



恒生銀行

HANG SENG BANK

Annual Report 2021

2021年年報

The printed version of Hang Seng Bank's Annual Report 2021
will replace this version in late March 2022.

恒生銀行2021年年報之印刷本將於2022年3月底取代此版本。

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* 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.

CORPORATE PROFILE

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 280 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 2021

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

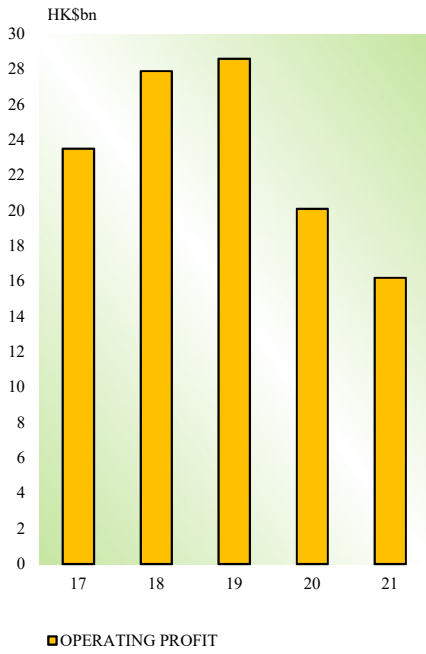
RESULTS IN BRIEF

	2021	2020	Change %
For the year	HK\$m	HK\$m	
Net operating income before change in expected credit losses and other credit impairment charges	33,182	36,068	(8)
Operating profit	16,231	20,125	(19)
Profit before tax	16,385	19,414	(16)
Profit attributable to shareholders	13,960	16,687	(16)
	%	%	
Return on average ordinary shareholders' equity	7.7	9.6	
Cost efficiency ratio	42.6	36.6	
	HK\$	HK\$	%
Earnings per share	6.93	8.36	(17)
Dividends per share	5.10	5.50	(7)
<hr/>			
	At 31 December 2021	At 31 December 2020	Change
At year-end	HK\$m	HK\$m	%
Shareholders' equity	184,332	183,100	1
Total assets	1,820,185	1,759,787	3
	%	%	
Capital ratios			
- Common Equity Tier 1 ('CET1') Capital Ratio	15.9	16.8	
- Tier 1 Capital Ratio	17.5	18.5	
- Total Capital Ratio	18.9	20.0	
Liquidity ratios			
- Liquidity coverage ratio	192.7	230.4	
- Net stable funding ratio	147.4	152.9	

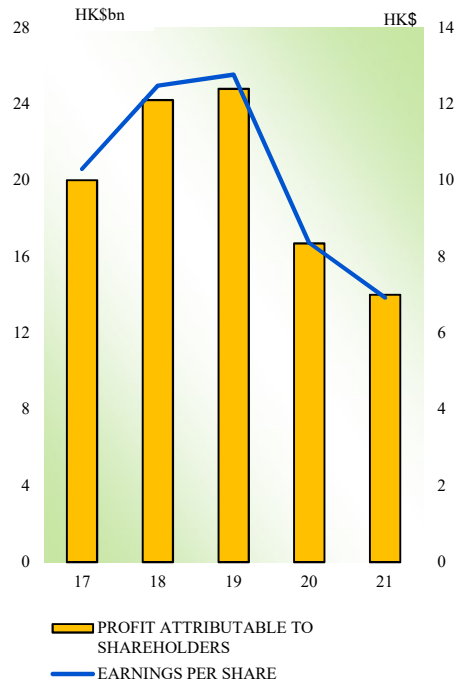
FIVE-YEAR FINANCIAL SUMMARY

	2017	2018	2019	2020	2021
For the year	HK\$bn	HK\$bn	HK\$bn	HK\$bn	HK\$bn
Operating profit	23.5	27.9	28.6	20.1	16.2
Profit before tax	23.7	28.4	28.8	19.4	16.4
Profit attributable to shareholders	20.0	24.2	24.8	16.7	14.0
At year-end	HK\$bn	HK\$bn	HK\$bn	HK\$bn	HK\$bn
Shareholders' equity	152.0	162.1	178.8	183.1	184.3
Issued and paid-up capital	9.7	9.7	9.7	9.7	9.7
Total assets	1,478.4	1,571.3	1,677.0	1,759.8	1,820.2
Total liabilities	1,326.3	1,409.2	1,498.1	1,576.6	1,635.8
Per share	HK\$	HK\$	HK\$	HK\$	HK\$
Earnings per share	10.30	12.48	12.77	8.36	6.93
Dividends per share					
- 1 st to 4 th interim dividends	6.70	7.50	8.20	5.50	5.10
Ratios	%	%	%	%	%
Return on average ordinary shareholders' equity	14.2	16.0	15.2	9.6	7.7
Post-tax return on average total assets	1.4	1.6	1.5	1.0	0.8
Capital ratios					
- Common Equity Tier 1 ('CET1') Capital Ratio	16.5	16.6	16.9	16.8	15.9
- Tier 1 Capital Ratio	17.7	17.8	18.7	18.5	17.5
- Total Capital Ratio	20.1	20.2	20.8	20.0	18.9
Cost efficiency ratio	30.5	29.5	30.0	36.6	42.6

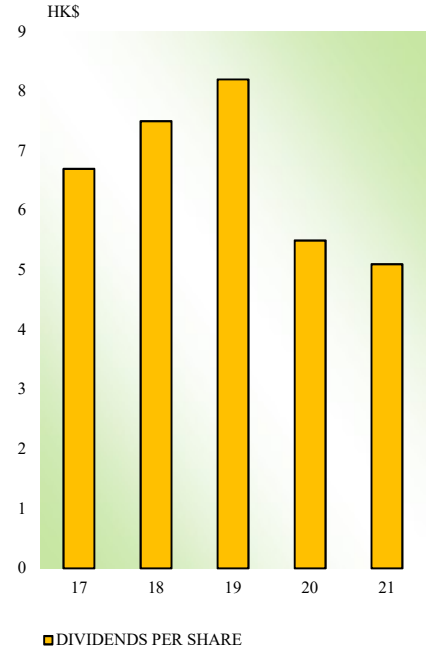
RESULTS



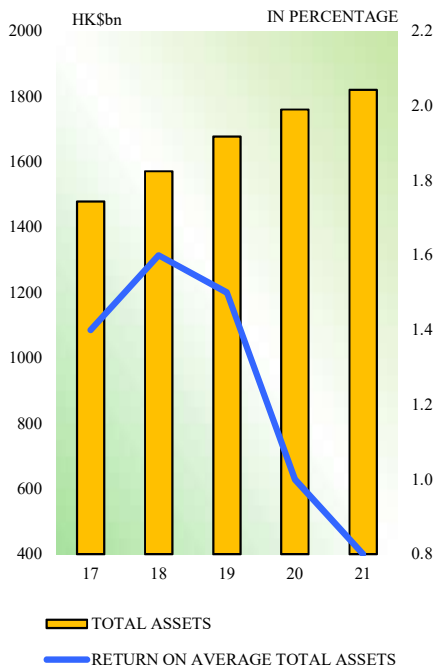
PROFIT ATTRIBUTABLE TO SHAREHOLDERS AND EARNINGS PER SHARE



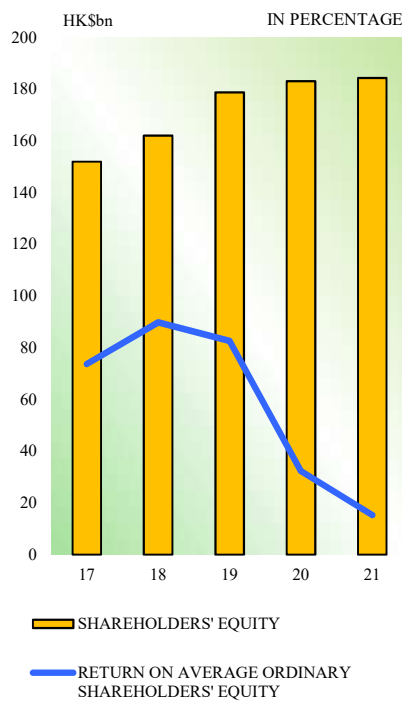
DIVIDENDS PER SHARE



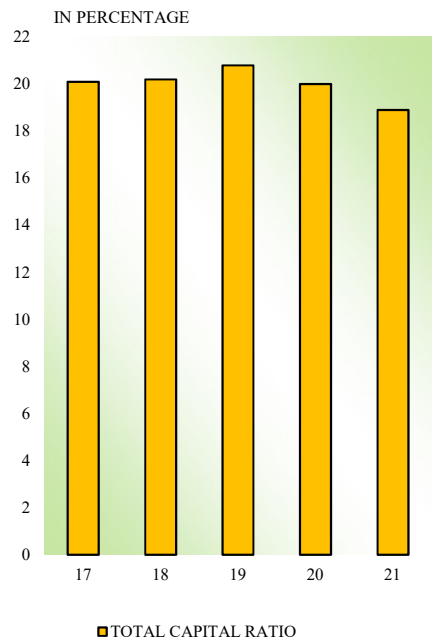
TOTAL ASSETS AND RETURN ON AVERAGE TOTAL ASSETS



SHAREHOLDERS' EQUITY AND RETURN ON AVERAGE ORDINARY SHAREHOLDERS' EQUITY



TOTAL CAPITAL RATIO



CHAIRMAN'S STATEMENT

Succeeding in Difficult Times

The effects of the pandemic and globally low interest rates continued to put pressure on the banking sector for a second year in a row. With the difficulties being experienced in certain sectors of the economy, albeit with encouraging trends in overall economic activity and world trade, market conditions were highly fluid in 2021. Against this backdrop, the Bank remained steadfastly focused on its long-term success and took the opportunity to bring forward actions to further diversify and future-proof our business.

Fintech is a fundamental part of banking innovations and remains a major area of investment for the Bank. Enhanced digital capabilities enable us to provide faster and more convenient products, services and market information to support customers at all touch points, at all times. They also allow us to better understand the wealth management needs of different customer segments so that we may broaden our offerings and provide customised solutions. Whilst driving an agenda for business growth, we give equal regard to the importance of sustainability, not just in our own operations but in the communities that we serve. Green and sustainability-linked financing are gaining momentum as a strategic area of growth. We also contribute positive actions to address climate change and support our young generations.

Our people are the bedrock of the Bank and their well-being remains a top priority. As the changing circumstances of the pandemic disrupted normal work routines, our people's commitment to ensuring our business, our operations and our support to customers continued without interruption. This embodies the ethos and intent of Hang Seng's core values. Continued investments in our digital infrastructure, together with our management's purpose and encouragement, empowered more than half of our workforce to benefit from our existing flexible working policy to work remotely from outside Bank premises one to two days per week, regardless of the pandemic situation. To support colleagues' physical and emotional wellness and keep them connected socially, we provided a variety of online exercise, relaxation and leisure programmes and resources.

Difficult as 2021 has been, our business and our operations remained resilient. We are reporting an attributable profit of HK\$13,960m. With the fourth interim dividend of HK\$1.80 per share being declared by the Directors, the total distribution for 2021 will be HK\$5.10 per share.

Realising Our Potential

We view our future success to be closely linked to the well-being and prosperity of Hong Kong and, more broadly, the Greater Bay Area ('GBA'). Our purpose is to realise the potential for our customers, our people and our business by becoming the preferred banking and financial services partner in the GBA.

As an integrated financial, innovation and manufacturing hub, the GBA is home to more than 72 million people and has the world's attention as a major driver of tomorrow's economic growth. Taking 2020 as a baseline, gross domestic product is expected to more than double to reach US\$4.6tn by 2030. Hang Seng is uniquely well-positioned and Hang Seng Bank China, our wholly-owned franchise operating in the region, is already in place to serve our customers. With our seamlessly connected network, our experts are able to offer convenient, one-stop service to cross-boundary customers. At the same time, our Hang Seng Indexes Company tracks the financial pulse of the region through a wide range of indexes of different markets and sectors including high-tech, new economy and environmental, social and governance ('ESG'). Our brand is well-established across the GBA.

Envisioning the future of financial services, we are helping to drive the 'new economy' by expanding in areas such as sustainable financing and ESG investment. We also work with strategic partners to support fintech development and innovation in the region. Our strength in wealth management propositions provides a solid foundation for us to grow our retail business as demand for wealth-and-health solutions increases across the GBA.

A Sustainable Banking Leader

Our ESG vision is to be a leader in driving ESG in the banking industry. We have already made good progress in 2021. In addition to significantly expanding our offerings of green and sustainability-related products and services for customers, we were the first local bank in Hong Kong to commit to becoming carbon neutral, a goal we intend to and are on track to achieve by 2030.

The Board fully supported and approved the Bank's proposal to set annual ESG key performance indicators and action plans, as well as formalise its climate risk management structure by implementing a climate strategy to guide corporate decisions. A Climate Change Management Roadmap has also been developed for the next two years to ensure we further embed climate change considerations into all aspects of our business and decision making. My fellow Directors and I attended multiple ESG trainings over the year and the Bank became a signatory to the Carbon Neutrality Partnership in support of the Hong Kong Government's Climate Action Plan 2050.

Board of Directors and Senior Management

In September, we officially welcomed Diana Cesar aboard as Executive Director and Chief Executive of the Bank. Her clear vision and deep understanding of the Hong Kong and GBA markets will ensure we continue moving forward at pace with our long-term growth strategy and advancing our brand positioning as a progressive and innovative industry leader.

I would like to extend my heartfelt appreciation to Margaret Kwan, who recently retired from her position as Executive Director and Head of Wealth and Personal Banking after 27 years of outstanding contributions. Margaret provided an experienced and steady hand as Acting Chief Executive in the months leading up to Diana's appointment. Rannie Lee is our new Head of Wealth and Personal Banking as of February and we are delighted to have her deep-seeded knowledge and experience to continue building on our strong franchise for retail customers.

Peter Wong stepped down as a Non-Executive Director of the Bank in September. His vacancy has been taken up by David Liao, who is Group Executive, Co-CEO, Asia Pacific of the HSBC Group. I wish to reiterate the Directors' thanks to Peter for his wise counsel and invaluable contributions over the past 16 years and to David who will add his expertise to Hang Seng's Board.

Building Future Success Together

Without doubt, the past two years have created tremendous challenges for individuals and organisations around the world for which there is no blueprint for resolution. They have also demonstrated that it is possible, with clear vision and concerted efforts, for us to achieve the previously unimaginable: from the speed of medical innovation and vaccine production, to the ways we work and maintain close personal connections. Traditional assumptions and limitations are falling away in the face of determination and creativity.

We aim to bring this same attitude and energy to meeting the financial needs and aspirations of our customers, supporting the career ambitions and well-being of our colleagues, and building a bright future for our business and our community.

Guided by our purpose and values, we have a clear strategy that uses Hang Seng's existing brand strengths of customer-centricity, innovation, expert market knowledge and deep community roots as powerful tools for capturing exciting new opportunities ahead, whether it be in the GBA or in new business sectors and economies.

As always, our colleagues are at the heart of the strong Hang Seng brand. I am extremely grateful to every staff member who has worked tirelessly to drive our business and support our customers in what has been another challenging year. A major element of our future growth strategy is ensuring we attract, retain and inspire top talent. We are working to achieve this not only by offering attractive compensation and benefits, but also by providing future skills training and opportunities that will open up new horizons of career success and keep our people at the leading edge of our industry. As a case in point, this year we will be rolling out a Bank-wide data literacy programme. Through our efforts, we will continue to strengthen our pipeline for attracting and nurturing young talent and further promoting an entrepreneurial and dynamic culture within the Bank.

In summary, uncertainties in the external environment and fast-moving market conditions mean there will always be fresh challenges ahead. We will overcome these by maintaining control over the direction of our business and focusing on what we do best. With our deep understanding of the GBA, we will build an ever more customer-centric business that is responsive, agile and resilient. Our sustainable growth strategy gives us clear purpose: to provide banking and wealth management services that continue to be fit for the future.

Irene Lee
Chairman
22 February 2022

CHIEF EXECUTIVE'S REPORT

2021: A Year of Continuity and Change

Few would dispute that the operating environment continued to be challenging in 2021. Nevertheless, we have bright spots to report in our performance last year. We enjoyed solid balance sheet growth, healthy increases in non-interest income and strong momentum in building up our mortgage, trade and green loans portfolios. Digital developments advanced at speed and environmental, social and governance ('ESG') issues were an important focus as we made efforts to support the transition to a low-carbon economy. We were also delighted to celebrate with our Hang Seng Table Tennis Academy graduates who brought home a bronze medal from the Olympic Games.

Our financial performance was a tale of two halves.

In the first half, there was cautious optimism that we were turning the corner on COVID-19. An improved economic outlook buoyed sentiments and drove activity in global financial and commercial markets. We benefitted from strong business momentum, especially in wealth management. The second half, however, was more challenging as investor and business sentiment dampened with the emergence of Omicron which brought back disruptions to trade and global supply chains, slowing economic recovery.

In addition, due to tightening liquidity and increased refinancing risk in the mainland commercial real estate sector, we built in a material adjustment to our expected credit losses ('ECL') to reflect the higher risk level. We will continue to closely monitor the market situation and mitigate potential risks through robust reviews of credit portfolios. That said, our overall lending portfolio remains stable.

The underlying performance of our business was resilient. However, enhancing the ECL provisions has impacted our full-year results. Also, low interest rates continued to affect net interest income across all of our businesses. As a result, our attributable profit for 2021 fell by 16% to HK\$13,960m.

Wealth and Personal Banking

Our Wealth and Personal Banking business recorded an 11% year-on-year increase in wealth management income. This is the result of stronger data analytics capabilities and the uplifting of digital banking capabilities to deliver better customer solutions and more diversified investment and insurance products. We have particularly focused on the mid-market segments. Amongst other achievements, we were the first bank in Hong Kong to extend equity-linked investment product subscription services to US securities for retail investors. As demand for ESG investment products accelerates around the world, we are pleased to be launching the first ESG ETF based on the Hang Seng Index. We will also be introducing green mortgage and electrical vehicle loans in the first half.

Hang Seng was one of the first banks to launch cross-boundary investment services under the Wealth Management Connect ('WMC') Scheme. We have set up a designated WMC team in Hong Kong which will work closely with our colleagues in the Mainland to provide seamless support to customers for their northbound and southbound investment in the Greater Bay Area ('GBA').

Insurance business income rose by 17% as we launched new products to meet growing customer needs in areas such as lifetime protection, legacy planning and long-term asset growth.

Strong momentum in the local property market and improved retail consumption sentiment boosted by the Government's Consumer Voucher Scheme propelled strong growth in our mortgage and credit card businesses. New mortgage drawdowns outpaced the market, increasing by 34% year-on-year. Card spending was up 10%.

Investing in digital infrastructure remains a priority. Last year, we rolled out 415 digital innovations and enhancements for personal banking, including the introduction of the 'Pay with Hang Seng' online payment channel. Our digital efforts have been well received. Year-on-year, the number of users of our award-winning mobile banking app was up by 12%, log-ons increased 26% and the total number of online transactions jumped 44%.

The enhanced digital experience extends seamlessly into our physical branches and outlets. We continued to invest in our 'Future Branch' concept to deliver more customer-centric services. Our new landmark Central Branch is the latest showcase of our digital servicing model.

Commercial Banking, Global Banking and Global Markets

On the commercial side, we continued to focus on supporting our customers. The pace of new lending grew as export demand and international economic activity revived. In particular, Commercial Banking's trade finance lending was up 41%. Overall, the renewed activity helped Commercial Banking grow customer advances by 2%, with customer deposits rising by 8%. We stayed active in the syndicated loan market, recording a 10% increase in credit facilities fees. We also captured opportunities to grow our foreign exchange and trade fee incomes.

ESG is fast becoming a prerequisite for doing business and we are proactive in supporting clients to transition. We introduced sustainability-linked loans and enhanced existing trade finance products with green and sustainable features. We also stepped up our collaboration with Hong Kong Quality Assurance Agency to help green financing customers capitalise on opportunities in the GBA. In total, we approved HK\$7.3bn in green loans, 15 times more than the amount in 2020. Global Markets grew its green bond investment portfolio by 83% year-on-year, and the Repo Trading business began accepting green bonds as collateral to support market growth in sustainable financing activity.

As we continue to explore new business segments and opportunities in green finance, our efforts will also help to further diversify our revenue base.

Fintech provided customers with remote account opening services and shorter turnaround and processing times while making the management of cash flow and payments collection faster and easier. We introduced over 250 digital innovations and enhancements. Corporate clients now enjoy more timely collection and reconciliation processes with our new Virtual Account tool and we deployed the use of blockchain technology to support digital trade documentation and finance activities. Innovation supported a more than doubling in average monthly customer acquisitions compared with the previous year.

We are continuing to collaborate with external partners to facilitate the advancement of fintech development. In addition to our strategic alliances with Hong Kong Cyberport and Hong Kong Science and Technology Parks, we started working with the Hong Kong Trade Development Council last year to co-create 'InnoClub', a one-stop platform to help SMEs go digital in their operations.

We offered tailor-made, industry-specific cash management solutions to Global Banking clients across different business sectors. This led to a 21% growth in current and savings deposits and an 11% growth in the loan balance. Global Banking customers are also discovering the benefits of going digital as we saw 22% of total transactions switching from in-branch counters to online channels.

We expanded our Global Markets Repo Trading business, maintained our market-making role for Hong Kong government bills and bonds, and actively participated in the issuance of the Hong Kong Monetary Authority's first one-year HONIA-indexed Floating Rate Note. We also supported the regulatory transition of LIBOR by launching replacement financial products referencing new risk-free rates.

Hang Seng China

Challenging operating environment aside, our wholly-owned subsidiary Hang Seng China leveraged its close connectivity with our Hong Kong operations to maintain strong growth momentum. Profit before tax increased 23%. The personal banking business increased by 268%, while commercial and global banking business were up 29% and 10% respectively. In particular, our deep understanding of local market and industry trends supported a solid increase in lending. Wholesale trade loans reached a record high and we continue to be one of the most active foreign banks in the syndication segment, maintaining a top ranking in the industry.

All in all, the Bank's underlying fundamentals are strong and we are gaining momentum in key strategic areas to make our business more resilient and drive sustainable future growth.

Financial Overview

The Bank's financial position was strengthened as we recorded good growth in non-interest income business lines, which benefitted from improved economic and investment sentiments in the first half as well as initiatives to further diversify our revenue base. While there were increased market uncertainties in the second half, due in part to new developments in the pandemic situation, overall, non-interest income grew by 2% year-on-year to HK\$9,360m.

Income from interest-earning activities came under growing pressure during the year. Despite solid balance sheet growth and a 2.7% increase in average interest-earning assets, net interest income fell by 11% to HK\$23,822m, reflecting the unfavourable effects of the interest rate environment. Year-on-year, the net interest margin was down by 24 basis points at 1.49%, which remains above market average levels.

Net operating income before change in expected credit losses and other credit impairment charges fell by 8% compared with 2020 to HK\$33,182m.

We continued to invest in technology, brand presence and people to strengthen our strategic positioning and facilitate future growth, which contributed to a 7% rise in operating expenses to HK\$14,134m. Together with the decline in net operating income, the increase in expenses pushed our cost efficiency ratio to 42.6%. However, on the back of these investments into our business, we are now more strongly positioned to capture a greater share of new market opportunities and realise improved operational efficiencies over the longer term.

As previously mentioned, we increased ECL provisions on a few currently unimpaired credit exposures to clients in the mainland real estate sector. However, our overall credit quality remained robust and with the release of similar provisions across a broad range of other sectors and a reduction in stage-3 ECL charges, change in ECL only increased slightly by 3% to HK\$2,807m.

The overall impact of all these factors was a 19% decline in operating profit to HK\$16,231m. Operating profit excluding the change in ECL was down by 17% at HK\$19,038m.

Recovery in the commercial property market in Hong Kong resulted in a net surplus of HK\$82m on property revaluation, compared with a net deficit of HK\$636m in the same period in 2020.

Profit before tax fell by 16% to HK\$16,385m. Attributable profit was also down by 16% at HK\$13,960m. Earnings per share were down by 17% at HK\$6.93 per share. For our individual business segments, profit before tax for Wealth and Personal Banking, Commercial Banking, and Global Banking and Markets, fell by 8%, 18% and 40% respectively, affected mainly by a drop in net interest income.

Return on average ordinary shareholders' equity was 7.7%, compared with 9.6% for 2020. Return on average total assets was 0.8%, compared with 1.0% in 2020.

Our capital base remains strong. At 31 December 2021, our common equity tier 1 capital ratio was 15.9%, our tier 1 capital ratio was 17.5%, and our total capital ratio was 18.9%. We continued to maintain healthy liquidity that was well above the statutory requirement throughout the year. At 2021 year-end, our liquidity coverage ratio was 192.7%.

Gross advances to customers were HK\$1,004bn, up 6% compared with 2020 year-end, driven mainly by residential mortgages, trade finance lending and loans for use outside Hong Kong.

Customer deposits, including certificates of deposit and other debt securities in issue, increased by HK\$35bn, or 3%, to HK\$1,339bn against the end of 2020. To diversify its funding sources, the Bank issued more certificates of deposit in 2021.

2022 Outlook

It is clear that recovery cannot be taken for granted and uncertainty will continue to be a factor. In order to operate in this environment, we must always remain vigilant and agile, and be quick to respond to any sudden changes.

It is vital that we have clear strategies and a direction forward. In 2022, we will focus on growing our business and capturing new opportunities in strategic customer segments and in the GBA by leveraging cross-business revenue synergies and boosting contribution from non-fund income and digital channels.

Markets are expecting an increase in interest rates this year, which should provide some medium-term relief on the net interest margin and net interest income. As we look to grow our loan book, we will continue to adopt a prudent risk management approach. Innovation is essential and will remain a top priority. We will invest in equipping our colleagues with future skills to support their career ambitions within the Bank.

The future is 'Beyond Banking'. We will embrace fintech to integrate banking services more seamlessly into people's business and everyday lives. In the future, customers will not need to seek us out, we will already be there when needed.

We are well-positioned to provide our customers with seamless support to take advantage of new business and investment opportunities in the GBA. This will further strengthen our own franchise and be an important contributor for long-term profit growth.

Focusing attention and driving action on the ESG agenda will remain a core value. We will expand our green loans and sustainability-linked investment products. We will also enhance the ESG performance of our own operations. We are on track to meet our target of being carbon neutral by 2030.

Our community investment programmes will support the sustainable, long-term development of Hong Kong.

With the COVID-19 situation recently becoming more serious, we have announced a HK\$10m initiative to provide support for the elderly and grassroots families that includes donating rapid antigen tests, surgical masks and other supplies, and the setting up of an Emotional Well-being Hotline. Our staff volunteers will also participate in telephone outreach activities to offer care and general support to the elderly and others in need.

And finally, I would like to thank and acknowledge my colleagues for their commitment and perseverance. Maintaining uninterrupted services for customers in a demanding environment required working as a team and putting in long hours. I am delighted that last month, Hang Seng was again named the Best Domestic Bank in Hong Kong by *The Asset* magazine, a recognition we have maintained for 22 consecutive years. The pursuit of excellence and ever-growing success is engrained in the company's DNA and will continue to be the driving force behind our brand, now and into the future.

Diana Cesar

Executive Director and Chief Executive

22 February 2022

BUSINESS REVIEW

Cautious optimism returned to global financial and commercial markets in the first half of the year, buoyed by the growing availability of COVID-19 vaccines and the supportive policy initiatives of governments and central banks in major economies around the world. However, with the emergence and spread of new strains of the virus in the second half, the more upbeat investor and business outlook began to cool in the face of fresh uncertainties over the sustained recovery of trade flows and economic activity.

Despite the challenging market conditions, the Bank recorded good progress in key areas of long-term business focus, leveraging its position as a respected market leader with close connections to customers, digital innovator, and provider of ‘people-first’ value-added financial services. This strong proposition also supported good balance sheet growth.

Customer loans and advances (net of expected credit loss (‘ECL’) allowances) increased by HK\$53bn, or 6%, to HK\$997bn. Loans for use in Hong Kong grew by 3%. Lending to industrial, commercial and financial sectors decreased by 1%. Trade finance lending regained momentum and grew by 57%, reflecting a recovery in global trade volumes. Lending to individuals grew by 8%.

In commercial and corporate lending, loans for property development rose by 3%, while lending for property investment was broadly in line with 2020 year-end. There was increased lending to transport and transport equipment and ‘other’ sectors. These increases were partly offset by the decline in loans outstanding from the financial concerns, wholesale and retail trade, manufacturing, and information technology and telecom sectors.

In loans to retail customers, the more active property market drove a 7% increase in residential mortgages and a 13% rise in Government Home Ownership Scheme/Private Sector Participation Scheme/Tenants Purchase Scheme lending.

Loans for use outside Hong Kong grew by 9%, partly reflecting increased lending by Hang Seng China.

Customer deposits, including certificates of deposit and other debt securities in issue, recorded a year-on-year increase of HK\$35bn, or 3%, to HK\$1,339bn. Current and savings deposits rose, but there was a drop in time deposits.

Wealth and Personal Banking

Wealth and Personal Banking recorded a 6% year-on-year decrease in net operating income before change in expected credit losses and other credit impairment charges to HK\$18,506m. Operating profit dropped by 9% to HK\$9,610m and profit before tax decreased by 8% to HK\$9,682m.

Loans grew by 6% year-on-year, due mainly to a strong performance by our mortgage lending business, and deposits were broadly on par with 2020 year-end. However, the persistent downward trend in market interest rates during the year resulted in an 11% drop in net interest income to HK\$13,013m.

Customers enjoyed the benefits of our investments in uplifting our data analytics and digital banking capabilities through more product choice and faster and easier transaction journeys. These enhanced customer experiences helped drive an 11% increase in wealth management business revenue. Overall, non-interest income increased by 8% to HK\$5,493m.

Our investments in technology also supported the further transition towards greater use of our digital channels, which will support improved operational efficiency over the longer term. Year-on-year, the number of users of our mobile banking app increased by 12%, mobile app log-ons rose by 26% and the total number of online transactions grew by 44%.

Key highlights among the 415 new digital innovations and enhancements we implemented during the year to make banking simpler and more convenient include the 'My Investment' mobile wealth dashboard, an all-in-one credit card management platform that delivers real-time transaction and payment information, the introduction of seamless, one-stop limit and payee management on our mobile Transfer & Pay platform. Customers benefitted from better control and choice in managing their wealth and health needs through our ongoing actions to enrich the functionalities and value-added service provided by our digital wealth management and insurance channels.

We made good progress with using our open banking ecosystem to further integrate our services into the fabric of people's everyday lives and meet our customers when and where they need us. Developments during the year included an exclusive partnership between Hang Seng insurance and the 'yuu' rewards programme mobile app, bringing Trip.com into our Cash Dollars rewards ecosystem, and launching 'Pay with Hang Seng', a new online payment service.

Our service and product innovations enjoyed positive recognition in the market, reflected in our winning of nine major awards for our various digital offerings from industry watchers such as *The Asian Banker* and *The Asset*.

In volatile market conditions, we recorded a 4% increase in total investment services income. We leveraged our all-weather portfolio of wealth management products and enhanced data analysis capabilities to provide personalised solutions for customers at all stages of life and diverse financial needs. We added new products, particularly for the mid-to-mass segments, to provide more choice for portfolio diversification, and we were the first bank in Hong Kong to extend equity-linked investment product subscription services for retail investors to include US securities. In October, we were one of the first batch of banks to launch a Cross-boundary Wealth Management Connect service. With our strong wealth management experience and service proposition and the close connectivity between our operations in Hong Kong and in the mainland, we are well-positioned to meet the needs of customers and capture a growing proportion of the tremendous business potential and client base that exists in the Greater Bay Area ('GBA').

Insurance income rose by 17%, reflecting our effective management of the life insurance investment portfolio in fluid financial markets. Facilitated by the launch of new Whole Life products and enhanced annuity products, we achieved strong growth in our distribution business through our ability to fulfil a diverse range of customer needs for lifetime protection, legacy planning and long-term asset growth. Our Olive Wellness App built up a robust and expandable ecosystem by providing customers with a one-stop digital health and wellness proposition. Olive users took up the call to adopt healthy lifestyle habits and recorded over 2.4 billion tracking step counts through the app by the end of the year in 2021. By increasing our insurance touchpoints with customers, the app also represents a sizable and sustainable pipeline for the future growth of our insurance business.

Leveraging our extensive network of service channels, dedicated sales mortgage teams and the strong momentum of the property market, we achieved a 34% year-on-year increase in new mortgage drawdowns, representing both primary and secondary market business, and grew our mortgage balances by 7% in Hong Kong. Our competitive pricing and customer-centric end-to-end services saw our new mortgage business outpace the market, and continued to rank among the top three in Hong Kong for new mortgage registrations.

Amid improved retail consumption sentiment, we achieved strong growth in our credit card market position through effective product and marketing initiatives. Riding on the shift in consumer preference towards e-commerce spending, we further expanded our online-to-offline partnerships with leading merchants to provide our cardholders with enhanced lifestyle benefits and offers for their everyday spending. Year-on-year, card spending grew by 10%.

We continued to invest in transforming our branch infrastructure and digitalised service model to deliver enhanced, customer-centric service experiences. As part of our 'Future Branch' concept, our GO Digital Expert Team at our new Central Branch uses a variety of technological tools, including one-time password authentication, to digitally assist customers with various account services and help drive our progress towards paperless banking. We were the first bank to begin accepting Hong Kong's 'iAM Smart' mobile app, which gives individuals a convenient alternative to presenting their physical Hong Kong ID card, for identity verification purposes across our branch network for enquiries and application services.

With our strengthened customer proposition based on closer connections with customers and better understanding their needs, we achieved 23% year-on-year increase in the Signature customer base and grew our Prestige and Preferred Banking customer base by 12%.

Commercial Banking

Commercial Banking recorded a 12% year-on-year decrease in net operating income before change in expected credit losses and other credit impairment charges to HK\$8,936m. Operating profit and profit before tax both dropped by 18% to HK\$4,147m.

We achieved strong growth of 8% in customer deposits and customer lending was up by 2%. Nevertheless, the adverse effects of the low interest rate resulted in a 15% year-on-year drop in net interest income.

Through our proactive and prudent approach to credit risk management, we maintained good overall asset quality and recorded a 25% year-on-year improvement in expected credit losses and other credit provisions.

We continued to actively participate in syndicated loan markets, achieving a 10% increase in credit facilities fee income, and maintained our third-place ranking in the League Table for Hong Kong Mandated Arranger in terms of number of deals. We also captured market opportunities to increase our foreign exchange income by 9% and trade fee income by 3%. Working against this, however, was the decrease in investment services income amid market volatility and the significant decline in cross-boundary commercial activity due to the pandemic. Overall, non-interest income was on par with the previous year.

We accelerated our actions to encourage improved environmental, social and governance ('ESG') performance among our customers and facilitate their transition to the low-carbon economy. We introduced sustainability-linked loans and enhanced existing trade finance products with green and sustainable features. We also stepped up our collaboration with Hong Kong Quality Assurance Agency to help customers use green financing to pursue business growth in the GBA.

Supporting entrepreneurs and start-ups with the expansion of their business activities in the GBA remained a central element of our strategic alliance with Hong Kong Cyberport Management Company. We formed a new strategic partnership with Hong Kong Trade Development Council in 2021 to co-create 'InnoClub', a one-stop platform to help SMEs to digitalise their operations and adopt innovative business solutions. We also provided financial support to drive innovation through our InnoTech Fund.

Enhancements to our digital services infrastructure during the year include the deployment of Contour, a global blockchain network, that enables documentary trade to be conducted digitally via a web-based portal. We also participated in eTradeConnect, a blockchain network established by banks in Hong Kong, which expanded its coverage during the year by connecting to The People's Bank of China ('PBoC') Trade Finance platform in the mainland. With our successful piloting of the connection to PBoC in November, we now have a strong foundation from which to capture business arising from digital cross-border trade finance activities.

We strengthened our main bank proposition via the introduction of 'Virtual Account', a tool that gives customers faster and more effective management of their accounts collection and reconciliation. To help SMEs capture business opportunities arising from the Hong Kong Government's Consumption Voucher Scheme, we worked with a fintech partner to provide static QR Code Collection solution. With improvements to our GBA remittance services, Hang Seng China customers making US dollar payments to Hong Kong can now complete their transaction within five minutes. We are also partnering with various fintech firms to further integrate our services into the day-to-day operational ecosystems of businesses in a variety of industrial sectors, including medical services, educational services and retail catering.

Supported by the roll-out of Remote Account Opening incorporating an e-sign feature, we shortened account onboarding times. Our customers can now open a 'Biz Virtual+' account in as fast as three working days. These efficiency and customer experience enhancements helped drive the more than doubling of our monthly average customer acquisition rate compared with 2020.

