book interest rate positions may be transferred to be managed by Markets Treasury, within the market risk limits approved by the RMM.

(b) Treasury Risk

Treasury risk management continued

Governance and structure continued

Treasury Risk Management function carries out independent review, challenge and assurance of the appropriateness of the liquidity and IRRBB risk management activities undertaken by ALCM and Markets Treasury.

Internal Audit provides independent assurance that risk is managed effectively.

Capital

Capital Management

(audited)

The Group's objective for managing capital is to maintain a strong capital base to support the development of its business and to meet regulatory capital requirements at all times. The Group recognises the impact of different level of equity capital on shareholder returns and seeks to maintain a prudent balance between advantages and flexibility provided by a strong capital position and higher returns on equity through greater leverage.

The policy on capital management sets out the Group's capital management and ICAAP. The policy incorporates key capital risk appetites for Common Equity Tier 1 ('CET1') capital, Tier 1 ('T1') capital, total capital, loss-absorbing capacity and leverage ratios. Regulatory capital and economic capital are the two primary measures used for monitoring and managing the capital position.

Capital measures:

– regulatory capital is the capital which we are required to hold in accordance with the rules established by regulator; and
– economic capital is the internally calculated capital requirement to support risks to which the Group is exposed to and forms a core part of the ICAAP.

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 and management, performance and planning, risks to capital, and the implications of stress testing. ICAAP is driven by an assessment of risks, including credit, market, operational, structural foreign exchange, interest rate risk in the banking book. Climate risk is also considered as part of the ICAAP, and the Group is continuing to develop the approach for climate risk management. The ICAAP supports the determination of the capital risk appetites, as well as enables the assessment and determination of capital requirements by regulator.

An annual Group capital plan is prepared and approved by the Board with the objectives of maintaining an optimal amount of capital and a suitable mix between different components of capital. The Group manages its own capital within the context of the approved annual capital plan, which determines the level of risk-weighted asset ('RWA') growth as well as the optimal amount and components of capital required to support planned business growth. Capital and RWA are monitored and managed against the plan, with capital forecasts reported to relevant governance committees. As part of the Group's capital management objectives, subsidiary with capital generated in excess of planned requirement will return to the Bank, normally by way of dividends. The Group also raised subordinated debt in accordance with HSBC Group's guidelines regarding market and investor concentration, cost, market conditions, timing and maturity profile.

The Bank is primarily a provider of equity capital to its subsidiaries. These investments are substantially funded by the Bank's own capital and profit. 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, retained profits, other equity instruments and other reserves. Capital also includes impairment allowances and regulatory reserve for general banking risks as allowed under Banking (Capital) Rules.

Externally imposed capital requirements

(audited)

The HKMA supervises the Group on a consolidated and solo-consolidated basis and, as such, receives information on the capital adequacy of, and sets capital requirements for, the Group as a whole. Individual banking subsidiaries are directly regulated by their local banking supervisors, who set and monitor their capital adequacy requirements. Certain non-banking financial subsidiaries are also subject to the supervision and capital requirements of local regulatory authorities.

(b) Treasury Risk

Capital Management continued

(audited)

Externally imposed capital requirements continued

(audited)

The Group uses the advanced internal ratings-based approach ('IRB') 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 to calculate the risk-weighted amount. For counterparty credit risk, the Group uses standardised (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 approach to calculate its general market risk for the risk categories of interest rate and foreign exchange (including gold) exposures and the standardised (market risk) approach for calculating other market risk positions. For operational risk, the Group uses the standardised (operational risk) approach to calculate its operational risk.

During the year, the Group has complied with all of the externally imposed capital requirements by the HKMA.

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 2022, the capital buffers applicable to the Group include the Capital Conservation Buffer ('CCB'), the Countercyclical Capital Buffer ('CCyB') and the Higher Loss Absorbency ('HLA') requirements 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 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 4 November 2022 and 30 December 2022 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 1.0% for the Group.

Loss-absorbing capacity requirements

(unaudited)

The HKMA classified the Bank as a material subsidiary of HSBC's Asian resolution group in 2019 and required the Bank to comply with internal loss-absorbing capacity requirements under the Financial Institutions (Resolution) (Loss-absorbing Capacity Requirements – Banking Sector) Rules. During the year, the Bank has issued non-capital loss-absorbing capacity debt instrument of HK$3bn to its immediate holding company.

Leverage ratio

(unaudited)

The leverage ratio was introduced into the Basel III framework as a non-risk-based backstop limit, to supplement 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 Basel III tier 1 capital divided by total on-balance sheet and off-balance sheet exposures. The minimum leverage ratio requirement in Hong Kong is 3%.

Capital base

(unaudited)

The following tables show the capital base, RWAs and capital ratios as contained in the 'Capital Adequacy Ratio' return required to be submitted to the HKMA by the Bank on consolidated basis as specified by the HKMA under the requirements of section 3C(1) of the Banking (Capital) Rules. The basis is different from that for accounting purposes. Further information on the regulatory consolidation basis is set out in the Banking Disclosure Statement that is available in the Regulatory Disclosures section of our website www.hangseng.com.

The Bank and its subsidiaries may need to maintain a regulatory reserve to satisfy the provisions of the Banking Ordinance and local regulatory requirements for prudential supervision purposes. At 31 December 2022, the Group is not required to restrict any reserves which can be distributed to shareholders (2021: HK$441m) as the impairment allowance for Stage 1 and 2 loans and advances to customers exceeded the expected regulatory reserve balance.

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 final reform package, which is currently scheduled for implementation by the HKMA no earlier than 1 January 2024. We continue to participate in consultations and monitor progress on the implementation. Based on the results of the latest HKMA consultations, we foresee a positive impact on our capital ratios. The RWA output floor under the Basel III final reform package will commence once implemented, with an expected five-year phase-in arrangement. Any impact from the output floor would be towards the end of the phase-in period. We are expecting the issuance of final rules in 2023 which will enable us to better estimate the impact.

(b) Treasury Risk

Capital Management continued

(audited)

Capital base continued

(unaudited)

The following table sets out the composition of the Group's capital base under Basel III at 31 December 2022 and 31 December 2021. A more detailed breakdown of the capital position and a full reconciliation between the Group's accounting and regulatory balance sheets can be viewed in the Banking Disclosure Statement in the Regulatory Disclosures section of our website www.hangseng.com.

	2022	2021
CET1 Capital		
Shareholders' equity	**143,883**	144,651
– Shareholders' equity per Consolidated Balance Sheet	**183,896**	184,332
– Additional Tier 1 ('AT1') perpetual capital instruments	**(11,744)**	(11,744)
– Unconsolidated subsidiaries	**(28,269)**	(27,937)
Non-controlling interests	**–**	–
– Non-controlling interests per Consolidated Balance Sheet	**65**	84
– Non-controlling interests in unconsolidated subsidiaries	**(65)**	(84)
Regulatory deductions to CET1 capital	**(27,461)**	(28,052)
– Cash flow hedging reserve	**472**	2
– Changes in own credit risk on fair valued liabilities	**(6)**	(6)
– Property revaluation reserves[1]	**(24,418)**	(24,617)
– Regulatory reserve	**–**	(441)
– Intangible assets	**(3,011)**	(2,359)
– Deferred tax assets net of deferred tax liabilities	**(346)**	(90)
– Valuation adjustments	**(152)**	(126)
– Excess of total expected loss amount over total eligible provisions under the IRB	**–**	(415)
Total CET1 Capital	**116,422**	116,599
AT1 Capital		
Total AT1 capital before and after regulatory deductions	**11,744**	11,744
– Perpetual capital instruments	**11,744**	11,744
Total AT1 Capital	**11,744**	11,744
Total T1 Capital	**128,166**	128,343
Tier 2 ('T2') Capital		
Total T2 capital before regulatory deductions	**11,555**	11,460
– Property revaluation reserves[1]	**10,988**	11,078
– Impairment allowances and regulatory reserve eligible for inclusion in T2 capital	**567**	382
Regulatory deductions to T2 capital	**(1,045)**	(1,045)
– Significant capital investments in unconsolidated financial sector entities	**(1,045)**	(1,045)
Total T2 Capital	**10,510**	10,415
Total Capital	**138,676**	138,758

1 Includes the revaluation surplus on investment properties which is reported as part of retained profits and related adjustments made in accordance with the Banking (Capital) Rules issued by the HKMA.

(b) Treasury Risk

Capital Management continued

(audited)

Risk-weighted assets by risk type

(unaudited)

	2022	2021
Credit risk	**687,532**	659,956
Market risk	**19,883**	13,248
Operational risk	**57,311**	60,924
Total	**764,726**	734,128

Capital ratios (as a percentage of risk-weighted assets)

(unaudited)

The capital ratios on consolidated basis calculated in accordance with the Banking (Capital) Rules are as follows:

	2022	2021
CET1 capital ratio	**15.2%**	15.9%
T1 capital ratio	**16.8%**	17.5%
Total capital ratio	**18.1%**	18.9%

In addition, the capital ratios of all tiers as of 31 December 2022 would be reduced by approximately 0.5 percentage point after the prospective fourth interim dividend payment for 2022. The following table shows the pro-forma basis position of the capital ratios after the prospective interim dividend.

	Pro-forma 2022	Pro-forma 2021
CET1 capital ratio	**14.7%**	15.4%
T1 capital ratio	**16.3%**	17.0%
Total capital ratio	**17.6%**	18.4%

Leverage ratio

(unaudited)

	2022	2021
Leverage ratio	**7.3%**	7.5%
T1 capital	**128,166**	128,343
Exposure measure	**1,752,201**	1,704,064

Detailed breakdown of the Group's leverage exposure measure and a summary comparison table reconciling the assets of the Group's accounting balance sheet with the leverage exposure measure using the standard templates as specified by the HKMA can be viewed in the Banking Disclosure Statement in the Regulatory Disclosures section of our website www.hangseng.com.

Dividend policy

Objective

The Bank's medium to long term dividend objective is to maintain steady dividends in light of profitability, regulatory requirements, growth opportunities and the operating environment. Its roadmap is designed to generate increasing shareholders' value through strategic business growth. The Bank would balance solid yields with the longer-term reward of sustained share price appreciation.

Considerations

The declaration of dividends is made at the discretion of the Board, which will take into account all relevant factors including the following:

- regulatory requirements;
- financial results;
- level of distributable reserves;
- general business conditions and strategies;
- strategic business plan and capital plan;
- statutory and regulatory restrictions on dividend payment; and
- any other factors the Board may deem relevant.

Phasing and Timing

Under normal circumstances and if the Board determines to declare a dividend at its discretion, dividends would be declared on a quarterly basis. The phasing of dividends would be planned on a prudent basis to allow for any unforeseen events, which might arise towards the end of an accounting period. Phasing of dividends would also take account of the volatility of the Bank's profits.

Other financial information

Other financial information required under the Banking (Disclosure) Rules and Financial Institutions (Resolution) (Loss-absorbing Capacity Requirements – Banking Sector) Rules can be viewed in the Banking Disclosure Statement that is available in the Regulatory Disclosures section of our website www.hangseng.com.

(b) Treasury Risk

Foreign exchange exposures

(unaudited)

Structural foreign exchange exposures represent net assets or capital investments in subsidiaries, branches or the fair value of the Group's long-term foreign currency equity investments, the functional currencies of which are currencies other than the Hong Kong dollar. An entity's functional 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'. The Group uses 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 subsidiaries.

The Group's structural foreign exchange exposures are managed with the primary objective of ensuring, where practicable, that the Group's consolidated capital ratios and the capital ratios of individual banking subsidiaries are largely protected from the effect of changes in exchange rates.

The Group's foreign exchange exposures are prepared in accordance with the HKMA 'Return of Foreign Currency Position -(MA(BS)6)'.

For details of the Group's non-structural and structural foreign currency positions, please refer to the Banking Disclosure Statement that is available in the 'Regulatory Disclosures' section of the Bank's website.

Liquidity and funding risk

(audited)

Overview

Liquidity risk is the risk that we do not have sufficient financial resources to meet our obligations as they fall due or that we can only do so at an excessive cost. Liquidity risk arises from mismatches in the timing of cash flows. Funding risk is the risk that funding considered to be sustainable, and therefore used to fund assets, is not sustainable over time. Funding risk arises when illiquid asset positions cannot be funded at the expected terms and when required.

Liquidity and funding risk profile

The Group adopt HSBC Group's policies, metrics and controls which aim to allow us to withstand very severe liquidity stresses. The global policies are designed to be adaptable to changing business models, markets and regulations. They are designed to ensure that Group and entity management have oversight of our liquidity and funding risks in order to manage them appropriately.

We manage liquidity and funding risk at an operating entity level to ensure 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 minimum requirements and any applicable regulatory requirements at all times. These requirements are set against the Group's implementation of the LCR and the NSFR. Each operating entity is required to undertake a qualitative and quantitative assessment of the contractual and behavioural profile of its assets and liabilities when setting internal limits in order to reflect their expected behaviour under idiosyncratic, market-wide and combined stress scenarios.

Structure and organisation

ALCM teams are responsible for the application of policies and controls at a local operating entity level. The elements of the Group's policies and controls are underpinned by a robust governance framework, the two major elements of which are:

- ALCOs at the Group and entity level; and
- annual ILAAP used to validate risk tolerance and set risk appetite.

All operating entities are required to prepare an internal liquidity adequacy assessment ('ILAA') document at appropriate frequency. The final objective of the ILAA, approved by the relevant Board of Directors, is to verify that the entity and subsidiaries maintain liquidity resources which are adequate in both amount and quality at all times, there is no significant risk that its liabilities cannot be met as they fall due, and a prudent funding profile is maintained.

The Board is ultimately responsible for determining the types and magnitude of liquidity risk that the Group is able to take and ensuring that there is an appropriate organisation structure for managing this risk. Under authorities delegated by the Executive Committee, the Group ALCO is responsible for managing all Asset, Liability and Capital Management issues including liquidity and funding risk management.

(b) Treasury Risk

Liquidity and funding risk continued

(audited)

Structure and organisation continued

The Group ALCO delegates to the Group Tactical Asset and Liability Management Committee ('TALCO') the task of reviewing various analysis of the Group pertaining to liquidity and funding.

Compliance with liquidity and funding requirements is monitored by the ALCO and is reported to the RMM, Executive Committee, RC and the Board of Directors on a regular basis. This process includes:

– maintaining compliance with relevant regulatory requirements of the reporting 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 depositor concentration in order to avoid undue reliance on large individual depositors and ensuring a satisfactory overall funding mix; and
– maintaining liquidity contingency plans. These plans identify early indicators of stress conditions and describe actions to be taken in the event of difficulties arising from systemic or other crises, while minimising adverse long-term implications for the business.

Governance

ALCM teams apply the Group's policies and controls at both an individual entity and Group level, and are responsible for the implementation of Group-wide and local regulatory policy at a legal entity level. Markets Treasury has responsibility for cash and liquidity management.

Treasury Risk Management carries out independent review, challenge and assurance of the appropriateness of the risk management activities undertaken by ALCM and Markets Treasury. Their work includes setting control standards, advising on policy implementation, and reviewing and challenging of reporting.

Internal Audit provide independent assurance that risk is managed effectively.

The management of liquidity and funding risk

Funding and liquidity plans form part of the financial resource plan that is approved by the Board. The critical Board risk appetite measures are the LCR and NSFR. An internal liquidity metric ('ILM') is used to supplement these regulatory metrics. An appropriate funding and liquidity profile is managed through a wider set of measures:

- a minimum LCR requirement;
- a minimum NSFR requirement;
- an ILM requirement;
- a depositor concentration limit;
- cumulative term funding maturity concentration limit;
- liquidity metrics to monitor minimum requirement by currency;
- intra-day liquidity;
- the application of liquidity funds transfer pricing; and
- forward-looking funding assessments.

(b) Treasury Risk

Liquidity and funding risk continued

(audited)

The management of liquidity and funding risk continued

Liquidity coverage ratio

(unaudited)

The LCR aims to ensure that a bank has sufficient unencumbered high-quality liquid assets ('HQLA') to meet its liquidity needs in a 30-calendar-day liquidity stress scenario.

At 31 December 2022, the LCR of all the Group's principal operating entities were well above regulatory minimums and above the internally expected levels established by the Board.

Net stable funding ratio

(unaudited)

The Group uses the NSFR as a basis for ensuring operating entities raise sufficient stable funding to support their business activities. The NSFR requires institutions to maintain minimum amount of stable funding based on assumptions of asset liquidity.

At 31 December 2022, the NSFR of all the Group's principal operating entities were above the internally expected levels established by the Board.

Depositor concentration and term funding maturity concentration

(unaudited)

The LCR and NSFR metrics assume a stressed outflow based on a portfolio of depositors within each deposit segment. The validity of these assumptions is challenged if the portfolio of depositors is not large enough to avoid depositor concentration. Operating entities are exposed to term refinancing concentration risk if the current maturity profile results in future maturities being overly concentrated in any defined period.

At 31 December 2022, the depositor concentration and term funding maturity concentration of all the Group's principal operating entities were within the internally expected levels established by the Board.

Sources of funding

(unaudited)

Our primary sources of funding are customer deposits. We issue wholesale securities to supplement our customer deposits and change the currency mix or maturity profile of our liabilities.

Currency mismatch

(unaudited)

Group policy requires all operating entities to monitor material single currency ILM and LCR. Limits are set to ensure that outflows can be met, given assumptions on stressed capacity in the FX swap markets.

Additional contractual obligations

(unaudited)

Under the terms of our current collateral obligations under derivative contracts (which are International Swaps and Derivatives Association ('ISDA') compliant CSA contracts), the additional collateral required to post in the event of one-notch and two-notch downgrade in credit ratings is nil.

(b) Treasury Risk

Liquidity and funding risk continued

(audited)

The management of liquidity and funding risk continued

Liquidity and funding risk in 2022

(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 LCRs for the periods are as follows:

	Quarter ended							
	31 Dec 2022	**30 Sep 2022**	**30 Jun 2022**	**31 Mar 2022**	31 Dec 2021	30 Sep 2021	30 Jun 2021	31 Mar 2021
Average LCR	**275.3%**	**230.5%**	**206.8%**	**188.9%**	191.8%	203.2%	214.4%	204.0%

The liquidity position of the Group remained strong in 2022. The average LCR ranged from 188.9% to 275.3% for the reportable quarters. The LCR at 31 December 2022 was 281.3% (192.7% at 31 December 2021).

The composition of the Group's HQLA as defined under Schedule 2 of the BLR is shown as below. The majority of the HQLA held by the Group are Level 1 assets which consist mainly of government debt securities.

	Weighted value (average) for the quarter ended							
	31 Dec 2022	**30 Sep 2022**	**30 Jun 2022**	**31 Mar 2022**	31 Dec 2021	30 Sep 2021	30 Jun 2021	31 Mar 2021
Level 1 assets	**400,658**	**381,314**	**353,034**	**344,686**	350,120	342,427	355,092	377,648
Level 2A assets	**12,385**	**13,549**	**15,579**	**17,109**	17,013	15,138	15,464	14,301
Level 2B assets	**2,827**	**3,423**	**3,742**	**3,099**	2,321	2,445	3,073	2,169
Total	**415,870**	**398,286**	**372,355**	**364,894**	369,454	360,010	373,629	394,118

In accordance with the Banking (Liquidity) Rules, the Net Stable Funding Ratio ('NSFR') was implemented in Hong Kong with effect from 1 January 2018. The Group is required to calculate NSFR on a consolidated basis and maintain a NSFR of not less than 100%.

The NSFR for the reportable periods are as follows:

	At quarter ended							
	31 Dec 2022	**30 Sep 2022**	**30 Jun 2022**	**31 Mar 2022**	31 Dec 2021	30 Sep 2021	30 Jun 2021	31 Mar 2021
NSFR	**163.8%**	**155.2%**	**155.0%**	**151.3%**	147.4%	146.6%	146.6%	150.5%

The funding position of the Group remained strong and stable in 2022. The NSFR was 163.8% for the quarter ended 31 December 2022 (147.4% as at 31 December 2021), highlighting a surplus of available stable funding relative to the required stable funding requirement.

To comply with the Banking (Disclosure) Rules, the details of liquidity information can be found in the Regulatory Disclosures section of our website www.hangseng.com.

(b) Treasury Risk

Liquidity and funding risk continued

(audited)

Analysis of cash flows payable under financial liabilities by remaining contractual maturities

(audited)

	Within 1 month	Over 1 month but within 3 months	Over 3 months but within 1 year	Over 1 year but within 5 years	Over 5 years	Total
At 31 December 2022						
Deposits from banks	**4,978**	**1**	**229**	**–**	**–**	**5,208**
Current, savings and other deposit accounts	**910,602**	**169,288**	**163,287**	**12,266**	**–**	**1,255,443**
Repurchase agreements – non-trading	**8,525**	**1,074**	**1,722**	**–**	**–**	**11,321**
Trading liabilities	**46,323**	**–**	**–**	**–**	**–**	**46,323**
Derivative financial instruments	**20,587**	**140**	**146**	**113**	**–**	**20,986**
Financial liabilities designated at fair value	**13,972**	**13,979**	**11,744**	**7,024**	**330**	**47,049**
Certificates of deposit and other debt securities in issue	**7,220**	**31,158**	**56,758**	**–**	**–**	**95,136**
Other financial liabilities	**16,134**	**6,931**	**7,823**	**1,205**	**207**	**32,300**
Subordinated liabilities	**–**	**404**	**1,556**	**25,359**	**8,259**	**35,578**
	1,028,341	**222,975**	**243,265**	**45,967**	**8,796**	**1,549,344**
Loan commitments	**518,838**	**–**	**–**	**–**	**–**	**518,838**
Contingent liabilities and financial guarantee contracts	**24,959**	**–**	**–**	**–**	**–**	**24,959**
	543,797	**–**	**–**	**–**	**–**	**543,797**
At 31 December 2021						
Deposits from banks	5,333	–	–	–	–	5,333
Current, savings and other deposit accounts	1,116,989	83,461	27,914	2,362	–	1,230,726
Repurchase agreements – non-trading	13,393	729	1,683	812	–	16,617
Trading liabilities	44,291	–	–	–	–	44,291
Derivative financial instruments	11,889	69	249	106	–	12,313
Financial liabilities designated at fair value	8,160	9,953	9,056	15	377	27,561
Certificates of deposit and other debt securities in issue	19,709	23,018	39,060	–	–	81,787
Other financial liabilities	16,746	6,604	4,911	1,209	271	29,741
Subordinated liabilities	–	100	327	12,664	13,572	26,663
	1,236,510	123,934	83,200	17,168	14,220	1,475,032
Loan commitments	514,920	–	–	–	–	514,920
Contingent liabilities and financial guarantee contracts	28,950	–	–	–	–	28,950
	543,870	–	–	–	–	543,870

(b) Treasury Risk

Liquidity and funding risk continued

(audited)

Analysis of cash flows payable under financial liabilities by remaining contractual maturities continued

(audited)

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 'Within one month' 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 and are reported in the 'Over 5 years' time bucket. 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.

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 held in order to hedge positions held with trading intent. Interest rate risk that can be economically hedged may be transferred to the Markets Treasury business. Hedging is generally executed through interest rate derivatives or fixed-rate government bonds. Any interest rate risk that Markets Treasury cannot economically hedge is not transferred and will remain within the global business where the risks originate.

The ALCM and Markets Treasury functions use a number of measures to monitor and control interest rate risk in the banking book, including:

- net interest income sensitivity;
- economic value of equity sensitivity; and
- hold -to-collect-and-sell value at risk.

Net interest income sensitivity

(audited)

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 by local ALCOs, where entities calculate both one-year and five-year NII sensitivities across a range of interest rate scenarios.

The table below sets out the effect on future net interest income of 100 basis points parallel rises or falls in all yield curves at the beginning of year from 1 January 2023 and 25 basis points parallel rises or falls in all yield curves at the beginning of year from 1 January 2023.

Assuming no management actions and all other non-interest rate risk variables remain constant, such a series of parallel rises in all yield curves would increase expected net interest income for the year ended 31 December 2023 by HK$2,659m for 100 basis points case and by HK$696m for 25 basis points case, while such a series of parallel falls in all-in yield curves would decrease expected net interest income by HK$3,218m for 100 basis points case and by HK$776m for 25 basis points case.

(b) Treasury Risk

Interest Rate Risk in the Banking Book continued

(unaudited)

Net interest income sensitivity continued

(audited)

The expected net interest income sensitivity is described as follows:

	100bp parallel increase	100bp parallel decrease	25bp parallel increase	25bp parallel decrease
Change in 2023 expected net interest income				
– HKD	**1,024**	**(1,366)**	**285**	**(330)**
– USD	**493**	**(518)**	**123**	**(128)**
– Other	**1,142**	**(1,334)**	**288**	**(318)**
Total	**2,659**	**(3,218)**	**696**	**(776)**
Change in 2022 expected net interest income				
– HKD	4,422	(3,392)	1,383	(1,394)
– USD	1,110	(870)	302	(290)
– Other	828	(893)	219	(209)
Total	6,360	(5,155)	1,904	(1,893)

NII sensitivity figures set out in the table above 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, non-interest-bearing current account migration and fixed-rate loan early prepayment. These sensitivity calculations do not incorporate actions that would be taken by Markets Treasury 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.

The Group's EVE sensitivity is prepared in accordance with the HKMA 'Return of Interest Rate Risk Exposure -(MA(BS)12A)'. For details of the Group's EVE sensitivity, please refer to the Banking Disclosure Statement that will be available in the 'Regulatory Disclosures' section of the Bank's website.

(b) Treasury Risk

Interest Rate Risk in the Banking Book continued

(unaudited)

Sensitivity of reserves

The Group monitors the sensitivity of reported cash flow hedge reserves to interest rate movements on a quarterly basis by assessing the expected reduction in valuation of cash flow hedge due to parallel movements of plus or minus 100bps in all yield curves. These particular exposures form only a part of the Group's overall interest rate risk exposures.

The following table describes the sensitivity of reported cash flow hedge reserves to the stipulated movements in yield curves. The sensitivities are indicative and based on simplified scenarios.

	At 31 December 2022	**Maximum impact**	**Minimum impact**
+ 100 basis points parallel move in all yield curves	**(364)**	**(372)**	**(134)**
As a percentage of shareholders' equity at 31 December 2022 (%)	**(0.20)**	**(0.20)**	**(0.07)**
- 100 basis points parallel move in all yield curves	**420**	**445**	**177**
As a percentage of shareholders' equity at 31 December 2022 (%)	**0.23**	**0.24**	**0.10**

	At 31 December 2021	Maximum impact	Minimum impact
+ 100 basis points parallel move in all yield curves	(52)	(52)	(35)
As a percentage of shareholders' equity at 31 December 2021(%)	(0.03)	(0.03)	(0.02)
- 100 basis points parallel move in all yield curves	69	71	41
As a percentage of shareholders' equity at 31 December 2021 (%)	0.04	0.04	0.02

(c) Market risk

Overview

Market risk is the risk that movements in market factors, such as foreign exchange rates, interest rates, credit spreads, equity prices and commodity prices, will reduce our income or the value of our portfolios.

Key developments in 2022

There were no material changes to our policies and practices for the management of market risk in 2022.

Governance and structure

The following diagram summarises the main business areas where trading market risks reside and the market risk measures used to monitor and limit exposures.

	Trading Risk
Risk Type	– Foreign exchange & Commodities – Interest rates – Credit spreads – Equities
Risk Measure	Value at risk/Sensitivity/Stress testing

The objective of the Group's 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 the established risk appetite.

(c) Market risk

Market risk governance

(audited)

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 Global Markets for management, or to separate books managed under the supervision of the ALCO.

The Traded Risk 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. Traded Risk also restricts trading in the more complex derivatives products to offices with appropriate levels of product expertise and robust control systems.

Key risk management processes

(unaudited)

Monitoring and limiting market risk exposures

The Group's objective is to manage and control market risk exposures while maintaining a market profile consistent with the Group's risk appetite. The Group uses 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 individual market factor movements on specific instruments or portfolios including interest rates, foreign exchange rates and equity prices. The Group uses 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 ('VaR')

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 the Group capitalises them. Where VaR is not calculated explicitly, the Group uses alternative tools as summarised in the 'Stress testing' section below.

The VaR models used by the Group 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;
- Standard VaR is calculated to a 99% confidence level and using a one-day holding period; and
- Stressed VaR uses a 10-day holding period and a 99% confidence interval based on a continuous one-year historical significant stress period.

The models also incorporate the effect of the 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

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;
- 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; and
- VaR is calculated on the basis of exposures outstanding at the close of business and therefore does not reflect intra-day exposures.

(c) Market risk

Key risk management processes continued

(unaudited)

Risk not in VaR ('RNIV') 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.

Stress testing

(audited)

Stress testing is an important procedure that is integrated into the Group's 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 is implemented at legal entity and overall Group levels. A scoring framework is in place for management to effectively assess the severity of the potential stress losses and the likelihood of occurrence of the stress scenarios. The risk appetite around potential stress losses for the Group is set and monitored against a referral limit.

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 quite local or idiosyncratic in nature, and complement the systematic top-down stress testing.

Stress testing and reverse stress testing provide senior management with insights regarding the 'tail risk' beyond VaR, for which risk appetite is limited.

Trading portfolios

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.

Market risk in 2022

(unaudited)

During 2022, financial markets were driven by concerns over high inflation and recession risks, against the backdrop of the Russia-Ukraine conflict and continued COVID-19 pandemic restrictions in Asia. Throughout the year, major central banks tightened their monetary policies at a faster pace than previously anticipated in order to counter rising inflation. As a result, bond markets sold off sharply and bond yields rose to multi-year highs. Equity valuations saw pronounced volatility and fell across most market sectors due to recession risks and tighter liquidity conditions. Foreign exchange markets were largely dominated by a strong US dollar, as a result of global geopolitical instability and the relatively fast pace of monetary tightening by the US Federal Reserve. Investors sentiment remained fragile in credit markets, with credit spreads in investment-grade and high-yield debt benchmarks reaching their widest levels since the start of the COVID-19 pandemic. The Chinese property sector was underperforming in 2022, continuing the wave of defaults and debt restructuring from 2021.

The Group continued to manage market risk prudently during 2022. 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 and scenario analysis.

(c) Market risk

Trading portfolios

(unaudited)

Value at risk of the trading portfolios

The Trading VaR at 31 December 2022 increased when compared against 31 December 2021, mainly driven by interest rate trading positions. In average terms, the VaR level however was lower in 2022.

The Group's trading VaR for the year is shown in the table below.

Trading value at risk, 99% 1 day

(audited)

	At 31 December 2022	Maximum during the year	Average for the year
VaR			
Total	**32**	**43**	**34**
Foreign exchange trading	**2**	**13**	**3**
Interest rate trading	**31**	**42**	**34**
Portfolio diversification	**(1)**	**N/A**	**N/A**

	At 31 December 2021	Maximum during the year	Average for the year
VaR			
Total	31	55	40
Foreign exchange trading	3	28	20
Interest rate trading	31	51	35
Portfolio diversification	(3)	N/A	N/A

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 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.

Backtesting

(unaudited)

The Group routinely validates the accuracy of the 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 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.

Equities exposures

(audited)

The Group's equities exposures in 2022 and 2021 are reported as 'Financial assets designated and otherwise mandatorily measured at fair value through profit or loss', 'Financial investments' and 'Trading assets' in the consolidated financial statements. These are subject to trading limit and risk management control procedures and other market risk regime.

(d) Climate risk

(unaudited)

Overview

Climate risk relates to the financial and non-financial impacts that may arise as a result of climate change and the move to a greener economy. Climate change can impact the organisation through a number of channels:

Physical risk can arise through increasing severity and/or frequency of severe weather or other climatic events, such as rising sea levels and flooding.

Transition risk, can arise from the move to a low carbon economy, such as through policy, regulatory and technological changes.

Greenwashing risk is a thematic risk that can materialise from the act of knowingly or unknowingly misleading stakeholders regarding our strategy relating to climate, the climate impact/benefits of a product or service, or regarding the climate commitments or performance of our customers.

Approach and policy

Climate risks may affect us either directly, or through our relationships with our customers, resulting in both financial and non-financial impacts.

We may face direct exposure to the physical impacts of climate change which could negatively affect our day-to-day operations. In addition, if we are perceived to mislead stakeholders on our business activities or if we fail to achieve our stated carbon neutrality ambitions, we could face greenwashing risk resulting in significant reputational damage and potential regulatory fines, impacting the firm's revenue generating ability.

Our customers may find that their business models fail to align to a low carbon economy or that extreme or chronic changes in weather cause disruption to their operations. Any detrimental impact to our customers from climate risk could negatively impact us either through credit losses on our loan book or losses on trading assets. We may also be impacted by reputational concerns related to the climate action or inaction of our customers.

Climate Risk has been integrated into our existing Risk Taxonomy and is being incorporated within the Risk Management Framework through the policies and controls for the existing risks where appropriate.

Our approach to climate risk is aligned to our risk management framework and three lines of defence ('3LOD') model, which sets out how we identify, assess, and manage our risks. This approach ensures the Board and senior management have visibility and oversight of our key climate risks.

The first line of defence has ultimate accountability for managing climate risk in line with risk appetite and owns the related controls.

The second line of defence sets policies and minimum control standards, provides subject matter expertise and review and challenge to first line activities to ensure actions relating to climate are appropriate. Risk Stewards in the existing Risk Taxonomy are responsible for the oversight of climate risk impacts on their risk types.

The third line of defence provides independent assurance to management that climate risk management, governance and control processes are designed and operating effectively.

Our initial approach focused on understanding physical and transition impacts across five priority risk types: wholesale credit risk, retail credit risk, reputational risk, resilience risk and regulatory compliance risk.

We consider Greenwashing to be an important emerging risk which is likely to increase over time, as we look to develop capabilities and products to achieve our carbon neutrality commitments, and work with our clients to help them transition to a low carbon economy. To reflect this, our Climate Risk Approach has been updated to include greenwashing and guidance has been provided to the first and second lines of defence on the key risk indicators, and how it should be managed.

(d) Climate risk

(unaudited)

Overview continued

Approach and policy continued

Climate Risk - Primary Risk

<table>
<tr><th colspan="2">Drivers</th><th>Details</th><th>Potential Impacts</th></tr>
<tr><td rowspan="2">Physical</td><td>Acute</td><td>Increased frequency and severity of weather events causing disruption to business operations</td><td rowspan="6">• Decreased real estate values
• Decreased household income and wealth
• Increased costs of legal and compliance
• Increased public scrutiny
• Decreased profitability
• Lower asset performance</td></tr>
<tr><td>Chronic</td><td>Longer-term shifts in climate patterns (e.g. sustained higher temperatures) that may cause sea level rise or chronic heat waves</td></tr>
<tr><td rowspan="4">Transition</td><td>Policy and legal</td><td>Mandates on, and regulation of, existing products and services. Litigation from parties who have suffered from the effects of climate change</td></tr>
<tr><td>Technology</td><td>Replacement of existing products with lower emission options</td></tr>
<tr><td>End-demand (market)</td><td>Changing consumer behaviour</td></tr>
<tr><td>Reputational</td><td>Increased scrutiny following a change in stakeholder perceptions of climate-related action or inaction</td></tr>
</table>

Climate Risk - Thematic Risk

<table>
<tr><th colspan="2">Drivers</th><th>Details</th></tr>
<tr><td rowspan="3">Greenwashing</td><td>Firm Based</td><td>Failure to be accurate and transparent in communicating our progress against our carbon neutrality ambition</td></tr>
<tr><td>Product</td><td>Not taking steps to ensure our ‘green’ and ‘sustainable’ products are developed and marketed appropriately</td></tr>
<tr><td>Client</td><td>Failing to check our products are being used for ‘green’ and ‘sustainable’ business activity and assessing the credibility of our customers’ climate commitments and/or progress against KPIs</td></tr>
</table>

Climate risk management

Key developments in 2022

We continue to accelerate the development of our climate risk management capabilities. The key achievements in 2022 include:

- Developed new climate risk metrics to cover our retail mortgage portfolio in Hong Kong.
- Enhanced our corporate transition questionnaire and scoring tool to clients in high transition risk sectors.
- Development of our internal climate stress testing and scenarios capability, including model development and delivery regulatory climate stress tests.

Governance and structure

The Board takes overall responsibility for our climate strategy, overseeing executive management in the development of the approach, execution and associated reporting.

The Chief Risk Officer is responsible for the management of climate-related risks. Our Climate Risk Working Group is responsible for overseeing our climate related risk management.

Risk appetite

Our climate risk appetite supports the oversight and management of the financial and non-financial risks from climate change, meets regulatory expectations and supports the business to deliver our climate ambition in a safe and sustainable way. Our initial risk appetite has focused on the oversight and management of climate risks, including metrics relating to our high transition risk sectors in our wholesale portfolio and physical risk exposures in our retail portfolio. We continue to review our risk appetite regularly to ensure that it captures the most material climate risks and will develop appropriate metrics to measure and monitor these risks.

(d) Climate risk

(unaudited)

Climate risk management continued

Policies, processes and controls

We are integrating climate risk into the policies, processes and controls for key areas, and we will continue to update these as our climate risk management capabilities mature over time.

In 2022, we have updated policies and incorporated climate considerations into our new money request processes for our wholesale business. We also adopted the updated Energy Policy, covering oil and gas, power and utilities, hydrogen, renewables, nuclear and biomass, as well as the updated thermal coal phase-out policy after its initial publication in 2021. Our Transition risk scoring tool has been enhanced for our corporate portfolios, which will enable us to assess our customers exposures to climate risk.

Wholesale credit risk

Identification and assessment

We have identified six key sectors where our wholesale credit customers have the highest climate transition risk, based on their carbon emissions. These are oil and gas, building and construction, chemicals, automotive, power and utilities, and metals and mining. We continue to roll out our transition and physical risk questionnaire to our largest customers in high-risk sectors, with the addition of four more sectors: agriculture, industrials, real estate and transportation. The questionnaire helps us to assess and improve our understanding of the impact of climate changes on our customers' business models and any related transition strategies. It also helps us to identify potential business opportunities to support the transition.

Management

In 2022, we updated our credit policy to incorporated climate considerations in credit applications for new money requests. We continued using a scoring tool, which provides a climate risk score for each customer based on questionnaire responses. The scoring tool will be enhanced and refined over time as more data becomes available. The results of the tool have been provided to business and risk management teams. In 2023 we aim to further embed climate risk considerations in our credit risk management processes.

Aggregation and reporting

We internally report our transition risk exposure consumed by the six high transition risk sectors in the wholesale portfolio.

Retail credit risk

Identification and assessment

We continue to enhance our identification and assessment of climate risk, prioritizing our largest portfolios, by increasing our investment in physical risk data and by developing internal capabilities.

In 2022, we undertook an internal climate stress testing exercise to further our understanding and assessment of the potential impact of physical risk to our mortgage portfolios.

Management

We continue to review and update our retail credit risk management policies and processes to further embed climate risk, whilst also monitoring local regulatory developments to ensure compliance.

Aggregation and reporting

We implemented physical risk exposure metric for retail mortgage portfolio in 2022.

Resilience risk

Identification and assessment

Our Operational and Resilience Risk is responsible for overseeing the identification and assessment of physical and transition risks that may impact on the organisation's operational and resilience capabilities.

We are developing a deeper understanding of the risks to which our properties are subject to, and assess the mitigants to ensure ongoing operational resilience.

Management

HSBC Group continue to develop the operational and resilience risk policies and the underlying measurement capability. This embeds climate risk management within our risk management framework.

Aggregation and reporting

With our ambition to achieve net zero in our own operation, we are particularly focused on developing measures to facilitate proactive risk management and assess progress against this strategic target.

Operational and Resilience Risk is represented on the climate risk related committees and working groups.

(d) Climate risk

(unaudited)

Regulatory compliance risk

Identification and assessment

During 2022, key regulatory compliance risks under consideration have evolved to also include Post-sale Servicing, Complaints Handling, and Market Abuse. The priority risk focus remains on greenwashing, namely the development and ongoing governance of new, changed or withdrawn products/services and ensuring sales practices and marketing materials are clear, fair and not misleading.

To support the ongoing management and mitigation of greenwashing risk, the Compliance sub-functions have worked across all business lines to enhance our product controls. This has improved our ability to identify, assess and manage product-related greenwashing risks throughout the product governance lifecycle. Examples of ongoing enhancements include:

- Integrating the consideration and mitigation of climate/ESG-related risks within the Regulatory Compliance Risk Taxonomy and Control Library ('RTCL') and the existing New and Ongoing Product Management Policy.
- Ensure climate risk is actively considered and documented in the enhanced product templates/forms by the business within product review and creation.
- The HSBC Group's Regulatory Conduct has implemented requirements in the Group Product Governance Enhancement Guide to ensure climate risks are robustly assessed, documented and mitigated, and will be seeking assurance validation and rollout at regionally level covering the Bank.

Management

Our policies continue to set the minimum standards that are required to manage the risk of breaches of our regulatory duty to customers, including those related to climate risk, ensuring fair customer outcomes are achieved. Our product and customer lifecycle policies have been enhanced to ensure consideration of climate risks and are reviewed on a periodic basis to ensure they remain relevant and up-to-date.

The Compliance sub-function continues to focus on improving the capability of Compliance colleagues through the provision of ongoing training, communications and dedicated guidance. An area of particular focus is ensuring Compliance colleagues remain up to date with changes in the evolving regulatory landscape.

Aggregation and reporting

HSBC Group Compliance continues to operate an ESG and Climate Risk Working Group at HSBC Group level to track and monitor the integration and embedding of climate risk within the management of regulatory compliance risks. In addition, the working group continues to monitor ongoing regulatory and legislative changes across the sustainability and climate risk agenda. In Asia-Pacific, a working group was established in February 2022 to coordinate the regional implementation of climate risk-related enhancements across the Compliance Advisory function.

HSBC Group have continued to develop key climate-related metrics and indicators, aligned to the broader focus on regulatory compliance risks, to continually improve the risk monitoring capability. This has included the development of a climate-specific risk profile, which is produced at HSBC Group level and regularly disseminated and reviewed at the Regional level, alongside the development of new and improvements to existing metrics and indicators.

HSBC Group Compliance continues to be represented at HSBC Group's Climate Risk Oversight Forum.

(e) Resilience risk

(unaudited)

Overview

Resilience risk is the risk of sustained and significant business disruption, execution, delivery or physical security or safety events, causing the inability to provide critical services to our customer, affiliates, and counterparties. Resilience risk arises from failures or inadequacies in processes, people, systems or external events.

Resilience risk management

Key developments in 2022

The Operational and Resilience Risk sub-function provides robust Risk Steward oversight of the management of risk by the Group businesses, functions and legal entities. This includes effective and timely independent challenge and expert advice. During the year, we carried out a number of initiatives to keep pace with geopolitical, regulatory and technology changes and to strengthen 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 implemented heightened monitoring and reporting of cyber, third party, business continuity and payment/ sanctions risks resulting from the Russia/Ukraine war and enhanced controls and key processes where needed.
- We provided analysis and reporting of non-financial risks providing easy-to-access risk and control information and metrics that enable management to focus on non-financial 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 privacy 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 Operational and Resilience Risk 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 nine sub-risk types related to: failure to manage third parties; technology and cybersecurity; transaction processing; failure to protect people and places from physical malevolent acts; business interruption and incident risk; data risk; change execution risk; building unavailability; and workplace safety.

Risk appetite and key escalations for resilience risk are reported to the Risk Management Meeting, chaired by the Chief Risk Officer, with an escalation path to the Risk Committee.

Key risk management processes

Operational resilience is our ability to anticipate, prevent, adapt, respond to, recover and learn from operational disruption while minimising customer and market impact. Resilience is determined by assessing whether we are able to continue to provide our most important services, within an agreed level. This is achieved via day-to-day oversight, 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 Risk Steward opinion papers to formal governance. We accept we will not be able to prevent all disruption but we prioritise investment to continually improve the response and recovery strategies for our most important business services.

Business operations continuity

We continue to monitor the COVID-19 situation and remain ready for business continuity. Following the announcement of nationwide loosening of COVID-19 restrictions in China, there has been an increase in the number of cases. The situation is closely being monitored. As of now, no impact to the Group's operation has been reported.

(f) Regulatory Compliance Risk

(unaudited)

Overview

Regulatory compliance risk is the risk associated with breaching our duty to clients and other counterparties, inappropriate market conduct 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.

Key developments in 2022

The embedding of our purpose-led conduct approach concluded and is now considered 'business as usual'. The mapping of regulations to our risks and controls continued and will conclude in 2023 alongside new tooling to support enterprise-wide horizon scanning of new regulatory obligations and regulatory reporting inventories. Climate risk has been integrated into regulatory compliance policies and processes, with enhancements made to the Product Governance Framework and Controls in order to ensure the effective consideration of Climate and in particular Greenwashing risks.

The structure of the Compliance function remained substantively unchanged in 2022. The Regulatory Conduct capability and Financial Crime capability both continue to work closely with the Regional Chief Compliance Officer and his respective teams to help them identify and manage regulatory and financial crime compliance risks. They also work together to ensure we achieve good conduct outcomes and provide enterprise-wide support on the Compliance risk agenda in collaboration with the Risk function.

Key risk management processes

The Group Regulatory Conduct 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 to the local Chief Compliance Officer and his 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 prompt identification and escalation of actual or potential regulatory breaches, and relevant reportable events are escalated to the Compliance ExCo, RMM and the Risk Committee, as appropriate.

(g) Financial Crime Risk

(unaudited)

Overview

Financial crime risk is the risk that the Group'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 2022

We continuously review the effectiveness of our financial crime risk management framework, which includes consideration of the complex and dynamic nature of sanctions compliance risk. In 2022, we adapted our policies, procedures and controls to respond to the unprecedented volume and diverse set of sanctions and trade restrictions imposed against Russia following its invasion of Ukraine.

We also continued to make progress with several key financial crime risk management initiatives, including:

- We enhanced our screening and non-screening controls to aid the identification of potential sanctions risk related to Russia, as well as risk arising from export control restrictions.
- The Group has deployed a key component of our intelligence-led, dynamic risk assessment capabilities for customer account monitoring in Singapore for WPB and CMB.
- We have reconfigured our Transaction Screening capability in readiness for the global change to payment systems formatting under ISO20022 requirements, and enhanced transaction screening capabilities by implementing automated alert discounting.
- We continued to strengthen the first party lending fraud framework, reviewed and published an updated fraud policy and associated control library, and continued to develop fraud detection tools.

Governance and structure

The structure of the financial crime sub-function remained substantively unchanged in 2022, although we continued to review the effectiveness of our governance framework to manage financial crime risk. The management of financial crime risk reside with Chief Compliance Officer. Oversight is maintained by the Chief Risk Officer in line with her enterprise risk oversight responsibilities, through the RMM.

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 the Bank 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 of the markets in which we operate, where we apply a global minimum standard that seeks to promote the highest standards. In cases where material differences exist between the laws and regulations of these markets, our policy adopts the highest standard while acknowledging the primacy of local law.

We continue to assess the effectiveness of our end-to-end financial crime risk management framework on an ongoing basis, and invest in enhancing our operational control capabilities and technology solutions to deter and detect criminal activity. We have simplified our framework by streamlining and de-duplicating policy requirements. We also strengthened our financial crime risk taxonomy and control libraries, improving our investigative and monitoring capabilities through technology deployments, as well as developing more targeted metrics. We have also enhanced 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. In 2022, our focus remained on measures to improve the overall effectiveness of the financial crime framework.

(h) Model risk

(unaudited)

Overview

Model risk is the risk of inappropriate or incorrect business decisions arising from the use of models that have been inadequately designed, implemented or used, or from models that do not perform in line with expectations and predictions.

Model risk arises in both financial and non-financial contexts whenever business decision making includes reliance on models.

Key developments in 2022

Redeveloped, independently validated and submitted our models to the PRA and HKMA in response to regulatory capital changes, including the internal ratings-based (IRB) approach for credit risk. These new models have been built to enhanced standards using improved data as a result of investment in processes and systems.

Redeveloped and validated models impacted by changes to alternative rate setting mechanisms due to IBOR transition.

Embedded changes to our control framework for Sarbanes-Oxley models. These changes were made to address control weaknesses that emerged as a result of significant increases in adjustments and overlays that were applied to compensate for the impact of COVID-19 pandemic, and the subsequent volatility due to the effects of the rise in global interest rates on the ECL models.

Businesses and Functions continued to be more involved in the development and management of models, and hiring colleagues with strong model risk skills. Enhanced focus was also placed on key model risk drivers such as data quality and model methodology.

Enhanced the reporting that supports the model risk appetite measures, to support our Businesses and Functions in managing model risk more effectively.

Climate Risk, HKFRS17 Insurance models and models using advanced analytics and machine learning, have become critical areas of focus that will grow in importance in 2023 and beyond. The model risk teams were enhanced with specialist skills to manage the increased model risk in these areas.

Governance

Model oversight forums provide oversight of models used in the Group to oversee model risk management activities based on associated model categories and focus on local delivery and requirements.

Key risk management processes

A variety of modelling approaches, including regression, simulation, sampling, machine learning and judgemental scorecards for a range of business applications are used. These activities include customer selection, product pricing, financial crime transaction monitoring, creditworthiness evaluation and financial reporting.

Model risk management policies and procedures are regularly reviewed, and required the First Line of Defence to demonstrate comprehensive and effective controls based on a library of model risk control.

We report on model risk to senior management on a regular basis through the use of the risk map, risk appetite and regular key updates.

The effectiveness of our model oversight structure is regularly reviewed to ensure appropriate understanding and ownership of model risk continued to be embedded in the Businesses and Functions.

(i) Insurance manufacturing operation risk

(audited)

Risk management objectives and policies for management of insurance risk

The majority of the risk in the insurance business derives from manufacturing activities and can be categorised as insurance risk and financial risk. Financial risks include market risk, credit risk and liquidity risk. Insurance risk is the risk, other than financial risk, of loss transferred from the holder of the insurance contract to the insurer.

Group's bancassurance model

We operate an integrated bancassurance model which provides insurance products principally for customers with whom we have a banking relationship. The insurance contracts we sell relate to the underlying needs of our banking customers, which we can identify from our point-of-sale contacts and customer knowledge. For the products we manufacture, the majority of sales are of savings and investment products.

By focusing largely on personal and SME lines of business we are able to optimise volumes and diversify individual insurance risks.

We choose to manufacture these insurance products in a Group subsidiary 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.

Where we do not have the risk appetite or operational scale to be an effective insurance manufacturer, we engage with a handful of leading external insurance companies in order to provide insurance products to our customers through our banking network and direct channels. These arrangements are generally structured with our exclusive strategic partners and earn the Group a combination of commissions, fees and a share of profits. We distribute insurance products in Hong Kong, China and Macau.

Insurance products are sold through all global businesses, but predominantly by WPB and CMB through our branches and direct channels.

Governance

Insurance risks are managed to a defined risk appetite, which is aligned to the Group's risk appetite and risk management framework (including the three lines of defence model). The Insurance Risk Management Meeting oversees the control framework and is accountable to the Group Risk Management Meeting on risk matters relating to insurance business.