To better serve customers through our physical network, we upgraded our Business Banking Centres in Tsim Sha Tsui and Kwun Tong, including the introduction of dedicated transaction counters.

Our drive to provide best-in-class services was recognised with a number of awards during the year, including 'Hong Kong Domestic COVID Management Initiative of the Year' and 'Hong Kong Domestic AI Initiative of the Year' awards from *Asian Banking & Finance*, and 'Best Payment Bank in Hong Kong' and 'Frictionless Transaction Awards – Best Productivity, Efficiency and Automation Initiative, Application or Programme' awards from *The Asian Banker*.

Global Banking and Markets

Global Banking and Markets recorded an 11% year-on-year decrease in net operating income before change in expected credit losses and other credit impairment charges to HK\$5,426m, and a 40% decrease in both operating profit and profit before tax to HK\$2,965m.

Global Banking

Global Banking reported a 3% year-on-year growth in net operating income before change in expected credit losses and other credit impairment charges to HK\$2,757m. Operating profit and profit before tax both dropped by 55% to HK\$962m, due mainly to increased ECL provisions made in the second half of the year in light of tightening liquidity and increased refinancing risk in the mainland commercial real estate sector, which led us to update our outlook on such sector to reflect the higher risk level. However, the overall credit quality of the lending portfolio remained robust.

Our success in delivering highly tailored, industry-specific cash management solutions for clients across a diverse range of industries drove strong year-on-year growth of 21% in the current and saving deposits base, giving us greater flexibility to manage the acquisition cost of time deposits, and we achieved robust growth in net interest income from deposits. As customers benefitted from the speed and convenience of the Bank's award-winning digital cash management services, we saw 22% of total customer transactions shift from in-branch counters to mobile and online channels compared with the previous year.

In a challenging operating environment, we achieved strong growth of 11% in customer lending, driven in part by our efforts to further diversify the loans portfolio by acquiring new customers in 'new economy' sectors. However, with keen market competition serving to maintain downward pressure on credit spreads, net interest income from lending was down by 3% year-on-year. In support of the Hong Kong market's LIBOR transition, we completed our first risk-free rate (Sterling Overnight Index Average ('SONIA')) loan for the bank. We also accelerated initiatives to support greater sustainability in market through our green financing services and achieved good growth in the green loans portfolio during the year.

The combined performances of our interest-earning businesses kept net interest income broadly on par with the previous year.

Non-interest income rose by 24% to HK\$388m. Leveraging our strong customer relationships, we stepped up initiatives to diversify and expand our sources of non-fund income. Strong growth in trade service business, including factoring, supply chain finance and performance bonds helped drive an increase in commissions revenue. Our syndicated lending business continued to perform well and remained a key income driver. The completion of several breakthrough deals involving dim-sum and green bonds together with other business completed by our Debt Capital Markets origination team also helped support the increase in fee income.

Global Markets

Global Markets reported a 22% decrease in net operating income before change in expected credit losses and other credit impairment charges to HK\$2,669m. Operating profit and profit before tax both decreased by 29% to HK\$2,003m, reflecting a decrease in revenue from Markets Treasury, partly offset by a small increase in income from business by sales and trading departments.

Net interest income decreased by 12% to HK\$1,792m and non-interest income decreased by 36% to HK\$877m. Markets Treasury revenue was adversely affected by the flattened yield curve and tightened credit spreads under the low interest rate environment.

Revenue from sales and trading was maintained at similar level to the previous year. We recorded a 7% year-on-year increase in corporate foreign exchange turnover as signs in the first half of the year that the worst of the pandemic might be coming to an end encouraged corporate clients become more active. We also recorded significant good in Hong Kong dollar and renminbi trading revenue. Our Repo Trading business continued to build good momentum and we made further progress with initiatives to deepen the penetration of Global Markets' products among the Bank's other customer groups.

As one of the market's key primary dealers, we actively participated and submitted our tender in the Hong Kong Monetary Authority's issuance its first one-year HONIA-indexed Floating Rate Note in November under its Institutional Bond Issuance Programme this issuance.

We are also moving forward with our use of fintech to enhance our services. In 2021, this included onboarding our first Robotics Process Automation solution in partnership with a technology company in Hong Kong Science and Technology Parks to support the equities derivative quotation process.

Hang Seng Indexes

Wholly owned subsidiary Hang Seng Indexes Company Limited ('Hang Seng Indexes') further strengthened its position as the market leader in Hong Kong for compiling and managing innovative indexes that facilitate the development of a diverse range of investment strategies and products. The company continues to enjoy positive industry recognition for its efforts. Recent accolades include 'Best ESG Index Provider – Hong Kong' and 'Most Innovative Index – Hong Kong' in *Asia Asset Management's* 'Best of the Best Awards 2022'.

Leveraging its deep understanding of the Hong Kong and mainland markets and emerging investment trends, Hang Seng Indexes launched 62 new indexes, including ESG-related and Smart Beta indexes. New indexes to support the growing emphasis on ESG and drive towards a low-carbon future include the HSI ESG Enhanced Index and HSI Low Carbon Index.

The newest of Hang Seng Indexes' three flagship benchmarks, the Hang Seng TECH Index ('HSTECH'), continued to attract international interest as the basis for the development of various financial products. As at 2021 year-end, Hang Seng Indexes had licensed the HSTECH for use as the basis for launching 28 exchange-traded funds in 11 markets, including Hong Kong, Singapore, South Korea, the US and the UK. Futures linked to the HSTECH recorded an all-time high trading volume of 89,967 on 28 December 2021.

Another major initiative during the year was the rolling out of significant enhancements to the Hang Seng Index ('HSI'), the internationally acknowledged benchmark of the Hong Kong stock market, following a month-long industry consultation exercise. The changes to the HSI will ensure the index keeps pace with developments in market composition. Enhancements to maintain HSI's position as the most representative and important benchmark of the Hong Kong stock market include increasing the number of constituents and applying a new selection method. In December 2021, the number of constituents in the HSI was increased to 64.

As at the end of 2021, there were 106 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 Family of Indexes at 2021 year-end had reached a total of about US\$44bn.

The total number of futures and options contracts traded on the HSI, the Hang Seng China Enterprises Index and the HSTECH Index in 2021 was over 95 million.

As at the end of 2021, Hang Seng Indexes was compiling more than 1,400 indexes covering Hong Kong and mainland markets, including 221 real-time indexes.

AWARDS AND RECOGNITION 2021

Best Bank - Domestic (Hong Kong)
(22nd consecutive year)
THE ASSET

Most Respected Organisations Award
THE HONG KONG MANAGEMENT ASSOCIATION

Best Bank for SMEs, Hong Kong
ASIAMONEY

Best in Treasury and Working Capital for SMEs, Hong Kong
THE ASSET

Best Digital/Mobile Banking Service, Hong Kong
THE ASIAN BANKER

Best Financial Asset/Market Trading Service
THE ASIAN BANKER

High-quality Development Bank
SECURITIES TIMES

Most Innovative Bank of the Year
CAI LIAN NEWS AGENCY

Best Trade Finance Foreign Bank
TRADING FINANCE

Best Supply Chain Finance Service
TRADING FINANCE

Best Social Responsibility Award
(Since 2020)
CHINA SOCIAL WELFARE FOUNDATION

Best Liquidity Management and Investment Solution
THE ASSET

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

Caring Company
(Since 2003)
HONG KONG COUNCIL OF SOCIAL SERVICE

Junzi Corporation Award (10th consecutive year)
Junzi Corporation Exemplary Award (2nd consecutive year)
THE HANG SENG UNIVERSITY OF HONG KONG

MANAGEMENT DISCUSSION AND ANALYSIS

FINANCIAL REVIEW

FINANCIAL PERFORMANCE

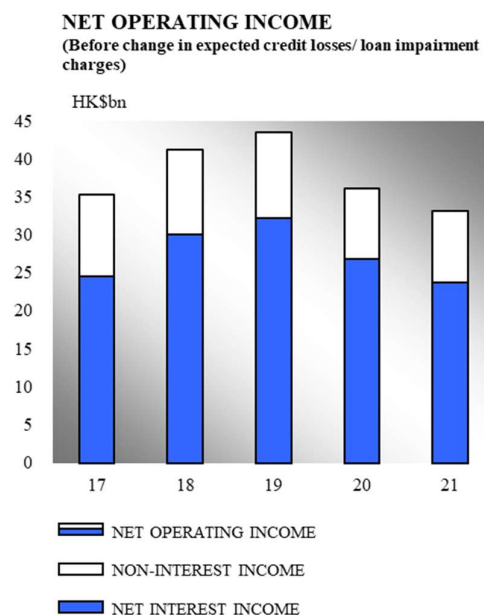
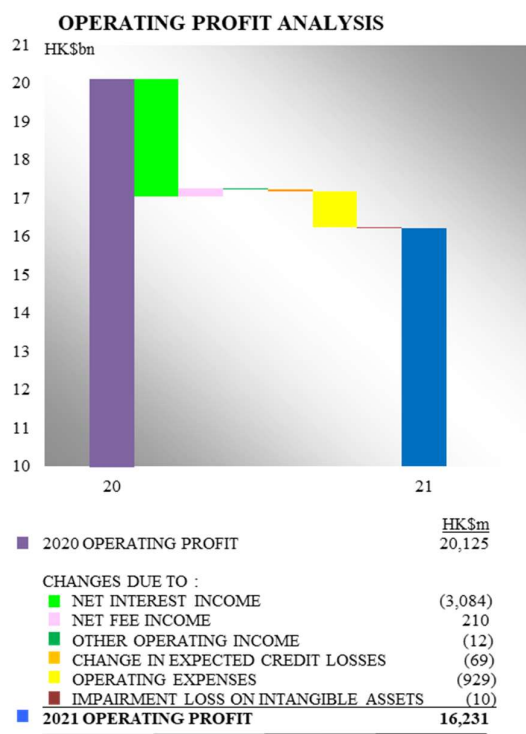
Income Analysis

Summary of financial performance

<i>Figures in HK\$m</i>	<u>2021</u>	<u>2020</u>
Net operating income before change in expected credit losses and other credit impairment charges	33,182	36,068
Operating expenses	14,134	13,205
Operating profit	16,231	20,125
Profit before tax	16,385	19,414
Profit attributable to shareholders	13,960	16,687
Earnings per share (in HK\$)	6.93	8.36

The Group's 2021 first half performance benefitted from the improved economic outlook and resultant release of expected credit losses ('ECL') charges for stage 1 and stage 2 unimpaired credit exposures. In the second half of 2021, due to tightening liquidity and increased refinancing risks in the mainland commercial real estate sector, the Group built in a material adjustment to our ECL to reflect the higher risk level. The Group remains vigilant and will continue to closely monitor the market situation. Robust reviews on credit portfolios and sectors still stand to help identify and mitigate any potential risks. Overall quality of lending portfolios remained stable.

Net operating income before change in expected credit losses and other credit impairment charges was HK\$33,182m, down 8%. The reduction primarily reflected an 11% fall in net interest income as a result of the impact of lower global interest rates. Non-interest income grew by 2% to HK\$9,360m, with our strong performance in the first half partly offset by the impact of less favourable investment sentiment in the later part of the year. Operating expenses went up by 7% when compared with 2020. Change in expected credit losses and other credit impairment charges ('ECL') increased by 3% to HK\$2,807m, reflecting higher charges on unimpaired credit exposures (stage 1 and 2) to cover the emerging risk arising from the mainland commercial real estate sector, partly offset by lower stage 3 ECL charges and release of stage 1 and 2 ECL on other unimpaired credit exposures sectors as a result of improved economic outlook. This had an adverse impact on **operating profit**, which dropped by 19% to HK\$16,231m. Investment property revaluation recorded a surplus compared with a deficit for 2020, resulting in a 16% drop in **profit before tax** to HK\$16,385m and in **profit attributable to shareholders** to HK\$13,960m.



Net interest income decreased by HK\$3,084m, or 11%, to HK\$23,822m. Average interest-earning assets grew by HK\$42bn, or 3%, to HK\$1,595bn, driven by growth in average financial investments and customer loans. Narrowing deposit spreads and a lower contribution from net-free funds in the near-zero interest rate environment outweighed the benefits realised from improved loan spreads. The decrease in net interest income was also affected by the flattened yield curve and tightened credit spreads caused by the prevailing lower interest rate environment. Net interest margin was down by 24 basis points to 1.49%, due mainly to balance sheet repricing. Net interest spread dropped by 17 basis points to 1.42% and contribution from net-free funds decreased by 7 basis points to 0.07% as a result of the decline in market interest rates.

Figures in HK\$m

	2021	2020
Net interest income/(expense) arising from:		
- financial assets and liabilities that are not at fair value through profit and loss	24,719	27,695
- trading assets and liabilities	130	189
- financial instruments designated and otherwise mandatorily measured at fair value through profit or loss	(1,027)	(978)
	<u>23,822</u>	<u>26,906</u>
Average interest-earning assets	1,595,483	1,553,012
Net interest spread	1.42 %	1.59 %
Net interest margin	1.49 %	1.73 %

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 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:

Net interest income and expense reported as 'Net interest income'		
- Interest income	28,030	35,010
- Interest expense	(3,315)	(7,346)
- Net interest income	24,715	27,664
Net interest income and expense reported as 'Net income from financial instruments measured at fair value through profit or loss'	(893)	(758)
Average interest-earning assets	1,556,663	1,513,983
Net interest spread	1.52 %	1.69 %
Net interest margin	1.59 %	1.83 %

Net fee income increased by HK\$210m, or 3%, to HK\$6,577m, with our strong performance in the first half partly offset by the less favourable investment sentiment in the second half. We leveraged our deep customer knowledge and diverse range of wealth-and-health products together with our convenient service channels to grow our wealth management income. Income from retail investment funds increased by 19%. Card services income rose by 13%, due mainly to higher card spending and merchant sales. Credit facilities fees were up by 14%, due to higher new corporate lending activities. Trade-related fee income increased by 14%, as global trade volume recovered during the year. Other fee income was also up by 20% as a result of the increased incentives received from our growing mortgage insurance programme business and government customer relief measures. These favourable factors were offset by lower stockbroking and related services fee income, which was down by 5% due to lower transaction volume as a result of less favourable investment sentiment in the second half. Fee income from insurance business, remittance and account services fell by 15%, 7% and 5% respectively.

Net income/(loss) from financial instruments measured at fair value through profit or loss increased by HK\$1,026m, or 31%, to HK\$4,346m.

Net income from assets and liabilities of insurance businesses measured at fair value through profit or loss increased by HK\$1,787m, or 217%, to HK\$2,610m. This was driven by higher investment returns on the growing asset portfolio held to back insurance liabilities due to a more active portfolio management in 2021 as compared with the unfavourable market condition in 2020. 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.

Net trading income and net income from financial instruments designated at fair value through profit or loss together fell by HK\$764m, or 31%, to HK\$1,739m, driven by the funding swap transactions which recorded a loss of HK\$93m compared with a gain of HK\$535m in 2020.

Change in expected credit losses and other credit impairment charges increased by HK\$69m, or 3%, to HK\$2,807m.

Figures in HK\$m

	<u>2021</u>	<u>2020</u>
Loans and advances to banks and customers	2,844	2,608
- new allowances net of allowance releases	2,983	2,757
- recoveries of amounts previously written off	(167)	(104)
- other movements	28	(45)
Loan commitments and guarantees	(43)	33
Other financial assets	6	97
	<u>2,807</u>	<u>2,738</u>

The Bank regularly reviews its forward economic guidance to reflect changes in the economic outlook and other factors that may influence the credit environment. Due to tightening liquidity and increased refinancing risks in the mainland commercial real estate sector, the Group built in a material adjustment to our ECL to reflect higher risk level towards the end of 2021. The Group remains vigilant and will continue to closely monitor the market situation.

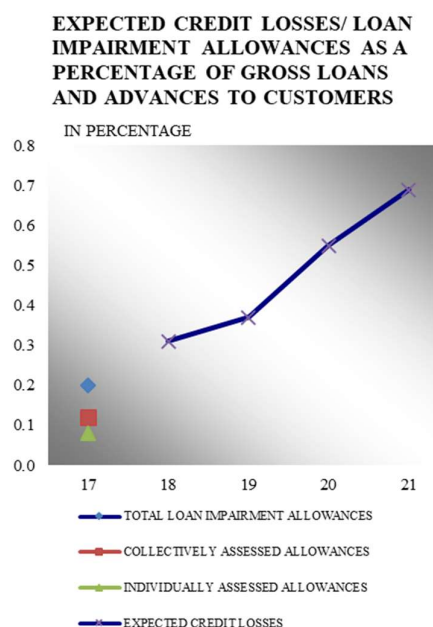
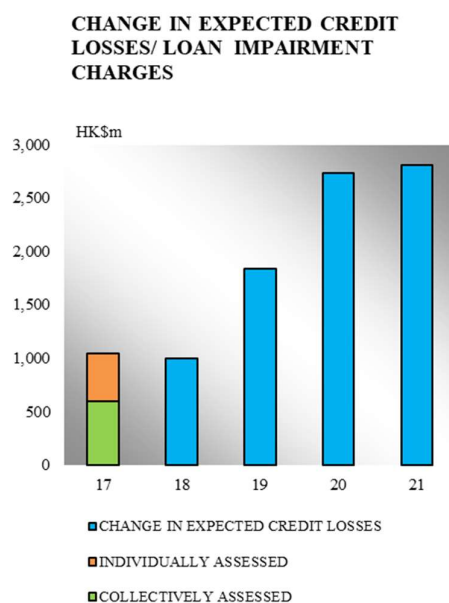
Change in ECL for stage 1 and stage 2 unimpaired credit exposures recorded a net release in the first half of the year, reflecting an improvement in the economic outlook as a result of the economy recovery. The net release was offset by higher ECL charges to cover the emerging risk arising from the mainland commercial real estate sector in the second half, resulting in an overall ECL charges of HK\$1,065m for stage 1 and stage 2 unimpaired credit exposures for the year. As a result, change in ECL for stage 1 and stage 2 registered an increase of HK\$522m when compared with net charges of HK\$543m for 2020. Wealth and Personal Banking ('WPB') recorded a net release of HK\$330m, while Commercial Banking ('CMB') and Global Banking and Markets ('GBM') recorded a net increase of HK\$852m.

Change in ECL for stage 3 and purchased or originated credit-impaired exposures (impaired credit exposures) decreased by HK\$453m when compared with 2020 to HK\$1,742m. WPB accounted for HK\$329m of the decrease, due mainly to lower charges on credit card and personal loan portfolios. The remaining HK\$124m was related to CMB and GBM.

Gross impaired loans and advances were up by HK\$4,705m, or 82%, against 2020 year-end at HK\$10,429m. Certain impaired corporate loans through our Hong Kong office and mainland banking subsidiary were downgraded during the year as a result of the Covid-19 pandemic and the recent tightening liquidity and increased refinancing risks in the mainland commercial real estate sectors. Taking into account the collaterals and the allowances for ECL provided, the Group considered that the current provision level was adequate. Gross impaired loans and advances as a percentage of gross loans and advances to customers stood at 1.04% as at 31 December 2021, compared with 0.69% at 30 June 2021 and 0.60% at the end of December 2020. Overall credit quality remained robust.

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

	<i>At 31 December 2021</i>	<i>At 31 December 2020</i>
Expected credit losses as a percentage of gross loans and advances to customers	0.69%	0.55%
Gross impaired loans and advances as a percentage of gross loans and advances to customers	1.04%	0.60%



Net insurance premium income fell by 8%, despite higher new business sales, mainly attributable to lower renewal business. In addition, there was the recapture of a portfolio of policyholders' liabilities under a tactical reinsurance arrangement in 2020 which dragged up the net insurance premium income in 2020. Gross insurance premium grew by 5%. In the challenging operating environment, the Group continued to enrich its comprehensive range of tax and retirement-planning products and healthcare solutions to suit different customer needs, and expanded distribution through digital and broker channels.

Net insurance claims and benefits paid and movement in liabilities to policyholders fell by 10%. Gross insurance claims and benefits paid and movement in liabilities to policyholders remained intact compared with 2020, reflecting higher investment returns attributable to policyholders from the favourable asset market performance and higher new business sales. The decrease in movement in liabilities to policyholders was also due to the recapture of a portfolio of policyholders' liabilities under a tactical reinsurance arrangement made in 2020.

Other operating income dropped by 86% as a result of the change in the movement in PVIF.

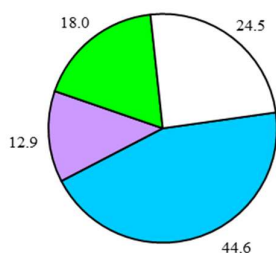
Operating expenses increased by HK\$929m, or 7%, to HK\$14,134m, reflecting an increase in investments, mainly IT-related costs to continue enhancing our digital capabilities, staff costs and amortisation of intangible assets.

Staff costs were up by 3%, driven largely by the refund of social security costs in 2020 to our mainland subsidiary bank and adjustments in compensation to retain high-performing talent, partly offset by the reduction in salaries resulting from lower headcount. Depreciation charges remained flat. Amortisation of intangible assets was up by 59%, reflecting higher capitalised software to support business growth within the Group. General and administrative expenses were up by 12%, largely in IT-related investment to enhance our digital capabilities and regulatory compliance programmes.

The cost efficiency ratio increased by 6.0 percentage points to 42.6%, due mainly to the impact of lower revenue resulting from decreased net interest income and increase in operating expenses.

OPERATING EXPENSES FOR 2021

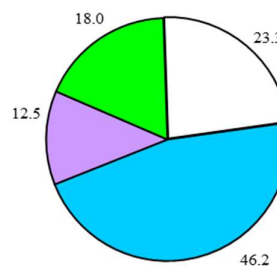
IN PERCENTAGE



■ EMPLOYEE COMPENSATION AND BENEFITS
 ■ PREMISES, EQUIPMENT AND RENTAL
 ■ DEPRECIATION AND AMORTISATION*
 ■ OTHER OPERATING EXPENSES

OPERATING EXPENSES FOR 2020

IN PERCENTAGE



*Included depreciation of right-of-use assets of HK\$574m in 2021 (2020: HK\$595m)

<i>Full-time equivalent staff numbers by region</i>	<i>At 31 December</i>	
	<i>2021</i>	<i>2020</i>
Hong Kong and others	7,708	7,925
Mainland	1,688	1,703
	9,396	9,628

Following the gradual recovery of the property market during the year, **net surplus/(deficit) on property revaluation** recorded a net surplus of HK\$82m in 2021, compared with a net deficit of HK\$636m in 2020. **Share of profits/(losses) of associates** recorded a profit of HK\$72m in 2021, compared with a loss of HK\$75m for 2020, reflecting the movement in the property revaluation of a property investment company.

Analysis of income from wealth management business

Figures in HK\$m

	2021	2020
Investment services income ¹ :		
- retail investment funds	1,552	1,302
- structured investment products	390	447
- securities broking and related services	2,005	2,118
- margin trading and others	71	81
	<u>4,018</u>	<u>3,948</u>
Insurance income:		
- life insurance:		
- net interest income	4,273	4,066
- non-interest income	(40)	111
- investment returns on life insurance funds (including share of associate's profit/(losses), net surplus/(deficit) on property revaluation backing insurance contracts and change in expected credit losses and other credit impairment charges)	2,879	724
- net insurance premium income	14,083	15,301
- net insurance claims and benefits paid and movement in liabilities to policyholders	(16,350)	(18,254)
- movement in present value of in-force long-term insurance business	(188)	2,082
	<u>4,657</u>	<u>4,030</u>
- general insurance and others	278	245
	<u>4,935</u>	<u>4,275</u>
	<u>8,953</u>	<u>8,223</u>

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 from financial instruments measured at fair value through profit or loss.

Wealth management business income increased by HK\$730m, or 9%, to HK\$8,953m, reflecting our success in capturing opportunities created by the upturn in investment sentiment among customers and the more favourable movement in equity market.

Total investment services income grew by HK\$70m, or 2%, to HK\$4,018m, notably in retail investment funds, partly offset by securities broking and related services.

Income from insurance business (included under 'net interest income', 'net fee income', 'net income 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', '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') increased by HK\$660m, or 15%, to HK\$4,935m. Net interest income from life insurance business grew by HK\$207m, or 5% to HK\$4,273m, as the size of the life insurance funds investment portfolio grew, reflecting a net inflow from new and renewal business. Investment returns on the life insurance portfolio increased by HK\$2,155m, or 298%, to HK\$2,879m, mainly driven by the active portfolio management performance in 2021 as compared with a less favourable equity market performance in 2020. To the extent that these investment portfolio returns were attributable to policyholders, there was an offsetting movement in 'net insurance claims and benefits paid and movement in liabilities to policyholders' or 'movement in PVIF' under other operating income.

Net insurance premium income fell by 8%, despite higher new business sales, mainly attributable to lower renewal business. In addition, there was the recapture in 2020 of a portfolio of policyholders' liabilities under a tactical reinsurance arrangement in 2020 which dragged up the net insurance premium income in 2020. Gross insurance premium grew by 5%. In the challenging operating environment, the Group continued to enrich its comprehensive range of products and healthcare solutions to suit different customer needs, and expanded distribution through digital and broker channels. Through entering a partnership with 'yuu', which was one of the largest Hong Kong loyalty program, the Group has successfully extended the footprint to non-bank customers. Hang Seng Olive, a new mobile health and wellness app launched in first half of 2021, provides a diverse array of online health and wellness services such as a clinic e-booking service, and virtual health consultations, and convenient access to a wide variety of insurance solutions.

Net insurance claims and benefits paid and movement in liabilities to policyholders fell by 10%. Gross insurance claims and benefits paid and movement in liabilities to policyholders remained intact compared with 2020, reflecting higher investment returns attributable to policyholders from the favourable growth asset market performance and higher new business sales. The decrease in movement in liabilities to policyholders was also due to the recapture in 2020 of a portfolio of policyholders' liabilities under a tactical reinsurance arrangement.

The growth of new business and favourable investment return have driven up the PVIF. However, the movement in PVIF reported under 'other operating income' was unfavourable compared to 2020 was mainly due to offsetting adjustment to PVIF to account for the sharing of favourable investment returns attributable to policyholders. On the other hand, investment returns moved in opposite direction with significant positive adjustment to PVIF in 2020.

General insurance income up by HK\$33m, or 13% compared with 2020.

Second half of 2021 compared with first half of 2021

The Group's robust first-half results reflected its active initiatives to grow wealth management business income as financial markets began to recover and a reduction in ECL charges following an improvement in economic outlook. As we moved into the second-half of 2021, wealth management business income was impacted by the greater market uncertainties and less favourable investment sentiment. In addition, developments in the mainland property market has exerted pressure on the liquidity and funding of the mainland property developers, leading to some default cases on these developers in the market towards the end of 2021. As uncertainty remains in the mainland commercial real estate sector, the Group updated its outlook on mainland commercial real estate sector to reflect the higher risk level, and built up higher stage 1 and 2 ECL. This action more than offset the net release in overall stage 1 and 2 ECL in the first half. The impact of low interest rates continued to have an adverse effect on net interest income. The Group will continue to monitor the effectiveness of its strategy and to drive business momentum to ensure it remains well-positioned to capture business growth opportunities as markets and economies recover.

Net operating income before change in expected credit losses and other credit impairment charges was HK\$15,856m, down by HK\$1,470m, or 8%, driven by the 28% decrease in non-interest income due to weakened market investment sentiment in the second half. With the 9% increase in operating expenses and higher ECL charges, **operating profit** decreased by HK\$4,215m, or 41%. **Profit attributable to shareholders** decreased by HK\$3,574m, or 41%, when compared to the first half of 2021.

Net interest income remained flat, with the increase in average interest-earning assets partly offset by the narrowed net interest margin in the low interest rate environment. Average interest-earning assets grew by 1%, driven by the increase in customer lending. Net interest margin remained stable and was down by 3 basis points to 1.48%, reflecting the compressed deposit spreads.

Operating expenses increased by HK\$626m, or 9%, driven mainly by higher general and administrative expenses with increases in marketing and advertising costs, consultancy fees, data-processing fees and IT-related investment on regulatory compliance programmes, which collectively

outweighed the decrease in staff costs. The Group will continue to actively manage operating expenses to facilitate the continued direction of resources towards further optimising its digital capabilities.

ECL charges increased by HK\$2,129m, due to higher impairment charges under stage 1 and 2 unimpaired credit exposures and stage 3 impaired credit exposures. Stage 1 and 2 ECL charges recorded a net charge of HK\$1,411m in the second half compared with a net release of HK\$346m in the first half, reflecting higher stage 1 and 2 ECL made against the potential emerging risk arising from uncertainties in the mainland commercial real estate sector, which more than offset the net release in overall stage 1 and 2 ECL in the first half. Stage 3 ECL charges increased by HK\$372m when compared with the first half to HK\$1,057m, reflecting the downgrade of certain corporate customers across a few sectors, partly offset by lower ECL charges on credit cards and personal lending.

Net surplus/(deficit) on property revaluation and share of profits/(losses) of associates was broadly in line with the first half.

Segmental Analysis

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

<i>Figures in HK\$m</i>	<i>Wealth and Personal Banking</i>	<i>Commercial Banking</i>	<i>Global Banking and Markets</i>	<i>Other</i>	<i>Total</i>
<i>Year ended 31 December 2021</i>					
Profit/(loss) before tax	9,682	4,147	2,965	(409)	16,385
Share of profit/(loss) before tax	59.1%	25.3%	18.1%	(2.5)%	100.0%
<i>Year ended 31 December 2020 (restated)</i>					
Profit/(loss) before tax	10,522	5,055	4,970	(1,133)	19,414
Share of profit/(loss) before tax	54.2%	26.0%	25.6%	(5.8)%	100.0%

Wealth and Personal Banking ('WPB') recorded a 6% year-on-year decrease in net operating income before change in ECL to HK\$18,506m. Operating profit dropped by 9% to HK\$9,610m and profit before tax decreased by 8% to HK\$9,682m.

The period-end balance of deposits was broadly in line with 2020 year-end and loans were up by 6% year-on-year. However, the persistent downward trend in market interest rates resulted in an 11% drop in net interest income to HK\$13,013m.

We are committed to investing in technology and people. We have advanced data analytics capabilities, and uplifted our digital banking capabilities in terms of products, user experience and journeys, and wealth management portfolio analysis tools. This helped drive an 8% increase in non-interest income to HK\$5,493m and wealth management business revenue grew by 11%.

Our continuous investment in technology and digital infrastructure has enabled us to meet the changing demand of our customers. Year-on-year, the average number of monthly mobile users increased by 12%, mobile app log-ons rose by 26% and the total number of online transactions grew by 44%.

We successfully delivered over 415 new digital innovations and enhancements to enrich our suite of customer-centric solutions and make digital banking simpler and more convenient for customers. These features included the 'My Investment' mobile wealth dashboard, our 'all-in-one' credit card management platform with real-time transactions and payment information, enhanced mobile Transfer & Pay platform with seamless, one-stop limit and payee management, as well as enhancements to our online wealth and insurance platforms with enriched information and functionalities that make it easier for customers to get an overall picture of their portfolios and to manage their holdings and policies.

We further enriched our open banking ecosystem to integrate our services closer to everyday lifestyle needs, and bring banking services to customers exactly when and where they need them. This included

our exclusive insurance business partnership with the ‘yuu’ rewards programme mobile app, expanding the Cash Dollars rewards ecosystem to include earning and spending of Cash Dollars on Trip.com, and a new online payment service, ‘Pay with Hang Seng’. Our online and mobile platform and product innovations continue to be well recognised by the industry, and we won nine major digital banking awards in 2021 from organisations including *The Asian Banker* and *The Asset*.

Total investment services income recorded year-on-year growth of 4% amid volatile market conditions. We leveraged our comprehensive all-weather portfolio of wealth management products and enhanced analysis tools to provide personalised wealth solutions for our customers. We also launched more wealth products and capabilities for mid-to-mass segments. We were the first bank in Hong Kong to extend equity-linked investment product services to US securities and we added more investment products online and offline to expand customer choice for portfolio diversification. To capture opportunities from cross-boundary business, in October 2021 we were among the first batch of banks to launch a Cross-boundary Wealth Management Connect service. Leveraging our well-established connectivity and competitive strengths in Hong Kong and the Mainland, we are well-positioned to meet customers’ needs and take full advantage of the opportunities offered by the Scheme to expand our customer base and business in the Greater Bay Area (‘GBA’).

Insurance income rose by 17%, reflecting our astute management of the life insurance investment portfolio amid volatile financial markets. We achieved strong growth in our distribution business supported by the launch of new whole-life products and enhanced annuity products to fulfil customer needs for lifetime protection, legacy planning and long-term asset growth. Our one-stop mobile health-and-wellness solution, Olive Wellness App, successfully built up an ecosystem through a suite of wellness engagement initiatives and touchpoints for insurance offerings, and is providing a sizable and sustainable pipeline for future insurance business growth. The app also promoted healthy and green lifestyles and recorded over 2.4 billion tracking step counts from users in 2021.

Leveraging our extensive network, dedicated sales mortgage teams and the strong momentum of the property market, we achieved a remarkable 34% year-on-year increase in new mortgage drawdowns, and grew our mortgage balances by 7% in Hong Kong. Our competitive pricing and customer-centric end-to-end services led to new mortgage business growth that outpaced the market. We continued to rank among the top three in Hong Kong for new mortgage registrations.

Amid improved retail consumption sentiment, we achieved a strong growth in our credit card business through effective product and marketing initiatives. Riding on the shift in consumer shopping preference towards e-commerce, we further expanded our online-to-offline partnerships with leading merchants to cater for our cardholders’ everyday spending needs with enhanced lifestyle benefits. Year-on-year, card spending grew by 10%.

We continued to invest in transforming our branch infrastructure and advancing our digitalised servicing model to deliver customer-centric services. As part of our ‘Future Branch’ concept, we deployed a GO Digital Expert Team that leverages technology such as digital tablets and one-touch password authentication to assist customers with various account services, enabling them to avoid queuing for counter services while also supporting a shift towards paperless banking. We were the first bank to begin accepting Hong Kong’s ‘iAM Smart’ mobile app, which gives individuals a convenient alternative to presenting their physical Hong Kong ID card, for identity verification purposes across our branch network for enquiries and application services.

Driven by our customer-centric values, we have invested and strengthened our analytics capabilities to provide solutions that are highly tailored to individual customer needs, and adopted a robust contact management platform to deepen and broaden client relationships. Facilitated by our strengthened customer proposition, we achieved a 23% year-on-year increase in the Signature customer base and grew our Prestige and Preferred Banking customer base by 12%.

Commercial Banking (‘CMB’) recorded a 12% year-on-year decrease in net operating income before change in ECL to HK\$8,936m. Operating profit and profit before tax both dropped by 18% to HK\$4,147m.

The low interest rate environment impacted returns from deposits despite an 8% increase in the deposit balance, resulting in a 15% drop in net interest income.

We stayed active in syndicated loan markets and kept our third-place ranking in the League Table for Hong Kong Mandated Arrangers in terms of number of deals. This helped drive a 10% increase in our credit facilities fee income. We captured market opportunities to grow our foreign exchange income by 9% and trade fee income by 3%. However, such growth was offset by the decrease in investment services income which was affected by market volatility and drop-off in cross-boundary commercial activity due to the pandemic. Overall, non-interest income was largely in line with the previous year.

As part of the Bank's efforts to be a leader in advancing environmental, social and governance ('ESG') considerations, we are facilitating customers' transition to the low-carbon economy. In 2021, we introduced sustainability-linked loans ('SLL') and enhanced existing trade finance products with green and sustainable features to incentivise customers to improve their ESG performance. We also stepped up our collaboration with Hong Kong Quality Assurance Agency to help customers using green financing to capitalise on the enormous business growth potential in the GBA.

On top of our strategic alliance with Hong Kong Cyberport Management Company to assist customers to capture the opportunities in the GBA, we formed a strategic partnership with Hong Kong Trade Development Council to co-create 'InnoClub', a one-stop platform to help SME to digitalise their operations and adopt innovative business solutions. Our InnoTech Fund also provides funding support for innovation development.

We continue to drive digitalisation and deployed Contour, a global blockchain network, to conduct documentary trade digitally via a web-based portal. We also participated in eTradeConnect - the blockchain network established by local banks which has expanded its coverage and connected with the People's Bank of China ('PBoC') trade finance platform. We succeeded in piloting the connection with the PBoC and this will provide a solid foundation to capture cross-boundary digital trade finance activities.

We have strengthened our main bank proposition via the introduction of Virtual Account, a tool that enables customers to manage payment collections and accounts reconciliation in a more timely manner. We have partnered with several fintech firms to facilitate the ecosystem operations of various industry sectors, including medical, educational and retail catering. To support SMEs in capturing business opportunities from the Hong Kong Government's Consumption Voucher Scheme, we worked with a fintech partner to develop a static QR code collection solution. We have also updated our GBA remittance capability to make it possible for Hang Seng China customers to complete US dollar payments to Hong Kong within five minutes.

Supported by the roll-out of our Remote Account Opening service with e-sign feature, we have improved the customer experience by shortening onboarding times. Customers can now open a 'Biz Virtual+' account in as fast as three working days. This helped us more than double our monthly average customer acquisition rate compared with the previous year.

To better serve our corporate customers, we upgraded our Business Banking Centres in Tsim Sha Tsui and Kwun Tong including the introduction of dedicated transaction counters to provide all-round banking services.

We maintained good asset quality by adopting proactive credit risk management, though we made appropriate provisions for a few specific cases in the mainland commercial real estate sector that experienced tightening liquidity.

Our efforts to provide best-in-class services was recognised with a number of industry awards, including 'Hong Kong Domestic COVID Management Initiative of the Year' and 'Hong Kong Domestic AI Initiative of the Year' from *Asian Banking & Finance*. We were also named 'Best Payment Bank in Hong Kong' and won the 'Frictionless Transaction Award – Best Productivity, Efficiency and Automation Initiative, Application or Programme' in *The Asian Banker's* Transaction Banking Awards.

Global Banking and Markets ('GBM') recorded an 11% year-on-year decrease in net operating income before change in ECL to HK\$5,426m and a 40% decrease in both operating profit and profit before tax to HK\$2,965m.

Global Banking ('GB') reported a 3% year-on-year growth in net operating income before change in ECL to HK\$2,757m. Operating profit and profit before tax both dropped by 55% to HK\$962m, due mainly to an adjustment in ECL provisions against exposures to the mainland commercial real estate sector. Our proactive management of credit risk kept the overall credit quality of our portfolio stable.

Net interest income was broadly in line with 2020.

We provided tailor-made, industry-specific cash management solutions for clients across various sectors, including property management, retail conglomerates, insurance and non-bank financial services. The positive response to our efforts helped drive strong growth of 21% in our current and saving deposits which gave us the flexibility to manage the acquisition cost of time deposits and achieve robust growth in deposit interest income. Our award-winning cash management digital solutions, including APIs, QR code collection channel and one-click fixed deposit service, helped our customers achieve more efficient business operations while supporting ESG objectives through paperless transactions. Overall, we recorded a 22% year-on-year shift in transaction volume from counter services to digital channels. Our strong across-boundary connectivity enabled us to support customers in the GBA with a wide variety of services, including cross-boundary liquidity management solutions.

In the uncertain economic conditions, we managed to achieve strong growth of 11% in the loan balance by diversifying our portfolio, including by acquiring new customers in 'new economy' sectors. However, with keen market competition to acquire quality loan assets, our credit spread continued to be under pressure, resulting in a 3% drop in loan interest income. With the transition of the London Interbank Offered Rate ('LIBOR'), we completed the first risk-free rate (Sterling Overnight Index Average ('SONIA')) loan for the Bank. To support the ESG objectives of the Bank and its clients, we were active in arranging 'green financing' during the year and achieved good growth in our green loans portfolio. We also provided financing for customers through our newly launched SLLs.

Non-interest income rose by 24% to HK\$388m. Leveraging our strong customer relationships, we further stepped up our development and diversification of non-fund income sources of revenue. Higher income from commissions was generated from strong growth in trade service business, including factoring, supply chain finance and performance bonds. Our syndicated loan business continued to perform well and remained a key contributor in 2021. More fee income was contributed from the activities of our Debt Capital Markets origination team, which completed several breakthrough deals involving dim-sum and green bonds during the year.

Global Markets ('GM') reported a 22% decrease in net operating income before change in ECL to HK\$2,669m. Operating profit and profit before tax both decreased by 29% to HK\$2,003m, reflecting a drop in revenue from Markets Treasury.

Net interest income decreased by 12% to HK\$1,792m and non-interest income decreased by 36% to HK\$877m, with income from Markets Treasury adversely impacted by the flattened yield curve and tightened credit spreads under the prevailing low interest rate environment.

Revenue from sales and trading recorded a slight increase to the previous year. Signs that the worst of the pandemic might be coming to an end encouraged corporate clients become more active in the first half of the year, helping to drive a 7% year-on-year increase in corporate foreign exchange turnover. We also recorded significant growth in our Hong Kong dollar and renminbi trading revenue. Our Repo Trading business continued to build good momentum and we advanced with initiatives to deepen the penetration of GM products among WPB, CMB and GB customers.

Under the Institutional Bond Issuance Programme, the Hong Kong Monetary Authority issued the first one-year HONIA-indexed Floating Rate Notes in November. As one of the key primary dealers, we actively participated in this issuance and submitted our tender on the Notes.

To support the Bank's fintech strategy, we on-boarded the Bank's first Robotics Process Automation solution, in partnership with a technology company in Hong Kong Science and Technology Parks, to support the equities derivative quotation process.

Balance sheet Analysis

Assets

Total assets increased by HK\$60bn, or 3%, to HK\$1,820bn compared with 2020 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\$6bn, or 51%, to HK\$17bn. Trading assets were up by HK\$10bn, or 28%, to HK\$47bn, mainly in Hong Kong Exchange Fund Bills.

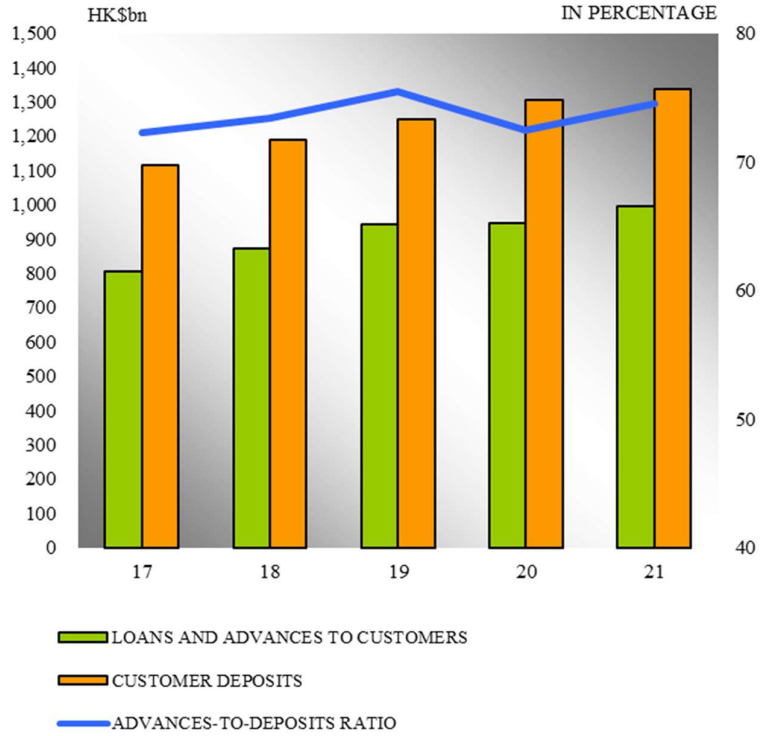
Customer loans and advances (net of allowances for ECL) increased by HK\$53bn, or 6%, to HK\$997bn. The Group continues to actively support the Hong Kong government relief measures in response to the Covid-19 outbreak. Loans for use in Hong Kong grew by 3%. Lending to industrial, commercial and financial sectors decreased by 1%. Lending for property development increased by 3%, while lending for property investment was broadly in line with 2020 year-end. There was increased lending to transport and transport equipment and 'other' sectors. These increases were more than offset by the decline in loans outstanding from financial concerns, wholesale and retail trade, manufacturing and information technology and telecom sectors. Lending to individuals grew by 8%. With the more active property market, residential mortgages and Government Home Ownership Scheme/Private Sector Participation Scheme/Tenants Purchase Scheme lending grew by 7% and 13% respectively. Trade finance lending regained momentum and grew by 57%, reflecting a recovery in global trade volumes. Loans for use outside Hong Kong grew by 9%, mainly reflecting increased lending by the Group's mainland banking subsidiary and loans for use outside Hong Kong granted by the Hong Kong office.

Financial investments decreased by HK\$54bn, or 10%, to HK\$500bn, reflecting the partial redeployment of the commercial surplus to support loan growth.

Assets Deployment

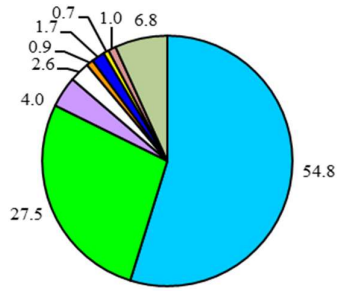
<i>Figures in HK\$m</i>	<i>At 31 December</i>		<i>At 31 December</i>	
	<i>2021</i>	<i>%</i>	<i>2020</i>	<i>%</i>
Cash and balances at central banks	16,896	0.9	11,226	0.6
Trading assets	47,433	2.6	37,117	2.1
Derivative financial instruments	13,224	0.7	17,181	1.0
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	31,326	1.7	20,695	1.2
Reverse repurchase agreements – non-trading	18,821	1.0	13,360	0.8
Placings with and advances to banks	72,493	4.0	44,357	2.5
Loans and advances to customers	997,397	54.8	944,774	53.7
Financial investments	500,386	27.5	554,720	31.5
Other assets	122,209	6.8	116,357	6.6
Total assets	1,820,185	100.0	1,759,787	100.0
Return on average total assets	0.8%		1.0%	

LOANS AND ADVANCES TO CUSTOMERS AND CUSTOMER DEPOSITS



ASSETS DEPLOYMENT FOR 2021

IN PERCENTAGE



■ LOANS AND ADVANCES TO CUSTOMERS

■ FINANCIAL INVESTMENTS

■ PLACINGS WITH AND ADVANCES TO BANKS

■ TRADING ASSETS

■ CASH AND BALANCES AT CENTRAL BANKS

■ FINANCIAL ASSETS DESIGNATED AND OTHERWISE MANDATORILY MEASURED AT FAIR VALUE THROUGH PROFIT OR LOSS

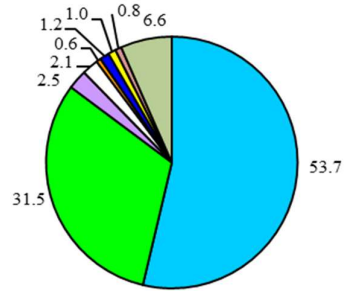
■ DERIVATIVE FINANCIAL INSTRUMENTS

■ REVERSE REPURCHASE AGREEMENTS - NON-TRADING

■ OTHER ASSETS

ASSETS DEPLOYMENT FOR 2020

IN PERCENTAGE



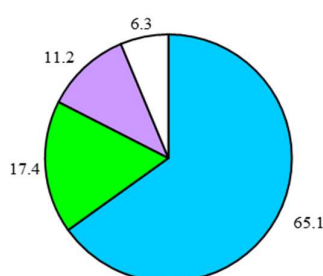
Liabilities and equity

Customer deposits, including certificates of deposit and other debt securities in issue, increased by HK\$35bn, or 3%, to HK\$1,339bn against the end of 2020. Current and savings deposits increased, but there was a drop in time deposits. To diversify its source of funding, the Group issued more certificates of deposit during 2021. At 31 December 2021, the advances-to-deposits ratio was 74.5%, compared with 72.4% at 31 December 2020.

<i>Figures in HK\$m</i>	<i>At 31 December 2021</i>	<i>At 31 December 2020</i>
Customer loans and advances (net of allowances for ECL)	997,397	944,774
Customer deposits, including certificates of deposit and other debt securities in issue	1,338,800	1,304,083
Advances-to-deposits ratio	74.5%	72.4%

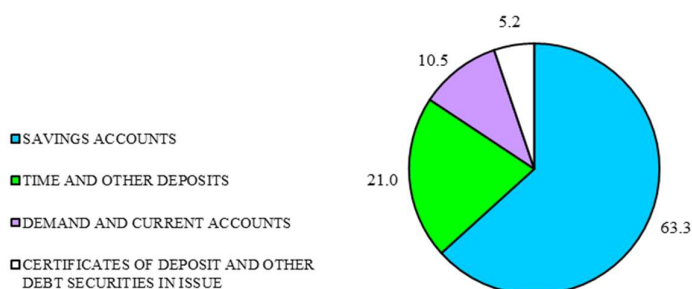
CUSTOMER DEPOSITS FOR 2021

IN PERCENTAGE



CUSTOMER DEPOSITS FOR 2020

IN PERCENTAGE



Shareholders' equity

<i>Figures in HK\$m</i>	<i>At 31 December 2021</i>	<i>At 31 December 2020</i>
Share capital	9,658	9,658
Retained profits	140,100	137,580
Other equity instruments	11,744	11,744
Premises revaluation reserve	18,428	17,960
Cash flow hedging reserve	46	260
Financial assets at fair value through other comprehensive income reserve	2,499	4,557
Other reserves	1,857	1,341
Total reserves	174,674	173,442
Total shareholders' equity	184,332	183,100
Return on average ordinary shareholders' equity	7.7%	9.6%

At 31 December 2021, shareholders' equity was up by HK\$1bn, or 1%, to HK\$184bn compared with 2020 year-end. Retained profits were up by HK\$3bn, or 2%, reflecting profit accumulation after the appropriation of dividends paid during the year. The premises revaluation reserve was up HK\$0.5bn, or 3%, reflecting the favourable movement in the commercial property market in Hong Kong during the year. Financial assets at fair value through other comprehensive income reserve decreased by HK\$2bn, or 45%, mainly reflecting the fair value movement of the Group's investments in financial assets measured at fair value.

Management Discussion and Analysis

(Figures expressed in millions of Hong Kong dollars unless otherwise indicated)

Risk

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 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, 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 a conservative risk appetite and strong risk management capability.
- We aim to deliver sustainable earnings and consistent returns for shareholders.

Business practice

- We have zero tolerance for any of our people knowingly engaging in any business, activity or association where foreseeable reputational risk or damage has not been considered and/or mitigated.
- 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.

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 defined as 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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

Enterprise-wide application *(continued)*

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 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, policies 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 managing risk, through our activities with regard to people and capabilities; governance; reporting and management information; credit risk management models; and data.

Management Discussion and Analysis (continued)

Risk (continued)

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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

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 his 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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

Our roles and responsibilities *(continued)*

Three lines of defence (continued)

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

The RAS is a written articulation of the level and types of risk that the Group is willing to take in order to achieve its strategic objectives. Our risk appetite encapsulates consideration of both financial and non-financial risks and is expressed in both quantitative and qualitative terms.

The RMM reviews the Group's actual risk appetite profile against the limits set out in the RAS regularly to enable senior management to monitor the risk profile and guide business activities in order to balance risk and return. The actual risk appetite profile is also reported to the RC and Board by Chief Risk Officer including material deviation and related management mitigating actions.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

Risk management tools *(continued)*

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.

We define a 'top risk' as a thematic issue that may form and crystallise within one year, and has the potential to materially affect the Group's financial results, reputation or long-term business model. It may arise across any combination of risk types, markets or global businesses. The impact may be well understood by senior management and some mitigating actions may already be in place.

An 'emerging risk' is defined as a thematic issue that has large unknown components, which may form and crystallise beyond a one-year time horizon. If it were to materialise, it could have a significant material impact on a combination of the Group's long-term strategy, profitability and/or reputation. Existing mitigating action plans are likely to be minimal, reflecting the uncertain nature of these risks at this stage. Some high-level analysis and/or stress testing may have been carried out to assess the potential impact.

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.

Many of our regulators – including the Hong Kong Monetary Authority ('HKMA') – use stress testing as a prudential regulatory tool, and the Group has focused significant governance and resources to meet their requirements.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

Risk management tools *(continued)*

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 to which the Group is exposed. Using this information, management decides whether risks can or should be mitigated through management actions or, if they were to crystallise, should be absorbed through capital. This in turn informs decisions about preferred capital levels and allocations.

In addition to the Group-wide stress testing scenarios, 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.

The Group stress testing programme is overseen by the RC and results are reported, where appropriate, to the RMM and RC.

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.

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 2021

There were no material changes to the policies and practices for the management of risk in 2021. However, where required, appropriate exceptional handling approaches were exercised in response to Coronavirus Disease ('COVID-19') developments.

We continued to actively manage the risks resulting from the COVID-19 pandemic and its impacts on our customers and operations during 2021 as well as other key risks described in this section.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

Risk management tools *(continued)*

Key developments in 2021 (continued)

In 2021, we enhanced our risk management in the following areas:

- We streamlined the articulation of our risk appetite framework, providing further clarity on how risk appetite interacts with strategic planning and recovery planning processes.
- We continued to simplify our approach to non-financial risk management, with the implementation of more effective oversight tools and techniques to improve end-to-end identification and management of these risks.
- We continued to improve the effectiveness of our financial crime controls with a targeted update of our fraud controls. We refreshed our financial crime policies, ensuring they remained up-to-date and addressed changing and emerging risks, and we continued to meet our regulatory obligations. Since 2021, we have combined our RMM and Financial Crime Risk Management Committee Meetings to ensure a holistic view of all risks.
- We implemented enhanced governance and oversight around model adjustments and related processes for HKFRS 9 models and Sarbanes-Oxley controls.
- We have implemented second line of defence risk management for liquidity risk and interest rate risk in the banking book during 2021. Second line of defence for capital risk management is in progress.

Areas of special interest

(unaudited)

During 2021, 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, IBOR transition, financial crime risk environment, risks related to COVID-19 and climate-related risks.

Geopolitical and macroeconomic risks

Our operations and portfolios are exposed to risks associated with US-China tensions, social unrest and COVID-19, which could lead to disruption of our operations, physical risk to our staff and/ or physical damage to our assets.

The COVID-19 pandemic has heightened US-China tensions, which could have implications for the Group and its customers.

The US-China relationship in particular remains complex, with divisions over a number of critical issues. The US has imposed various sanctions and trade restrictions on Chinese persons and companies.

Certain measures are particularly relevant. The Hong Kong Autonomy Act passed by the US authorises secondary sanctions against non-US financial institutions found to be knowingly conduct significant transactions with individuals and entities that are determined by the US to have undermined Hong Kong's autonomy. In addition, the US has imposed restrictions on US persons' ability to buy or sell certain publicly traded securities of certain Chinese companies linked to China's defence and related material or surveillance sectors.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

Areas of special interest *(continued)* *(unaudited)*

Geopolitical and macroeconomic risks (continued)

China in turn has announced a number of its own sanctions and trade restrictions that target foreign individuals and companies. These have been imposed mainly against certain public officials associated with the implementation of foreign sanctions against China. China has promulgated new laws that provide a legal framework for imposing further sanctions and export restrictions, including a law prohibiting the implementation of, or compliance with, foreign sanctions against China and which also creates a private rights of action in the Chinese courts for damages caused by third parties implementing foreign sanctions or other discriminatory measures. These and any future measures and countermeasures that may be taken by the US and China may affect the Group, its customers, and the markets in which we operate.

China's expanding data privacy and cybersecurity laws could pose potential challenges to intra-Group data sharing. These developments could increase financial institutions' compliance burdens in respect of cross-border transfers of personal information. In Hong Kong, there is also an increasing focus by regulators on the use of big data and artificial intelligence.

Market concerns remain about repercussions for the Chinese domestic economy from the recent instability in the commercial real estate sector. We continue to monitor the situation closely, including potential indirect impacts, and seek to take mitigating actions as required.

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.

IBOR transition

Interbank Offered Rates ('IBORs') have historically been used extensively to set interest rates on different types of financial transactions and for valuation purposes, risk measurement and performance benchmarking.

Following the UK's Financial Conduct Authority ('FCA') announcement in July 2017 that it would no longer continue to persuade or require panel banks to submit rates for the London Interbank Offered Rate ('LIBOR') after 2021, we have been actively working to transition legacy contracts from IBORs and meet client needs for products linked to new near risk-free replacement rates ('RFRs') or alternative reference rates. In March 2021, in accordance with the 2017 FCA announcement, ICE Benchmark Administration Limited ('IBA') announced that it would cease publication of 26 of the 35 main LIBOR currency interest rate benchmark settings from the end of 2021, but that the most widely used US dollar LIBOR settings would cease from 30 June 2023. As a result, our focus during 2021 was on the transition of legacy contracts referencing the LIBOR settings that demised from the end of 2021.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

Areas of special interest *(continued)* *(unaudited)*

IBOR transition (continued)

During 2021, we continued the development of IT and RFR product capabilities, implemented supporting operational processes, and engaged with our clients to discuss options for the transition of their legacy contracts. The successful implementation of new processes and controls, as well as the transition of contracts away from IBORs, reduced the heightened financial and non-financial risks to which we were exposed. However, while all but exceptional new LIBOR contract issuance ceased in 2021, and from the end of 2021 for US dollar, we remain exposed to risks, including legacy contracts that reference US dollar LIBOR, which are expected to demise from June 2023.

Financial risks have been largely mitigated as a result of the implementation of model and pricing changes. However, differences in US dollar LIBOR and its replacement rate RFR, Secured Overnight Funding Rate ('SOFR') create a basis risk in the trading book and banking book due to the asymmetric adoption of SOFR across assets, liabilities and products that we need to actively manage through appropriate financial hedging. Additionally, the relatively limited use of SOFR in financial markets to date could result in insufficient liquidity risk to transition legacy US dollar contracts during 2022. This could potentially delay transition of some US dollar contracts into 2023, compressing the amount of time for transition, which could lead to heightened operational and conduct related risks as a result.

Additional non-financial risks including financial reporting risks relating to potential mis-statements due to the complexity in applying accounting reliefs relating to amendment of legacy contracts and legal risk continue to exist.

These risks are present in different degrees across our product offering.

Transition legacy contracts

During 2021, we either successfully transitioned or confirmed appropriate fallback for all legacy IBOR contracts in sterling, Swiss franc, Euro and Japanese yen LIBOR interest rates, with no 'tough legacy' contracts remaining. Our approach to transition US dollar LIBOR legacy contracts will differ by product and business area, but will be based on the lessons learnt from the successful transition of contracts during 2021. We will continue to communicate with our clients and investors in a structured manner and be client led in the timing and nature of the transition.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

Areas of special interest *(continued)* *(unaudited)*

IBOR transition (continued)

Transition legacy contracts *(continued)*

For derivatives, all our sterling, Swiss franc, Euro and Japanese yen LIBOR interest rate exposures at year-end had no further such rate fixings post year end. We anticipate our US dollar exposures will continue to reduce through 2022 as a result of contract maturities, active transition and the cessation of new US dollar LIBOR issuance. We will continue to look to actively reduce our US dollar LIBOR exposures by transitioning trades ahead of the demise date of 30 June 2023, by working with our clients to determine their needs and alternative approaches. Additionally, we are working with market participants, including clearing houses, to ensure we are able to transition contracts as the US dollar LIBOR cessation date approaches.

For our loan book, most of our reported exposure at the end of 2021 relates to sterling, Swiss franc, Euro and Japanese yen LIBOR interest rate contracts that required no further client negotiation. The remaining exposure relates to one syndicated transaction which has continued in early 2022, and this has led to further transition being completed. If the contract is unable to transition prior to the first interest payment date in 2022, it is expected to use an alternative rate determined by the contractual language and governing law. For the remaining demising IBORs, notably US dollar LIBOR, we have implemented new products and processes and updated our systems in readiness for transition. Global Banking, and Commercial Banking have begun to engage with clients who have upcoming contract maturities with a view to refinancing using an appropriate replacement rate. Further communication and outreach to customers with US dollar LIBOR contracts with later maturities will occur in due course.

Where we hold bonds issued by other institutions, we have remained dependent on the issuer's agents to engage in the transition process, although analysis will be undertaken of the issuers in US dollar LIBOR bonds to reduce our exposure, as occurred through 2021.

The completion of an orderly transition from the remaining IBORs, notably US dollar LIBOR, continues to be our programme's key objective through 2022 and 2023, with the aim of putting systems and processes in place to help achieve this.

Mitigating actions

- Our IBOR transition programme, which is overseen by the Chief Risk Officer and Compliance Officer, will continue to deliver IT and operational processes to meet the objectives.
- We carry out extensive training, communication and client engagement to facilitate appropriate selection of new rates and products and we have dedicated teams in place to support the transition.
- We actively transition legacy contracts and ceased new issuance of LIBOR based contracts, in line with regulatory expectations and 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.

Management Discussion and Analysis (continued)

Risk (continued)

Areas of special interest (continued) (unaudited)

IBOR transition (continued)

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.

(audited)	Financial instruments yet to transition to alternative benchmarks, by main benchmark			
	USD LIBOR (HK\$m)	GBP LIBOR (HK\$m)	JPY LIBOR (HK\$m)	SIBOR (HK\$m)
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	-	-	-
At 31 December 2020				
Non-derivative financial assets ¹	44,268	11,008	55	205
Non-derivative financial liabilities	3,101	-	-	-
Derivative notional contract amount	113,010	761	-	-

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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

Areas of special interest *(continued)* *(unaudited)*

IBOR transition (continued)

Financial instruments impacted by IBOR reform *(continued)* *(audited)*

In March 2021, the administrator of LIBOR, IBA, announced that the publication date of most US dollar LIBOR tenors is extended from 31 December 2021 to 30 June 2023. Publication of one-week and two-month tenors will cease after 31 December 2021. This change reduce the amounts presented at 31 December 2021 in the above table as some financial instruments included at 31 December 2020 will reach their contractual maturity date prior to the extended publication dates. Comparative data have not been re-presented.

Financial crime risk environment *(unaudited)*

Financial institutions remain under considerable regulatory scrutiny regarding their ability to prevent and detect financial crime. The financial crime threats we faced have continued to evolve, often in tandem with broader geopolitical socioeconomic and technological shifts across our markets, leading to challenges such as managing conflicting laws and approaches to legal and regulatory regimes.

Financial crime risk evolved during the COVID-19 pandemic, notably with the manifestation of fraud risks linked to the economic slowdown and the resulting deployment of government relief measures. The accelerated digitisation of financial services has fostered significant changes to the payments ecosystem, including a multiplicity of providers and new payment mechanisms, not all of which are subject to the same level of regulatory scrutiny or regulations as financial institutions. This is presenting increasing challenges to the industry in terms of maintaining required levels of transparency, notably where institutions serve as intermediaries. Developments around digital assets and currencies, notably the role of stablecoins and central bank digital currencies, have continued at pace, with an increasing regulatory and enforcement focus on financial crimes linked to these types of assets.

Expectations with respect to intersection of ESG issues and financial crime as our organisation, customers and suppliers transition to net zero, are increasing, not least with respect to potential ‘greenwashing’. Companies also face as a heightened regulatory focus on both human rights issues and environmental crimes, from a financial crime perspective. 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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

Areas of special interest *(continued)* *(unaudited)*

Financial crime risk environment *(continued)* *(unaudited)*

Mitigating actions

- We are strengthening our fraud and surveillance 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 to ensure our financial crime controls remain appropriate for changes in customer behaviour and gaps in regulatory coverage, including the development of procedures and controls to manage the risks associated with direct and indirect exposure to digital assets and currencies.
- We are assessing our existing policies and control framework to ensure that developments in the ESG space are considered and the risks mitigated.
- We work with the relevant jurisdictions to address data privacy challenges to help enable effective management of financial crime risk.
- We work closely with our regulators and engage in public-private partnerships, playing an active role in shaping the industry's financial crime controls for the future, notably with respect to the enhanced, and transparent, use of technology.

Risks related to COVID-19

Despite the successful roll-out of vaccines around the world, the COVID-19 pandemic and its effect on the global economy have continued to impact our customers and organisation. The pandemic necessitated governments to respond at unprecedented levels to protect public health, and to support local economies and livelihoods. The resulting government support measures and restrictions created additional challenges, given the rapid pace of change and significant operational demands. Renewed outbreaks, particularly those resulting from the emergence of variants of the virus, emphasise the ongoing threat of COVID-19 and could result in significant further tightening of government restrictions.

Hong Kong Government has deployed extensive measures to support local populations.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

Areas of special interest *(continued)* *(unaudited)*

Risks related to COVID-19 (continued)

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.

The impact of the pandemic on the long-term prospects of businesses in the most vulnerable sectors of the economy – such as retail, hospitality, travel and commercial real estate - remains uncertain and may lead to significant Expected Credit Loss ('ECL') charges on specific exposures, which may not be fully captured in ECL estimates. In addition, in times of stress, fraudulent activity is often more prevalent, leading to potentially significant ECL charges or operational losses.

As economic conditions improve, and government support measures come to an end, there is a risk that the outputs of HKFRS 9 models may have a tendency to underestimate loan losses. To help mitigate this risk, model outputs and management adjustments are closely monitored and independently reviewed for reliability and appropriateness.

As a result of COVID-19, business continuity plans have been successfully implemented and the majority of service level agreements have been maintained. We have not experienced any major impacts to the supply chains from our third-party service providers due to COVID-19. The risk of damage or theft to our physical assets or criminal injury to our employees remains unchanged, with no significant incidents impacting our buildings or staff. Exceptional handling to ensure the continuity of critical customer services are being documented through governance.

Despite the ongoing economic recovery, significant uncertainties remain in assessing the duration and impact of the COVID-19 pandemic, including whether any subsequent outbreaks result in a reimposition of government restrictions. There is a risk that economic activity remains below pre-pandemic levels for a prolonged period increasing inequality across markets, and it will likely be some time before societies return to pre-pandemic levels of social interactions.

We continue to monitor the situation closely, and given the novel and prolonged nature of the pandemic, additional mitigating actions may be required.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

Areas of special interest *(continued)* *(unaudited)*

Climate related risks

Overview

One of the most significant risks that global economy face today relates to climate change. It is widely recognised that continued emission of greenhouse gases will cause further global warming and this warming could lead to damaging economic and social consequences. Internationally, central banks as well as regulatory bodies demonstrate growing awareness and commitment to tackle the challenge collectively. There are expectations on the financial sector to mobilise climate finance to support the transition to low-carbon economy.

We support the goals of the Paris Agreement. We are strengthening our risk management capabilities to address Climate Risks. In accordance with HSBC Group's guidelines for climate sensitive sectors, we will manage our credit exposure to these industries and support our customers in their transition to a low-carbon economy.

Impacts of Climate-related Risks

Climate-related risks may be divided into two major categories: (1) risk related to the transition into a lower-carbon economy and (2) risk related to the physical impact of climate change. Transitioning to a lower-carbon economy may lead to extensive policy, legal, regulatory, market and technological change. Physical risk relates to the physical impacts of severe climate events such as flooding and drought; and the long term shift in climate pattern.

These have the potential to cause both financial and non-financial impacts to banks as well as their customers. Financial impacts could materialise if transition and physical risks impact the ability of borrowers to repay their loans. Non-financial impacts could materialise if bank's own assets or operations are impacted by extreme weather or chronic changes in weather patterns or as a result of business decisions to achieve climate ambition.

Key Risk Management Processes

Our approach to climate risk management aligns to HSBC's group-wide risk management framework and three lines of defence model to ensure robust oversight of climate risk. The financial and non-financial impacts imposed by climate risk are addressed by integrating climate risk measures into the existing supporting risk policies, processes and controls.

We continue to evolve our risk appetite to reflect the latest risks from climate change and international standards, setting out the measures we intend to take to support our climate ambition and our commitments to regulators, investors and stakeholders.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

Areas of special interest *(continued)* *(unaudited)*

Climate related risks (continued)

Key Risk Management Processes *(continued)*

Our Environmental, Social and Governance ('ESG') and risk management teams regularly meet, and engage various stakeholders when needed, to review our climate risk management strategy and roadmap. Progress/ issues for escalation relating to climate risk will be regularly updated at ESG Steering Committee to ensure senior management oversight.

Key Development in 2021

To ensure we meet the growing climate risk related expectations from our regulators, investors and customers; and align with industry peers, we engaged external consultant to conduct thorough review and benchmarking exercise; and developed a roadmap specific to climate risk management to guide our actions towards international standard and market best practice.

A dedicated Climate Risk Working Group, led by Chief Risk Officer, is newly established in our Risk function to support the implementation of our climate change strategy. The workgroup will not only establish climate-related risk governance framework, but also provide management oversight on the resolution of climate risk related agendas.

To establish foundation for climate change-related governance, in September 2021, Climate Risk Programme Training was organised for our EXCO and Board members to assume additional responsibility and exercise board level oversight.

Management Discussion and Analysis (continued)

Risk (continued)

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

(audited)

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: <ul style="list-style-type: none">– 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: <ul style="list-style-type: none">– 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.

Management Discussion and Analysis (continued)

Risk (continued)

Description of risks - banking operations (continued) (audited)

Risks	Arising from	Measurement, monitoring and management of risk
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 exposures arising from our insurance operations are discussed in 'Insurance manufacturing operation risk' section.	Market risk is: <ul style="list-style-type: none">– 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.
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: <ul style="list-style-type: none">– 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.

Management Discussion and Analysis (continued)

Risk (continued)

Description of risks - banking operations (continued) (audited)

Risks	Arising from	Measurement, monitoring and management of risk
Regulatory compliance risk		
Regulatory compliance risk is the risk that we fail to observe the letter and spirit of all relevant laws, codes, rules, regulations and standards of good market practice, and incur fines and penalties and suffer damage to our business as a consequence.	Regulatory compliance risk arises from the risks associated with breaching our duty to our customers and other counterparties, inappropriate market conduct and breaching other regulatory requirements.	Regulatory compliance risk is: <ul style="list-style-type: none">– measured by reference to 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 assure their observance. Proactive risk control and/or remediation work is undertaken where required.

Management Discussion and Analysis (continued)

Risk (continued)

Description of risks - banking operations (continued) (audited)

Risks	Arising from	Measurement, monitoring and management of risk
Financial crime risk		
Financial crime risk is the risk of knowingly or unknowingly help parties to commit or to further illegal activity through the Group, including money laundering, fraud, bribery and corruption, tax evasion, sanctions breaches, and terrorist and proliferation financing.	Financial crime risk arises from day-to-day banking operations involving customers, third parties and employees. Exceptional circumstances which impact day-to-day operations may additionally increase financial crime risk.	Financial crime risk is: <ul style="list-style-type: none"> – measured by reference to risk appetite, identified metrics, incident assessments, regulatory feedback and the judgement and assessment of our financial crime risk teams; – monitored against the first line of defence risk and control assessments, the results of the monitoring and control assurance activities of the second line of defence functions, and the results of internal and external audits and regulatory inspections; and – managed by establishing and communicating appropriate policies and procedures, training employees in them, and monitoring activity to help ensure their observance. Proactive risk control and/or remediation work is undertaken where required.
Model risk		
Model risk is the potential for adverse consequences from business decisions informed by models, which can be exacerbated by errors in methodology, design or the way they are used.	Model risk arises in both financial and non-financial contexts whenever business decision making includes reliance on models.	Model risk is: <ul style="list-style-type: none"> – 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.

Management Discussion and Analysis (continued)

Risk (continued)

Description of risks - insurance manufacturing operations (audited)

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
<i>Insurance risk</i>		
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: <ul style="list-style-type: none"> – 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.
<i>Financial risk</i>		
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: <ul style="list-style-type: none"> – 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: <ul style="list-style-type: none"> – measured separately for each type of risk: <ul style="list-style-type: none"> - 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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

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, liquidity risk, market 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 2021

There were no material changes to the policies and practices for the management of credit risk in 2021. We continued to apply the requirements of HKFRS 9 'Financial Instruments' within Credit Risk.

Due to the unique market conditions in the COVID-19 outbreak, we expanded operational practices to provide short-term support to customers under the current policy framework. For further details of market-specific measures to support our personal and business customers, see below sections.

Governance and structure

We have established credit risk management and related HKFRS 9 processes throughout the Group. We continue to actively assess the impact of economic developments 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 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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

Credit risk sub-function (continued)
(audited)

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 costs 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 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 loss ('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.

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 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, Market Risk, and Wealth and Personal Banking Risk, as well as the Chief Risk Officer, the Chief Financial Officer and the Chief Accounting Officer.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

Key risk management processes *(continued)*

Concentration of exposure (audited)

Concentrations of credit risk arise when a number of counterparties or exposures have comparable economic characteristics, or such counterparties are engaged in similar activities or operate in the same geographical areas or industry sectors so that their collective ability to meet contractual obligations is uniformly affected by changes in economic, political or other conditions. We use a number of controls and measures to minimise undue concentration of exposure in our portfolios across industries, countries and 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 lending businesses, 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

The 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.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

Key risk management processes (continued)

Retail lending

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

Credit quality classification ^{1,2}	Sovereign debt securities and bills	Other debt securities and bills	Wholesale lending		Retail lending	
	External credit rating	External credit rating	Internal credit rating	12-month Basel probability of default %	Internal credit rating	12-month probability-weighted PD %
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').