The monitoring of the risks within the insurance operations is carried out by the Insurance Risk teams. Specific risk functions, including wholesale credit & market risk, operational risk, information security risk and compliance, support Insurance Risk teams in their respective areas of expertise.

Measurement

The risk profile of our insurance manufacturing businesses is measured using a risk-based capital approach. Assets and liabilities are measured on a market value basis and a capital requirement is defined to ensure that there is a less than 1 in 200 chance of insolvency over a one year time horizon, given the risks that the businesses are exposed to. The risk-based capital approach is largely aligned to the HSBC Group's economic capital basis as well as upcoming Hong Kong Risky Based Capital Regulation ('HKRBC'). The HKRBC coverage ratio (net asset value under HKRBC basis divided by the related capital requirement) is a key risk appetite measure. Management has set out the risk appetite and tolerance level in which management actions are required. In addition to HKRBC, the existing regulatory solvency requirement is also a metric used to manage risk appetite on an entity basis.

(i) Insurance manufacturing operation risk

(audited)

The following table shows the composition of assets and liabilities by contract type.

Balance sheet of insurance manufacturing subsidiary by type of contract

	Linked contracts[1]	Non-linked contracts[1]	Other assets and liabilities[2]	Total
2022				
Financial assets:				
– financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**138**	**28,584**	**–**	**28,722**
– derivative financial instruments	**–**	**273**	**5**	**278**
– financial investments	**–**	**143,091**	**5,177**	**148,268**
– other financial assets	**41**	**4,688**	**467**	**5,196**
Total financial assets	**179**	**176,636**	**5,649**	**182,464**
Reinsurers' share of liabilities under insurance contracts	**–**	**6,020**	**–**	**6,020**
Present value of in-force long-term insurance contracts	**–**	**–**	**20,620**	**20,620**
Other assets	**–**	**6,398**	**1,209**	**7,607**
Total assets	**179**	**189,054**	**27,478**	**216,711**
Liabilities under investment contracts designated at fair value	**86**	**247**	**–**	**333**
Liabilities under insurance contracts	**58**	**165,536**	**–**	**165,594**
Deferred tax	**–**	**9**	**3,480**	**3,489**
Derivative financial instruments	**–**	**83**	**–**	**83**
Other liabilities	**–**	**–**	**12,648**	**12,648**
Total liabilities	**144**	**165,875**	**16,128**	**182,147**
Shareholders' equity	**–**	**–**	**34,564**	**34,564**
Total liabilities and shareholders' equity	**144**	**165,875**	**50,692**	**216,711**
2021				
Financial assets:				
– financial assets designated and otherwise mandatorily measured at fair value through profit or loss	180	31,043	–	31,223
– derivative financial instruments	–	411	–	411
– financial investments	–	123,381	6,126	129,507
– other financial assets	46	9,786	571	10,403
Total financial assets	226	164,621	6,697	171,544
Reinsurers' share of liabilities under insurance contracts	–	5,848	–	5,848
Present value of in-force long-term insurance contracts	–	–	22,363	22,363
Other assets	–	6,291	1,298	7,589
Total assets	226	176,760	30,358	207,344
Liabilities under investment contracts designated at fair value	114	269	–	383
Liabilities under insurance contracts	71	154,480	–	154,551
Deferred tax	–	9	3,755	3,764
Derivative financial instruments	–	286	–	286
Other liabilities	–	–	13,960	13,960
Total liabilities	185	155,044	17,715	172,944
Shareholders' equity	–	–	34,400	34,400
Total liabilities and shareholders' equity	185	155,044	52,115	207,344

1 Comprises life insurance contracts and investment contracts.

2 Comprises shareholder assets and liabilities.

(i) Insurance manufacturing operation risk

(audited)

Stress and Scenario Testing

Stress testing forms a key part of the risk management framework for the insurance business. We participate in regulatory stress tests, including the Bank of England stress test of the banking system, the Hong Kong Monetary Authority stress test, and Hong Kong Insurance Authority stress test. These have highlighted that a key risk scenario for the insurance business is a prolonged low interest rate environment. In order to mitigate the impact of this scenario, the insurance subsidiary has a range of strategies that could be employed including repricing current products to reflect lower interest rates, moving towards less capital intensive products, and developing investment strategies to optimise the expected returns against the required capital.

Key Risk Types

The key risks for the insurance operations are market risks (in particular interest rate and equity), and credit risks, followed by insurance underwriting risk and operational risks. Liquidity risk, while more significant for the banking business, is minor for our insurance subsidiary.

Market risk (insurance)

Market risk is the risk of changes in market factors affecting the Group's capital or profit. Market factors include interest rates, equity and growth assets, spread risk and foreign exchange rates.

Our exposure varies depending on the type of contract issued. Our most significant life insurance products are contracts with discretionary participating features ('DPF') issued in Hong Kong. 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 bonds with a proportion allocated to other asset classes, to provide customers with the potential for enhanced returns.

DPF products expose the Group to the risk of variation in asset returns, which will impact our participation in the investment performance. In addition, in some scenarios the asset returns can become insufficient to cover the policyholders' financial guarantees, in which case the shortfall has to be met by the Group. Allowances are made against the cost of such guarantees, calculated by stochastic modelling.

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.

Our insurance manufacturing subsidiary has market risk mandates which specify the investment instruments in which they are permitted to invest and the maximum quantum of market risk which 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:

- for products with DPF, adjusting bonus rates to manage the liabilities to policyholders. The effect is that a significant portion of the market risk is borne by the policyholders;
- 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. It is not always possible to match asset and liability durations, due to several factors such as uncertainty over the receipt of all future premiums and the timing of claims and the forecast payment dates of liabilities may exceed the duration of the longest dated investments available. We use models to assess the effect of a range of future scenarios on the values of financial assets and associated liabilities, and ALCO employs the outcomes in determining how best to structure asset holdings to support liabilities;
- using derivatives to protect against adverse market movements or better support liability cash flows;
- for new products with investment guarantees, considering the cost when determining the level of premiums or the price structure;
- periodically reviewing products identified as higher risk, which contain investment guarantees and embedded optionality features linked to savings and investment products for active management;
- designing new products to mitigate market risk, such as changing the investment return sharing portion between policyholders and the shareholder, using Terminal Bonus feature instead of annual dividend, lower the level of guaranteed returns, etc;
- exiting, to the extent possible, investment portfolios whose risk is considered unacceptable; and
- repricing premiums charged to policyholders.

(i) Insurance manufacturing operation risk

(audited)

The following table illustrates the effects of selected interest rate, equity price and foreign exchange rate scenarios on our profit for the year and the total shareholders' equity of our insurance operation.

	2022	2021
	Impact on profit after tax and shareholders' equity	Impact on profit after tax and shareholders' equity
+ 100 basis points shift in yield curves	**(609)**	(675)
- 100 basis points shift in yield curves	**672**	725
10 per cent increase in equity prices	**410**	551
10 per cent decrease in equity prices	**(406)**	(533)
10% increase in USD exchange rate compared to all currencies	**70**	76
10% decrease in USD exchange rate compared to all currencies	**(70)**	(76)

Where appropriate, the effects of the sensitivity tests on profit after tax and total equity incorporate the impact of the stress on the PVIF. The relationship between the profit and total equity and the risk factors is non-linear and nonsymmetrical, therefore the results disclosed should not be extrapolated to measure sensitivities to different levels of stress. The sensitivities reflect the established risk sharing mechanism with policyholders for participating products, and are stated before allowance for management actions which may mitigate the effect of changes in the market environment. The sensitivities presented do not allow for adverse changes in policyholders' behaviour that may arise in response to changes in market rates.

Credit risk (insurance)

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 manufacturing subsidiary:

– 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 mainly reflected as 'Financial investments' and 'Reinsurers' share of liabilities under insurance contracts' in the table of 'Balance sheet of insurance manufacturing subsidiary by type of contract' under 'Insurance manufacturing operation risk' section.

Our insurance manufacturing subsidiary is responsible for the credit risk, 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. Investment credit exposures are monitored against limits by our insurance manufacturing subsidiary. Stress testing is performed on the investment credit exposures using credit spread sensitivities and default probabilities is included in the stress and scenario testing as described above.

We use tools to manage and monitor credit risk. These include a credit report which contains a watch-list of investments with current credit concerns to identify investments which may be at risk of future impairment or where high concentrations to counterparties are present in the investment portfolio.

Impairment is calculated in three stages and financial assets are allocated into one of the three stages where the transfer mechanism depends on whether there is a significant increase in credit risk between its initial recognition and the relevant reporting period. After the allocation, the measurement of ECL, which is the product of PD, LGD and EAD, will reflect the risk of default occurring over the remaining life of the instruments. Note 2(j) of the financial statements set out the details on related accounting policy.

Credit risk on assets supporting unit-linked liabilities is predominantly borne by the policyholders; therefore our exposure is primarily assets related to liabilities under non-linked insurance and investment contracts and shareholders' funds.

(i) Insurance manufacturing operation risk

(audited)

Credit risk (insurance) continued

The credit quality of the reinsurers' share of liabilities under insurance contracts is assessed as 'strong' (as defined on 'Credit quality classification' under 'Credit risk' section), with 0% of the exposure being past due nor impaired (2021: 0%). The credit quality of financial assets is included under the Credit Risk section. The risk associated with credit spread volatility is to a large extent migrated by holding debt securities to maturity, and sharing a degree of credit spread experience with policyholders.

Liquidity risk (insurance)

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.

Risk is managed by cashflow 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 and establishing committed contingency borrowing facilities.

Our insurance manufacturing subsidiary complete quarterly liquidity risk reports and an annual review of the liquidity risks to which they are exposed.

The following table shows the expected undiscounted cash flows for insurance contract liabilities at 31 December 2022 and 2021.

Expected maturity of insurance contract liabilities

	Expected cash flows (undiscounted)				
	Within 1 year	Over 1 year but within 5 years	Over 5 years but within 15 years	Over 15 years	Total
2022					
Non-linked insurance	**13,965**	**50,029**	**86,255**	**158,678**	**308,927**
Linked insurance	**10**	**35**	**53**	**28**	**126**
	13,975	**50,064**	**86,308**	**158,706**	**309,053**
2021					
Non-linked insurance	14,958	49,836	82,850	122,856	270,500
Linked insurance	12	41	61	32	146
	14,970	49,877	82,911	122,888	270,646

The remaining contractual maturity of investment contract liabilities is included in the table on note 21 of the financial statements.

Insurance risk

Insurance 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 unit costs. 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 of 'Balance sheet of insurance manufacturing subsidiary by type of contract' under 'Insurance manufacturing operation risk' section analyses our life insurance risk exposures by type of contract under 'liabilities under insurance contracts'.

(i) Insurance manufacturing operation risk

(audited)

Insurance risk continued

The Group's insurance manufacturing subsidiary primarily uses the following techniques to manage and mitigate insurance risk:

- a formalised product approval process covering product design, pricing and overall proposition management (for example, management of lapses by introducing surrender charges);
- underwriting policy;
- claims management processes; and
- reinsurance which cedes risks above our acceptable thresholds to an external reinsurer thereby limiting our exposure.

The following table shows the sensitivity of profit and total equity to reasonably possible changes in non-economic assumptions:

	2022	2021
Effect on profit after tax and total equity at 31 December		
10 per cent increase in mortality and/or morbidity rates	**(89)**	(101)
10 per cent decrease in mortality and/or morbidity rates	**89**	102
10 per cent increase in lapse rates	**(108)**	(99)
10 per cent decrease in lapse rates	**115**	107
10 per cent increase in expense rates	**(47)**	(58)
10 per cent decrease in expense rates	**46**	57

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. In general, for life insurance contracts a policy lapse has two offsetting effects on profits, which are the loss of future income on the lapsed policy and the existence of surrender charge recouped at policy lapse. The net impact depends on the relative size of these two effects which varies with the type of contracts.

Expense rate risk is the exposure to a change in the 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.

Present value of in-force long-term insurance business ('PVIF')

In calculating PVIF, expected cash flows are projected after adjusting for a variety of assumptions made by insurance operation to reflect local market conditions and management's judgement of future trends, and uncertainty in the underlying assumptions is reflected by applying margins (as opposed to a cost of capital methodology). Variations in actual experience and changes to assumptions can contribute to volatility in the results of the insurance business.

Financial Reporting Committee meets on a quarterly basis to review and approve PVIF assumptions. All changes to non-economic assumptions, economic assumptions that are not observable and model methodology must be approved by the Financial Reporting Committee.

Economic assumptions are either set in a way that is consistent with observable market values or, in certain markets is made of long-term economic assumptions. Setting such assumptions involves the projection of long-term interest rates and the time horizon over which observable market rates trend towards these long-term assumptions. The assumptions are informed by relevant historical data and by research and analysis performed by internal and external experts, including regulatory bodies. The valuation of PVIF will be sensitive to any changes in these long-term assumptions in the same way that it is sensitive to observed market movements, and the impact of such changes is included in the sensitivities presented below.

(i) Insurance manufacturing operation risk

(audited)

Present value of in-force long-term insurance business ('PVIF') continued

The Group sets the risk discount rate applied to the PVIF calculation by starting from a risk-free rate curve and adding explicit allowances for risks not reflected in the best estimate cash flow modelling. Where shareholders provide options and guarantees to policyholders the cost of these options and guarantees is an explicit reduction to PVIF.

Economic assumptions

The following table shows the impact on the PVIF at balance sheet date of reasonably possible changes in the main economic and business assumptions:

	2022	2021
+ 100 basis points shift in yield curves	**(772)**	(806)
– 100 basis points shift in yield curves	**789**	902

Non-economic assumptions

PVIF are determined by reference to non-economic assumptions, including mortality and/or morbidity, lapse rates and expense rates. The following table illustrates the impact on the PVIF of the changes in key variables:

	2022	2021
10 per cent increase in mortality and/or morbidity rates	**(139)**	(154)
10 per cent decrease in mortality and/or morbidity rates	**140**	261
10 per cent increase in lapse rates	**(178)**	(191)
10 per cent decrease in lapse rates	**190**	256
10 per cent increase in expense rates	**(80)**	(119)
10 per cent decrease in expense rates	**78**	154

The impact on PVIF shown above is illustrative only and employ simplified scenarios. It should be noted that the effects may not be linear and therefore the results cannot be extrapolated. The sensitivities reflect the established risk sharing mechanism with policyholders for participating products, but do not incorporate other actions that could be taken by management to mitigate effects nor do they take into account the consequential changes in policyholders' behaviour.

Process used to determine assumptions for long-term insurance contracts

The process used to determine the assumptions is intended to result in stable and prudent estimates of future outcome. This is achieved by adopting relatively conservative assumptions which can withstand a reasonable range of fluctuation of actual experience. Annual review of the relevant experience is performed to assess the adequacy of margin between the assumptions adopted and the best estimate of future outcome. The assumptions that are considered include expenses and the probability of claims. Discount rate is determined by the risk free rate for both historical and new reinvestment rates.

For non-linked life business, the policy reserve is generally calculated on a modified net premium basis. The net premium is the level of premium payable over the premium payment period whose discounted value at the outset of the policy would be sufficient to exactly cover the discounted value of the original guaranteed benefits at maturity or at death if earlier. The net premium is then modified to allow for deferral of acquisition costs. The policy reserve is then calculated by subtracting the present value of future modified net premiums from the present value of the benefits guaranteed at maturity or death up to the balance sheet date, subject to a floor of the cash value. The modified net premium basis makes no allowance for voluntary discontinuance by policyholders as this would generally result in a reduced level of policy reserve.

For linked life business, the policy reserve is generally determined as the total account balance of all in-force policies with an additional provision for the unexpired insurance risk.

(i) Insurance manufacturing operation risk

(audited)

Assumptions

The principal assumptions underlying the calculation of the policy reserve are:

(i) Mortality

A base mortality table which is most appropriate for each type of contract is selected. An adjustment is included to reflect the Group's own experience with an annual investigation performed to ascertain the appropriateness of overall assumption.

(ii) Morbidity

The morbidity incidence rates, which mainly cover major illness and disability, are generally derived from the reinsurance costs which also form the pricing basis. A loading is generally added as a provision for adverse deviation. An annual investigation is performed to ascertain the appropriateness with the Group's insurance subsidiary's actual experience.

(iii) Discount rates

Rate of interest

	2022	2021
Policies denominated in HKD	**2.40%**	2.20%
Policies denominated in USD	**3.15%**	3.30%
Policies denominated in RMB	**2.85%**	3.00%

Under the modified net premium method, the long-term business provision is sensitive to the interest rate used for discounting.

Sensitivity to changes in variables

The Group's insurance subsidiary re-runs its valuation models on various bases. An analysis of sensitivity around various scenarios provides an insight to the key risks which the Group's insurance subsidiary is exposed to. The table presented below demonstrates the sensitivity of insured liability estimates to particular movements in assumptions used in the estimation process. Certain variables can be expected to impact on life insurance liabilities more than others, and consequently a greater degree of sensitivity to these variables may be expected.

The following table illustrates the impact on the policy reserves of the changes in key variables:

		2022	2021
	Change in variable	Impact on the policy reserves	Impact on the policy reserves
Discount rate	+100 basis points	**(3,433)**	(5,014)
Discount rate	-100 basis points	**12,260**	14,875
Mortality/Morbidity	+10 per cent	**285**	403
Mortality/Morbidity	-10 per cent	**(202)**	(335)

The analysis above has been prepared for a change in variable with all other assumptions remaining constant and ignores changes in values of the related assets.

For the sensitivity in discount rate, an absolute +/-100 basis points of the discount rate is used. For the Mortality/Morbidity sensitivity, a relative +/-10% (i.e. multiply the assumption by 110% or 90%) is used.

CORPORATE GOVERNANCE REPORT

Corporate Governance Principles and Practices

Hang Seng Bank Limited (the "Bank") is committed to maintaining and upholding high standards of corporate governance with a view to safeguarding the interests of shareholders, customers, employees and other stakeholders. The Bank has followed the module on "Corporate Governance of Locally Incorporated Authorised Institutions" ("CG-1") under the Supervisory Policy Manual ("SPM") issued by the Hong Kong Monetary Authority ("HKMA"). The Bank has also fully complied with all the principles of good corporate governance, code provisions and most of the recommended best practices set out in the Corporate Governance Code contained in Appendix 14 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("HKEx") (the "Listing Rules") throughout the year of 2022.

Further, to ensure that it is in line with international and local corporate governance best practices, the Bank constantly reviews and enhances its corporate governance framework by making reference to market trend as well as guidelines and requirements issued by regulatory authorities. Throughout 2022, the Bank has also implemented various Group governance initiatives to streamline parent/subsidiary oversight framework, and enhance meeting efficiency and reporting quality.

Board of Directors

The Board has collective responsibilities for promoting the long-term sustainability and success of the Bank by providing entrepreneurial leadership within a framework of prudent and effective controls. In doing so, the Board commits to high standards of integrity and ethics.

According to the Board's terms of reference, specific matters reserved for the Board's consideration and decision include:

- strategic plan and objectives
- financial resource planning (formerly known as annual operating plan) and performance targets
- annual and interim financial reporting
- capital plans and management
- risk appetite statement and profile update
- appointment and oversight of senior management, and succession plans for the Board and senior management
- internal control and risk management governance structure
- corporate culture, values and standards
- environmental, social and governance ("ESG") strategy and governance framework
- effective audit functions
- policies, practices and disclosure on corporate governance and remuneration
- significant policies and plans and subsequent changes
- acquisitions, disposals and purchases above predetermined thresholds
- whistleblowing policy and mechanism

Chairman and Chief Executive

The roles of the Chairman and Chief Executive of the Bank are complementary, but importantly, they are distinct and separate with a clear and well-established division of responsibilities. Details of their respective roles are set out in the Board's terms of reference.

The Chairman of the Board, who is an Independent Non-executive Director ("INED"), is responsible for the leadership and effective running of the Board and for ensuring that decisions of the Board are taken on a sound and well-informed basis and in the best interest of the Bank. In addition, as the Chairman of the Board, she is also responsible for ensuring that all Directors are properly briefed on all issues currently on hand and receive adequate, accurate and reliable information in a timely manner. The Chairman possesses the requisite experience, competencies and personal qualities to fulfill these responsibilities.

The Chief Executive, who is an Executive Director ("ED"), is accountable to the Board for her performance and is responsible for implementing the strategy and policy as established by the Board. The Chief Executive is also responsible for the management and day-to-day running of the Bank's business and operations, as well as leading and chairing the Executive Committee.

Board Composition

As at the date of this Annual Report, the Board comprises 12 Directors, of whom two are EDs and ten are Non-executive Directors ("NEDs"). Among the ten NEDs, eight are INEDs. There is a strong independent element on the Board, to ensure the independence and objectivity of the Board's decision-making process as well as the thoroughness and impartiality of the Board's oversight of the Management. Further, out of the 12 Directors, eight are female Directors, indicating a strong gender diversity on the Board.

The Board possesses, both as individual Directors and collectively, appropriate experience, competencies and personal qualities, including professionalism and integrity, to discharge its responsibilities adequately and effectively. In addition, the Board collectively has adequate knowledge and expertise relevant to each of the material business activities that the Bank pursues and the associated risks in order to ensure effective governance and oversight.

Members of the Board, who come from a variety of different backgrounds, have a diverse range of business, banking and professional expertise. Biographical details of the Directors, together with information relating to the relationship among them, are set out in the section "Biographical Details of Directors and Senior Management" in this Annual Report.

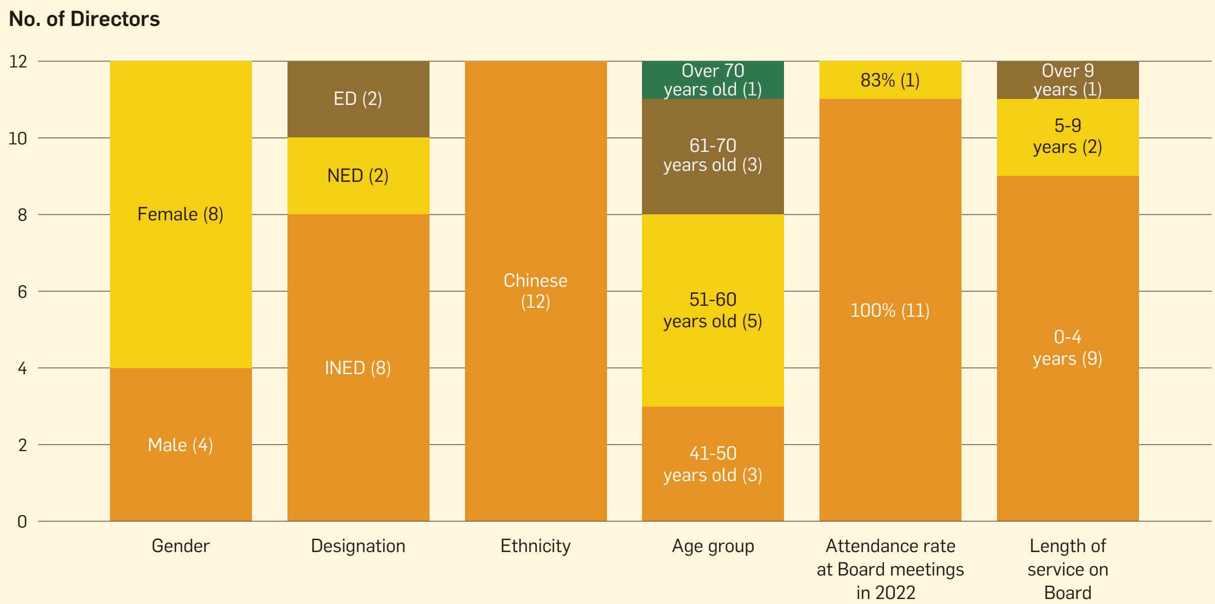
The Bank remains committed to meritocracy in the Boardroom, which requires a diverse and inclusive culture where Directors believe that their views are heard, their concerns are attended to and they serve in an environment where bias, discrimination and harassment on any matter are not tolerated.

The Board has adopted a Board Diversity Policy, which is subject to annual review to ensure that diversity and inclusion are given serious consideration in the succession planning, selection, nomination, operation and evaluation of the Board. The last review was conducted in November 2022, and the latest version of the Policy as approved by the Board in November 2022 has been made available on the Bank's website (www.hangseng.com) for better transparency and governance. Board appointments are based on merit and candidates are considered against objective criteria, having due regard for the benefits of diversity on the Board including, but not limited to, characteristics, such as gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge, length of service, and any other factors that the Board may consider relevant and applicable from time to time.

The Board considers that its diversity, including gender diversity, is a vital asset to the business. Selection of female candidates to join the Board will be, in part, dependent on the pool of female candidates with the necessary skills, knowledge and experience. Where necessary, the Board will work with external agency to identify and approach suitable candidates that would enhance its composition and diversity, with a view to expanding the competencies, experience and perspectives of the Board as a whole.

As of the date of this Annual Report, the female representation of the Board was 67%, which is above the Board's aspirational target of a minimum of 40% female representation on the Board according to the Board Diversity Policy of the Bank.

An analysis of the Board's current composition as at the date of this Report is set out in the following chart:



The Bank has maintained on its website (www.hangseng.com) and on the website of HKEx (www.hkexnews.hk) an updated list of its Directors identifying their roles and functions and whether they are INEDs. INEDs are also identified as such in all corporate communications that disclose the names of the Bank's Directors.

Further, the Bank has received from each of the INEDs an annual confirmation of his/her independence. The independence of the INEDs has been assessed in accordance with the guidelines set out in Rule 3.13 of the Listing Rules, and guidelines issued by HKMA. Following such assessment, the Board has affirmed that all the INEDs continue to be independent, including those whose terms of appointment are about or over nine years.

Board Process

Board meetings are held about six times a year and no less than once every quarter. Additional Board meetings, or meetings of a Board committee established by the Board to consider specific matters, can be convened, when necessary.

Schedule for the regular Board meetings in each year, together with the standing agenda for such meetings, are made available to all Directors before the end of the preceding year. In addition, notice of meetings will be given to all Directors at least 14 days before each regular meeting.

Other than regular agenda items, the Chairman also meets with NEDs without the presence of EDs at the end of each regular Board meeting, to facilitate an open and frank discussion among the NEDs on issues relating to the Bank. The Board, together with the Bank's Senior Management, also held an annual sharing session, which formed part of the key development initiatives of the Bank to meet the Bank's succession needs, with nominated talents from businesses and functions of the Bank and direct reports of the Bank's Senior Management, to help the Bank develop its staff as well as sharing views on business continuity and opportunities. Head of Human Resources also assisted the Board in reviewing the performance of the Bank's broader top team including, but not limited to, succession of senior roles and the Bank's succession pipeline.

The Board maintains regular communications with HKMA through various means to exchange views and update itself about HKMA's supervisory assessment of the Bank and supervisory focuses on the banking industry in general.

Meeting agenda for regular meetings are set after consultation with the Chairman and the Chief Executive. All Directors are given an opportunity to include matters in the agenda.

Throughout 2022, the Bank has continued to embed HSBC Group's governance requirements, including those of its Subsidiary Accountability Framework (that aims to enhance the clarity and consistency of governance practices adopted across all entities within the HSBC Group), to enhance meeting efficiency and reporting quality. Those enhanced governance requirements have proved to achieve a step change in the quality and consistency of reporting. Better planning and inputs to meetings and pre-meetings with the chairpersons, lead to better discussions, and more agile and well-informed decision making, resulting in a more effective use of the Board and Management time and simplification of board and committee processes.

Directors make their best efforts to contribute to the formulation of strategy, policies and decision-making by attending the Board meetings in person or via telephone or video-conferencing facilities. During 2022 and for the sake of health and safety under the prevailing pandemic, the Board and Board Committees had mostly met in hybrid mode with Directors having the option to join either in person or by zoom, with the meeting papers uploaded onto an electronic board portal for easy access by Directors.

Minutes of Board meetings with details of the matters discussed by the Board and decisions made, including any concerns or views of the Directors, are kept by the Company Secretary and are open for inspection by Directors.

In addition to the regular financial and business performance reports submitted to the Board at its regular meetings, the Board also receives financial and business updates with information on the Bank's latest financial performance and material variance from the Bank's financial resource planning during those months where no Board meetings are held. Directors can therefore have a balanced and comprehensive assessment of the Bank's performance, business operations, financial position and prospects throughout the year.

The Board reviews and evaluates its work process and effectiveness annually, with a view to identifying areas for improvement and further enhancement, while promoting board effectiveness and accountability through best practices, standardised guidance, common tools and resources. In mid-2022, all Directors completed the questionnaire for annual evaluation of Board performance over a number of areas including the following :

- the role, composition and skills of the Board;
- effectiveness of Board Committees and their co-ordination;
- procedures and process of Board and Board Committees; and
- culture and boardroom behaviour.

Based on the outcome of the evaluation, the Board is considered as effective in the above aspects.

Directors also made suggestions on major areas covered the following:

- Board's involvement in strategy setting and oversight of strategy implementation
- Board's oversight and involvement in senior management succession planning
- Topics covered in Board agenda and duration/frequency of Board/Committee meetings
- Information flow to the Board/Committees
- Board's involvement in and oversight of the Bank's climate strategy
- Enhancement of virtual Board/Committee meetings

Follow up actions in addressing Directors' responses to the evaluation had been taken during the year with the coordination of relevant businesses and functions of the Bank.

In addition to the annual board evaluation, there is also a regular process for the Bank to evaluate the performance of its Directors, which involves the Board's regular reviews of the time commitment required from NEDs, independence of INEDs, structure, size and composition of the Board and the non-executive Board Committees, as well as trainings that Directors received during the year.

To allow HKMA to assess whether the Bank has a robust evaluation process, the Bank also submitted to HKMA in 2022 a list of outside mandates, including directorships and other commitments, held by each Director and the Chief Executive, together with an affirmation signed by the Board Chairman to confirm the annual performance evaluation of each director and the Chief Executive.

All Directors have access to the EDs and the senior management team as and when they consider necessary. They also have access to the Company Secretary who is responsible for ensuring that Board procedures, and related rules and regulations, are followed.

Under the Articles of Association of the Bank, a Director shall not vote or be counted in the quorum in respect of any contract, arrangement, transaction or other proposal in which he/she or his/her associate(s), is/are materially interested.

The Board has adopted a Policy on Conflicts of Interest. The Policy identifies the relationships, services, activities or transactions in respect of which conflicts of interest may arise and sets out measures for prevention or management of such conflicts. The Policy also contains an objective compliance process for implementing the Policy, which includes notification by a Director of conflicts or potential conflicts, and a review/approval process. In addition, the Policy also sets out provisions of the Board's approach to dealing with any non-compliance with the Policy. The Policy was last updated in 2023 in alignment with the updated corporate practice.

The Board has been applying technology designed specifically around the Board to help the Directors manage their time more efficiently, while staying connected to the Board and other Directors in order to discharge their responsibilities effectively and securely.

During 2022, the Board held six meetings and the important matters discussed at Board meetings included but not limited to:

Strategic Planning

- quarterly updates of the Strategic Plan of Hang Seng Bank Limited (2021 – 2024)
- Strategic Plan of Hang Seng Bank (China) Limited ("HACN") (2022-2024) with progress updates
- progress updates of Hang Seng Indexes business
- 2021 Environmental, Social and Governance ("ESG") Report and regular ESG progress updates for 2022
- outlook and priorities of Wealth and Personal Banking business
- wholesale business performance and outlook
- Engagement Model between Hang Seng Bank Limited and The Hongkong and Shanghai Banking Corporation Limited as parent and subsidiary

Financial and Business Performance, and Capital Planning

- financial statements for the year ended 31 December 2021
- interim financial statements for the six months ended 30 June 2022
- declaration of the fourth interim dividend for year 2021 and first three interim dividends for year 2022
- financial resource planning and capital plan for year 2022
- reports on financial and business performance
- internal capital adequacy assessment process
- internal liquidity adequacy assessment process
- review/update on financials policies, plans and frameworks
- enterprise-wide stress test result and scenario for internal stress testing
- review of stress testing approach and approval process

Risk Management and Technology

- 2022 review of risk appetite statement and framework, with quarterly risk appetite profile updates and 2022 mid-year review of the risk appetite statement
- risk management framework refresh and risk governance structure
- updates of limits of relevant risk appetite metrics
- update of internal control system assessment
- Basel Committee on Banking Supervision 239 ("BCBS 239") compliance framework and semi-annually review of connected lendings, large credit exposures and risk concentrations
- progress of climate risk management
- reviews or updates of significant risk policies, plans and frameworks
- updates of current and emerging risk issues including, commercial real estate exposures and related provisioning
- annual review of credit approval authority limits of the Senior Management Team
- update on coronavirus pandemic and business continuity plans of the Bank and HACN
- operational resilience and third party risk and outsourcing status update
- technology and cyber security risk and cloud update
- technology and data roadmap with 2022 delivery and regular technology updates
- review of IT services quality and reliability

Governance and Culture

- Board succession planning
- review of 2022 Subsidiary Accountability Framework
- review of the effectiveness of the Board and Board Committees, including the revised terms of references
- review of the structure, size and composition of the Board and the Non-executive Board Committees
- new and revised Supervisory Policy Manuals or Guidelines issued by HKMA from time to time
- entry into a connected transaction between Hang Seng Insurance Company Limited ("HSIC") and entities of the HSBC Group
- renewal of certain continuing connected transactions between HSIC and entities of the HSBC Group
- update on culture review of the Bank and annual review of the Bank's Culture Statement
- review or updates of significant corporate governance policies/framework including, but not limited to, Board Diversity Policy, Shareholders Communication Policy and the Framework for disclosure of inside information
- establishment of a management committee for disclosure and controls

Human Resources and Remuneration

- annual review of the remuneration policy and remuneration system
- annual review of alignment of risk and remuneration
- pay review for 2022 and variable pay for 2021
- review of fees payable to NEDs and the Committee Chairmen/members of the Bank and its subsidiaries
- annual review of the remuneration of EDs, Senior Management, Key Personnel and Heads of Control Functions
- appointment of ED, Board Committee Chairman and members
- appointment and remuneration packages of Senior Management
- succession planning for the Board and Senior Management
- performance management relating to Senior Management
- re-designation of a director and stepping down of directors
- re-election/election of Directors
- terms of appointment of NEDs
- review of independence of INEDs
- Human Resources related updates, including market competitiveness, hiring and staff retention issues, staff upskill initiatives and succession planning
- update on Employee Snapshot Survey 2022

Appointment and Re-election of Directors

The Board has adopted a Nomination Policy which has been made available on the Bank's website (www.hangseng.com) to emphasise the Bank's commitment on transparent nomination process in the selection of candidates for Board appointment.

Pursuant to the Bank's Nomination Policy, the Bank uses a formal, considered and transparent procedure for the appointment of new Directors. With the adoption of the Bank's Nomination Policy, greater demand has been imposed on the Board and/or the Nomination Committee on the independence and board diversity, amongst other corporate governance issues for better board effectiveness and diversity.

Before a prospective Director's name is formally proposed, opinions of the existing Directors (including the INEDs) will be solicited. The proposed appointment will first be reviewed by the Nomination Committee, taking into account the balance of skills, knowledge and experience on the Board. Upon recommendation of the Nomination Committee, the proposed appointment will then be reviewed and, if thought fit, approved by the Board after due deliberation. If necessary, the Bank may also engage external search firm to assist in the sourcing and identification of appropriate candidates for Board appointments.

The Bank will also consider the prospective Director's time commitment to the role being applied for and any potential conflicts of interest identified, if he/she has outside mandates.

Pursuant to Group policy, the Bank will conduct enhanced vetting for non-employee NEDs before his/her appointment and thereafter once every three years, as one of the measures to verify the continual fitness and propriety of the NEDs.

In accordance with the requirement under the Banking Ordinance, approval from HKMA will be obtained for appointment of new Directors.

The Bank issues appointment letters to each of the NEDs, setting out the terms and conditions of their appointment, including the time commitment requirement. Additional time commitment is necessary if the NEDs also serve on committee(s) of the Board.

All new Directors are subject to election by shareholders at the next Annual General Meeting ("AGM") after their appointments have become effective. Further, the Bank's Articles of Association provide that all Directors shall be subject to retirement by rotation at least once every three years. Retiring Directors are eligible for re-election at AGMs of the Bank.

According to SAF requirement on the term of appointment of NEDs, term of appointment of each NED is three years and NEDs should serve no more than two three-year terms with any extension subject to rigorous governance process. In renewing the term of appointment of each NED, the Board reviews whether such NED remains qualified for his/her position.

Responsibilities of Directors

Directors have full and timely access to all relevant information about the Bank so that they can discharge their duties and responsibilities as Directors effectively. In particular, through regular Board meetings and receipt of regular financial and business updates, all Directors are kept abreast of the conduct, business activities and development, as well as regulatory updates applicable to the Bank.

The Bank recognises that independence of the Board is a key element of good corporate governance. The Bank has established effective mechanisms, including, but not limited to, entitling the Directors and Committee members to seek independent professional advice on matters relating to the Bank where appropriate at the Bank's expense, to ensure independent views and input are available to the Board. These mechanisms in place are subject to annual review by the Board that underpins a strong independent Board.

The Bank has adopted a Code for Securities Transactions by Directors on terms no less exacting than the required standards set out in the Model Code for Securities Transactions by Directors of Listed Issuers (set out in Appendix 10 to the Listing Rules) with periodic review. Specific enquiries have been made with all Directors who have confirmed that they have complied with the Bank's Code for Securities Transactions by Directors throughout the year 2022.

Directors' interests in securities of the Bank and HSBC Group as at 31 December 2022 have been disclosed in the Report of the Directors set out in this Annual Report.

Appropriate Directors' liability insurance cover has also been arranged to indemnify the Directors against liabilities arising out of the discharge of their duties and responsibilities as the Bank's Directors. The coverage and the sum insured under the policy are reviewed annually. Further, the Bank's Articles of Association provide that Directors are entitled to be indemnified out of the Bank's assets against claims from third parties in respect of certain liabilities.

Induction and Training for Directors

Induction programmes on the following key areas will be arranged for newly appointed Directors so that they can discharge their responsibilities to the Bank properly and effectively:

- directors' duties and responsibilities
- business operations and financial position
- risk management and internal control
- governance structure and practices
- control and support functions

Further, all Directors should participate in continuous professional development to develop and refresh their knowledge and skills. They are provided with briefings and trainings on an on-going basis at the Bank's expense as necessary to ensure that they have a proper understanding of the Bank's operations and business, and are fully aware of their responsibilities under the applicable laws, rules and regulations. The Bank maintains proper records of the briefings and trainings provided to and received by its Directors from time to time.

In addition, all Directors are provided with a "Memorandum of Directors", which sets out the scope and nature of Directors' duties and liabilities, particulars of Group policies and local regulatory and statutory requirements of which the Directors must be aware. Such memorandum is updated from time to time so as to reflect the latest internal policies/guidelines, regulatory/statutory requirements, and best practices.

During the year, Directors received briefings and trainings on the following topics:

- HKEx's Article on "Continuing Disclosure Obligations and Trading Halt"
- HSBC Group NED summit covering current macroeconomics and geopolitics; strategy with 2021 results, technology with focus on IT strategy; and climate and energy security with insights on ESG
- Innovation in Banking Services including digital capabilities development, virtual banks and e-currency
- PwC's 25th Annual Global CEO Survey China report on "Recharting the path to sustained outcomes" with major themes on (1) growth expectations in the "new normal"; (2) emerging threats and market focus; (3) commitment to the ESG agenda; and (4) diving sustainable outcomes
- PwC's Bitesize webinar series including (1) tax changes ahead; (2) China Mergers & Acquisitions 2021 review and 2022 outlook for the global banking industry; (3) leveraging Hong Kong's existing strengths to chart a new path collectively: Interpretation of the Northern Metropolis Development Strategy; and (4) cyber threats: What to expect in 2022 and beyond
- Briefing on International Financial Reporting Standard ("IFRS") 17 on Insurance Contracts
- Compliance Training on "Regulatory Environment and Focus"
- Deep dive sessions of cyber security and fraud cases
- Climate risk management briefing
- Update on cyber security risk and cyber security drill exercise
- HSBC Global Mandatory Training for 2022: Health, Safety and Wellbeing, Risk Management, Cyber Security, Sustainability, Anti-bribery and Corruption, Anti-money Laundering, Terrorist Financing, Sanctions, Fraud and Tax Transparency, and "Living our Values" series including Data Literacy, Workplace Harassment and Data Privacy.

The following table shows a summary on key training areas received by the Directors during 2022:

	Training Areas					
Directors	**Governance matters**	**Regulatory matters**	**Business/ Management**	**Risk and Control**	**Digital and Technology**	**ESG**
INEDs						
Irene Y L Lee	✓	✓	✓	✓	✓	✓
Cordelia Chung Note 1	✓	✓	✓	✓	✓	✓
Clement K M Kwok	✓	✓	✓	✓	✓	✓
Patricia S W Lam Note 2	✓	✓	✓	✓	✓	✓
Huey Ru Lin Note 3	✓	✓	✓	✓	✓	✓
Kenneth S Y Ng Note 4	✓	✓	✓	✓	✓	✓
Xiao Bin Wang Note 5	✓	✓	✓	✓	✓	✓
Michael W K Wu	✓	✓	✓	✓	✓	✓
NEDs						
Kathleen C H Gan	✓	✓	✓	✓	✓	✓
David Y C Liao	✓	✓	✓	✓	✓	✓
EDs						
Diana Cesar	✓	✓	✓	✓	✓	✓
Say Pin Saw Note 6	✓	✓	✓	✓	✓	✓

Note 1 Cordelia Chung was appointed as INED with effect from 23 February 2022.

Note 2 Patricia S W Lam was appointed as INED with effect from 1 July 2022.

Note 3 Huey Ru Lin was appointed as INED with effect from 1 July 2022.

Note 4 Kenneth S Y Ng was re-designated as INED with effect from 1 April 2022.

Note 5 Xiao Bin Wang was appointed as INED with effect from 23 February 2022.

Note 6 Say Pin Saw was appointed as ED and Alternate Chief Executive both with effect from 7 November 2022.

Delegation by the Board

Board Committees

The Board has set up five Committees, namely, Executive Committee, Audit Committee, Risk Committee, Remuneration Committee and Nomination Committee, to assist it in carrying out its responsibilities.

The current composition of the Board Committees as at the date of this Report is as follows:

Board

Executive Committee	Audit Committee	Risk Committee	Remuneration Committee	Nomination Committee
Diana Cesar *(Chairman)*	Clement K M Kwok* *(Chairman)*	Kenneth S Y Ng* *(Chairman)*	Michael W K Wu* [Note 16] *(Chairman)*	Irene Y L Lee* *(Chairman)*
Jordan W C Cheung [Note 7]	Irene Y L Lee*	Irene Y L Lee*	Cordelia Chung* [Note 17]	Diana Cesar
Kathy K W Cheung [Note 8]	Xiao Bin Wang* [Note 14]	Huey Ru Lin* [Note 15]	Irene Y L Lee*	Patricia S W Lam* [Note 18]
Vivien W M Chiu [Note 9]		Michael W K Wu*		David Y C Liao#
Rose M Cho				Kenneth S Y Ng* [Note 19]
Liz T L Chow				Michael W K Wu*
Gloria L S Ho [Note 10]				
Donald Y S Lam				
Betty S M Law [Note 11]				
Gilbert M L Lee				
Rannie W L Lee [Note 12]				
Godwin C C Li				
Say Pin Saw [Note 13]				
Ryan Y S Song				
Christopher H K Tsang				

* INEDs

\# NEDs

Note 7 Jordan W C Cheung was appointed as Executive Committee member with effect from 19 December 2022.

Note 8 Kathy K W Cheung was appointed as Executive Committee member and Alternate Chief Executive with effect from 7 March 2022 and 9 June 2022 respectively.

Note 9 Vivien W M Chiu was appointed as Executive Committee member and Alternate Chief Executive with effect from 1 January 2022 and 19 January 2022 respectively.

Note 10 Gloria L S Ho was appointed as Executive Committee member with effect from 1 May 2022.

Note 11 Betty S M Law was appointed as Executive Committee member with effect from 26 August 2022.

Note 12 Rannie W L Lee was appointed as Executive Committee member and Alternate Chief Executive with effect from 1 January 2022 and 1 April 2022 respectively.

Note 13 Say Pin Saw was appointed as Executive Committee member with effect from 11 September 2022.

Note 14 Xiao Bin Wang was appointed as Audit Committee member with effect from 28 March 2022.

Note 15 Huey Ru Lin was appointed as Risk Committee member with effect from 21 November 2022.

Note 16 Michael W K Wu was appointed as Remuneration Committee member with effect from 28 March 2022, and was appointed subsequently as Remuneration Committee Chairman with effect from 6 May 2022.

Note 17 Cordelia Chung was appointed as Remuneration Committee member with effect from 28 March 2022.

Note 18 Patricia S W Lam was appointed as Nomination Committee member with effect from 1 July 2022.

Note 19 Kenneth S Y Ng was appointed as Nomination Committee member with effect from 5 May 2022.

Each of these Committees has specific written terms of reference, which set out in detail their respective authorities and responsibilities. Each Committee reviews its terms of reference and effectiveness annually. The terms of reference of all the Non-executive Board Committees have been made available on the Bank's website (www.hangseng.com).

All Committees adopt the same governance processes as the Board as far as possible and report back to the Board on their decisions and recommendations on a regular basis.

Executive Committee

The Executive Committee meets approximately ten times a year and operates as a general management committee under the direct authority of the Board. The Executive Committee exercises the powers, authorities and discretions as delegated by the Board in so far as they concern the management and day-to-day running of the Bank in accordance with its terms of reference and such other policies and directives as the Board may determine from time to time. The Executive Committee also sub-delegates credit, investment and capital expenditure authorities to its members and the Bank's senior executives.

To further enhance the Bank's risk management framework and in line with best practices, the Bank has set up a Risk Management Meeting, a risk meeting of the Executive Committee, to provide recommendations and advice to the Bank's Chief Risk Officer on enterprise-wide management of all risks, policies and guidelines for the management of risk within the Group. Risk Management Meetings should be held six times each year. Minutes of Risk Management Meetings are provided to the Executive Committee and the Risk Committee for review and oversight purpose.

Audit Committee

The Audit Committee meets at least four times a year with the Bank's executives including the Chief Financial Officer, Chief Risk Officer, Head of Audit, and representatives from the Bank's external auditor. The Committee reviews, among other things, the Bank's financial reporting, the nature and scope of audit reviews, the effectiveness of the systems of internal control and compliance relating to financial reporting, and the operation and effectiveness of whistleblowing policies and procedures. The Audit Committee is also responsible for making recommendations to the Board on the appointment, re-appointment, removal and remuneration of the Bank's external auditor. In addition, the Bank has adopted HSBC Group's *HSBC Confidential* whereby all staff members may report incidents of improprieties on a strictly confidential and secured basis so that the same can be timely and thoroughly investigated and appropriate actions can be taken promptly.

The Audit Committee reports to the Board following each Audit Committee meeting, drawing the Board's attention to significant issues or matters of which the Board should be aware, identifying any matters in respect of which it considers that action or improvement is needed, and making relevant recommendations.

During the year, the Audit Committee held four meetings and the major work performed by the Committee was as follows:

- reviewed the financial statements for the year ended 31 December 2021 and the related documents, and internal control recommendations and audit issues noted by the Bank's external auditor
- reviewed the interim financial statements for the six months ended 30 June 2022 and the related documents, and the issues noted by the Bank's external auditor
- reviewed and approved the quarterly banking disclosure statements for reporting periods ended 31 December 2021, 31 March 2022, 30 June 2022 and 30 September 2022
- reviewed the Financial Resource Planning and capital plan for year 2022
- reviewed the quarterly financial performance and balance sheet management positions
- reviewed IFRS 17 project update and transition analysis
- reviewed the financial reporting risk updates, which included the effectiveness of the Bank's internal control systems relating to financial reporting and the Bank's financial and accounting policies and practices, as well as the revised accounting standards and prospective changes to accounting standards
- reviewed the scenario for internal stress testing and the stress testing approval process
- reviewed the significant policies and plans including, but not limited to, the Bank's Recovery Plan
- reviewed the internal audit reports and discussed the same with the Management and Head of Audit
- adopted the Internal Audit Plan and Internal Audit Charter for 2022, and reviewed the resources arrangements, audit statistics, internal audit reports and key themes, and the progress update of the Internal Audit Planning for 2023

- reviewed the update on Sarbanes-Oxley Act (SOX) implementation, internal control system assessment and accounting reconciliations control certificates as of 31 December 2021 and 30 June 2022
- reviewed the adequacies of resources, qualifications and experience of staff of the Accounting and Financial Reporting function (including those of ESG team) and Internal Audit function, and their training programmes and budgets
- reviewed the re-appointment, remuneration and engagement letter of the Bank's external auditor, its independence and objectivity, and the effectiveness of the audit process
- reviewed the report on whistleblowing cases in 2022 and the operation and effectiveness of the whistleblowing arrangements
- reviewed the Audit Committee's independence and effectiveness in discharging its role and responsibilities, and its terms of reference
- approved and reviewed the Audit Committee Certificates of the Bank and its subsidiaries
- approved and endorsed the appointment of Audit Committee Chairman/Members of the Bank and its subsidiaries, as appropriate
- reviewed the composition of the Audit Committees of the Bank and its subsidiaries
- reviewed the information cascaded from and escalated significant issues to the Audit Committee of The Hongkong and Shanghai Banking Corporation Limited, as appropriate

The Audit Committee also meets at least twice annually with the representatives of the Bank's Head of Audit and external auditor without the presence of the Management in accordance with its terms of reference.

Risk Committee

The Risk Committee meets at least four times a year with the Bank's executives including the Chief Financial Officer, Chief Risk Officer, Head of Audit, Chief Compliance Officer, and representatives from the Bank's external auditor. The Committee is responsible for, among other things, the Bank's high level risk related matters, risk appetite and tolerance, risks associated with proposed strategic acquisitions or disposals, risk management reports from the Management, effectiveness of the risk management framework and systems of internal control and compliance (other than that regarding financial reporting), and appointment and removal of the Chief Risk Officer.

Pursuant to HKMA's Circular on "Bank Culture Reform", the Board has also delegated to the Risk Committee to encompass culture-related responsibilities. Such responsibilities include actions to approve, review and assess, at least annually, the adequacy of any relevant statement which sets out the Bank's culture and behavioural standards.

The Risk Committee reports to the Board following each Risk Committee meeting, drawing the Board's attention to significant issues or matters of which the Board should be aware, identifying any matters in respect of which it considers that action or improvement is needed, and making relevant recommendations.