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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

Key risk management processes *(continued)*

Renegotiated loans and forbearance (audited)

Forbearance refers to modified contractual terms and conditions or 'concessions' granted to a customer experiencing or about to experience credit related financial difficulty so that the customer is better positioned to service its debt. Once a concession has been classified as Forbearance, it must be reported as 'Renegotiated Loans'.

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

Credit quality of renegotiated loans

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.

Wholesale renegotiated 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. Personal renegotiated loans are deemed to remain credit-impaired until repayment or derecognition.

Loans that have been identified as renegotiated retain this designation until (1) maturity; or (2) derecognition; or (3) two-year observation period has been fulfilled after the customers are no longer classified as credit-impaired with no past due over 30 days.

Renegotiated loans and recognition of expected credit losses (audited)

For retail lending, unsecured renegotiated loans are generally segmented from other parts of the loan portfolio. Renegotiated expected credit loss assessments reflect the higher rates of losses typically encountered with renegotiated loans. For wholesale lending, renegotiated 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 renegotiated 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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

Key risk management processes *(continued)*

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.

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 are conducted when all recovery actions (including legal proceedings) have been exhausted with remote chance of further recovery.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

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 2021		At 31 December 2020	
	Gross carrying/ nominal amount	Allowance for ECL ¹	Gross carrying/ nominal amount	Allowance for ECL ¹
Loans and advances to customers at amortised cost:	1,004,325	(6,928)	949,954	(5,180)
Placings with and advances to banks at amortised cost	72,494	(1)	44,357	-
Other financial assets measured at amortised costs:	214,623	(167)	188,872	(187)
– cash and balances at central banks	16,896	-	11,226	-
– reverse repurchase agreements – non-trading	18,821	-	13,360	-
– financial investments	141,380	(153)	134,997	(173)
– other assets ²	37,526	(14)	29,289	(14)
Total gross carrying amount on balance sheet	1,291,442	(7,096)	1,183,183	(5,367)
Loans and other credit related commitments	365,054	(162)	356,776	(163)
Financial guarantee and similar contracts	2,431	(3)	3,024	(18)
Total nominal amount off balance sheet ³	367,485	(165)	359,800	(181)
Total	1,658,927	(7,261)	1,542,983	(5,548)
	Fair value	Memorandum Allowance for ECL	Fair value	Memorandum Allowance for ECL
Debt instruments measured at Fair Value through Other Comprehensive Income ('FVOCI') ⁴	353,892	(9)	412,845	(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.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

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				Total	Allowance for ECL					ECL coverage %				
	Stage 1	Stage 2	Stage 3	POCI ²		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	469,431	124,606	8,495	972	603,504	(350)	(2,621)	(2,515)	-	(5,486)	0.07%	2.10%	29.61%	0.00%	0.91%
- non-bank financial institutions	24,210	1,783	104	-	26,097	(121)	(12)	(28)	-	(161)	0.50%	0.67%	26.92%	N/A	0.62%
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 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).

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

	At 31 December 2021											
	Gross carrying amount				Allowance for ECL				ECL coverage %			
	Of which: Up-to-date	Of which: 1 to 29 DPD ¹	Of which: 30 and > DPD	Of which: Up-to-date	Of which: 1 to 29 DPD	Of which: 30 and > DPD	Of which: Up-to-date	Of which: 1 to 29 DPD	Of which: 30 and > DPD			
	Stage 2 date	DPD ¹	DPD	Stage 2 date	DPD	DPD	Stage 2 date	DPD	DPD			
Loans and advances to customers at amortised cost	15,358	13,430	1,391	537	(833)	(711)	(54)	(68)	5.42%	5.29%	3.88%	12.66%
- 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').

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage (continued) (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:	814,146	130,084	5,723	1	949,954	(1,315)	(1,821)	(2,044)	-	(5,180)	0.16%	1.40%	35.72%	0.00%	0.55%
- personal	339,299	12,282	984	-	352,565	(557)	(748)	(220)	-	(1,525)	0.16%	6.09%	22.36%	N/A	0.43%
- corporate and commercial	455,414	115,640	4,579	1	575,634	(695)	(1,065)	(1,782)	-	(3,542)	0.15%	0.92%	38.92%	0.00%	0.62%
- non-bank financial institutions	19,433	2,162	160	-	21,755	(63)	(8)	(42)	-	(113)	0.32%	0.37%	26.25%	N/A	0.52%
Placements with and advances to banks at amortised cost	43,919	438	-	-	44,357	-	-	-	-	-	0.00%	0.00%	N/A	N/A	0.00%
Other financial assets measured at amortised cost	184,344	4,528	-	-	188,872	(133)	(54)	-	-	(187)	0.07%	1.19%	N/A	N/A	0.10%
Loans and other credit-related commitments	352,241	4,535	-	-	356,776	(90)	(73)	-	-	(163)	0.03%	1.61%	N/A	N/A	0.05%
- personal	241,420	-	-	-	241,420	-	-	-	-	-	0.00%	N/A	N/A	N/A	0.00%
- corporate and commercial	98,795	4,535	-	-	103,330	(87)	(73)	-	-	(160)	0.09%	1.61%	N/A	N/A	0.15%
- non-bank financial institutions	12,026	-	-	-	12,026	(3)	-	-	-	(3)	0.02%	N/A	N/A	N/A	0.02%
Financial guarantee and similar contracts:	2,702	322	-	-	3,024	(16)	(2)	-	-	(18)	0.59%	0.62%	N/A	N/A	0.60%
- personal	7	-	-	-	7	-	-	-	-	-	0.00%	N/A	N/A	N/A	0.00%
- corporate and commercial	2,695	322	-	-	3,017	(16)	(2)	-	-	(18)	0.59%	0.62%	N/A	N/A	0.60%
- non-bank financial institutions	-	-	-	-	-	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
At 31 December 2020	1,397,352	139,907	5,723	1	1,542,983	(1,554)	(1,950)	(2,044)	-	(5,548)	0.11%	1.39%	35.72%	0.00%	0.36%

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).

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

	At 31 December 2020												
	Gross carrying amount				Allowance for ECL				ECL coverage %				
	Stage 2	Of which: Up-to-date	Of which: 1 to 29	Of which: 30 and >	Stage 2	Of which: Up-to-date	Of which: 1 to 29	Of which: 30 and >	Stage 2	Of which: Up-to-date	Of which: 1 to 29	Of which: 30 and >	
		date	DPD ¹	DPD		date	DPD	DPD		date	DPD	DPD	
Loans and advances to customers at amortised cost	12,282	10,418	1,240	624	(748)	(645)	(48)	(55)	6.09%	6.19%	3.87%	8.81%	
- personal	115,640	115,170	374	96	(1,065)	(1,005)	(20)	(40)	0.92%	0.87%	5.35%	41.67%	
- corporate and commercial	2,162	2,161	1	-	(8)	(8)	-	-	0.37%	0.37%	0.00%	N/A	
- non-bank financial institutions	130,084	127,749	1,615	720	(1,821)	(1,658)	(68)	(95)	1.40%	1.30%	4.21%	13.19%	

¹ Days past due ('DPD').

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

(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.

	2021	2020
Cash and balances at central banks	16,896	11,226
Trading assets	47,392	37,072
Derivative financial instruments	13,224	17,181
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	1,041	1,284
Reverse repurchase agreements - non-trading	18,821	13,360
Placings with and advances to banks	72,493	44,357
Loans and advances to customers	997,397	944,774
Financial investments	495,119	547,669
Other assets	37,533	29,449
Financial guarantees and other credit related contingent liabilities ¹	28,864	19,773
Loan commitments and other credit related commitments	649,961	556,503
	<u>2,378,741</u>	<u>2,222,648</u>

¹ Performance and other guarantees were included.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

(ii) Measurement uncertainty and sensitivity analysis of ECL estimates *(audited)*

Despite a broad recovery in economic conditions during 2021, ECL estimates continue to be subject to a high degree of uncertainty, and management judgements and estimates continue to reflect a degree of caution, both in the selection of economic scenarios and their weightings, and through judgmental adjustments.

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 have been 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 Top and Emerging Risks.

In Q2 2020, to ensure that the severe risks associated with the pandemic were appropriately captured, management added a fourth, more severe, scenario to use in the measurement of ECL. Starting Q4 2021, the methodology has been adjusted so that the use of four scenarios, of which two are downside scenarios, is the standard approach to ECL calculation.

Three of these scenarios are drawn from consensus forecasts and distributional estimates. The central scenarios deemed the 'most likely' outcome, and usually being assigned 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 ('the consensus') while consensus upside and downside scenarios are created with reference to distributions for selected 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 trend.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

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

Description of Consensus Economic Scenarios

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

Global economic growth experienced a recovery in 2021, following an unprecedented contraction in 2020. Restrictions to mobility and travel have eased across global markets, aided by the successful roll-out of vaccination programmes. Vaccinations have shown their effectiveness in lowering hospitalisations and deaths enabling economies to re-open. The emergence of new variants that potentially reduce the efficacy of vaccines remains a risk. Economic forecasts are subject to a high degree of uncertainty in the current environment. Risks to the economic outlook are dominated by the progression of the pandemic, vaccine roll-out and the public response. Geopolitical risks also remain significant and include continued differences between the US and China over a range of strategic issues.

The scenarios used to calculate ECL in the Annual Report 2021 are described below.

The consensus Central scenario

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

Our Central scenario assumes that the stringent restrictions on activity, imposed across several countries and territories in 2020 and early 2021 are not repeated. The new viral strain, that emerged late in 2021 - Omicron has only a limited impact on the recovery, according to this scenario. Consumer spending and business investment, supported by elevated levels of private sector savings, are expected to drive the economic recovery as fiscal and monetary policy support recedes. Differences across markets in the speed and scale of economic recovery in the Central scenario reflect differences in the progression of the pandemic, different speeds of roll-out of vaccination programmes, national level differences in restrictions imposed and scale of support measures.

The key features of our Central scenario are:

- Economic activity across global markets continues to recover. GDP grows at a moderate rate and exceeds pre-pandemic levels across all global markets in 2022.
- Unemployment declines to levels only slightly higher than existed pre-pandemic.
- COVID related fiscal spending recedes in 2022 as fewer restrictions on activity allow fiscal support to be withdrawn. Deficits remain high in several countries as they embark on multi-year investment programmes to support recovery, productivity growth and climate transition.
- Inflation across many of global markets remains elevated through 2022. Supply driven price pressures persist through the first half of 2022 before gradually easing. In subsequent years, inflation quickly converges back towards central bank target rates.
- Policy interest rates in key markets rise gradually over our projection period, in line with economic recovery.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

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

The consensus Central scenario *(continued)*

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		
2022: Annual average growth rate	3.1	5.3
2023: Annual average growth rate	2.9	5.4
2024: Annual average growth rate	2.6	5.1
5 years average (2022-2026)	2.7	5.1
Unemployment rate		
2022: Annual average growth rate	4.1	3.8
2023: Annual average growth rate	3.6	3.7
2024: Annual average growth rate	3.5	3.8
5 years average (2022-2026)	3.6	3.8
House price growth		
2022: Annual average growth rate	3.4	0.3
2023: Annual average growth rate	2.4	4.7
2024: Annual average growth rate	2.0	4.9
5 years average (2022-2026)	2.6	3.5
Probability	70	80

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

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

The consensus Upside scenario

Compared to the consensus Central scenario, the consensus Upside scenario features a faster recovery in economic activity during the first two years, before converging to long-run trend expectation.

The scenario is consistent with a number of key upside risk themes. These include the orderly and rapid global abatement of COVID-19 via successful containment and ongoing vaccine efficacy; de-escalation of tensions between the US and China and continued support from fiscal and monetary policy.

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	10.3 (4Q22)	11.8 (4Q22)
Unemployment rate	2.7 (4Q23)	3.5 (1Q23)
House price growth	11.9 (4Q22)	8.2 (4Q22)
Probability	5	5

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

Downside scenarios

The progress of the pandemic and the ongoing public policy response continues to be a key source of risk. Downside scenarios assume that new strains of the virus result in an acceleration in infection rates and increased pressure on public health services, necessitating restrictions on activity. The re-imposition of such restrictions could be assumed to have damaging effect on consumer and business confidence.

Government fiscal programmes in advanced economies in 2020 and 2021 were supported by accommodative actions taken by central banks. These measures have provided households and firms with significant support. An inability or unwillingness to continue with such support or the untimely withdrawal of support present a downside risk to growth.

While COVID-19 and related risks dominate the economic outlook, geopolitical risks also present a threat. These risks include:

- Continued long-term differences between the US and China, which could affect sentiment and restrict global economic activity.
- The re-emergence of social unrest in Hong Kong.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

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

The Consensus Downside scenario

In the consensus Downside scenario, economic recovery is considerably weaker compared to 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 expectation. The scenario is consistent with the key downside risks articulated above. Further outbreaks of COVID-19, coupled with delays in vaccination programmes lead to longer lasting restrictions on economic activity. Other global risks also increase and drive increased risk-aversion in asset markets.

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	(1.0) (4Q22)	2.3 (4Q22)
Unemployment rate	5.6 (2Q22)	4.0 (2Q22)
House price growth	(7.9) (4Q22)	(3.7) (2Q22)
Probability	20	10

Note: Extreme point in the consensus Downside is 'worst outcome' in the scenario, i.e. lowest GDP growth, highest unemployment rate etc. in first two years of the scenario.

Downside 2 scenario

The Downside 2 scenario features a deep global recession. In this scenario, new COVID-19 variants emerge that cause infections to rise sharply in 2022, resulting in setbacks to vaccine programmes and the rapid imposition of restrictions on mobility and travel across some countries. The scenario also assumes governments and central banks are unable to significantly increase fiscal and monetary support, which results in abrupt corrections in labour and asset markets.

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	(8.2) (4Q22)	(4.8) (4Q22)
Unemployment rate	6.1 (4Q22)	5.4 (4Q23)
House price growth	(17.7) (4Q22)	(24.8) (4Q22)
Probability	5	5

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

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

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

Scenario weighting

In considering economic uncertainty and assigning probabilities to scenarios, management has considered both global and local-specific factors. This has led management to assigning scenario probabilities that are tailored to its view of uncertainty in individual markets.

To inform its view, management has considered the progression and response to the virus in individual markets, the efficacy of vaccine roll-outs, the degree of current and expected future government support and connectivity with other countries. Management has also been guided by the policy response and economic performance through the pandemic, as well as the evidence that economies have adapted as the virus has progressed.

A key consideration in Q4 2021 has been the emergence of the new variant - Omicron - in December 2021. The virulence and severity of the new strain, in addition to the continued efficacy of vaccines against it was unknown when the variant first emerged. Management has therefore determined that uncertainty attached to forecasts has increased and sought to reflect this in scenario weightings.

China's significant capacity to extend policy support to the economy and manage through COVID-19 related disruptions, led management to conclude that the economic outlook for mainland China was the least uncertain of all our top markets. The Central scenario for mainland China has been assigned an 80% probability while a total of 15% has been assigned to the two Downside scenarios. In Hong Kong, the combination of recurrent outbreaks and the other risks outlined above, have led management to assign a 25% weight to the two Downside scenarios.

Critical accounting estimates and judgements

The calculation of ECL under HKFRS 9 involves significant judgements, assumptions and estimates. Despite a general recovery in economic conditions during 2021, the level of estimation uncertainty and judgement has remained high during 2021 as a result of the ongoing economic effects of the COVID-19 pandemic and other sources of economic instability, including significant judgements relating to:

- the selection and weighting of economic scenarios, given rapidly changing economic conditions in an unprecedented manner, uncertainty as to the effect of government and central bank support measures designed to alleviate adverse economic impacts, and a wider distribution of economic forecasts than before the pandemic. The key judgements are the length of time over which the economic effects of the pandemic will occur and the speed and shape of recovery. The main factors include the effectiveness of pandemic containment measures, the pace of roll-out and effectiveness of vaccines, and the emergence of new variants of the virus, plus a range of geopolitical uncertainties, which together represent a high degree of estimation uncertainty, particularly in assessing Downside scenarios;

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

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

Critical accounting estimates and judgements *(continued)*

- estimating the economic effects of those scenarios on ECL, where there is no observable historical trend that can be reflected in the models that will accurately represent the effects of the economic changes of the severity and speed brought about by the COVID-19 pandemic and recovery from those conditions. Modelled assumptions and linkages between economic factors and credit losses may underestimate or overestimate ECL in these conditions, and there is significant uncertainty in the estimation of parameters such as collateral values and loss severity;
- the identification of customers experiencing significant increases in credit risk and credit impairment, particularly where those customers have accepted payment deferrals and other reliefs designed to address short-term liquidity issues given muted default experience to date. The use of segmentation techniques for indicators of significant increases in credit risk involves significant estimation uncertainty; 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

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 2021, and judgemental adjustments were still required to support modelled outcomes.

We have developed a globally consistent methodology for the application of forward economic guidance into the calculation of ECL for wholesale and retail credit risk. These standard approaches are described below, followed by the management judgemental adjustments made, including those to reflect the circumstances experienced in 2021.

For wholesale portfolio, a global methodology is used for the estimation of the term structure of probability of default ('PD') and loss given default ('LGD'). For PDs, we consider the correlation of forward economic guidance to default rates for a particular industry in the 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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

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

How economic scenarios are reflected in the calculation of ECL *(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.

At 31 December 2021, management judgements were applied to reflect credit risk dynamics not captured by our models. The drivers of the management judgemental adjustments reflect the changing economic outlook and evolving risks across our geographies.

Where the macroeconomic and portfolio risk outlook continues to improve, supported by low levels of observed defaults, adjustments initially taken to reflect increased risk expectations have been retired or reduced.

However, other adjustments have increased where modelled outcomes are overly sensitive and not aligned to observed changes in the risk of the underlying portfolios during the pandemic, or where sector-specific risks are not adequately captured.

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 focuses 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.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

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

Management judgemental adjustments (continued)

Management judgemental adjustments made in estimating the scenario-weighted reported ECL at 31 December 2021 are set out in the following table. The table includes adjustments in relation to data and model limitations, including those driven by late-breaking events and sector specific risks resulting from the pandemic, and as a result of the regular process of model development and implementation.

Management judgemental adjustments to ECL¹:

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

	Retail	Wholesale	Total
	31 December 2020		
(HK\$m)			
Low risk counterparties and economies ²	-	44	44
Corporate lending adjustments	-	686	686
Retail lending adjustments	219	-	219
Retail model default suppression adjustment	503	-	503
Total	722	730	1,452

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

² Low-risk counterparties and economies is comprised of adjustments relating to WPB Insurance only and re-presented to conform with current year's presentation.

At 31 December 2021, wholesale management judgemental adjustments were an ECL increase of HK\$1.4bn mainly from increase in Corporate lending adjustments. These principally reflected the outcome of management judgements for high-risk and vulnerable sectors in some of 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 comparison of key risk metrics to pre-pandemic levels, resulting in either releases or increases to ECL in each geography.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

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

Management judgemental adjustments *(continued)*

The increase in adjustment impact relative to 31 December 2020 was mostly driven by management judgements as a result of the effect of further improvement of macroeconomic scenarios on modelled outcomes and increased dislocation of modelled outcomes to management expectations for high-risk sectors, mainly for China real estate sector. The highest increase was observed in the real estate sector, including a material adjustment to reflect the uncertainty of the higher risk China commercial real estate exposures on account of tightening liquidity and increased refinancing risks. The increase in management judgemental adjustment for China real estate sector was partly offset by adjustment releases in other sectors resulted from improvement in industry outlook and portfolio quality.

For the retail portfolio, management judgemental adjustments mainly relate to macroeconomic conditions and customer support programmes with an ECL underlay of HK\$63m as of 31 December 2021.

- Macroeconomic related adjustments decreased ECL by HK\$259m and other retail lending adjustments increased ECL by HK\$3m. These were primarily to address areas such as economic response model enhancement, customer relief and data limitations.
- Pandemic-related economic recovery adjustments increased ECL by HK\$193m to adjust for the effects of the volatile pace of recovery from the pandemic. This is where in management's judgement, supported by quantitative analyses of portfolio and economic metrics, modelled outcomes which are overly sensitive given the limited observed deterioration in the underlying portfolio during the pandemic.

Economic scenarios sensitivity analysis of ECL estimates

Management considered the sensitivity of the ECL outcome against the economic forecasts as part of the ECL governance process by recalculating the ECL under each scenario described above for selected portfolios, applying a 100% weighting to each scenario in turn. The weighting is reflected in both the determination of a significant increase in credit risk and the measurement of the resulting ECL.

The ECL calculated for the Upside and Downside scenarios should not be taken to represent the upper and lower limits of possible ECL outcomes. The impact of defaults that might occur in the future under different economic scenarios is captured by recalculating ECL for loans in stages 1 and 2 at the balance sheet date. The population of stage 3 loans (in default) at the balance sheet date is unchanged in these sensitivity calculations. Stage 3 ECL would only be sensitive to changes in forecasts of future economic conditions if the loss-given default ('LGD') of a particular portfolio was sensitive to these changes.

There is a particularly high degree of estimation uncertainty in numbers representing more severe scenario 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.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

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

Economic scenarios sensitivity analysis of ECL estimates (continued)

For retail credit risk exposures, the sensitivity analysis includes ECL for loans and advances to customers related to defaulted obligors. This is because the retail ECL for secured mortgage portfolios including loans in all stages is sensitive to macroeconomic variables.

Wholesale and retail sensitivity

The wholesale and retail sensitivity analysis is stated inclusive of management judgemental adjustments, as appropriate to each scenario. The results tables exclude portfolios held by insurance business and small portfolios and as such cannot be directly compared with personal and wholesale lending presented in other credit risk tables. Additionally in both the wholesale and retail analysis, the comparative period results for Downside 2 scenario are not directly comparable to the current period, because they reflect different risk profiles relative with the Consensus scenarios for the period 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		
Reported ECL	<u>2,921</u>	<u>370</u>
Consensus scenarios		
Central scenario	2,550	288
Upside scenario	1,769	96
Downside scenario	4,048	508
Downside 2 scenario	7,947	2,234

HKFRS 9 ECL sensitivity to future economic conditions^{1,3}

	Hong Kong	Mainland China
ECL of financial instruments subject to significant measurement uncertainty ²		
Reported ECL	<u>1,606</u>	<u>424</u>
Consensus scenarios		
Central scenario	1,248	364
Upside scenario	626	98
Downside scenario	2,370	932
Alternative scenario	5,315	3,503

¹ Excludes ECL and financial instruments on defaulted obligors because the measure 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.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

(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 conditions¹

	Hong Kong	Mainland China
	31 December 2021	
ECL of loans and advances to customers ²		
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

HKFRS 9 ECL sensitivity to future economic conditions¹

	Hong Kong	Mainland China
	31 December 2020	
ECL of loans and advances to customers ²		
Reported ECL	1,440	49
Consensus scenarios		
Central scenario	1,396	49
Upside scenario	1,339	48
Downside scenario	1,517	50
Alternative scenario	2,030	65

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.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

(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 guarantees²

(audited)

	Non credit - impaired				Credit - impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI ¹		Total	
	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL
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)

	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.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

(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 guarantees² (continued)
(audited)

	Non credit -impaired				Credit - impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI ¹		Gross	
	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 2020	1,243,623	(1,014)	118,301	(1,838)	2,073	(814)	-	-	1,363,997	(3,666)
Transfers of financial instruments:										
- transfers from Stage 1 to Stage 2	(71,117)	118	71,117	(118)	-	-	-	-	-	-
- transfers from Stage 2 to Stage 1	33,455	(480)	(33,455)	480	-	-	-	-	-	-
- transfers to Stage 3	(1,607)	2	(1,443)	52	3,050	(54)	-	-	-	-
- transfers from Stage 3	-	-	31	-	(31)	-	-	-	-	-
Net remeasurement of ECL arising from transfer of stage	-	219	-	(101)	-	(3)	-	-	-	115
New financial assets originated and purchased	186,164	(342)	7,988	(177)	563	(329)	2	-	194,717	(848)
Assets derecognised (including final repayments)	(111,033)	74	(21,136)	253	(357)	109	-	-	(132,526)	436
Changes to risk parameters - further lending/(repayment)	(73,811)	117	(6,336)	135	1,463	(399)	(1)	-	(78,685)	(147)
Changes in risk parameters - credit quality	-	(255)	-	(1,610)	-	(1,645)	-	-	-	(3,510)
Changes to model used for ECL calculation	-	140	-	1,028	-	-	-	-	-	1,168
Assets written off	-	-	-	-	(1,091)	1,091	-	-	(1,091)	1,091
Foreign exchange and others	7,334	-	312	-	53	-	-	-	7,699	-
At 31 December 2020	1,213,008	(1,421)	135,379	(1,896)	5,723	(2,044)	1	-	1,354,111	(5,361)

	Total
Change in ECL in income statement (charge)/release for the year	(2,786)
Add: Recoveries	104
Add/(less): Others	43
Total ECL (charge)/release for the year	<u>(2,639)</u>

	At 31 December 2020		For the year ended
	Gross carrying/nominal amount	Allowance for ECL	31 December 2020 ECL (charge)/release
Placings with and advances to banks and loans and advances to customers, including loan commitments and financial guarantees	1,354,111	(5,361)	(2,639)
Other financial assets measured at amortised cost	188,872	(187)	(99)
Summary of financial instruments to which the impairment requirements in HKFRS 9 are applied	1,542,983	(5,548)	(2,738)
Debt instruments measured at FVOCI ²	411,423	(9)	2
Performance and other guarantees not considered for HKFRS 9	16,774	(7)	(2)
Total allowance for ECL/ consolidated income statement ECL charge for the year	1,971,180	(5,564)	(2,738)

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.

Management Discussion and Analysis (continued)
Risk (continued)
(a) Credit Risk (continued)
**(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.

Distribution of financial instruments by credit quality at 31 December 2021

	Gross carrying / notional amount					Total	Allowance for ECL	Net
	Strong	Good	Satisfactory	Sub- standard	Credit- impaired			
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	127,835	193,188	257,956	15,058	9,467	603,504	(5,486)	598,018
– non-bank financial institutions	632	7,777	17,584	-	104	26,097	(161)	25,936
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 ¹	353,816	234	-	-	-	354,050	(9)	354,041
	<u>1,065,208</u>	<u>257,054</u>	<u>297,528</u>	<u>15,273</u>	<u>10,429</u>	<u>1,645,492</u>	<u>(7,105)</u>	<u>1,638,387</u>
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
	<u>57,562</u>	<u>3,859</u>	<u>229</u>	<u>7</u>	<u>-</u>	<u>61,657</u>	<u>-</u>	<u>61,657</u>
	<u>1,122,770</u>	<u>260,913</u>	<u>297,757</u>	<u>15,280</u>	<u>10,429</u>	<u>1,707,149</u>	<u>(7,105)</u>	<u>1,700,044</u>
Percentage of total credit quality	66%	15%	17%	1%	1%	100%		
Loan and other credit related commitments ²	279,705	47,077	38,053	219	-	365,054	(162)	364,892
Financial guarantee and similar contracts ²	424	893	1,108	6	-	2,431	(3)	2,428

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.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

(iv) Credit quality of financial instruments (continued)
(audited)

Distribution of financial instruments by credit quality at 31 December 2020

	Gross carrying / notional amount					Total	Allowance for ECL	Net
	Strong	Good	Satisfactory	Sub- standard	Credit- impaired			
In-scope for HKFRS 9 impairment								
Loans and advances to customers at amortised cost	434,281	215,848	281,689	12,412	5,724	949,954	(5,180)	944,774
– personal	322,117	17,634	11,488	342	984	352,565	(1,525)	351,040
– corporate and commercial	112,107	188,178	258,765	12,004	4,580	575,634	(3,542)	572,092
– non-bank financial institutions	57	10,036	11,436	66	160	21,755	(113)	21,642
Placements with and advances to banks at amortised cost	44,044	311	2	-	-	44,357	-	44,357
Cash and balances at central banks	11,226	-	-	-	-	11,226	-	11,226
Reverse repurchase agreements - non-trading	11,280	2,080	-	-	-	13,360	-	13,360
Financial investments measured at amortised cost	105,830	22,385	6,782	-	-	134,997	(173)	134,824
Other assets	17,225	7,554	4,498	12	-	29,289	(14)	29,275
Debt instruments measured at fair value through other comprehensive income ¹	411,036	387	-	-	-	411,423	(9)	411,414
	<u>1,034,922</u>	<u>248,565</u>	<u>292,971</u>	<u>12,424</u>	<u>5,724</u>	<u>1,594,606</u>	<u>(5,376)</u>	<u>1,589,230</u>
Out-of-scope for HKFRS 9 impairment								
Trading assets	36,198	874	-	-	-	37,072	-	37,072
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	243	1,041	-	-	-	1,284	-	1,284
Derivative financial instruments	13,864	3,117	199	1	-	17,181	-	17,181
	<u>50,305</u>	<u>5,032</u>	<u>199</u>	<u>1</u>	<u>-</u>	<u>55,537</u>	<u>-</u>	<u>55,537</u>
	<u>1,085,227</u>	<u>253,597</u>	<u>293,170</u>	<u>12,425</u>	<u>5,724</u>	<u>1,650,143</u>	<u>(5,376)</u>	<u>1,644,767</u>
Percentage of total credit quality	66%	15%	18%	1%	0%	100%		
Loan and other credit related commitments ²	269,830	54,036	32,823	87	-	356,776	(163)	356,613
Financial guarantee and similar contracts ²	99	1,325	1,590	10	-	3,024	(18)	3,006

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.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

(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					Total	Allowance for ECL	Net
	Strong	Good	Satisfactory	Sub- standard	Credit- impaired			
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
Placements 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 commitments²	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 contracts²	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 FVOCI¹								
– 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.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

(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 2020

	Gross carrying / notional amount					Total	Allowance for ECL	Net
	Strong	Good	Satisfactory	Sub- standard	Credit- impaired			
Loans and advances to customers at amortised cost	434,281	215,848	281,689	12,412	5,724	949,954	(5,180)	944,774
– stage 1	430,162	189,437	193,739	808	-	814,146	(1,315)	812,831
– stage 2	4,119	26,411	87,950	11,604	-	130,084	(1,821)	128,263
– stage 3	-	-	-	-	5,723	5,723	(2,044)	3,679
– POCI	-	-	-	-	1	1	-	1
Placings with and advances to banks at amortised cost	44,044	311	2	-	-	44,357	-	44,357
– stage 1	43,854	65	-	-	-	43,919	-	43,919
– stage 2	190	246	2	-	-	438	-	438
– stage 3	-	-	-	-	-	-	-	-
– POCI	-	-	-	-	-	-	-	-
Other financial assets measured at amortised cost	145,561	32,019	11,280	12	-	188,872	(187)	188,685
– stage 1	143,610	31,506	9,227	1	-	184,344	(133)	184,211
– stage 2	1,951	513	2,053	11	-	4,528	(54)	4,474
– stage 3	-	-	-	-	-	-	-	-
– POCI	-	-	-	-	-	-	-	-
Loan and other credit-related commitments²	269,830	54,036	32,823	87	-	356,776	(163)	356,613
– stage 1	269,810	51,989	30,372	70	-	352,241	(90)	352,151
– stage 2	20	2,047	2,451	17	-	4,535	(73)	4,462
– stage 3	-	-	-	-	-	-	-	-
– POCI	-	-	-	-	-	-	-	-
Financial guarantees and similar contracts²	99	1,325	1,590	10	-	3,024	(18)	3,006
– stage 1	97	1,264	1,337	4	-	2,702	(16)	2,686
– stage 2	2	61	253	6	-	322	(2)	320
– stage 3	-	-	-	-	-	-	-	-
– POCI	-	-	-	-	-	-	-	-
	<u>893,815</u>	<u>303,539</u>	<u>327,384</u>	<u>12,521</u>	<u>5,724</u>	<u>1,542,983</u>	<u>(5,548)</u>	<u>1,537,435</u>
Debt instruments at FVOCI¹								
– stage 1	411,036	387	-	-	-	411,423	(9)	411,414
– stage 2	-	-	-	-	-	-	-	-
– stage 3	-	-	-	-	-	-	-	-
– POCI	-	-	-	-	-	-	-	-
	<u>411,036</u>	<u>387</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>411,423</u>	<u>(9)</u>	<u>411,414</u>

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.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

(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') at 31 December 2021, by market and credit quality.

	Hong Kong	Mainland China	Total
Loans and advances to customers ¹	37,828	18,009	55,837
Guarantees issued and others ²	9,123	9,839	18,962
Total mainland China CRE exposure at 31 December 2021	46,951	27,848	74,799
Distribution of mainland China CRE exposure by credit quality			
- Strong	11,461	6,184	17,645
- Good	11,762	8,822	20,584
- Satisfactory	12,069	11,954	24,023
- Sub-standard	8,607	94	8,701
- Credit-impaired	3,052	794	3,846
At 31 December 2021	46,951	27,848	74,799
Allowance for ECL	2,646	174	2,820

¹ Amounts represent gross carrying amount.

² Amounts represent nominal amount.

At 31 December 2021, the Group had no direct credit exposures to developers in the 'red' category of the Chinese government's 'three red lines' framework. The Group's exposures 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.

Mainland China CRE exposure booked in Hong Kong had a higher degree of uncertainty due to tightening liquidity and increased refinancing risks, despite 75% of the portfolio booked with a credit quality of 'satisfactory' or above. At 31 December 2021, the Group had allowances for ECL of HK\$2,646m held against mainland China CRE exposure booked in Hong Kong. We will continue to monitor the prevailing situation closely.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

(v) Credit-impaired loans (audited)

We determine that a financial instrument is credit-impaired and in stage 3 by considering relevant objective evidence, primarily whether:

- contractual payments of either principal or interest are past due for more than 90 days;
- there are other indications that the borrower is unlikely to pay, such as when a concession has been granted to the borrower for economic or legal reasons relating to the borrower's financial condition; or
- the loan is otherwise considered to be in default. If such unlikelihood to pay is not identified at an earlier stage, it is deemed to occur when an exposure is 90 days past due, even where regulatory rules permit default to be defined based on 180 days past due. Therefore, the definitions of credit-impaired and default are aligned as far as possible so that stage 3 represents all loans that are considered defaulted or otherwise credit-impaired.

(vi) Customer relief programmes (unaudited)

In response to the COVID-19 pandemic, governments and regulators around the world have introduced a number of support measures for both personal and wholesale customers. The following table presents the number of personal accounts/wholesale customers and the associated drawn loan values of customers under these schemes and Hang Seng-specific measures at 31 December 2021.

		At 31 December 2021	At 31 December 2020
Personal lending			
Number of customers granted mortgages payment holidays	Thousands	0.08	0.57
Drawn loan value of customers granted mortgage payment holidays	HK\$m	210	1,739
Total mortgages	HK\$m	304,830	284,111
Payment holidays as a proportion of total mortgages	%	0.1	0.6
Number of customers granted other personal lending payment holidays	Thousands	0.13	0.24
Drawn loan value of customers granted other personal lending payment holidays	HK\$m	267	537
Total other personal lending	HK\$m	69,894	68,454
Payment holidays as a proportion of total other personal lending	%	0.4	0.8
Wholesale lending			
Number of customers under customer relief schemes	Thousands	0.11	0.22
Drawn loan value of customers under customer relief schemes	HK\$m	9,130	13,658
Total wholesale loans and advances to customers	HK\$m	629,601	597,389
Customer relief as a proportion of total wholesale loans and advances to customers	%	1.5	2.3
Total customer relief as a proportion of total loans and advances to customers	%	1.0	1.7

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

(vi) Customer relief programmes *(continued)* *(unaudited)*

The initial granting of customer relief does not automatically trigger a migration to stage 2 or 3. However, information provided by payment deferrals is considered in the context of other reasonable and supportable information, as part of the overall assessment for significant increase in credit risk and for credit impairment, to identify loans for which lifetime ECL is appropriate. An extension in payment deferral does not automatically result in stage 2 or stage 3. The key accounting and credit risk judgement to ascertain whether a significant increase in credit risk has occurred is whether the economic effects of COVID-19 on the customer are likely to be temporary over the lifetime of the loan, and do not indicate that a concession is being made in respect of financial difficulty that would be consistent with stage 3.

Customer relief schemes in Hong Kong

Wholesale

Given the continued challenges encountered by the Hong Kong business community on the back of the COVID-19 outbreak, the Bank has rolled out certain temporary relief measures in 2020 to support our corporate clients during this period. The overarching premise of these initiatives was to support the immediate cash flow and liquidity of our customers, without increasing the overall quantum of exposure/ risk appetite to these clients. Eligible customers were required to meet a set of credit criteria.

The prescribed eligibility criteria (which include parameters for CRR, favourable past due history and no Worry-Watch-Monitor classification etc.) are to ensure that these measures are extended only to the 'good book', clients are not already showing any signs of stress and that these arrangements are more proactive and flexible approaches to commercial restructuring as opposed to forbearance/ renegotiated loans/ distressed restructuring.