During the year, the Risk Committee held four meetings and the major work performed by the Committee was as follows:

- reviewed the Bank's Culture Statement and culture dashboards
- reviewed the first line of defence reports of all lines of businesses
- reviewed the regular risk reports submitted by the Management including, but not limited to, risk management framework refresh, risk governance structure, internal control system assessment, risk appetite statement and framework and profile update, risk profile papers (including risk maps and top and emerging risks), compliance update, annual plan and progress update relating to compliance
- reviewed the scenario for internal stress testing and the stress testing approval process
- reviewed the enterprise-wide stress test results and risk assessment report, internal capital adequacy assessment process, and endorsed the internal liquidity adequacy assessment process, credit approval authority limits, and other significant risk policies, plans and frameworks
- reviewed the report on the alignment of risk and remuneration, and outcome of incentivising compliance for the pay review of performance year 2021
- reviewed the Internal Audit Plan and the Internal Audit Charter for 2022, and the resources arrangements, audit statistics, internal audit reports and key themes, and the progress update of the Internal Audit Planning for 2023
- reviewed the adequacy of resources, qualifications and experience of staff of the Risk and Compliance functions, and their training programmes and budgets

- reviewed the report on whistle-blowing cases in 2022 and the operation and effectiveness of the whistleblowing arrangements
- reviewed other risk related reports in relation to progress update of climate risk management; risk appetite metric limit update; commercial real estate exposures and related provisioning; third party risk management and outsourcing status update; technology and cyber security risk and Cloud update
- reviewed other operations related reports in relation to operational resilience programme; BCBS 239 Compliance Framework; update on business continuity plans of the Bank and its mainland subsidiary; update of the Bank's operations during the recent COVID-19 situation; operational event reports; and impact by the COVID-19 pandemic including the situation in China (Shanghai), the continual closure of the border and impacts arising from the geopolitical development, namely, the Ukraine/Russia conflict and China/US trade war
- endorsed the increase of the current exposure limit and additional limit cap of the Bank and its subsidiaries
- reviewed the revised risk-related HKMA Supervisory Policy Manuals
- reviewed the Risk Committee's independence and effectiveness in discharging its role and responsibilities, and its terms of reference
- approved and reviewed the Risk Committee Certificates of the Bank and its subsidiaries
- approved and endorsed the appointment of Risk Committee Chairman and Members of the Bank and its subsidiaries, as appropriate
- reviewed the composition of the Risk Committees of the Bank and its subsidiaries
- reviewed the information cascaded from and escalated significant issues to the Risk Committee of The Hongkong and Shanghai Banking Corporation Limited, as appropriate

The Risk Committee also meets at least twice annually with the Bank's Chief Risk Officer, Head of Audit, and external auditor separately without the presence of the Management in accordance with its terms of reference.

Remuneration Committee

The Remuneration Committee meets at least twice a year to consider and provide advice to the Board on the remuneration policy and structure in order to underpin the Bank's people strategy. Pursuant to delegation by the Board, the Committee also considers and proposes for the Board's approval the remuneration packages of all EDs, senior management, key personnel and heads of control functions. In addition, it reviews at least annually and independently of the Management, the adequacy and effectiveness of the Bank's remuneration policy and its implementation, to ensure that the Bank's remuneration practices are consistent with relevant regulatory requirements and promotes effective risk management.

In determining the bank-wide remuneration policy, the Remuneration Committee will take into account the Bank's business objective, people strategy, short-term and long-term performance, business and economic conditions, market practices, conduct, compliance and risk control, in order to ensure that the remuneration aligns with business and individual performance, promotes effective risk management, facilitates retention of quality personnel and is competitive in the market. The Committee may invite any Director, executive, consultant or other relevant party to provide advice in this respect, if necessary. In 2022, the Committee engaged an external consultant to undertake an independent review of the Bank's remuneration policy and its implementation for year 2022.

The Remuneration Committee reports to the Board following each Committee meeting, and draws to the Board's attention any significant issues, identify any action or improvement required, and makes relevant recommendations.

During 2022, the Remuneration Committee held two meetings and the major work performed by the Committee was as follows:

- endorsed the remuneration packages of Executive Directors, senior management, key personnel and heads of control functions of the Bank
- endorsed the proposed variable pay for 2021 and pay review proposal for 2022, and the update on 2022 performance and pay review process and changes to performance management
- reviewed/endorsed the fees payable to Non-executive Directors and Committee Chairmen/Members of the Bank and its subsidiaries

- reviewed the report on the alignment of risk and remuneration, and outcome of incentivising compliance for performance year 2021 variable pay
- reviewed the remuneration policy of the Bank and approved the appointment of independent reviewer for the annual review of the Bank's remuneration policy and its implementation
- reviewed the outcome of the independent review by an external reviewer of the Bank's remuneration policy and remuneration system, and the adequacy and effectiveness of its implementation
- reviewed the outcome of the Group Material Risk Takers ("MRT") review and local MRT review for HACN for Performance Year 2022
- reviewed the update on enhancements made to the benefits across the Bank's entities, as well as legislative development in Hong Kong
- reviewed the Remuneration Committee's effectiveness in discharging its role and responsibilities, and its terms of reference
- approved and endorsed the appointment of Remuneration Committee Chairmen and Members of the Bank and its subsidiaries, as appropriate
- endorsed the remuneration packages for senior management and recommended to the Board for approval
- reviewed the composition of the Remuneration Committees of the Bank and its subsidiaries
- reviewed the information cascaded from and escalated significant issues to the Remuneration Committee of The Hongkong and Shanghai Banking Corporation Limited, as appropriate

Nomination Committee

The Nomination Committee meets at least twice a year. It leads the process for Board appointments and identifies and nominates candidates for appointment to the Board, for the Board's approval. The Bank has adopted its Nomination Policy to ensure that proper selection and nomination processes are in place for Board appointments. The Nomination Committee shall consider the candidates based on merit having regard to the experience, skills, expertise as well as the overall Board diversity and shall undertake adequate due diligence in respect of the candidates and make recommendations for the Board's consideration and, if thought fit, approval. If necessary, the Bank may also engage external search firm to assist in the sourcing and identification of appropriate candidates for Board appointments. The Nomination Policy is also available on the website of the Bank (www.hangseng.com). The Bank will from time to time review the Nomination Policy and monitor its implementation to ensure its compliance with regulatory requirements and good corporate governance practices.

The Committee also considers, among other things, the structure, size and composition of the Board and Non-executive Board Committees, independence of INEDs, re-election of Directors, term of appointment of NEDs, time commitment required from NEDs, appointment to Board Committees, and approves the appointment to the position of "manager" as defined under the Banking Ordinance.

The Nomination Committee reports to the Board following each Committee meeting, drawing the Board's attention to significant issues or matters of which the Board should be aware, identifying any matters in respect of which it considers that action or improvement is needed, and making relevant recommendations.

During the year, the Nomination Committee held two meetings and the major work performed by the Committee was as follows:

- endorsed the appointment of an ED and Board Committee Chairman and members for the Board's approval
- approved the appointment of Senior Management and senior executives
- approved the revised list of the Bank's "managers" list under the Banking Ordinance
- reviewed the Board Succession Plan and succession planning for senior management
- endorsed the Board Diversity Policy for the Bank's approval
- reviewed the structure, size and composition of the Board and Non-executive Board Committees
- reviewed the succession planning for the Board and Senior Management
- reviewed the independence of INEDs
- reviewed the time commitment required from NEDs
- endorsed the renewal of terms of appointment of NEDs
- reviewed/endorsed the re-election/election of Directors
- reviewed the Nomination Committee's effectiveness in discharging its role and responsibilities, and its terms of reference

Attendance Records

The attendance records of Board and Board Committee meetings held in 2022 are as follows:

	Meetings held in 2022						
	AGM	Board	Executive Committee	Audit Committee	Risk Committee	Remuneration Committee	Nomination Committee
Number of Meetings	1	6	10	4	4	2	2
Directors							
Irene Y L Lee* *(Chairman)*	1/1	6/6	–	4/4	4/4	2/2	2/2
Diana Cesar *(Executive Director and Chief Executive)*	1/1	6/6	10/10	–	–	–	2/2
John C C Chan* Note 20	1/1	2/2	–	–	–	1/1	1/1
L Y Chiang* Note 21	1/1	6/6	–	4/4	–	2/2	–
Cordelia Chung* Note 22	1/1	5/5	–	–	–	1/1	–
Kathleen C H Gan#	1/1	5/6	–	–	–	–	–
Margaret W H Kwan Note 23	–	–	1/1	–	–	–	–
Clement K M Kwok*	1/1	6/6	–	4/4	–	–	–
Patricia S W Lam* Note 24	–	4/4	–	–	–	–	1/1
David Y C Liao#	1/1	6/6	–	–	–	–	2/2
Huey Ru Lin* Note 25	–	4/4	–	–	1/1	–	–
Vincent H S Lo# Note 26	1/1	2/2	–	–	–	–	–
Kenneth S Y Ng* Note 27	1/1	6/6	–	–	4/4	–	1/1
Say Pin Saw Note 28 *(Executive Director and Chief Financial Officer)*	–	1/1	3/3	–	–	–	–
Xiao Bin Wang* Note 29	1/1	5/5	–	3/3	–	–	–
Michael W K Wu*	1/1	6/6	–	–	4/4	1/1	2/2
Senior Management							
Jordan W C Cheung Note 30	–	–	0/0	–	–	–	–
Kathy K W Cheung Note 31	–	–	8/8	–	–	–	–
Vivien W M Chiu Note 32	–	–	9/9	–	–	–	–
Rose M Cho	–	–	10/10	–	–	–	–
Liz T L Chow	–	–	10/10	–	–	–	–
Gloria L S Ho Note 33	–	–	6/6	–	–	–	–
Donald Y S Lam	–	–	10/10	–	–	–	–
Betty S M Law Note 34	–	–	3/4	–	–	–	–
Gilbert M L Lee	–	–	10/10	–	–	–	–
Rannie W L Lee Note 35	–	–	8/9	–	–	–	–
Andrew W L Leung Note 36	–	–	7/7	–	–	–	–
Godwin C C Li	–	–	9/10	–	–	–	–
Angela C M Shing Note 37	–	–	5/6	–	–	–	–
Ryan Y S Song	–	–	10/10	–	–	–	–
Christopher H K Tsang	–	–	10/10	–	–	–	–
Elaine Y N Wang Note 38	–	–	4/4	–	–	–	–
May M K Wong Note 39	–	–	7/7	–	–	–	–
Chee Leong Yeo Note 40	–	–	0/1	–	–	–	–
Average Rate	100%	99%	97%	100%	100%	100%	100%

* INEDs

\# NEDs

Note 20 John C C Chan retired and stepped down as INED, and ceased to be Remuneration Committee Chairman and Nomination Committee member, all with effect from the conclusion of the Bank's Annual General Meeting held on 5 May 2022.

Note 21 L Y Chiang stepped down as INED, and ceased to be Audit Committee member and Remuneration Committee member, all with effect from 1 January 2023.

Note 22 Cordelia Chung was appointed as INED and Remuneration Committee member with effect from 23 February 2022 and 28 March 2022 respectively.

Note 23 Margaret W H Kwan retired and stepped down as ED and ceased to be Executive Committee member, both with effect from 1 February 2022.

Note 24 Patricia S W Lam was appointed as INED and Nomination Committee member, both with effect from 1 July 2022.

Note 25 Huey Ru Lin was appointed as INED and Risk Committee member with effect from 1 July 2022 and 21 November 2022 respectively.

Note 26 Vincent H S Lo retired and stepped down as NED with effect from the conclusion of the Bank's Annual General Meeting held on 5 May 2022.

Note 27 Kenneth S Y Ng, currently Risk Committee Chairman, was re-designated as INED and appointed as Nomination Committee member with effect from 1 April 2022 and 5 May 2022 respectively.

Note 28 Say Pin Saw was appointed as ED and Alternate Chief Executive with effect from 7 November 2022. Her appointment as Chief Financial Officer and Executive Committee member took effect from 11 September 2022.

Note 29 Xiao Bin Wang was appointed as INED and Audit Committee member with effect from 23 February 2022 and 28 March 2022 respectively.

Note 30 Jordan W C Cheung was appointed Executive Committee member with effect from 19 December 2022.

Note 31 Kathy K W Cheung was appointed Executive Committee member and Alternate Chief Executive with effect from 7 March 2022 and 9 June 2022 respectively.

Note 32 Vivien W M Chiu was appointed Executive Committee member and Alternate Chief Executive with effect from 1 January 2022 and 19 January 2022 respectively.

Note 33 Gloria L S Ho was appointed Executive Committee member with effect from 1 May 2022.

Note 34 Betty S M Law was appointed Executive Committee member with effect from 26 August 2022.

Note 35 Rannie W L Lee was appointed Executive Committee member and Alternate Chief Executive with effect from 1 January 2022 and 1 April 2022 respectively.

Note 36 Andrew W L Leung ceased to be Executive Committee member with effect from 11 September 2022.

Note 37 Angela C M Shing was appointed as Executive Committee member with effect from 3 May 2022 and ceased to be Executive Committee member with effect from 1 December 2022.

Note 38 Elaine Y N Wang ceased to be Executive Committee member with effect from 1 May 2022.

Note 39 May M K Wong ceased to be Executive Committee member with effect from 26 August 2022.

Note 40 Chee Leong Yeo ceased to be Executive Committee member with effect from 20 January 2022.

Remuneration of Directors, Senior Management and Key Personnel

In determining the remuneration of the Directors, it's the Bank's policy in rewarding competitively the achievement of long-term sustainable performance. Our goal is to attract, motivate and retain the very best people, regardless of gender, ethnicity, age, disability or any other factor unrelated to performance. This supports the long-term interests of our stakeholders, which includes the customers and the communities we serve, our shareholders and our regulators.

Remuneration of Directors

The remuneration paid to NEDs and EDs is subject to annual review in accordance with the remuneration framework of the Bank.

The level of fees paid to NEDs is determined with reference to the Directors' responsibilities and commitment, and fees paid by comparable institutions. No equity-based remuneration with performance-related elements is granted to INEDs by the Bank to ensure their objectivity and independence.

As regards EDs, the following factors are considered with reference to the Remuneration Policy of the Bank when determining their remuneration packages:

- balanced scorecard of relevant financial and non-financial objectives including appropriate risk and compliance objectives, differentiated by performance
- general business and economic conditions
- changes in appropriate markets such as supply/demand fluctuations and changes in competitive conditions
- individual contributions to the Bank
- right behaviours aligned with the Group values, culture and conduct expectation
- retention consideration and individual potential

No individual Director is involved in deciding his/her own remuneration.

The current scale of Director's fees, and fees for chairmen and members of the Non-executive Board Committees, namely, Audit Committee, Risk Committee, Remuneration Committee and Nomination Committee, are set out below:

	(HK$)
Board of Directors Note 41	
Chairman	**860,000**
Non-executive Directors	**660,000**
Audit Committee/Risk Committee	
Chairman	**610,000**
Members	**290,000**

	(HK$)
Remuneration Committee	
Chairman	**340,000**
Members	**200,000**
Nomination Committee	
Chairman	**450,000**
Members	**200,000**

Note 41 In line with the remuneration policy of HSBC Group, no Director's fee is payable to those Directors who are full time employees of the Bank and its subsidiaries.

Information relating to the remuneration of Directors on a named basis for the year ended 31 December 2022 is set out in Note 14 to the Bank's 2022 Financial Statements.

Remuneration of Senior Management and Key Personnel

According to HKMA's SPM CG-5 "Guideline on a Sound Remuneration System", authorised institutions are required to make disclosures in relation to their remuneration systems as appropriate. The Bank has fully complied with HKMA's disclosure requirements set out in Part 3 of the said Guideline.

There are 20 Senior Management members Note 42 and 8 Key Personnel Note 43 in 2022. The aggregate amount of remuneration Note 44 of the Senior Management and Key Personnel during the year, split into fixed and variable remuneration, is set out below:

	Remuneration amount and quantitative information	2022	2021
	Fixed remuneration		
1	Number of employees	**28**	25
2	Total fixed remuneration (HK$ '000)	**78,366**	74,861
3	Of which: cash-based	**78,366**	74,861
	Variable remuneration		
4	Number of employees Note 45	**28**	25
5	Total variable remuneration (HK$ '000) Note 46	**51,989**	48,806
6	Of which: cash-based	**28,469**	27,456
7	*Of which: deferred*	***9,178***	*8,283*
8	Of which: shares or other share-linked instruments	**23,520**	21,350
9	*Of which: deferred*	***12,529***	*11,252*
10	**Total remuneration (HK$ '000)**	**130,555**	123,667

Note 42 Senior Management refers to those executives who are (a) EDs of the Bank; (b) Alternate Chief Executives of the Bank; (c) Members of the Executive Committee of the Bank; and (d) Head(s) of the Bank's principal subsidiary/subsidiaries with offshore operations and with total assets representing more than 5% of the Bank's total assets. Among the senior colleagues mentioned above , 20 of them are Executive Committee members (including new joiners and leavers) of the Bank in 2022. The bands for the total remuneration payable to them in 2022 and the number of individuals falling within such banding are as follows: (a) less than HKD 5 million: 14 persons; (b) HKD 5 million to HKD 10 million: 4 persons; (c) more than HKD 10 million to HKD 15 million: 1 person; and (d) more than HKD 15 million: 1 person.

Note 43 Key Personnel refers to employees classified as "Identified Staff and Material Risk Takers" (collectively referred as "Material Risk Takers" or "MRTs") under the UK Prudential Regulation Authority Remuneration Rules.

Note 44 Remuneration refers to all remuneration payable to employees during the year with reference to their tenure as Senior Management and Key Personnel. The forms of variable remuneration and the proportion deferred are based on the seniority, role and responsibilities of employees and their level of total variable compensation. As the total number of Senior Management and Key Personnel involved is relatively small, to avoid individual figures being deduced from the disclosure, aggregate figures are disclosed in this section.

Note 45 Number of employees disclosed above includes leavers who may have zero variable pay.

Note 46 No deferred variable remuneration had been reduced through performance adjustments in 2022 and 2021.

The aggregate amount of special payments of the Senior Management and Key Personnel awarded during the year is set out below:

	Special payments	2022		2021	
		Number of employees	**Total amount (HK$ '000)**	Number of employees	Total amount (HK$ '000)
1	Guaranteed bonuses	–	–	–	–
2	Severance payments	–	–	–	–

The aggregate amount of deferred and retained variable remuneration of Senior Management and Key Personnel is set out below:

	Deferred and retained remuneration (HK$ '000)	2022		2021	
		Cash	**Shares**	Cash	Shares
1	Total amount of outstanding deferred remuneration Note 47 & 49	**20,527**	**27,615**	22,449	27,134
2	*Of which: Total amount of outstanding deferred and retained remuneration exposed to ex post explicit and/or implicit adjustment*	***20,527***	***27,615***	*22,449*	*27,134*
3	Total amount of amendment during the year due to ex post implicit adjustments Note 50	**–**	**2,033**	–	3,389
4	Total amount of deferred remuneration paid out in the financial year Note 48, 49 & 51	**9,826**	**18,898**	11,949	13,141

Note 47 Outstanding, unvested, deferred remuneration is exposed to ex post explicit adjustments via malus.

Note 48 Paid and vested variable pay made to Material Risk Takers is subject to clawback.

Note 49 There is no reduction of deferred remuneration and retained remuneration due to ex post explicit adjustments during 2022 and 2021 via the application of malus and/or clawback.

Note 50 Outstanding, unvested, deferred shares are exposed to ex post implicit adjustments. The total value of these shares was calculated based on the closing market share price of HSBC Holding plc (London) as at 31 December of the respective financial years. HSBC's share price was 14.94% higher as at 31 December 2022 when compared to that of 31 December 2021.

Note 51 The total amount of deferred remuneration paid out in the financial year reported for 2021 was under reported. Correct numbers are outlined in the table.

Other relevant remuneration disclosures are set out in Notes 14, 15 and 50(b) to the Bank's 2022 Financial Statements.

Accountability and Audit

Financial Reporting

The Board aims at making a balanced, clear and comprehensive assessment of the Bank's performance, position and prospects. A financial resource planning is reviewed and approved by the Board on an annual basis. Reports on financial results, business performance and variances against the approved financial resource planning are made available to the Board for review and monitoring on a monthly basis.

Strategic planning cycles are generally from three to five years. The Bank's strategic plan for 2021- 2024 was approved by the Board in July 2021 and reviewed by the Board in November 2022. The Board oversees and reviews from time to time the implementation of the strategic plan.

The annual and interim results of the Bank are announced in a timely manner within two months after the end of the relevant year or period. Further, the Bank also publishes the Banking Disclosure Statement on a quarterly basis pursuant to HKMA's requirements, which provides additional financial information to the public.

The Directors acknowledge their responsibilities for preparing the accounts of the Bank. As at 31 December 2022, the Directors were not aware of any material uncertainties relating to events or conditions which may cast significant doubt upon the Bank's ability to continue as a going concern. Accordingly, the Bank's Directors have prepared the financial statements of the Bank on a going-concern basis.

The responsibilities of the external auditor with respect to financial reporting are set out in the "Independent Auditor's Report" attached to the Bank's 2022 Financial Statements.

Internal Controls

System and Procedures

The Board is responsible for internal control of the Bank and its subsidiaries and for reviewing its effectiveness.

The Bank's internal control system comprises a well-established organisational structure and comprehensive policies and standards. Areas of responsibilities for each business and functional unit are clearly defined to ensure effective checks and balances.

Procedures have been designed for safeguarding assets against unauthorised use or disposition; for maintaining proper accounting records; and for ensuring the reliability of financial information used within the business or for publication. The procedures provide reasonable but not absolute assurance against material errors, losses or fraud. Procedures have also been designed to ensure compliance with applicable laws, rules and regulations.

Systems and procedures are in place in the Bank to identify, control and report on the major types of risks the Bank encounters. Business and functional units are responsible for the assessment of individual types of risk arising under their areas of responsibilities, the management of the risks in accordance with risk management procedures and the reporting on risk management. The Bank maintains an effective risk management framework through the setting up of specialised management committees for the oversight and monitoring of major risk areas and the establishment of risk management departments under the relevant control functions of the Bank. Relevant risk management reports are submitted to Asset and Liability Management Committee, Risk Management Meeting, Executive Committee, and Risk Committee, and ultimately to the Board for oversight and monitoring of the respective types of risk. The Bank's risk management policies and major control limits are approved by the Board or its delegated committees, and are monitored and reviewed regularly according to established policies and procedures.

More detailed discussion on the policies and procedures for management of each of the major types of risk the Bank encounters is set out in the section "Risk" of the "Management Discussion and Analysis" in this Annual Report.

Annual Assessment

A review of the effectiveness of the Bank's internal control system covering all material controls, including financial, operational, compliance, and risk management controls, is conducted annually. The review at the end of 2022 was conducted with reference to the COSO (The Committee of Sponsoring Organisations of the Treadway Commission) internal control framework, which assesses the Bank's internal control system against the five elements of control environment, risk assessment, control activities, information and communication, and monitoring. The review results have been reported to the Audit Committee, Risk Committee and the Board. The Board is satisfied that such system is effective and adequate. In addition, the Bank, through the Audit Committee, has also reviewed the adequacy of resources, qualifications and experience of staff of the Accounting and Financial Reporting functions, and ESG performance and reporting function, and their training programmes and budget.

Framework for Disclosure of Inside Information

The Bank has put in place a robust framework for the disclosure of inside information in compliance with the Securities and Futures Ordinance. The framework sets out the procedures and internal controls for the handling and dissemination of inside information in a timely manner so as to allow all the stakeholders to apprehend the latest position of the Bank and its subsidiaries. The framework and its effectiveness are subject to review on a regular basis according to established procedures.

Internal Audit

The primary role of the Internal Audit function is to help the Board and the Management to protect the assets, reputation and sustainability of the Bank. The Internal Audit function provides independent and objective assurance as to whether the design and operational effectiveness of the Bank's framework of risk management, control and governance processes, as designed and represented by the Management, is adequate.

The Bank has adopted a risk management and internal control structure, referred to as the "Three Lines of Defence", to ensure it achieves its commercial aims while meeting regulatory and legal requirements, and its responsibilities to shareholders, customers and staff. The Internal Audit function's role as the third line of defence is independent of the first and second lines of defence. The Bank's Head of Audit reports to the Chairman and the Audit Committee.

An Internal Audit Charter is reviewed and approved by the Audit Committee periodically which has detailed the purpose, organisation, authority, independence and objectivity, accountabilities and scope of work, and standards of audit practices to govern the work of the Internal Audit function. Further, the Internal Audit function also maintains a quality assurance and improvement programme that covers all aspects of internal audit activity, including conformance with The Institute of Internal Auditors (IIA) Standards, applicable regulatory guidance and internal audit policies and procedures.

Results of audit work together with an assessment of the overall risk management and control framework are reported to the Audit Committee and the Risk Committee as appropriate. The Internal Audit function also reviews the Management's action plans in relation to audit findings and verifies the adequacy and effectiveness of the mitigating controls before formally closing the issue.

External Auditor

PricewaterhouseCoopers, Certified Public Accountants and a Registered Public Interest Entity Auditor, is the Bank's external auditor. The Audit Committee is responsible for making recommendations to the Board on the appointment, re-appointment, removal and remuneration of the external auditor. The external auditor's independence and objectivity, and the effectiveness of the audit process are also reviewed and monitored by the Audit Committee on a regular basis.

During 2022, fees paid to the Bank's external auditor for audit services amounted to HK$28.3 million, compared with HK$27.4 million in 2021. For non-audit services, the fees paid to the Bank's external auditor amounted to HK$15.8 million, compared with HK$10.0 million in 2021. In 2022, the non-audit service assignments covered by these fees included HKD$1.8 million for other assurance services.

Audit Committee

The Audit Committee assists the Board in meeting its responsibilities for ensuring effective systems of internal control and compliance relating to financial reporting, and in meeting its financial reporting obligations, as well as overseeing the implementation and effectiveness of whistleblowing policies and arrangements.

Risk Committee

The Risk Committee assists the Board in meeting its responsibilities for ensuring effective systems of risk management, internal control and compliance (other than that relating to financial reporting), in meeting its risk governance obligations. The Risk Committee also advises and assists in the Board's review of the effectiveness of culture enhancement initiatives.

Communication with Shareholders

Effective Communication

The Bank attaches great importance to communication with shareholders. To this end, a number of means are used to promote greater understanding and dialogue with the investment community. The Bank holds group meetings with analysts in connection with the Bank's annual and interim results. The results announcements are also broadcast live via webcast. Apart from the above, designated senior executives maintain regular dialogue with institutional investors and analysts to keep them abreast of the Bank's development, subject to compliance with the applicable laws and regulations. In addition, the Bank's Chief Executive, ED(s) and Chief Financial Officer also made presentations and held group meetings with investors at investor forums.

Further, the Bank's website (www.hangseng.com) offers timely access to the Bank's financial information, announcements, circulars to shareholders and information on the Bank's corporate governance structure and practices. For efficient communication with shareholders and in the interest of environmental preservation, shareholders are encouraged to browse the Bank's corporate communications on the Bank's website, in the place of receiving printed copies of the same.

The AGM provides a useful forum for shareholders to exchange views with the Board. The Bank's Chairman, ED(s), Chairmen of the Board Committees and NEDs are available at the AGM to answer questions from shareholders about the business and performance of the Bank. In addition, the Bank's external auditor is also invited to attend the AGM to answer questions about the conduct of the audit, and the preparation and contents of the auditor's report. Separate resolutions are proposed at general meetings for each substantial issue, including the re-election and election (as the case may be) of individual Directors. For AGM held physically, an explanation of the detailed procedures of conducting a poll will be provided to shareholders at the AGM, to ensure that shareholders are familiar with such procedures.

The Bank's last AGM was held on Thursday, 5 May 2022 ("2022 AGM") at Hang Seng Bank Headquarters. In the interest of safety and wellbeing of the Bank's shareholders, staff and other members of the community amid the prevailing COVID-19 pandemic, the Bank still adopted special arrangements for the 2022 AGM, in order to minimise attendance in person, while enabling shareholders to vote and ask questions.

The quorum of the 2022 AGM was legitimately form by directors and other senior staff members who were shareholders. Shareholders were, however, able to view and listen to the 2022 AGM through a live webcast which could be accessed by going to the webcast link provided on any browser enabled device. The Bank also set up a dedicated telephone line for shareholders to ask questions directly at the 2022 AGM.

All resolutions at the 2022 AGM were decided on a poll. Shareholders were still able to vote by doing so in advance of the 2022 AGM by appointing the chairman of the AGM as their proxy to exercise their voting right in accordance with their instructions. Shareholders were also encouraged to express their views both before the 2022 AGM by submitting their questions to a designated email account and during said meeting through the webcast link provided and the dedicated telephone line. All the resolutions proposed at that meeting were approved by poll. Details of the poll results are available under the section "Investor Relations" of the Bank's website (www.hangseng.com). The next AGM will be held in the second quarter of 2023, the notice of which will be sent to shareholders at least 20 clear business days before the said meeting.

To facilitate shareholders' understanding of the current corporate information of the Bank, details of the substantial interests in share capital and the public float information of the Bank are set out in the "Report of the Directors"; and other important information for shareholders is also disclosed in the "Corporate information and Calendar" in this Annual Report.

Calling an Extraordinary General Meeting

Shareholder(s) holding not less than five percent of the total voting rights of all the members having a right to vote may request to call an Extraordinary General Meeting of the Bank.

The requisition (a) must state the general nature of the business to be dealt with at the meeting, (b) must be signed by the requisitionist(s), and (c) may either be deposited at the Bank's registered office at 83 Des Voeux Road Central, Hong Kong in hard copy form or sent by email to egmrequisition@hangseng.com. If the resolution is to be proposed as a special resolution, the requisition should include the text of the resolution and specify the intention to propose the resolution as a special resolution. The requisition may consist of several documents in like form, each signed by one or more requisitionist(s).

The requisition must also state (a) the name(s) of the requisitionist(s), (b) the contact details of the requisitionist(s), and (c) the number of ordinary shares of the Bank held by the requisitionist(s).

The Directors must proceed to convene an Extraordinary General Meeting within 21 days from the date of receipt of the requisition. Such meeting should be held on a date not more than 28 days after the date on which the notice convening the meeting is given.

If the Directors fail to convene the Extraordinary General Meeting as aforesaid, the requisitionist(s), or any of them representing more than one-half of the total voting rights of all of them, may themselves convene the meeting. Any meeting so convened shall not be held after the expiration of three months from the date of the deposit of the requisition.

A meeting so convened by the requisitionist(s) shall be convened in the same manner, as nearly as possible, as that in which meetings are to be convened by the Directors.

Any reasonable expenses incurred by the requisitionist(s) by reason of the failure of the Directors to convene a meeting shall be reimbursed to the requisitionist(s) by the Bank.

Putting Forward Proposals at General Meetings

Shareholders representing at least 2.5 percent of the total voting rights of all the members having a right to vote, or, at least 50 shareholders who have a relevant right to vote, may:

- put forward proposal at general meeting
- circulate to other shareholders written statement with respect to matter to be dealt with or other business to be dealt with at general meeting

For further details on shareholder qualifications, and the procedures and timeline, in connection with the above, shareholders are kindly requested to refer to Sections 580 and 615 of the Companies Ordinance (Cap 622, Laws of Hong Kong).

Further, a shareholder may propose a person other than a retiring Director of the Bank for election as a Director of the Bank at a general meeting. For such purpose, the shareholder must send to the Bank's registered address (for the attention of the Bank's Company Secretary) a written notice which identifies the candidate and includes a notice in writing by that candidate of his/her willingness to be so elected. Such notice must be sent within the seven-day period commencing on the day after the despatch of the notice of the meeting, or such other period as may be determined by the Directors from time to time, and ending no later than seven days prior to the date appointed for such meeting. Procedures for shareholders to propose candidates for election as Director of the Bank are also available on the website of the Bank (www.hangseng.com).

Putting Enquiries to the Board

Shareholders may send their enquiries requiring the Board's attention to the Bank's Company Secretary at the Bank's registered address. Questions about the procedures for convening or putting forward proposals at an AGM or Extraordinary General Meeting may also be put to the Company Secretary by the same means.

Shareholders Communication Policy

The Bank has established a Shareholders Communication Policy which sets out the Bank's processes to provide shareholders and the investment community with ready, equal and timely information on the Bank for them to make informed assessments of the Bank's strategy, operations and financial performance, and to engage actively with the Bank and exercise their rights as shareholders in an informed manner. The most recent review was undertaken and approved by the Board in November 2022 and the effectiveness of the Policy was confirmed considering multiple channels were in place and adopted to reflect the current best practice in communications with shareholders and the investment community. The said policy, which is subject to annual review, is available on the Bank's website (www.hangseng.com).

Dividend Policy

The Bank has formulated a Dividend Policy to set out the Bank's medium to long term dividend objective to maintain steady dividends in light of profitability, regulatory requirements, growth opportunities and the operating environment. Its roadmap is designed to generate increasing shareholders' value through strategic business growth. The Bank would balance solid yields with the longer-term reward of sustained share price appreciation. When declaring dividends, the Bank will, in general, take into consideration factors including regulatory requirements, financial results, level of distributable reserves, general business conditions and strategies, strategic business plan and capital plan, statutory and regulatory restrictions on dividend payment, and any other factors the Board may deem relevant. More detailed disclosure on the Bank's Dividend Policy is set out in the section "Risk" of the "Management Discussion and Analysis" in this Annual Report.

Material Related Party Transactions

Material Related Party Transactions and Contracts of Significance

The Bank's material related party transactions are set out in Note 50 to the 2022 Financial Statements. These transactions include those that the Bank has entered into with its immediate holding company and its subsidiaries as well as its fellow subsidiary companies in the ordinary course of its interbank activities, including the acceptance and placement of interbank deposits, corresponding banking transactions, off-balance sheet transactions, and the provision of other banking and financial services.

The Bank uses the information technology services of, and shares an automated teller machine network with, The Hongkong and Shanghai Banking Corporation Limited, its immediate holding company. The Bank also shares information technology and certain processing services with fellow subsidiaries. In 2022, the Bank's share of the costs included HK$1,722 million for system development, HK$830 million for data processing, and HK$1,118 million for administrative services.

The Bank maintains a staff retirement benefit scheme for which a fellow subsidiary company acts as trustee and the Bank's immediate holding company act as administrator. As part of its ordinary course of business with other financial institutions, the Bank also distributes retail investment funds for a fellow subsidiary with a fee income of HK$30 million and markets Mandatory Provident Fund for its immediate holding company during the year 2022 with a fee income of HK$135 million.

These transactions were entered into by the Bank in the ordinary and usual course of business on normal commercial terms, and in relation to those which constituted connected transactions under the Listing Rules, they also complied with applicable requirements under the Listing Rules. The Bank regards its usage of the information technology services of The Hongkong and Shanghai Banking Corporation Limited (amount of information technology services cost incurred for 2022: HK$505 million) as contracts of significance for 2022.

Continuing Connected Transactions

(a) On 21 June 2019, Hang Seng Insurance Company Limited ("HSIC"), a wholly-owned subsidiary of the Bank, entered into the following agreements, both of which have been renewed or amended on 21 June 2022:

(i) A management services agreement ("Previous Management Services Agreement") with HSBC Life (International) Limited ("INHK") for a term of three years expired on 21 June 2022, pursuant to which INHK, directly or through one or more of its affiliates, provided certain management services to HSIC.

Subsequent to 21 June 2019, the Previous Management Services Agreement was amended and restated to effect minor amendments to the scope of services provided by INHK with effect from 1 September 2019. INHK, on a quarterly basis, charged HSIC a fee for the provision of the services on a fully absorbed cost basis plus a mark-up of 6%. These charges, which were subject to an annual cap, were determined following negotiation on an arm's length basis and in accordance with the policy of the HSBC Group, which took into account the Organisation for Economic Co-operation and Development ("OECD") transfer pricing guidelines.

(ii) An investment management agreement ("Previous Investment Management Agreement") with HSBC Global Asset Management (Hong Kong) Limited ("AMHK") for a term of three years expired on 21 June 2022, pursuant to which AMHK acted as investment manager in respect of certain of HSIC's assets held from time to time. AMHK delegated to HSBC Alternative Investments Limited ("HAIL") the management of part of such assets by way of a bespoke portfolio in accordance with a specific management mandate ("Specific Management Mandate") entered into between HSIC, AMHK and HAIL on 21 June 2019. On 23 December 2020, certain minor amendments were made to the Specific Management Mandate to expand the investment scope of alternative credits and specify that AMHK shall assist HAIL by providing client servicing to HSIC on behalf of HAIL.

HSIC paid AMHK, on a quarterly basis, a fee of between 0.05% and 0.5% per annum of the mean value of the assets under management. Under the Specific Management Mandate, HSIC also paid HAIL a fee of between 0.35% and 0.5% per annum before the aforesaid amendments to the Specific Management Mandate; or a fee of between 0.22% and 0.35% per annum after the aforesaid amendments, both of the aggregate value of assets under management in a bespoke portfolio, together with a performance fee of 10% per annum payable in certain circumstances in respect of the amount by which the return of such portfolio exceeded a benchmark return of 8% (before the aforesaid amendments) or 5% (after the aforesaid amendments) annually. The above fees, which were subject to an annual cap, were determined on an arm's length basis.

(b) On 21 June 2019, HSIC entered into a fund monitoring agreement ("Fund Monitoring Agreement") with HAIL for a term of three years commencing from 22 June 2019. The Fund Monitoring Agreement sets out the terms upon which HAIL has agreed to provide services to HSIC in connection with the monitoring of the portfolios of certain funds into which HSIC has invested and monitoring their respective fund managers. HSIC paid HAIL an annual amount equivalent to 0.04% per annum of the value of funds invested by HSIC in the specified portfolio which were the subject of the monitoring services. The above fee, which was subject to an annual cap, was determined on an arm's length basis.

(c) On 21 June 2016, HSIC entered into a private equity investment management agreement ("PE Investment Management Agreement") with HAIL for a term of 11 years, pursuant to which HAIL acts as investment manager in respect of certain private equity fund investments made by HAIL on behalf of HSIC.

(i) Certain minor amendments had been made to the PE Investment Management Agreement on 4 May 2018, 10 May 2018, and on 21 June 2019, the PE Investment Management Agreement was amended and restated to remove the retainer fee and increase the management fee cap.

(ii) HSIC has agreed to pay HAIL between 0.35% and 0.75% per annum of the aggregate value of assets under management as an annual management fee on an aggregate basis, and in order to ensure full alignment of interests between the two parties, a performance fee of 15% carried interest if certain hurdle rates of return are achieved for HSIC in respect of the investments made in each year of the investment period under the PE Investment Management Agreement. The above fees, which are subject to certain fee caps, were determined on an arm's length basis.

(iii) Pursuant to Rule 14A.52 of the Listing Rules, the term of an agreement for a continuing connected transaction of a listed company must not exceed three years except in special circumstances. As the term of the PE Investment Management Agreement is 11 years, the Bank, in compliance with Rule 14A.52 of the Listing Rules, appointed an independent financial adviser to explain why the PE Investment Management Agreement requires a term that is longer than three years and to confirm that it is normal business practice for investment management agreements relating to private equity investments to be of such duration. The explanation and confirmation by the independent financial adviser were set out in the Bank's announcement on 21 June 2016.

As one or more of the applicable percentage ratios (as defined in Rule 14.07 of the Listing Rules) in respect of the annual caps for the Previous Management Services Agreement exceed 0.1% but were less than 5%, the Previous Management Services Agreement was therefore only subject to the reporting, announcement and annual review requirements under the Listing Rules.

As announced, one or more of the applicable percentage ratios (as defined in Rule 14.07 of the Listing Rules) in respect of the annual caps for the Previous Investment Management Agreement, the Specific Management Mandate and the Fund Monitoring Agreement and the fee caps for the PE Investment Management Agreement, on an aggregated basis, exceeded 0.1% but were less than 5%, these agreements were therefore only subject to the reporting, announcement and annual review requirements under the Listing Rules.

Details of the terms of the Previous Management Services Agreement, the Previous Investment Management Agreement, the Specific Management Mandate, the Fund Monitoring Agreement and the PE Investment Management Agreement, and the relevant annual caps and fee caps were announced by the Bank on 21 June 2019.

(d) On 21 June 2022, HSIC renewed or amended and entered into the following agreements:

(i) A new management services agreement ("New Management Services Agreement") with INHK for a term of three years, pursuant to which INHK, directly or through one or more of its affiliates, provides certain management services to HSIC.

INHK, on a quarterly basis, charges HSIC a fee for provision of the services on a fully absorbed cost basis plus a mark-up of 6%. These charges, which are subject to an annual cap, were determined following negotiation on an arm's length basis and in accordance with the policy of the HSBC Group, which took into account the OECD transfer pricing guidelines.

(ii) A new investment management agreement ("New Investment Management Agreement") with AMHK for a term of three years, pursuant to which AMHK acts as investment manager in respect of certain of HSIC's assets held from time to time.

HSIC has agreed to pay AMHK, on a quarterly basis, a fee of between 0.05% and 0.5% per annum of the mean value of the assets under management. The above fee, which is subject to an annual cap, was determined on an arm's length basis.

As one or more of the applicable percentage ratios (as defined in Rule 14.07 of the Listing Rules) in respect of the annual caps for the New Management Services Agreement exceed 0.1% but are less than 5%, the New Management Services Agreement is therefore only subject to the reporting, announcement and annual review requirements under the Listing Rules.

As one or more of the applicable percentage ratios (as defined in Rule 14.07 of the Listing Rules) in respect of the annual caps for the New Investment Management Agreement exceed 0.1% but are less than 5%, the New Investment Management Agreement is therefore only subject to the reporting, announcement and annual review requirements under the Listing Rules.

Details of the terms of the New Management Services Agreement and the New Investment Management Agreement, and the relevant annual caps were announced by the Bank on 21 June 2022.

INHK, AMHK and HAIL are all indirect wholly-owned subsidiaries of the HSBC Group, the ultimate controlling shareholder of the Bank, and therefore are connected persons of the Bank. Accordingly, all of the aforesaid agreements constitute continuing connected transactions of the Bank. The Bank has complied with the disclosure requirements in accordance with Chapter 14A of the Listing Rules.

For the year ended 31 December 2022, the respective amounts paid and payable under the Previous Management Services Agreement to 21 June 2022 and thereafter the New Management Services Agreement to 31 December 2022 were approximately HK$15 million and HK$17 million. Both amounts were within the respective caps set for the above two periods of HK$120 million and HK$97 million. The aggregate amount paid and payable under the Previous Investment Management Agreement and the Specific Management Mandate up to 21 June 2022, and the New Investment Management thereafter to 31 December 2022 were approximately HK$27 million and HK$21 million, both of which were within the respective caps for the above two periods of HK$77 million and HK$45 million. The amount paid and payable under the Fund Monitoring Agreement up to 21 June 2022 was approximately US$27,183 (equivalent to HK$213,379) which was within the cap set for the period with reference to the annual cap of US$75,000 (approximately HK$585,000). The management fee of approximately US$3,077,089 (equivalent to HK$24,067,651) was paid and payable under the PE Investment Management Agreement for the year ended 31 December 2022, which was within the annual cap on management fee of US$8,000,000 (approximately HK$62,400,000). No performance fee was payable under the PE Investment Management Agreement for 2022.

In respect of all the aforesaid agreements which constitute the Bank's continuing connected transactions, all the INEDs of the Bank have reviewed the said transactions and confirmed that the said transactions have been entered into:

(a) in the ordinary and usual course of business of the Bank and its subsidiaries;

(b) on normal commercial terms or better; and

(c) in accordance with the relevant agreements governing the same on terms that are fair and reasonable and in the interests of the shareholders of the Bank as a whole.

Further, the Bank engaged its external auditor to report on the continuing connected transactions of the Bank and its subsidiaries in accordance with Hong Kong Standard on Assurance Engagements 3000 (Revised) "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 (Revised) "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. The Directors confirmed that the external auditor has issued an unqualified letter containing their findings and conclusions in respect of the continuing connected transactions set out in the preceding paragraphs in accordance with Rule 14A.56 of the Listing Rules. A copy of the auditor's letter has been provided by the Bank to The Stock Exchange of Hong Kong Limited.

Connected Transaction

On 5 October 2022, HSIC, HSBC (Guernsey) GP PCC Limited ("HGGP") and HSBC Management (Guernsey) Limited ("HMGL") entered into a limited partnership agreement ("Limited Partnership Agreement") pursuant to which HSIC, as investor, and HGGP, as general partner, have established a limited partnership vehicle, namely, H9 LP Inc. ("H9 LP"), for the purpose of making private equity investments. Under the Limited Partnership Agreement, HMGL has been appointed as manager to manage the assets of H9 LP in accordance with the Limited Partnership Agreement, and may engage HAIL as exclusive investment advisor to provide HMGL with investment advisory services. HSIC is the sole investor of H9 LP.

HSIC has agreed to commit a total of US$1,440,000,000 (equivalent to HK$11,232,000,000) to H9 LP, with such amount to be invested in vintage 2022. HSIC's liability under the Limited Partnership Agreement is limited to the aggregate of its undrawn commitments.

Details of the terms of the Limited Partnership Agreement and the relevant capital contributions were announced by the Bank on 5 October 2022.

HGGP and HMGL, both being indirect wholly-owned subsidiaries of the HSBC Group, the ultimate controlling shareholder of the Bank, are connected persons of the Bank. The Limited Partnership Agreement is therefore a connected transaction of the Bank.

As one or more of the applicable percentage ratios (as defined in Rule 14.07 of the Listing Rules) in relation to the new investment mandate is more than 0.1% but less than 5%, the Limited Partnership Agreement is exempt from the independent shareholders' approval requirement, and is subject only to the reporting and announcement requirements in respect of connected transactions set out in Chapter 14A of the Listing Rules.

The Bank has complied with the disclosure requirements in accordance with Chapter 14A of the Listing Rules.

Culture

Business Principles and Values

The Bank has a set of clear business principles and corporate values to guide the Bank in the decisions it takes and how it operates. "Courageous Integrity" is the guiding principle for staff to speak up and to do the right thing with no compromises to the Bank's ethical standard and integrity. The Bank strives for an inclusive culture that enables employees to fulfil their potentials.

The Bank's refreshed purpose as an organisation is to open up a world of opportunity with an aim to achieve this by striving to become the preferred banking and financial services partner for customers in Hong Kong and the Greater Bay Area. On an operational level, the Bank's actions are guided by four redefined core values, namely, "We values difference, We succeed together, We take responsibility, and We get it done". The Bank expects all employees to reflect these values by seeking out different perspectives, collaborating across boundaries, holding ourselves accountable and taking the long view, and moving at pace and making things happen. Leaders and managers are expected to bring to life the corporate values in everyday work. Ongoing management effort is made to embed the corporate values and good conduct through (a) tone from the top; (b) strengthening people management capability to build desired culture; and (c) incentivising and showcasing desired behaviors.

Since 2019 a behavioral led culture change programme "RIGHT Together" was launched to embed culture actions, with five behavioral foci in line with its corporate values and business principles to enable the Bank to "Serving Customers RIGHT and Serving the RIGHT Customers" for sustainable business growth.

In addition to the above, the Bank continues to drive five Conduct Outcomes, (a) We understand our customers' needs, (b) We provide products and services that offer exchange of value, (c) We service customers' ongoing needs, and will put things right if we make a mistake, (d) We act with integrity in financial markets we operate in, and (e) We operate resiliently and securely to avoid harm to HSBC customers and markets, under the Purpose-led Conduct Approach Embedding Programme.

The first line-of-defence has the responsibility for ensuring we achieve good Conduct Outcomes. The second line-of-defence has the responsibility for understanding how Conduct applies to them and ensuring it is applied in the standards they set. Audit as the third lines-of-defence is responsible for assessing the effectiveness of the arrangement across all risk disciplines, operational arrangement and technologies.

The Bank's culture also aligns with its strategy and forms one of the strategic focuses in the Bank's strategy.

Anti-Corruption Policy and Whistleblowing Policy

The Bank has its anti-corruption policy which observes the HSBC Group's Global policy and supports local anti-corruption laws and regulations with periodic review in place to ensure its effectiveness and compliance with the prevailing regulatory requirements. The Bank also adopted the HSBC Group's whistleblowing channel called *"HSBC Confidential"* which offers a safe, simple and globally consistent ways to raise concerns across various channels including contact center, electronic form and email which are operating 7x24.

For more details of the Bank's Anti-Corruption Policy and Whistleblowing Policy, please refer to our ESG Report 2022 published on the Bank's website (www.hangseng.com).

Staff Code of Conduct

To ensure the Bank operates to the highest standards of ethical conduct and professional competence, all staff are required to strictly follow the Staff Code of Conduct. With reference to applicable regulatory guidelines and other industry best practices, the Code sets out the ethical standard and values that all staff will adhere to and covers various legal, regulatory and ethical issues. Topics including, but not limited to, conduct in obtaining/granting business and business facilitation, use of information, personal account dealings, conflicts of interest, expectations for personal relationship in the workplace, outside activities, diversity and inclusion, alcohol and drugs, and behaviour expectations at work related (including corporate and social) events are covered in the Code. The Code is reviewed on an annual basis and as when required to reflect the latest regulatory requirements and the Bank's internal policies.

The Bank uses various communication channels to periodically remind staff of the requirement to adhere to the rules and ethical standards set out in the Code. To ensure their understanding on the rules and regulations set out in the Code, an online curriculum for the Code was launched in 2022 and all staff are required to complete it.

Avoidance of Conflicts of Interest

The Bank has established policies and procedures to manage actual or potential conflicts of interest of its staff. Robust organisational structure has been designed to ensure adequate segregation of duties and avoid conflicts of interest. Staff working in sensitive or high-risk areas are required to adhere to job-specific as well as staff dealing rules and undergo training on the avoidance of conflicts of interest in carrying out their duties.

Human Resources

The human resources policies of the Bank are designed to attract high calibre talents at all levels of the Bank, develop and motivate them to fulfil their potential and excel in their careers. The Bank is committed to building awareness and encouraging an open and inclusive culture, ensuring all employees would have fair and equal access to opportunities.

Employee Statistics

As at 31 December 2022, the Bank's total headcount was 7,020 representing a decrease of 609 or -8%, compared with a year earlier. The total headcount comprised 3,003 executives (50% are male and 50% are female), 2,973 officers (38% are male and 62% are female) and 1,044 clerical and non-clerical staff (34% are male and 66% are female). The female representation of senior leaders (Global Career Band 3 or above) in Hang Seng Group (including operations in Hong Kong, China, and overseas representative offices) was targeted at 45.9% for 2022. As at 31 December 2022, we have achieved 46.3%.

In 2022, the Bank has achieved a gender balance (44%-69% female) at all four levels, including our Board, executive, senior management and workforce as follows:

- 69% of Board of Directors are female
- 60% of Executive Committee members
- 44% of senior leaders are female
- 58% of our employees in Hong Kong are female

In 2023, the Bank will continue to sustain its inclusive culture where everyone has the opportunity to grow and achieve their career objectives in the Bank, thereby improve and sustain the Bank's female representation at the senior level.

The female representation is driven by 3 factors, namely, hiring, promotion and attrition with the following ratios (as of the end of 2022):

- 47 % of the Bank's external senior hires are female
- 58 % of the Bank's promotion into senior leaders are female
- 41 % of the Bank's voluntary attrition of senior leaders are female

To build a diverse and inclusive workforce, all hiring managers are required to complete a learning programme "Hiring and Selection: Getting it Right" on hiring and selection as a pre-requisite. The programme prepares hiring managers with evidence-based interviewing skills and raises their awareness of unconscious bias in the selection of candidates.