The relief measures are as follows:

- Programmes implemented by the Bank in Hong Kong in February 2020 for 'eligible client' include:
 - Tenor extension for up to 60 days for trade finance
 - Principal moratorium and / or tenor extension for up to 6 months for non-trade finance

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

(vi) Customer relief programmes *(continued)* *(unaudited)*

Wholesale *(continued)*

- Several rounds of industry-wide relief programmes initiated by the Hong Kong Monetary Authority ('HKMA') for eligible corporates with turnover not exceeding HK\$800m and other prescribed criteria was launched since May 2020. The Pre-approved Principal Payment Holiday Scheme for Corporate Customers ('PPPHS') entailed essentially a up to 90-day tenor extension for trade finance and / or up to 6-month principal moratorium for non-trade finance in each programme.;
- A Special 100% Loan Guarantee under the SME Financing Guarantee Scheme ('SFGS100') was launched in April 20. The guarantee covers a maximum tenor of 3 years and maximum loan size of HK\$4m, and involved transfer of title of the loan to the Hong Kong Mortgage Corporation ('HKMC'), a quasi-government agency. The HKMC has further enhanced the maximum loan amount to HK\$6m and loan tenor to 8 years subsequently.

Retail

The HKMA in early February 2020 encouraged Authorised Institutions to adopt a sympathetic stance in dealing with customers facing financial stress due to the COVID-19 and, to the extent prudent risk management principles permit, consider requests from these borrowers for temporary relief arrangements favourably. The Bank introduced a suite of comprehensive relief measures to ease the financial burden and short term cash flow pressures on personal customers created by the spread of COVID-19. This exemplifies the Bank's commitment to support the local community during these tough times.

The relief measures are as follows:

- Deferred Mortgage Principal Repayment Plan is generally in 6 months and further extension of 6 months is allowed upon request (total up to 12 months). Eligible customers only need to repay interest during the period and the plan is offered to existing mortgage loan customers who have a good repayment record in the past 6 months and also covers Government Home Ownership Scheme ('GHOS') / Tenants Purchase Scheme ('TPS');
- Personal Loan Guarantee Scheme (PLGS) launched on 28 April 2021 – a loan with maximum HK\$80,000 and optional 12 months' payment holidays to customers who are unemployed after January 2020 due to COVID-19 with interest rate 1% APR & interest will be rebated to customers after pay-off.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

(vii) 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 Bank'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.

Residential mortgages (audited)

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

	At 31 December 2021			At 31 December 2020		
	Gross carrying/ nominal amount	ECL	ECL coverage %	Gross carrying/ nominal amount	ECL	ECL coverage %
Stage 1						
Fully collateralised	303,236	(9)	0.00	281,826	(1)	0.00
LTV ratio:						
– Less than 70%	245,906	(9)	0.00	238,721	(1)	0.00
– 71% to 90%	48,846	(0)	0.00	31,581	(0)	0.00
– 91% to 100%	8,484	(0)	0.00	11,524	(0)	0.00
Partially collateralised (A)	42	-	-	77	(0)	0.00
Total	303,278	(9)	0.00	281,903	(1)	0.00
– Collateral value on A	41			73		
Stage 2						
Fully collateralised	5,636	(0)	0.01	5,010	(0)	0.00
LTV ratio:						
– Less than 70%	5,248	(0)	0.01	4,698	(0)	0.00
– 71% to 90%	358	-	-	257	(0)	0.00
– 91% to 100%	30	(0)	0.00	55	(0)	0.00
Partially collateralised (B)	-	-	-	1	-	-
Total	5,636	(0)	0.01	5,011	(0)	0.00
– Collateral value on B	-			1		
Stage 3						
Fully collateralised	432	(12)	2.72	481	(45)	9.36
LTV ratio:						
– Less than 70%	414	(12)	2.82	467	(45)	9.64
– 71% to 90%	18	(0)	0.52	14	(0)	0.14
– 91% to 100%	-	-	-	-	-	-
Partially collateralised (C)	-	-	-	5	-	-
Total	432	(12)	2.72	486	(45)	9.27
– Collateral value on C	-			5		
POCI						
Fully collateralised	-	-	-	-	-	-
LTV ratio:						
– Less than 70%	-	-	-	-	-	-
– 71% to 90%	-	-	-	-	-	-
– 91% to 100%	-	-	-	-	-	-
Partially collateralised (D)	-	-	-	-	-	-
Total	-	-	-	-	-	-
– Collateral value on D	-			-		
	309,346	(21)	0.01	287,400	(46)	0.02

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.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

(vii) Collateral and other credit enhancements (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.

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

	At 31 December 2021			At 31 December 2020		
	Gross carrying/ nominal amount	ECL	ECL coverage %	Gross carrying/ nominal amount	ECL	ECL coverage %
Stage 1						
Not collateralised	75,656	(32)	0.04	98,686	(41)	0.04
Fully collateralised	134,639	(84)	0.06	151,276	(110)	0.07
Partially collateralised (A)	4,721	(3)	0.06	4,690	(5)	0.11
Total	<u>215,016</u>	<u>(119)</u>	<u>0.06</u>	<u>254,652</u>	<u>(156)</u>	<u>0.06</u>
– Collateral value on A	2,948			3,700		
Stage 2						
Not collateralised	32,398	(1,986)	6.13	3,864	(4)	0.10
Fully collateralised	25,433	(175)	0.69	24,248	(210)	0.87
Partially collateralised (B)	778	(10)	1.29	1,081	(14)	1.30
Total	<u>58,609</u>	<u>(2,171)</u>	<u>3.70</u>	<u>29,193</u>	<u>(228)</u>	<u>0.78</u>
– Collateral value on B	361			889		
Stage 3						
Not collateralised	1,298	(414)	31.90	-	-	-
Fully collateralised	2,637	(342)	12.97	129	(18)	13.95
Partially collateralised (C)	-	-	-	-	-	-
Total	<u>3,935</u>	<u>(756)</u>	<u>19.21</u>	<u>129</u>	<u>(18)</u>	<u>13.95</u>
– Collateral value on C	-			-		
POCI						
Not collateralised	-	-	-	-	-	-
Fully collateralised	765	-	-	-	-	-
Partially collateralised (D)	-	-	-	-	-	-
Total	<u>765</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
– Collateral value on D	-			-		
	<u>278,325</u>	<u>(3,046)</u>	<u>1.09</u>	<u>283,974</u>	<u>(402)</u>	<u>0.14</u>

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.

Management Discussion and Analysis (continued)

Risk (continued)

(a) Credit Risk (continued)

(vii) 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 2021			At 31 December 2020		
	Gross carrying/ nominal amount	ECL	ECL coverage %	Gross carrying/ nominal amount	ECL	ECL coverage %
Stage 1						
Not collateralised	321,650	(280)	0.09	266,101	(371)	0.14
Fully collateralised	148,902	(104)	0.07	139,653	(252)	0.18
Partially collateralised (A)	53,498	(25)	0.05	46,560	(69)	0.15
Total	524,050	(409)	0.08	452,314	(692)	0.15
– Collateral value on A	23,659			20,574		
Stage 2						
Not collateralised	23,596	(204)	0.86	36,635	(198)	0.54
Fully collateralised	53,111	(335)	0.63	55,445	(512)	0.92
Partially collateralised (B)	9,259	(30)	0.32	15,051	(207)	1.38
Total	85,966	(569)	0.66	107,131	(917)	0.86
– Collateral value on B	3,532			7,724		
Stage 3						
Not collateralised	1,881	(1,252)	66.56	1,903	(1,342)	70.52
Fully collateralised	952	(6)	0.63	945	(37)	3.92
Partially collateralised (C)	1,831	(529)	28.89	1,763	(428)	24.28
Total	4,664	(1,787)	38.31	4,611	(1,807)	39.19
– Collateral value on C	1,159			1,084		
POCI						
Not collateralised	-	-	-	1	-	-
Fully collateralised	207	-	-	-	-	-
Partially collateralised (D)	-	-	-	-	-	-
Total	207	-	-	1	-	-
– Collateral value on D	-			-		
	614,887	(2,765)	0.45	564,057	(3,416)	0.61

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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(a) Credit Risk *(continued)*

(vii) Collateral and other credit enhancements *(continued)* *(audited)*

Placings with and advances to banks *(audited)*

Placings with and advances to banks are typically unsecured. At 31 December 2021, HK\$72,493m (2020: HK\$44,357m) 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 2021 are residential properties with carrying amount of HK\$35m (2020: residential properties of HK\$24m and commercial properties of HK\$4m).

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(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 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 2021

- We have rolled out second line of defence for liquidity risk and interest rate risk of banking book during 2021. Second line of defence for capital is in progress.
- An internal liquidity metric ('ILM') was introduced during 2021 to supplement the Liquidity Coverage Ratio ('LCR') and Net Stable Funding Ratio ('NSFR') metrics.
- We enhanced our risk management of structural foreign exchange ('SFX') risk. We hedge structural foreign exchange positions where it is capital efficient to do so, and subject to approved limits.

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.

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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(b) Treasury Risk *(continued)*

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.

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. As part of the Group's capital management policy, 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.

The Group uses the advanced internal ratings-based approach ('IRB') to calculate its credit risk for the majority of its non-securitisation exposures. For counterparty credit risk, the Group replaces the current exposure method with standardised (counterparty credit risk) approach to calculate its default risk exposures starting from 30 June 2021. 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 2021, 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. On 28 October 2021, the HKMA maintained the CCyB for Hong Kong at 1.0%. On 24 December 2021, the HKMA maintained the D-SIB designation as well as HLA requirement at 1% for the Group.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(b) Treasury Risk *(continued)*

Capital Management *(continued)*

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. There will be an increase in the internal loss-absorbing capacity requirements starting from 1 January 2022 and the Bank has issued non-capital loss-absorbing capacity debt instrument of HK\$5bn to its immediate holding company in the second half of the year accordingly.

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- 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 maintain a regulatory reserve to satisfy the provisions of the Banking Ordinance and local regulatory requirements for prudential supervision purposes. At 31 December 2021, the effect of this requirement is to restrict the amount of reserves which can be distributed to shareholders by HK\$441m (2020: HK\$1,323m).

We closely monitor and consider future regulatory change and continue to evaluate the impact upon our capital requirements of regulatory developments. This includes the Basel III reforms package, over which there remains a significant degree of uncertainty due to the number of national discretions within Basel's reforms. It remains premature to provide details of an impact although we currently anticipate the potential for an increase for RWAs, driven by the output floor, in the long term.

Management Discussion and Analysis (continued)

Risk (continued)

(b) Treasury Risk (continued)

Capital Management (continued)

Capital base (continued) (unaudited)

The following table sets out the composition of the Group's capital base under Basel III at 31 December 2021 and 31 December 2020. 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.

	2021	2020
Common Equity Tier 1 ('CET1') Capital		
Shareholders' equity	144,651	145,915
- Shareholders' equity per Consolidated Balance Sheet	184,332	183,100
- Additional Tier 1 ('AT1') perpetual capital instruments	(11,744)	(11,744)
- Unconsolidated subsidiaries	(27,937)	(25,441)
Non-controlling interests	-	-
- Non-controlling interests per Consolidated Balance Sheet	84	95
- Non-controlling interests in unconsolidated subsidiaries	(84)	(95)
Regulatory deductions to CET1 capital	(28,052)	(27,306)
- Cash flow hedging reserve	2	(51)
- Changes in own credit risk on fair valued liabilities	(6)	(10)
- Property revaluation reserves ¹	(24,617)	(24,067)
- Regulatory reserve	(441)	(1,323)
- Intangible assets	(2,359)	(1,566)
- Defined benefit pension fund assets	-	(6)
- Deferred tax assets net of deferred tax liabilities	(90)	(183)
- Valuation adjustments	(126)	(100)
- Excess of total expected loss amount over total eligible provisions under the IRB	(415)	-
Total CET1 Capital	116,599	118,609
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 Tier 1 ('T1') Capital	128,343	130,353
Tier 2 ('T2') Capital		
Total T2 capital before regulatory deductions	11,460	11,762
- Property revaluation reserves ¹	11,078	10,831
- Impairment allowances and regulatory reserve eligible for inclusion in T2 capital	382	931
Regulatory deductions to T2 capital	(1,045)	(1,045)
- Significant capital investments in unconsolidated financial sector entities	(1,045)	(1,045)
Total T2 Capital	10,415	10,717
Total Capital	138,758	141,070

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.

Management Discussion and Analysis (continued)

Risk (continued)

(b) Treasury Risk (continued)

Capital Management (continued)

Risk-weighted assets by risk type

(unaudited)

	2021	2020
Credit risk	659,956	624,487
Market risk	13,248	14,332
Operational risk	60,924	66,709
Total	<u>734,128</u>	<u>705,528</u>

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:

	2021	2020
CET1 capital ratio	15.9%	16.8%
T1 capital ratio	17.5%	18.5%
Total capital ratio	18.9%	20.0%

In addition, the capital ratios of all tiers as of 31 December 2021 would be reduced by approximately 0.5 percentage point after the prospective fourth interim dividend payment for 2021. The following table shows the pro-forma basis position of the capital ratios after the prospective interim dividend.

	Pro-forma 2021	Pro-forma 2020
CET1 capital ratio	15.4%	16.1%
T1 capital ratio	17.0%	17.7%
Total capital ratio	18.4%	19.2%

Leverage ratio

(unaudited)

	2021	2020
Leverage ratio	7.5%	7.9%
T1 capital	128,343	130,353
Exposure measure	1,704,064	1,641,358

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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(b) Treasury Risk *(continued)*

Capital Management *(continued)*

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;
- 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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(b) Treasury Risk *(continued)*

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 HK dollar. An entity's functional currency is normally that of the primary economic environment in which the entity operates. The Group's structural foreign exchange exposures are managed with the primary objective of ensuring, where practical, 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.

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 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

We adopt a comprehensive Group's policies, metrics and controls which aims 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 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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(b) Treasury Risk *(continued)*

Liquidity and funding risk *(continued)* *(audited)*

Structure and organisation

ALCM teams are responsible for the application of the Group's 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.

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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(b) Treasury Risk *(continued)*

Liquidity and funding risk *(continued)*

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 ILM was introduced in January 2021 to supplement the LCR and NSFR metrics. An appropriate funding and liquidity profile is managed through a wider set of measures:

- a minimum LCR requirement;
- a minimum NSFR requirement;
- an internal liquidity metric ('ILM');
- a depositor concentration limit;
- three-month and twelve-month cumulative rolling term contractual maturity limits covering deposits from banks, deposits from non-bank financial institutions and securities issued;
- a minimum LCR requirement by currency;
- intra-day liquidity;
- the application of liquidity funds transfer pricing; and
- forward-looking funding assessments.

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 2021, 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 2021, 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 2021, 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 in the LCR *(unaudited)*

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

Single currency ILM metric will be in place from 2022 for all operating entities to monitor the cross currency funding risk.

Additional contractual obligations *(Unaudited)*

Under the terms of our current collateral obligations under derivative contracts (which are 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.

Management Discussion and Analysis (continued)

Risk (continued)

(b) Treasury Risk (continued)

Liquidity and funding risk (continued)

The management of liquidity and funding risk (continued)

Liquidity and funding risk in 2021 (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'). The Group 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 2021	30 Sep 2021	30 Jun 2021	31 Mar 2021	31 Dec 2020	30 Sep 2020	30 Jun 2020	31 Mar 2020
Average LCR	<u>191.8%</u>	<u>203.2%</u>	<u>214.4%</u>	<u>204.0%</u>	<u>207.8%</u>	<u>199.4%</u>	<u>198.0%</u>	<u>181.6%</u>

The liquidity position of the Group remained strong in 2021. The average LCR ranged from 191.8% to 214.4% for the reportable quarters. The LCR at 31 December 2021 was 192.7% (230.4% at 31 December 2020).

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 2021	30 Sep 2021	30 Jun 2021	31 Mar 2021	31 Dec 2020	30 Sep 2020	30 Jun 2020	31 Mar 2020
Level 1 assets	<u>350,120</u>	<u>342,427</u>	<u>355,092</u>	<u>377,648</u>	384,837	356,059	315,876	297,826
Level 2A assets	<u>17,013</u>	<u>15,138</u>	<u>15,464</u>	<u>14,301</u>	14,498	15,031	15,415	15,056
Level 2B assets	<u>2,321</u>	<u>2,445</u>	<u>3,073</u>	<u>2,169</u>	2,563	2,092	1,795	1,224
Total	<u>369,454</u>	<u>360,010</u>	<u>373,629</u>	<u>394,118</u>	<u>401,898</u>	<u>373,182</u>	<u>333,086</u>	<u>314,106</u>

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 2021	30 Sep 2021	30 Jun 2021	31 Mar 2021	31 Dec 2020	30 Sep 2020	30 Jun 2020	31 Mar 2020
NSFR	<u>147.4%</u>	<u>146.6%</u>	<u>146.6%</u>	<u>150.5%</u>	<u>152.9%</u>	<u>149.2%</u>	<u>151.0%</u>	<u>146.0%</u>

The funding position of the Group remained strong and stable in 2021. The NSFR was 147.4% for the quarter ended 31 December 2021 (152.9% as at 31 December 2020), 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.

Management Discussion and Analysis (continued)

Risk (continued)

(b) Treasury Risk (continued)

Liquidity and funding risk (continued)

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 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
	<u>1,236,510</u>	<u>123,934</u>	<u>83,200</u>	<u>17,168</u>	<u>14,220</u>	<u>1,475,032</u>
Loan commitments	514,920	-	-	-	-	514,920
Financial guarantee and credit risk related guarantee contracts	28,950	-	-	-	-	28,950
	<u>543,870</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>543,870</u>
At 31 December 2020						
Deposits from banks	11,273	-	1,676	-	-	12,949
Current, savings and other deposit accounts	1,086,458	97,646	25,171	830	-	1,210,105
Repurchase agreements – non-trading	4,178	-	1,475	635	-	6,288
Trading liabilities	30,937	-	-	-	-	30,937
Derivative financial instruments	18,923	221	610	1,078	-	20,832
Financial liabilities designated at fair value	12,972	9,809	9,119	348	416	32,664
Certificates of deposit and other debt securities in issue	3,290	20,471	38,293	706	-	62,760
Other financial liabilities	17,920	6,059	3,587	1,507	268	29,341
Subordinated liabilities	-	88	288	7,593	13,810	21,779
	<u>1,185,951</u>	<u>134,294</u>	<u>80,219</u>	<u>12,697</u>	<u>14,494</u>	<u>1,427,655</u>
Loan commitments	499,493	-	-	-	-	499,493
Financial guarantee and credit risk related guarantee contracts	19,847	-	-	-	-	19,847
	<u>519,340</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>519,340</u>

The balances in the above tables incorporates all cash flows relating to principal and future coupon payments on an undiscounted basis (except for trading liabilities and trading derivatives). Trading liabilities and trading derivatives have been included in the 'Within one month' time bucket as trading liabilities are typically held for short periods of time. The undiscounted cash flows payable under hedging derivative liabilities are classified according to their contractual maturity. Investment contract liabilities have been included in financial liabilities designated at fair value, whereby the policyholders have the option to surrender or transfer at any time, and are reported in the 'Over five years' time bucket. A maturity analysis prepared on the basis of the earliest possible contractual repayment date (assuming that all surrender and transfer options are exercised) would result in all investment contracts being presented as falling due within one year or less. The undiscounted cash flows potentially payable under loan commitments and financial guarantee contracts are classified on the basis of the earliest date they can be called. Cash flows payable in respect of customer accounts are primarily contractually repayable on demand or at short notice.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(b) Treasury Risk *(continued)*

Interest Rate Risk in the Banking Book

(unaudited)

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 function uses a number of measures to monitor and control interest rate risk in the banking book, including:

- net interest income sensitivity; and
- economic value of equity sensitivity.

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 2022 and 25 basis points parallel rises or falls in all yield curves at the beginning of year from 1 January 2022.

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 2022 by HK\$6,360m for 100 basis points case and by HK\$1,904m 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\$5,155m for 100 basis points case and by HK\$1,893m for 25 basis points case.

Management Discussion and Analysis (continued)

Risk (continued)

(b) Treasury Risk (continued)

Interest Rate Risk in the Banking Book (continued) (unaudited)

Net interest income sensitivity (continued)

The expected net interest income sensitivity is described as follows:

	100bp parallel increase	100bp parallel decrease	25bp parallel increase	25bp parallel decrease
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	<u>6,360</u>	<u>(5,155)</u>	<u>1,904</u>	<u>(1,893)</u>
Change in 2021 expected net interest income				
- HKD	2,679	(1,311)	670	(759)
- USD	411	(694)	103	(230)
- other	1,069	(1,131)	268	(273)
Total	<u>4,159</u>	<u>(3,136)</u>	<u>1,041</u>	<u>(1,262)</u>

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 recognized 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.

Management Discussion and Analysis (continued)

Risk (continued)

(b) Treasury Risk (continued)

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 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
	At 31 December 2020	Maximum impact	Minimum impact
+ 100 basis points parallel move in all yield curves	(51)	(76)	(51)
As a percentage of shareholders' equity at 31 December 2020(%)	(0.03)	(0.04)	(0.03)
- 100 basis points parallel move in all yield curves	98	251	98
As a percentage of shareholders' equity at 31 December 2020 (%)	0.05	0.14	0.05

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(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.

Exposure to market risk is separated into two portfolios: trading portfolios and non-trading portfolios.

Key developments in 2021

There were no material changes to our policies and practices for the management of market risk in 2021.

Governance and structure

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

	Trading Risk	Non-Trading Risk
Risk Type	- Foreign exchange & Commodities - Interest rates - Credit spreads	- Foreign exchange - Interest rates - Credit spreads
Risk Measure	Value at risk / Sensitivity analysis / Stress testing	Value at risk / Sensitivity analysis / Stress testing

Where appropriate, the Group applies similar risk management policies and measurement techniques to both trading and non-trading portfolios. The Group's objective is to manage and control market risk exposures to optimise return on risk while maintaining a market profile consistent with the established risk appetite.

Market risk governance

(audited)

Market risk is managed and controlled through limits approved by the Group 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 Asset and Liability Management Committee ('ALCO').

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(c) Market risk *(continued)*

Market risk governance *(continued)* *(audited)*

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. Trading 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. In addition, the Group calculates VaR for non-trading portfolios to have a complete picture of risk. 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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(c) Market risk *(continued)*

Monitoring and limiting market risk exposures*(continued)*

Value at risk ('VaR') *(continued)*

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 and non-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.

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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(c) Market risk *(continued)*

Monitoring and limiting market risk exposure *(continued)*

Stress testing *(continued)* *(audited)*

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 2021 *(unaudited)*

Financial markets were resilient in 2021. During the first half of the year, the rollout of COVID vaccination programmes, loose financial conditions and continued fiscal support contributed to a gradual reopening of major economies. Concerns of rising inflationary pressures were mainly interpreted as transitory. Whilst the path of monetary policies remained uncertain, central banks continued to provide liquidity. This supported risk assets valuations, while volatility in most asset classes remained subdued. In the second half of 2021, amid the emergence of new COVID variants, global equities reached further record highs, as investors focused on global economic resilience and corporate earnings. Yields followed a downward trend for most of 3Q-21, before reversing in the final weeks of the year, when markets began pricing in a faster pace of interest rate rise in some of the major economies, due to persistently elevated inflation and the expectation of a tighter monetary policies. Credit markets remained strong, with credit benchmark indices for investment-grade and high-yield debt close to pre-pandemic levels. Nevertheless, a wave of volatility and uncertainty in the Chinese property sector due to liquidity crunch resulting in numerous rating downgrades and defaults during second half of 2021.

The Group continued to manage market risk prudently during 2021. 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.

Management Discussion and Analysis (continued)

Risk (continued)

(c) Market risk (continued)

Trading portfolios

(unaudited)

Value at risk of the trading portfolios

The Trading VaR at 31 December 2021 decreased when compared against 31 December 2020, mainly driven by the decrease in foreign exchange trading positions. In average terms, the VaR level was also lower in 2021.

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

Trading, 99% 1 day

(audited)

	At 31 December 2021	Minimum during the year	Maximum during the year	Average for the year
VaR				
Trading	31	26	55	40
Foreign exchange trading	3	3	28	20
Interest rate trading	31	24	51	35
Portfolio diversification	(3)	-	-	(15)

	At 31 December 2020	Minimum during the year	Maximum during the year	Average for the year
VaR				
Trading	43	29	58	42
Foreign exchange trading	23	21	35	26
Interest rate trading	30	19	45	31
Portfolio diversification	(10)	-	-	(15)

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.

Management Discussion and Analysis (continued)

Risk (continued)

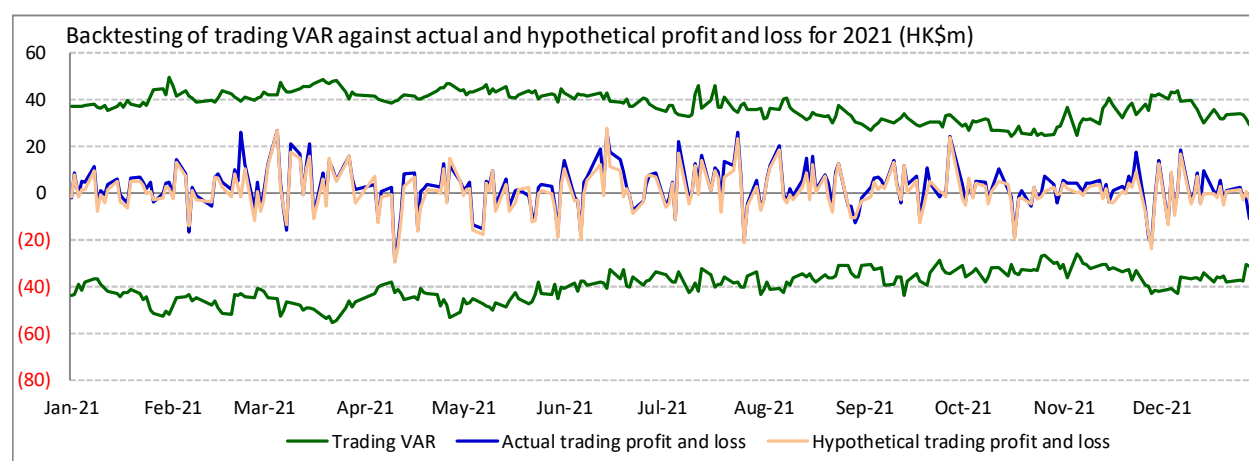
(c) Market risk (continued)

Trading portfolios (continued) (unaudited)

Backtesting (unaudited)

In 2021, there was no profit or loss exception at the Group consolidated level.

The graph below shows the daily trading VaR against actual and hypothetical profit and loss for the Group during 2021.



The Group routinely validates the accuracy of the VaR models by back-testing them with both actual and hypothetical profit and loss. Hypothetical profit and loss excludes non-modelled items such as fees, commissions and revenues of intra-day transactions.

The number of back-testing exceptions is used to gauge how well the models are performing. The Group considers enhanced internal monitoring of a VaR model if more than five loss exceptions occur in a 250-day period.

Equities exposures (audited)

The Group's equities exposures in 2021 and 2020 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.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(d) Resilience risk *(unaudited)*

Overview

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 management

Key developments in 2021

The Operational and Resilience Risk sub-function provides robust non-financial risk steward oversight of the management of risk by the Group businesses, functions and legal entities. It also provides effective and timely independent challenge. During the year there are a number of initiatives to strengthen the management of non-financial risks:

- Updating material risk taxonomy and control libraries and refreshing material risk and control assessment for a more robust understanding of our risk and control environment
- Enabling better analysis and reporting of non-financial risks through access to a wider range of management information on risks and controls
- Increasing risk stewards capability by training to allow for effective stewardship
- Strengthening the read across of issues and near misses by implementing Group-wide harmonized approach across businesses and functions
- Enhancing the risk management oversight across our most material change initiatives to support growth in our strategic transformation

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 seven risk types related to: third parties and supply chains; information, technology and cybersecurity; payments and manual processing; physical security; business interruption and contingency risk; building unavailability; and workplace safety.

Key risk management processes

Operational resilience is our ability to anticipate, prevent, adapt, respond to, recover and learn from internal or external disruption, protecting customers, the markets we operate in and economic stability. Resilience is determined by assessing whether we are able to continue to provide our most important services, within an agreed level. We accept we will not be able to prevent all disruption, we prioritise investment to continually improve the response and recovery strategies for our most important business services.

Business operations continuity

Business Continuity, in response to the COVID-19 pandemic, remains in place across a number of locations where the Group operates, allowing the majority of service level agreements to be maintained. There were no significant impacts to service delivery.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(e) Regulatory Compliance Risk *(unaudited)*

Overview

Regulatory compliance risk is the risk that we fail to observe the letter and spirit of all relevant laws, codes, rules, regulations and standards of good market practice, and incur fines and penalties and suffer damage to our business as a consequence.

The Regulatory Compliance function provides independent, objective oversight and challenge and promotes a compliance oriented culture, supporting the business in delivering fair outcomes for customers, maintaining the integrity of financial markets and achieving the Group's strategic objectives.

Key developments in 2021

There were no material changes to the policies and practices for the management of regulatory compliance risk in 2021, except for the initiatives that we undertook to raise our standards in relation to the conduct of our business, as described below under 'Conduct of business'.

Governance and structure

Regulatory Compliance is part of the Compliance function and provides guidance and advice to business and functions.

Key risk management processes

We regularly review our policies and procedures. Global policies and procedures require the prompt identification and escalation of any actual or potential regulatory breach to Regulatory Compliance. Reportable events are escalated to the RMM and RC, as appropriate.

Conduct of business

In 2021, we continued to take steps to raise our standards relating to conduct, which included:

- delivering further mandatory conduct training to all employees;
- incorporating the assessment of expected values and behaviours as key determinants in recruitment, performance appraisal and remuneration processes;
- improving our market surveillance capability;
- introducing policies and procedures to strengthen support for potentially vulnerable customers;
- enhancing the quality and depth of conduct management information and how it is used across the Bank;
- implementing an assessment process to check the effectiveness of our conduct initiatives across the Bank; and
- assessing conduct standards and practices within our key third party suppliers and distributors.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(f) Financial Crime Risk

(unaudited)

Overview

Financial crime risk is the risk that we knowingly or unknowingly help parties to commit or to further potentially illegal activity through the Bank, including money laundering, fraud, bribery and corruption, tax evasion, sanctions breaches, and terrorist and proliferation financing.

Financial crime risk management

Key developments in 2021

We consistently review the effectiveness of our financial crime risk management framework, which includes consideration of geopolitical and wider economic factors, and 2021 was no exception. We continued to support Business in navigating the complex and dynamic nature of geopolitics as it relates to sanctions and export control risk. A key focus area in this regard relates to the array of new regulations and designations in 2021 and in alignment with our policy, which is to comply with all applicable sanctions regulations in the jurisdictions in which we operate.

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

- We strengthened our anti-fraud capabilities, notably with respect to the early identification of first party lending fraud and the identification of new strategic detection tools.
- We continued to develop leading-edge surveillance technology and capabilities to identify potential market abuse, including testing machine learning capabilities to detect unauthorised trading.
- We invested in the use of artificial intelligence (AI) and advanced analytics techniques to manage financial crime risk, notably new automated capabilities in name and transaction screening.
- We implemented a market leading gifts and entertainment recording and approval system, which, in combination with an expenses reconciliation tool, allows us to manage our gifts and entertainment risk consistently and effectively.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(f) Financial Crime Risk *(continued)* *(unaudited)*

Financial crime risk management *(continued)*

Governance and structure

Since establishing a global framework of Financial Crime Risk Management Committees in 2018, we have continued to strengthen and review the effectiveness of our governance framework to manage financial crime risk. They help to enable compliance with the letter and the spirit of all applicable financial crime compliance laws and regulations, as well as our own standards, values and policies relating to financial crime risks. The Financial Crime Risk Management Meeting, chaired by the Chief Executive, has served as the pinnacle of this governance structure, ultimately responsible for the management of financial crime risk. As a reflection of the growing maturity and effectiveness of our financial crime risk management, this meeting was integrated with the Risk Management Meeting in May 2021.

During 2021, we redesigned and delivered an integrated operating model for our Compliance function, with the accompanying restructure providing greater accountability to our Compliance team. This team, led by the chief compliance officer, will support the Bank in aligning the way in which we manage all compliance risks, including financial crime risk, to the needs and aims of the wider business. They will support making our compliance risk management processes and procedures more efficient and effective.

Key risk management processes

We 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, protecting the integrity of the financial system and the communities we serve. We also participate in public-private partnerships and information-sharing initiatives.

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(g) 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.

Key developments in 2021

Redeveloped critical Internal Rating Based (IRB) Approach models for credit risk were validated and submitted to the HKMA. These new models have been built to enhance standards using improved data.

Models impacted by changes to alternative rate setting mechanisms due to IBOR transition were redeveloped and validated.

Further enhancements to the control framework for Sarbanes-Oxley were made to address the control weaknesses that emerged as a result of significant increases in model adjustments and overlays that were applied to compensate for the impact of COVID-19 on models and to introduce a requirement for second line to approve material models prior to use.

Model owners in Business and Functions continued to embed the requirements included in the HSBC Group Model Risk Policy and Standards introduced in 2020.

New Model Risk Appetite measure was rolled out, which is more forward looking and helped Businesses and Functions manage model risk more effectively.

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.

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

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

Management Discussion and Analysis *(continued)*

Risk *(continued)*

(h) 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 an economic capital ('EC') 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 methodology for the economic capital calculation is largely aligned to the pan-European Solvency II insurance capital regulation. The EC coverage ratio (economic net asset value divided by the economic 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 EC, the regulatory solvency ratio is also a metric used to manage risk appetite on an entity basis.

Management Discussion and Analysis (continued)

Risk (continued)

(h) Insurance manufacturing operation risk (continued) (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
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
2020				
<i>(re-presented)</i> ³				
Financial assets:				
- financial assets designated and otherwise mandatorily measured at fair value through profit or loss	199	20,419	-	20,618
- derivative financial instruments	-	439	-	439
- financial investments	-	116,983	6,177	123,160
- other financial assets	39	8,365	263	8,667
Total financial assets	238	146,206	6,440	152,884
Reinsurers' share of liabilities under insurance contracts	-	5,471	-	5,471
Present value of in-force long-term insurance contracts	-	-	22,551	22,551
Other assets	-	6,203	1,313	7,516
Total assets	238	157,880	30,304	188,422
Liabilities under investment contracts designated at fair value				
	137	282	-	419
Liabilities under insurance contracts	69	142,611	-	142,680
Deferred tax	-	9	3,776	3,785
Derivative financial instruments	-	184	-	184
Other liabilities	-	-	9,558	9,558
Total liabilities	206	143,086	13,334	156,626
Shareholders' equity	-	-	31,796	31,796
Total liabilities and shareholders' equity	206	143,086	45,130	188,422

¹ Comprises life insurance contracts and investment contracts.

² Comprises shareholder assets and liabilities.

³ Comparative figures have been re-presented to conform with current year's presentation.

Management Discussion and Analysis (continued)

Risk (continued)

(h) Insurance manufacturing operation risk (continued) (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.

Management Discussion and Analysis (continued)

Risk (continued)

(h) Insurance manufacturing operation risk (continued) (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.

	2021	2020
	Impact on profit after tax and shareholders' equity	Impact on profit after tax and shareholders' equity
+ 100 basis points shift in yield curves	(675)	(750)
- 100 basis points shift in yield curves	725	787
10 per cent increase in equity prices	551	442
10 per cent decrease in equity prices	(533)	(468)
10% increase in USD exchange rate compared to all currencies	76	126
10% decrease in USD exchange rate compared to all currencies	(76)	(126)

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.

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 (2020: 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.

Management Discussion and Analysis (continued)

Risk (continued)

(h) Insurance manufacturing operation risk (continued) (audited)

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 2021.

Expected maturity of insurance contract liabilities

	Expected cash flows (undiscounted)				Total
	Within 1 year	Over 1 year but within 5 years	Over 5 years but within 15 years	Over 15 years	
2021					
Non-linked insurance	14,958	49,836	82,850	122,856	270,500
Linked insurance	12	41	61	32	146
	<u>14,970</u>	<u>49,877</u>	<u>82,911</u>	<u>122,888</u>	<u>270,646</u>
2020					
Non-linked insurance	15,106	48,599	79,035	109,096	251,836
Linked insurance	11	41	62	32	146
	<u>15,117</u>	<u>48,640</u>	<u>79,097</u>	<u>109,128</u>	<u>251,982</u>

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'.

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.