Employee Remuneration

The Bank aims to attract, motivate and retain the best people. The Bank's reward strategy supports this objective through rewarding those who are committed to a long-term career with the Bank with demonstrated sustainable performance, strong alignment to corporate values and adherence to risk and compliance standards.

The Remuneration Committee oversees the Bank's overall remuneration strategy and ensures it is compliant with local laws, rules or regulations; is in line with the risk appetite, business strategy, culture and values, and long-term interests of the Bank; and is appropriate to attract, retain and motivate employees to support the success of the Bank. The fundamental principles, philosophies and processes are documented in the Bank's remuneration policy.

The Bank adopts a Total Compensation approach. In determining the total remuneration for employees, fixed and discretionary variable pay are considered and differentiated by performance and adherence to corporate values. The Bank will make reference to individual's responsibility, capability and risk profile of the job to ensure appropriate balance between the fixed pay and variable pay.

Fixed pay is determined by taking into account relevant level of the role, skills and experience required by the Business and composition of pay in the markets in which the Bank operates and in support of the Bank's people strategy. Salaries are reviewed in the context of business performance, individual potential and performance, market practice, internal relativities and regulatory requirements.

Bank-wide variable pay budgets are determined based on the Bank's business performance, people strategy, risk appetite statement and risk metrics including conduct risks. The variable pay budget is shaped by risk considerations and the Bank's performance is sustainable in the long-term. The ex-ante risk adjustment of remuneration within the Bank is achieved in the way that the Risk Committee of the Bank will advise the Board and/or the Remuneration Committee, as appropriate, on the alignment of risk appetite with performance objectives set in the context of variable incentive and on whether any adjustments for risk need to be applied when considering performance objectives and actual performance. In addition, the overall variable pay funding proposal is refined with reference to the advice of Chief Financial Officer and Chief Risk Officer in respect of the Bank's financial position and performance against its risk appetite profile.

Variable pay plans takes into account a combination of corporate and/or business results as well as the individual's performance. They reward financial quantitative measures and non-financial qualitative measures including adherence to corporate values, management of risks, service standards, ethical behaviour and responsible selling. To embed a values-led, high performance culture, the variable pay plans are designed to recognise and reward positive behaviours while discourage negative behaviours that put the Bank under unnecessary financial, regulatory or reputational risk with the application of consequence management, malus and clawback policies.

Variable pay consists of deferred and non-deferred components in the forms of cash and share award. The Bank adopts a progressive deferral mechanism with higher deferral rates and different forms of deferral by reference to (a) the employee's seniority, role, responsibilities and the potential risks that their activities may create for the Bank; and (b) the total amount of variable remuneration exceeding the prescribed thresholds. The deferred award has a vesting period of three to seven years and is subject to malus and clawback. In some instances, retention periods of up to one year may be implemented on vested share awards.

The principles of the remuneration policy are applicable to the Bank and its subsidiaries, subject to the local legislative requirements and market practices, and are proportionate to the scope and complexity of the local business.

Employee Engagement

The Bank aims to create a work environment that promotes employee engagement, champions diversity and a culture of inclusivity, and empowers our people to perform at their best by providing training and performance coaching, career development opportunities and support for employee well-being.

To enable a working environment that allows for a higher degree of flexibility to promote work-life balance and enhance resilience, a hybrid working model has been implemented with support mechanisms in place to empower employees to connect and collaborate to get things done.

The Bank takes seriously its commitment to promote physical and mental wellness among its employees and has provided facilities and activities to support care for its people, including cooking, yoga and mindfulness classes, online workshops for carers, and sports amenities, among other initiatives. The Bank's staff volunteer team also provides a platform to enhance employee engagement and establish a culture of care for the community. In 2022, over 20 activities were organized for its staff volunteers, covering themes like future talent development, caring for the environment, caring for the underprivileged kids and elderly, as well as manning hotlines to provide support for those in need amidst the pandemic.

Information on the Bank's direction and strategies, policy updates, and employment-related matters is conveyed to employees through business briefings, town hall meetings, intranet posts, morning broadcasts, circulars, e-mails, and the Bank's social communication mobile app for staff, which aims to engage employees in dialogue with senior management and encourages collaboration among colleagues across all levels.

The Bank also encourages employees to provide suggestions, comments and feedback through employee surveys, exchange sessions, and thematic focus groups. Conducted annually, the employee survey seeks to gain insights from employees' perspectives on the Bank's progress against its strategy, what they think about the Bank's culture and leadership, and how they think the Bank could improve the working and workplace experience. In 2022, with an 83% response rate, 'Change Leadership' and 'Trust' recorded a favourable score of 77% and 78% respectively, and they remained two of the highest scoring indices among eight, the others being Employee Engagement, Employee Focus, Strategy, Speak-up, Career, and Inclusion. Additionally, the Bank proactively pays regard to staff sentiment and behaviour with a view to enhancing communication and staff engagement plans as well as developing suitable training programmes to reinforce positive corporate culture and values.

Growth and Development

The Bank is committed to the development of competence and ethical behaviour of staff members with due regard to the principles set out in HKMA's SPM CG-6 on "Competence and Ethical Behaviour". The Bank has established policies and procedures for monitoring, developing and maintaining the competence level and ethical behaviour of staff members. These include clear guidance as set out in various policy manuals, robust performance management system, training and development solutions provided on a regular and need basis.

The Bank offers a full spectrum of learning resources on wide-ranging banking, technical and management subjects, e-Learning, Classroom Training (both virtual and physical), mobile learning, and VR training etc, to support staff learning and development. To start with, all new joiners are provided with a comprehensive induction programme of the Bank's history, vision, culture, values, risk management and corporate governance. The Bank also offers a series of anti-money laundering, conduct, anti-bribery and corruption training programmes to strengthen the financial crime risk management culture. A wider range of on-the-job role based specific training programmes are also available for each critical role, in the areas of relationship management, sales, products, operations, compliance, credit and risk, etc. On average, the Bank's staff members in Hong Kong undertook 3.2 days of learning and development programme (excluding those arranged by individual department) in 2022. In addition, the Bank offers education subsidy to support staff to pursue professional or academic qualifications and/ or acquire job-related knowledge.

The Bank invests in the development of its leadership pipeline and supports the personal growth of staff by providing a broad range of leadership and management development solutions. To ensure sustainability, the Bank has strategies, measures and analytics to plan and manage succession to leadership roles, and to prepare high-potential talents for their succession to critical roles. Businesses/ functions supported by the Human Resources take actions to accelerate the development of successors and high potential talents through feedback and coaching, planned job moves for development including cross fertilisation between businesses/functions, and implementing individual development plans.

Recruitment and Retention

The Bank pursues external recruitment of fresh graduates, experienced professionals and functional specialists to support planning and execution of business strategy. New hires are offered well-structured on-boarding and development programmes. At the same time, the Bank promotes opportunities for internal mobility and career development for internal staff. The Bank sponsors internships and student placements to build pipeline for future hires.

The Bank sponsors intake through the Fintech Internship programme co-launched by HKMA and the Applied Science and Technology Research Institute and launched Youth Placement. Management Trainee programmes and Functional Trainee Programme in different lines of business and functional areas are in place to develop professional competence and to build future talents for key roles. People managers focus on staff engagement and retention through their roles in everyday performance management and development coaching of their staff, offer of career advancement opportunities and market competitive remuneration.

Environmental, Social and Governance

ESG Strategy

The prolonged pandemic, international geopolitical environment and ongoing effects of climate change reflect the need for every organisation to take a long-term view of its operations and develop robust strategies that prioritise resilience, adaptability and transparency in a fast-changing business environment. We are proactively addressing Environmental, Social and Governance ('ESG') issues on three major fronts: to enhance the performance of our own operations, through the provision of services that help our customers transition to the low-carbon economy, and in responding to the needs of our community.

Since 2021, we have focused on the following six ESG pillars in pursuit of our aspiration to be a leading entity to drive ESG in the banking industry:

- Environmental targets
- Sustainable finance
- Youth
- Climate risk management
- Advocacy and awareness
- Robust disclosure

With the active participation and support of colleagues across the Bank, we made good progress with our various ESG initiatives in 2022. We enhanced our carbon reduction targets and saw a substantial increase in the volume of our sustainable financing business. For the second year in a row, we title-sponsored the Chamber of Hong Kong Listed Companies' 'ESG and Green Finance Opportunities Forum', which connects key stakeholders, including investors, corporates, NGOs and regulators, and provides them with a valuable opportunity to discuss ESG best practices and the potential of green finance. We also published six episodes of ESG comics to help raise staff's and public awareness of different ESG topics in an engaging and lively manner.

Environment

New Climate-related Commitments

We were the first local bank in Hong Kong to sign up as a supporter of the Task Force on Climate-related Financial Disclosure ('TCFD') back in 2020. We made reference to TCFD recommendations for the first time when compiling the climate-related information published in our Environmental, Social and Governance Report 2021. In 2022, we further stepped up our climate change-related commitments by becoming the first local bank in Hong Kong to sign up to the Science Based Targets initiative ('SBTi') to set carbon emission reduction targets in line with latest climate science. We aim to reduce carbon emissions from our own operations to net zero by 2030. We are also contributing to the HSBC Group's ambitions of becoming net zero in its supply chain by 2030 and aligning the financed emissions in its portfolio of customers to net zero by 2050.

Conserving Environment Through Our Services

With the aims of reducing our environment footprint and enabling our customers to make greener lifestyle choices, we launched a 'Green Receipt' (transaction e-Advice) service at all our branches and Business Banking Centres in August 2022. After carrying out an in-person transaction, customers can choose to receive their transaction receipt digitally in real time through our HARO WhatsApp Virtual Assistant. This service provides a more convenient and eco-friendly way for customers to store, manage and share their transaction records, as well as helping us to reduce our use of paper.

We began transitioning from using PVC to rPVC for newly issued credit cards and ATM cards in April 2022 and July 2022 respectively. This switch has reduced our carbon emissions in procurement and operations, as well as those of our suppliers in the production of Hang Seng credit cards and ATM cards. This initiative also contributes to the 'circular economy' by using recycled material and reducing the environmental impact of disposing of our credit cards and ATM cards.

Sustainable Finance

In addition to setting targets for our operational ESG performance, we also continued to integrate ESG elements into our products and services. In 2022, we arranged the first green trade facility for a customer in the paper and printing industry in Hong Kong to support the expansion of its green supply chain network and to encourage over 20 of its suppliers to collaborate more closely on carbon reduction, sustainability and other environmental protection activities, while concurrently supporting the working capital flexibility of the customer and its suppliers. We also rolled out green mortgage and electric vehicle loans and provided green shopping offers to help our personal banking customers to pursue more environmentally sustainable lifestyles. Our wholly owned subsidiary, Hang Seng Indexes Company Limited, launched the Hang Seng Climate Change 1.5°C Target Index and HSCEI ESG Enhanced Index to provide benchmarks for investors to integrate climate and ESG considerations into their portfolios.

Community Investment

We advocate for actions that will have a sustainable and positive impact in our community. Our community investment strategy is based around four pillars: Future Skills, Promoting Sustainable Finance and Financial Literacy, Addressing Climate Change and Care for the Community.

'Addressing Climate Change' has become a key focus since 2020 to enhance our efforts to help tackle the global climate change challenge and align our ESG aspirations. In 2021, we rolled out the Hang Seng Low Carbon Future: SolarCare Programme to support renewable energy development. The first solar power system under the Programme was installed at Breakthrough Youth Village, a local NGO site, in 2022. The electricity generated from the solar panels will be fed into Hong Kong's energy grid under the Hong Kong Government's Feed-in Tariff Scheme. The resulting financial rebates from the Scheme will be used to fund youth climate education activities, with an estimated reach of 5,400 young people each year.

Riding on the success of Hang Seng Low Carbon Future: SolarCare Programme, we launched the Hang Seng Low Carbon Future – Low Carbon Schools Programme together with CarbonCare InnoLab ('CCIL') in 2022 to help the participating schools reduce their carbon emissions through the production and use of renewable energy. We have made donation to CCIL to install solar panels at two schools in 2022. The two schools will earn rebates from the Hong Kong Government's Feed-in-Tariff Scheme, which will be used to fund climate awareness and education initiatives for the two schools' teachers, students and family members.

In addition, we have funded a one-year carbon sequestration research project of The Hong Kong Polytechnic University. The project, which commenced in the fourth quarter of 2022, is evaluating the potential effectiveness of oyster farming as a nature-based solution for carbon sequestration in Hong Kong.

We also closely monitor the various acute needs of society and allocate appropriate resources to community investment initiatives. In response to the far-reaching impact of Hong Kong's fifth wave of COVID in February 2022, we pledged HK$10 million in community support, which included donating 154,000 rapid antigen tests, 25,000 caring packs with disinfectant products, and helping to set up outreach programmes to assist people in need in our city. We supported the Hong Kong Family Welfare Society ('HKFWS') to establish an Emotional Well-being and General COVID Support Hotline. The hotline provided callers with psychological support, COVID-related information and referral services. During the 3-month hotline service, it had managed near 5,500 calls, supported by over 100 social workers and volunteers, including our enthusiastic staff. In addition, we provided community support by calling isolated senior citizens in cooperation with the Chinese YMCA of Hong Kong.

Details of our other community investment initiatives are disclosed in the ESG section of our website.

External Recognition

Our actions to drive ESG development have been recognised by external stakeholders. We ranked first in Hong Kong for gender equality in the Gender Equality in Asia-Pacific Special Report 2022 published by Equileap, an international specialised data provider focusing on gender metrics. In the same Report, we are the only bank in the Asia Pacific region to have achieved gender balance at all four company levels: Board, executives, senior management and workforce.

Closer at home, we received an AA+ rating in Hang Seng Corporate Sustainability Index Series 2022/23 and have been a constituent in three indexes of the index series for 12 consecutive years. In 2022/23, we ranked first for overall ESG performance and attained the highest score in four out of seven core areas in the 'Financials' industry. The Hang Seng Corporate Sustainability Index Series recognises listed companies in Hong Kong and mainland China with excellent ESG performance.

We also performed strongly in the Business Sustainability Indices organised by The Chinese University of Hong Kong Business School's Centre for Business Sustainability. We ranked fifth in both the Hong Kong Business Sustainability Index ('HKBSI') and The Greater Bay Area Business Sustainability Index ('GBABSI') and achieved a seventh-place ranking in the Greater China Region Business Sustainability Index ('GCBSI'). The HKBSI assesses the sustainability performance of the 58 constituents of the Hang Seng Index, while the GBABSI assesses the sustainability performance of Hong Kong-listed companies operating in the Guangdong-Hong Kong-Macao Greater Bay Area that are eligible for southbound trading under the Stock Connect Scheme.

Our ESG disclosure has also received external recognition. Our Environmental, Social and Governance Report 2021 won a 'Best GRI Report Commendation' in the Hong Kong ESG Reporting Awards 2022. The Awards recognise organisations that adopt GRI Standards for ESG reporting, excel in complying with GRI reporting principles and requirements, and exemplify best practices in sustainability governance, materiality assessment and stakeholder engagement.

For more details of our ESG disclosures in 2022, please refer to our ESG Report 2022 published on the Bank's website (www.hangseng.com).

Health and Safety

The Bank commits to ensure a best in class health and safety business environment. To achieve this, the Bank sustains its accredited management system ISO 45001:2018 Occupational Health and Safety Management System ("OHSMS") in 2022, via prescribed surveillance visit by independent external certification body, with an aim to minimise the exposure of health and safety associated risk to all stakeholders including staff, customers and contractors with its business activities within the Bank's premises.

The Bank's proactive strategies are aimed at enhancing the health and safety, wellbeing of the Bank all stakeholders to achieve desired outcomes. The Bank commits to:

- providing and maintaining a safety-first workplace culture where the Bank takes care of each other and provides a best in class 'activity-base working' environment where safety is prioritised;
- reviewing the effectiveness of health and safety management system continuously by appointed certification body at planned interval;
- taking all reasonably practicable measures to eliminate or minimise risks to the physical and mental health, safety and wellbeing of the Bank staff and others via comprehensive risk assessment;
- providing sufficient information, instruction, supervision and training for work process;
- fostering a collaborative and cooperative relationship with the Bank staff and other stakeholders through effective consultation regarding health, safety and wellbeing activities at work;
- encouraging effective early intervention practices to better identify risk and minimise the impact on the physical and mental health of the Bank staff;
- taking care of vulnerable employee via sound controls in place; and
- marketing best practice in the industry for continuous improvement.

Each of the Bank staff contributes to building and maintaining a physical and mentally healthy work environment by caring for one another and always putting safety first. Each of the Bank staff also plays an important role in engaging in meaningful, respectful and open consultation about health and safety matters to achieve the Bank's strategic outcomes.

The Bank acknowledges its staff shared duties under the Bank's Health & Safety Policies, which are committed to consulting, cooperating and coordinating health and safety activities to achieve positive safety outcomes for the Bank staff.

It is also fundamental that all employees recognise and accept that they have a responsibility to work safely, to maintain a safe workplace and never walk by unsafe acts and conditions. The Bank staff are also required to exercise general duties as Employee as well as to observe all health and safety policies, guidance and practices established by the Bank. The Bank believes that all accidents and illnesses can and should be prevented through continuous commitment, communication and acts of safety of the Bank staff, in addition to living up the strong safety culture within the Bank.

The Bank develops and continuously review work arrangement guiding principles and procedures for COVID-19, which sets out the actions to be taken by various units in response to the occurrence of different scenarios. In addition, the Bank keeps an adequate stock of hygiene consumables, such as cleaning products, face masks etc, to protect its staff at all times. The Bank staff are also well trained to raise the overall safety risk awareness through the Bank-wide intranet of the importance of personal hygiene and health, and the contingency measures, in order to enable the Bank services to the community during an outbreak of a COVID-19.

The Global Safety Week 2022 spreads the importance of safety through this year's theme - Every incident has an impact. With everyone's support, we can promote S.A.F.E.R. behaviours and reduce the number of incidents.

Other Information

Organisational Structure

Under the Bank's current organisational structure, the Bank's businesses and functions are set out as follows:

Businesses	Functions	
Wealth and Personal Banking	Audit	Financial Control
Commercial Banking	Communications	Human Resources
Global Banking	Compliance	Legal
Global Markets	Corporate Governance & Secretariat	Marketing
	Corporate Sustainability	Risk
	Digital Business Services	Strategic Planning and Corporate Development

BIOGRAPHICAL DETAILS OF DIRECTORS AND SENIOR MANAGEMENT

Board of Directors

Irene LEE Yun Lien INDEPENDENT NON-EXECUTIVE CHAIRMAN AGED 69

Joined the Board since May 2014

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited
- Chairman of Nomination Committee;
  Member of Audit Committee;
  Member of Risk Committee;
  Member of Remuneration Committee

Other major appointments

^ Alibaba Group Holding Limited (Note 1)
- Independent Director; Chairwoman of Nominating and Corporate Governance Committee

Hong Kong Monetary Authority
- Member of The Exchange Fund Advisory Committee

^ Hysan Development Company Limited
- Executive Chairman; Chairman of Nomination Committee

The Hongkong and Shanghai Banking Corporation Limited
- Independent Non-executive Director; Chairman of Remuneration Committee; Member of Audit Committee; Member of Risk Committee

30% Club HK – Chairman

Past major appointments

^ HSBC Holdings plc
- Independent Non-executive Director (2015 – 2022)
  Member of Chairman's Committee; Member of Nomination & Corporate Governance Committee (2018 – 2022)
  Member of Group Remuneration Committee (2018 – 2021)

^ Cathay Pacific Airways Limited
- Independent Non-executive Director (2010 – 2019)
  Chairman of Audit Committee (2015 – 2019)
  Chairman of Remuneration Committee (2012 – 2019)

^ CLP Holdings Limited
- Independent Non-executive Director; Member of Audit Committee; Member of Finance and General Committee (2012 – 2018)
  Member of Sustainability Committee (2014 – 2018)

^ Noble Group Limited
- Independent Non-executive Director; Member of Audit Committee; Member of Investment and Capital Markets Committee (2012 – 2017)
  Member of Nominating Committee (2013 – 2017)
  Member of Risk Committee (2014 – 2017)

JP Morgan Australia
- Member of Advisory Council (2005 – 2013)

^ QBE Insurance Group Limited
- Non-executive Director (2002 – 2013)

ING Bank (Australia) Limited
- Non-executive Director (2005 – 2011)

Australian Government Takeovers Panel
- Member (2001 – 2010)

^ Commonwealth Bank of Australia
- Head of Corporate Finance (1993 – 1998)

Citicorp Investment Bank Limited in New York, London and Sydney
- Executive Director (1977 – 1987)

Qualifications

Degree of Doctor of Social Science, honoris causa
- The Chinese University of Hong Kong

Bachelor of Arts Degree – Smith College, USA
Barrister-at-Law in England and Wales
Member – The Honourable Society of Gray's Inn, UK

Diana Ferreira CESAR JP EXECUTIVE DIRECTOR AND CHIEF EXECUTIVE AGED 54

Joined the Board since September 2021

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited
– Chairman of Executive Committee; Member of Nomination Committee
Hang Seng Bank (China) Limited
– Chairman and Non-executive Director; Member of Nomination Committee
Hang Seng Indexes Company Limited
– Chairman of Hang Seng Index Advisory Committee
Hang Seng Insurance Company Limited
– Chairman and Non-executive Director

Other major appointments

Justice of the Peace
Financial Services Development Council
– Member of Board of Directors; Convenor of Human Capital Committee (Note 1)
Hang Seng School of Commerce
– Chairman of the Board of Directors
Ho Leung Ho Lee Foundation
– Member of Board of Trustees
Hong Kong Monetary Authority
– Member of Financial Infrastructure and Market Development Subcommittee
^ HSBC Holdings plc – General Manager
The Community Chest of Hong Kong
– Board Member; Campaign Committee Co-Chairman; Member of Executive Committee
The Hang Seng University of Hong Kong
– Chairman of the Board of Governors
The Hong Kong Institute of Bankers – Vice President
Treasury Markets Association – Council Member
University Grants Committee – Member

Past major appointments

The Hongkong and Shanghai Banking Corporation Limited
– Chief Executive Officer, Hong Kong; Member of Executive Committee; Manager under s.72B of Banking Ordinance (2015 – 2021)
Head of Retail Banking and Wealth Management, Hong Kong (2011 – 2015)
Head of Marketing and Customer Propositions, Retail Banking and Wealth Management, Asia-Pacific (2009 – 2011)
The Hong Kong Association of Banks
– Chairman representing The Hongkong and Shanghai Banking Corporation Limited (2018, 2021)
Hong Kong Trade Development Council
– Council Member (2018, 2021)
EPS Company (Hong Kong) Limited
– Chairman of the Board (2011 – 2016)
HSBC Broking Services (Asia) Limited – Director (2011 – 2016)
HSBC Insurance (Asia) Limited – Director (2011 – 2016)
HSBC Life (International) Limited – Director (2011 – 2016)
Hubei Suizhou Cengdu HSBC Rural Bank Company Limited
– Director (2014 – 2015)

Qualifications

Bachelor of Arts in Commerce and Social Sciences
– University of Toronto
Honorary Certified Banker
– The Hong Kong Institute of Bankers

^ The securities of these companies are listed on a securities market in Hong Kong or overseas.

Cordelia CHUNG INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 63

Joined the Board since February 2022

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited – Member of Remuneration Committee

Other major appointments

Arup Group Limited
– Non-executive Director; Member of Assurance Committee (Note 1); Member of Leadership Appointments Committee (Note 1); Member of Risk Committee
City University of Hong Kong – Member of the Court (Note 1)
Hong Kong Science and Technology Parks Corporation
– Non-executive Director; Chairman of Investment Committee; Vice Chairman of Business Development and Admission Committee; Member of Projects and Facilities Committee; Member of Senior Staff Administration Committee; Member of Re-industrialisation Advisory Committee
Human Resources Planning Commission of HKSAR Government
– Member
Maryknoll Convent School Foundation Limited – Chairman
Raymond T. Y. Chan, Victoria Chan & Co. – Consultant
Research Grants Council of HKSAR Government – Member

Past major appointments

Grosvenor Asia Pacific Limited
– Non-executive Director (2020 – 2022) (Note 1)
Arup Group Limited
– Member of Nomination Committee (2020 – 2022) (Note 1)
Dalian Committee of the Chinese People's Political Consultative Conference
– Member (2008 – 2021)
Office of the Privacy Commissioner for Personal Data, Hong Kong
– Member of Personal Data (Privacy) Advisory Committee (2015 – 2021)
Singapore University of Technology and Design
– Trustee of the Board; Chairman of Promotion and Development Committee; Member of Audit and Risk Committee (2012 – 2021)
^ LIXIL Corporation
– Managing Director, Corporate Strategy (2015 – 2019)
IBM China/ Hong Kong Limited
– Various senior positions including Regional General Manager of IBM ASEAN; General Manager of IBM Hong Kong and Macau; Member of Global Strategy Committee (1991 – 2015)

Qualifications

Bachelor of Laws (Hons) – The University of Hong Kong

Kathleen GAN Chieh Huey NON-EXECUTIVE DIRECTOR AGED 48

Joined the Board since May 2019

Other major appointments

^ HSBC Holdings plc – General Manager; Head of Finance
HSBC Insurance (Singapore) Pte. Limited (Note 1)
– Non-executive Director; Chairman of Risk Committee; Member of Audit Committee
HSBC Life (Singapore) Pte. Ltd. (formerly known as AXA Insurance Pte. Ltd.)
– Non-executive Director; Chairman of Risk Committee; Member of Audit Committee

Past major appointments

HSBC Bank (China) Company Limited – Supervisor (2017 – 2022)
HSBC Global Services Limited – Director (2019 – 2022)
HSBC Asia Holdings Limited – Director (2018 – 2020)
The Hongkong and Shanghai Banking Corporation Limited
– Alternate Chief Executive (2016 – 2020)
Chief Financial Officer, Asia Pacific (2015 – 2019)
Global Chief Financial Officer, Global Commercial Banking (2010 – 2015)
Global Chief Risk Officer, Global Commercial Banking (2011 – 2014)
HSBC Asia Pacific Holdings (UK) Limited
– Director (2015 – 2019)
HSBC Insurance (Asia) Limited – Director (2015 – 2019)
HSBC Insurance (Asia-Pacific) Holdings Limited
– Director (2016 – 2019)
HSBC Life (International) Limited – Director (2015 – 2019)
HSBC Securities Investments (Asia) Limited
– Director (2015 – 2019)
HSBC North America Holdings Inc
– Executive Vice President, Chief Operating Officer – North America Finance (2008 – 2010)

Qualifications

Bachelor's Degree (Honors) in Business
– Nanyang Technological University, Singapore
Henry Crown Fellow – The Aspen Institute, USA

Clement KWOK King Man INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 63

Joined the Board since May 2021

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited – Chairman of Audit Committee

Other major appointments

Faculty of Business and Economics of The University of Hong Kong
– Member of International Advisory Council
^ The Hongkong and Shanghai Hotels, Limited
– Managing Director and Chief Executive Officer
World Travel & Tourism Council – Council Member

Past major appointments

Financial Reporting Council – Honorary Adviser (2017 – 2021)
^ Orient Overseas (International) Limited
– Independent Non-executive Director (2015 – 2018)
^ Swire Pacific Limited
– Independent Non-executive Director (2002 – 2015)
Harbourfront Commission
– Non-official member (Individuals) (2010 – 2013)
Securities and Futures Appeals Tribunal
– Member (2003 – 2009)
Securities and Futures Commission
– Member of Takeovers and Mergers Panel (2003 – 2009)
International Accounting Standards Board
– Member of Interpretations Committee (2002 – 2007)
^ MTR Corporation Limited – Finance Director (1996 – 2002)
Hang Seng Indexes Company Limited
– Member of Hang Seng Index Advisory Committee (1997 – 2000)
The Stock Exchange of Hong Kong Limited
– Member of Listing Committee (1994 – 1996)
Schroders Asia
– Director and Head of Corporate Finance (1986 – 1996)
Barclays de Zoete Wedd Limited, United Kingdom
– Manager, Corporate Finance Division (1984 – 1986)
PricewaterhouseCoopers, United Kingdom
– Chartered Accountant (1980 – 1984)

Qualifications

Fellow – The Hong Kong Management Association
Member – Institute of Chartered Accountants in England and Wales
Member – Hong Kong Institute of Certified Public Accountants
Bachelor of Science in Economics
– The London School of Economics, UK

Major awards

Chevalier de l'Ordre National de la Légion d'Honneur (2015)

Patricia LAM Sze Wan INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 56

Joined the Board since July 2022

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited – Member of Nomination Committee

Other major appointments

Hang Seng School of Commerce – Director
^ MGM China Holdings Limited
– Independent Non-executive Director; Chairperson of Remuneration Committee; Member of Nomination and Corporate Governance Committee
The Hang Seng University of Hong Kong – Governor

Past major appointments

Sotheby's Inc.
– Senior International Chairman (March 2022 – January 2023) (Note 1)
Sotheby's Hong Kong Limited
– Chairman of Sotheby's Asia (2004 – 2022) (Note 1)
Chairman of Sotheby's Diamonds (2005 – 2022) (Note 1)
Various positions including Head of Private Client Services Department (1991 – 2005)

Qualifications

Post Graduate Diploma in Asian Arts
– Sotheby's School of Oriental and African Studies, The University of London, UK
Bachelor's Degree in Monetary Economics
– The London School of Economics, UK

^ The securities of these companies are listed on a securities market in Hong Kong or overseas.

David LIAO Yi Chien NON-EXECUTIVE DIRECTOR AGED 50

Joined the Board since September 2021

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited – Member of Nomination Committee

Other major appointments

^ Bank of Communications Co., Ltd.
– Non-executive Director; Member of Personnel and Remuneration Committee
Hong Kong General Chamber of Commerce
– Member of General Committee (Note 1)
Hong Kong Monetary Authority
– Member of The Exchange Fund Advisory Committee
^ HSBC Holdings plc
– Group Executive; Member of Group Executive Committee
The Hongkong and Shanghai Banking Corporation Limited
– Executive Director; Co-CEO; Co-Chair of Executive Committee; Member of Asset, Liability and Capital Management Committee; Member of Chairman's Committee; Member of Risk Management Meeting

Past major appointments

HSBC Global Asset Management Limited
– Director (2021 – 2022)
HSBC Jintrust Fund Management Company Limited
– Supervisor (2017 – 2022)
The Hongkong and Shanghai Banking Corporation Limited
– Alternate Chief Executive (2020 – 2021)
HSBC Bank (China) Company Limited
– Director; Chief Executive Officer; Member of Nomination Committee; Chairman of Executive Committee (2015 – 2020)
HSBC Bank (Taiwan) Limited – Advisor (2015 – 2018)
Hubei Suizhou Cengdu HSBC Rural Bank Company Limited
– Chairman (2015 – 2016)

Qualifications

Bachelor's Degree (Honours) in Arts – The University of London, UK

LIN Huey Ru INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 47

Joined the Board since July 2022

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited – Member of Risk Committee (Note 1)

Other major appointments

GGV Capital Pte. Ltd. – Venture Partner
Monetary Authority of Singapore
– Member of International Technology Advisory Panel
Nium Pte. Ltd. – Independent Non-executive Director (Note 1)
PayU Payments Private Limited, the Payments and Fintech Division of ^Prosus
– Member of FinTech Advisory Board
Terraformation Inc. – Special Project Advisor

Past major appointments

Grabtaxi Holdings Private Limited, a subsidiary of ^Grab Holdings Limited
– Advisor to Senior Management (2021 – 2022) (Note 1)
Flexport, Inc. – President, Flexport Asia Ltd. (2018 – 2020)
^ Affirm, Inc. – Chief Operating Officer (2012 – 2018)
Children's Council of San Francisco
– Member of Board of Directors (2016 – 2018)
^ PayPal Holdings, Inc.
– Various positions including China Site General Manager, Asia Pacific Operations (2001 – 2012)

Qualifications

Masters in Administration, Policy Analysis and Evaluation
– Stanford University
Bachelors in Biological Science and Psychology
– Carnegie Mellon University

Kenneth NG Sing Yip INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 72

Joined the Board since March 2014

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited
– Chairman of Risk Committee;
Member of Nomination Committee

Other major appointments

Hong Kong General Chamber of Commerce
– Vice Chairman of Legal Committee
HSBC Bank Australia Limited
– Independent Non-executive Director; Member of Audit Committee; Member of Nomination Committee
HSBC Bank (Vietnam) Ltd.
– Chairman of Board of Supervision
^ Ping An Insurance (Group) Company of China, Ltd.
– Independent Non-executive Director
The University of Hong Kong
– Member of Asian Institute of International Financial Law Advisory Board of the Faculty of Law

Past major appointments

^ Hang Seng Bank Limited
– Non-executive Director (2014 – 2022)
HSBC Bank (China) Company Limited
– Non-executive Director (2011 – 2018)
Competition Tribunal Users' Committee of HKSAR Government
– Member (2014 – 2017)
Standing Committee on Company Law Reform
– Member (2011 – 2017)
The Law Society of Hong Kong – Council Member (2002 – 2016)
The Hongkong and Shanghai Banking Corporation Limited
– General Counsel, Asia Pacific (1998 – 2016)
Deputy Head of Legal and Compliance Department (1993 – 1998)
Assistant Group Legal Adviser (1987 – 1993)
Board of Review of Inland Revenue Ordinance of HKSAR Government
– Member (2008 – 2014)
^ Ping An Insurance (Group) Company of China, Ltd.
– Non-executive Director (2006 – 2013)

Qualifications

Bachelor's Degree and Master's Degree in Laws (L.L.B. and L.L.M.)
– The University of London, UK
Bachelor's Degree in Laws (L.L.B.) – Beijing University, PRC

SAW Say Pin EXECUTIVE DIRECTOR AND CHIEF FINANCIAL OFFICER AGED 55

Joined the Board since November 2022

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited – Member of Executive Committee
Hang Seng Bank (China) Limited (Note 1)
– Non-executive Director;
Chairman of Risk and Consumer Rights/Interests Protection Committee;
Member of Audit Committee;
Member of Remuneration Committee
Hang Seng Insurance Company Limited – Director
Hang Seng Investment Management Limited – Chairman
Hang Seng Investment Services Limited – Director
Hang Seng Real Estate Management Limited – Director
Hang Seng Securities Limited – Director
Imenson Limited – Director

Other major appointments

Hang Seng School of Commerce – Director (Note 1)
HSBC Asia Holdings Limited – Director
The Hang Seng University of Hong Kong – Governor (Note 1)

Past major appointments

HSBC Bank (China) Company Limited
– Chief Financial Officer (2019 – 2022)
Hubei Suizhou Cengdu HSBC Rural Bank Company Limited
– Supervisor (2020 – 2022)
HSBC Bank Malaysia Berhad
– Various positions including Chief Financial Officer; Chief Accounting Officer; Senior Finance Manager; Head of Treasury Services; Head of Management Information; Financial Accountant (1995 – 2019)
HSBC Electronic Data Processing (Malaysia) Sdn Bhd
– Non-executive Director (2015 – 2019)
HSBC Software Development (Malaysia) Sdn Bhd
– Non-executive Director (2015 – 2019)
HSBC Amanah Malaysia Berhad
– Chief Financial Officer (Double-hat) (2011 – 2015)

Qualifications

Chartered Banker – Asian Institute of Chartered Banker
Fellow – CPA Australia
Master of Finance
– Royal Melbourne Institute of Technology, Australia

^ The securities of these companies are listed on a securities market in Hong Kong or overseas.

WANG Xiao Bin INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 55

Joined the Board since February 2022

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited – Member of Audit Committee

Other major appointments

^ Worley Limited – Independent Non-executive Director

Past major appointments

^ China Resources Power Holdings Company Limited
– Executive Director (2006 – 2023) (Note 1)
Senior Vice President (2020 – 2023) (Note 1)
Company Secretary (2003 – 2023) (Note 1)
Chief Financial Officer (2003 – 2020)
^ Angang Steel Company Limited
– Independent Non-executive Director (2005 – 2009)
ING Bank N.V.
– Various positions including director of corporate finance in the investment bank division (1995 – 2003)
PriceWaterhouse, Australia
– Various positions in the audit and business advisory division (1990 – 1995)

Qualifications

Member
– Australian Society of Chartered Practising Accountants
Graduate diploma in Applied Finance and Investment
– The Financial Services Institute of Australasia (formerly known as Securities Institute of Australia)
Bachelor's Degree in Commerce – Murdoch University, Australia

Michael WU Wei Kuo INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 52

Joined the Board since September 2010

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited
– Chairman of Remuneration Committee;
Member of Nomination Committee;
Member of Risk Committee

Other major appointments

Hongkong Caterers Limited – Chairman and Managing Director
^ Jardine Matheson Holdings Limited – Non-executive Director
Maxim's Caterers Limited – Chairman and Managing Director
The Community Chest of Hong Kong – Board Member

Past major appointments

^ Hongkong Land Holdings Limited
– Non-executive Director (2012 – 2022) (Note 1)
^ Hang Seng Bank Limited
– Member of Audit Committee (2014 – 2018)
The Community Chest of Hong Kong
– Member of Executive Committee (2017 – 2018)
The Hong Kong University of Science and Technology
– Member of the Council (2011 – 2017)

Qualifications

Bachelor of Science in Applied Mathematics and Economics
– Brown University, USA

Major awards

'Ernst & Young Entrepreneur of The Year 2012 China'
– Category Winner (Services) and Country Winner (Hong Kong / Macau Regions) (2012)
Executive Award of the DHL / SCMP Hong Kong Business Awards (2008)

Notes:

[1] New appointments or cessation of appointments since the date of the Bank's 2022 Interim Report or the date of announcement for the appointment of Director issued by the Bank subsequent to the date of the Bank's 2022 Interim report.

[2] The interests of Directors in shares of the Bank, if any, within the meaning of Part XV of the Securities and Futures Ordinance ('SFO') as at 31 December 2022 are disclosed in the section 'Directors' and Alternate Chief Executives' Interests' of the Report of the Directors attached to the Bank's 2022 Annual Report.

[3] Some Directors (as disclosed in the section 'Biographical Details of Directors and Senior Management – Board of Directors' of the Bank's 2022 Annual Report) are also Directors of HSBC Holdings plc ('HSBC') and/or its subsidiaries. HSBC, through its wholly owned subsidiaries, has an interest in the shares of the Bank under the provisions of Divisions 2 and 3 of Part XV of the SFO, the details of which are disclosed in the section 'Substantial Interests in Share Capital' of the Report of the Directors attached to the Bank's 2022 Annual Report.

[4] Save as disclosed in the section 'Biographical Details of Directors and Senior Management – Board of Directors' of the Bank's 2022 Annual Report, the Directors (a) have not held any directorships in other publicly listed companies, whether in Hong Kong or overseas, during the last 3 years; and (b) do not hold any other positions in the Bank and its subsidiaries; and do not have any other relationships with any Directors, senior management or substantial or controlling shareholders of the Bank.

[5] All Directors (except those Directors who are full time employees of the Bank or its subsidiaries) will receive Directors' fees in the amounts approved from time to time by shareholders at the Annual General Meetings of the Bank. The current amounts of Directors' fees have been determined with reference to market rates, directors' workload and required commitment. A Director will also receive a fee for duties assigned to and services provided by him/her as Chairman or member of various Committees of the Bank. Such fees have been determined with reference to the remuneration policy of the Bank.

[6] No Directors' fees are payable to those Directors who are full time employees of the Bank or its subsidiaries. The salary packages of such Directors have been determined with reference to the remuneration policy of the Bank. Such Directors are also entitled to discretionary bonus.

[7] The details of the emoluments of the Directors on a named basis are disclosed in Note 14 of the Bank's Financial Statements as contained in the Bank's 2022 Annual Report.

[8] None of the Directors has signed service contract with the Bank. The term of appointment of Non-executive Directors (including Independent Non-executive Directors) is three years.

[9] Biographical details of Directors of the Bank are also available on the website of the Bank at www.hangseng.com.

^ The securities of these companies are listed on a securities market in Hong Kong or overseas.

Senior Management

From left to right
front row

Rannie W L Lee
Head of Wealth and Personal Banking

Diana Cesar JP
Executive Director and Chief Executive

Say Pin Saw
Executive Director and Chief Financial Officer

Donald Y S Lam
Head of Commercial Banking

back row

Christopher H K Tsang
Chief Compliance Officer

Betty S M Law
Head of Communications and Corporate Sustainability

Gilbert M L Lee
Head of Strategy & Planning and Chief of Staff to CE

Ryan Y S Song
Vice-Chairman and Chief Executive of Hang Seng Bank (China) Limited

Kathy K W Cheung
Chief Risk Officer

Rose M Cho
Head of Global Banking

Liz T L Chow
Head of Global Markets

Vivien W M Chiu
Chief Operating Officer

Godwin C C Li
Company Secretary and General Counsel

Gloria L S Ho
Head of Human Resources

Jordan W C Cheung
Chief Marketing Officer

Diana Ferreira CESAR JP EXECUTIVE DIRECTOR AND CHIEF EXECUTIVE

(Biographical details are set out on page 155)

SAW Say Pin EXECUTIVE DIRECTOR AND CHIEF FINANCIAL OFFICER

(Biographical details are set out on page 159)

Jordan CHEUNG Wang Chun CHIEF MARKETING OFFICER AGED 38

Joined the Bank since December 2022

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Chief Marketing Officer; Member of Executive Committee

Past major positions

DFI Retail Group Holdings (formerly known as Dairy Farm International)
– Vice President, Head of CRM & Performance Marketing, yuu (2022)
Regal Hotels International Holdings Limited
– Vice President (dual roles) – Head of Group Marketing and Head of Innovation and Digital Transformation (2020 – 2022)
Manulife Hong Kong
– Director, Digital Marketing / Customer Experience and Strategic Marketing (2019 – 2020)
Hong Kong Airlines Limited
– Deputy General Manager, Global Marketing (2012 – 2019)

Qualifications

Bachelor of Integrated Business Administration with Concentration in Marketing – The Chinese University of Hong Kong

Kathy CHEUNG Ka Wai CHIEF RISK OFFICER AGED 53

Joined the Bank since March 2022

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Chief Risk Officer; Member of Executive Committee
Hang Seng Data Services Limited – Director
Hang Seng Indexes Company Limited – Director
Hang Seng Investment Management Limited – Director
Hang Seng Investment Services Limited – Director
Hang Seng Securities Limited – Director
Hang Seng Security Management Limited – Director

Other major appointments

Hang Seng School of Commerce – Director
The Hang Seng University of Hong Kong – Governor

Past major positions

HSBC Asia Holdings Limited – Director (August to November 2022)
The Hongkong and Shanghai Banking Corporation Limited
– Chief Risk Officer, Hong Kong and Macau (2015 – 2022)
Head of Retail Banking and Wealth Management Risk, Greater China (2015)
Head of Retail Banking and Wealth Management Risk (2013 – 2015)
Head of Credit & Risk (2012 – 2013)
Head of Consumer Credit Risk (2011)
Various roles in relation to Risk Management (2000 – 2010)

Qualifications

Bachelor of Arts in Business Administration – Accounting
– University of Washington, USA
Member – American Institute of Certified Public Accountant

Vivien CHIU Wai Man CHIEF OPERATING OFFICER AGED 58

Joined the Bank since January 2022

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Chief Operating Officer; Member of Executive Committee
Hang Seng Data Services Limited – Director
Hang Seng Indexes Company Limited – Director
Hang Seng Investment Management Limited – Director
Hang Seng Investment Services Limited – Director
Hang Seng (Nominee) Limited – Director
Hang Seng Real Estate Management Limited – Director
Hang Seng Securities Limited – Director
Hang Seng Security Management Limited – Director

Other major appointments

Barrowgate Limited – Director

Past major positions

The Hongkong and Shanghai Banking Corporation Limited
– Interim Chief Operating Officer Hong Kong (2021)
Head of Operations Hong Kong (2017 – 2021)
Regional Head – Banking Operations & CDD, Operations (2013 – 2017)
Senior Programme Manager, Transformation (2010 – 2013)
Senior Development Manager, Technology (2007 – 2010)
Various roles in Technology, Digital Business Services (1989 – 2007)
Hong Kong Interbank Clearing Limited – Alternate Director (2017 – 2021)
HKICL Services Limited – Alternate Director (2017 – 2021)
Hong Kong Trade Finance Platform Company Limited
– Alternate Director (2018 – 2021)

Qualifications

Bachelor of Engineering – University of Melbourne, Australia

Rose CHO Mui HEAD OF GLOBAL BANKING AGED 51

Joined the Bank since June 2003

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Head of Global Banking; Member of Executive Committee

Other major appointments

The Community Chest of Hong Kong
– Dress Casual Day Organising Committee Co-Chairman; Campaign Committee Member
The Hainan Province Committee of the Chinese People's Political Consultative Conference
– Member

Past major positions

Hang Seng Bank Limited
– Head of Corporate Banking, Commercial Banking Division (2015 – 2021)
Head of Business Banking, Commercial Banking Division (2011 – 2015)
Deputy Head of Commercial Banking, Commercial Banking Division (2007 – 2011)
Department Head, Commercial Banking (2004 – 2007)
Team Head, Commercial Banking Division (2003)
Rabobank, N.A.
– Senior Relationship Manager, Corporate Banking (1997 – 2003)
BankBoston, N.A. – Relationship Manager, Corporate Banking (1996 – 1997)
Citibank, N.A. – Relationship Manager, Corporate Banking (1993 – 1996)

Qualifications

Master of Business Administration
– The Hong Kong University of Science and Technology
Bachelor of Business Administration (Honors) in Business Studies
– The Hong Kong Polytechnic University

Liz CHOW Tan Ling HEAD OF GLOBAL MARKETS AGED 49

Joined the Bank since October 2006

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Head of Global Markets; Member of Executive Committee
Hang Seng Bullion Company Limited – Director

Other major appointments

Treasury Markets Association – Member of Executive Board

Past major positions

Hang Seng Bank Limited
– Head of Global Markets Corporate Treasury and Business Management (2011 – 2015)
Head of Corporate Treasury Services Greater China (2011)
Various positions in the area of corporate treasury in Treasury Division (2006 – 2011)
DBS Bank Limited, Hong Kong – VP Treasury & Markets (2002 – 2006)
Commonwealth Bank of Australia, Hong Kong
– Executive Capital Markets (2000 – 2002)

Qualifications

Bachelor of Business Administration – The Chinese University of Hong Kong
Bachelor of Laws – The University of London, UK

Gloria HO Lok Sze HEAD OF HUMAN RESOURCES AGED 44

Joined the Bank since April 2022

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Head of Human Resources; Member of Executive Committee
Hang Seng Security Management Limited – Director

Past major positions

Kerry Properties Limited – Chief Human Resources Officer (2017 – 2022)
Christie's
– Vice President, HR Business Partner / Head of Human Resources, Asia (2014 – 2017)
Shangri-La Group
– Director of Human Resources Operations, Development / Corporate Director of Talent Acquisition (2012 – 2014)

Qualifications

Bachelor of Commerce, Management – University of Auckland, New Zealand

Donald LAM Yin Shing HEAD OF COMMERCIAL BANKING AGED 59

Joined the Bank since March 2003

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Head of Commercial Banking; Member of Executive Committee

Past major positions

The Guangxi Province Committee of the Chinese People's Political Consultative Conference
– Member (2013 – 2023)
Hang Seng Insurance Company Limited – Director (2011 – 2022)
Hong Kong Chiu Chow Chamber of Commerce Limited
– Honorary Director (2018 – 2022)
The Community Chest of Hong Kong
– Board Member; Second Vice President and Campaign Committee Chairman; Member of Executive Committee (2021 – 2022)
Federation of HK Chiu Chow Community Organizations Limited
– Director (2014 – 2020)
Federation of HK Guangxi Community Organisations Limited
– Vice Chairman (2018 – 2020)
Hang Seng Bank Limited
– Head of Commercial Banking Relationship Management (2005 – 2006)
Deputy Head of Commercial Banking Relationship Management (2004 – 2005)
Department Head, Commercial Banking Relationship Management Department A (2003 – 2004)
Playmates Holdings Limited
– Executive Director and Chief Financial Officer (2001 – 2003)
The Hongkong and Shanghai Banking Corporation Limited
– Senior Marketing and Planning Manager (1999 – 2001)
Held various senior positions in Corporate and Commercial Banking (1987 – 1999)

Qualifications

Certified Banker – The Hong Kong Institute of Bankers
Chartered Banker – Chartered Banker Institute, UK
Bachelor of Social Science (1st Class Honor) – The University of Hong Kong
Master of Business Administration – The Chinese University of Hong Kong
Master of Science in e-Commerce – The Chinese University of Hong Kong

Betty LAW Shuk Man HEAD OF COMMUNICATIONS AND CORPORATE SUSTAINABILITY AGED 50

Joined the Bank since July 2022

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Head of Communications and Corporate Sustainability; Member of Executive Committee

Other major appointments

Hang Seng School of Commerce – Director
The Hang Seng University of Hong Kong – Governor

Past major positions

The Hong Kong Jockey Club
– Executive Manager, Public Affairs (Corporate & Media Services) (2019 – 2022)
Hang Lung Properties Limited
– General Manager – Corporate Communications (2011 – 2019)
AIA Group Limited
– Assistant Vice President Group Communications (2010 – 2011)
Hang Seng Bank Limited
– Senior Corporate Communications Manager (2006 – 2010)

Qualifications

Master of Comparative and Public History
– The Chinese University of Hong Kong
Master of International and Public Affairs
– The University of Hong Kong
Bachelor of Arts in English and Translation
– The Chinese University of Hong Kong

Gilbert LEE Man Lung HEAD OF STRATEGY & PLANNING AND CHIEF OF STAFF TO CE AGED 45

Joined the Bank since August 2014

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Head of Strategy & Planning and Chief of Staff to CE; Member of Executive Committee
Hang Seng Data Services Limited – Director
Hang Seng Indexes Company Limited – Director

Past major positions

Yantai Bank Co., Ltd.
– Director; Member of Audit Committee; Member of Connected Party Transaction Committee (2019 – 2022)
Hang Seng Bank Limited – Head of Strategy & Planning (2014 – 2018)
Wells Fargo Bank, N.A.
– Senior Vice President, Cross-Border Governance & Strategic Initiatives Leader – Asia (2013 – 2014)
Booz & Company
– Senior Associate, Co-Lead of Financial Services Practice, Greater China (2007 – 2013)
Bank of America, N.A.
– Assistant Vice President, Special Assets Group, Asia (2006)
Citibank, N.A.
– Various positions in the areas of Corporate Banking and Risk Management (2000 – 2005)

Qualifications

Chartered Financial Analyst
Chartered Global Management Accountant
Fellow – The Chartered Institute of Management Accountants
Certified Chief Innovation Officer – Global Innovation Institute
Associate – Life Management Institute
Member – The Hong Kong Institute of Directors
Master of Business Administration – INSEAD, France
Master of Science in Business Economics
– The Chinese University of Hong Kong
Bachelor of Finance – The University of Hong Kong
Fellow of Asia Pacific Leadership Programme
– East-West Centre, The University of Hawaii, USA

Rannie LEE Wah Lun HEAD OF WEALTH AND PERSONAL BANKING AGED 55

Joined the Bank since January 2022

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Head of Wealth and Personal Banking; Member of Executive Committee
Hang Seng Bank (Trustee) Limited – Director
Hang Seng Credit Limited – Director
Hang Seng Finance Limited – Director
Hang Seng Indexes Company Limited
– Member of Hang Seng Index Advisory Committee
Hang Seng Insurance Company Limited – Director
Hang Seng Investment Management Limited – Director
Hang Seng Securities Limited – Chairman
Hang Seng Security Management Limited – Director
HASE Wealth Limited – Director
Haseba Investment Company Limited – Director

Past major positions

The Hongkong and Shanghai Banking Corporation Limited
– Head of Special Project, Retail Banking and Wealth Management (2021)
Co-CEO and Head of Retail Banking and Wealth Management / Wealth and Personal Banking, Pearl River Delta (Assignment based in Shenzhen, China) (2018 – 2021)
Various positions in Personal Financial Services Division, including Country Head of Customer Value Management (1997 – 2018)

Qualifications

Master of Management – Macquarie University, Australia
Bachelor of Law – Manchester Metropolitan University, UK
Bachelor of Social Science – The University of Hong Kong

Godwin LI Chi Chung COMPANY SECRETARY AND GENERAL COUNSEL AGED 58

Joined the Bank since May 1995

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Company Secretary and General Counsel;
Member of Executive Committee
Hang Seng Bank (Trustee) Limited – Director
Hang Seng Bullion Company Limited – Director
Hang Seng (Nominee) Limited – Director
HASE Wealth Limited – Director

Past major positions

Hang Seng Bank Limited
– Assistant Company Secretary, Senior Manager and Legal Advisor (1995 – 2005)
Guoco Group Limited – Assistant Legal Counsel (1993 – 1995)

Qualifications

Bachelor of Laws – The University of Hong Kong

Ryan SONG Yue Sheng VICE-CHAIRMAN AND CHIEF EXECUTIVE OF HANG SENG BANK (CHINA) LIMITED AGED 49

Joined the Bank since May 2018

Major positions held within Hang Seng Group

Hang Seng Bank Limited – Member of Executive Committee
Hang Seng Bank (China) Limited
– Vice-Chairman and Chief Executive;
Chairman of Executive Committee;
Member of Connected Transactions Control Committee;
Member of Nomination Committee

Past major positions

HSBC Bank (China) Company Limited
– Executive Vice President (2016 – 2018)
Head of Global Markets; Member of Executive Committee (2013 – 2018)
Head of Trading; Deputy Head of Global Markets (2005 – 2013)
Head of Sales, Global Markets (2000 – 2005)

Qualifications

Master of Business Administration
– China Europe International Business School

Christopher TSANG Hing Keung CHIEF COMPLIANCE OFFICER AGED 56

Joined the Bank since April 2020

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Chief Compliance Officer; Member of Executive Committee
Hang Seng Investment Management Limited – Director
Hang Seng Investment Services Limited – Director
Hang Seng Securities Limited – Director

Past major positions

Hang Seng Bank Limited
– Head of Regulatory Compliance (2020 – 2021)
China Construction Bank (Asia) Limited
– Chief Compliance Officer (2016 – 2020)
ICBC (Asia) Limited – Head of Legal and Compliance (2014 – 2016)
Dah Sing Bank Limited – Group Head of Legal and Compliance (2010 – 2014)
Bank of Communications Co., Ltd., Hong Kong
– Head of Legal and Compliance (2010)
DBS Bank (Hong Kong) Limited
– Head of Compliance, Hong Kong and mainland China (2005 – 2010)
Hong Kong Monetary Authority
– Manager, Banking Supervision Department (1996 – 2005)
Standard Chartered Bank – Assistant Relationship Manager (1993 – 1996)

Qualifications

Master of Science in Banking – City University of Hong Kong
Master of Business Administration – University of Toronto, Canada
Bachelor of Arts in Translation – The University of Hong Kong

Note:

Definition of senior management is set out in the 'Corporate Governance Report' section in this Annual Report.