Management Discussion and Analysis (continued)

Risk (continued)

(h) Insurance manufacturing operation risk (continued) (audited)

Insurance risk (continued)

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

	2021	2020
Effect on profit after tax and total equity at 31 Dec		
10 per cent increase in mortality and/or morbidity rates	(101)	(100)
10 per cent decrease in mortality and/or morbidity rates	102	99
10 per cent increase in lapse rates	(99)	(92)
10 per cent decrease in lapse rates	107	100
10 per cent increase in expense rates	(58)	(63)
10 per cent decrease in expense rates	57	63

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.

Actuarial Control 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 Actuarial Control 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.

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:

	2021	2020
+ 100 basis points shift in yield curves	(806)	(2,891)
- 100 basis points shift in yield curves	902	875

Management Discussion and Analysis (continued)

Risk (continued)

(h) Insurance manufacturing operation risk (continued) (audited)

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:

	2021	2020
10 per cent increase in mortality and/or morbidity rates	(154)	(141)
10 per cent decrease in mortality and/or morbidity rates	261	139
10 per cent increase in lapse rates	(191)	(163)
10 per cent decrease in lapse rates	256	174
10 per cent increase in expense rates	(119)	(116)
10 per cent decrease in expense rates	154	116

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.

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

	2021	2020
Policies denominated in HKD	2.20%	2.15%
Policies denominated in USD	3.30%	3.40%
Policies denominated in RMB	3.00%	3.20%

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

Management Discussion and Analysis (continued)

Risk (continued)

(h) Insurance manufacturing operation risk (continued) (audited)

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:

		2021	2020
	Change in variable	Impact on the policy reserves	Impact on the policy reserves
Discount rate	+100 basis points	(5,014)	(6,269)
Discount rate	-100 basis points	14,875	18,541
Mortality/Morbidity	+10 per cent	403	497
Mortality/Morbidity	-10 per cent	(335)	(417)

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 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 2021.

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 2021, 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
- 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 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 10 Directors, of whom one is ED and nine are Non-executive Directors ("NEDs"). Among the nine NEDs, five 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 10 Directors, four 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.

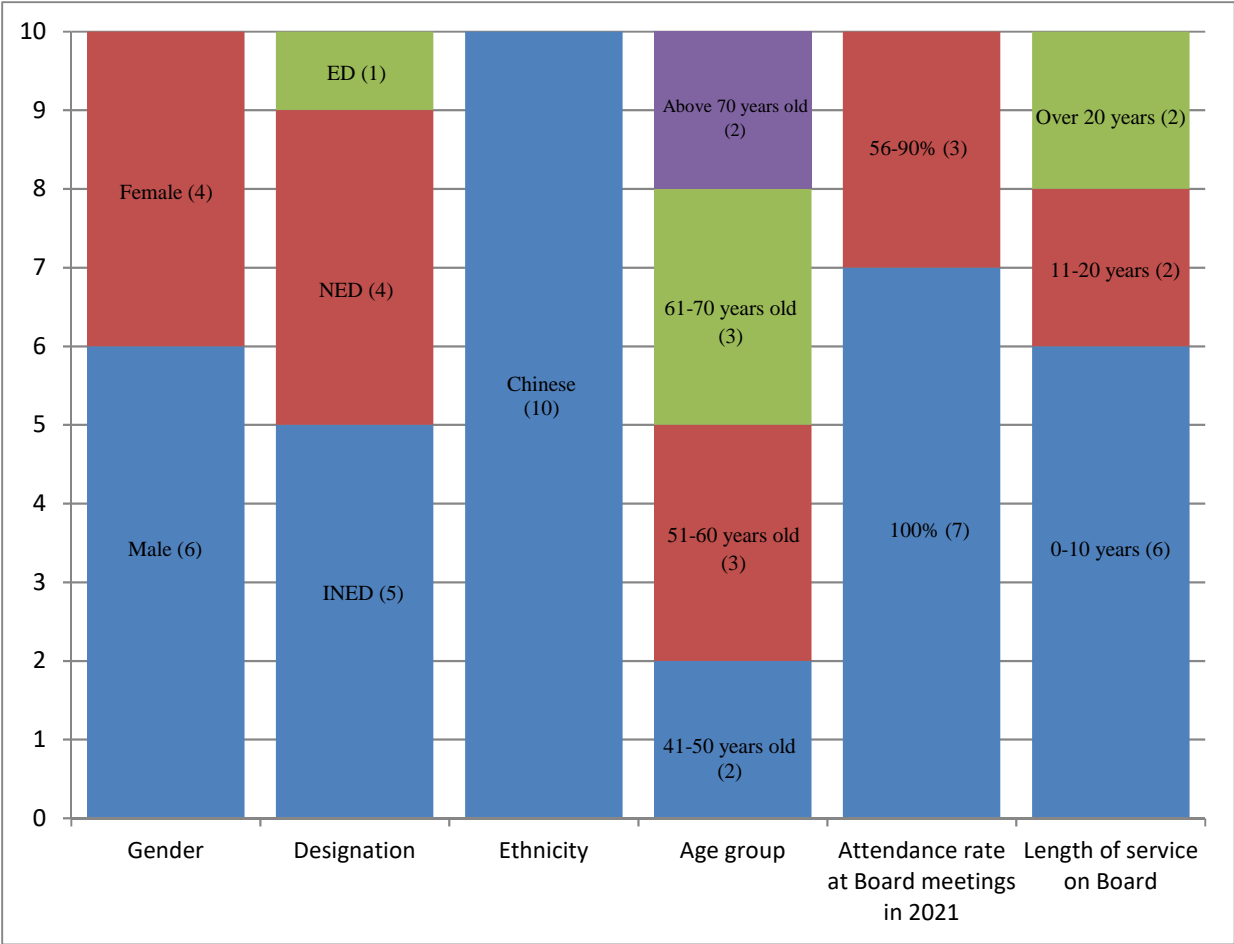
Members of the Board, who come from a variety of different backgrounds, have a diverse range of business, banking and professional expertise. Biographical details of the Directors, together with information relating to the relationship among them, are set out in the section "Biographical Details of Directors 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 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, gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service. The Board considers that its diversity, including gender diversity, is a vital asset to the business.

The Board has also 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.

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

No. of Directors



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 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 meetings, 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 also held an annual talent session with the Chief Executive and Head of Human Resources to review the Bank's broader top team.

The Board meets with the representatives of HKMA annually to maintain a regular dialogue with the regulator where HKMA shares with the Board their overall supervisory assessment of the Bank and key 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 2021, the Bank has continued to embed HSBC Group's governance requirements 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 lead to better discussions, and more agile and well-informed decision making, resulting in a more effective use of the Board and Management time. In addition, the Group's Subsidiary Accountability Framework ("SAF") was updated in 2021 to further enhance the clarity and consistency of governance practices adopted across all entities within the Group. The Bank has conducted a gap analysis to confirm the Bank's compliance with the SAF requirements and provided the year-end attestation of SAF compliance following an annual review.

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 2021 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 annual operating plan 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. The Board also regularly reviews the time commitment required from NEDs.

All Directors have access to the EDs 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 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 2021, the Board held seven meetings (including one meeting with HKMA) and the important matters discussed at Board meetings included:

<u>Strategic Planning</u>	<u>Financial and Business Performance, and Capital Planning</u>
<ul style="list-style-type: none"> - Strategic Plan 2021-2024 with (a) refreshed strategic pillars; and (b) 2022 Targets and Action Plan - Quarterly updates of Strategic Plan 2018 - 2020 - Strategic Plan of Hang Seng Indexes Company Limited (2022 – 2026) - Fintech Innovation Strategy - Environmental, Social and Governance (“ESG”) Strategy and Implementation Plan for 2021 and beyond, as well as 2020 ESG Report 	<ul style="list-style-type: none"> - financial statements for the year ended 31 December 2020 - interim financial statements for the six months ended 30 June 2021 - declaration of the fourth interim dividend for year 2020 and first three interim dividends for year 2021 - annual operating plan and capital plan for year 2021 - reports on financial and business performance - internal capital adequacy assessment process - internal liquidity adequacy assessment process - issuance of non-capital loss-absorbing capacity debt instrument

Risk Management

- 2021 review of risk appetite statement and framework, with quarterly risk appetite profile update and 2021 mid-year review of the risk appetite statement
- risk management framework refresh and risk governance structure
- 2021 HKMA climate risk stress testing results and 2021 HKMA supervisor driven stress test scenarios and results
- internal control system assessment
- Basel Committee on Banking Supervision 239 compliance framework and self-assessment results
- update on cyber security risk and cyber resilience assessment framework
- semi-annually review of large credit exposures and risk concentrations
- update on climate risk management
- significant risk policies, plans and frameworks
- annual review of credit approval authority limits and overall credit limit to the HSBC Group companies
- update on Interbank Offered Rate transition
- governance on IT and Cloud adoption

Governance and Culture

- Subsidiary Accountability Framework 2021 and outcome of gap analysis
- Board succession planning
- HASE Non-executive Director Expenses 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 SPMs issued by HKMA from time to time
- HKMA Supervisory Review Process and CAMEL Rating Review
- entry into a one-off connected transaction between Hang Seng Insurance Company Limited and entities of the HSBC Group
- update on Culture Review of the Bank and annual review of the Bank's Culture Statement

Human Resources and Remuneration

- new Group Purpose and Values
- annual review of the remuneration policy and remuneration system
- annual review of alignment of risk and remuneration
- pay review for 2021 and variable pay for 2020
- 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 NED and INEDs and Board Committee Chairmen and members
- appointment and remuneration packages of Senior Management

	<ul style="list-style-type: none"> - succession planning for the Board and Senior Management - performance management relating to Senior Management - re-election of Directors - terms of appointment of NEDs - review of independence of INEDs
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Appointment and Re-election of Directors

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.

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 NED, setting out the terms and conditions of their appointment, including the time commitment expected of them. 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. 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.

There are established procedures for Directors to seek independent professional advice on matters relating to the Bank where appropriate. All costs associated with obtaining such advice will be borne by the Bank. In addition, each Director has separate and independent access to the Bank's Management.

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 2021.

Directors' interests in securities of the Bank and HSBC Group as at 31 December 2021 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 are provided with briefings and trainings on an on-going basis 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. Such briefings and trainings are provided at the Bank's expense. The Bank maintains proper records of the briefings and trainings provided to and received by its Directors.

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:

- Artificial intelligence – latest technology and infrastructure
- HKMA's Article on "Hong Kong as an International Financial Centre – Facts over Myths"
- Responding to financial statement fraud allegations
- Global summit of the climate governance initiatives
- Insights on global index business
- Update on Interbank Offer Rate transition and reform
- Green finance and climate risk for banks
- Deep dive of fraud cases
- Climate risk briefing and Chapter Zero Climate Webinar
- Three-part event series to net zero including (1) How financial institutions are tackling the net zero challenge; (2) Financial disclosures and the management and integration of climate

- considerations into reporting: Reviewing the substance behind the reports; and (3) Climate change: Risk management and scenario analysis
- Requirement under Banking (Exposure Limits) Rules
 - Update on cyber security risk
 - Stewardship and sustainability across Asia Pacific – investor’s perspective
 - Insights on ESG
 - HSBC Global Mandatory Training: Health, Safety and Wellbeing, Risk Management, Cyber, Data Privacy, Sustainability, Financial Crime Risk, Anti-bribery and Corruption, Anti-money Laundering, Sanctions, Fraud and Tax Transparency, and “Living our Values” series including Data Literacy, Workplace Harassment and Competition Law.

To summarise, Directors received briefings and trainings on the following key areas to update and develop their skills and knowledge during year 2021:

Directors	Training Areas					
	Governance matters	Regulatory matters	Business/ Management	Risk and Control	Digital and Technology	ESG
INEDs						
Irene Y L Lee ^{Note 1}	√	√	√	√	√	√
John C C Chan	√	√	√	√	√	√
L Y Chiang	√	√	√	√	√	√
Clement K M Kwok ^{Note 2}	√	√	√	√	√	√
Michael W K Wu	√	√	√	√	√	√
NEDs						
Kathleen C H Gan	√	√	√	√	√	√
David Y C Liao ^{Note 3}	√	√	√	√	√	√
Vincent H S Lo	√	√	√	√	√	√
Kenneth S Y Ng	√	√	√	√	√	√
ED						
Diana Cesar ^{Note 4}	√	√	√	√	√	√

Note 1 Irene Y L Lee, current INED, was appointed as Chairman of the Board with effect from 27 May 2021.

Note 2 Clement K M Kwok was appointed as INED with effect from 27 May 2021.

Note 3 David Y C Liao was appointed as NED with effect from 1 September 2021.

Note 4 Diana Cesar was appointed as ED and Chief Executive with effect from 1 September 2021.

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				
<p>Executive Committee Diana Cesar ^{Note 5} (Chairman) Vivien W M Chiu ^{Note 6} Rose M Cho Liz T L Chow Donald Y S Lam Gilbert M L Lee Rannie W L Lee ^{Note 7} Andrew W L Leung Godwin C C Li Ryan Y S Song Christopher H K Tsang Elaine Y N Wang May M K Wong</p>	<p>Audit Committee Clement K M Kwok* ^{Note 8} (Chairman) L Y Chiang* Irene Y L Lee*</p>	<p>Risk Committee Kenneth S Y Ng# ^{Note 9} (Chairman) Irene Y L Lee* ^{Note 10} Michael W K Wu*</p>	<p>Remuneration Committee John C C Chan* (Chairman) L Y Chiang* Irene Y L Lee* ^{Note 10}</p>	<p>Nomination Committee Irene Y L Lee* ^{Note 10} (Chairman) Diana Cesar ^{Note 5} John C C Chan* David Y C Liao# ^{Note 11} Michael W K Wu*</p>

* INEDs

NEDs

^{Note 5} Diana Cesar was appointed as Executive Committee Chairman and Nomination Committee member, both with effect from 1 September 2021.

^{Note 6} Vivien W M Chiu was appointed as Executive Committee member with effect from 1 January 2022.

^{Note 7} Rannie W L Lee was appointed as Executive Committee member with effect from 1 January 2022.

^{Note 8} Clement K M Kwok was appointed as Audit Committee Chairman with effect from 27 May 2021.

^{Note 9} Kenneth S Y Ng was appointed as Risk Committee Chairman with effect from 3 November 2021.

^{Note 10} Irene Y L Lee was re-designated as Risk Committee member, and appointed as Remuneration Committee member, and Nomination Committee Chairman, all with all effect from 27 May 2021.

^{Note 11} David Y C Liao was appointed as Nomination Committee member with effect from 1 September 2021.

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 nine 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. 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 2020 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 2021 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 2020, 31 March 2021, 30 June 2021 and 30 September 2021
- reviewed the annual operating plan and capital plan for year 2021 and the revised internal capital targets for 2021 and onwards
- reviewed the balance sheet management position
- reviewed the financial reporting risk update, 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 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 2021, and reviewed the resources arrangements, audit statistics, internal audit reports and key themes, and the progress update of the Internal Audit Planning for 2022

- reviewed the update on Sarbanes-Oxley Act (SOX) implementation, internal control system assessment and accounting reconciliations control certificates as of 31 December 2020 and 30 June 2021
- reviewed the adequacies of resources, qualifications and experience of staff of the Accounting and Financial Reporting function 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 2021 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
- endorsed the appointment of Audit Committee Chairman of the Bank
- reviewed the composition of the Audit Committees of the Bank and its subsidiaries
- escalated significant issues to the Audit Committee of The Hongkong and Shanghai Banking Corporation Limited ("HSBC")

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, 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 reports, annual plan and progress update relating to compliance
- reviewed 2021 HKMA climate risk stress testing results and 2021 HKMA supervisor driven stress test scenarios and results, and the update on the Bank's climate risk management
- reviewed the enterprise wide 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
- approved the annual plan of the Risk function for 2021 including risk priorities for 2021
- reviewed the report on the alignment of risk and remuneration, and outcome of incentivising compliance for the pay review of performance year 2020
- reviewed the Internal Audit Plan and the Internal Audit Charter for 2021, and the resources arrangements, audit statistics, internal audit reports and key themes, and the progress update of the Internal Audit Planning for 2022
- reviewed the adequacy of resources, qualifications and experience of staff of the Risk and Compliance function, and their training programmes and budgets
- reviewed the report on whistle-blowing cases in 2021 and the operation and effectiveness of the whistleblowing arrangements
- reviewed the governance of IT and Cloud adoption, the update of cyber security risk and endorsed the cyber resilience assessment framework, including the target cyber resilience maturity and assessment results
- reviewed the operational resilience programme, BCBS 239 self-assessment results, and model risk management
- 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
- endorsed the appointment of Risk Committee Chairman of the Bank
- 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 HSBC

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 head 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 2021, the Committee engaged an external consultant to undertake an independent review of the Bank's remuneration policy and its implementation for year 2021.

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 2021, 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 2020 and pay review proposal for 2021, and the update on 2021 performance and pay review process and changes to performance management
- reviewed and 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 2020 variable pay
- reviewed and endorsed the revised remuneration policy for the Board's approval
- 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 Remuneration Committee's effectiveness in discharging its role and responsibilities, and its terms of reference
- approved and reviewed the Remuneration Committee Certificates of the Bank and its subsidiaries
- 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 the Remuneration Committee of HSBC and escalated from the Bank’s subsidiary, and escalated significant issues from the Remuneration Committee of the Bank to the Remuneration Committee of HSBC

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 four meetings and the major work performed by the Committee was as follows:

- approved the appointment of Chief Executive and Acting Chief Executive
- endorsed the appointment of NED, INEDs and Board Committee Chairmen and members for the Board’s approval
- approved the appointment of Senior Management and senior executives
- approved the appointment of “managers” under the Banking Ordinance
- 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
- endorsed the re-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 2021 are as follows:

	Meetings held in 2021						
	AGM	Board	Executive Committee	Audit Committee	Risk Committee	Remuneration Committee	Nomination Committee
Number of Meetings	1	7	9	4	4	2	4
Directors							
Irene Y L Lee ^{*Note 12} (Chairman)	1/1	7/7	-	4/4	4/4	1/1	4/4
Diana Cesar ^{Note 13} (Executive Director and Chief Executive)	-	4/4	3/3	-	-	-	2/2
Raymond K F Ch'ien ^{*Note 14}	1/1	2/2	-	-	-	1/1	2/2
Louisa Cheang ^{Note 15}	0/1	1/3	3/7	-	-	-	1/2
John C C Chan [*]	1/1	7/7	-	-	-	2/2	4/4
L Y Chiang [*]	1/1	7/7	-	4/4	-	2/2	-
Kathleen C H Gan [#]	1/1	7/7	-	-	-	-	-
Margaret W H Kwan ^{Note 16}	1/1	6/7	9/9	-	-	-	-
Clement K M Kwok ^{*Note 17}	-	4/5	-	2/2	-	-	-
Eric K C Li ^{*Note 18}	1/1	2/2	-	2/2	2/2	-	-
David Y C Liao ^{#Note 19}	-	4/4	-	-	-	-	2/2
Vincent H S Lo [#]	1/1	7/7	-	-	-	-	-
Kenneth S Y Ng ^{#Note 20}	1/1	6/7	-	-	4/4	-	-
Peter T S Wong ^{#Note 21}	1/1	2/3	-	-	-	-	1/2
Michael W K Wu [*]	1/1	6/7	-	-	3/4	-	4/4
Senior Management							
Eunice Chan ^{Note 22}	-	-	9/9	-	-	-	-
Rose M Cho ^{Note 23}	-	-	9/9	-	-	-	-
Crystal P S Cheung ^{Note 24}	-	-	4/4	-	-	-	-
Liz T L Chow	-	-	9/9	-	-	-	-
Donald Y S Lam	-	-	9/9	-	-	-	-
Gilbert M L Lee	-	-	9/9	-	-	-	-
Andrew W L Leung	-	-	9/9	-	-	-	-
Godwin C C Li	-	-	9/9	-	-	-	-
Ryan Y S Song	-	-	9/9	-	-	-	-
Christopher H K Tsang	-	-	9/9	-	-	-	-

^{Note 12} Irene Y L Lee was appointed as Chairman of the Board and Nomination Committee, and Remuneration Committee member and was re-designated as Risk Committee member, all with effect from 27 May 2021.

Elaine Y N Wang	-	-	9/9	-	-	-	-
May M K Wong	-	-	9/9	-	-	-	-
Chee Leong Yeo ^{Note25}	-	-	9/9	-	-	-	-
Average Rate	92%	91%	97%	100%	93%	100%	91%

* INEDs

NEDs

Note13 Diana Cesar was appointed as ED and Chief Executive, Executive Committee Chairman and Nomination Committee member, all with effect from 1 September 2021.

Note 14 Raymond K F Ch'ien retired and stepped down as the Chairman of the Board, and ceased to be Nomination Committee Chairman and Remuneration Committee member, all with effect from 27 May 2021.

Note 15 Louisa Cheang stepped down as ED and ceased to be Vice-Chairman and Chief Executive, Executive Committee Chairman and Nomination Committee member, all with effect from 1 September 2021.

Note 16 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 17 Clement K M Kwok was appointed as INED and Audit Committee Chairman, both with effect from 27 May 2021.

Note 18 Eric K C Li retired and stepped down as INED, and ceased to be Audit Committee Chairman and Risk Committee member, all with effect from 27 May 2021.

Note 19 David Y C Liao was appointed as NED and Nomination Committee member, both with effect from 1 September 2021.

Note 20 Kenneth S Y Ng was appointed as Risk Committee Chairman with effect from 3 November 2021.

Note 21 Peter T S Wong retired and stepped down as NED, and ceased to be Nomination Committee member, both with effect from 1 September 2021.

Note 22 Eunice Chan ceased to be Executive Committee member with effect from 1 January 2022.

Note 23 Rose M Cho was appointed Executive Committee member with effect from 16 January 2021.

Note 24 Crystal P S Cheung ceased to be Executive Committee member with effect from 25 May 2021.

Note 25 Chee Leong Yeo ceased to be Executive Committee member with effect from 20 January 2022.

REMUNERATION OF DIRECTORS, SENIOR MANAGEMENT AND KEY PERSONNEL

The Bank's remuneration policy is to reward competitively the achievement of long-term sustainable performance, and attract and motivate the very best people, regardless of gender, ethnicity, age, disability or any other factor unrelated to performance or experience with the Bank. The Bank also recognises the right behaviours that are aligned to Group values and the long-term interests of the stakeholders of the Bank.

Remuneration of Directors

The level of fees paid to NEDs is determined with reference to the Directors' responsibilities and commitment, and fees paid by comparable institutions.

As regards EDs, the following factors are considered when determining their remuneration packages:

- business objectives
- general business and economic conditions
- changes in appropriate markets such as supply/demand fluctuations and changes in competitive conditions
- individual performance and contributions to the Bank
- right behaviours aligned with the Group values, culture and conduct expectation
- retention consideration and individual potential

No individual Director will be involved in decisions relating to 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\$)		(HK\$)
<u>Board of Directors</u> ^{Note 26}		<u>Remuneration Committee</u>	
Chairman	860,000	Chairman	290,000
Non-executive Directors	660,000	Members	200,000
<u>Audit Committee / Risk Committee</u>		<u>Nomination Committee</u>	
Chairman	500,000	Chairman	400,000
Members	280,000	Members	200,000

^{Note 26} 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 2021 is set out in Note 14 to the Bank's 2021 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 17 Senior Management members ^{Note 27} and eight Key Personnel ^{Note 28} in 2021. The aggregate amount of remuneration ^{Note 29} 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	2021	2020
	Fixed remuneration		
1	Number of employees	25	25
2	Total fixed remuneration (HK\$ '000)	74,861	77,061
3	Of which: cash-based	74,861	77,061
	Variable remuneration		
4	Number of employees ^{Note 30}	25	25
5	Total variable remuneration (HK\$ '000) ^{Note 31}	48,806	51,689
6	Of which: cash-based	27,456	31,190
7	<i>Of which: deferred</i>	8,283	8,532
8	Of which: shares or other share-linked instruments	21,350	20,500
9	<i>Of which: deferred</i>	11,252	11,993
10	Total remuneration (HK\$ '000)	123,667	128,750

Note 27 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.

Note 28 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 29 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 30 Number of employees disclosed above includes leavers who may have zero variable pay.

Note 31 No deferred variable remuneration had been reduced through performance adjustments in 2021 and 2020.

The aggregate amount of special payments of the Senior Management and Key Personnel awarded during the year is set out below:

	Special payments	2021		2020	
		Number of employees	Total amount (HK\$ '000)	Number of employees	Total amount (HK\$ '000)
1	Guaranteed bonuses	-	-	1	900
2	Severance payments	-	-	1	2,646

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)	2021		2020	
		Cash	Shares	Cash	Shares
1	Total amount of outstanding deferred remuneration ^{Note 32 & 34}	22,449	27,134	25,404	27,811
2	<i>Of which: Total amount of outstanding deferred and retained remuneration exposed to ex post explicit and/or implicit adjustment</i>	22,449	27,134	25,404	27,811
3	Total amount of amendment during the year due to ex post implicit adjustments ^{Note 35}	-	3,389	-	(13,649)
4	Total amount of deferred remuneration paid out in the financial year ^{Note 33 & 34}	2,635	754	6,484	22,116

Note 32 Outstanding, unvested, deferred remuneration is exposed to ex post explicit adjustments via malus.

Note 33 Paid and vested variable pay made to Material Risk Takers is subject to clawback.

Note 34 There is no reduction of deferred remuneration and retained remuneration due to ex post explicit adjustments during 2021 and 2020 via the application of malus and/or clawback.

Note 35 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 18.4% higher as at 31 December 2021 when compared to that of 31 December 2020.

Other relevant remuneration disclosures are set out in Notes 14, 15 and 50(b) to the Bank's 2021 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. An annual operating plan is reviewed and approved by the Board on an annual basis. Reports on financial results, business performance and variances against the approved annual operating plan 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. Progress of the implementation of the key initiatives in the strategic plan is reported to and reviewed by the Board and Executive Committee on a quarterly basis.

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 2021, 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 2021 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 2021 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 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 2021, fees paid to the Bank's external auditor for audit services amounted to HK\$27.4 million, compared with HK\$26.5 million in 2020. For non-audit services, the fees paid to the Bank's external auditor amounted to HK\$10.0 million, compared with HK\$10.5 million in 2020. In 2021, the non-audit service assignments covered by these fees included HKD\$10.0 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, Executive Director, 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 Wednesday, 26 May 2021 ("2021 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 has adopted special arrangements for the 2021 AGM, in order to minimise attendance in person, while still enabling shareholders to vote and ask questions.

The 2021 AGM was held with the minimum number of persons present as is legally required to form a quorate meeting. The quorum was formed by directors and other senior staff members who were shareholders. Shareholders were, however, able to view and listen to the 2021 AGM through a live webcast of the AGM which could be accessed by going to the webcast link provided on any browser enabled device. The Bank also enhanced the shareholders' experience at Q&A session of its 2021 AGM by setting up a dedicated telephone line for shareholders to ask questions directly at the AGM.

All resolutions at the AGM were decided on a poll. Shareholders were still able to vote by doing so in advance of the AGM by appointing the chairman of the AGM as their proxy to exercise their voting right in accordance with their instructions. Shareholders were also enabled to express their views both before the AGM by submitting their questions to a designated email account and during the AGM 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).

New Articles of Association of the Bank was adopted at the 2021 AGM for the purpose of, among other things, providing flexibility to the Bank in relation to the conduct of general meetings. Details of the key changes and other corresponding and house-keeping changes to the Articles of Association are set out in the circular of the Bank dated 21 April 2021.

The next AGM will be held in the second quarter of 2022, the notice of which will be sent to shareholders at least 20 clear business days before the said meeting. Shareholders may refer to the section "Corporate Information and Calendar" in this Annual Report for information on other important dates for shareholders in year 2022.

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 to set 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. The said policy 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 2021 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 2021, the Bank's share of the costs included HK\$1,499 million for system development, HK\$663 million for data processing, and HK\$889 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\$32 million and markets Mandatory Provident Fund for its immediate holding company during the year 2021 with a fee income of HK\$151 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 2021: HK\$507 million) as contracts of significance for 2021.

Continuing Connected Transactions

On 21 June 2019, Hang Seng Insurance Company Limited (“HSIC”), a wholly-owned subsidiary of the Bank, renewed or amended and entered into the following agreements:

- (i) A new management services agreement (“New Management Services Agreement”) with HSBC Life (International) Limited (“INHK”) for a term of three years following the expiry of a previous management services agreement on 21 June 2019.

Pursuant to the New Management Services Agreement, INHK, directly or through one or more of its affiliates, provides certain management services to HSIC. Subsequently, the New 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 charges HSIC a fee for the 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 Organisation for Economic Co-operation and Development transfer pricing guidelines.

- (ii) A new investment management agreement (“New Investment Management Agreement”) with HSBC Global Asset Management (Hong Kong) Limited (“AMHK”) for a term of three years following the expiry of a previous investment management agreement on 21 June 2019.

Pursuant to the New Investment Management Agreement, 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 new specific management mandate (“New 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 New 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 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. Under the New Specific Management Mandate, HSIC has also agreed to pay HAIL a fee of between 0.35% and 0.5% per annum before the aforesaid amendments to the New 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 are subject to an annual cap, were determined on an arm’s length basis.

- (iii) A new fund monitoring agreement (“New Fund Monitoring Agreement”) with HAIL for a term of three years commencing from 22 June 2019 which superseded a previous fund monitoring agreement entered into between HSIC and HAIL on 12 December 2016.

The New 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 has agreed to pay HAIL an annual amount equivalent to 0.04% per annum of the value of funds invested by HSIC in the specified portfolio which are the subject of the monitoring services. The above fee, which is subject to an annual cap, was determined on an arm’s length basis.

- (iv) 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.

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.

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.

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.

The New Fund Monitoring Agreement, on a standalone basis, is a “de minimis” continuing connected transaction under Chapter 14A of the Listing Rules and is fully exempt from any reporting, announcement, shareholders’ approval and annual review requirements under the Listing Rules. However, the Bank considers that due to the similarity of the services provided under the New Fund Monitoring Agreement, the New Investment Management Agreement, the New Specific Management Mandate and the PE Investment Management Agreement, the fees payable by HSIC under these agreements should be aggregated for the purposes of calculating the applicable percentage ratios under the Listing Rules. As one or more of the applicable percentage ratios in respect of the annual caps for the New Investment Management Agreement, the New Specific Management Mandate and the New Fund Monitoring Agreement and the fee caps for the PE Investment Management Agreement, on an aggregated basis, exceed 0.1% but are all less than 5%, these agreements are 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, the New Investment Management Agreement, the New Specific Management Mandate, the PE Investment Management Agreement and the New Fund Monitoring Agreement, and the relevant annual caps and fee caps were announced by the Bank on 21 June 2019.

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 2021, the aggregate amount paid and payable under the New Management Services Agreement was approximately HK\$39 million, whereas the aggregate amount paid and payable under the New Investment Management Agreement and the New Specific Management Mandate was approximately HK\$43 million, both of which were within the annual caps for the year ended 31 December 2021 of HK\$233 million and HK\$120 million respectively. The management fee of approximately US\$3,115,414 (equivalent to HK\$24,278,365) was paid and payable under the PE Investment Management Agreement for the year ended 31 December 2021, 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 2021. Further, for the year ended 31 December 2021, the aggregate amount paid and payable under the New Fund Monitoring Agreement was approximately US\$50,901 (equivalent to HK\$396,662), which was within the annual cap of US\$75,000 (equivalent to HK\$585,000).

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 8 July 2021, 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, H8 LP Inc. ("H8 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 H8 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 H8 LP.

HSIC has agreed to commit a total of US\$1,025,000,000 (equivalent to HK\$7,995,000,000) to H8 LP, with such amount to be invested in vintage 2021. 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 8 July 2021.

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.

Four values aligned behaviors (We value difference, We succeed together, We take responsibility, and We get it done) underpin effective financial crime risk management culture and good conduct outcomes. The Bank expects all employees to reflect these values by acting with courageous integrity; speaking up; escalating concerns; and doing the right thing for our customers, communities and each other. 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. Particularly we have "Speak up starts with me campaign" in 2021, in which enabling speak-up culture from junior levels across all departments.

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 2021 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 excel in their careers, and uphold the Bank's corporate values and culture of service excellence.

Employee Statistics

As at 31 December 2021, the Bank's total headcount was 9,331 representing a decrease of 232*, or - 2.4%, compared with a year earlier. The total headcount comprised 3,503 executives (47% are male and 53% are female), 3,906 officers (37% are male and 63% are female) and 1,922 clerical and non-clerical staff (33% are male and 67% are female).

**Talents are the most important asset of the Bank. The emphasis for 2021 was to promote internal job moves and serve internal development opportunities for staff. With continued adoption of technology and process efficiency, productivity of staff has also been enhanced.*

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 all the reward policies are carefully considered in the context of business objective, people strategy, commercial competitiveness, alignment of risk and reward and regulatory guidance. 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.

Information on the Bank's direction and strategies, policy updates and employment 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. Launched in January 2019, the mobile app is an important channel for fostering an open and dynamic culture in which employees feel empowered and inspired to engage in two-way communication with senior management and colleagues at all levels.

The Bank also encourages employees to provide suggestions, comments and feedback through employee surveys, exchange sessions and thematic focus groups. The Bank continuously monitors the sentiments and behaviours of staff with the aim of developing training, communication and staff engagement plans that reinforce a positive corporate culture and values.

The Bank utilises a number of different channels and mechanisms to encourage staff to provide feedback. These include biannual employee surveys, conducted in the first and second halves of the year, that are designed to give the Bank a better understanding of employee opinions 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 the second half of 2021, the highest scoring indices were 'Change Leadership' and 'Trust', which both recorded an employee approval rating of over 80%, and were 5 points and 11 points respectively above the industry averages for the same period.

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 3.8 days of learning and development programme in 2021. 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 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 co-ops and internships to build pipeline for future hires. Trainee programmes in select business 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.

The Bank sponsors intake through the FinTech Internship programme co-launched by HKMA and the Applied Science and Technology Research Institute in previous years. In 2021, the Bank has participated in the HKMA Banking Talent Programme to offer 6-month internships to fresh graduates, and offer 18-month employment contracts to graduates under the HKSAR Government's "Greater Bay Area Youth Employment Scheme". The Bank has also participated in the "HKMA Financial Industry Recruitment Scheme for Tomorrow" programme to offer 12-month employment contracts to experienced hires.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE

The pandemic and ongoing effects of climate change have driven home the significance of the role that every person and every organisation has to play in ensuring a sustainable future for all. The Bank has taken a proactive approach to managing Environmental, Social and Governance (ESG) issues to keep pace with the fast-changing landscape, both in our own operations and in how we support our customers and community to transition to a low-carbon future.

In 2021, we further strengthened our ESG governance, especially in climate risk management, to better respond to the expectations of regulators and investors. The Executive Committee and ESG Steering Committee continued to provide guidance and oversight on the coordinated efforts of all departments to meet the Bank's aspirations. The Board of Directors was regularly updated on ESG matters and attended six dedicated training sessions related to ESG during the course of the year.

Under the ESG governance structure, our senior management provided regular insights to support the fulfilment of our ESG vision and establish an implementation plan. In early 2021, the Board approved our ESG strategy and implementation plan for 2021 and beyond.

Aspiring to be a leader in driving ESG in the banking industry, we launched six key ESG pillars, as listed below, to put our vision into action.

- Environmental targets
- Sustainable finance
- Youth
- Climate risk management
- Advocacy and awareness
- Robust disclosure

Through concerted actions across the Bank, we have made good progress in 2021. All staff members received training on the importance of sustainability. Update of climate risk is reported under Top and Emerging risk for close monitoring currently. A dedicated green financing team was established and we title-sponsored the Chamber of Hong Kong Listed Companies' first 'ESG and Green Finance Opportunities Forum' to engage companies and financial sector stakeholders on ESG. The Bank also launched eight bite-size ESG learning videos online to enhance staff and public understanding of ESG matters and raise awareness on how everyone can play a part in supporting sustainability at work and in daily life.

The Bank's committed efforts in its disclosures were recognised with the Grand Awards in the 'Best ESG Report' and 'Best GRI Report' in the Hong Kong ESG Reporting Awards in 2021.

For more details of Hang Seng's ESG vision, initiatives and performance, please refer to the Bank's 2021 Environmental, Social and Governance Report to be made available on the Bank's website by the end of May 2022.

Environment

Supporting the Hong Kong SAR Government's Climate Action Plan 2050, the Bank put a holistic Climate Strategy in place in 2021 to drive our own corporate development. The Strategy not only includes actions to prepare for climate change, which is vital for our long-term success, but also reinforces our business commitment in reducing emissions from our own operations. Furthermore, we set environmental targets that would make us carbon neutral in our own operations by 2030 to align with Hong Kong's goal for carbon neutrality before 2050 and to adapt to the physical and transition risks and opportunities associated with a warming world. We aim to leverage our position in the value chain to instigate change and encourage climate actions by our clients and partners.