REPORT OF THE DIRECTORS

The Directors have pleasure in presenting their report together with the audited financial statements for the year ended 31 December 2022.

Principal Place of Business

The Bank is incorporated and domiciled in Hong Kong and has its registered office and principal place of business at 83 Des Voeux Road Central, Hong Kong.

Principal Activities and Business Review

The Bank and its subsidiaries (the 'Group') are engaged in the provision of banking and related financial services. Further discussion and analysis of these activities as required by Schedule 5 to the Hong Kong Companies Ordinance, including a fair review of the business and a discussion of the principal risks and uncertainties facing the Group, particulars of important events affecting the Group that have occurred since the end of the financial year 2022, an indication of likely future development in the Group's business, a discussion of the Group's environmental policies and performance, and its compliance with the relevant laws and regulations that have a significant impact on the Group and an account of the Group's key relationships with its employees, customers and suppliers that have a significant impact on the Group can be found in the sections 'Five-Year Financial Summary', 'Chairman's Statement', 'Chief Executive's Report', 'Management Discussion and Analysis' and 'Corporate Governance Report' of this Annual Report. The aforesaid form part of this report.

Profits and Dividends

The consolidated profit of the Bank and its subsidiaries and associates for the year is set out under the consolidated income statement of this Annual Report.

The Directors declared and paid the first to third interim dividends of HK$2.10 (2021: HK$3.30) per share totalling HK$4,014m (2021: HK$6,309m) during the year. The Directors also declared the fourth interim dividend of HK$2.00 per share totalling HK$3,824m (2021: HK$1.80 per share totalling HK$3,441m), which will be paid on 21 March 2023.

Major Customers

The Directors believe that the five largest customers of the Bank accounted for less than 30% of the total interest income and other operating income of the Bank for the year.

Subsidiaries

Particulars of the Bank's principal subsidiaries as at 31 December 2022 are set out in note 30 to the financial statements for the year ended 31 December 2022.

Share Capital

Details of share capital of the Bank during the year are set out in note 43 to the financial statements for the year ended 31 December 2022.

Equity-linked Agreements

For the year ended 31 December 2022, the Bank has not entered into any equity-linked agreement.

Purchase, Sale or Redemption of the Bank's Listed Securities

There was no purchase, sale or redemption by the Bank, or any of its subsidiaries, of the Bank's listed securities during the year.

Reserves

Distributable reserve of the Bank as at 31 December 2022, calculated under Part 6 of the Hong Kong Companies Ordinance, amounted to HK$101,000m (2021: HK$99,320m). Movements in other reserves are set out in the consolidated statement of changes in equity of this Annual Report.

Donations

Charitable donations pledged by the Bank and its subsidiaries during the year amounted to HK$29m. For further details of the Bank's corporate social responsibility activities and expenditures, please refer to the section 'Environmental, Social and Governance' in the 'Corporate Governance Report' of this Annual Report.

Directors

The Directors of the Bank, who were in office on the date of this report, were Irene Y L Lee, Diana Cesar, Cordelia Chung, Kathleen C H Gan, Clement K M Kwok, Patricia S W Lam, David Y C Liao, Huey Ru Lin, Kenneth S Y Ng, Say Pin Saw, Xiao Bin Wang and Michael W K Wu.

Margaret W H Kwan retired from the Board with effect from 1 February 2022. John C C Chan and Vincent H S Lo retired from the Board with effect from the conclusion of the 2022 Annual General Meeting held on 5 May 2022. L Y Chiang stepped down from the Board with effect from 1 January 2023.

Save for the following Directors, all the other Directors, who were in office on the date of this report, had served on the Board of the Bank throughout the year:

(a) Cordelia Chung and Xiao Bin Wang who were appointed as Independent Non-executive Directors with effect from 23 February 2022;

(b) Patricia S W Lam and Huey Ru Lin who were appointed as Independent Non-executive Directors with effect from 1 July 2022; and

(c) Say Pin Saw who was appointed as Executive Director with effect from 7 November 2022.

Patricia S W Lam, Huey Ru Lin and Say Pin Saw will retire under the provisions of the Bank's Articles of Association and, being eligible, offer themselves for election at the Bank's 2023 Annual General Meeting ('2023 AGM') to be held in Q2 2023, the notice of which will be sent to shareholders at least 20 clear business days before the said meeting.

The Directors who are required to retire by rotation pursuant to the Bank's Articles of Association at the 2023 AGM are Kathleen C H Gan, Kenneth S Y Ng and Michael W K Wu.

No Director proposed for election or re-election at the 2023 AGM has a service contract with the Bank which is not determinable by the Bank within one year without payment of compensation (other than statutory compensation).

The biographical details of the Directors of the Bank are set out in the section 'Biographical Details of Directors and Senior Management' of this Annual Report.

Directors of Subsidiaries

The names of all Directors who have served on the boards of the Bank's subsidiaries during the period from 1 January 2022 to the date of this report (unless otherwise stated) are provided in the section 'Directors of Subsidiaries' of this Annual Report.

Status of Independent Non-executive Directors

The Bank has received from each Independent Non-executive Director an annual confirmation of his/her independence pursuant to Rule 3.13 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the 'Listing Rules' and the 'Stock Exchange' respectively). The Bank still considers all the Independent Non-executive Directors to be independent.

Directors' and Alternate Chief Executives' Interests

As at 31 December 2022, the interests of the Directors and Alternate Chief Executives in the shares, underlying shares of equity derivatives and debentures of the Bank and its associated corporations (all within the meaning of Part XV of the Securities and Futures Ordinance ('SFO')) disclosed in accordance with the Listing Rules were detailed below.

Interests in shares

	Personal Interests (held as beneficial owner)	Family Interests (interests of spouse or child under 18)	Corporate Interests (interests of controlled corporation)	Other Interests	Total Interests	Total Interests as % of the relevant shares in issue/issued share capital
Number of ordinary shares in the Bank						
Director:						
Kathleen C H Gan	2,500	–	–	–	2,500	0.00
Number of ordinary shares of US$0.50 each in HSBC Holdings plc						
Directors:						
Diana Cesar	378,267	–	–	111,835(1)	490,102	0.00
Kathleen C H Gan	466,301	–	–	122,320(1)	588,621	0.00
Patricia S W Lam	367,270	–	–	–	367,270	0.00
Irene Y L Lee	15,000	–	–	–	15,000	0.00
David Y C Liao	512,575	–	–	343,819(1)	856,394	0.00
Kenneth S Y Ng	440,723	–	–	–	440,723	0.00
Say Pin Saw	34,053	–	–	26,921(1)	60,974	0.00
Alternate Chief Executives:						
Kathy K W Cheung	86,581	–	–	17,211(1)	103,792	0.00
Vivien W M Chiu	28,107(2)	79,570(3)	–	5,346(1)	113,023	0.00
Donald Y S Lam	239,375	–	–	28,002(1)	267,377	0.00
Rannie W L Lee	5,436	–	–	8,696(1)	14,132	0.00

Interests in debentures of associated corporation of the Bank

	Personal Interests (held as beneficial owner)	Family Interests (interests of spouse or child under 18)	Corporate Interests (interests of controlled corporation)	Other Interests	Total Interests
Perpetual subordinated contingent convertible securities issued by HSBC Holdings plc					
Alternate Chief Executive:					
Vivien W M Chiu	–	US$300,000[3]	–	–	US$300,000

Notes:

[1] These included interests in conditional awards of ordinary shares of US$0.50 each in HSBC Holdings plc under the HSBC Share Plans made in favour of Directors and Alternate Chief Executives.

[2] These included 1,933 shares in HSBC Holdings plc jointly held by Vivien W M Chiu and her family member.

[3] Vivien W M Chiu's spouse had interests in the total amount of US$300,000 of perpetual subordinated contingent convertible securities issued by HSBC Holdings plc. These perpetual subordinated contingent convertible securities would be converted into 79,570 ordinary shares in HSBC Holdings plc upon the occurrence of capital adequacy trigger event. Ms Chiu's family interests set out in the table under 'Interests in shares' and the table under 'Interests in debentures of associated corporation of the Bank' represented the same interests.

Conditional Awards of Shares

During the year, the Directors and Alternate Chief Executives as set out below were eligible to be granted conditional awards over ordinary shares of US$0.50 each in HSBC Holdings plc by that company (being the ultimate holding company of the Bank) under various HSBC Share Plans. The details of the interests of the Directors and Alternate Chief Executives in the conditional awards of ordinary shares in HSBC Holdings plc under the HSBC Share Plans, as at 31 December 2022, were as follows:

	Awards held as at 1 January 2022	Awards made during the Director's/Alternate Chief Executive's term of office in 2022	Awards released during the Director's/Alternate Chief Executive's term of office in 2022	Awards held as at 31 December 2022[1]
Directors:				
Diana Cesar	104,941	94,153	87,345	111,835
Kathleen C H Gan	103,421	90,721	71,822	122,320
David Y C Liao	93,765	348,175	98,121	343,819
Say Pin Saw	26,921[2]	–	–	26,921
Alternate Chief Executives:				
Kathy K W Cheung	17,211[2]	–	–	17,211
Vivien W M Chiu	4,645[2]	2,821	2,280	5,346
Donald Y S Lam	31,188	30,247	33,484	28,002
Rannie W L Lee	8,696[2]	–	–	8,696

Notes:

[1] This included additional shares arising from scrip dividends, if any.

[2] These represented the awards held by the Director and/or Alternate Chief Executives when they were appointed as Director and/or Alternate Chief Executives of the Bank.

During the year, Kathy K W Cheung, Vivien W M Chiu, Kathleen C H Gan and Donald Y S Lam also acquired and were awarded ordinary shares of HSBC Holdings plc under the HSBC International Employee Share Purchase Plan. Their interests and the interests of Say Pin Saw in ordinary shares of HSBC Holdings plc under this plan have been included in their 'Personal Interests' disclosed in the table under 'Interests in shares'.

All the interests stated above represented long positions. As at 31 December 2022, no short positions were recorded in the Register of Directors' and Alternate Chief Executives' Interests and Short Positions required to be kept under section 352 of the SFO.

Save as disclosed in the preceding paragraphs, neither the Bank nor any of its holding companies or its subsidiaries or fellow subsidiaries was a party to any arrangement to enable the Directors of the Bank to acquire benefits by means of the acquisition of shares in or debentures of the Bank or any other body corporate as at the end of the year or at any time during the year.

No right to subscribe for equity or debt securities of the Bank has been granted by the Bank to, nor have any such rights been exercised by, any person during the year ended 31 December 2022.

Directors' Interests in Transactions, Arrangements or Contracts

No transaction, arrangement or contract (that is significant in relation to the Bank's business), to which the Bank or any of its holding companies or any of its subsidiaries or fellow subsidiaries was a party and in which a Director of the Bank or an entity connected with a Director had, directly or indirectly, a material interest, subsisted as at the end of the year or at any time during the year.

Management Contracts

Save for service contracts, no other contracts, relating to the management and/or administration of the whole or any substantial part of the business of the Bank were entered into or subsisting during the year.

Directors' Interests in Competing Businesses

Pursuant to Rule 8.10 of the Listing Rules, as at the date of this report, the following Directors had declared interests in the following entities which compete or are likely to compete, either directly or indirectly, with the businesses of the Bank:

Diana Cesar is a General Manager of HSBC Holdings plc.

Kathleen C H Gan is a General Manager and Head of Finance of HSBC Holdings plc. She is also a Non-executive Director of both HSBC Life (Singapore) Pte. Ltd. (formerly known as AXA Insurance Pte. Ltd.) and HSBC Insurance (Singapore) Pte. Limited, and was the Supervisor of HSBC Bank (China) Company Limited until 30 April 2022, all of which are wholly-owned subsidiaries, directly or indirectly, of The Hongkong and Shanghai Banking Corporation Limited.

David Y C Liao is a Group Executive and a Member of the Group Executive Committee of HSBC Holdings plc. He is also an Executive Director and Co-CEO of The Hongkong and Shanghai Banking Corporation Limited; and was a Director of HSBC Global Asset Management Limited, which is a direct wholly-owned subsidiary of HSBC Holdings plc., until 30 January 2022. In addition, he was a Supervisor of HSBC Jintrust Fund Management Company Limited, 49% of which is indirectly held by HSBC Holdings plc., until 20 February 2022. Further, he is a Non-executive Director of Bank of Communications Co., Ltd., which conducts general banking business.

Kenneth S Y Ng, who has been re-designated from a Non-executive Director to an Independent Non-executive Director of the Bank with effect from 1 April 2022, is an Independent Non-executive Director of HSBC Bank Australia Limited, and the Chairman of the Board of Supervision of HSBC Bank (Vietnam) Ltd. Both companies are wholly-owned subsidiaries, directly or indirectly, of The Hongkong and Shanghai Banking Corporation Limited.

Say Pin Saw is a Director of HSBC Asia Holdings Limited. HSBC Asia Holdings Limited is the immediate holding company of The Hongkong and Shanghai Banking Corporation Limited.

HSBC Holdings plc, through its subsidiaries and associated undertakings, including The Hongkong and Shanghai Banking Corporation Limited, the immediate holding company of the Bank, is engaged in providing a comprehensive range of banking, insurance and related financial services.

The entities in which the Directors have declared interests are managed by separate boards of directors and management, which are accountable to their respective shareholders.

The Board of the Bank includes eight Independent Non-executive Directors whose views carry significant weight in the Board's decisions. The Audit Committee (comprising of three Independent Non-executive Directors) and Risk Committee (comprising of four Independent Non-executive Directors) of the Bank meet regularly to assist the Board of Directors in reviewing the financial performance, internal control and risk management systems of the Bank and its subsidiaries. The Bank is, therefore, capable of carrying on its businesses in the best interests of all shareholders as a whole and has put in place adequate mechanisms to ensure that the Directors discharge their duties vis-a-vis all shareholders, including in respect of the Bank's dealings with the businesses in which Directors have declared interests.

Directors' Emoluments

The emoluments of the Directors of the Bank on a named basis are set out in note 14 to the financial statements for the year ended 31 December 2022.

Indemnity Provision

Details of the Bank's permitted indemnity provision are set out in the section 'Corporate Governance Report' of this Annual Report.

Substantial Interests in Share Capital

The register maintained by the Bank pursuant to the SFO recorded that, as at 31 December 2022, the following corporations had interests or short positions in the shares or underlying shares (as defined in the SFO) in the Bank set opposite their respective names:

Name of Corporation	Number of Ordinary Shares in the Bank (Percentage of total)
The Hongkong and Shanghai Banking Corporation Limited	1,188,057,371 (62.14%)
HSBC Asia Holdings Limited	1,188,057,371 (62.14%)
HSBC Holdings plc	1,188,057,371 (62.14%)

The Hongkong and Shanghai Banking Corporation Limited is a wholly-owned subsidiary of HSBC Asia Holdings Limited, which in turn is a wholly-owned subsidiary of HSBC Holdings plc. Accordingly, the interests of The Hongkong and Shanghai Banking Corporation Limited are recorded as the interests of HSBC Asia Holdings Limited and HSBC Holdings plc.

The Directors regard HSBC Holdings plc to be the beneficial owner of 1,188,057,371 ordinary shares in the Bank (62.14%).

All the interests stated above represented long positions. As at 31 December 2022, no short positions were recorded in the Register of Interests in Shares and Short Positions required to be kept under section 336 of the SFO.

Public Float

As at the date of this report, the Bank has maintained the prescribed public float under the Listing Rules, based on the information that is publicly available to the Bank and within the knowledge of the Directors of the Bank.

Corporate Governance Principles and Practices

Details of the Bank's corporate governance practices are set out in the section 'Corporate Governance Report' in this Annual Report.

Auditor

The financial statements for the year ended 31 December 2022 have been audited by PricewaterhouseCoopers who will retire and, being eligible, offer themselves for re-appointment. A resolution for the re-appointment of PricewaterhouseCoopers as auditor of the Bank will be proposed at the 2023 AGM.

On behalf of the Board

Irene Lee
Chairman
21 February 2023

2022 FINANCIAL STATEMENTS

CONSOLIDATED INCOME STATEMENT

for the year ended 31 December 2022
(Expressed in millions of Hong Kong dollars)

	note	2022	2021
Interest income calculated using effective interest method		39,316	28,030
Interest income – others		915	477
Interest income	3	40,231	28,507
Interest expense	3	(11,250)	(4,685)
Net interest income		28,981	23,822
Fee income		7,606	9,151
Fee expense		(2,537)	(2,574)
Net fee income	4	5,069	6,577
Net income/(loss) from financial instruments measured at fair value through profit or loss	5	(429)	4,346
Gains less losses from financial investments	6	75	206
Dividend income	7	225	176
Net insurance premium income	8	20,551	14,083
Other operating income/(loss)	9	(1,274)	322
Total operating income		53,198	49,532
Net insurance claims and benefits paid and movement in liabilities to policyholders	10	(19,226)	(16,350)
Net operating income before change in expected credit losses and other credit impairment charges		33,972	33,182
Change in expected credit losses and other credit impairment charges	11	(7,626)	(2,807)
Net operating income		26,346	30,375
Employee compensation and benefits		(6,445)	(6,311)
General and administrative expenses		(5,657)	(5,285)
Depreciation expenses		(1,974)	(2,066)
Amortisation of intangible assets		(702)	(472)
Operating expenses	12	(14,778)	(14,134)
Impairment loss on intangible assets		(11)	(10)
Operating profit		11,557	16,231
Net surplus/(deficit) on property revaluation	16	(108)	82
Share of profits/(losses) of associates		(10)	72
Profit before tax		11,439	16,385
Tax expense	17	(1,288)	(2,439)
Profit for the year		10,151	13,946
Profit attributable to:			
Shareholders of the Bank		10,165	13,960
Non-controlling interests		(14)	(14)
(Figures in HK$)			
Earnings per share – basic and diluted	18	4.95	6.93

The notes on pages 185 to 253 form part of these Financial Statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

for the year ended 31 December 2022
(Expressed in millions of Hong Kong dollars)

	2022	2021
Profit for the year	10,151	13,946
Other comprehensive income		
Items that will be reclassified subsequently to the Consolidated Income Statement when specific conditions are met:		
Debt instruments at fair value through other comprehensive income ('FVOCI'):		
– fair value gains/(losses) taken to equity	(1,416)	(1,391)
– fair value (gains)/losses transferred to the Consolidated Income Statement:		
– on hedged items	550	829
– on disposal	(85)	(98)
– release of expected credit losses recognised in the Consolidated Income Statement	(1)	–
– deferred taxes	137	41
– exchange differences	118	349
Cash flow hedge reserve:		
– fair value gains/(losses) taken to equity	2,213	2,207
– fair value (gains)/losses transferred to the Consolidated Income Statement	(3,245)	(2,464)
– deferred taxes	170	43
Exchange differences on translation of:		
– financial statements of overseas branches, subsidiaries and associates	(1,302)	522
Items that will not be reclassified subsequently to the Consolidated Income Statement:		
Change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk		
– fair value gains/(losses) taken to equity	(6)	4
– deferred taxes	1	(1)
Equity instruments designated at fair value through other comprehensive income:		
– fair value gains/(losses) taken to equity	320	(1,961)
– exchange differences	(430)	173
Premises:		
– unrealised surplus/(deficit) on revaluation of premises	690	1,310
– deferred taxes	(118)	(220)
– exchange differences	(25)	9
Defined benefit plans:		
– actuarial gains/(losses) on defined benefit plans	(18)	352
– deferred taxes	3	(58)
Exchange differences and others	(2)	(3)
Other comprehensive income for the year, net of tax	(2,446)	(357)
Total comprehensive income for the year	7,705	13,589
Total comprehensive income for the year attributable to:		
– shareholders of the Bank	7,719	13,603
– non-controlling interests	(14)	(14)
	7,705	13,589

The notes on pages 185 to 253 form part of these Financial Statements.

CONSOLIDATED BALANCE SHEET

at 31 December 2022
(Expressed in millions of Hong Kong dollars)

	note	2022	2021
ASSETS			
Cash and balances at central banks	22	**17,609**	16,896
Trading assets	23	**47,373**	47,433
Derivative financial instruments	24	**22,761**	13,224
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	25	**28,861**	31,326
Reverse repurchase agreements – non-trading		**42,364**	18,821
Placings with and advances to banks	26	**62,326**	72,493
Loans and advances to customers	27	**931,334**	997,397
Financial investments	28	**622,616**	500,386
Interest in associates	31	**2,256**	2,341
Investment properties	32	**11,998**	9,545
Premises, plant and equipment	32	**27,498**	31,205
Intangible assets	33	**24,514**	25,486
Other assets	34	**52,295**	53,632
Total assets		**1,893,805**	1,820,185
LIABILITIES AND EQUITY			
Liabilities			
Deposits from banks		**5,205**	5,333
Current, savings and other deposit accounts	35	**1,249,486**	1,230,216
Repurchase agreements – non-trading		**11,304**	16,592
Trading liabilities	36	**46,323**	44,291
Derivative financial instruments	24	**20,992**	12,252
Financial liabilities designated at fair value	37	**46,309**	27,399
Certificates of deposit and other debt securities in issue	38	**93,379**	81,567
Other liabilities	39	**36,739**	31,179
Liabilities under insurance contracts	40	**165,594**	154,551
Current tax liabilities	41	**389**	603
Deferred tax liabilities	41	**6,645**	7,302
Subordinated liabilities	42	**27,479**	24,484
Total liabilities		**1,709,844**	1,635,769
Equity			
Share capital	43	**9,658**	9,658
Retained profits		**142,680**	140,100
Other equity instruments	44	**11,744**	11,744
Other reserves		**19,814**	22,830
Total shareholders' equity		**183,896**	184,332
Non-controlling interests		**65**	84
Total equity		**183,961**	184,416
Total equity and liabilities		**1,893,805**	1,820,185

Diana Cesar *Executive Director and Chief Executive*
Clement K M Kwok *Director*

Say Pin Saw *Executive Director and Chief Financial Officer*

The notes on pages 185 to 253 form part of these Financial Statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the year ended 31 December 2022
(Expressed in millions of Hong Kong dollars)

				Other reserves							
	Share capital	Other equity instruments	Retained profits[1]	Premises revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Others[2]	Total shareholders' equity	Non-controlling interests	Total equity
At 1 January 2022	9,658	11,744	140,100	18,428	2,499	46	1,180	677	184,332	84	184,416
Profit for the year	–	–	10,165	–	–	–	–	–	10,165	(14)	10,151
Other comprehensive income (net of tax)	–	–	(17)	547	(807)	(862)	(1,302)	(5)	(2,446)	–	(2,446)
Debt instruments at fair value through other comprehensive income	–	–	–	–	(697)	–	–	–	(697)	–	(697)
Equity instruments designated at fair value through other comprehensive income	–	–	–	–	(110)	–	–	–	(110)	–	(110)
Cash flow hedges	–	–	–	–	–	(862)	–	–	(862)	–	(862)
Change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	–	–	–	–	–	–	–	(5)	(5)	–	(5)
Property revaluation	–	–	–	547	–	–	–	–	547	–	547
Actuarial losses on defined benefit plans	–	–	(15)	–	–	–	–	–	(15)	–	(15)
Exchange differences and others	–	–	(2)	–	–	–	(1,302)	–	(1,304)	–	(1,304)
Total comprehensive income for the year	–	–	10,148	547	(807)	(862)	(1,302)	(5)	7,719	(14)	7,705
Dividends paid[3]	–	–	(7,455)	–	–	–	–	–	(7,455)	–	(7,455)
Coupons paid on AT1 capital instruments	–	–	(710)	–	–	–	–	–	(710)	–	(710)
Movement in respect of share-based payment arrangements	–	–	5	–	–	–	–	5	10	–	10
Others	–	–	–	–	–	–	–	–	–	(5)	(5)
Transfers[4]	–	–	592	(637)	45	–	–	–	–	–	–
At 31 December 2022	9,658	11,744	142,680	18,338	1,737	(816)	(122)	677	183,896	65	183,961

1 Retained profits are the cumulative net earnings of the Group that have not been paid out as dividends, but retained to be reinvested in the business. To satisfy the provisions of the Hong Kong Banking Ordinance and local regulatory requirements for prudential supervision purposes, the Group has earmarked a 'regulatory reserve' from retained profits. Movements in the reserve are made directly through retained earnings. As at 31 December 2022, the Group is not required to restrict any reserves which can be distributed to shareholders (2021: HK$441m) as the impairment allowance for Stage 1 and 2 loans and advances to customers exceeded the expected regulatory reserve balance.

2 Other reserves comprise share-based payment reserve and own credit risk reserve. The share-based payment reserve is used to record the amount relating to share awards and options granted to employees of the Group by the ultimate holding company. The own credit risk reserve is for the change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk.

3 Dividends paid represented the payment of fourth interim dividend of 2021 and the first three interim dividends of 2022 amounted to HK$3,441m and HK$4,014m respectively.

4 This includes transfers from the premises revaluation reserve to retained earnings in relation to depreciation of revalued properties, and from financial assets at FVOCI reserve to retained earnings in relation to the disposal loss of equity investments at FVOCI.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY continued

for the year ended 31 December 2022
(Expressed in millions of Hong Kong dollars)

				Other reserves							
	Share capital	Other equity instruments	Retained profits[1]	Premises revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Others[2]	Total shareholders' equity	Non-controlling interests	Total equity
At 1 January 2021	9,658	11,744	137,580	17,960	4,557	260	658	683	183,100	95	183,195
Profit for the year	–	–	13,960	–	–	–	–	–	13,960	(14)	13,946
Other comprehensive income (net of tax)	–	–	291	1,099	(2,058)	(214)	522	3	(357)	–	(357)
Debt instruments at fair value through other comprehensive income	–	–	–	–	(270)	–	–	–	(270)	–	(270)
Equity instruments designated at fair value through other comprehensive income	–	–	–	–	(1,788)	–	–	–	(1,788)	–	(1,788)
Cash flow hedges	–	–	–	–	–	(214)	–	–	(214)	–	(214)
Change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	–	–	–	–	–	–	–	3	3	–	3
Property revaluation	–	–	–	1,099	–	–	–	–	1,099	–	1,099
Actuarial gains on defined benefit plans	–	–	294	–	–	–	–	–	294	–	294
Exchange differences and others	–	–	(3)	–	–	–	522	–	519	–	519
Total comprehensive income for the year	–	–	14,251	1,099	(2,058)	(214)	522	3	13,603	(14)	13,589
Dividends paid	–	–	(11,662)	–	–	–	–	–	(11,662)	–	(11,662)
Coupons paid on AT1 capital instruments	–	–	(703)	–	–	–	–	–	(703)	–	(703)
Movement in respect of share-based payment arrangements	–	–	3	–	–	–	–	(9)	(6)	–	(6)
Others	–	–	–	–	–	–	–	–	–	3	3
Transfers	–	–	631	(631)	–	–	–	–	–	–	–
At 31 December 2021	9,658	11,744	140,100	18,428	2,499	46	1,180	677	184,332	84	184,416

1 Retained profits are the cumulative net earnings of the Group that have not been paid out as dividends, but retained to be reinvested in the business. To satisfy the provisions of the Hong Kong Banking Ordinance and local regulatory requirements for prudential supervision purposes, the Group has earmarked a 'regulatory reserve' from retained profits. Movements in the reserve are made directly through retained earnings. As at 31 December 2022, the Group is not required to restrict any reserves which can be distributed to shareholders (2021: HK$441m) as the impairment allowance for Stage 1 and 2 loans and advances to customers exceeded the expected regulatory reserve balance.

2 Other reserves comprise share-based payment reserve and own credit risk reserve. The share-based payment reserve is used to record the amount relating to share awards and options granted to employees of the Group by the ultimate holding company. The own credit risk reserve is for the change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk.

CONSOLIDATED STATEMENT OF CASH FLOWS

for the year ended 31 December 2022
(Expressed in millions of Hong Kong dollars)

	2022	2021
Profit before tax	11,439	16,385
Adjustments for non-cash items:		
Depreciation and amortisation	2,676	2,538
Net interest income	(28,981)	(23,822)
Dividend income	(225)	(176)
Gains less losses from financial investment	(75)	(206)
Share of (profits)/losses in associates	10	(72)
Net (surplus)/deficit on property revaluation	108	(82)
Change in expected credit losses and other credit impairment charges	7,626	2,807
Impairment loss on intangible assets	11	10
Loans and advances written off net of recoveries	(768)	(1,066)
Movement in present value of in-force long-term insurance business ('PVIF')	1,743	188
Interest received	37,775	28,059
Interest paid	(7,415)	(4,195)
Elimination of exchange differences and other non-cash items	10,213	2,995
Changes in operating assets and liabilities		
Change in trading assets	60	(10,316)
Change in derivative financial instruments	(797)	(4,652)
Change in financial assets designated and otherwise mandatorily measured at fair value through profit or loss	2,465	(10,631)
Change in reverse repurchase agreements – non-trading maturing after one month	(10,189)	804
Change in placings with and advances to banks maturing after one month	(9,052)	(21,390)
Change in loans and advances to customers	58,158	(56,634)
Change in other assets	733	4,048
Change in repurchase agreements – non trading	(5,288)	10,322
Change in deposits from banks	(128)	(7,610)
Change in current, savings and other deposit accounts	19,270	20,744
Change in trading liabilities	2,032	13,354
Change in financial liabilities designated at fair value	18,910	(5,131)
Change in certificates of deposit and other debt securities in issue	11,812	19,067
Change in other liabilities	3,732	661
Change in liabilities under insurance contract	11,043	11,871
Dividends received from financial investments	229	178
Tax paid	(2,225)	(2,227)
Net cash from operating activities	134,902	(14,179)

CONSOLIDATED STATEMENT OF CASH FLOWS continued

for the year ended 31 December 2022
(Expressed in millions of Hong Kong dollars)

	2022	2021
Purchase of financial investments	(847,112)	(648,479)
Proceeds from sale or redemption of financial investments	763,250	672,930
Repayment of shareholders' loan from an associated company	–	2
Purchase of property, plant and equipment and intangible assets (excluding PVIF)	(1,887)	(2,146)
Net cash inflow from the disposal of other assets	8	–
Net cash inflow from the sales of loan portfolio	1,441	2,267
Net cash from investing activities	(84,300)	24,574
Interest paid for subordinated liabilities	(691)	(336)
Principal and interest elements of lease payments	(547)	(584)
Dividends paid	(7,455)	(11,662)
Coupons paid on AT1 capital instruments	(710)	(703)
Proceeds from issuance of subordinated liabilities	3,000	5,000
Net cash from financing activities	(6,403)	(8,285)
Net increase in cash and cash equivalents	44,199	2,110
Cash and cash equivalents at 1 January	111,134	109,615
Exchange differences in respect of cash and cash equivalents	(2,515)	(591)
Cash and cash equivalents at 31 December	152,818	111,134
Cash and cash equivalents comprise[1]:		
– Cash and balances at central banks	17,609	16,896
– Balances with banks	8,605	10,078
– Items in the course of collection from other banks	5,598	3,744
– Placings with and advances to banks maturing within one month	15,458	33,202
– Reverse repurchase agreements with banks maturing within one month	24,028	10,674
– Treasury bills	78,220	28,873
– Net settlement accounts and cash collateral to banks within one month	8,932	13,769
– Less: items in the course of transmission to other banks	(5,632)	(6,102)
	152,818	111,134

1 At 31 December 2022, the amount of cash and cash equivalents that was not available for use by the Group was HK$11,902m (2021: HK$14,040m), of which HK$7,024m (2021: HK$8,153m) was related to mandatory deposits at central banks.

NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 December 2022
(Figures expressed in millions of Hong Kong dollars unless otherwise indicated)

1. Basis of preparation

(a) Compliance with Hong Kong Financial Reporting Standards

Hang Seng Bank Limited ('the Bank') and its subsidiaries ('the Group') are engaged in the provision of banking and related financial services. The Bank is a limited liability company incorporated in Hong Kong. The address of its registered office and principal place of business is 83 Des Voeux Road Central, Hong Kong.

The consolidated financial statements comprise the financial statements of the Group made up to 31 December 2022. The consolidated financial statements have been prepared in accordance with all applicable Hong Kong Financial Reporting Standards ('HKFRS'), the provisions of the Hong Kong Companies Ordinance and accounting principles generally accepted in Hong Kong. HKFRS comprises Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards ('HKAS'), and interpretations issued by the Hong Kong Institute of Certified Public Accountants ('HKICPA'). In addition, these financial statements comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. A summary of the significant accounting policies adopted by the Group is set out in note 2.

Standards adopted during the year ended 31 December 2022

There were no new standards applied during the year ended 31 December 2022. During 2022, the Group adopted a number of amendments to standards which had an insignificant effect on the consolidated financial statements of the Group.

(b) Presentation of information

The following have been included in the audited sections of the 'Management Discussion and Analysis' ('MD&A'):

- Disclosure under HKFRS 4 *'Insurance Contracts'* concerning the nature and extent of risks relating to insurance contracts under Insurance Risk in 'Risk' section.
- Disclosure under HKFRS 7 *'Financial Instruments: Disclosures'* concerning the nature and extent of risks relating to financial instruments under Credit Risk, Treasury Risk and Market Risk in 'Risk' section.
- Capital disclosures under HKAS 1 *'Presentation of Financial Statement'* in 'Capital Management' under Treasury Risk in 'Risk' section.
- IBOR transition in 'Areas of special interest' section.

In accordance with the Group's policy to provide disclosures that help stakeholders to understand the Group's performance, financial position and changes thereto, the information provided in the Notes to the Financial Statements and the Risk disclosures in the MD&A goes beyond the minimum levels required by accounting standards, statutory and regulatory requirements.

(c) Consolidation

The Group controls and consequently consolidates an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Control is initially assessed based on consideration of all facts and circumstances, and is subsequently reassessed when there are significant changes to the initial setup.

Where an entity is governed by voting rights, the Group would consolidate 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 over relevant activities or holding the power as agent or principal.

All intra-group transactions are eliminated on consolidation.

The consolidated financial statements also include the attributable share of the results and reserves of associates based on the financial statements prepared at dates not earlier than three months prior to 31 December 2022.

1. Basis of preparation continued

(d) Future Accounting Developments

The HKICPA has issued a number of new standards which are not yet effective for the year ended 31 December 2022 and which have not been adopted in the financial statements. Key changes of new standards are summarised as follows:

HKFRS 17 *'Insurance Contracts'*

HKFRS 17 *'Insurance contracts'* is effective for annual reporting periods beginning on or after 1 January 2023 and is applied retrospectively.

HKFRS 17 sets out the requirements that the Group will apply in accounting for insurance contracts it issues, reinsurance contracts it holds, and investment contracts with discretionary participation features.

The Group is at an advanced stage in the implementation of HKFRS 17, having put in place accounting policies, data and models, and made progress with preparing 2022 comparative data. Below set out the expectations of the impact of HKFRS 17, compared with the Group's current accounting policy for insurance contracts which is set out in note 2(t).

Under HKFRS 17, no present value of in-force business ('PVIF') asset will be recognised. Instead, the measurement of the insurance contract liability is based on groups of insurance contracts and will include the fulfilment cash flows, as well as the contractual service margin ('CSM'), which represents the unearned profit.

To identify groups of insurance contracts, individual contracts subject to similar dominant risk and managed together are identified as a portfolio of insurance contracts. Each portfolio is further separated by profitability group and issue date into periodic cohorts.

The fulfilment cash flows comprise of:

- the best estimates of future cash flows, including amounts expected to be collected from premiums and payouts for claims, benefits and expenses, which are projected using assumptions based on demographic and operating experience;
- an adjustment for time value of money and financial risks associated with the future cash flows; and
- an adjustment for non-financial risk that reflects the uncertainty about the amount and timing of the future cash flows.

In contrast to the Group's HKFRS 4 accounting where profits are recognised up front, the CSM will be systematically recognised in revenue, as services are provided over the expected coverage period of the group of contracts without any change to the overall profit of the contracts. Losses resulting from the recognition of onerous contracts are recognised in income statement immediately.

The CSM is adjusted depending on the measurement model of the group of insurance contracts. While the general measurement model ('GMM') is the default measurement model under HKFRS 17, the Group expects that the majority of its contracts will be accounted for under the variable fee approach ('VFA') which is mandatory to apply for insurance contracts with direct participation features upon meeting the eligibility criteria.

HKFRS 17 requires entities to apply HKFRS 17 retrospectively as if HKFRS 17 had always been applied, using the full retrospective approach ('FRA') unless it is impracticable. When 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 will apply the FRA for new business from 2019 at the earliest, subject to practicability, and FVA for the majority of contracts for which FRA is impracticable. Where the FVA is used, the measurement takes into account the cost of the capital that a market participant within the jurisdiction would be expected to hold based on the asset and liability positions on the transition date.

The Group decided to make use of the option to re-designate eligible financial assets held to support insurance liabilities currently measured at amortised cost, as financial assets measured at fair value through profit or loss.

The Group will also make use of the risk mitigation option for a number of economic offsets between the VFA contracts and reinsurance contracts held that meet the requirements.

Impact of HKFRS 17

Changes to equity on transition are driven by elimination of the PVIF asset, the re-designation of certain eligible financial assets in the scope of HKFRS 9, the remeasurement of insurance liabilities and assets under HKFRS 17, and the recognition of the CSM.

HKFRS 17 requires use of current market values for the measurement of insurance liabilities. The shareholder's share of the investment experience and assumption changes will be absorbed by the CSM and released over time to profit or loss under VFA. For contracts measured under GMM, the shareholder's share of the investment volatility is recorded in profit or loss as it arises. Under HKFRS 17, operating expenses will be lower as directly attributable costs will be incorporated in the CSM and recognised in the results of insurance service result.

While the profit over the life of an individual contract will be unchanged, its emergence will be later under HKFRS 17.

All these impacts will be subject to deferred tax.

1. Basis of preparation continued

(d) Future Accounting Developments continued

Impact of HKFRS 17 continued

Estimates of the opening balance sheet as at 1 January 2022 have been calculated and are presented below, showing separately the impact on the total assets, liabilities and equity of our insurance manufacturing operations and Group equity. These estimates are based on accounting policies, assumptions, judgements and estimation techniques that remain subject to change.

Impact of transition to HKFRS 17, at 1 January 2022	Insurance manufacturing operations			Group
	Assets	Liabilities	Equity	Equity
	HK$ bn	HK$ bn	HK$ bn	HK$ bn
Balance sheet values at 1 January 2022 under HKFRS 4	207.3	172.9	34.4	184.4
Removal of PVIF*	(22.4)	(3.7)	(18.7)	(18.7)
Replacement of HKFRS 4 liabilities with HKFRS 17	(1.3)	12.6	(13.9)	(14.3)
– Removal of HKFRS 4 liabilities and recording of HKFRS 17 fulfilment cash flows	(1.0)	(9.9)	8.9	8.8
– HKFRS 17 contractual service margin	(0.3)	22.5	(22.8)	(23.1)
Remeasurement effect of HKFRS 9 re-designations	6.5	–	6.5	6.5
Tax effect*	1.1	(0.1)	1.2	1.3
Estimated balance sheet values at 1 January 2022 under HKFRS 17	191.2	181.7	9.5	159.2

* PVIF of HK$22.4bn less deferred tax of HK$3.7bn constitute the overall estimated reduction in intangible assets, after tax, of HK$18.7bn on transition to HKFRS 17.

The Group's accounting for insurance contracts considers a broader set of cash flows than those arising within the insurance manufacturing entities. This includes the effect of eliminating intra-group fees associated with distribution of policies through the Group's banking channel and directly attributable costs incurred by other Group entities. These factors lead to an increase to the Group CSM after inclusion of distribution activities of approximately HK$0.3bn, with a consequential reduction to Group equity of approximately HK$0.3bn after inclusion of deferred tax.

(e) Critical accounting 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 accounting estimates and judgements in note 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 judgments from those reached by management for the purpose of 2022 consolidated financial statements. Management's selection of the Group's accounting policies which 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.

2. Significant accounting policies

(a) Interest income and expense

Interest income and expense for all financial instruments are recognised in 'Interest income' and 'Interest expense' respectively in the income statement. Effective interest method is used for those financial instruments that are not at fair value through profit or loss. Other interest income and expense that are not using effective interest method for calculation arise from non-derivative financial assets and liabilities carried at FVTPL.

The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, where appropriate, a shorter period, to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the Group estimates cash flows considering all contractual terms of the financial instrument but excluding future credit losses. The calculation includes all amounts paid or received by the Group that are an integral part of the effective interest rate of a financial instrument, including transaction costs and all other premiums or discounts.

2. Significant accounting policies continued

(b) Non-interest income

(i) Fee income

Fee income is earned from a diverse range of services provided by the Group to its customers and is accounted for as follows:

- income earned on the execution of a significant act is recognised as revenue when the act is completed (for example, fees arising from negotiating, or participating in the negotiation of, a transaction for a third party); and
- income earned from the provision of services is recognised as revenue when the services are provided (for example, asset management services).

(ii) Net income from financial instruments measured at fair value

(a) Net trading income

Net trading income comprises all gains and losses from changes in the fair value of financial assets and financial liabilities held for trading, together with the related dividend. Gains or losses arising from changes in fair value of derivatives are recognised in 'Net trading income' to the extent as described in the accounting policy set out in note 2(i). Gains and losses on foreign exchange trading and other transactions are also reported as net trading income except for those gains and losses on translation of foreign currencies recognised in other comprehensive income and accumulated separately in equity in the foreign exchange reserve in accordance with the accounting policy set out in note 2(v).

(b) Net income/(loss) from financial instruments designated at fair value

Net income/(loss) from financial instruments designated at fair value comprises all gains and losses from changes in the fair value of financial assets and financial liabilities designated at fair value, including derivatives managed in conjunction with the financial assets and liabilities designated at fair value. Dividends arising on those financial instruments are also included.

(c) Net income from assets and liabilities of insurance businesses measured at fair value

Net income from assets and liabilities of insurance businesses measured at fair value comprises of income in respect of financial assets and liabilities measured at fair value and derivatives managed in conjunction with the above which can be separately identifiable from other trading derivatives.

(iii) Dividend income

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 have approved the dividend for unlisted equity securities.

(iv) Rental income from operating lease

Rental income, net of incentives, under an operating lease is recognised in 'Other operating income' in equal instalments over the reporting periods covered by the lease term.

(c) Cash and cash equivalents

For the purpose of the cash flow statement, cash and cash equivalents include highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of change in value. Such investments comprise cash and balances at central banks, placings with and advances to banks maturing within one month, treasury bills and certificates of deposit with less than three months' maturity from the date of acquisition and items in the course of collection from or in transmission to other banks.

(d) Valuation of financial instruments

All financial instruments are recognised initially 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, the fair value will be based on other observable current market transactions in the same instrument, without modification or repackaging, or on a valuation technique whose variables include only data from observable markets, such as interest rate yield curves, option volatilities and currency rates. When such evidence exists, the Group recognises a trading gain or loss on day 1, being the difference between the transaction price and the fair value. When significant unobservable parameters are used, the entire day 1 gain or loss is deferred and is recognised in the income statement over the life of the transaction until the transaction matures, is closed out, the valuation inputs become observable, or when 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 Group measures the fair value of the group of financial instruments on a net basis but presents the underlying financial assets and liabilities separately in the financial statements, unless they satisfy the HKFRS offsetting criteria.

2. Significant accounting policies continued

(d) Valuation of financial instruments continued

Critical accounting estimates and judgements

The majority of valuation techniques employ only observable market data. 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:

- 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).

The Group's details of valuation of financial instruments is depicted in note 51 'Fair value of financial instruments'.

(e) Financial instruments measured at amortised cost

Financial assets that are held to collect the contractual cash flows and that contain contractual terms that give rise on specified dates to cash flows that are solely payments of principal and interest, such as most loans and advances to banks and customers and some debt securities, are measured at amortised cost. In addition, most financial liabilities are measured at amortised cost. The carrying value of these financial assets at initial recognition includes the directly attributed transactions costs.

The Group may commit to underwrite loans on fixed contractual terms for specified periods of time. When the loan arising from the lending commitment is expected to be held for trading, 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.

(f) Financial assets measured at fair value through other comprehensive income ('FVOCI')

Financial assets held for a business model that is achieved by both selling and collecting contractual cash flows and that 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 the trade date when the Group enters into contractual arrangements to purchase and are normally derecognised when they are either sold or redeemed. They are subsequently remeasured at fair value and changes therein (except for those relating to impairment, interest income and foreign currency exchange gains and losses) are recognised in other comprehensive income until the assets are sold. Upon disposal, the cumulative gains or losses in other comprehensive income are recognised in the income statement as 'Gains less losses from financial investments'. Financial assets measured at FVOCI are included in the impairment calculations set out below and impairment is recognised in profit or loss.

(g) Equity securities measured at fair value with fair value movement presented in OCI

The equity securities for which fair value movements are shown in OCI are for business facilitation and other similar investments where the Group holds the investments other than to generate a capital return. Gains or losses on derecognition of these equity securities are not transferred to profit or loss. Otherwise equity securities are measured at fair value through profit or loss (except for dividend income which is recognised in profit or loss).

(h) Financial instruments designated at fair value

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;
- when 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; and
- where 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 value are recognised in the income statement in 'Net income from financial instruments measured at fair value through profit or loss'.

2. Significant accounting policies continued

(h) Financial instruments designated at fair value continued

Under the above criterion, the main classes of financial instruments designated at fair value 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. If no fair value designation was made for the related assets, at least some of the assets would otherwise be measured at either fair value through other comprehensive income or amortised cost. The related financial assets and liabilities are managed and reported to management on a fair value basis. Designation of the financial assets and related liabilities at fair value allows changes in fair values to be recorded in the income statement and presented in the same line.

(i) Derivatives

Derivatives are financial instruments that derive their value from the price of underlying item such as equities, interest rates or other indices. Derivatives are recognised initially and are subsequently measured at fair value. 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, the contractual interest is shown in 'Interest expense' together with the interest payable on the issued debt.

Hedge accounting

The Group designates certain derivatives as either (i) hedges of the change in fair value of recognised assets or liabilities or firm commitments ('fair value hedge'); or (ii) hedges of highly probable future cash flows attributable to a recognised asset or liability, or a forecast transaction ('cash flow hedge').

At the inception of a hedging relationship, the Group documents the relationship between the hedging instruments and the hedged items, its risk management objective and its strategy for undertaking the hedge. The Group requires a documented assessment, both at hedge inception and on an ongoing basis, of whether or not the hedging instruments, are highly effective in offsetting the changes attributable to the hedged risks in the fair values or cash flows of the hedged items.

(i) Fair value hedge

Changes in the fair value of derivatives that are designated and qualified as fair value hedging instruments are recorded in the income statement within 'Net income from financial instruments measured at fair value through profit or loss', along with changes in the fair value of the hedged assets or liabilities attributable to the hedged risk.

If the hedging relationship no longer meets the criteria for hedge accounting, the hedge accounting is discontinued. The cumulative adjustment to the carrying amount of a hedged item is amortised to the income statement based on a recalculated effective interest rate over the residual period to maturity, unless the hedged item has been derecognised.

(ii) Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualified as cash flow hedges is recognised in other comprehensive income and accumulated separately in equity. Any gain or loss in fair value relating to an ineffective portion is recognised immediately in the income statement within 'Net income from financial instruments measured at fair value through profit or loss'.

The accumulated gains and losses recognised in other comprehensive income are recycled to the income statement in the periods in which the hedged item will affect profit or loss.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss at that time remains in equity until the forecast transaction is ultimately recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was recognised in other comprehensive income is immediately reclassified to the income statement.

(iii) Hedge effectiveness testing

To qualify for hedge accounting, the Group requires that at the inception of the hedge and throughout its life, each hedge must be expected to be highly effective (prospective effectiveness), and demonstrate actual effectiveness (retrospective effectiveness) on an ongoing basis.

2. Significant accounting policies continued

(i) Derivatives continued

Hedge accounting continued

(iii) Hedge effectiveness testing continued

The documentation of each hedging relationship sets out how the effectiveness of the hedge is assessed and the method adopted by the Group to assess hedge effectiveness depends on its risk management strategy.

For fair value hedge relationships, the Group utilises the cumulative dollar offset method or regression as effectiveness testing methodology. For cash flow hedge relationships, the Group utilises the change in variable cash flow method, capacity test or the cumulative dollar offset method using the hypothetical derivative approach.

For prospective effectiveness, the hedging instrument is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk during the period for which the hedge is designated. For retrospective effectiveness, the change in fair value or cash flows must offset each other in the range of 80% to 125%. Hedge ineffectiveness is recognised in the income statement in 'Net income from financial instruments measured at fair value through profit or loss'.

(iv) Derivatives that do not qualify for hedge accounting

Non-qualifying hedges are economic hedges entered into as part of documented interest rate management strategies for which hedge accounting is not applied. Changes in fair value of non-qualifying hedges do not alter the cash flows expected as part of the documented management strategies for both the non-qualifying hedge instruments and the related assets and liabilities. All gains and losses from changes in the fair values of derivatives that do not qualify for hedge accounting are recognised immediately in the income statement.

(j) 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 fair value through other comprehensive income, and certain loan commitments and financial guarantee contracts. At initial recognition, allowance (or provision in the case of some loan commitments and financial guarantees) is required for ECL resulting from default events that are possible 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, allowance (or provision) is required 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 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 90 days past due or above;
- 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.

Interest income is recognised by applying the effective interest rate to the amortised cost amount, 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 collateral. 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 modify the contractual payment 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.

Performing forborne loans are initially stage 2 and remain classified as forborne until they meet applicable cure criteria (for example, they continue not to 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).

2. Significant accounting policies continued

(j) Impairment of amortised cost and FVOCI financial assets continued

Forbearance continued

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 restructuring. 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 restructuring is at market rates and no payment related concession has been provided. Mandatory and general offer loan modifications that are not borrower-specific, for example market-wide customer relief programmes, have not been classified as renegotiated loans and generally have not resulted 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 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 considers if the financial instrument has experienced a significant increase in credit risk, 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, 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, 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 which encompasses a wide range of information including the obligor's customer risk rating ('CRR'), macroeconomic condition forecasts and credit transition probabilities. Significant increase in credit risk is measured by comparing the average probability of default ('PD') for the remaining term estimated at origination with the equivalent estimation at reporting date (or that the origination PD has doubled in the case of origination CRR greater than 3.3). The significance of changes in PD was informed by expert credit risk judgment, referenced to historical credit migrations and to relative changes in external market rates. 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
Greater than 3.3 and not impaired	2x

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 ('TTC') PDs and TTC 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 notches
8.3	0 notches

2. Significant accounting policies continued

(j) Impairment of amortised cost and FVOCI financial assets continued

Significant increase in credit risk (stage 2) continued

For certain portfolios of debt securities where external market ratings are available and credit ratings are not used in credit risk management, the debt securities will be in stage 2 if their credit risk increases to the extent they are no longer considered investment grade. Investment grade is where the financial instrument has a low risk of incurring losses, the structure has a strong capacity to meet its contractual cash flow obligations in the near term and adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil their contractual cash flow obligations.

For retail portfolios, default risk is assessed using a reporting date PD derived from credit history which incorporate all available information about the customer. This PD is adjusted for the effect of macroeconomic forecasts and is considered to be a reasonable approximation of a lifetime PD measure. Retail exposures are divided into account level and homogeneous segment level measurement. Within each portfolio, the stage 2 accounts are defined as accounts with 12-month PD greater than the average 12-month PD of loans in that portfolio 12 months before they become 30 days past due.

Unimpaired and without significant increase in credit risk (stage 1)

ECL resulting from default events that are possible within the next 12 months ('12-month ECL') are 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 the recognition of a new financial instrument following a renegotiation where concessions have been granted for economic or contractual reasons relating to the borrower's financial difficulty that otherwise would not have been considered. The amount of change-in-lifetime ECL is recognised in profit or loss until the POCI 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 stages (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. Except for renegotiated loans, financial instruments are transferred out of stage 3 when they no longer exhibit any evidence of credit impairment as described above. For wholesale portfolios, renegotiated loans that are not POCI will continue to be in stage 3 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. While for retail portfolios, renegotiated loans remain in stage 3 for their renegotiated lifetime. For loans that are assessed for impairment on a portfolio basis, the evidence typically comprises a history of payment performance against the original or revised terms, as appropriate to the circumstances. For loans that are assessed for impairment on an individual basis, all available evidence is assessed on a case-by-case basis.

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.

In general, the Group calculates ECL using three main components, 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.

2. Significant accounting policies continued

(j) Impairment of amortised cost and FVOCI financial assets continued

Measurement of ECL continued

The Group leverages the Basel framework where possible, with recalibration to meet the differing HKFRS 9 requirements as follows:

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 – Regulatory floors may apply according to regulatory requirements	– Point in time (based on current conditions, adjusted to take into account estimates of future conditions that will impact PD) – An obligor/an account being 90 days past due or above is considered as defaulted – No floors is required under HKFRS 9
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 according to regulatory requirements – 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 is required under HKFRS 9 – Discounted using the 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 on an individual basis using a discounted cash flow ('DCF') methodology. The expected future cash flows are based on the credit risk officer's estimates as at 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 four different scenarios are probability-weighted by reference to the three economic scenarios applied more generally by the Group and the judgement of the credit risk officer in relation to the likelihood of the workout strategy succeeding or receivership being required. For less significant cases, the effect of different economic scenarios and work-out strategies is approximated and applied as an adjustment to the most likely outcome.

Period over which ECL is measured

Expected credit loss 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. For wholesale overdrafts, credit risk management actions are taken no less frequently than on an annual basis and therefore this period is to the expected date of the next substantive credit review. The date of the substantive credit review also represents the initial recognition of the new facility. 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 revolving loan, 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 in excess of the carrying amount of the financial asset is recognised as a provision.

Forward-looking economic forecast

The Group applies multiple forward-looking global economic scenarios determined with reference to external forecast distributions representative of our view of forecast economic conditions. This approach is considered sufficient to calculate unbiased expected credit loss in most economic environments. In certain economic environments, additional analysis may be necessary and result in additional scenarios or adjustments, to reflect a range of possible economic outcomes for an unbiased expected credit loss estimate. The detailed methodology is disclosed in 'Measurement uncertainty and sensitivity analysis of ECL estimates'.

2. Significant accounting policies continued

(j) Impairment of amortised cost and FVOCI financial assets continued

Critical accounting estimates and judgements

In determining ECL, management is required to exercise judgement in defining what is considered to be a significant increase in credit risk and in making assumptions and estimates to incorporate relevant information about past events, current conditions and forecasts of economic conditions. Judgement has been applied in determining the lifetime and point of initial recognition of revolving facilities.

The PD, LGD and EAD models which support these determinations are reviewed regularly in light of differences between loss estimates and actual loss experience. The underlying models and their calibration, including how they react to forward-looking economic conditions, remain subject to review and refinement.

The exercise of judgement in making estimations requires the use of assumptions which are highly subjective and very sensitive to the risk factors, in particular to changes in economic and credit conditions across a large number of geographical areas. Many of the factors have a high degree of interdependency and there is no single factor to which loan impairment allowances as a whole are sensitive. Therefore, sensitivities are considered in relation to key portfolios which are particularly sensitive to a few factors and the results should be further extrapolated. Risk Management section (a) 'Credit Risk' under MD&A sets out the assumptions underlying the Central scenario and information about how scenarios are developed in relation to the Group's top and emerging risks and its judgements, informed by consensus forecasts of professional industry forecasters. The adjustment from the ECL determined by using the Central scenario alone, which is used to calculate an unbiased expected loss, provides an indication of the overall sensitivity of ECL to different economic assumptions.

(k) Sale and repurchase agreements

Where securities are sold subject to commitment to repurchase them at a pre-determined price ('repos'), they remain on the balance sheet and a liability is recorded in respect of the consideration received in 'Repurchase agreements-non-trading'. Conversely, securities purchased under analogous commitments to resell ('reverse repos') are not recognised on the balance sheet and the consideration paid is recorded in 'Reverse repurchase agreements-non-trading'. The difference between the sale and repurchase price is treated as interest income and recognised over the life of the agreement.

Securities lending and borrowing transactions are generally secured, with collateral taking the form of securities or cash advanced or received. The transfer of securities to counterparties under these agreements is not normally reflected on the balance sheet. Cash collateral advanced or received is recorded as an asset or a liability respectively.

(l) Subsidiaries and associates

The Group classifies investments in entities which it controls as subsidiaries. The Group classifies investments in entities over which it has significant influence, and that are neither subsidiaries nor joint arrangement, as associates.

The Group's investments in subsidiaries and associates are stated at cost less any impairment losses. Investment in associates is recognised using the equity method. Under this method, such investments are initially stated at cost, including attributable goodwill, and are adjusted thereafter for the post-acquisition change in the Group's share of net assets less any impairment losses. An impairment loss recognised in prior periods shall be reversed through the income statement if, and only if, there has been a change in the estimates used to determine the recoverable amount of the investment since the last impairment loss was recognised.

(m) Investment properties

Investment properties are land and/or buildings which are owned or held under a leasehold interest to earn rental income and/or for capital appreciation. Investment properties are stated at fair value with changes in fair value being recognised in the income statement. Fair values are determined by independent professional valuers, primarily on the basis of capitalisation of net incomes with due allowance for outgoings and reversionary income potential. Property interests which are held under operating leases to earn rentals, or for capital appreciation, or both, are classified and accounted for as investment property on a property-by-property basis.

The Group previously elected to apply HKAS 40 *'Investment Properties'* to account for all its leasehold properties that were held for investment purposes.

2. Significant accounting policies continued

(n) Premises, plant and equipment

(i) Land and buildings

The following land and buildings held for own use are stated in the balance sheet at their revalued amount, being their fair value at the date of the revaluation less any subsequent accumulated depreciation and impairment losses:

- leasehold land and buildings where the fair value of the land cannot be reliably separated from the value of the building at inception of the lease and the premises are not clearly held under an operating lease; and
- leasehold land and buildings where the value of the land can be reliably separated from the value of the building at inception of the lease and the term of the lease is not less than 50 years.

Revaluations are performed by professionally qualified valuers, on a market basis, with sufficient regularity to ensure that the net carrying amount does not differ materially from the fair value at the reporting date. 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 other comprehensive income and are accumulated separately in the 'Premises revaluation reserve'. Deficits arising on revaluation, are firstly set off against any previous revaluation surpluses included in the 'Premises revaluation reserve' in respect of the same land and buildings, and are thereafter recognised in the income statement.

Depreciation is calculated to write off the valuation of the land and buildings over their estimated useful lives as follows:

- freehold land is not depreciated;
- leasehold land is depreciated over the unexpired terms of the leases; and
- buildings and improvements thereto are depreciated at the greater of 2% per annum on the straight-line basis or over the unexpired terms of the leases or over the remaining estimated useful lives of the buildings.

On revaluation of the land and buildings, depreciation accumulated during the year will be eliminated. Depreciation charged on revaluation surplus of the land and buildings is transferred from 'Premises revaluation reserve' to 'Retained profits'.

On disposal of the land and buildings, the profit and loss is calculated as the difference between the net sales proceeds and the net carrying amount and recognised in the income statement. Surpluses relating to the land and buildings disposed of included in the 'Premises revaluation reserve' are transferred as movements in reserves to 'Retained profits'.

The land owned by Hong Kong Government permits its use under leasehold arrangements. Similar arrangements exist in mainland China. The Group accounts for its interests in own use of the leasehold land as owned assets.

(ii) Other plant and equipment

Furniture, plant and equipment, are stated at cost less depreciation calculated on the straight-line basis to write off the assets over their estimated useful lives, which are generally between 3 and 20 years. On disposal, the profit and loss is calculated as the difference between the net sales proceeds and the net carrying amount.

Plant and equipment are subject to review for impairment if there are events or changes in circumstances that indicate that the carrying amount may not be recoverable.

(o) Goodwill and intangible assets

(i) Goodwill

Goodwill arises on business combinations, including the acquisition of subsidiaries or associates when the cost of acquisition exceeds the fair value of the Group's share of the identifiable assets, liabilities and contingent liabilities acquired and is reported in the consolidated balance sheet. If the Group's interest in the fair value of the identifiable assets, liabilities and contingent liabilities of an acquired business is greater than the cost of acquisition, the excess is recognised immediately in the income statement. Goodwill on acquisitions of associates is included in 'Interest in associates' and is not tested separately for impairment.

Goodwill is allocated to cash-generating units ('CGUs') 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 annually, and whenever there is an indication that the CGU may be impaired, by comparing the recoverable amount of a CGU with the carrying value of its net assets, including attributable goodwill. The recoverable amount of an asset is the higher of, its fair value less cost to sell, and its value in use. Value in use is the present value of the expected future cash flows from a CGU. If the recoverable amount of the CGU is less than the carrying value, an impairment loss is charged to the income statement. Any write-off in excess of the carrying value of goodwill is limited to the fair value of the individual assets and liabilities of the CGU. Goodwill is stated at cost less any accumulated impairment losses, if any.

At the date of disposal of a business, attributable goodwill is included in the Group's share of net assets in the calculation of the gain or loss on disposal.

2. Significant accounting policies continued

(o) Goodwill and intangible assets continued

(ii) Intangible assets

Intangible assets include PVIF, acquired software licences and capitalised development costs of computer software programmes.

- The PVIF is stated at a valuation determined at the reporting date by using the methodology as described in note 2(t).
- Computer software acquired is stated at cost less amortisation and impairment allowances. Amortisation of computer software is charged to the income statement over its estimated useful life. Costs incurred in the development phase of a project to produce application software for internal use are capitalised and amortised over the software's estimated useful life, usually five years.

Intangible assets that have an indefinite estimated useful life or are not yet ready for use are tested for impairment annually. Intangible assets that have a finite estimated useful life, except for the PVIF, are stated at cost less amortisation and accumulated impairment losses and are amortised over their estimated useful lives. Estimated useful life is the lower of legal duration and expected economic life. Intangible assets are subject to impairment review if there are events or changes in circumstances that indicate that the carrying amount may not be recoverable.

(p) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Income tax is recognised in the income statement except to the extent that it relates to items recognised in other comprehensive income or directly in equity, in which case it is recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable profits for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years. Current tax assets and liabilities are settled on an individual taxable entity basis.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purpose and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits. Deferred tax assets are recognised to the extent that it is probable that taxable profits will be available, against which deductible temporary differences can be utilised at each reporting date.

Deferred tax is calculated using the tax rates that are expected to apply in the periods in which the assets will be realised or the liabilities settled. Deferred tax assets and liabilities are not discounted. Deferred tax assets and liabilities are offset when they arise in the same tax reporting group and relate to income taxes levied by the same taxation authority, and when a legal right to offset exists in the entity.

(q) Employee benefits

(i) Salaries, annual bonuses, paid annual leave, leave passage and the cost to the Group of non-monetary benefits are accrued in the year in which the associated services are rendered by the employees. Provision is made in respect of paid leave entitlement accumulated during the year, which can be carried forward into future periods for compensated absence or payment in lieu if the employee leaves employment.

(ii) The Group provides retirement benefits for staff members and operates defined benefit and defined contribution schemes and participates in mandatory provident fund schemes in accordance with the relevant laws and regulations.

Payments to defined contribution plans and state-managed retirement benefit plans, where the Group's obligations under the plans are equivalent to a defined contribution plan, are charged as an expense as the employees render service.

The costs recognised for funding defined benefit plans are determined using the projected unit credit method, with annual actuarial valuations performed on each plan. The net charge to the income statement mainly comprises the service cost and the net interest on the net defined benefit liability and is presented in operating expenses. Service cost comprises current service cost, past service cost, and gain or loss on settlement.

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.

2. Significant accounting policies continued

(r) 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 arising from past events and a reliable estimate can be made as to the amount of the obligation. Contingent liabilities, which include certain guarantees and letters of credit pledged as collateral security, are possible obligations that arise from past events whose existence will be confirmed only by the occurrence, or non-occurrence, of one or more uncertain future events not wholly within the control of the Group; or are present obligations that have arisen from past events but are not recognised because it is not probable that settlement will require the outflow of economic benefits, or because the amount of the obligations cannot be reliably measured. Contingent liabilities are not recognised in the financial statements but are disclosed unless the probability of settlement is remote.

(s) Financial guarantees

Financial guarantees are contracts that require the Group to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the terms of the loans or debt instruments.

Financial guarantee liabilities are initially recognised at their fair value, and subsequently carried at the higher of:

- the amount determined in accordance with the expected credit loss model under HKFRS 9 *'Financial Instruments'*, and
- the amount initially recognised less, where appropriate, the cumulative amount of income recognised in accordance with the principles of HKFRS 15 *'Revenue from Contracts with Customers'*.

Financial guarantees are included within other liabilities.

(t) Insurance contracts

Through its insurance subsidiary, the Group issues contracts to customers that contain insurance risk, financial risk or a combination thereof. A contract under which the Group accepts significant insurance risk from another party, by agreeing to compensate that party on the occurrence of a specified uncertain future event, is classified as an insurance contract. An insurance contract may also transfer financial risk, but is accounted for as an insurance contract if the insurance risk is significant.

A contract issued by the Group that transfers financial risk, without significant insurance risk, is classified as an investment contract, and is accounted for as a financial instrument. The financial assets held by the Group for the purpose of meeting liabilities under insurance and investment contracts are classified and accounted for based on their classifications as set out in notes 2(e) to 2(i).

Insurance contracts are accounted for as follows:

Net earned insurance premiums

Premiums for life insurance contracts are accounted for when receivable, except in unit-linked insurance contracts where premiums are accounted for when liabilities are recognised.

Reinsurance premiums, netted by the reinsurers' share of provision for unearned premiums, are accounted for in the same reporting period as the premiums for the direct insurance contracts to which they relate.

Claims and reinsurance recoveries

Gross insurance claims for life insurance contracts reflect the total cost of all claims arising during the reporting period, including policyholder cash dividend payment upon policy anniversary and payments of maturities, surrenders and death claims. Reinsurance recoveries are accounted for in the same period as the related claims.

Present value of in-force long-term insurance business ('PVIF')

A value is placed on insurance contracts that are classified as long-term insurance business or long-term investment contracts with discretionary participating features ('DPF') and in force at the reporting date. This asset represents the present value of the shareholders' interest in the profits expected to emerge from those insurance contracts written at the reporting date.

The PVIF is determined by discounting future earnings expected to emerge from business currently in force, using appropriate assumptions in assessing factors such as future mortality and morbidity, lapse rates, levels of expenses and a risk discount rate that reflects the risk premium attributable to the respective long-term insurance business. The valuation has also included explicit risk margins for non-economic risks in the projection assumptions, and explicit allowances for financial options and guarantees using stochastic methods. Risk discount rates are set on an active basis with reference to market risk free yields and incorporate the explicit margins and allowances for certain risks and uncertainties in place of implicit adjustments. Movements in the PVIF are included in other operating income on a pre-tax basis. The PVIF is reported under 'Intangible assets' in the balance sheet.

2. Significant accounting policies continued

(t) Insurance contracts continued

Liabilities under insurance contracts

Liabilities under non-linked life insurance contracts are calculated by each life insurance operation based on local actuarial principles. Some insurance contracts may contain discretionary participation features whereby the policyholder is entitled to additional payments whose amount and/or timing is at the discretion of the issuer. The discretionary element of these contracts is included in 'Liabilities under insurance contracts'.

Liabilities under unit-linked life insurance contracts are at least equivalent to the surrender or transfer value which is calculated by reference to the value of the relevant underlying funds or indices.

A liability adequacy test is carried out on insurance liabilities to ensure that the carrying amount of the liabilities is sufficient in the light of current estimates of future cash flows. When performing the liability adequacy test, all expected cash flows are discounted and compared with the carrying value of the liability. When a shortfall is identified it is charged immediately to the income statement.

Critical accounting estimates and judgements

Classification

HKFRS 4 requires the Group to determine whether a contract that transfers both insurance risk and financial risk is classified as an insurance contract, or as a financial instrument under HKFRS 9, or whether the insurance and non-insurance elements of the contract should be accounted for separately. This process involves judgement and estimation of the amounts of different types of risks that are transferred or assumed under a contract. The estimation of such risks often involves the use of assumptions about future events and is thus subject to a degree of uncertainty.

Present value of in-force long-term insurance business ('PVIF')

The value of PVIF, which is recorded as an intangible asset, depends upon assumptions regarding future events. These are described in more detail in note 33(a). The assumptions are reassessed at each reporting date and changes in the estimates which affect the value of PVIF are reflected in the income statement.

Insurance liabilities

The estimation of insurance liabilities involves selecting statistical models and making assumptions about future events which need to be frequently calibrated against experience and forecasts. The sensitivity of insurance liabilities to potential changes in key assumptions is set out in the MD&A.

(u) Investment contracts

Customer liabilities under linked investment contracts are measured at fair value and reported under 'Financial liabilities designated at fair value'. The linked financial assets are measured at fair value and the movements in fair value are recognised in the income statement in 'Net income from financial instruments designated at fair value through profit or loss'. Deposits receivable and amounts withdrawn are accounted for as increases or decreases in the liability recorded in respect of investment contracts.

Investment management fee receivables are recognised in the income statement over the period of the provision of the investment management services, in 'Net fee income'.

(v) Translation of foreign currencies

Foreign currency transactions during the year are translated at the foreign exchange rates ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rates ruling at each reporting date. Any resulting exchange differences are recognised in the income statement. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated using the foreign exchange rates ruling at the dates the fair value was determined.

The results of branches, subsidiaries and associates not reporting in Hong Kong dollars are translated into Hong Kong dollars at the average rates of exchange for the reporting period. Exchange differences arising from the re-translation of opening foreign currency net investments and the related cost of hedging, if any, and exchange differences arising from re-translation of the result for the reporting period from the average rate to the exchange rate ruling at the period-end, are recognised in other comprehensive income and accumulated separately in equity in the foreign exchange reserve.

Exchange differences on a monetary item that is part of a net investment in a foreign operation are recognised in the income statement of separate subsidiary's financial statements. In the consolidated financial statements, the corresponding exchange differences are recognised in other comprehensive income and accumulated separately in equity in the foreign exchange reserve. On disposal of a foreign operation, exchange differences relating thereto previously recognised in reserves are recognised in the income statement.

2. Significant accounting policies continued

(w) Operating segments

The Group's operating segments are determined to be customer group segment because the chief operating decision maker uses customer group information in order to make decisions about allocating resources and assessing performance.

HKFRS 8 *'Operating Segments'* requires segmental disclosure to be based on the way that the Group's chief operating decision maker regards and manages the Group, with the amounts reported for each reportable segment being the measures reported to the Group's chief operating decision maker for the purpose of assessing segmental performance and making decision about operating matters.

(x) Related parties

For the purposes of these financial statements, parties are considered to be related to the Group if the Group has the ability, directly or indirectly, to control the party or exercise significant influence over the party in making financial and operating decisions, or vice versa, or where the Group and the party are members of the same group. Related parties may be individuals (being members of key management personnel, significant shareholders and/or their close family members) or other entities which are under the significant influence of related parties of the Group or post-employment benefit scheme. Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group and its holding companies, directly or indirectly, including any directors (whether executive or otherwise) and Executive Committee members of the Group and its holding companies.

3. Interest income/interest expense

(a) Interest income

	2022	2021
Interest income arising from:		
– financial assets that are not at fair value through profit and loss	39,316	28,030
– trading assets	915	461
– financial assets designated and otherwise mandatorily measured at fair value through profit or loss	–	16
	40,231	28,507
of which:		
– interest income from impaired financial assets	346	42

(b) Interest expense

	2022	2021
Interest expense arising from:		
– financial liabilities that are not at fair value through profit and loss	9,231	3,311
– trading liabilities	738	331
– financial liabilities designated at fair value	1,281	1,043
	11,250	4,685
of which:		
– interest expense from subordinated liabilities	779	338

4. Net fee income

	Wealth and Personal Banking	Commercial Banking	Global Banking	Global Markets	Other	Total
2022[1]						
– securities broking and related services	1,322	92	1	20	–	1,435
– retail investment funds	911	15	–	–	–	926
– insurance	333	72	76	–	–	481
– account services	265	126	7	3	–	401
– remittances	80	164	34	–	–	278
– cards	2,582	26	–	–	–	2,608
– credit facilities	16	306	140	–	–	462
– imports/exports	–	311	37	–	–	348
– other	126	146	51	9	335	667
Fee income	5,635	1,258	346	32	335	7,606
Fee expense	(2,410)	(34)	(3)	(90)	–	(2,537)
	3,225	1,224	343	(58)	335	5,069
2021 (re-presented)[1]						
– securities broking and related services	1,866	162	6	6	–	2,040
– retail investment funds	1,539	28	–	–	–	1,567
– insurance	339	85	78	–	–	502
– account services	247	116	7	1	–	371
– remittances	53	181	34	–	–	268
– cards	2,656	23	–	–	–	2,679
– credit facilities	18	476	188	–	–	682
– imports/exports	–	364	52	–	–	416
– other	199	116	31	7	273	626
Fee income	6,917	1,551	396	14	273	9,151
Fee expense	(2,449)	(28)	(6)	(93)	2	(2,574)
	4,468	1,523	390	(79)	275	6,577

[1] To align with the presentation of relevant segmental information for business management and operation, the segmental information of Global Banking and Global Markets have been split. Comparative figures have been re-presented to conform with current year's presentation.

	2022	2021
of which:		
Net fee income on financial assets that are not at fair value through profit or loss (other than amounts included in determining the effective interest rate)	1,645	1,880
– fee income	3,873	4,179
– fee expense	(2,228)	(2,299)
Net fee income on trust and other fiduciary activities where the Group holds or invests assets on behalf of its customers	668	903
– fee income	806	1,022
– fee expense	(138)	(119)

5. Net income/(loss) from financial instruments measured at fair value through profit or loss

	2022	2021
Net trading income	**1,828**	1,557
– trading income	**1,834**	1,560
– other trading income/(expense) from ineffective fair value hedges	**(6)**	(3)
Net income/(expense) from financial instruments designated at fair value through profit or loss	**(217)**	182
Net income/(expense) from assets and liabilities of insurance businesses measured at fair value through profit or loss	**(2,049)**	2,610
– financial assets held to meet liabilities under insurance and investment contracts	**(2,058)**	2,611
– liabilities to customers under investment contracts	**9**	(1)
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	**9**	(3)
	(429)	4,346

6. Gains less losses from financial investments

	2022	2021
Net gains/(losses) from disposal of debt securities measured at amortised cost	**(10)**	108
Net gains/(losses) from disposal of debt securities measured at fair value through other comprehensive income	**85**	98
	75	206

7. Dividend income

	2022	2021
Dividend income:		
– listed investments	**195**	160
– unlisted investments	**30**	16
	225	176

8. Net insurance premium income

	Non-linked	Unit-linked	Total
2022			
Gross insurance premium income	**21,325**	**3**	**21,328**
Reinsurers' share of gross insurance premium income	**(777)**	**–**	**(777)**
Net insurance premium income	**20,548**	**3**	**20,551**
2021			
Gross insurance premium income	15,296	3	15,299
Reinsurers' share of gross insurance premium income	(1,216)	–	(1,216)
Net insurance premium income	14,080	3	14,083

9. Other operating income/(loss)

	2022	2021
Rental income from investment properties	276	269
Movement in present value of in-force long-term insurance business (note 33(a))	(1,743)	(188)
Net gains/(losses) from disposal of fixed assets	(15)	(48)
Net gains/(losses) from the derecognition of loans and advances to customers measured at amortised cost	2	4
Others	206	285
	(1,274)	322

10. Net insurance claims and benefits paid and movement in liabilities to policyholders

	Non-linked	Unit-linked	Total
2022			
Claims, benefits and surrenders paid	12,553	3	12,556
Movement in liabilities	7,454	(14)	7,440
Gross claims and benefits paid and movement in liabilities to policyholders	20,007	(11)	19,996
Reinsurers' share of claims, benefits and surrenders paid	(633)	–	(633)
Reinsurers' share of movement in liabilities	(137)	–	(137)
Reinsurers' share of claims and benefits paid and movement in liabilities to policyholders	(770)	–	(770)
Net insurance claims and benefits paid and movement in liabilities to policyholders	19,237	(11)	19,226
2021			
Claims, benefits and surrenders paid	11,901	4	11,905
Movement in liabilities	5,672	2	5,674
Gross claims and benefits paid and movement in liabilities to policyholders	17,573	6	17,579
Reinsurers' share of claims, benefits and surrenders paid	(868)	–	(868)
Reinsurers' share of movement in liabilities	(361)	–	(361)
Reinsurers' share of claims and benefits paid and movement in liabilities to policyholders	(1,229)	–	(1,229)
Net insurance claims and benefits paid and movement in liabilities to policyholders	16,344	6	16,350

11. Change in expected credit losses and other credit impairment charges

	2022	2021
Loans and advances to banks and customers	7,669	2,844
– new allowances net of allowance releases	7,367	2,983
– recoveries of amounts previously written off	(131)	(167)
– other movements	433	28
Loan commitments and guarantees	(8)	(43)
Other financial assets	(35)	6
	7,626	2,807

12. Operating expenses

	2022	2021
Employee compensation and benefits:		
– salaries and other costs*	5,941	5,811
– retirement benefit costs		
– defined benefit scheme (note 48(a))	149	169
– defined contribution scheme (note 48(b))	355	331
	6,445	6,311
General and administrative expenses:		
– rental expenses	18	22
– other premises and equipment	1,875	1,795
– marketing and advertising expenses	440	378
– other operating expenses	3,324	3,090
	5,657	5,285
Depreciation of premises, plant and equipment (note 32)	1,460	1,492
Depreciation of right-of-use assets	514	574
Amortisation of intangible assets (note 33)	702	472
	14,778	14,134
* of which:		
share-based payments (note 49(c))	35	36
Cost efficiency ratio	43.5%	42.6%

13. The emoluments of the five highest paid individuals

(a) The aggregate emoluments

	2022	2021
Salaries, allowances and benefits in kind	28	28
Retirement scheme contributions	3	1
Variable bonuses		
– Cash bonus	11	8
– Share-based payment	11	9
	53	46

(b) The numbers of the five highest paid individuals with emoluments within the following bands are:

HK$	2022 Number of Individuals	2021 Number of Individuals
5,500,001 – 6,000,000	1	–
7,000,001 – 7,500,000	2	1
7,500,001 – 8,000,000	–	2
8,000,001 – 8,500,000	–	1
13,000,001 – 13,500,000	1	–
14,500,001 – 15,000,000	–	1
19,500,001 – 20,000,000	1	–
	5	5

The emoluments of the five highest paid individuals set out above include the emoluments of one (2021: two) Executive Directors which are included in note 14. There is no Non-Executive Director included in the table above (2021: Nil).

14. Directors' remunerations

The emoluments of the Directors of the Bank disclosed pursuant to section 383 of the Hong Kong Companies Ordinance (Cap.622) and the Companies (Disclosure of Information about Benefits of Directors) Regulation were set out below:

	Emoluments								
				Variable bonus[5]					
				Cash		Shares			
	Fees '000	Salaries, allowances and benefits in kind [6] '000	Contribution to retirement benefit schemes [4] '000	Deferred '000	Non-deferred '000	Deferred '000	Non-deferred '000	Total 2022 '000	Total 2021 '000
Executive Directors									
Diana Cesar, Chief Executive[1]	–	9,827	685	2,652	1,768	3,074	1,768	19,774	6,868
Louisa Cheang, Chief Executive[1] (Resigned on 1 Sep 2021)	–	–	–	–	–	–	–	–	8,375
Margaret W H Kwan[1] (Resigned on 1 Feb 2022)	–	1,150	2	–	–	–	–	1,152	7,875
Say Pin Saw[1] (Appointed on 7 Nov 2022)	–	540	63	–	226	151	–	980	–
Non-Executive Directors									
Raymond K F Ch'ien[3] (Resigned on 27 May 2021)	–	–	–	–	–	–	–	–	451
John C C Chan[3] (Resigned on 5 May 2022)	479	–	–	–	–	–	–	479	1,070
L Y Chiang[3]	1,142	–	–	–	–	–	–	1,142	1,091
Cordelia Chung[3] (Appointed on 23 Feb 2022)	771	–	–	–	–	–	–	771	–
Kathleen C H Gan[2]	660	–	–	–	–	–	–	660	660
Clement K M Kwok [3]	1,178	–	–	–	–	–	–	1,178	773
Patricia S W Lam[3] (Appointed on 1 Jul 2022)	430	–	–	–	–	–	–	430	–
Irene Y L Lee[3]	2,032	–	–	–	–	–	–	2,032	1,818
Eric K C Li[3] (Resigned on 27 May 2021)	–	–	–	–	–	–	–	–	537
David Y C Liao[2]	860	–	–	–	–	–	–	860	287
Huey Ru Lin[3] (Appointed on 1 Jul 2022)	378	–	–	–	–	–	–	378	–
Vincent H S Lo (Resigned on 5 May 2022)	275	–	–	–	–	–	–	275	660
Kenneth S Y Ng[3]	1,312	–	–	–	–	–	–	1,312	960
Xiao Bin Wang[3] (Appointed on 23 Feb 2022)	840	–	–	–	–	–	–	840	–
Peter T S Wong[2] (Resigned on 1 Sep 2021)	–	–	–	–	–	–	–	–	553
Michael W K Wu[3]	1,377	–	–	–	–	–	–	1,377	1,091
Past Directors	–	–	1,693	–	–	–	–	1,693	1,677
	11,734	11,517	2,443	2,652	1,994	3,225	1,768	35,333	34,746
2021	9,951	15,342	2,380	1,698	1,727	1,921	1,727		

Notes:

[1] In line with the HSBC Group's remuneration policy, no Director's fees were paid to those Directors who were full time employees of the Bank or its subsidiaries.

[2] Fees receivable as a Director of Hang Seng Bank Limited were surrendered to The Hongkong and Shanghai Banking Corporation Limited in accordance with the HSBC Group's internal policy.

[3] Independent Non-Executive Director.

[4] The Bank made contributions during 2022 into the retirement benefit schemes of which the Bank's Directors/past Directors are among their members. The aggregate amount of pensions received by the past Directors of the Bank under the relevant pension schemes amounted to HK$1.693m in 2022.

[5] The amount of variable bonus (deferred and non-deferred) comprises the cash and the estimated purchase cost of the award of HSBC Holdings plc Restricted Share.

[6] Benefits in kind mainly include estimated money value of other non-cash benefits: accommodation, car, insurance premium.

[7] Remunerations/emoluments for Executive Directors are for services in connection with management of the affairs of the Hang Seng Bank and its subsidiary undertakings.

15. Auditors' remuneration

	2022	2021
Statutory audit services	28	27
Non-statutory audit services and others	16	10
	44	37

16. Net surplus/(deficit) on property revaluation

	2022	2021
Surplus/(deficit) on investment property revaluation	(108)	82

17. Tax expense

(a) Taxation in the Consolidated Income Statement represents:

	2022	2021
Current tax – provision for Hong Kong profits tax		
Tax for the year	1,845	2,391
Adjustment in respect of prior years	(23)	75
	1,822	2,466
Current tax – taxation outside Hong Kong		
Tax for the year	204	77
Adjustment in respect of prior years	1	–
	205	77
Deferred tax (note 41(b))		
Origination and reversal of temporary differences	(739)	(104)
Total tax expense	1,288	2,439

The current tax provision is based on the estimated assessable profit for 2022, and is determined for the Bank and its subsidiaries operating in the Hong Kong SAR by using the Hong Kong profits tax rate of 16.5 per cent (2021: 16.5 per cent). For subsidiaries and branches operating in other jurisdictions, the appropriate tax rates prevailing in the relevant countries are used. Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised.

(b) Reconciliation between taxation charge and accounting profit at applicable tax rates:

	2022	2021
Profit before tax	11,439	16,385
Notional tax on profit before tax, calculated at Hong Kong profits tax rate of 16.5% (2021: 16.5%)	1,887	2,704
Tax effect of:		
– different tax rates in other countries/areas	11	87
– non-taxable income and non-deductible expenses	(523)	(362)
– share of (profits)/losses of associates	2	(12)
– others	(89)	22
Actual charge for taxation	1,288	2,439

18. Earnings per share – basic and diluted

The calculation of basic and diluted earnings per share is based on earnings of HK$9,455m in 2022 (2021: HK$13,257m), which has been adjusted for the AT1 capital instrument related deductions, and on the weighted average number of ordinary shares in issue of 1,911,842,736 shares (unchanged from 2021).

19. Dividends/Distributions

(a) Dividends attributable to the year:

	2022		2021	
	per share HK$	HK$m	per share HK$	HK$m
First interim	**0.70**	**1,338**	1.10	2,103
Second interim	**0.70**	**1,338**	1.10	2,103
Third interim	**0.70**	**1,338**	1.10	2,103
Fourth interim	**2.00**	**3,824**	1.80	3,441
	4.10	**7,838**	5.10	9,750

The fourth interim dividend is proposed after the balance sheet date, and has not been recognised as a liability at the balance sheet date.

(b) Dividends attributable to the previous year, approved and paid during the year:

	2022	2021
Fourth interim dividend in respect of the previous year, approved and paid during the year, of HK$1.80 per share (2021: HK$2.80 per share)	**3,441**	5,353

(c) Distributions to holders of AT1 capital instruments classified as equity

	2022	2021
US$900 million fixed to floating rate perpetual capital instrument (coupon rate at 6.03 per cent and then three-month US dollar LIBOR plus 4.02 per cent from the first call date)	**427**	423
US$600 million fixed to floating rate perpetual capital instrument (coupon rate at 6.00 per cent and then three-month US dollar LIBOR plus 4.06 per cent from the first call date)	**283**	280
	710	703

20. Segmental analysis

Hong Kong Financial Reporting Standard 8 ('HKFRS 8') requires segmental disclosure to be based on the way that the Group's chief operating decision maker regards and manages the Group, with the amounts reported for each reportable segment being the measures reported to the Group's chief operating decision maker for the purpose of assessing segmental performance and making decisions about operating matters. To align with the internal reporting information, the Group has presented the following five reportable segments.

– **Wealth and Personal Banking** offers a broad range of products and services to meet the personal banking, consumer lending and wealth management needs of individual customers. Personal banking products typically include current and savings accounts, time deposits, mortgages and personal loans, credit cards, insurance, investment and other wealth management services;

– **Commercial Banking** offers a comprehensive suite of products and services to corporate, commercial and small and medium-sized enterprises ('SME') customers – including corporate lending, trade and receivable finance, payments and cash management, treasury and foreign exchange, general insurance, key-person insurance, investment services and corporate wealth management;

– **Global Banking** provides tailored financial solutions to major corporate and institutional clients. Undertaking a long-term relationships management approach, its services include general banking and transaction banking, corporate lending, deposit and cash management;

– **Global Markets** provides tailored solutions and services in foreign exchange, bullion, equities, fixed income and securities financing as well as managing the funding and liquidity position of the Group and other market risk positions arising from banking and client activities;

– **Other** mainly represents the Group's holdings of premises apart from outlets dedicated for Wealth and Personal Banking, investment properties, equity shares and subordinated debt funding as well as central support and functional costs with associated recoveries.

(a) Segmental result

For the purpose of segmental analysis, the allocation of revenue reflects the benefits of capital and other funding resources allocated to the business segments by way of internal capital allocation and fund transfer-pricing mechanisms. Cost of central support services and functions are allocated to business segments based on cost drivers which reflect or correlate with the use of services. Bank-owned premises apart from outlets dedicated for Wealth and Personal Banking are reported under the 'Other' segment. When these premises are utilised by business segments, notional rent will be charged to the relevant business segments with reference to market rates.

20. Segmental analysis continued

(a) Segmental result continued

	Wealth and Personal Banking	Commercial Banking	Global Banking	Global Markets	Other[2,4]	Total
2022[1]						
Net interest income/(expense)	17,160	8,149	2,411	1,524	(263)	28,981
Net fee income/(expense)	3,225	1,224	343	(58)	335	5,069
Net income/(loss) from financial instruments measured at fair value through profit or loss	(1,888)	241	–	1,120	98	(429)
Gains less losses from financial investments	(10)	–	–	85	–	75
Dividend income	–	–	–	–	225	225
Net insurance premium income	18,838	1,713	–	–	–	20,551
Other operating income/(loss)	(1,462)	(52)	2	–	238	(1,274)
Total operating income	35,863	11,275	2,756	2,671	633	53,198
Net insurance claims and benefits paid and movement in liabilities to policyholders	(17,576)	(1,650)	–	–	–	(19,226)
Net operating income before change in expected credit losses and other credit impairment charges	18,287	9,625	2,756	2,671	633	33,972
– of which: – external	*11,255*	*10,859*	*4,983*	*7,502*	*(627)*	*33,972*
– inter-segment	*7,032*	*(1,234)*	*(2,227)*	*(4,831)*	*1,260*	*–*
Change in expected credit losses and other credit impairment charges	(497)	(5,436)	(1,688)	(4)	(1)	(7,626)
Net operating income	17,790	4,189	1,068	2,667	632	26,346
Operating expenses*	(9,083)	(3,414)	(688)	(643)	(950)	(14,778)
Impairment loss on intangible assets	–	–	–	–	(11)	(11)
Operating profit/(loss)	8,707	775	380	2,024	(329)	11,557
Net surplus/(deficit) on property revaluation	–	–	–	–	(108)	(108)
Share of profits/(losses) of associates	(10)	–	–	–	–	(10)
Profit/(loss) before tax	8,697	775	380	2,024	(437)	11,439
Share of profit/(loss) before tax	76.0%	6.8%	3.3%	17.7%	(3.8)%	100.0%
** Depreciation/amortisation included in operating expenses*	(803)	(11)	(2)	(1)	(1,859)	(2,676)
As at 31 December 2022						
Total assets	610,343	366,837	211,807	674,297	30,521	1,893,805
of which: Gross loans and advances to customers	382,727	353,172	208,829	–	–	944,728
Total liabilities	1,102,134	341,490	126,329	106,656	33,235	1,709,844
of which: Customer deposits[3]	931,170	319,090	123,229	15,352	–	1,388,841
Interest in associates	2,256	–	–	–	–	2,256
Non-current assets acquired during the year	168	29	–	4	1,686	1,887

20. Segmental analysis continued

(a) Segmental result continued

	Wealth and Personal Banking	Commercial Banking	Global Banking	Global Markets	Other[2,4]	Total
2021 (re-presented)[1]						
Net interest income/(expense)	13,013	7,037	2,369	1,792	(389)	23,822
Net fee income/(expense)	4,468	1,523	390	(79)	275	6,577
Net income from financial instruments measured at fair value through profit or loss	3,095	370	–	858	23	4,346
Gains less losses from financial investments	104	4	–	98	–	206
Dividend income	–	–	–	–	176	176
Net insurance premium income	13,059	1,024	–	–	–	14,083
Other operating income/(loss)	126	(31)	(2)	–	229	322
Total operating income	33,865	9,927	2,757	2,669	314	49,532
Net insurance claims and benefits paid and movement in liabilities to policyholders	(15,359)	(991)	–	–	–	(16,350)
Net operating income before change in expected credit losses and other credit impairment charges	18,506	8,936	2,757	2,669	314	33,182
– of which: – external	*16,961*	*9,195*	*3,451*	*3,277*	*298*	*33,182*
– inter-segment	*1,545*	*(259)*	*(694)*	*(608)*	*16*	*–*
Change in expected credit losses and other credit impairment charges	(314)	(1,326)	(1,165)	(2)	–	(2,807)
Net operating income	18,192	7,610	1,592	2,667	314	30,375
Operating expenses*	(8,582)	(3,463)	(630)	(664)	(795)	(14,134)
Impairment loss on intangible assets	–	–	–	–	(10)	(10)
Operating profit/(loss)	9,610	4,147	962	2,003	(491)	16,231
Net surplus on property revaluation	–	–	–	–	82	82
Share of profits of associates	72	–	–	–	–	72
Profit/(loss) before tax	9,682	4,147	962	2,003	(409)	16,385
Share of profit/(loss) before tax	59.1%	25.3%	5.9%	12.2%	(2.5)%	100.0%
** Depreciation/amortisation included in operating expenses*	(820)	(10)	(1)	(2)	(1,705)	(2,538)
As at 31 December 2021 (re-presented)						
Total assets	593,093	416,717	227,226	594,239	(11,090)	1,820,185
of which: Gross loans and advances to customers	375,095	402,067	227,163	–	–	1,004,325
Total liabilities	1,036,077	352,129	119,799	136,775	(9,011)	1,635,769
of which: Customer deposits[3]	874,709	334,003	117,776	26,188	(13,876)	1,338,800
Interest in associates	2,341	–	–	–	–	2,341
Non-current assets acquired during the year	129	14	–	2	2,001	2,146

1 To align with the presentation of relevant segmental information for business management and operation, the segmental information of Global Banking and Global Markets have been split. Additional information on external/inter-segment of net operating income before change in expected credit losses and other credit impairment charges has also been included. Comparative figures have been re-presented to conform with current year's presentation.

2 Deposits balances under 'Other' segment, as applicable, mainly relating to the consolidated elimination of Negotiable Certificates of Deposits ('NCDs') issued by Hang Seng Bank (China) Limited to Hang Seng Bank Limited.

3 Customer deposits balances include current, savings and other deposit accounts, certificates of deposit and other debt securities in issue.

4 Including inter-segment elimination, of which total assets amounted to HK$33.9bn (2021: HK$79.4bn) and total liabilities amounted to HK$24.4bn (2021: HK$68.7bn).

20. Segmental analysis continued

(b) Information by geographical region

The geographical regions in this analysis are classified by the location of the principal operations of the subsidiary companies or, in the case of the Bank itself, by the location of the branches responsible for reporting the results or advancing the funds. Consolidation adjustments made in preparing the Group's financial statements upon consolidation are included in the 'Inter-region elimination'.

	Hong Kong	Mainland China	Others	Inter-region elimination	Total
Year ended 31 December 2022					
Total operating income/(loss)	**49,862**	**3,111**	**255**	**(30)**	**53,198**
Profit before tax	**11,050**	**219**	**170**	**–**	**11,439**
At 31 December 2022					
Total assets	**1,766,884**	**139,595**	**22,337**	**(35,011)**	**1,893,805**
Total liabilities	**1,590,976**	**123,633**	**20,713**	**(25,478)**	**1,709,844**
Interest in associates	**2,256**	**–**	**–**	**–**	**2,256**
Non-current assets*	**62,503**	**1,468**	**39**	**–**	**64,010**
Contingent liabilities and commitments	**506,097**	**72,291**	**5,496**	**(40,087)**	**543,797**
Year ended 31 December 2021					
Total operating income/(loss)	46,284	3,001	278	(31)	49,532
Profit before tax	15,047	1,161	177	–	16,385
At 31 December 2021					
Total assets	1,697,609	179,392	22,820	(79,636)	1,820,185
Total liabilities	1,521,858	162,429	21,348	(69,866)	1,635,769
Interest in associates	2,341	–	–	–	2,341
Non-current assets*	64,535	1,652	49	–	66,236
Contingent liabilities and commitments	495,857	75,212	5,516	(32,715)	543,870

* Non-current assets consist of investment properties, premises, plant and equipment, intangible assets and right-of-use assets.

21. Maturity analysis of assets and liabilities

The following table provides 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 '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 '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 'Over 5 years' time bucket.
- Non-financial assets and liabilities with no contractual maturity are included in the 'Over 5 years' time bucket. Non-financial assets mainly include premises, plant and equipment of HK$27,498m (2021: HK$31,205m), intangible assets of HK$24,514m (2021:HK$25,486m), investment properties of HK$11,998m (2021: HK$9,545m), bullion of HK$6,887m (2021: HK$8,470m) and reinsurers' share of liabilities under insurance contracts of HK$6,020m (2021: HK$5,848m). Non-financial liabilities mainly include liabilities under insurance contracts of HK$165,594m (2021: HK$154,551m) and deferred tax liabilities of HK$6,645m (2021: HK$7,302m).
- Liabilities under insurance contracts and reinsurer's share of liabilities under insurance contracts are irrespective of contractual maturity included in the 'Over 5 years' time bucket in the maturity table provided below. An analysis of the expected maturity of liabilities under insurance contracts based on undiscounted cash flows is provided under the 'Insurance manufacturing operation risk' in the Risk section of the Management Discussion and Analysis. Liabilities under investment contracts are classified in accordance with their contractual maturity. Undated investment contracts are included in the 'Over 5 years' time bucket.

21. Maturity analysis of assets and liabilities continued

Maturity analysis of assets and liabilities

	Not more than 1 month	Over 1 month but not more than 3 months	Over 3 months but not more than 6 months	Over 6 months but not more than 9 months	Over 9 months but not more than 1 year	Over 1 year but not more than 2 years	Over 2 years but not more than 5 years	Over 5 years	Total
2022									
Assets									
Cash and balances at central banks	17,609	–	–	–	–	–	–	–	17,609
Trading assets	47,373	–	–	–	–	–	–	–	47,373
Derivative financial instruments	20,705	512	153	27	400	456	508	–	22,761
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	77	–	–	–	–	–	460	28,324	28,861
Reverse repurchase agreements – non-trading	25,731	12,908	3,725	–	–	–	–	–	42,364
Placings with and advances to banks	24,061	26,007	8,354	–	2,423	–	1,481	–	62,326
Loans and advances to customers	90,077	61,158	81,851	48,575	38,562	144,907	178,541	287,663	931,334
Financial investments	134,545	213,141	47,307	16,473	14,474	41,725	58,717	96,234	622,616
Accrued income and other financial assets	22,316	5,875	5,448	2,229	1,509	375	172	714	38,638
Financial assets	382,494	319,601	146,838	67,304	57,368	187,463	239,879	412,935	1,813,882
Non-financial assets	–	–	–	–	–	–	–	79,923	79,923
Total assets	382,494	319,601	146,838	67,304	57,368	187,463	239,879	492,858	1,893,805
Liabilities									
Deposits from banks	4,978	1	–	226	–	–	–	–	5,205
Current, savings and other deposit accounts	909,173	167,283	142,972	8,281	9,665	2,521	9,591	–	1,249,486
Repurchase agreements – non-trading	8,520	1,072	1,712	–	–	–	–	–	11,304
Trading liabilities	46,323	–	–	–	–	–	–	–	46,323
Derivative financial instruments	20,509	4	62	56	68	161	132	–	20,992
Financial liabilities designated at fair value	13,856	13,824	4,345	4,506	2,476	6,972	–	330	46,309
Certificates of deposit and other debt securities in issue	7,054	30,472	35,501	19,832	520	–	–	–	93,379
Subordinated liabilities[1]	–	–	–	–	–	–	19,680	7,799	27,479
Accruals and other financial liabilities	17,286	8,172	5,636	1,730	1,657	566	641	161	35,849
Financial liabilities	1,027,699	220,828	190,228	34,631	14,386	10,220	30,044	8,290	1,536,326
Non-financial liabilities	–	–	–	–	–	–	–	173,518	173,518
Total liabilities	1,027,699	220,828	190,228	34,631	14,386	10,220	30,044	181,808	1,709,844

[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.