As the first local bank in Hong Kong to sign up as a supporter of the Task Force on Climate-related Financial Disclosures and attain ISO 14001 certification for all its offices and branches, we strive to lead by example in transitioning to a low-carbon economy. Under the ESG Steering Committee, the Environmental Working Group is chaired by our Chief Operating Officer to oversee the strategy and implementation of environmental matters within our operations. With a clear Environmental Policy, the Bank is committed to conducting its activities in an environmentally responsible manner and developing a range of management practices to promote sustainable development.

With our key ESG ambition to be carbon neutral in our operations by 2030, we have undertaken a series of about HK\$54 million Bank-wide enhancement projects that aims to reduce our carbon dioxide emissions by over 380 metric tonnes per year through initiatives to make our workplaces more energy-efficient and sustainable, referencing internationally recognised standards.

In 2021, we took further steps to support renewable energy. In addition to purchasing 2,920MWh of renewable energy from local electricity providers, we installed solar panels at our Mong Kok office building with the capacity to generate over 60MWh of renewable energy per year. In recognition of the Bank's support for the development of renewable energy in Hong Kong, we received the 'Renewable Energy Contribution Award' in CLP's Smart Energy Award 2021.

The Bank's operations comply with all applicable environmental regulations and guidelines in Hong Kong, such as the Waste Disposal Ordinance (Cap. 354). In 2021, we had no reported cases of non-compliance with environmental laws or regulations.

Together with our key goal of becoming carbon neutral by 2030, we have also set the following environmental targets.

Environmental targets

Aspects	2030 Targets	2021 Progress (As of the end of September 2021)
Electricity Consumption	Reduce absolute electricity consumption by 30% using October 2017 to September 2018 as base year	-9.8%
Greenhouse Gas Emissions	Reduce absolute Scope 1 and 2 emissions by 30%* using October 2017 to September 2018 as base year	-22.5%
Water Consumption	Reduce absolute water consumption by 24% using October 2017 to September 2018 as base year	-7.5%
Waste Diversion	Divert 80% of waste away from landfill	57.3%
Paper Consumption	Reduce absolute paper consumption by 35% using October 2018 to September 2019 as base year	- 30.8%

* This target excludes the carbon emissions reduction through sourcing electricity from renewable energy schemes organised by local electricity providers.

Sustainable finance

Alongside enhancing our operational ESG performance, we further stepped up our efforts to provide a wider range of ESG-themed products and services. In 2021, the Bank's approved green loan value totalled about HK\$7.3 billion, 14.7 times the level in 2020. We have also further diversified our ESG investment products for retail customers, which has helped bring the total sales volume of such products to HK\$1.7 billion in 2021, up over 1,800% compared with 2020.

Aspect	Products
Green financing	<ul style="list-style-type: none"> - Green Financing Promotion Scheme (since 2018) - Greenness Assessment Scheme (since 2020) - Sustainability-linked loan (since 2021)
ESG investment	<ul style="list-style-type: none"> - Hang Seng Corporate Sustainability Index Fund (since 2011) <p>The Bank also offers other types of ESG-themed products, such as sustainable equity funds, low-carbon bonds and structured products.</p>

ESG-themed research and indexing	<ul style="list-style-type: none"> - Hang Seng Corporate Sustainability Index (since 2010) - Hang Seng ESG 50 Index (since 2020) - HSI ESG Index (since 2019) - HSCEI ESG Index (since 2019) - Hang Seng Shanghai-Shenzhen-Hong Kong Autonomous and Electric Vehicles Index (since 2021) - Hang Seng Shanghai-Shenzhen-Hong Kong Clean Energy Index (since 2021) - HSI ESG Enhanced Index (since 2021) - HSI Low Carbon Index (since 2021) <p>Our wholly owned subsidiary, Hang Seng Indexes Company Limited, continues to publish the information of researched companies' ESG ratings on its public website to for the benefit of parties who are seeking independent information about the ESG performance of those companies.</p>
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Focus Areas	2021	2020	2019
Number of green loan applications	23	2	2
Total green Loan amount	HK\$7,291 million	HK\$495 million	HK\$1,008 million
Number of researched companies by our appointed ESG assessment body	1,927	1,799	1,680

Going forward, Hang Seng will continue to increase the diversity and number of its green products.

Community Investment Strategy

We are a long-time advocate of creating sustainable and positive impact in our community. The Bank's community investment strategy is formulated around four pillars: 'Future Skills', 'Promoting Sustainable Finance and Financial Literacy', 'Addressing Climate Change' and 'Care for the Community'. Together, these pillars reflect the Bank's approach in supporting the needs of the community.

The Corporate Social Responsibility Working Group, chaired by the Bank's Head of Communications and Corporate Sustainability, is responsible for overseeing the development and implementation of our community investment strategy. The Working Group reports progress on the Bank's various community investment initiatives to the ESG Steering Committee on a quarterly basis.

The 'Addressing Climate Change' pillar became a key focus in 2020 as we move to better respond to this pressing global issue and to align with the Bank's environmental management approach. In 2021, we launched the innovative 'Hang Seng Low Carbon Future: SolarCare Programme' to support renewable energy development by installing solar panels at an NGO campsite. Leveraging the Government's Feed-in Tariff rebate scheme, the solar panels will generate funds to support high quality climate education activities for local youths for up to 10 years. The SolarCare Programme is unique in using direct actions to reduce carbon emissions while generating sustainable funding for community projects at the same time.

With the aim of bringing together corporates, regulators and sustainability professionals to discuss ESG best practices and the potential of green finance, we initiated and title-sponsored the Chamber of Hong Kong Listed Companies' first 'ESG and Green Finance Opportunities Forum' in 2021.

Financial management is a valuable skill at any age. It is important to help students and adults at different stages of life to build a strong foundation of basic financial knowledge. In 2021, we launched a new financial education programme for junior secondary school students in Hong Kong. We aim to expand the reach of our financial education series to cover a full spectrum of beneficiaries – from kindergarten, primary, secondary and university students to adults and senior citizens.

We were delighted to witness the achievements of Hang Seng Table Tennis Academy (HSTTA) graduates at the Tokyo Olympics and the Doha ITTF-ATTU Asian Championships in 2021. The outstanding success of HSTTA alumni at an international level is a testament to the Bank's 30-year support of the development of table tennis in Hong Kong.

Overall in 2021, we invested more than HK\$31 million in our community investment programmes, working with local organisations to design and deliver 18 community investment programmes to support about 40,000 direct beneficiaries.

We also invested non-financial resources such as volunteer time, professional expertise and practical support to further enhance the lasting social and environmental impact of these programmes. During 2021, we contributed close to 10,300 hours of volunteer time and professional expertise to various charitable initiatives.

Over the past 10 years, we have invested a total of about HK\$289 million in community initiatives.

Details of the positive effects of Hang Seng's community investment initiatives are available in the ESG Report on our website.

Health and Safety

The Bank commits to ensure a best in class health and safety business environment. To achieve this, the Bank migrated its management system to ISO 45001:2018 Occupational Health and Safety Management System ("OHSMS") in 2020, certified 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 based" work 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 every 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;
- marketing best practice in the industry for continuous improvement;
- supporting the rehabilitation of the Bank staff following an injury or illness, enabling a safe and productive return to work; and
- promoting a nationally consistent approach to rehabilitation and improving awareness of rehabilitation initiatives to ensure timely and effective outcomes monitoring and evaluating work health and safety performance as part of a continual improvement process to assess the effectiveness of the Bank's work health and safety management system.

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.

In 2021, the Bank continued implementing a Health & Wellbeing Program, which included a series of wellbeing activities and a mental health month. The Program also consisted of a series of workshops to help the Bank staff better understand the importance of work life balance, encourage them to adopt and maintain a health and balanced lifestyle, and to stay positive to maintaining a well-managed stress level.

For more details of the Bank's ESG vision, initiatives and performance in 2021, please refer to its 2021 Environmental, Social and Governance Report to be made available on the Bank's website (www.hangseng.com).

OTHER INFORMATION

Organisational Structure

Under the Bank's current organisational structure, the Bank's businesses and functions are set out as follows:

Businesses

Wealth and Personal Banking

Commercial Banking

Global Banking

Global Markets

Functions

Audit

Communications

Compliance

Corporate Governance & Secretariat

Corporate Sustainability

Financial Control

Human Resources

Legal

Marketing

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 68

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

Hong Kong Monetary Authority –

Member of The Exchange Fund Advisory Committee

^ **Hysan Development Company Limited** –

Executive Chairman; Chairman of Nomination Committee

^ **HSBC Holdings plc** –

Independent Non-executive Director; Member of Chairman's Committee; Member of Nomination & Corporate Governance 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** –

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)

^ **Keybridge Capital Limited** –

Non-executive Chairman (2009 – 2012)

Executive Chairman (2006 – 2009)

The Myer Family Company Pty Limited –

Non-executive Director (2009 – 2011)

ING Bank (Australia) Limited – Non-executive Director (2005 – 2011)

Australian Government Takeovers Panel – Member (2001 – 2010)

Sealcorp Holdings Limited – Chief Executive Officer (1998 – 1999)

- ^ **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

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

Executive Director and Chief Executive (*Note 1*)

Aged 53

Joined the Board since September 2021

Other positions held within Hang Seng Group

- ^ **Hang Seng Bank Limited** –
Chairman of Executive Committee (*Note 1*); Member of Nomination Committee (*Note 1*)
Hang Seng Bank (China) Limited –
Chairman and Non-executive Director (*Note 1*); Member of Nomination Committee (*Note 1*)
Hang Seng Indexes Company Limited –
Chairman of Hang Seng Index Advisory Committee (*Note 1*)
Hang Seng Insurance Company Limited – Chairman and Non-executive Director (*Note 1*)

Other major appointments

- Financial Services Development Council** – Member of Board of Directors
Hang Seng School of Commerce – Chairman of the Board of Directors (*Note 1*)
Ho Leung Ho Lee Foundation – Member of Board of Trustees (*Note 1*)
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
The Hang Seng University of Hong Kong – Chairman of the Board of Governors (*Note 1*)
The Hong Kong Institute of Bankers – Vice President (*Note 1*)
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) (*Note 1*)
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)
(*Note 1*)
Hong Kong Trade Development Council – Council Member (2018, 2021) (*Note 1*)
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 (*Note 1*)

John CHAN Cho Chak GBS, JP
Independent Non-executive Director

Aged 78

Joined the Board since August 1995

Other positions held within Hang Seng Group

- ^ **Hang Seng Bank Limited** –
Chairman of Remuneration Committee; Member of Nomination Committee

Other major appointments

Justice of the Peace

- ^ **Guangdong Investment Limited** – Independent Non-executive Director
- Long Win Bus Company Limited** – Non-executive Director
- The Community Chest of Hong Kong** –
Vice Patron; Board Member; Member of Executive Committee
- The Hong Kong University of Science and Technology** – Chairman of the Court
- The Kowloon Motor Bus Company (1933) Limited** – Non-executive Director
- ^ **Transport International Holdings Limited** –
Deputy Chairman and Independent Non-executive Director

Past major appointments

- The Community Chest of Hong Kong** –
Second Vice President and Campaign Committee Chairman (1999 – 2001, 2020 – 2021)
Third Vice President and Public Relations Committee Chairman (2014 – 2015)
First Vice President and Executive Committee Chairman (2001 – 2003)
- ^ **RoadShow Holdings Limited** – Chairman and Non-executive Director (2001 – 2017)
- ^ **Swire Properties Limited** – Independent Non-executive Director (2010 – 2017)
- Hong Kong Monetary Authority** –
Member of The Exchange Fund Advisory Committee (2008 – 2014)
- Sir Edward Youde Memorial Fund** – Chairman of the Council (2007 – 2013)
- The Hong Kong Jockey Club** – Chairman (2006 – 2010)
- HKSAR Commission on Strategic Development** – Non-Official Member (2005 – 2009)
- ^ **Hong Kong Exchanges and Clearing Limited** – Independent Non-executive Director (2000 – 2003)
- Hong Kong Civil Service** –
Private Secretary to the Governor; Deputy Secretary (General Duties); Director of Information Services; Deputy Chief Secretary; Secretary for Trade and Industry; Secretary for Education and Manpower (1964 – 1978; 1980 – 1993)

Qualifications

Degree of Doctor of Social Sciences (honoris causa) – Lingnan University; The University of Hong Kong; The Hong Kong University of Science and Technology
Degree of Doctor of Business Administration (honoris causa) – International Management Centres
Diploma in Management Studies – The University of Hong Kong
Honours Degree in English Literature – The University of Hong Kong

Major awards

Gold Bauhinia Star (1999)

CHIANG Lai Yuen JP
Independent Non-executive Director

Aged 56

Joined the Board since September 2010

Other positions held within Hang Seng Group

- ^ **Hang Seng Bank Limited** –
Member of Audit Committee; Member of Remuneration Committee

Other major appointments

Justice of the Peace

- ^ **Chen Hsong Holdings Limited** – Chairman; Executive Director; Chief Executive Officer
Chen Hsong Investments Limited – Director
China Plastics Machinery Industry Association – Vice-President
China Shenzhen Machinery Association – Vice-President
Federation of Shenzhen Industries – Vice-Chairman
Food and Health Bureau – Member of Advisory Council on Food and Environmental Hygiene
The Toys Manufacturers' Association of Hong Kong – Vice-President
The Twelfth Guangdong Provincial Committee of the Chinese People's Political Consultative Conference – Member

Past major appointments

- The Shenzhen Committee of the Chinese People's Political Consultative Conference** –
Member of Standing Committee (2000 – 2021) (*Note 1*)
Aviation Development and Three-runway System Advisory Committee – Member (2015 – 2021)
The Hong Kong University of Science and Technology –
Member of the Court (2012 – 2018)
Member of the Council (2006 – 2012)
Hospital Authority – Board Member (2011 – 2017)
Directorate Salaries and Conditions of Service of HKSAR Government –
Member of Standing Committee (2008 – 2014)
The Open University of Hong Kong – Member of the Council (2006 – 2012)
Disciplined Services Salaries and Conditions of Service of HKSAR Government –
Member of Standing Committee (2005 – 2010)

Qualifications

Bachelor Degree of Arts – Wellesley College, USA

Major awards

'Young Industrialist Awards of Hong Kong' by the Federation of Hong Kong Industries (2004)

Kathleen GAN Chieh Huey
Non-executive Director

Aged 47

Joined the Board since May 2019

Other major appointments

- AXA Insurance Pte. Ltd.** – Non-executive Director (*Note 1*)
HSBC Bank (China) Company Limited – Supervisor
HSBC Global Services Limited – Director
^ **HSBC Holdings plc** – General Manager; Head of Finance

Past major appointments

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 62

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

Major awards

Chevalier de l'Ordre National de la Légion d'Honneur (2015)

David LIAO Yi Chien

Non-executive Director (*Note 1*)

Aged 49

Joined the Board since September 2021

Other positions held within Hang Seng Group

^ **Hang Seng Bank Limited** – Member of Nomination Committee (*Note 1*)

Other major appointments

^ **Bank of Communications Co., Ltd.** –

Non-executive Director; Member of Personnel and Remuneration Committee

^ **HSBC Holdings plc** – Group Executive; Member of Group Executive Committee

The Hongkong and Shanghai Banking Corporation Limited –

Executive Director; Co-CEO, Asia Pacific; 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) (*Note 1*)

HSBC Jintrust Fund Management Company Limited – Supervisor (2017 – 2022) (*Note 1*)

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 – University of London

Vincent LO Hong Sui GBM, JP

Non-executive Director

Aged 73

Joined the Board since February 1999

Other major appointments

Justice of the Peace

Business and Professionals Federation of Hong Kong – Honorary Life President

Chongqing Municipal Government – Economic Adviser

Council for the Promotion and Development of Yangtze – President

^ **Great Eagle Holdings Limited** – Non-executive Director

Shanghai Tongji University; Shanghai University – Advisory Professorship
Shui On Group – Chairman
^ **Shui On Land Limited** – Chairman
^ **SOCAM Development Limited** – Chairman
The Hong Kong University of Science and Technology – Honorary Court Chairman

Past major appointments

Hong Kong Trade Development Council – Chairman (2015 – 2019)
The Twelfth National Committee of the Chinese People’s Political Consultative Conference – Member (2013 – 2018)
Airport Authority Hong Kong – Chairman (2014 – 2015)
Board Member (2013 – 2015)
Lantau Development Advisory Committee of HKSAR Government – Non-official Member (2014 – 2015)
APEC Business Advisory Council – Hong Kong’s Representative (2010 – 2014)
^ **Shui On Land Limited** – Chief Executive Officer (2004 – 2011)
^ **China Telecom Corporation Limited** – Independent Non-executive Director (2002 – 2008)
^ **New World China Land Limited** – Independent Non-executive Director (1999 – 2004)
The Hong Kong University of Science and Technology – Chairman of the Council (1999 – 2002)
Hong Kong General Chamber of Commerce – Chairman (1991 – 1992)
Basic Law Consultative Committee – Executive Committee Member (1985 – 1990)

Qualifications

Doctorate in Business Administration (honoris causa) – The Hong Kong University of Science and Technology
Doctor of Business (honoris causa) – The University of New South Wales, Australia

Major awards

Grand Bauhinia Medal (2017)
Lifetime Achievement Award for Leadership in Property Sector by the 4th World Chinese Economic Forum (2012)
‘Ernst & Young Entrepreneur Of The Year 2009’ in the China Real Estate Sector (2009)
Ernst & Young China Entrepreneur Of The Year 2009 (2009)
Chevalier des Arts et des Lettres by the French Government (2005)
Director of the Year in the category of Listed Company Executive Directors by The Hong Kong Institute of Directors in 2002 (2002)
Businessman of the Year award in the Hong Kong Business Awards 2001 (2001)
Gold Bauhinia Star (1998)

Kenneth NG Sing Yip
Non-executive Director

Aged 71

Joined the Board since March 2014

Other positions held within Hang Seng Group

^ **Hang Seng Bank Limited** – Chairman of Risk Committee (*Note 1*)

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

- 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.) – University of London, UK
Bachelor’s Degree in Laws (L.L.B.) – Beijing University, PRC

Michael WU Wei Kuo

Independent Non-executive Director

Aged 51

Joined the Board since September 2010

Other positions held within Hang Seng Group

- ^ **Hang Seng Bank Limited** –
Member of Nomination Committee; Member of Risk Committee

Other major appointments

- Hongkong Caterers Limited** – Chairman and Managing Director
^ **Hongkong Land Holdings Limited** – Non-executive 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

- ^ **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)

- ^ The securities of these companies are listed on a securities market in Hong Kong or overseas.

Notes:

- 1 New appointments or cessation of appointments since the date of the Bank's 2021 Interim Report or the date of announcement for the appointment of Director issued by the Bank subsequent to the date of the Bank's 2021 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 2021 are disclosed in the section 'Directors' and Alternate Chief Executives' Interests' of the Report of the Directors attached to the Bank's 2021 Annual Report.
- 3 Some Directors (as disclosed in the section 'Biographical Details of Directors and Senior Management – Board of Directors' of the Bank's 2021 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 2021 Annual Report.
- 4 Save as disclosed in the section 'Biographical Details of Directors and Senior Management – Board of Directors' of the Bank's 2021 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; (b) do not hold any other positions in the Bank and its subsidiaries; and (c) do not have any other relationships with any Directors, senior management or substantial or controlling shareholders of the Bank, except that Michael W K Wu's spouse is the niece of Vincent H S Lo, a Non-executive Director 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 2021 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.

BIOGRAPHICAL DETAILS OF DIRECTORS AND SENIOR MANAGEMENT

Senior Management

Diana Ferreira CESAR

Executive Director and Chief Executive

(Biographical details are set out on page 168)

Vivien CHIU Wai Man

Chief Operating Officer

Aged 57

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 Investment Management Limited – Director

Hang Seng Investment Services 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 50

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

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 48

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 – University of London, UK

Donald LAM Yin Shing
Head of Commercial Banking

Aged 58

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

Hang Seng Insurance Company Limited – Director

Other major appointments

Federation of HK Chiu Chow Community Organizations Limited – Director

Federation of HK Guangxi Community Organisations Limited – Vice Chairman

Hong Kong Chiu Chow Chamber of Commerce Limited – Honorary Director

The Community Chest of Hong Kong –

Board Member; Second Vice President and Campaign Committee Chairman; Member of Executive Committee

The Guangxi Province Committee of the Chinese People's Political Consultative Conference – Member

Past major positions

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

Gilbert LEE Man Lung

Head of Strategy & Planning and Chief of Staff to CE

Aged 44

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

Other major appointments

Yantai Bank Co., Ltd. –

Director; Member of Audit Committee; Member of Connected Party Transaction Committee

Past major positions

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

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 54

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 Credit Limited – Director

Hang Seng Finance Limited – Director

Hang Seng Indexes Company Limited – Member of Hang Seng Index Advisory Committee

Hang Seng Investment Management Limited – Director

Hang Seng Securities Limited – Chairman

Hang Seng Security Management 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

Bachelor of Law – Manchester Metropolitan University

Bachelor of Social Science – University of Hong Kong

Andrew LEUNG Wing Lok
Chief Financial Officer

Aged 59

Joined the Bank in July 1997 (left in 2006) and rejoined in July 2009

Major positions held within Hang Seng Group

Hang Seng Bank Limited –

Chief Financial Officer; Member of Executive Committee

Hang Seng Bank (China) Limited –

Director; Chairman of Risk 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 Securities Limited – Director

Other major appointments

Hang Seng School of Commerce – Director

HSBC Asia Holdings Limited – Director

The Hang Seng University of Hong Kong – Governor; Chairman of Audit Committee

Past major positions

Bank of China (Hong Kong) Limited –

Deputy General Manager, Financial Management (2007 – 2009)

Hang Lung Properties Limited –

Senior Manager, Corporate Finance (2006 – 2007)

Hang Seng Bank Limited –

Senior Manager and Deputy Head of China Business (2005 – 2006)

Senior Manager and Deputy Head of Greater China Business (2003 – 2005)

Senior Manager of Corporate Banking (2001 – 2003)

Senior Manager and Deputy Head of Financial Control (1997 – 2001)

Qualifications

Associate – The Hong Kong Chartered Governance Institute (formerly known as The Hong Kong Institute of Chartered Secretaries)

Associate – The Chartered Governance Institute, UK (formerly known as The Institute of Chartered Secretaries and Administrators)

Bachelor of PRC Law – Peking University, PRC

Bachelor of Social Sciences (Major in Management) – The University of Hong Kong

Chartered Professional Accountant, Canada (CPA (Canada), CMA)

Fellow – The Association of Chartered Certified Accountants, UK

Fellow – The Hong Kong Institute of Certified Public Accountants

Master of Science, Data processing – University of Ulster, UK

Master of Science in Electronic Commerce and Internet Computing – The University of Hong Kong

Godwin LI Chi Chung
Company Secretary and General Counsel

Aged 57

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 48

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 55

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

Elaine WANG Yee Ning

Head of Human Resources

Aged 60

Joined the Bank since June 2016

Major positions held within Hang Seng Group

Hang Seng Bank Limited –

Head of Human Resources; Member of Executive Committee

Past major positions

The Hongkong and Shanghai Banking Corporation Limited –

Regional Head of Development and Regional Head of Talent (2014 – 2016)

Regional Head of Human Resources, Retail Banking and Wealth Management, Asia Pacific (2011 – 2014)

Head of Human Resources, HSBC China (2009 – 2011)

BP Asia Limited –

Vice President, Human Resources China & Gas Asia Pacific Business Unit (2005 – 2008)

Regional Human Resources Manager (2002 – 2004)

Head of Human Resources, BP Amoco Chemicals Asia Pacific (1992 – 2001)

Qualifications

Master of Health Services Management – The University of New South Wales, Australia

Bachelor of Applied Science – The University of Sydney, Australia

WONG May Kay
Head of Communications and Corporate Sustainability

Aged 59

Joined the Bank since September 2018

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

Hang Seng Bank Limited – Senior Project Advisor (2018 – 2019)

MW Communications Limited – Founder and Chief Executive Officer (2017 – 2019)

Hsin Chong Group Holdings Limited – Vice President, Business Relations (2016 – 2017)

Campaign Office of Carrie Lam – Media Specialist (2017)

MTR Corporation Limited –

Principal Corporate Affairs Advisor (2015 – 2016)

General Manager – Corporate Relations (2013 – 2015)

Deputy General Manager – Corporate Relations (2008 – 2013)

Senior Manager – Corporate Relations (2003 – 2008)

Deputy Corporate Relations Manager (1998 – 2001)

The Hongkong and Shanghai Hotels, Limited – Manager, Communications (2001 – 2003)

CNBC/NBC Asia – News Editor; Supervising Producer (1995 – 1998)

Cathay Pacific Airways Limited – Staff Communication Manager (1994 – 1995)

Television Broadcasts Limited –

Assistant News Editor; Senior Reporter; News Anchor (1991 – 1994)

Reporter, News Anchor (1984 – 1989)

Canadian Broadcasting Corporation – Television News Reporter (1989 – 1991)

Qualifications

Bachelor of Journalism – Carleton University, Ottawa, Canada

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 2021.

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 2021, 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\$3.30 (2020: HK\$2.70) per share totalling HK\$6,309m (2020: HK\$5,161m) during the year. The Directors also declared the fourth interim dividend of HK\$1.80 per share totalling HK\$3,441m (2020: HK\$2.80 per share totalling HK\$5,353m), which will be paid on 22 March 2022.

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 2021 are set out in note 30 to the financial statements for the year ended 31 December 2021.

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 2021.

Equity-linked Agreements

For the year ended 31 December 2021, 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 2021, calculated under Part 6 of the Hong Kong Companies Ordinance, amounted to HK\$99,320m (2020: HK\$99,841m). Movements in other reserves are set out in the consolidated statement of changes in equity of this Annual Report.

Donations

Charitable donations made 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, John C C Chan, L Y Chiang, Kathleen C H Gan, Clement K M Kwok, David Y C Liao, Vincent H S Lo, Kenneth S Y Ng and Michael W K Wu.

Raymond K F Ch'ien and Eric K C Li retired from the Board with effect from 27 May 2021. Peter T S Wong and the late Louisa Cheang stepped down from the Board with effect from 1 September 2021. Margaret W H Kwan retired from the Board with effect from 1 February 2022.

Save for the following Directors (collectively the 'New 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) Clement K M Kwok who was appointed as Independent Non-executive Director with effect from 27 May 2021;
- (b) Diana Cesar who was appointed as Executive Director with effect from 1 September 2021; and
- (c) David Y C Liao who was appointed as Non-executive Director with effect from 1 September 2021.

The New Directors will retire under the provisions of the Bank's Articles of Association and, being eligible, offer themselves for election at the Bank's 2022 Annual General Meeting ('2022 AGM') to be held in Q2 2022, 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 2022 AGM are John C C Chan and Vincent H S Lo.

No Director proposed for election or re-election at the 2022 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 2021 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 2021, 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						
<u>Directors:</u>						
John C C Chan	1,000 ⁽¹⁾	-	-	-	1,000	0.00
Kathleen C H Gan	2,500	-	-	-	2,500	0.00
Margaret W H Kwan	65	-	-	-	65	0.00
Number of ordinary shares of US\$0.50 each in HSBC Holdings plc						
<u>Directors:</u>						
Diana Cesar	300,167	-	-	104,941 ⁽²⁾	405,108	0.00
John C C Chan	24,605 ⁽¹⁾	-	-	-	24,605	0.00
Kathleen C H Gan	387,495	-	-	103,421 ⁽²⁾	490,916	0.00
Margaret W H Kwan	111,440	11,267	-	26,423 ⁽²⁾	149,130	0.00
Irene Y L Lee	15,000	-	-	-	15,000	0.00
David Y C Liao	418,321	-	-	93,765 ⁽²⁾	512,086	0.00
Kenneth S Y Ng	440,723	-	-	-	440,723	0.00
<u>Alternate Chief Executives:</u>						
Eunice L C Y Chan ⁽³⁾	31,460	-	-	14,742 ⁽²⁾	46,202	0.00
Donald Y S Lam	202,818	-	-	31,188 ⁽²⁾	234,006	0.00
Andrew W L Leung	12,866	-	-	21,367 ⁽²⁾	34,233	0.00

Notes:

- (1) 1,000 shares in the Bank and 4,371 shares in HSBC Holdings plc were jointly held by John C C Chan and his wife.
- (2) 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.
- (3) Eunice L C Y Chan ceased to be an Alternate Chief Executive on 1 January 2022.

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 2021, were as follows:

	Awards held as at 1 January 2021	Awards made during the Director's/Alternate Chief Executive's term of office in 2021	Awards released during the Director's/Alternate Chief Executive's term of office in 2021	Awards held as at 31 December 2021
<u>Directors:</u>				
Diana Cesar	104,898 ⁽¹⁾	-	-	104,941 ⁽²⁾
Kathleen C H Gan	77,852	95,343	69,774	103,421
Margaret W H Kwan	23,543	32,561	29,681	26,423
David Y C Liao	93,765 ⁽¹⁾	-	-	93,765
<u>Alternate Chief Executives:</u>				
Eunice L C Y Chan ⁽³⁾	12,571	7,453	5,971	14,742 ⁽²⁾
Donald Y S Lam	28,747	32,099	29,775	31,188 ⁽²⁾
Andrew W L Leung	20,296	9,633	9,586	21,367 ⁽²⁾

Notes:

- (1) These represented the awards held by the Directors on 1 September 2021 when the Directors were appointed as Directors of the Bank.
- (2) These included additional shares arising from scrip dividends.
- (3) Eunice L C Y Chan ceased to be an Alternate Chief Executive on 1 January 2022.

During the year, Kathleen C H Gan, Eunice L C Y Chan 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 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 2021, 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 2021.

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 the Supervisor of HSBC Bank (China) Company Limited and a Non-executive Director of AXA Insurance Pte. Ltd. Both companies 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, Asia Pacific of The Hongkong and Shanghai Banking Corporation Limited; and was a Director of HSBC Global Asset Management Limited, which is a wholly-owned subsidiary of HSBC Holdings plc., for the period up to 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., for the period up to 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 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.

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 five 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 two Independent Non-executive Directors and one Non-executive Director) 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 2021.

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 2021, 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 2021, 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 2021 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 2022 AGM.

On behalf of the Board

Irene Lee
Chairman
22 February 2022

CONSOLIDATED INCOME STATEMENT

for the year ended 31 December 2021

(Expressed in millions of Hong Kong dollars)

		2021	2020
	note		
Interest income calculated using effective interest method		28,030	35,010
Interest income – others		477	687
Interest income	3	28,507	35,697
Interest expense	3	(4,685)	(8,791)
Net interest income		23,822	26,906
Fee income		9,151	8,588
Fee expense		(2,574)	(2,221)
Net fee income	4	6,577	6,367
Net income/(loss) from financial instruments measured at fair value through profit or loss	5	4,346	3,320
Gains less losses from financial investments	6	206	(10)
Dividend income	7	176	157
Net insurance premium income	8	14,083	15,301
Other operating income	9	322	2,281
Total operating income		49,532	54,322
Net insurance claims and benefits paid and movement in liabilities to policyholders	10	(16,350)	(18,254)
Net operating income before change in expected credit losses and other credit impairment charges		33,182	36,068
Change in expected credit losses and other credit impairment charges	11	(2,807)	(2,738)
Net operating income		30,375	33,330
Employee compensation and benefits		(6,311)	(6,102)
General and administrative expenses		(5,285)	(4,720)
Depreciation expenses		(2,066)	(2,086)
Amortisation of intangible assets		(472)	(297)
Operating expenses	12	(14,134)	(13,205)
Impairment loss on intangible assets		(10)	-
Operating profit		16,231	20,125
Net surplus/(deficit) on property revaluation	16	82	(636)
Share of profits/(losses) of associates		72	(75)
Profit before tax		16,385	19,414
Tax expense	17	(2,439)	(2,744)
Profit for the year		13,946	16,670
Profit attributable to:			
Shareholders of the Bank		13,960	16,687
Non-controlling interests		(14)	(17)
<i>(Figures in HK\$)</i>			
Earnings per share - basic and diluted	18	6.93	8.36

The notes on pages 197 to 263 form part of these Financial Statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

for the year ended 31 December 2021

(Expressed in millions of Hong Kong dollars)

	2021	2020
Profit for the year	13,946	16,670
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 (losses)/gains taken to equity	(1,391)	759
- fair value losses/(gains) transferred to the Consolidated Income Statement:		
-- on hedged items	829	(663)
-- on disposal	(98)	(3)
- release of expected credit losses recognised in the Consolidated Income Statement	-	(2)
- deferred taxes	41	(4)
- exchange difference	349	4
Cash flow hedge reserve:		
- fair value gains/(losses) taken to equity	2,207	(823)
- fair value (gains)/losses transferred to the Consolidated Income Statement	(2,464)	1,115
- deferred taxes	43	(48)
Exchange differences on translation of:		
- financial statements of overseas branches, subsidiaries and associates	522	854
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	4	(1)
- deferred taxes	(1)	-
Equity instruments designated at fair value through other comprehensive income:		
- fair value (losses)/gains taken to equity	(1,961)	920
- exchange difference	173	250
Premises:		
- unrealised surplus/(deficit) on revaluation of premises	1,310	(1,542)
- deferred taxes	(220)	252
- exchange difference	9	19
Defined benefit plans:		
- actuarial gains/(losses) on defined benefit plans	352	(10)
- deferred taxes	(58)	2
Exchange difference and others	(3)	-
Other comprehensive income for the year, net of tax	(357)	1,079
Total comprehensive income for the year	13,589	17,749
Total comprehensive income for the year attributable to:		
- shareholders of the Bank	13,603	17,766
- non-controlling interests	(14)	(17)
	13,589	17,749

The notes on pages 197 to 263 form part of these Financial Statements.

CONSOLIDATED BALANCE SHEET

at 31 December 2021

(Expressed in millions of Hong Kong dollars)

		2021	2020
	note		
ASSETS			
Cash and balances at central banks	22	16,896	11,226
Trading assets	23	47,433	37,117
Derivative financial instruments	24	13,224	17,181
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	25	31,326	20,695
Reverse repurchase agreements – non-trading		18,821	13,360
Placements with and advances to banks	26	72,493	44,357
Loans and advances to customers	27	997,397	944,774
Financial investments	28	500,386	554,720
Interest in associates	31	2,341	2,358
Investment properties	32	9,545	9,415
Premises, plant and equipment	32	31,205	30,925
Intangible assets	33	25,486	24,733
Other assets	34	53,632	48,926
Total assets		1,820,185	1,759,787
LIABILITIES AND EQUITY			
Liabilities			
Deposits from banks		5,333	12,943
Current, savings and other deposit accounts	35	1,230,216	1,209,472
Repurchase agreements - non-trading		16,592	6,270
Trading liabilities	36	44,291	30,937
Derivative financial instruments	24	12,252	20,861
Financial liabilities designated at fair value	37	27,399	32,530
Certificates of deposit and other debt securities in issue	38	81,567	62,500
Other liabilities	39	31,179	31,334
Liabilities under insurance contracts	40	154,551	142,680
Current tax liabilities	41	603	282
Deferred tax liabilities	41	7,302	7,302
Subordinated liabilities	42	24,484	19,481
Total liabilities		1,635,769	1,576,592
Equity			
Share capital	43	9,658	9,658
Retained profits		140,100	137,580
Other equity instruments	44	11,744	11,744
Other reserves		22,830	24,118
Total shareholders' equity		184,332	183,100
Non-controlling interests		84	95
Total equity		184,416	183,195
Total equity and liabilities		1,820,185	1,759,787

Diana Cesar *Executive Director and Chief Executive*

Clement K M Kwok *Director*

Andrew W L Leung *Chief Financial Officer*

The notes on pages 197 to 263 form part of these Financial Statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

 for the year ended 31 December 2021
 (Expressed in millions of Hong Kong dollars)

	Share capital	Other equity instruments	Retained profits ¹	Other reserves					Total shareholders' equity	Non-controlling interests	Total equity
				Premises revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Others ²			
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 ³	-	-	(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

At 1 January 2020	9,658	11,744	133,734	19,889	3,296	16	(196)	669	178,810	107	178,917
Profit for the year	-	-	16,687	-	-	-	-	-	16,687	(17)	16,670
Other comprehensive income (net of tax)	-	-	(8)	(1,271)	1,261	244	854	(1)	1,079	-	1,079
Debt instruments at fair value through other comprehensive income	-	-	-	-	91	-	-	-	91	-	91
Equity instruments designated at fair value through other comprehensive income	-	-	-	-	1,170	-	-	-	1,170	-	1,170
Cash flow hedges	-	-	-	-	-	244	-	-	244	-	244
Change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	-	-	-	-	-	-	-	(1)	(1)	-	(1)
Property revaluation	-	-	-	(1,271)	-	-	-	-	(1,271)	-	(1,271)
Actuarial losses on defined benefit plans	-	-	(8)	-	-	-	-	-	(8)	-	(8)
Exchange differences and others	-	-	-	-	-	-	854	-	854	-	854
Total comprehensive income for the year	-	-	16,679	(1,271)	1,261	244	854	(1)	17,766	(17)	17,749
Dividends paid	-	-	(12,808)	-	-	-	-	-	(12,808)	-	(12,808)
Coupons paid on AT1 capital instruments	-	-	(700)	-	-	-	-	-	(700)	-	(700)
Movement in respect of share-based payment arrangements	-	-	17	-	-	-	-	15	32	-	32
Others	-	-	-	-	-	-	-	-	-	5	5
Transfers	-	-	658	(658)	-	-	-	-	-	-	-
At 31 December 2020	9,658	11,744	137,580	17,960	4,557	260	658	683	183,100	95	183,195

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 2021, the effect of this requirement is to restrict the amount of reserves which can be distributed by the Group to shareholders by HK\$441m (2020: HK\$1,323m).