21. Maturity analysis of assets and liabilities continued

Maturity analysis of assets and liabilities continued

	Not more than 1 month	Over 1 month but not more than 3 months	Over 3 months but not more than 6 months	Over 6 months but not more than 9 months	Over 9 months but not more than 1 year	Over 1 year but not more than 2 years	Over 2 years but not more than 5 years	Over 5 years	Total
2021									
Assets									
Cash and balances at central banks	16,896	–	–	–	–	–	–	–	16,896
Trading assets	47,433	–	–	–	–	–	–	–	47,433
Derivative financial instruments	12,048	104	217	184	80	316	275	–	13,224
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	77	–	–	–	–	–	591	30,658	31,326
Reverse repurchase agreements – non-trading	11,049	4,633	3,139	–	–	–	–	–	18,821
Placings with and advances to banks	43,279	18,299	4,577	1,520	2,277	2,541	–	–	72,493
Loans and advances to customers	80,268	65,580	80,432	61,706	56,970	134,349	245,160	272,932	997,397
Financial investments	69,561	123,195	56,896	22,275	9,394	51,568	75,186	92,311	500,386
Accrued income and other financial assets	26,601	5,328	4,006	1,503	198	534	200	696	39,066
Financial assets	307,212	217,139	149,267	87,188	68,919	189,308	321,412	396,597	1,737,042
Non-financial assets	–	–	–	–	–	–	–	83,143	83,143
Total assets	307,212	217,139	149,267	87,188	68,919	189,308	321,412	479,740	1,820,185
Liabilities									
Deposits from banks	5,333	–	–	–	–	–	–	–	5,333
Current, savings and other deposit accounts	1,116,818	83,294	19,196	3,592	4,987	566	1,763	–	1,230,216
Repurchase agreements – non-trading	13,391	729	627	1,041	–	804	–	–	16,592
Trading liabilities	44,291	–	–	–	–	–	–	–	44,291
Derivative financial instruments	11,831	12	47	132	31	84	115	–	12,252
Financial liabilities designated at fair value	8,138	9,897	4,432	2,075	2,465	15	–	377	27,399
Certificates of deposit and other debt securities in issue	19,685	22,929	28,009	4,448	6,496	–	–	–	81,567
Subordinated liabilities	–	–	–	–	–	–	11,225	13,259	24,484
Accruals and other financial liabilities	16,972	6,774	3,735	985	363	435	761	265	30,290
Financial liabilities	1,236,459	123,635	56,046	12,273	14,342	1,904	13,864	13,901	1,472,424
Non-financial liabilities	–	–	–	–	–	–	–	163,345	163,345
Total liabilities	1,236,459	123,635	56,046	12,273	14,342	1,904	13,864	177,246	1,635,769

22. Cash and balances at central banks

	2022	2021
Cash in hand	**8,505**	7,230
Balances at central banks	**9,104**	9,666
	17,609	16,896

23. Trading assets

	2022	2021
Treasury bills	**17,568**	26,004
Other debt securities	**29,749**	21,388
Debt securities	**47,317**	47,392
Investment funds/equity shares	**43**	41
Reverse repurchase agreements	**13**	–
	47,373	47,433

24. Derivative financial instruments

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.

The following table shows the notional contract amounts and fair value of assets and liabilities by each class of derivatives.

	Notional contract amount			Fair value – Assets			Fair value – Liabilities		
	Trading	Hedging	Total	Trading	Hedging	Total	Trading	Hedging	Total
Foreign exchange	**1,166,859**	**13,920**	**1,180,779**	**10,649**	**1,491**	**12,140**	**10,973**	**12**	**10,985**
Interest rate	**697,187**	**78,127**	**775,314**	**9,472**	**667**	**10,139**	**9,231**	**485**	**9,716**
Equity and other	**25,738**	**–**	**25,738**	**482**	**–**	**482**	**291**	**–**	**291**
At 31 December 2022	**1,889,784**	**92,047**	**1,981,831**	**20,603**	**2,158**	**22,761**	**20,495**	**497**	**20,992**
Foreign exchange	1,108,621	21,949	1,130,570	8,099	1,068	9,167	7,822	148	7,970
Interest rate	609,565	38,128	647,693	3,345	229	3,574	3,293	316	3,609
Equity and other	23,480	–	23,480	483	–	483	673	–	673
At 31 December 2021	1,741,666	60,077	1,801,743	11,927	1,297	13,224	11,788	464	12,252

24. Derivative financial instruments continued

Trading derivatives

Most of the Group's trading 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 in derivatives 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 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.

Hedge accounting derivatives

The Group applies hedge accounting to manage the following risks: interest rate, foreign exchange and net investment in foreign operations. 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 the overall costs to the Group 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.

(a) Fair value hedges

The Group enters into 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.

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.

For some debt securities held, the Group manages interest rate risk in a dynamic risk management strategy. The assets in scope of this strategy are high quality fixed-rate debt securities, which may be sold to meet liquidity and funding requirements.

Hedging instrument by hedged risk

	Hedging instrument				
	Carrying amount				
Hedged risk	**Notional amount[1]**	**Assets**	**Liabilities**	**Balance sheet presentation**	**Change in fair value[2]**
Interest rate	**23,177**	**579**	**17**	**Derivatives**	**544**
At 31 December 2022	**23,177**	**579**	**17**		**544**

	Hedging instrument				
	Carrying amount				
Hedged risk	Notional amount	Assets	Liabilities	Balance sheet presentation	Change in fair value
Interest rate	34,428	220	309	Derivatives	826
At 31 December 2021	34,428	220	309		826

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.

24. Derivative financial instruments continued

(a) Fair value hedges continued

Hedged item by hedged risk

Hedged risk	Hedged item: Carrying amount – Assets	Hedged item: Carrying amount – Liabilities	Hedged item: Accumulated fair value hedge adjustments included in carrying amount – Assets	Hedged item: Accumulated fair value hedge adjustments included in carrying amount – Liabilities	Balance sheet presentation	Change in fair value[1]	Ineffectiveness: Recognised in profit and loss	Ineffectiveness: Profit and loss presentation
Interest rate	22,878	–	(541)	–	Financial investments measured at fair value through other comprehensive income	(550)	(6)	Net income from financial instruments measured at fair value through profit or loss
At 31 December 2022	22,878	–	(541)	–		(550)	(6)	

Hedged risk	Hedged item: Carrying amount – Assets	Hedged item: Carrying amount – Liabilities	Hedged item: Accumulated fair value hedge adjustments included in carrying amount – Assets	Hedged item: Accumulated fair value hedge adjustments included in carrying amount – Liabilities	Balance sheet presentation	Change in fair value[1]	Ineffectiveness: Recognised in profit and loss	Ineffectiveness: Profit and loss presentation
Interest rate	34,836	–	(27)	–	Financial investments measured at fair value through other comprehensive income	(829)	(3)	Net income from financial instruments measured at fair value through profit or loss
At 31 December 2021	34,836	–	(27)	–		(829)	(3)	

[1] Used in effectiveness testing, which comprise an amount attributable to the designated hedged risk that can be a risk component.

(b) 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 non-dynamic hedges.

24. Derivative financial instruments continued

(b) Cash flow hedges continued

Hedging instrument by hedged risk

	Hedging instrument					Hedged item	Ineffectiveness	
	Carrying amount							
Hedged risk	Notional amount[1]	Assets	Liabilities	Balance sheet presentation	Change in fair value[2]	Change in fair value[3]	Recognised in profit and loss	Profit and loss presentation
Foreign currency	13,920	1,491	12	Derivatives	2,783	2,783	–	Net income from financial instruments measured at fair value through profit or loss
Interest rate	54,950	88	468	Derivatives	(570)	(570)	–	Net income from financial instruments measured at fair value through profit or loss
At 31 December 2022	68,870	1,579	480		2,213	2,213	–	

	Hedging instrument					Hedged item	Ineffectiveness	
	Carrying amount							
Hedged risk	Notional amount	Assets	Liabilities	Balance sheet presentation	Change in fair value	Change in fair value	Recognised in profit and loss	Profit and loss presentation
Foreign currency	21,949	1,068	148	Derivatives	2,216	2,216	–	Net income from financial instruments measured at fair value through profit or loss
Interest rate	3,700	9	7	Derivatives	(9)	(9)	–	Net income from financial instruments measured at fair value through profit or loss
At 31 December 2021	25,649	1,077	155		2,207	2,207	–	

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.

24. Derivative financial instruments continued

(b) Cash flow hedges continued

Reconciliation of equity and analysis of other comprehensive income by risk type

	Interest rate	Foreign exchange	Total
At 1 January 2022	**(2)**	**48**	**46**
fair value gains/(losses)	**(570)**	**2,783**	**2,213**
fair value (gains)/losses reclassified from the cash flow hedge reserve to the income statement in respect of:			
– hedged items that has affected profit or loss	**8**	**(3,253)**	**(3,245)**
Income taxes	**92**	**78**	**170**
At 31 December 2022	**(472)**	**(344)**	**(816)**
At 1 January 2021	51	209	260
fair value gains/(losses)	(9)	2,216	2,207
fair value (gains)/losses reclassified from the cash flow hedge reserve to the income statement in respect of:			
– hedged items that has affected profit or loss	(55)	(2,409)	(2,464)
Income taxes	11	32	43
At 31 December 2021	(2)	48	46

(c) Interest Rate Benchmark Reform

At 31 December 2022, HK$58,610m (2021: HK$24,447m) of the notional amounts of interest rate derivatives designated in hedge accounting relationships do not represent the extent of the risk exposure managed by the Group but they are expected to be directly affected by market-wide IBOR reform and in scope of Phase 1 amendments. The Group has also designated hedge accounting relationships which involve cross currency swaps, although the amount is not significant.

Risks and governance regarding the impact of the market-wide benchmarks reform is set out in the Management Discussion and Analysis of the 2022 Annual Report.

25. Financial assets designated and otherwise mandatorily measured at fair value through profit or loss

	2022	2021
Debt securities	**8**	18
Equity shares	**4,075**	7,422
Investment funds	**23,920**	22,863
Other	**858**	1,023
	28,861	31,326

26. Placings with and advances to banks

	2022	2021
Balances with banks	**8,605**	10,078
Placings with and advances to banks maturing within one month	**15,458**	33,202
Placings with and advances to banks maturing after one month but less than one year	**36,785**	26,673
Placings with and advances to banks maturing after one year	**1,481**	2,541
Less: Allowances for expected credit losses	**(3)**	(1)
	62,326	72,493
of which:		
Placings with and advances to central banks	**9,129**	7,554

There were no overdue advances, impaired advances and rescheduled advances to banks at 31 December 2022 (2021: Nil).

27. Loans and advances to customers

(a) Loans and advances to customers

	2022	2021
Gross loans and advances to customers	944,728	1,004,325
Less: Allowances for expected credit losses	(13,394)	(6,928)
	931,334	997,397
	%	%
Expected credit losses as a percentage of gross loans and advances to customers	1.42	0.69

	2022	2021
Gross impaired loans and advances	24,212	10,429
	%	%
Gross impaired loans and advances as a percentage of gross loans and advances to customers	2.56	1.04

(b) Net investments in finance leases and hire purchase contracts

Loans and advances to customers include net investments in equipment leased to customers under finance leases and hire purchase contracts having the characteristics of finance leases. The contracts usually run for an initial period of 5 to 25 years, with an option for acquiring by the lessee the leased asset at nominal value at the end of the lease period. The total minimum lease payments receivable and their present value at the year-end are as follows:

	2022			2021		
	Present value of minimum lease payments receivable	Interest income relating to future periods	Total minimum lease payments receivable	Present value of minimum lease payments receivable	Interest income relating to future periods	Total minimum lease payments receivable
Amounts receivable:						
– within one year	322	204	526	376	141	517
– over one year to two years	357	180	537	392	124	516
– over two years to three years	342	173	515	389	125	514
– over three years to four years	345	175	520	372	119	491
– over four years to five years	351	178	529	374	119	493
– after five years	5,532	1,294	6,826	5,839	890	6,729
	7,249	2,204	9,453	7,742	1,518	9,260
Allowances for expected credit losses	(112)			(103)		
Net investments in finance leases and hire purchase contracts	7,137			7,639		

28. Financial investments

	2022	2021
Financial investments measured at fair value through other comprehensive income:		
– treasury bills	**267,413**	225,910
– debt securities	**88,645**	127,982
– equity shares	**4,933**	5,267
	360,991	359,159
Debt instruments measured at amortised cost:		
– treasury bills	**89,968**	2,300
– debt securities	**171,751**	139,080
Less: Allowances for expected credit losses	**(94)**	(153)
	261,625	141,227
	622,616	500,386

Equity instruments measured at fair value through other comprehensive income

	2022	2021
Type of equity instruments		
– business facilitation	**4,933**	5,267

There was no overdue debt securities at 31 December 2022 (2021: Nil). The Group did not hold any asset-backed securities, mortgage-backed securities and collateralised debt obligations in 2022 and 2021.

There was no financial investments determined to be impaired at 31 December 2022 (2021: Nil).

29. Assets pledged, assets transferred and collateral received

Assets pledged

Financial assets pledged to secure liabilities

	2022	2021
Trading assets and financial investments	**64,065**	61,451
Amount of liabilities secured	**64,296**	62,718

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 sale and repurchase agreements and securities lending, derivative margining, and include assets pledged to cover short positions and to facilitate settlement processes with clearing houses.

29. Assets pledged, assets transferred and collateral received continued

Assets transferred

Transferred financial assets not qualifying for full derecognition and associated financial liabilities

	2022		2021	
	Carrying amount of		Carrying amount of	
	Transferred assets	Associated liabilities	Transferred assets	Associated liabilities
Repurchase agreements	11,724	10,717	13,078	12,374
Securities lending agreements	1,830	–	438	–
	13,554	10,717	13,516	12,374

The financial assets shown above include amounts transferred to third parties that do not qualify for derecognition, notably debt securities held by counterparties as collateral under repurchase agreements and debt securities lent under securities lending agreements. As the substance of these transactions is secured borrowings, the collateral assets continue to be recognised in full and the related liabilities, reflecting the Group's obligation to repurchase the transferred assets for a fixed price at a future date, are also recognised on the balance sheet. As a result of these transactions, the Group is unable to use, sell or pledge the transferred assets for the duration of the transactions. The Group remains exposed to interest rate risk, credit risk and market risk on these pledged instruments. The counterparty's recourse is not limited to the transferred assets.

Collateral received

Assets accepted as collateral related primarily to standard securities lending, reverse repurchase agreements and derivative margining. These transactions are conducted under terms that are usual and customary to standard securities lending, reverse repurchase agreements and derivative margining.

Fair value of collateral accepted as security for assets

	2022	2021
Fair value of collateral permitted to sell or repledge in the absence of default	42,867	18,865
Fair value of collateral actually sold or repledged	589	4,226

30. Subsidiaries

The following list contains only the particulars of subsidiaries which principally affected the results, assets or liabilities of the Group as at 31 December 2022. The class of shares held is ordinary.

Name of company	Place of incorporation & operation	Principal activities	Issued equity capital	Percentage of shareholding
Hang Seng Bank (China) Limited[1]	People's Republic of China	Banking	RMB8,317,500,000	100%
Hang Seng Insurance Company Limited	Hong Kong SAR	Retirement benefits and life assurance	HK$6,426,184,570	100%
Hang Seng Investment Management Limited	Hong Kong SAR	Fund management	HK$10,000,000	100%
Hang Seng Securities Limited	Hong Kong SAR	Stockbroking	HK$26,000,000	100%
Yan Nin Development Company Limited	Hong Kong SAR	Investment holding	HK$100,000	100%
Hang Seng Indexes Company Limited	Hong Kong SAR	Index compilation and licensing	HK$10,000	100%
High Time Investments Limited	Hong Kong SAR	Investment holding	HK$2,250,010,000	100%
Hang Seng Qianhai Fund Management Company Limited[2]	People's Republic of China	Fund raising, fund sales and asset management	RMB500,000,000	70%

1 Represents a wholly foreign owned limited liability company registered under the laws of People's Republic of China.

2 Represents a foreign-majority-owned contractual joint venture registered under the laws of People's Republic of China.

30. Subsidiaries continued

All the above companies are unlisted. All principal subsidiaries are held directly by the Bank except for Hang Seng Indexes Company Limited. The principal places of operation are the same as the places of incorporation.

Some of the principal subsidiaries are regulated banking and insurance entities 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 certain shareholder loans or cash dividends.

31. Interest in associates

	2022	2021
Share of net assets	**2,256**	2,341

The associates are:

Name of company	Place of incorporation and operation	Principal activities	Issued equity capital	Group's interest in equity capital
Unlisted				
Barrowgate Limited	Hong Kong SAR	Property investment	HK$10,000	24.64%
GZHS Research Co., Ltd.	People's Republic of China	Conduct market/securities analysis and publish research reports	RMB44,680,000	33.00%

The interests in Barrowgate Limited and GZHS Research Co., Ltd. ('GZHS') are owned by the subsidiaries of the Bank.

The above two associates are accounted for using the equity method in the Consolidated Financial Statements as at 31 December 2022 and 2021.

	Assets	Liabilities	Equity	Revenue	Expenses	Revenue Less Expenses
2022						
100 per cent	**10,183**	**1,028**	**9,155**	**115**	**155**	**(40)**
The Group's effective interest	**2,509**	**253**	**2,256**	**28**	**38**	**(10)**
2021						
100 per cent	10,501	999	9,502	455	164	291
The Group's effective interest	2,587	246	2,341	112	40	72

At 31 December 2022, the investment in associates were tested for impairment by estimating the recoverable amount of the investment based on 'Value in use'. No impairment loss was recognised since the recoverable amount exceeded the carrying amount (2021: Nil).

32. Property, plant and equipment

	2022	2021
Premises	24,287	27,281
Plant and equipment[1]	1,832	2,090
Other right of use assets	1,379	1,834
Premises, plant and equipment	27,498	31,205
Investment properties	11,998	9,545
	39,496	40,750

1 Includes leasehold land and building assets for which the rights of use are considered sufficient to constitute control and for which there are insignificant lease liabilities. They are therefore presented as owned assets.

(a) Movement in owned property, plant and equipment

	Premises	Investment properties	Plant and equipment	Total
2022				
Cost or valuation:				
At 1 January	27,281	9,545	4,465	41,291
Additions	32	4	351	387
Disposals and write-offs	–	–	(233)	(233)
Elimination of accumulated depreciation on revalued premises	(994)	–	–	(994)
Surplus on revaluation:				
– credited to premises revaluation reserve	690	–	–	690
– debited to income statement	–	(134)	–	(134)
Transfer	(2,682)	2,668	–	(14)
Exchange adjustments and other	(40)	(85)	(308)	(433)
At 31 December	24,287	11,998	4,275	40,560
Accumulated depreciation:				
At 1 January	–	–	(2,375)	(2,375)
Charge for the year (note 12)	(1,008)	–	(452)	(1,460)
Attributable to assets sold or written off	–	–	216	216
Elimination of accumulated depreciation on revalued premises	994	–	–	994
Exchange adjustments and other	14	–	168	182
At 31 December	–	–	(2,443)	(2,443)
Net book value at 31 December	24,287	11,998	1,832	38,117
Representing:				
– measure at cost	–	–	1,832	1,832
– measure at valuation	24,287	11,998	–	36,285
	24,287	11,998	1,832	38,117

32. Property, plant and equipment continued

(a) Movement in owned property, plant and equipment continued

	Premises	Investment properties	Plant and equipment	Total
2021				
Cost or valuation:				
At 1 January	26,898	9,415	3,982	40,295
Additions	46	2	681	729
Disposals and write-offs	–	–	(212)	(212)
Elimination of accumulated depreciation on revalued premises	(1,001)	–	–	(1,001)
Surplus on revaluation:				
– credited to premises revaluation reserve	1,310	–	–	1,310
– credited to income statement	–	125	–	125
Transfer	(3)	3	–	–
Exchange adjustments and other	31	–	14	45
At 31 December	27,281	9,545	4,465	41,291
Accumulated depreciation:				
At 1 January	–	–	(2,038)	(2,038)
Charge for the year (note 12)	(1,001)	–	(491)	(1,492)
Attributable to assets sold or written off	–	–	164	164
Elimination of accumulated depreciation on revalued premises	1,001	–	–	1,001
Exchange adjustments and other	–	–	(10)	(10)
At 31 December	–	–	(2,375)	(2,375)
Net book value at 31 December	27,281	9,545	2,090	38,916
Representing:				
– measure at cost	–	–	2,090	2,090
– measure at valuation	27,281	9,545	–	36,826
	27,281	9,545	2,090	38,916

(b) Terms of lease

	Premises		Investment properties	
	2022	2021	2022	2021
Leaseholds				
Held in Hong Kong:				
– long leases (over 50 years unexpired)	2,081	2,524	1,093	1,666
– medium leases (10 to 50 years unexpired)	21,271	23,742	10,536	7,504
– short leases (below 10 years unexpired)	–	–	369	375
Held outside Hong Kong:				
– long leases (over 50 years unexpired)	–	–	–	–
– medium leases (10 to 50 years unexpired)	935	1,015	–	–
– short leases (below 10 years unexpired)	–	–	–	–
	24,287	27,281	11,998	9,545

32. Property, plant and equipment continued

(c) The carrying amount of all premises which have been stated in the balance sheet would have been as follows had they been stated at cost less accumulated depreciation:

	2022	2021
Cost less accumulated depreciation at 31 December	**5,923**	6,699

(d) The Group leases out investment properties under operating leases. The leases typically run for an initial period of 2 to 3 years, and may contain an option to renew the lease after that date at which time all terms are renegotiated. None of the leases includes contingent rentals.

	2022	2021
Direct operating expenses arising from investment properties	**56**	41
Direct operating expenses arising from investment properties that generated rental income	**47**	38

The Group's total future minimum lease payments receivable under non-cancellable operating leases are as follows:

	2022	2021
Within one year	**239**	227
One to two years	**114**	106
Over two years to three years	**24**	50
	377	383

(e) Fair value measurement of properties

The Group's premises and investment properties were revalued by Cushman & Wakefield Limited ('C&W'), an independent professional valuer, at 5 December 2022, and were updated by C&W for any material changes in the valuation as at 31 December 2022. It was confirmed that there was no material change in value since 5 December 2022. The valuations were carried out by qualified persons who are members of the Hong Kong Institute of Surveyors. The basis of valuations of premises and investment properties were market value which is consistent with the definition of fair value under HKFRS 13 *'Fair Value Measurement'* and take into account the highest and best use of the property from the perspective of market participants.

(i) Fair value hierarchy

The level into which a fair value measurement is classified for properties is determined with reference to the observability and significance of the inputs used in the valuation technique as follows:

Level 1: Fair value measured using unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2: Fair value measured using observable inputs and not using significant unobservable inputs. Unobservable inputs are inputs for which market data are not available.

Level 3: Fair value measured using significant unobservable inputs.

The resultant values of both investment properties and properties held for own use for the Group were Level 3 in the fair value hierarchy as defined in HKFRS 13 *'Fair Value Measurement'*. During the year ended 31 December 2022, there were no transfers into or out of Level 3 (2021: Nil).

The fair value of tenanted investment properties is determined using Income Approach (also known as Investment Approach) on the basis of capitalisation of net incomes with due allowance for outgoings and reversionary income potential.

The fair values of the majorities of properties owned and occupied by the Group or vacant investment properties in Hong Kong and mainland China are determined using Market Approach (also known as Direct Comparison Approach) assuming sale with immediate vacant possession and by making reference to comparable sales evidence.

For properties with development potentials, their values are on redevelopment basis and reported upon the assessment on the basis that each of these properties will be developed to its full potential and completed to a good standard. The fair values are determined using Market Approach (also known as Direct Comparison Approach) by making reference to comparable sales transactions as available in the relevant market and have also taken into account the development costs that will be expended to complete the development.

32. Property, plant and equipment continued

(e) Fair value measurement of properties continued

(i) Fair value hierarchy continued

Reconciliation of fair value measurements in Level 3 of the fair value hierarchy

Reconciliation of the movement between opening and closing balances of Level 3 properties measured at fair value using a valuation technique with significant unobservable inputs is under note 32(a). The following table details the gains or losses recognised in profit or loss in relation to the Level 3 premises and investment properties:

	Premises	Investment properties
2022		
Unrealised gains or losses recognised in profit or loss relating to those assets held at the end of the reporting period		
– other operating income/(loss)	**–**	**(26)**
– net surplus/(deficit) on property revaluation	**–**	**(108)**
– depreciation of premises, plant and equipment	**(1,008)**	**–**
2021		
Unrealised gains or losses recognised in profit or loss relating to those assets held at the end of the reporting period		
– other operating income/(loss)	–	43
– net surplus/(deficit) on property revaluation	–	82
– depreciation of premises, plant and equipment	(1,001)	–

(ii) Information about significant unobservable inputs in Level 3 valuations

	Valuation technique(s)	Unobservable input(s)	Range 2022	Range 2021
Investment properties	Income approach (also known as Investment approach)	Market yields (reversionary yield)	**2.20% to 4.90%**	2.20% to 4.90%
		Market rental	**HK$14.6 to HK$316 per square foot**	HK$14.9 to HK$320 per square foot
	Market approach (also known as Direct Comparison approach)	Premium (discount) on characteristic of the properties	**-20% to +20%**	-20% to +20%
Premises	Market approach (also known as Direct Comparison approach)	Premium (discount) on characteristic of the properties	**-20% to +20%**	-20% to +20%

The fair value measurement for tenanted investment properties is positively correlated to the market rental but inversely correlated to the market yields. The valuations for premises held for own use or vacant investment properties take into account the characteristic of the properties which included the location, size, shape, view, floor level, year of completion and other factors collectively. Higher premium for properties with better characteristics will result in a higher fair value measurement.

33. Intangible assets

	2022	2021
Present value of in-force long-term insurance business	**20,620**	22,363
Internally developed software	**3,485**	2,704
Acquired software	**80**	90
Goodwill	**329**	329
	24,514	25,486

(a) Movement of present value of in-force long-term insurance business ('PVIF')

	2022	2021
At 1 January	**22,363**	22,551
Movement in present value of in-force long-term insurance business (note 9)	**(1,743)**	(188)
– Addition from current year new business	**2,062**	2,332
– Expected return	**(1,269)**	(1,625)
– Experience variances	**710**	288
– Changes in operating assumptions	**(1,215)**	42
– Investment return variances	**(57)**	(606)
– Changes in investment assumptions	**(1,903)**	(604)
– Other adjustments	**(71)**	(15)
At 31 December	**20,620**	22,363

The key assumptions used in the computation of PVIF are as follows:

	2022	2021
Risk discount rate	**7.1%**	5.4%
Expenses inflation	**3.0%**	3.0%
Average lapse rate:		
– 1st year	**2.3%**	2.6%
– 2nd year onwards	**2.4%**	3.6%

The sensitivity of PVIF valuation to changes in individual assumptions at the balance sheet dates is shown in the Management Discussion and Analysis.

(b) Goodwill

	2022	2021
At 1 January and at 31 December	**329**	329

Goodwill arising from acquisition of the remaining 50 per cent of Hang Seng Life Limited from HSBC Insurance (Asia-Pacific) Holdings Limited amounted to HK$329m is allocated to cash-generating units of Life Insurance – Hang Seng Insurance Company Limited ('HSIC') for the purpose of impairment testing.

During 2022, there was no impairment of goodwill (2021: Nil). Impairment testing in respect of goodwill is performed annually by comparing the recoverable amount of cash generating unit based on appraisal value with the carrying amount of its net assets, including attributable goodwill.

The appraisal value comprises HSIC's net assets (other than value of business acquired and goodwill), the PVIF and the expected value of future business as at 31 December 2022. The PVIF is determined by discounting future earnings expected from the current business, taking into account factors such as future mortality, lapse rates, levels of expenses and risk discount rate. The above details are shown in note 33(a) and the Management Discussion and Analysis.

33. Intangible assets continued

(c) Movement of internally developed application software and acquired software

	2022	2021
Cost:		
At 1 January	4,711	3,277
Additions	1,500	1,417
Amounts written off	(5)	(4)
Exchange and others	(32)	21
At 31 December	6,174	4,711
Accumulated amortisation:		
At 1 January	(1,917)	(1,424)
Charge for the year (note 12)	(702)	(472)
Impairment	(11)	(10)
Amounts written off	5	4
Exchange and others	16	(15)
At 31 December	(2,609)	(1,917)
Net book value at 31 December	3,565	2,794

34. Other assets

	2022	2021
Items in the course of collection from other banks	5,598	3,744
Bullion	6,887	8,470
Prepayments and accrued income	5,820	4,732
Acceptances and endorsements	12,799	11,121
Less: Allowances for expected credit losses	(23)	(12)
Reinsurers' share of liabilities under insurance contracts (note 40)	6,020	5,848
Settlement accounts	8,119	13,711
Cash collateral	3,105	2,343
Other accounts	3,970	3,675
	52,295	53,632

Other accounts included 'Assets held for sale' of HK$217m (2021: HK$35m).

35. Current, savings and other deposit accounts

	2022	2021
Current, savings and other deposit accounts:		
– as stated in Consolidated Balance Sheet	1,249,486	1,230,216
– structured deposits reported as financial liabilities designated at fair value (note 37)	37,138	24,012
	1,286,624	1,254,228
By type:		
– demand and current accounts	103,397	150,127
– savings accounts	656,190	871,281
– time and other deposits	527,037	232,820
	1,286,624	1,254,228

36. Trading liabilities

	2022	2021
Short positions in securities	**46,323**	44,291

37. Financial liabilities designated at fair value

	2022	2021
Certificates of deposit in issue (note 38)	**6,945**	–
Structured deposits (note 35)	**37,138**	24,012
Other structured debt securities in issue (note 38)	**1,893**	3,005
Liabilities to customers under investment contracts	**333**	382
	46,309	27,399

At 31 December 2022, the accumulated loss in fair value attributable to changes in own credit risk for financial liabilities designated at fair value was HK$9m (2021: accumulated loss HK$2m).

38. Certificates of deposit and other debt securities in issue

	2022	2021
Certificates of deposit and other debt securities in issue:		
– as stated in Consolidated Balance Sheet	**93,379**	81,567
– certificates of deposit in issue designated at fair value (note 37)	**6,945**	–
– other structured debt securities in issue reported as financial liabilities designated at fair value (note 37)	**1,893**	3,005
	102,217	84,572
By type:		
– certificates of deposit in issue	**100,324**	81,567
– other debt securities in issue	**1,893**	3,005
	102,217	84,572

39. Other liabilities

	2022	2021
Items in the course of transmission to other banks	**5,632**	6,102
Accruals	**6,640**	3,762
Acceptances and endorsements	**12,799**	11,121
Retirement benefit liabilities (note 48(a))	**414**	339
Settlement accounts	**1,400**	1,874
Cash collateral	**3,766**	2,232
Lease liabilities	**1,426**	1,880
Other	**4,662**	3,869
	36,739	31,179

40. Liabilities under insurance contracts

	Gross	Reinsurers' share[1]	Net
2022			
Non-linked			
At 1 January	154,480	(5,848)	148,632
Claims and benefits paid	(12,553)	633	(11,920)
Increase/(decrease) in liabilities to policyholders	20,007	(770)	19,237
Foreign exchange and other movements	3,602	(35)	3,567
At 31 December	165,536	(6,020)	159,516
Unit-linked			
At 1 January	71	–	71
Claims and benefits paid	(3)	–	(3)
Decrease in liabilities to policyholders	(11)	–	(11)
Foreign exchange and other movements	1	–	1
At 31 December	58	–	58
	165,594	(6,020)	159,574
2021			
Non-linked			
At 1 January	142,611	(5,471)	137,140
Claims and benefits paid	(11,901)	868	(11,033)
Increase/(decrease) in liabilities to policyholders	17,573	(1,229)	16,344
Foreign exchange and other movements	6,197	(16)	6,181
At 31 December	154,480	(5,848)	148,632
Unit-linked			
At 1 January	69	–	69
Claims and benefits paid	(4)	–	(4)
Increase in liabilities to policyholders	6	–	6
At 31 December	71	–	71
	154,551	(5,848)	148,703

[1] Amounts recoverable from reinsurance of liabilities under insurance contracts are included in the Consolidated Balance Sheet in 'Other assets'.

41. Current tax and deferred tax

(a) Current tax and deferred tax are represented in the balance sheet:

	2022	2021
Included in 'Other assets':		
Current taxation recoverable	2	9
Deferred tax assets	346	90
	348	99
Current tax liabilities:		
Provision for Hong Kong profits tax	240	580
Provision for taxation outside Hong Kong	149	23
	389	603
Deferred tax liabilities	6,645	7,302
	7,034	7,905

(b) Deferred tax assets and liabilities recognised

The major components of deferred tax (assets)/liabilities recognised in the balance sheet and the movements during the year are as follows:

	Depreciation allowances in excess of related depreciation	Revaluation of properties	Expected credit losses	Fair value adjustments for financial assets at FVOCI	Cash flow hedge	Other	Total
At 1 January 2022	711	3,743	(852)	3	9	3,598	7,212
Exchange adjustment and others	2	(8)	25	(3)	–	3	19
Charged/(credited) to income statement (note 17(a))	93	(131)	(412)	–	–	(289)	(739)
Charged/(credited) to reserves	–	118	–	(137)	(170)	(4)	(193)
At 31 December 2022	806	3,722	(1,239)	(137)	(161)	3,308	6,299
At 1 January 2021	546	3,643	(693)	45	51	3,527	7,119
Exchange adjustment and others	(1)	3	1	(1)	1	(1)	2
Charged/(credited) to income statement (note 17(a))	166	(123)	(160)	–	–	13	(104)
Charged/(credited) to reserves	–	220	–	(41)	(43)	59	195
At 31 December 2021	711	3,743	(852)	3	9	3,598	7,212

(c) Deferred tax assets not recognised

The amounts of unused tax losses for which no deferred tax asset is recognised in the balance sheet are HK$445m (2021: HK$474m). Of these amounts, HK$161m (2021: HK$187m) have no expiry date and the remaining will expire within 5 years.

There was no other temporary difference for which no deferred tax asset is recognised in the balance sheet as at 31 December 2022 (2021: Nil).

(d) Deferred tax liabilities not recognised

There were no deferred tax liabilities not recognised as at 31 December 2022 (2021: Nil).

42. Subordinated liabilities

Nominal value	Description	2022	2021
HK$5,460 million	Floating rate subordinated loan due May 2028, callable from 2027[1]	5,460	5,460
HK$4,680 million	Floating rate subordinated loan due June 2029, callable from 2028[2]	4,680	4,680
HK$6,240 million	Floating rate subordinated loan due June 2026, callable from 2025[3]	6,240	6,240
US$400 million	Floating rate subordinated loan due June 2030, callable from 2029[4]	3,119	3,119
HK$5,000 million	Floating rate subordinated loan due November 2027, callable from 2026[5]	4,988	4,985
HK$3,000 million	Floating rate subordinated loan due June 2028, callable from 2027[6]	2,992	–
		27,479	24,484
Representing:			
– measured at amortised cost		27,479	24,484

1 Interest rate at three-month HK dollar HIBOR plus 1.425 per cent per annum, payable quarterly, to the maturity date.

2 Interest rate at three-month HK dollar HIBOR plus 1.564 per cent per annum, payable quarterly, to the maturity date.

3 Interest rate at three-month HK dollar HIBOR plus 1.342 per cent per annum, payable quarterly, to the maturity date.

4 During the year, the interest rate is transited to compounded SOFR plus 2.0478 per cent per annum from previous three-month US dollar LIBOR plus 1.789 per cent per annum upon the interest rate benchmark migration, payable quarterly, to the maturity date.

5 Interest rate at three-month HK dollar HIBOR plus 1.000 per cent per annum, payable quarterly, to the maturity date.

6 Interest rate at three-month HK dollar HIBOR plus 1.680 per cent per annum, payable quarterly, to the maturity date.

During the year, the Bank has issued non-capital loss-absorbing capacity debt instrument totalling HK$3bn which rank higher than additional tier 1 capital instruments in the event of a winding-up (2021: HK$5bn).

The Bank has not had any defaults of principal, interest or other breaches with respect to its debt instruments during 2022 (2021: Nil).

43. Share capital

	2022		2021	
	No. of shares	HK$	No. of shares	HK$
Ordinary shares, issued and fully paid				
At 1 January and 31 December	1,911,842,736	9,658	1,911,842,736	9,658

44. Other equity instruments

Nominal value	Description	2022	2021
US$900 million	Fixed to floating rate perpetual capital instrument callable from September 2024[1]	7,044	7,044
US$600 million	Fixed to floating rate perpetual capital instrument callable from June 2024[2]	4,700	4,700
		11,744	11,744

1 Coupon rate is 6.03% and then three-month US dollar LIBOR plus 4.02 per cent from the first call date.

2 Coupon rate is 6.00% and then three-month US dollar LIBOR plus 4.06 per cent from the first call date.

The additional tier 1 capital instruments, which are qualified as loss-absorbing capacity, are perpetual and subordinated. The coupon payments of these capital instruments may be cancelled at the sole discretion of the Bank. The capital instruments 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 winding-up.

45. Contingent liabilities, contractual commitments and guarantees

(a) Off-balance sheet contingent liabilities and commitments

	2022	2021
Contingent liabilities and financial guarantee contracts		
Financial guarantees[1]	1,727	2,431
Performance and other guarantees[2]	23,216	26,439
Other contingent liabilities	16	80
	24,959	28,950
Commitments[3]		
Documentary credits and short-term trade-related transactions	1,995	3,233
Forward asset purchases and forward forward deposits placed	11,824	10,633
Undrawn formal standby facilities, credit lines and other commitments to lend	505,019	501,054
	518,838	514,920

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. The amounts in the above table are nominal principal amounts.

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 commitments of HK$357,265m at 31 December 2022 (2021: HK$365,054m) 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 capital commitments), guarantees and other contingent liabilities, which represents the amounts at risk should contracts be fully drawn upon and clients default. As a significant portion of guarantees and commitments is 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 the Group's overall credit risk management policies and procedures. Guarantees are subject to an annual credit review process.

(b) Contingencies

There is no material litigation expected to result in a significant adverse effect on the financial position of the Group, either collectively or individually. Management believes that adequate provisions have been made in respect of such litigation.

46. Other commitments

Capital commitments

At 31 December 2022, capital commitments, mainly related to the commitment for renovation of branches and offices, were HK$270m (2021: HK$868m).

47. 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 of set off only in the event of default, insolvency or bankruptcy, or the offset criteria are otherwise not satisfied; and
- in the case of derivatives and reverse repurchase/repurchase, stock borrowing/lending and similar arrangements, cash and non-cash collaterals has been received and pledged.

	Amounts subject to enforceable netting arrangements								
	Effects of offsetting in the balance sheet			Amounts not set off in the balance sheet					
	Gross amounts	Amounts offset	Net Amounts reported in the balance sheet	Financial instruments	Non-cash collateral	Cash collateral	Net amount	Amounts not subject to enforceable netting arrangements[1]	Balance sheet total
Financial assets[2]									
Derivatives	**19,816**	**–**	**19,816**	**(9,537)**	**(256)**	**(3,405)**	**6,618**	**2,945**	**22,761**
Reverse repos, stock borrowing and similar agreements classified as:	**40,704**	**–**	**40,704**	**–**	**(40,691)**	**–**	**13**	**1,673**	**42,377**
– trading assets	**13**	**–**	**13**	**–**	**–**	**–**	**13**	**–**	**13**
– non-trading assets	**40,691**	**–**	**40,691**	**–**	**(40,691)**	**–**	**–**	**1,673**	**42,364**
Other assets	**1,325**	**(892)**	**433**	**–**	**–**	**–**	**433**	**–**	**433**
At 31 December 2022	**61,845**	**(892)**	**60,953**	**(9,537)**	**(40,947)**	**(3,405)**	**7,064**	**4,618**	**65,571[2]**
Derivatives	11,098	–	11,098	(6,822)	(314)	(2,138)	1,824	2,126	13,224
Reverse repos, stock borrowing and similar agreements classified as:	17,495	–	17,495	–	(17,436)	(59)	–	1,326	18,821
– trading assets	–	–	–	–	–	–	–	–	–
– non-trading assets	17,495	–	17,495	–	(17,436)	(59)	–	1,326	18,821
Other assets	1,647	(1,054)	593	–	–	–	593	–	593
At 31 December 2021	30,240	(1,054)	29,186	(6,822)	(17,750)	(2,197)	2,417	3,452	32,638[2]
Financial liabilities[3]									
Derivatives	**17,954**	**–**	**17,954**	**(9,537)**	**(321)**	**(2,511)**	**5,585**	**3,038**	**20,992**
Repos, stock lending and similar agreements classified as:	**5,548**	**–**	**5,548**	**–**	**(5,399)**	**(149)**	**–**	**5,756**	**11,304**
– trading liabilities	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
– non-trading liabilities	**5,548**	**–**	**5,548**	**–**	**(5,399)**	**(149)**	**–**	**5,756**	**11,304**
Other liabilities	**1,233**	**(892)**	**341**	**–**	**–**	**–**	**341**	**–**	**341**
At 31 December 2022	**24,735**	**(892)**	**23,843**	**(9,537)**	**(5,720)**	**(2,660)**	**5,926**	**8,794**	**32,637[3]**
Derivatives	10,256	–	10,256	(6,822)	(396)	(2,077)	961	1,996	12,252
Repos, stock lending and similar agreements classified as:	8,631	–	8,631	–	(8,631)	–	–	7,961	16,592
– trading liabilities	–	–	–	–	–	–	–	–	–
– non-trading liabilities	8,631	–	8,631	–	(8,631)	–	–	7,961	16,592
Other liabilities	1,309	(1,054)	255	–	–	–	255	–	255
At 31 December 2021	20,196	(1,054)	19,142	(6,822)	(9,027)	(2,077)	1,216	9,957	29,099[3]

1 These exposures continue to be secured by financial collateral, but the Bank may not have sought or been able to obtain a legal opinion evidencing enforceability of the offsetting right.

2 Amounts presented in the balance sheet included balances due from HSBC entities of HK$11,113m (2021: HK$4,018m).

3 Amounts presented in the balance sheet included balances due to HSBC entities of HK$11,371m (2021: HK$5,770m).

48. Employee retirement benefits

(a) Defined benefit scheme

The Group operates one defined benefit scheme, the Hang Seng Bank Limited Defined Benefit Scheme ('HSBDBS'), which covers about 15 per cent of the Group's employees. HSBDBS was closed to new entrants with effect from 1 April 1999. Since the defined benefit section of the HSBDBS is a final salary lump sum scheme, its exposure to longevity risk and interest rate risk is limited.

HSBDBS is registered under Occupational Retirement Schemes Ordinance (Cap. 426 of the law of Hong Kong) ('the Ordinance'). The trustee assumes the overall responsibility for the HSBDBS but a management committee has also been established to broaden the governance. Its assets are held separately from the assets of the Group. The trustees are required by the Trust Deed to act in the best interest of the scheme participants.

HSBDBS is predominantly a funded scheme with assets which are held in trust funds separate from the Group. The actuarial funding valuation of the HSBDBS is reviewed at least on a triennial basis in accordance with local regulations. The actuarial assumptions used to conduct the actuarial funding valuation of the HSBDBS vary according to the economic conditions.

The investment strategy of the HSBDBS is to invest in a diversified portfolio of assets, both equities and bonds, with low investment and liquidity risk. The assets of the Scheme will be diversified across the different asset classes to reflect the liabilities and performance objectives of the Scheme. The Strategic Asset Allocation percentages for the asset types are as follows: Bonds (0 – 62%) and equity/ alternative credit funds (0 – 38%).

(i) Cumulative actuarial gains/(losses) recognised in other comprehensive income in respect of defined benefit scheme

	2022	2021
At 1 January	(857)	(1,209)
Actuarial gains/(losses) recognised in other comprehensive income	(18)	352
At 31 December	(875)	(857)

(ii) Movements in the scheme assets and present value of the defined benefit obligations

Net asset/(liability) under defined benefit scheme

	Fair value of scheme assets	Present value of defined benefit obligations	Net defined benefit (liability)/ asset
At 1 January 2022	4,361	(4,700)	(339)
Current service cost (note 12)	–	(138)	(138)
Interest income/(cost) on the defined benefit scheme asset/(liability) (note 12)	53	(56)	(3)
Remeasurement effects recognised in other comprehensive income	(404)	386	(18)
– Actuarial gains/(losses) from changes in demographic assumptions	–	(2)	(2)
– Actuarial gains/(losses) from changes in financial assumptions	–	481	481
– Actuarial gains/(losses) from experience	(404)	(93)	(497)
Contributions by the Group	92	–	92
Benefits paid	(589)	589	–
Others	–	–	–
Administrative costs and taxes paid by scheme (note 12)	–	(8)	(8)
At 31 December 2022	3,513	(3,927)	(414)
Retirement benefit liabilities recognised in Consolidated Balance Sheet (included in 'Other liabilities') (note 39)	3,513	(3,927)	(414)
Present value of defined benefit obligation relating to:			
– Actives		(3,823)	
– Pensioners		(104)	

The Group expects to make HK$90m of contributions to defined benefit scheme during 2023 (2021: expected contributions for 2022 was HK$98m).

48. Employee retirement benefits continued

(a) Defined benefit scheme continued

(ii) Movements in the scheme assets and present value of the defined benefit obligations continued

Net asset/(liability) under defined benefit scheme continued

	Fair value of scheme assets	Present value of defined benefit obligations	Net defined benefit (liability)/asset
At 1 January 2021	4,679	(5,302)	(623)
Current service cost (note 12)	–	(158)	(158)
Interest income/(cost) on the defined benefit scheme asset/(liability) (note 12)	20	(23)	(3)
Remeasurement effects recognised in other comprehensive income	228	124	352
– Actuarial gains/(losses) from changes in demographic assumptions	–	66	66
– Actuarial gains/(losses) from changes in financial assumptions	–	–	–
– Actuarial gains/(losses) from experience	228	58	286
Contributions by the Group	101	–	101
Benefits paid	(659)	659	–
Others	–	–	–
Administrative costs and taxes paid by scheme (note 12)	(8)	–	(8)
At 31 December 2021	4,361	(4,700)	(339)
Retirement benefit liabilities recognised in Consolidated Balance Sheet (included in 'Other liabilities') (note 39)	4,361	(4,700)	(339)
Present value of defined benefit obligation relating to:			
– Actives		(4,576)	
– Pensioners		(124)	

(iii) Benefits expected to be paid

Benefits expected to be paid from the HSBDBS to retirees over each of the next five years, and in aggregate for the five years thereafter, are as follows:

	2023	**2024**	**2025**	**2026**	**2027**	**2028-2032**
HSBDBS	367	443	447	396	475	2,066

The duration of the HSBDBS is 5.4 years (2021: 6.0 years) under the disclosure assumptions adopted.

(iv) Fair value of scheme assets by asset classes

	2022			2021		
	Value	**Quoted market price in active market**	**Of which placed with the Group and HSBC Group**	Value	Quoted market price in active market	Of which placed with the Group and HSBC Group
Fair value of scheme assets						
– Index ETFs/Funds	**1,367**	**1,367**	**–**	1,575	1,575	–
– Bonds	**2,106**	**2,106**	**–**	2,652	2,652	–
– Other*	**40**	**40**	**20**	134	134	40
	3,513	**3,513**	**20**	4,361	4,361	40

* Other mainly consists of cash and deposits.

48. Employee retirement benefits continued

(a) Defined benefit scheme continued

(v) Key actuarial financial assumptions

The scheme is funded defined benefit scheme and is administered by trustees with assets held separately from those of the Group. The latest annual actuarial valuation at 31 December 2022 was performed by Mandy Chan, Fellow of the Society of Actuaries of the United States, of Mercer (Hong Kong) Limited, using the Attained Age Method.

The Ordinance requires that registered retirement benefit schemes shall at all time be fully funded to meet its aggregate vested liability (i.e. on a wind-up basis) in accordance with the recommendations contained in an actuarial certificate supplied under the Ordinance. Any shortfall must be made up within the specified time under the Ordinance. Any deficits to meet the aggregate past service liability (i.e. on an on-going basis) can however be eliminated over a period of time in accordance with the funding recommendations of an actuary.

On an on-going basis, the value of the scheme assets of HSBDBS represented 95 per cent (2021: 103 per cent) of the benefits accrued to scheme members, after allowing for expected future increases in salaries, and the resulting deficits amounted to HK$193m (surplus in 2021: HK$130m). On a wind-up basis, the actuarial value of the HSBDBS assets represented 95 per cent (2021: 112 per cent) of the members' vested benefits, based on salaries at that date, and the resulting deficits amounted to HK$189m (surplus in 2021: HK$474m).

The determinations for actuarial funding valuation purposes are based on different methods and assumptions from those used for financial reporting purposes, and as a result should neither be compared nor related to other determinations included in these financial statements.

The present value of the scheme's obligation was a final lump sum salary and payment of HK$3,927m (2021: HK$4,700m). The principal actuarial assumptions used to calculate the Group's obligations for the HSBDBS for each year, and used as the basis for measuring the expenses in relation to the scheme, were as follows:

Principal actuarial assumptions for the scheme

	2022	2021
	%	%
Discount rate	3.40	1.25
Expected rate of salary increases	4.00	4.00

The Group determines the discount rates to be applied to its obligations in consultation with the scheme's actuaries, on the basis of current average yields of high quality (AA rated or equivalent) debt instruments, with maturities consistent with those of the defined benefit obligations. Where there is not a deep market in corporate bonds, government bond yields have been used, and this is the case for HSBDBS. The yield curve has been extrapolated where the term of the liabilities is longer than the duration of available bonds and the discount rate used then takes into account the term of the liabilities and the shape of the yield curve.

(vi) Actuarial assumption sensitivities

The discount rate and rate of salary increase are sensitive to changes in market conditions arising during the reporting year. The following table shows the effect of changes in these on the HSBDBS:

The effect of changes in key assumptions:

	HSBDBS	
	2022	2021
Discount rate		
– change in retirement benefit obligation at year end from a 25bps increase	(50)	(69)
– change in retirement benefit obligation at year end from a 25bps decrease	51	71
Rate of salary increase		
– change in retirement benefit obligation at year end from a 25bps increase	56	74
– change in retirement benefit obligation at year end from a 25bps decrease	(55)	(73)

48. Employee retirement benefits continued

(b) Defined contribution schemes

The principal defined contribution scheme for Group employees joining on or after 1 April 1999 is the HSBC Group Hong Kong Local Staff Defined Contribution Scheme. The Bank and relevant Group entities also participate in mandatory provident fund schemes ('MPF schemes') registered under the Hong Kong Mandatory Provident Fund Ordinance, which are also defined contribution schemes.

Contributions made in accordance with the relevant scheme rules to these defined contribution schemes (including MPF schemes) are charged to the income statement as below:

	2022	2021
Amounts charged to the income statement (note 12)	355	331

Under the schemes, the Group's contributions are reduced by contributions forfeited by those employees who leave the schemes prior to the contributions vesting fully. The forfeited contributions utilised during the year or available at the year-end to reduce future contributions is HK$0.03m (2021: HK$0.03m).

49. Share-based payments

The Group participated in various share compensation plans as listed in the following tables that are operated by the HSBC Group for acquiring of HSBC Holdings plc shares. These are to be settled by the delivery of shares of HSBC Holdings plc.

Share awards and option plans

Award	Policy
Deferred Share Awards	– Vesting of awards generally subject to continued employment with the Group – Vesting often staggered over a period ranging from three to seven years – Vested shares may be subject to a retention requirement post-vesting – Awards are generally subject to the rules of Share Plan and any performance conditions – Awards granted from 2010 onwards are subject to a malus provision prior to vesting – Awards granted to Material Risk Takers from 2015 onwards are subject to clawback post-vesting
International Employee Share Purchase Plan ('Sharematch')	– The plan was introduced in 2013 – Shares are purchased in the market each quarter up to a maximum of GBP750, or the equivalent in local currency – Matching shares are added at a ratio of one free share for every three purchased – Matching awards vest subject to continued employment and retention of the purchased shares for a maximum period of two years and nine months.

49. Share-based payments continued

(a) HSBC share awards

	2022 Number ('000)	2021 Number ('000)
Outstanding at 1 January	1,506	1,378
Additions during the year	917	962
Less: Released/lapsed in the year	(1,079)	(834)
Outstanding at 31 December	1,344	1,506

The closing price of the HSBC Holdings plc share at 31 December 2022 was £5.16 (2021: £4.49).

The weighted average remaining vesting period as at 31 December 2022 was 1.13 years (2021: 0.96 years).

(b) Calculation of fair value

The fair value of a share award is based on the share price at the date of the grant.

(c) Reconciliation of total incentive awards to income statement charge

	2022	2021
Equity-settled share-based payments	31	34
Cash-settled share-based payments	4	2
Income statement charge for restricted share awards (note 12)	35	36

The above charge was computed from the fair values of the share-based payment transaction when contracted, that arose under employee share awards made in accordance with HSBC's reward structures.

50. Material related-party transactions

(a) Immediate holding company and its subsidiaries and fellow subsidiaries

The Group entered into transactions with its immediate holding company and its subsidiaries as well as its fellow subsidiaries in the ordinary course of business, mainly including lending activities, the acceptance and placement of interbank deposits, correspondent banking transactions, off-balance sheet transactions and the provision of other banking and financial services. The activities were on substantially the same terms, including interest rates and security, as for comparable transactions with third party counterparties.

The Group used the IT service of, and shared an automated teller machine network with, its immediate holding company. The Group also shares the costs of certain IT projects with and used certain processing services of fellow subsidiaries.

The Group maintained a staff retirement benefit scheme for which a fellow subsidiary company acts as trustee and custodian and the Group's immediate holding company acts as administrator.

Fellow subsidiaries were appointed as fund managers to manage the Group's life insurance investment portfolios. There was an arrangement whereby a fellow subsidiary provided certain management services to the Group's insurance subsidiary. These transactions and services were on substantially the same terms as for comparable transactions with third-party counterparties.

The Bank acted as agent for promoting Mandatory Provident Fund products administered by its immediate holding company and distributed retail investment funds for a fellow subsidiary company.

During 2022, the Bank has paid coupons on AT1 capital instruments of HK$710m to its immediate holding company (2021: HK$703m).

The aggregate amount of income and expenses arising from these transactions during the year, the balances of amounts due to and from the relevant related parties, and the total contract amount of off-balance sheet transactions at the year-end are as follows:

	Immediate holding company and its subsidiaries		Fellow subsidiaries	
	2022	2021 (restated)[1]	2022	2021
Interest income	193	87	144	61
Interest expense	(1,901)	(522)	–	–
Other operating income/(expenses)	92	120	(42)	(37)
Operating expenses*	(1,173)	(1,105)	(3,533)	(2,921)
Amounts due from:				
Reverse repurchase agreements – non-trading	1,868	1,094	–	–
Placings with and advances to banks	10,506	20,196	4,766	7,334
Derivative financial instruments	9,183	2,770	62	154
Other assets	7,093	10,343	643	874
	28,650	34,403	5,471	8,362
Amounts due to:				
Current, savings and other deposit accounts	2,011	2,018	–	–
Deposits from banks	498	304	–	94
Repurchase agreements – non-trading	3,624	2,471	–	–
Derivative financial instruments	7,630	2,920	117	379
Certificates of deposit and other debt securities in issue[1]	68,002	65,000	–	–
Subordinated liabilities	27,479	24,484	–	–
Other liabilities	2,196	587	528	422
	111,440	97,784	645	895
Derivative contracts:				
Contract amount	585,027	450,551	12,204	28,095
Guarantees	392	392	–	–
Commitments	800	3,763	–	–

* Representing the operating expenses paid to immediate holding company and its subsidiaries and fellow subsidiaries, of which HK$1,207m was capitalised as intangible assets in the Group's consolidated balance sheet (2021: HK$1,046m).

1 The comparative figure has been restated to include certain balances which was previously classified as balances with third parties.

50. Material related-party transactions continued

(b) Key management personnel remuneration

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group and Bank. It includes members of the Board of Directors and Executive Committee of the Bank. During the year, the members of the Bank's Executive Committee has increased from 16 to 20. The amount of remuneration paid to key management personnel was pro-rata from the date of being appointed as Directors of the Bank or members of Executive Committee, if any. The aggregate amount of remuneration of the key management personnel during the year are as follows:

	2022	2021
Salaries, allowances and benefits in kind	70	68
Retirement scheme contributions	6	5
Variable bonuses		
– Cash bonus	21	20
– Share-based payment	16	14
	113	107

(c) Material transactions with key management personnel

During the year, the Group provided credit facilities to and accepted deposits from key management personnel of the Bank and its holding companies, their close family members and companies controlled or significantly influenced by them. The credit facilities extended and deposit taken were provided in the ordinary course of business and on substantially the same terms as for comparable transactions with persons of a similar standing or, where applicable, with other employees.

Material transactions conducted with key management personnel of the Bank and its holding companies and parties related to them are as follows:

	2022	2021
For the year		
Interest income	886	445
Interest expense	20	35
Fees and commission income	8	9
Maximum aggregate amount of loans and advances	56,894	60,112
At the year-end		
Loans and advances	40,764	47,031
Deposits	8,655	9,197
Guarantees issued	339	526
Undrawn commitments	2,614	4,589

Change in expected credit losses recognised for the year and impairment allowances against balances outstanding at the end of the year as required under HKFRS 9, in respect of Key Management Personnel were insignificant in both years.

The Group adheres to Part 8 of Banking (Exposure Limits) Rules made under Section 81A of Banking Ordinance regarding exposures to connected parties.

50. Material related-party transactions continued

(d) Loans to Directors

Particulars of loans to directors disclosed pursuant to section 17 of the Companies (Disclosure of Information about Benefits of Directors) Regulations for the year ended 31 December 2022 are shown as below.

	2022		2021	
	Highest balance during the year	Balance at 31 December	Highest balance during the year	Balance at 31 December
– Loans and advances	15,460	9,999	17,392	13,751
– Guarantees issued	8	3	305	205

The above relevant transactions in 2022 and 2021 were all transacted by the Bank.

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

No transaction, arrangement or contract (that is significant in relation to the Bank's business), to which the Bank or any of its holding companies or any of its subsidiaries or fellow subsidiaries was a party and in which a Director of the Bank had, directly or indirectly, a material interest, subsisted as at the end of the year or at any time during the year.

(f) Associates

The Group provides certain banking and financial services to associates, including loans, overdrafts, interest and non-interest bearing deposits and current accounts. Transactions and balances during the year with associates were as follows:

	2022		2021	
	Highest balance during the year	Balance at 31 December	Highest balance during the year	Balance at 31 December
Amounts due from associates#	9,184	8,093	7,465	7,465
Amounts due to associates#	1,762	876	4,238	106

For the year	2022	2021
Total operating income	141	16

Representing associates in HSBC Group

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.

The transactions resulting in 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.

(g) Ultimate holding company

The Group participates in various share option and share plans operated by HSBC Holdings plc whereby share options or shares of HSBC Holdings plc are granted to employees of the Group. As disclosed in note 49, 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 these share options and share awards is treated as a capital contribution and is recorded under 'Other reserves'. The balance of this reserve as at 31 December 2022 amounted to HK$684m comprising HK$668m relating to share option schemes and HK$16m relating to share award schemes (2021: HK$679m comprising HK$668m relating to share option schemes and HK$11m relating to share award schemes).

51. Fair value of financial instruments

(a) Fair value 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.

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 Global Markets ('GM'). GM's fair value governance structure comprises its Finance function and Valuation Committee. 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 Valuation Committees, which consist of independent support functions.

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 for the same issuer. Then, using discounted cash flow, each security is valued using the appropriate IBOR-based or risk free rate-based 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 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: 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: 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: financial instruments valued using valuation techniques where one or more significant inputs are unobservable.

51. Fair value of financial instruments continued

(a) Fair value of financial instruments carried at fair value continued

The accounting policies, control framework and hierarchy used to determine fair values in 2022 are consistent with those applied for the Annual Report 2021. The following table provides an analysis of financial instruments carried at fair value and bases of valuation:

	Fair value hierarchy					
	Quoted market price Level 1	Using observable inputs Level 2	With significant unobservable inputs Level 3	Third party total	Amounts with HSBC entities*	Total
Recurring fair value measurements						
2022						
Assets						
Trading assets	41,117	6,256	–	47,373	–	47,373
Derivative financial instruments	258	13,254	4	13,516	9,245	22,761
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	6,993	1,588	20,280	28,861	–	28,861
Financial investments	296,176	63,182	1,633	360,991	–	360,991
Liabilities						
Trading liabilities	46,323	–	–	46,323	–	46,323
Derivative financial instruments	10	13,231	4	13,245	7,747	20,992
Financial liabilities designated at fair value	–	24,287	22,022	46,309	–	46,309
2021						
Assets						
Trading assets	43,574	3,859	–	47,433	–	47,433
Derivative financial instruments	244	10,039	17	10,300	2,924	13,224
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	10,481	5,774	15,071	31,326	–	31,326
Financial investments	287,573	70,217	1,369	359,159	–	359,159
Liabilities						
Trading liabilities	44,291	–	–	44,291	–	44,291
Derivative financial instruments	17	8,936	–	8,953	3,299	12,252
Financial liabilities designated at fair value	–	21,376	6,023	27,399	–	27,399

* Included derivative contracts transacted with HSBC entities which are mainly classified within Level 2 of the valuation hierarchy.

Transfers between Level 1 and Level 2 fair values

	Assets				Liabilities		
	Financial investments	Trading assets	Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Trading liabilities	Financial liabilities designated at fair value	Derivatives
2022							
Transfer from Level 1 to Level 2	9,922	310	–	–	–	–	–
Transfer from Level 2 to Level 1	19,467	866	–	–	–	–	–
2021							
Transfer from Level 1 to Level 2	17,130	1,207	–	–	–	–	–
Transfer from Level 2 to Level 1	6,011	481	–	–	–	–	–

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.

51. Fair value of financial instruments continued

(a) Fair value of financial instruments carried at fair value continued

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 GM. 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.

51. Fair value of financial instruments continued

(a) Fair value of financial instruments carried at fair value continued

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 P&L reserves)

Inception profit adjustments are adopted when the fair value estimated by a valuation model is based on one or more significant unobservable inputs.

Financial instruments measured at fair value using a valuation technique with significant unobservable inputs - Level 3

	Assets			Liabilities	
	Financial investments	Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Financial liabilities designated at fair value	Derivatives
2022					
Investment funds and equity shares	**1,633**	**20,280**	**–**	**–**	**–**
Structured notes	**–**	**–**	**–**	**22,022**	**–**
Derivatives	**–**	**–**	**4**	**–**	**4**
	1,633	**20,280**	**4**	**22,022**	**4**
2021					
Investment funds and equity shares	1,369	15,071	–	–	–
Structured notes	–	–	–	6,023	–
Derivatives	–	–	17	–	–
	1,369	15,071	17	6,023	–

51. Fair value of financial instruments continued

(a) Fair value of financial instruments carried at fair value continued

Movement in Level 3 financial instruments

	Assets			Liabilities	
	Financial investments	Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Financial liabilities designated at fair value	Derivatives
At 1 January 2022	1,369	15,071	17	6,023	–
Total gains or losses recognised in profit or loss					
– net income/(loss) from financial instruments measured at fair value through profit or loss	–	491	(14)	56	4
Total gains or losses recognised in other comprehensive income					
– fair value gains	264	–	–	–	–
– exchange differences	–	–	–	(237)	–
Purchases	–	5,540	–	–	–
Issues/deposit taking	–	–	–	37,085	–
Sales	–	(1)	–	–	–
Settlements	–	(821)	–	(20,848)	–
Transfers out	–	–	–	(115)	–
Transfers in	–	–	1	58	–
At 31 December 2022	1,633	20,280	4	22,022	4
Unrealised gains or losses recognised in profit or loss relating to those assets and liabilities held at the end of the reporting period					
– net income/(loss) from financial instruments measured at fair value through profit or loss	–	49	2	(52)	2

51. Fair value of financial instruments continued

(a) Fair value of financial instruments carried at fair value continued

Movement in Level 3 financial instruments continued

	Assets			Liabilities	
	Financial Investments	Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Financial liabilities designated at fair value	Derivatives
At 1 January 2021	2,907	8,933	3	5,702	–
Total gains or losses recognised in profit or loss					
– net income/(loss) from financial instruments measured at fair value through profit or loss	–	2,923	(1)	(2)	3
Total gains or losses recognised in other comprehensive income					
– fair value losses	(1,538)	–	–	(2)	–
– exchange differences	–	–	–	93	–
Purchases	–	4,922	–	–	–
Issues/deposit taking	–	–	–	12,155	–
Settlements	–	(1,707)	–	(12,198)	–
Transfers out	–	–	–	(152)	(3)
Transfers in	–	–	15	427	–
At 31 December 2021	1,369	15,071	17	6,023	–
Unrealised gains or losses recognised in profit or loss relating to those assets and liabilities held at the end of the reporting period					
– net income/(loss) from financial instruments measured at fair value through profit or loss	–	2,923	(1)	(12)	(1)

In 2022, the transfer in/out of Level 3 derivative assets and liabilities were predominantly resulted from change in observability in equity volatilities and stock correlation. The transfer in/out of Level 3 financial liabilities designated at fair value reflected the change in observability of FX and equity volatility for pricing the instrument.

51. Fair value of financial instruments continued

(a) Fair value of financial instruments carried at fair value continued

Sensitivity of Level 3 fair values to reasonably possible alternative assumptions by instrument type

	Reflected in profit or loss		Reflected in other comprehensive income	
	Favourable changes	Unfavourable changes	Favourable changes	Unfavourable changes
2022				
Investment funds and equity shares	1,015	(1,015)	82	(82)
2021				
Investment funds and equity shares	754	(754)	68	(68)

When the fair value of a financial instrument is affected by more than one unobservable assumptions, the above table reflects the most favourable or the most unfavourable change from varying the assumptions individually.

Quantitative information about significant unobservable inputs in Level 3 valuations

	Fair value at 31 December 2022	Valuation technique(s)	Unobservable input(s)	Range
Assets				
Investment funds and equity shares	21,913	Net asset value	N/A	N/A
		Market-comparable approach	Earnings Multiple	31 – 34
			P/B ratios	0.26 – 1.30
			Liquidity Discount	10% – 60%
Derivatives	4	Option model	Equity Volatility	58.89% – 58.89%
Liabilities				
Structured notes	22,022	Option model	Equity Volatility	2.14% – 92.18%
			FX Volatility	3.81% – 14.13%
Derivatives	4	Option model	Equity Volatility	58.89% – 58.89%

	Fair value at 31 December 2021	Valuation technique(s)	Unobservable input(s)	Range
Assets				
Investment funds and equity shares	16,440	Net asset value	N/A	N/A
		Market-comparable approach	Earnings Multiple	42 – 47
			P/B ratios	0.29 – 1.91
			Liquidity Discount	10% – 60%
Derivatives	17	Option model	Equity Volatility	22.89% – 56.99%
Liabilities				
Structured notes	6,023	Option model	Equity Volatility	7.08% – 32.46%
			FX Volatility	2.72% – 19.69%

51. Fair value of financial instruments continued

(b) Fair value of financial instruments not carried at fair value

The following table provides an analysis of the fair value of financial instruments not measured at fair value on the Consolidated Balance Sheet. For all other instruments, the fair value is equal to the carrying value.

	Carrying amount	Quoted market price Level 1	Using observable inputs Level 2	With significant unobservable inputs Level 3	Fair value
2022					
Financial Assets					
Reverse repurchase agreements – non-trading	42,364	–	42,360	–	42,360
Placings with and advances to banks	62,326	–	62,327	–	62,327
Loans and advances to customers	931,334	–	–	926,376	926,376
Financial investments – at amortised cost	261,625	116,605	125,936	–	242,541
Financial Liabilities					
Deposits from banks	5,205	–	5,205	–	5,205
Current, savings and other deposit accounts	1,249,486	–	1,249,574	–	1,249,574
Repurchase agreements – non-trading	11,304	–	11,304	–	11,304
Certificates of deposit and other debt securities in issue	93,379	–	93,390	–	93,390
Subordinated liabilities	27,479	–	27,053	–	27,053
2021					
Financial Assets					
Reverse repurchase agreements – non-trading	18,821	–	18,820	–	18,820
Placings with and advances to banks	72,493	–	72,505	–	72,505
Loans and advances to customers	997,397	–	–	994,164	994,164
Financial investments – at amortised cost	141,227	20,168	127,852	–	148,020
Financial Liabilities					
Deposits from banks	5,333	–	5,333	–	5,333
Current, savings and other deposit accounts	1,230,216	–	1,230,279	–	1,230,279
Repurchase agreements – non-trading	16,592	–	16,591	–	16,591
Certificates of deposit and other debt securities in issue	81,567	–	81,588	–	81,588
Subordinated liabilities	24,484	–	25,148	–	25,148

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

The calculation of fair values of financial instruments that are not carried at fair value is described below.

The calculation of fair value incorporates the Group's 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 the instruments' cash flows over their expected future lives.

51. Fair value of financial instruments continued

(b) Fair value of financial instruments not carried at fair value continued

(i) Repurchase and reverse repurchase agreements – non-trading

Fair values approximate carrying amounts as their balances are generally short dated.

(ii) 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. 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.

(iii) Deposits from banks and customer accounts

Fair values are estimated using discounted cash flows, applying current rates offered for deposits of similar remaining maturities. The fair value of a deposit repayable on demand is assumed to be the amount payable on demand at the balance sheet date.

(iv) Debt securities in issue

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.

The fair values in this note 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.

52. Unconsolidated structured entities

The Group enters into transactions with unconsolidated structured entities in the normal course of business through the holding of collective investment funds established by HSBC Group and third parties. The majority of these funds held related to the insurance business. At 31 December 2022, the total asset value of unconsolidated structured entities amounted to HK$5,146.8bn (2021: HK$1,914.3bn). The Group's interests were recognised in financial assets mandatorily measured at fair value through profit or loss of HK$23,920m and trading assets of HK$43m (2021: financial assets mandatorily measured at fair value through profit or loss of HK$22,863m and trading assets of HK$41m). These collective investment funds include investment in unit trusts, private equity funds and infrastructure funds which provide the Group with a variety of investment opportunities through managed investment strategies.

Owing to the passive nature of these investments, the maximum exposure to loss from these interests is limited to the associated equity price risk and the capital commitments. The maximum exposure to loss, which represents the maximum loss that the Group could be required to report as a result of its involvement with these collective investment funds regardless of the probability of the loss being incurred, is equivalent to the carrying amount of these investments and the outstanding capital commitments of HK$11,824m (2021: HK$7,671m) to invest in several alternative investment funds for funding future alternative investments in global companies under respective investment mandates.

53. Immediate and ultimate holding companies

The immediate and ultimate holding companies of the Bank are The Hongkong and Shanghai Banking Corporation Limited (incorporated in Hong Kong) and HSBC Holdings plc (incorporated in England) respectively.

54. Bank balance sheet and statement of changes in equity

Bank balance sheet at 31 December

	2022	2021
ASSETS		
Cash and balances at central banks	17,595	13,339
Trading assets	44,006	46,324
Derivative financial instruments	19,786	10,891
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	77	77
Reverse repurchase agreements – non-trading	42,364	18,821
Placings with and advances to banks	49,112	51,299
Loans and advances to customers	852,555	908,267
Amounts due from subsidiaries	15,070	46,177
Financial investments	446,223	330,121
Investments in subsidiaries	19,929	20,166
Investment properties	4,262	4,058
Premises, plant and equipment	23,965	25,111
Intangible assets	3,345	2,616
Other assets	29,869	33,178
Total assets	1,568,158	1,510,445
LIABILITIES AND EQUITY		
Liabilities		
Deposits from banks	4,244	1,160
Current, savings and other deposit accounts	1,192,590	1,163,170
Repurchase agreements – non-trading	3,032	6,160
Trading liabilities	46,323	44,291
Derivative financial instruments	17,945	10,083
Financial liabilities designated at fair value	23,246	4,335
Certificates of deposit and other debt securities in issue	78,027	69,255
Amounts due to subsidiaries	5,906	20,882
Other liabilities	22,159	19,378
Current tax liabilities	214	155
Deferred tax liabilities	2,407	2,788
Subordinated liabilities	27,479	24,484
Total liabilities	1,423,572	1,366,141
Equity		
Share capital	9,658	9,658
Retained profits	107,065	105,140
Other equity instruments	11,744	11,744
Other reserves	16,119	17,762
Shareholders' equity	144,586	144,304
Total equity and liabilities	1,568,158	1,510,445

Diana Cesar *Executive Director and Chief Executive*
Clement K M Kwok *Director*

Say Pin Saw *Executive Director and Chief Financial Officer*

54. Bank balance sheet and statement of changes in equity continued

Bank statement of changes in equity for the year ended 31 December

	Share capital	Other equity instruments	Retained profits[1]	Other reserves: Premises revaluation reserve	Other reserves: Financial assets at FVOCI reserve	Other reserves: Cash flow hedge reserve	Other reserves: Foreign exchange reserve	Other reserves: Others[2]	Total equity
At 1 January 2022	9,658	11,744	105,140	14,651	2,371	46	17	677	144,304
Profit for the year	–	–	9,597	–	–	–	–	–	9,597
Other comprehensive income (net of tax)	–	–	(17)	513	(788)	(862)	1	(5)	(1,158)
Debt instruments at fair value through other comprehensive income	–	–	–	–	(678)	–	–	–	(678)
Equity instruments designated at fair value through other comprehensive income	–	–	–	–	(110)	–	–	–	(110)
Cash flow hedges	–	–	–	–	–	(862)	–	–	(862)
Change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	–	–	–	–	–	–	–	(5)	(5)
Property revaluation	–	–	–	513	–	–	–	–	513
Actuarial gains on defined benefit plans	–	–	(15)	–	–	–	–	–	(15)
Exchange differences and others	–	–	(2)	–	–	–	1	–	(1)
Total comprehensive income for the year	–	–	9,580	513	(788)	(862)	1	(5)	8,439
Dividends paid[3]	–	–	(7,455)	–	–	–	–	–	(7,455)
Coupons paid on AT1 capital instruments	–	–	(710)	–	–	–	–	–	(710)
Movement in respect of share-based payment arrangements	–	–	5	–	–	–	–	5	10
Others	–	–	(2)	–	–	–	–	–	(2)
Transfers[4]	–	–	507	(552)	45	–	–	–	–
At 31 December 2022	9,658	11,744	107,065	14,612	1,628	(816)	18	677	144,586

1 Retained profits are the cumulative net earnings of the Bank that have not been paid out as dividends, but retained to be reinvested in the business. To satisfy the provisions of the Hong Kong Banking Ordinance and local regulatory requirements for prudential supervision purposes, the Bank has earmarked a 'regulatory reserve' from retained profits. Movements in the reserve are made directly through retained earnings. As at 31 December 2022, the Group is not required to restrict any reserves which can be distributed to shareholders (2021: HK$363m) as the impairment allowance for Stage 1 and 2 loans and advances to customers exceeded the expected regulatory reserve balance.

2 Other reserves comprise share-based payment reserve and own credit risk reserve. The share-based payment reserve is used to record the amount relating to share awards and options granted to employees of the Group by the ultimate holding company. The own credit risk reserve is for the change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk.

3 Dividends paid in 2022 represented the payment of fourth interim dividend of 2021 and the first three interim dividends of 2022 amounted to HK$3,441m and HK$4,014m respectively.

4 This includes transfers from the premises revaluation reserve to retained earnings in relation to depreciation of revalued properties, and from financial assets at FVOCI reserve to retained earnings in relation to the disposal loss of equity investments at FVOCI.

54. Bank balance sheet and statement of changes in equity continued

Bank statement of changes in equity for the year ended 31 December continued

	Share capital	Other equity instruments	Retained profits[1]	Other reserves: Premises revaluation reserve	Other reserves: Financial assets at FVOCI reserve	Other reserves: Cash flow hedge reserve	Other reserves: Foreign exchange reserve	Other reserves: Others[2]	Total equity
At 1 January 2021	9,658	11,744	106,200	14,277	4,311	260	17	686	147,153
Profit for the year	–	–	10,488	–	–	–	–	–	10,488
Other comprehensive income (net of tax)	–	–	290	898	(1,940)	(214)	–	–	(966)
Debt instruments at fair value through other comprehensive income	–	–	–	–	(378)	–	–	–	(378)
Equity instruments designated at fair value through other comprehensive income	–	–	–	–	(1,560)	–	–	–	(1,560)
Cash flow hedges	–	–	–	–	–	(214)	–	–	(214)
Property revaluation	–	–	–	898	–	–	–	–	898
Actuarial gains on defined benefit plans	–	–	294	–	–	–	–	–	294
Exchange differences and others	–	–	(4)	–	(2)	–	–	–	(6)
Total comprehensive income for the year	–	–	10,778	898	(1,940)	(214)	–	–	9,522
Dividends paid	–	–	(11,662)	–	–	–	–	–	(11,662)
Coupons paid on AT1 capital instruments	–	–	(703)	–	–	–	–	–	(703)
Movement in respect of share-based payment arrangements	–	–	3	–	–	–	–	(9)	(6)
Transfers	–	–	524	(524)	–	–	–	–	–
At 31 December 2021	9,658	11,744	105,140	14,651	2,371	46	17	677	144,304

1 Retained profits are the cumulative net earnings of the Bank that have not been paid out as dividends, but retained to be reinvested in the business. To satisfy the provisions of the Hong Kong Banking Ordinance and local regulatory requirements for prudential supervision purposes, the Bank has earmarked a 'regulatory reserve' from retained profits. Movements in the reserve are made directly through retained earnings. As at 31 December 2022, the Group is not required to restrict any reserves which can be distributed to shareholders (2021: HK$363m) as the impairment allowance for Stage 1 and 2 loans and advances to customers exceeded the expected regulatory reserve balance.

2 Other reserves comprise share-based payment reserve and own credit risk reserve. The share-based payment reserve is used to record the amount relating to share awards and options granted to employees of the Group by the ultimate holding company. The own credit risk reserve is for the change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk.

The Bank and its banking subsidiaries operate under regulatory jurisdictions which require the maintenance of minimum capital adequacy ratios and which could therefore potentially restrict the amount of realised profits which can be distributed to shareholders.

At 31 December 2022, the aggregate amount of reserves available for distribution to equity shareholders of the Bank as calculated under the provision of Part 6 of the Hong Kong Companies Ordinance (Cap. 622) amounted to HK$101,000m (2021: HK$99,320m). After considering regulatory capital requirement and business development needs, an amount of HK$3,824m (2021: HK$3,441m) has been declared as the proposed fourth interim dividend in respect of the financial year ended 31 December 2022. The difference between the aggregate distributable reserves of HK$101,000m and the Bank's retained profit of HK$107,065m as reported above mainly represents the exclusion of unrealised revaluation gain on investment properties and the regulatory reserve of the Bank.

55. Approval of financial statements

The financial statements were approved and authorised for issue by the Board of Directors on 21 February 2023.

INDEPENDENT AUDITOR'S REPORT

To the Members of Hang Seng Bank Limited

(incorporated in Hong Kong with limited liability)

Opinion

What we have audited

The consolidated financial statements of Hang Seng Bank Limited (the 'Bank') and its subsidiaries (together, the 'Group'), which are set out on pages 178 to 253, comprise:

- the consolidated balance sheet as at 31 December 2022;
- 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] to the consolidated financial statements, which include significant accounting policies and other explanatory information.

[1] Certain required disclosures as described in Note 1(b) have been presented elsewhere in the Annual Report 2022, rather than in the notes to 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 2022, 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 ('ECL') on loans and advances to customers;
- The present value of in-force long-term insurance business ('PVIF') and liabilities under non-linked life insurance contracts; and
- Impact of adoption of HKFRS 17 *'Insurance Contracts'*.

Key Audit Matters continued

Allowances for expected credit losses ('ECL') on loans and advances to customers

Nature of the Key Audit Matter

As at 31 December 2022, the Group recorded allowances for ECL on loans and advances to customers of HK$13,394m.

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 that we focused our audit on ECL for those non-credit impaired loans and advances to customers include 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 from the COVID-19 infection rates in Asia, particularly in mainland China, ongoing developments related to the mainland China Commercial Real Estate sector, the geopolitical landscape and certain other current macroeconomic conditions impact 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. This includes judgemental adjustments to the ECL for unsecured offshore mainland China Commercial Real Estate exposures.

The above ongoing developments has also resulted 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 further discussed certain controls over the process in determining ECL on loans and advances to customers.

How our audit addressed the Key Audit Matter

We tested controls in place over the methodologies, their application, significant assumptions and data used to determine the ECL on loans and advances to customers. These included controls over:

- 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.

Key Audit Matters continued

Allowances for expected credit losses ('ECL') on loans and advances to customers continued

How our audit addressed the Key Audit Matter continued

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, and for a sample of those models, we independently reperformed the modelling for certain aspects of the ECL calculation.

We further performed the following to assess the significant assumptions and data:

- We challenged the appropriateness of the significant assumptions;
- 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 have independently assessed other significant assumptions and obtained corroborating evidence.

For a sample of management judgemental adjustments and 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 Annual Report 2022

- Management Discussion and Analysis – Risk, (a) Credit Risk, pages 61-90
- Note 2 on the consolidated financial statements: Significant accounting policies, (j) Impairment of amortised cost and FVOCI financial assets, pages 191-195
- Note 11 on the consolidated financial statements: Change in expected credit losses and other credit impairment charges, page 203
- Note 27 (a) on the consolidated financial statements: Loans and advances to customers, page 218

Key Audit Matters continued

The present value of in-force long-term insurance business ('PVIF') and liabilities under non-linked life insurance contracts

Nature of the Key Audit Matter

As at 31 December 2022, the Group has recorded an asset for PVIF of HK$20,620m and liabilities under non-linked life insurance contracts of HK$165,536m.

The determination of these balances requires the use of complex actuarial methodologies that are applied in models and involves judgement about future outcomes. Specifically, judgement is required in deriving the economic and non-economic assumptions. These assumptions are subject to estimation uncertainty, both for the PVIF asset and the liabilities under non-linked life insurance contracts.

Matters discussed with the Audit Committee

We discussed the appropriateness of the methodologies, their application, significant assumptions and related disclosures with the Audit Committee. In relation to assumptions, we focused on those for which variations had the most significant impact on the valuation of PVIF and liabilities under non-linked life insurance contracts carrying value.

How our audit addressed the Key Audit Matter

We tested controls in place over the methodologies, their application, significant assumptions and data for the PVIF asset and the liabilities under non-linked life insurance contracts. Specifically, these included controls over:

- policy data reconciliations from the policyholder administration system to the actuarial valuation system;
- assumptions setting;
- review and determination of methodologies used, and its application in models; and
- results aggregation and analysis processes.

With the assistance of our actuarial experts, we performed the following audit procedures to assess the methodologies used, their application, significant assumptions, data and disclosures:

- We assessed the appropriateness of the methodologies used, their application and the mathematical accuracy of the calculations;
- We challenged the appropriateness of the judgements made in selecting significant assumptions and, where relevant, their inter-relationships. We have independently assessed these assumptions and obtained relevant corroborating evidence. We further considered whether the judgements made in selecting the significant assumptions would give rise to indicators of possible management bias;
- We performed substantive audit procedures over critical data used in the determination of these balances to ensure these are relevant and reliable; and
- We assessed the adequacy of the disclosures in relation to the asset for PVIF and liabilities under non-linked life insurance contracts made in the consolidated financial statements in the context of the applicable financial reporting framework.

Relevant references in the Annual Report 2022

- Management Discussion and Analysis – Risk, (i) Insurance manufacturing operation risk, pages 115-122
- Note 2 on the consolidated financial statements: Significant accounting policies, (t) Insurance contracts, pages 198-199
- Note 33 on the consolidated financial statements: Intangible assets, pages 226-227
- Note 40 on the consolidated financial statements: Liabilities under insurance contracts, page 229

Key Audit Matters continued

Impact of adoption of HKFRS 17 *'Insurance Contracts'*

Nature of the Key Audit Matter

HKFRS 17 *'Insurance contracts'* sets out the requirements that an entity should apply in accounting for insurance contracts it issues, reinsurance it holds and investment contracts with discretionary participating features it issues. The Group is required to adopt the standard retrospectively from 1 January 2023, with comparatives restated from 1 January 2022. As part of the transition to HKFRS 17, the Group intends to apply the option under HKFRS 9 to re-designate holdings of financial assets held to support insurance liabilities currently measured at amortised cost, to fair value under HKFRS 9. The Group has estimated and disclosed that the adoption will reduce the opening total equity as at 1 January 2022 by HK$25.2bn. In the consolidated financial statements it is disclosed that this estimate is based on accounting policies, assumptions, judgements and estimation techniques that remain subject to change.

This is a new and complex standard and determining the impact as at 1 January 2022 requires judgement and interpretation in its implementation. This includes the selection of accounting policies and the use of complex actuarial methodologies that are applied in models and overlay adjustments to 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 the disclosures related to the impact of the coming adoption of HKFRS 17 with the Audit Committee.

How our audit addressed the Key Audit Matter

We tested controls in place over accounting policies, methodologies, their application, significant assumptions and data used in determining the estimated reduction of the opening total equity as at 1 January 2022. Specifically, these included controls over:

- 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, including model development, validation and monitoring.

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 accounting policies with the requirements in HKFRS 17;
- We assessed the appropriateness of the methodologies used, their application in models and overlay adjustments to models and the mathematical accuracy of the calculations;
- We challenged the appropriateness of the judgements made in selecting significant assumptions and, where relevant, their interrelationships. We have independently assessed these assumptions and obtained relevant corroborating evidence. We further considered whether the judgements made in selecting the significant assumption would give risk to indicators of susceptibility to management bias;
- We performed substantive audit procedures over critical data used to ensure these are relevant and reliable;
- We performed substantive audit procedures over the re-designation of financial assets held to support insurance liabilities; and
- We assessed the adequacy of the disclosures in the context of the applicable financial reporting framework.

Relevant references in the Annual Report 2022

Note 1(d) on the consolidated financial statements: Future Accounting Developments, HKFRS17 *'Insurance Contracts'*, pages 186-187

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 2022 (but does not include the consolidated financial statements and our auditor's report thereon), which we obtained prior to the date of this auditor's report, and the Banking Disclosure Statement for the year ended 31 December 2022, which is expected to be made available to us after the date of this auditor's report. 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 Banking Disclosure Statement for the year ended 31 December 2022, 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.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements continued

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 Mr. Poon, Raymond Tak-cheong.

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong , 21 February 2023

ANALYSIS OF SHAREHOLDERS

As at 31 December 2022	Shareholders		Number of Shares	
	Number	Percentage of total	Number in millions	Percentage of total
Number of shares held				
1 – 500	6,053	36.55	1.39	0.07
501 – 2,000	5,068	30.60	6.17	0.32
2,001 – 5,000	2,563	15.48	8.75	0.46
5,001 – 20,000	2,162	13.05	22.08	1.16
20,001 – 50,000	486	2.93	15.36	0.80
50,001 – 100,000	125	0.76	9.02	0.47
100,001 – 200,000	55	0.33	8.11	0.43
Over 200,000	50	0.30	1,840.96	96.29
	16,562	100.00	1,911.84	100.00
Geographical Distribution				
Hong Kong	16,305	98.45	1,909.06	99.85
Malaysia	45	0.27	0.29	0.02
Canada	41	0.25	0.13	0.01
Singapore	37	0.23	1.74	0.09
United Kingdom	29	0.18	0.03	0.00
Macau	27	0.16	0.13	0.01
Australia	24	0.14	0.08	0.00
United States of America	24	0.14	0.12	0.01
Others	30	0.18	0.26	0.01
	16,562	100.00	1,911.84	100.00

SUBSIDIARIES*

Fulcher Enterprises Company Limited

Hang Seng Bank (China) Limited

Hang Seng Bank (Trustee) Limited

Hang Seng Bullion Company Limited

Hang Seng Credit Limited

Hang Seng Data Services Limited

Hang Seng Finance Limited

Hang Seng Financial Information Limited

Hang Seng Indexes Company Limited

Hang Seng Indexes (Netherlands) B.V.

Hang Seng Insurance Company Limited

Hang Seng Investment Management Limited

Hang Seng Investment Services Limited

Hang Seng Life Limited *(in members' voluntary liquidation)*

Hang Seng (Nominee) Limited

Hang Seng Qianhai Fund Management Company Limited

Hang Seng Real Estate Management Limited

Hang Seng Security Management Limited

Hang Seng Securities Limited

Haseba Investment Company Limited

HASE Wealth Limited

High Time Investments Limited

HSI International Limited

Imenson Limited

Yan Nin Development Company Limited

* As defined in Section 15 of the Hong Kong Companies Ordinance (Cap 622).

DIRECTORS OF SUBSIDIARIES

The names of Directors who have served on the Boards of the Bank's subsidiaries during the period from 1 January 2022 to the date of Report of the Directors of this Annual Report (unless otherwise stated) are set out below:

CESAR Diana Ferreira

CHAN Ka Lok

CHAN May Yee*

CHAN Ping Chung Eddie

CHEN Kwan Yiu Edward*

CHEN Yu Sheng

CHENG Cheng Shing Agnes*

CHEUNG Ho Fai Derek*

CHEUNG Ka Wai Kathy

CHIU Wai Man Vivien

CHOW Tan Ling

FAN Gordon

FU Yin Ho*

Gregory Thomas HINGSTON

HO Lok Sze

JIN Jiejun*

Hong Mei KNIGHT

KONG Kwong Ming*

KWAN Wing Han Margaret*

KWAN Wing Shing Vincent*

LAM Hei Yin Joe

LAM Hoi

LAM Wai Chung Gordon

LAM Yin Shing Donald*

LAW Soo Ping Alison

LEE Kit Han Jackie

LEE Man Lung

LEE Pui Shan

LEE Wah Lun Rannie

LEE Yuk Shan*

LEUNG Chi Wai

LEUNG Kin Ping

LEUNG Wing Lok*

LI Chi Chung

LI Jianfeng

LIANG Chun Fei Belle

LIM Sau Fung

LIU Lai Ka

LIU Yu

LUI Man Chung Raymond

MA Zhengwei

MO Yuen Man Anita

MUK Chung Wing

NG Kar Wah

NIP Tak Kuen

POON Sun Cheong*

SAW Say Pin

SHEN Sibao*

SIT Wing Fai Wilfred

SONG Yue Sheng Ryan

SUEN Wai Kwan Grace

TIN Ho Ting

TSANG Hing Keung

WANG Xiao Kun

WANG Yee Ning Elaine*

Stuart Kingsley WHITE

WONG Ti

WONG Wai Hung

YAM Chi Fai

YEO Chee Leong*

YOU Anshan*

YUEN Kin Chung

ZHANG Junsheng

ZHU Jin

* He/She has resigned/ceased as a Director of the relevant subsidiary(ies) of the Bank.

CORPORATE INFORMATION AND CALENDAR

CORPORATE INFORMATION

Board of Directors

Chairman

Irene Y L Lee

Executive Director and Chief Executive

Diana Cesar JP

Directors

Cordelia Chung
Kathleen C H Gan
Clement K M Kwok
Patricia S W Lam
David Y C Liao
Huey Ru Lin
Kenneth S Y Ng
Say Pin Saw
Xiao Bin Wang
Michael W K Wu

Secretary

C C Li

Registered Office

83 Des Voeux Road Central, Hong Kong
Website: www.hangseng.com
Email: hangseng@computershare.com.hk

Stock Code

The Stock Exchange of Hong Kong Limited: 11

Registrar

Computershare Hong Kong Investor Services Limited
Shops 1712-1716, 17th Floor, Hopewell Centre
183 Queen's Road East, Wanchai, Hong Kong

Depositary*

BNY Mellon Shareowner Services
PO Box 43006
Providence, RI 02940-3078, USA
Website: www.mybnymdr.com
Email: shrrelations@cpushareownerservices.com

* The Bank offers investors in the United States a Sponsored Level-1 American Depositary Receipts Programme through The Bank of New York Mellon Corporation.

Annual Report 2022

This Annual Report 2022 in both English and Chinese is now available in printed form and on the Bank's website (www.hangseng.com) and the website of Hong Kong Exchanges and Clearing Limited ("HKEx") (www.hkexnews.hk).

Shareholders who:

A) browse this Annual Report 2022 on the Bank's website and wish to receive a printed copy; or

B) receive this Annual Report 2022 in either English or Chinese and wish to receive a printed copy in the other language version,

may send a request form, which can be obtained from the Bank's Registrar or downloaded from the Bank's website (www.hangseng.com) or HKEx's website (www.hkexnews.hk), to the Bank's Registrar:

Computershare Hong Kong Investor Services Limited
17M Floor, Hopewell Centre
183 Queen's Road East
Wanchai, Hong Kong
Facsimile: (852) 2529 6087
Email: hangseng@computershare.com.hk

If shareholders who have chosen (or are deemed to have chosen) to read this Annual Report 2022 on the Bank's website, have difficulty in reading or gaining access to this Annual Report 2022 via the Bank's website for any reason, the Bank will promptly send this Annual Report 2022 in printed form free of charge upon the shareholders' request.

Shareholders may change their choice of means of receipt or language of the Bank's future corporate communications at any time, free of charge, by giving the Bank c/o the Bank's Registrar reasonable notice in writing or by email to hangseng@computershare.com.hk.

CALENDAR

2022 Full Year Results

Announcement date	21 February 2023

2022 Fourth Interim Dividend#

Announcement date	21 February 2023
Book close and record date	8 March 2023
Payment date	21 March 2023

2022 Annual Report

to be posted to shareholders at or about the end of March 2023

Annual General Meeting

to be held in Q2 2023, the notice of which will be sent to shareholders at least 20 clear business days before the said meeting

\# The Register of Shareholders of the Bank will be closed on Wednesday, 8 March 2023, during which no transfer of shares can be registered. To qualify for the fourth interim dividend for 2022, all transfers, accompanied by the relevant share certificates, must be lodged with the Bank's Registrar, Computershare Hong Kong Investor Services Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, for registration not later than 4:30 pm on Tuesday, 7 March 2023. The fourth interim dividend will be payable on Tuesday, 21 March 2023 to shareholders whose names appear on the Register of Shareholders of the Bank on Wednesday, 8 March 2023. Shares of the Bank will be traded ex-dividend as from Monday, 6 March 2023.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report 2022 contains certain forward-looking statements with respect to the Group's financial condition; results of operations and business, including the strategic priorities; financial, investment and capital targets; and ESG targets, commitments and ambitions described herein.

Statements that are not historical facts, including statements about the Group's beliefs and expectations, are forward-looking statements. Words such as 'may', 'will', 'should', 'expects', 'targets', 'anticipates', 'intends', 'plans', 'believes', 'seeks', 'estimates', 'potential' and 'reasonably possible', 'aims to' or the negative thereof, other variations thereon or similar expressions are intended to identify forward-looking statements. These statements are based on current plans, information, data, estimates and projections, and therefore undue reliance should not be placed on them. Forward-looking statements speak only as of the date they are made. The Group makes no commitment to revise or update any forward-looking statements to reflect events or circumstances occurring or existing after the date of any forward-looking statements. Written and/or oral forward-looking statements may also be made in the periodic reports to the Hong Kong Regulators, summary financial statements to shareholders, proxy statements, offering circulars and prospectuses, press releases and other written materials, and in oral statements made by the Group's Directors, officers or employees to third parties, including financial analysts. Forward-looking statements involve inherent risks and uncertainties. Readers are cautioned that a number of factors could cause actual results to differ, in some instances materially, from those anticipated or implied in any forward-looking statement.

These include, but are not limited to:

- changes in general economic conditions in the markets in which we operate, such as new, continuing or deepening recessions, inflationary pressures and fluctuations in employment and creditworthy customers beyond those factored into consensus forecasts (including, without limitation, as a result of the Russia-Ukraine war and the COVID-19 pandemic); the Russia-Ukraine war and the COVID-19 pandemic and their impact on global economies, which could have a material adverse effect on (among other things) our financial condition, results of operations, prospects, liquidity, capital position and credit ratings; deviations from the market and economic assumptions that form the basis for our ECL measurements (including, without limitation, as a result of the Russia-Ukraine war, inflationary pressures and the COVID-19 pandemic); potential changes in the Group's dividend policy; changes in foreign exchange rates and interest rates; volatility in equity markets; lack of liquidity in wholesale funding or capital markets, which may affect our ability to meet our obligations under financing facilities or to fund new loans, investments and businesses; geopolitical tensions or diplomatic developments producing social instability or legal uncertainty, such as the Russia-Ukraine war and the related imposition of sanctions, the US approach to strategic competition with China, supply chain restrictions, claims of human rights violations, diplomatic tensions, including between China and the US, the UK, the EU, Australia, India and other countries, and developments in Hong Kong and Taiwan, alongside other potential areas of tension, which may affect the Group by creating regulatory, reputational and market risks; the efficacy of government, customer and the Group's actions in managing and mitigating ESG risks, in particular climate risk, nature-related risks and human rights risks, and in supporting the global transition to net zero carbon emissions, each of which can impact the Group both directly and indirectly through our customers and which may cause both idiosyncratic and systemic risks resulting in potential financial and non-financial impacts; illiquidity and downward price pressure in real estate markets; adverse changes in central banks' policies with respect to the provision of liquidity support to financial markets; adverse changes in the funding status of public or private defined benefit pensions; societal shifts in customer financing and investment needs, including consumer perception as to the continuing availability of credit; exposure to counterparty risk, including third parties using us as a conduit for illegal activities without our knowledge; the discontinuation of certain key Ibors and the development of near risk-free benchmark rates, as well as the transition of legacy Ibor contracts to near risk-free benchmark rates, which exposes the Group to execution risks, and increases some financial and non-financial risks; and price competition in the market segments we serve;
- changes in government policy and regulation, including the monetary, interest rate and other policies of central banks and other regulatory authorities in the markets in which we operate and the consequences thereof; initiatives to change the size, scope of activities and interconnectedness of financial institutions in connection with the implementation of stricter regulation of financial institutions in the markets we operate in; revised capital and liquidity benchmarks, which could serve to deleverage bank balance sheets and lower returns available from the current business model and portfolio mix; changes to tax laws and tax rates applicable to the Group, including the imposition of levies or taxes designed to change business mix and risk appetite; the practices, pricing or responsibilities of financial institutions serving their consumer markets; expropriation, nationalisation, confiscation of assets and changes in legislation relating to foreign ownership; the passage of the Hong Kong national security law and restrictions on telecommunications, as well as the US Hong Kong Autonomy Act, which have caused tensions between China, the US and the UK; general changes in government policy that may significantly influence investor decisions; the costs, effects and outcomes of regulatory reviews, actions or litigation, including any additional compliance requirements; and the effects of competition in the markets where we operate including increased competition from non-bank financial services companies; and

- factors specific to impact the Group, including our success in adequately identifying the risks we face, such as the incidence of loan losses or delinquency, and managing those risks (through account management, hedging and other techniques); our ability to achieve our financial, investment, capital targets and to contribute to HSBC Group's ESG goals (including with respect to HSBC Group's thermal coal phase-out policy to reduce our on-balance sheet financed emissions in the oil and gas and power and utilities sectors), which may result in our failure to achieve any of the expected benefits of our strategic priorities; model limitations or failure, including, without limitation, the impact that high inflationary concerns and the consequences of the COVID-19 pandemic have had on the performance and usage of financial models, which may require us to hold additional capital, incur losses and/or use compensating controls, such as judgemental post-model adjustments, to address model limitations; changes to the judgements, estimates and assumptions we base our financial statements on; changes in our ability to meet the requirements of regulatory stress tests; a reduction in the credit ratings assigned to us or any of our subsidiaries, which could increase the cost or decrease the availability of our funding and affect our liquidity position and net interest margin; changes to the reliability and security of our data management, data privacy, information and technology infrastructure, including threats from cyber-attacks, which may impact our ability to service clients and may result in financial loss, business disruption and/or loss of customer services and data; the accuracy and effective use of data, including internal management information that may not have been independently verified; changes in insurance customer behaviour and insurance claim rates; our dependence on loan payments and dividends from subsidiaries to meet our obligations; changes in accounting standards, including the implementation of HKFRS 17 *'Insurance Contracts'*, which may have a material impact on the way we prepare our financial statements and (with respect to HKFRS 17) may negatively affect the profitability of the Group's insurance business; changes in our ability to manage third-party, fraud and reputational risks inherent in our operations; employee misconduct, which may result in regulatory sanctions and/or reputational or financial harm; changes in skill requirements, ways of working and talent shortages, which may affect our ability to recruit and retain senior management and diverse and skilled personnel; and changes in our ability to develop sustainable finance and climate-related products consistent with the evolving expectations of our regulators, and our capacity to measure the climate impact from our financing activity (including as a result of data limitations and changes in methodologies), which may affect our ability to contribute to HSBC Group's climate ambition on reducing financed emissions in the oil and gas and power and utilities portfolio as well as the execution of the thermal coal phase-out policy, and increase the risk of greenwashing. Effective risk management depends on, among other things, our ability through stress testing and other techniques to prepare for events that cannot be captured by the statistical models it uses; our success in addressing operational, legal and regulatory, and litigation challenges; and other risks and uncertainties we identify in risk related discussions in the Annual Report 2022.

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