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 2020 and the first three interim dividends of 2021 amounted to HK\$5,353m and HK\$6,309m respectively.

CONSOLIDATED STATEMENT OF CASH FLOWS

for the year ended 31 December 2021

(Expressed in millions of Hong Kong dollars)

	2021	2020
Profit before tax	16,385	19,414
Adjustments for non-cash items:		
Depreciation and amortisation	2,538	2,383
Net interest income	(23,822)	(26,906)
Dividend income	(176)	(157)
Gains less losses from financial investment	(206)	10
Share of profits/(losses) in associates	(72)	75
Net surplus/(deficit) on property revaluation	(82)	636
Change in expected credit losses and other credit impairment charges	2,807	2,738
Impairment loss on intangible assets	10	-
Loans and advances written off net of recoveries	(1,066)	(987)
Movement in present value of in-force long-term insurance business ("PVIF")	188	(2,082)
Interest received	28,059	35,139
Interest paid	(4,195)	(9,425)
Elimination of exchange differences and other non-cash items	2,995	(11,261)
Changes in operating assets and liabilities		
Change in trading assets	(10,316)	10,240
Change in derivative financial instruments	(4,652)	3,556
Change in financial assets designated and otherwise mandatorily measured at fair value through profit or loss	(10,631)	(1,924)
Change in reverse repurchase agreements - non-trading maturing after one month	804	(7,701)
Change in placings with and advances to banks maturing after one month	(21,390)	10,054
Change in loans and advances to customers	(56,634)	(9,574)
Change in other assets	4,048	(1,808)
Change in repurchase agreements - non trading	10,322	4,392
Change in deposits from banks	(7,610)	10,452
Change in current, savings and other deposit accounts	20,744	6,014
Change in trading liabilities	13,354	(7,039)
Change in financial liabilities designated at fair value	(5,131)	2,950
Change in certificates of deposit and other debt securities in issue	19,067	45,310
Change in other liabilities	661	3,664
Change in liabilities under insurance contract	11,871	10,560
Dividends received from financial investments	178	157
Tax paid	(2,227)	(6,207)
Net cash from operating activities	(14,179)	82,673
Purchase of financial investments	(648,479)	(714,554)
Proceeds from sale or redemption of financial investments	672,930	657,899
Repayment of shareholders' loan from an associated company	2	2
Purchase of property, plant and equipment and intangible assets (excluding PVIF)	(2,146)	(2,110)
Net cash inflow from the sales of loan portfolio	2,267	6,059
Net cash from investing activities	24,574	(52,704)
Interest paid for subordinated liabilities	(336)	(541)
Principal and interest elements of lease payments	(584)	(596)
Dividends paid	(11,662)	(12,808)
Coupons paid on AT1 capital instruments	(703)	(700)
Proceeds from issuance of subordinated liabilities	5,000	-
Net cash from financing activities	(8,285)	(14,645)
Net increase in cash and cash equivalents	2,110	15,324
Cash and cash equivalents at 1 January	109,615	92,702
Exchange differences in respect of cash and cash equivalents	(591)	1,589
Cash and cash equivalents at 31 December	111,134	109,615

CONSOLIDATED STATEMENT OF CASH FLOWS *(continued)*

for the year ended 31 December 2021

(Expressed in millions of Hong Kong dollars)

	2021	2020
Cash and cash equivalents comprise ¹ :		
- Cash and sight balances at central banks	16,896	11,226
- Balances with banks	10,078	6,039
- Items in the course of collection from other banks	3,744	5,062
- Placings with and advances to banks maturing within one month	33,202	30,494
- Reverse repurchase agreements with banks maturing within one month	10,674	4,409
- Treasury bills	28,873	54,793
- Net settlement accounts and cash collateral	13,769	3,908
- less: items in the course of transmission to other banks	(6,102)	(6,316)
	<u>111,134</u>	<u>109,615</u>

¹ At 31 December 2021, the amount of cash and cash equivalents that was not available for use by the Group was HK\$14,040m (2020: HK\$28,169m), of which HK\$8,153m (2020: HK\$11,011m) was related to mandatory deposits at central banks.

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2021

(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 2021. 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 2021

There were no new standards applied during the year ended 31 December 2021. During 2021, 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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

1. Basis of preparation *(continued)*

(c) Consolidation *(continued)*

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 2021.

(d) Future Accounting Developments

The HKICPA has issued a number of new standards which are not yet effective for the year ended 31 December 2021 and which have not been adopted in the financial statements. Key changes of new standards are summarised as follows:

HKFRS 17 *'Insurance contracts'* was issued in January 2018 with amendments to the standard issued in October 2020. The standard sets out the requirements that an entity should apply in accounting for insurance contracts it issues and reinsurance contracts it holds. Following the amendments, HKFRS 17 is effective from 1 January 2023. The Group is in the process of implementing HKFRS 17. Industry practice and interpretation of the standard is still developing. Additionally, the impact on the forecast future returns of our insurance business is dependent on the growth, duration and composition of our insurance portfolio. Therefore, the likely financial impact of its implementation remains uncertain. However, the estimated impact compared with the Group's current accounting policy for insurance contracts, which is set out in policy 2(t) below:

- Under HKFRS 17, there will be no present value of in-force business ('PVIF') asset recognised. Instead the estimated future profit will be included in the measurement of the insurance contract liability as the contractual service margin ('CSM') and this will be gradually recognised in revenue as services are provided over the duration of the insurance contract. While the profit over the life of an individual contract will be unchanged, its emergence will be later under HKFRS 17. The removal of PVIF asset and the recognition of CSM will reduce equity. The PVIF asset will be eliminated to equity on transition, together with other adjustments to assets and liabilities to reflect HKFRS 17 measurement requirements and any consequential amendments to financial assets in the scope of HKFRS 9;
- HKFRS 17 requires increased use of current market values in the measurement of insurance liabilities. Changes in market conditions for certain products measured under the General Measurement Approach are immediately recognised in profit or loss, while changes in market conditions for other products measured under the Variable Fee Approach are included in the measurement of CSM;
- In accordance with HKFRS 17, directly attributable costs will be incorporated in the CSM and recognised in the results of insurance services as a reduction in reported revenue, as profit is recognised over the duration of insurance contracts. Costs that are not directly attributable will remain in operating expenses. This may result in a reduction in operating expenses compared to the current accounting policy.
- We intend to provide an update on the likely financial impacts on our insurance business in later 2022 financial reports, when we expect that this will be reasonably estimable.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

1. Basis of preparation *(continued)*

(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 2021 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.

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.

(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 from financial instruments designated at fair value

Net income / (expense) 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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

2. Significant accounting policies *(continued)*

(b) Non-interest income *(continued)*

(ii) Net income from financial instruments measured at fair value *(continued)*

(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 sight balances at central 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.

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)

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

2. Significant accounting policies *(continued)*

(d) Valuation of financial instruments *(continued)*

Critical accounting estimates and judgements *(continued)*

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. If the initial fair value is lower than the cash amount advanced, such as in the case of some leveraged finance and syndicated lending activities, the difference is deferred and recognised over the life of the loan through the recognition of interest income, unless the loan becomes impaired.

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'.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

2. Significant accounting policies *(continued)*

(i) Derivatives *(continued)*

Hedge accounting *(continued)*

(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.

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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

2. Significant accounting policies *(continued)*

(j) Impairment of amortised cost and FVOCI financial assets *(continued)*

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 allowances 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.

Renegotiation

Loans are identified as renegotiated and classified as credit-impaired when the contractual payment terms are modified due to significant credit distress of the borrower. Renegotiated loans remain classified as credit-impaired until there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows and retain the designation of renegotiated until maturity or derecognition.

A loan that is renegotiated 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 renegotiated loan is a substantially different financial instrument. Any new loans that arise following derecognition events in these circumstances are considered to be POCI and will continue to be disclosed as renegotiated loans.

Other than originated credit-impaired loans, all other modified loans could be transferred out of stage 3 if they no longer exhibit any evidence of being credit-impaired. In the case of renegotiated loans under wholesale portfolios, there should be sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows, over the minimum observation period, and there are no other indicators of impairment. These loans could be transferred to stage 1 or 2 based on the mechanism as described below by comparing the risk of 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). Any amount written off as a result of the modification of contractual terms would not be reversed. While for retail portfolios, renegotiated loans remain in stage 3 for their renegotiated lifetime.

Loan modifications other than renegotiated loans

Loan modifications that are not identified as renegotiated 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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

2. Significant accounting policies (continued)

(j) Impairment of amortised cost and FVOCI financial assets (continued)

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

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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

2. Significant accounting policies *(continued)*

(j) Impairment of amortised cost and FVOCI financial assets *(continued)*

Significant increase in credit risk (stage 2) *(continued)*

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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

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	<ul style="list-style-type: none"> - 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 	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Cannot be lower than current balance 	<ul style="list-style-type: none"> - Amortisation captured for term products
LGD	<ul style="list-style-type: none"> - 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 	<ul style="list-style-type: none"> - 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		<ul style="list-style-type: none"> - 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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

2. Significant accounting policies *(continued)*

(j) Impairment of amortised cost and FVOCI financial assets *(continued)*

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'.

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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

2. Significant accounting policies *(continued)*

(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.

(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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

2. Significant accounting policies *(continued)*

(n) Premises, plant and equipment *(continued)*

*(i) Land and buildings *(continued)**

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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

2. Significant accounting policies *(continued)*

(o) Goodwill and intangible assets *(continued)*

*(i) Goodwill *(continued)**

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.

(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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

2. Significant accounting policies *(continued)*

(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.

(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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

2. Significant accounting policies *(continued)*

(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.

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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

2. Significant accounting policies *(continued)*

(t) Insurance contracts *(continued)*

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.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

3 Interest income/interest expense

(a) Interest income

	2021	2020
Interest income arising from:		
- financial assets that are not at fair value through profit and loss	28,030	35,010
- trading assets	461	642
- financial assets designated and otherwise mandatorily measured at fair value through profit or loss	16	45
	<u>28,507</u>	<u>35,697</u>
of which:		
- interest income from impaired financial assets	42	27

(b) Interest expense

	2021	2020
Interest expense arising from:		
- financial liabilities that are not at fair value through profit and loss	3,311	7,315
- trading liabilities	331	453
- financial liabilities designated at fair value	1,043	1,023
	<u>4,685</u>	<u>8,791</u>
of which:		
- interest expense from subordinated liabilities	338	515

4 Net fee income

2021	Wealth and Personal Banking	Commercial Banking	Global Banking and Markets	Other	Total
- securities broking and related services	1,866	162	12	-	2,040
- retail investment funds	1,539	28	-	-	1,567
- insurance	339	85	78	-	502
- account services	247	116	8	-	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	38	273	626
Fee income	<u>6,917</u>	<u>1,551</u>	<u>410</u>	<u>273</u>	<u>9,151</u>
Fee expense	<u>(2,449)</u>	<u>(28)</u>	<u>(99)</u>	<u>2</u>	<u>(2,574)</u>
	<u>4,468</u>	<u>1,523</u>	<u>311</u>	<u>275</u>	<u>6,577</u>
2020 (restated) ¹					
- securities broking and related services	1,933	205	17	-	2,155
- retail investment funds	1,291	22	-	-	1,313
- insurance	446	75	70	-	591
- account services	251	133	7	-	391
- remittances	65	187	36	-	288
- cards	2,343	22	-	-	2,365
- credit facilities	22	433	143	-	598
- imports/exports	-	334	31	-	365
- other	131	110	39	242	522
Fee income	<u>6,482</u>	<u>1,521</u>	<u>343</u>	<u>242</u>	<u>8,588</u>
Fee expense	<u>(2,120)</u>	<u>(25)</u>	<u>(90)</u>	<u>14</u>	<u>(2,221)</u>
	<u>4,362</u>	<u>1,496</u>	<u>253</u>	<u>256</u>	<u>6,367</u>

¹ To better reflect the change of business model on card acquiring business and retail branches operation, management has made the decision to realign these functions within respective business segments during the year. Comparative figures have been re-presented to conform with current year's presentation.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

4 Net fee income *(continued)*

	2021	2020
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)	1,880	1,743
- fee income	4,179	3,711
- fee expense	(2,299)	(1,968)
Net fee income on trust and other fiduciary activities where the Group holds or invests assets on behalf of its customers	903	982
- fee income	1,022	1,069
- fee expense	(119)	(87)

5 Net income from financial instruments measured at fair value through profit or loss

	2021	2020
Net trading income	1,557	2,318
- trading income	1,560	2,327
- other trading income/(expense) from ineffective fair value hedges	(3)	(9)
Net income/(expense) from financial instruments designated at fair value through profit or loss	182	185
Net income/(expense) from assets and liabilities of insurance businesses measured at fair value through profit or loss	2,610	823
- financial assets held to meet liabilities under insurance and investment contracts	2,611	842
- liabilities to customers under investment contracts	(1)	(19)
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	(3)	(6)
	4,346	3,320

6 Gains less losses from financial investments

	2021	2020
Net gains/(losses) from disposal of debt securities measured at amortised cost	108	(13)
Net gains from disposal of debt securities measured at fair value through other comprehensive income	98	3
	206	(10)

7 Dividend income

	2021	2020
Dividend income:		
- listed investments	160	144
- unlisted investments	16	13
	176	157

NOTES TO THE FINANCIAL STATEMENTS (continued)

8 Net insurance premium income

	Non-linked	Unit-linked	Total
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	<u>14,080</u>	<u>3</u>	<u>14,083</u>
2020			
Gross insurance premium income	14,510	3	14,513
Reinsurers' share of gross insurance premium income	788	-	788
Net insurance premium income	<u>15,298</u>	<u>3</u>	<u>15,301</u>

9 Other operating income

	2021	2020
Rental income from investment properties	269	272
Movement in present value of in-force long-term insurance business (note 33(a))	(188)	2,082
Net losses from disposal of fixed assets	(48)	(19)
Net gains/(losses) from the derecognition of loans and advances to customers measured at amortised cost	4	(4)
Others	285	(50)
	<u>322</u>	<u>2,281</u>

10 Net insurance claims and benefits paid and movement in liabilities to policyholders

	Non-linked	Unit-linked	Total
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	<u>16,344</u>	<u>6</u>	<u>16,350</u>
2020			
Claims, benefits and surrenders paid	11,770	10	11,780
Movement in liabilities	5,813	-	5,813
Gross claims and benefits paid and movement in liabilities to policyholders	17,583	10	17,593
Reinsurers' share of claims, benefits and surrenders paid	(1,900)	-	(1,900)
Reinsurers' share of movement in liabilities	2,561	-	2,561
Reinsurers' share of claims and benefits paid and movement in liabilities to policyholders	661	-	661
Net insurance claims and benefits paid and movement in liabilities to policyholders	<u>18,244</u>	<u>10</u>	<u>18,254</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

11 Change in expected credit losses and other credit impairment charges

	2021	2020
Loans and advances to banks and customers	2,844	2,608
- new allowances net of allowance releases	2,983	2,757
- recoveries of amounts previously written off	(167)	(104)
- other movements	28	(45)
Loan commitments and guarantees	(43)	33
Other financial assets	6	97
	2,807	2,738

12 Operating expenses

	2021	2020
Employee compensation and benefits:		
- salaries and other costs*	5,811	5,613
- retirement benefit costs		
-- defined benefit scheme (note 48(a))	169	180
-- defined contribution scheme (note 48(b))	331	309
	6,311	6,102
General and administrative expenses:		
- rental expenses	22	27
- other premises and equipment	1,795	1,617
- marketing and advertising expenses	378	369
- other operating expenses	3,090	2,707
	5,285	4,720
Depreciation of premises, plant and equipment (note 32)	1,492	1,491
Depreciation of right-of-use assets	574	595
Amortisation of intangible assets (note 33)	472	297
	14,134	13,205
* of which:		
share-based payments (note 49(c))	36	38
Cost efficiency ratio	42.6%	36.6%

13 The emoluments of the five highest paid individuals

(a) The aggregate emoluments

	2021	2020
Salaries, allowances and benefits in kind	28	29
Retirement scheme contributions	1	2
Variable bonuses		
- Cash bonus	8	13
- Share-based payment	9	14
	46	58

(b) The numbers of the five highest paid individuals with emoluments within the following bands are:

HK\$	2021 Number of Individuals	2020 Number of Individuals
5,500,001 - 6,000,000	-	1
6,500,001 - 7,000,000	-	1
7,000,001 - 7,500,000	1	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	-
24,500,001 - 25,000,000	-	1
	5	5

The emoluments of the five highest paid individuals set out above include the emoluments of two (2020: two) Executive Directors which are included in note 14. There is no Non-executive Director included in the table above (2020: Nil).

NOTES TO THE FINANCIAL STATEMENTS (continued)

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								Total 2021 '000	Total 2020 '000
	Fees '000	Salaries, allowances and benefits in kind ⁽⁶⁾ '000	Contribution to retirement benefit schemes ⁽⁴⁾ '000	Variable bonus ⁽⁵⁾						
				Cash		Shares				
				Deferred '000	Non-deferred '000	Deferred '000	Non-deferred '000			
Executive Directors										
Diana F Cesar, Chief Executive ⁽¹⁾ (Appointed on 1 Sep 2021)	-	3,227	228	985	657	1,114	657	6,868	-	
Louisa Cheang, Chief Executive ⁽¹⁾ (Resigned on 1 Sep 2021)	-	7,918	457	-	-	-	-	8,375	24,943	
Margaret W H Kwan ⁽¹⁾	-	4,197	18	713	1,070	807	1,070	7,875	6,560	
Non-Executive Directors										
Raymond K F Ch'ien ⁽³⁾ (Resigned on 27 May 2021)	451	-	-	-	-	-	-	451	1,030	
John C C Chan ⁽³⁾	1,070	-	-	-	-	-	-	1,070	830	
Nixon Chan (Resigned on 22 May 2020)	-	-	-	-	-	-	-	-	275	
L Y Chiang ⁽³⁾	1,091	-	-	-	-	-	-	1,091	960	
Kenneth S Y Ng	960	-	-	-	-	-	-	960	890	
Irene Y L Lee ⁽³⁾	1,818	-	-	-	-	-	-	1,818	1,296	
Eric K C Li ⁽³⁾ (Resigned on 27 May 2021)	537	-	-	-	-	-	-	537	1,290	
Vincent H S Lo	660	-	-	-	-	-	-	660	660	
Peter T S Wong ⁽²⁾ (Resigned on 1 Sep 2021)	553	-	-	-	-	-	-	553	730	
Michael W K Wu ⁽³⁾	1,091	-	-	-	-	-	-	1,091	960	
Kathleen C H Gan ⁽²⁾	660	-	-	-	-	-	-	660	660	
Clement K M Kwok ⁽³⁾ (Appointed on 27 May 2021)	773	-	-	-	-	-	-	773	-	
David Y C Liao ⁽²⁾ (Appointed on 1 Sep 2021)	287	-	-	-	-	-	-	287	-	
Past Directors	-	-	1,677	-	-	-	-	1,677	1,674	
	<u>9,951</u>	<u>15,342</u>	<u>2,380</u>	<u>1,698</u>	<u>1,727</u>	<u>1,921</u>	<u>1,727</u>	<u>34,746</u>	<u>42,758</u>	
2020	<u>9,581</u>	<u>15,174</u>	<u>2,377</u>	<u>4,208</u>	<u>3,285</u>	<u>4,848</u>	<u>3,285</u>			

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 2021 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\$1.677m in 2021.

(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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

15 Auditors' remuneration

	2021	2020
Statutory audit services	27	26
Non-statutory audit services and others	10	11
	<u>37</u>	<u>37</u>

16 Net surplus/(deficit) on property revaluation

	2021	2020
Surplus/(deficit) on investment property revaluation	<u>82</u>	<u>(636)</u>

17 Tax expense

(a) Taxation in the Consolidated Income Statement represents:

	2021	2020
Current tax - provision for Hong Kong profits tax		
Tax for the year	2,391	2,344
Adjustment in respect of prior years	75	(57)
	<u>2,466</u>	<u>2,287</u>
Current tax - taxation outside Hong Kong		
Tax for the year	77	93
Adjustment in respect of prior years	-	(1)
	<u>77</u>	<u>92</u>
Deferred tax (note 41(b))		
Origination and reversal of temporary differences	<u>(104)</u>	<u>365</u>
Total tax expense	<u>2,439</u>	<u>2,744</u>

The current tax provision is based on the estimated assessable profit for 2021, 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 (2020: 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:

	2021	2020
Profit before tax	<u>16,385</u>	<u>19,414</u>
Notional tax on profit before tax, calculated at Hong Kong profits tax rate of 16.5% (2020: 16.5%)	2,704	3,203
Tax effect of:		
- different tax rates in other countries/areas	87	68
- non-taxable income and non-deductible expenses	(362)	(289)
- share of (profits)/losses of associates	(12)	12
- others	22	(250)
Actual charge for taxation	<u>2,439</u>	<u>2,744</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

18 Earnings per share - basic and diluted

The calculation of basic and diluted earnings per share is based on earnings of HK\$13,257m in 2021 (2020: HK\$15,987m), 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 2020).

19 Dividends/Distributions

(a) Dividends attributable to the year:

	2021		2020	
	per share HK\$	HK\$m	per share HK\$	HK\$m
First interim	1.10	2,103	1.10	2,103
Second interim	1.10	2,103	0.80	1,529
Third interim	1.10	2,103	0.80	1,529
Fourth interim	1.80	3,441	2.80	5,353
	<u>5.10</u>	<u>9,750</u>	<u>5.50</u>	<u>10,514</u>

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:

	2021	2020
Fourth interim dividend in respect of the previous year, approved and paid during the year, of HK\$1.80 per share (2020: HK\$2.8 per share)	<u>5,353</u>	<u>7,647</u>

(c) Distributions to holders of AT1 capital instruments classified as equity

	2021	2020
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)	423	421
US\$600 million Fixed to floating rate perpetual capital instrument (coupon rate at 6.0 per cent and then three-month US dollar LIBOR plus 4.06 per cent from the first call date)	280	279
	<u>703</u>	<u>700</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

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 four 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 and Markets** provides tailored financial solutions to major corporate and institutional clients. Undertaking a long-term relationships management approach, its services include general banking, corporate lending, interest rates, foreign exchange, money markets, structured products and derivatives, etc. Global Banking and Markets also manages the funding and liquidity positions of the Bank and other market risk positions arising from banking activities;
- **Other** mainly represents the Bank'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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

20 Segmental analysis (continued)

(a) Segmental result (continued)

	Wealth and Personal Banking	Commercial Banking	Global Banking and Markets	Other ¹	Total
2021					
Net interest income/(expense)	13,013	7,037	4,161	(389)	23,822
Net fee income	4,468	1,523	311	275	6,577
Net income/(loss) 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/(loss)	33,865	9,927	5,426	314	49,532
Net insurance claims and benefits paid and movement in liabilities to policyholders	(15,359)	(991)	-	-	(16,350)
Net operating income/(loss) before change in expected credit losses and other credit impairment charges	18,506	8,936	5,426	314	33,182
Change in expected credit losses and other credit impairment charges	(314)	(1,326)	(1,167)	-	(2,807)
Net operating income/(loss)	18,192	7,610	4,259	314	30,375
Operating expenses*	(8,582)	(3,463)	(1,294)	(795)	(14,134)
Impairment loss on intangible assets	-	-	-	(10)	(10)
Operating profit/(loss)	9,610	4,147	2,965	(491)	16,231
Net surplus on property revaluation	-	-	-	82	82
Share of profits/(losses) of associates	72	-	-	-	72
Profit/(loss) before tax	9,682	4,147	2,965	(409)	16,385
Share of profit/(loss) before tax	59.1%	25.3%	18.1%	(2.5)%	100.0%

* Depreciation/amortisation included
in operating expenses

(820) (10) (3) (1,705) (2,538)

At 31 December 2021

Total assets	593,093	416,717	821,465	(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	256,574	(9,011)	1,635,769
of which: Customer deposits ²	874,709	334,003	143,964	(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 Deposits balances under 'Other' segment mainly related to consolidated elimination of Negotiable Certificates of Deposit ('NCDs') issued by Hang Seng Bank (China) Limited to Hang Seng Bank Limited.

² Customer deposits balances include current, savings and other deposit accounts, certificates of deposit and other debt securities in issue.

NOTES TO THE FINANCIAL STATEMENTS (continued)

20 Segmental analysis (continued)

(a) Segmental result (continued)

	Wealth and Personal Banking	Commercial Banking	Global Banking and Markets	Other ¹	Total
2020 (restated) ²					
Net interest income/(expense)	14,694	8,273	4,408	(469)	26,906
Net fee income	4,362	1,496	253	256	6,367
Net income/(loss) from financial instruments measured at fair value through profit or loss	1,724	317	1,417	(138)	3,320
Gains less losses from financial investments	(15)	1	4	-	(10)
Dividend income	-	-	-	157	157
Net insurance premium income	14,219	1,082	-	-	15,301
Other operating income/(loss)	2,076	(37)	6	236	2,281
Total operating income/(loss)	37,060	11,132	6,088	42	54,322
Net insurance claims and benefits paid and movement in liabilities to policyholders	(17,288)	(966)	-	-	(18,254)
Net operating income/(loss) before change in expected credit losses and other credit impairment charges	19,772	10,166	6,088	42	36,068
Change in expected credit losses and other credit impairment charges	(973)	(1,771)	6	-	(2,738)
Net operating income/(loss)	18,799	8,395	6,094	42	33,330
Operating expenses*	(8,201)	(3,340)	(1,124)	(540)	(13,205)
Operating profit/(loss)	10,598	5,055	4,970	(498)	20,125
Net deficit on property revaluation	-	-	-	(636)	(636)
Share of profits/(losses) of associates	(76)	-	-	1	(75)
Profit/(loss) before tax	10,522	5,055	4,970	(1,133)	19,414
Share of profit/(loss) before tax	54.2%	26.0%	25.6%	(5.8)%	100.0%

* Depreciation/amortisation included
in operating expenses

(851)	(8)	(3)	(1,521)	(2,383)
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At 31 December 2020

Total assets	556,503	404,157	785,858	13,269	1,759,787
of which: Gross loans and advances to customers	353,257	392,261	204,436	-	949,954
Total liabilities	1,037,041	323,783	217,188	(1,420)	1,576,592
of which: Customer deposits ³	883,369	309,339	117,797	(6,422)	1,304,083
Interest in associates	2,358	-	-	-	2,358
Non-current assets acquired during the year	162	52	3	1,893	2,110

¹ Deposits balances under 'Other' segment mainly related to consolidated elimination of NCDs issued by Hang Seng Bank (China) Limited to Hang Seng Bank Limited.

² To better reflect the change of business model on card acquiring business and retail branches operation, management has made the decision to realign these functions within respective business segments during the year. Comparative figures have been re-stated to conform with current year's presentation.

³ Customer deposits balances include current, savings and other deposit accounts, certificates of deposit and other debt securities in issue.

NOTES TO THE FINANCIAL STATEMENTS (continued)

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 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
Equity	175,751	16,963	1,472	(9,770)	184,416
Share capital	9,658	10,990	-	(10,990)	9,658
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
Year ended 31 December 2020					
Total operating income/(loss)	51,357	2,732	276	(43)	54,322
Profit before tax	18,364	884	166	-	19,414
At 31 December 2020 (restated)					
Total assets	1,648,014	149,586	23,420	(61,233)	1,759,787
Total liabilities	1,471,529	134,424	22,102	(51,463)	1,576,592
Equity	176,485	15,162	1,318	(9,770)	183,195
Share capital	9,658	10,632	-	(10,632)	9,658
Interest in associates	2,358	-	-	-	2,358
Non-current assets*	63,465	1,544	64	-	65,073
Contingent liabilities and commitments	485,859	57,825	5,921	(30,265)	519,340

* Non-current assets consist of investment properties, premises, plant and equipment, intangible assets and right-of-use assets.

NOTES TO THE FINANCIAL STATEMENTS (continued)

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.
- 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 remaining contractual maturity. Undated investment contracts are included in the 'Over 5 years' time bucket, however, such contracts are subject to surrender and transfer options by the policyholders.

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
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 ¹	-	-	-	-	-	-	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

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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

21 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
2020									
Assets									
Cash and balances at central banks	11,226	-	-	-	-	-	-	-	11,226
Trading assets	37,117	-	-	-	-	-	-	-	37,117
Derivative financial instruments	17,074	23	8	6	16	33	21	-	17,181
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	79	154	-	-	-	-	525	19,937	20,695
Reverse repurchase agreements – non-trading	4,573	8,010	-	777	-	-	-	-	13,360
Placements with and advances to banks	36,533	1,531	-	-	-	3,775	2,518	-	44,357
Loans and advances to customers	79,394	49,449	71,585	63,911	51,412	127,037	241,326	260,660	944,774
Financial investments	79,378	173,070	62,584	9,417	15,707	38,853	88,275	87,436	554,720
Accrued income and other financial assets	21,061	4,731	3,237	468	178	242	135	743	30,795
Financial assets	<u>286,435</u>	<u>236,968</u>	<u>137,414</u>	<u>74,579</u>	<u>67,313</u>	<u>169,940</u>	<u>332,800</u>	<u>368,776</u>	<u>1,674,225</u>
Non-financial assets	-	-	-	-	-	-	-	85,562	85,562
Total assets	<u>286,435</u>	<u>236,968</u>	<u>137,414</u>	<u>74,579</u>	<u>67,313</u>	<u>169,940</u>	<u>332,800</u>	<u>454,338</u>	<u>1,759,787</u>
Liabilities									
Deposits from banks	11,272	-	1,671	-	-	-	-	-	12,943
Current, savings and other deposit accounts	1,086,162	97,481	17,417	5,077	2,513	562	260	-	1,209,472
Repurchase agreements - non-trading	4,177	-	1,020	450	-	623	-	-	6,270
Trading liabilities	30,937	-	-	-	-	-	-	-	30,937
Derivative financial instruments	18,828	134	305	42	99	463	988	2	20,861
Financial liabilities designated at fair value	12,934	9,741	5,783	2,281	1,027	348	-	416	32,530
Certificates of deposit and other debt securities in issue	3,253	20,369	30,624	141	7,413	700	-	-	62,500
Subordinated liabilities	-	-	-	-	-	-	6,240	13,241	19,481
Accruals and other financial liabilities	18,258	6,239	2,973	442	328	555	909	262	29,966
Financial liabilities	<u>1,185,821</u>	<u>133,964</u>	<u>59,793</u>	<u>8,433</u>	<u>11,380</u>	<u>3,251</u>	<u>8,397</u>	<u>13,921</u>	<u>1,424,960</u>
Non-financial liabilities	-	-	-	-	-	-	-	151,632	151,632
Total liabilities	<u>1,185,821</u>	<u>133,964</u>	<u>59,793</u>	<u>8,433</u>	<u>11,380</u>	<u>3,251</u>	<u>8,397</u>	<u>165,553</u>	<u>1,576,592</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

22 Cash and balances at central banks

	2021	2020
Cash in hand	7,230	6,937
Balances at central banks	<u>9,666</u>	<u>4,289</u>
	<u>16,896</u>	<u>11,226</u>

23 Trading assets

	2021	2020
Treasury bills	26,004	16,533
Other debt securities	<u>21,388</u>	<u>20,539</u>
Debt securities	47,392	37,072
Investment funds/equity shares	41	45
	<u>47,433</u>	<u>37,117</u>

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	1,108,621	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	<u>1,741,666</u>	<u>60,077</u>	<u>1,801,743</u>	<u>11,927</u>	<u>1,297</u>	<u>13,224</u>	<u>11,788</u>	<u>464</u>	<u>12,252</u>

	Notional contract amount			Fair value - Assets			Fair value - Liabilities		
	Trading	Hedging	Total	Trading	Hedging	Total	Trading	Hedging	Total
Foreign exchange	1,010,478	29,851	1,040,329	11,833	14	11,847	13,791	704	14,495
Interest rate	532,761	62,932	595,693	4,653	164	4,817	4,663	1,351	6,014
Equity and other	33,863	-	33,863	517	-	517	352	-	352
At 31 December 2020	<u>1,577,102</u>	<u>92,783</u>	<u>1,669,885</u>	<u>17,003</u>	<u>178</u>	<u>17,181</u>	<u>18,806</u>	<u>2,055</u>	<u>20,861</u>

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 is dependent on unobservable parameters is deferred over the life of the contract or until the instrument is redeemed, transferred or sold or the fair value becomes observable. All derivatives that are part of qualifying hedging relationships have valuations based on observable market parameters.

NOTES TO THE FINANCIAL STATEMENTS (continued)

24 Derivative financial instruments (continued)

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, cash flow hedges, or hedges of net investments in foreign operations.

(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.

(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.

(c) Interest Rate Benchmark Reform

At 31 December 2021, HK\$24,447m (2020: HK\$46,175m) 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 2021 Annual Report.

NOTES TO THE FINANCIAL STATEMENTS (continued)

25 Financial assets designated and otherwise mandatorily measured at fair value through profit or loss

	2021	2020
Debt securities	18	2
Equity shares	7,422	4,253
Investment funds	22,863	15,158
Other	1,023	1,282
	<u>31,326</u>	<u>20,695</u>

26 Placings with and advances to banks

	2021	2020
Balances with banks	10,078	6,039
Placings with and advances to banks maturing within one month	33,202	30,494
Placings with and advances to banks maturing after one month but less than one year	26,673	1,531
Placings with and advances to banks maturing after one year	2,541	6,293
Less: Allowances for expected credit losses	(1)	-
	<u>72,493</u>	<u>44,357</u>

of which:

Placings with and advances to central banks	7,554	13,216
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There were no overdue advances, impaired advances and rescheduled advances to banks at 31 December 2021 (2020: Nil).

27 Loans and advances to customers

(a) Loans and advances to customers

	2021	2020
Gross loans and advances to customers	1,004,325	949,954
Less: Allowances for expected credit losses	(6,928)	(5,180)
	<u>997,397</u>	<u>944,774</u>

% %

Expected credit losses as a percentage of gross loans and advances to customers	0.69	0.55
---------------------------------------------------------------------------------	------	------

2021 2020

Gross impaired loans and advances	10,429	5,724
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% %

Gross impaired loans and advances as a percentage of gross loans and advances to customers	1.04	0.60
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NOTES TO THE FINANCIAL STATEMENTS (continued)

27 Loans and advances to customers (continued)

(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:

	Present value of minimum lease payments receivable	Interest income relating to future periods	Total minimum lease payments receivable
2021			
Amounts receivable:			
- within one year	376	141	517
- one to two years	392	124	516
- two to three years	389	125	514
- three to four years	372	119	491
- four to five years	374	119	493
- after five years	5,839	890	6,729
	<u>7,742</u>	<u>1,518</u>	<u>9,260</u>
Allowances for expected credit losses	(103)		
Net investments in finance leases and hire purchase contracts	<u>7,639</u>		
2020			
Amounts receivable:			
- within one year	357	139	496
- one to two years	382	121	503
- two to three years	380	122	502
- three to four years	377	123	500
- four to five years	359	117	476
- after five years	5,863	912	6,775
	<u>7,718</u>	<u>1,534</u>	<u>9,252</u>
Allowances for expected credit losses	(94)		
Net investments in finance leases and hire purchase contracts	<u>7,624</u>		

NOTES TO THE FINANCIAL STATEMENTS (continued)

28 Financial investments

	2021	2020
Financial investments measured at fair value through other comprehensive income:		
- treasury bills	225,910	268,031
- debt securities	127,982	144,814
- equity shares	5,267	7,051
	<u>359,159</u>	<u>419,896</u>
Debt instruments measured at amortised cost:		
- treasury bills	2,300	3,667
- debt securities	139,080	131,330
Less: Allowances for expected credit losses	(153)	(173)
	<u>141,227</u>	<u>134,824</u>
	<u>500,386</u>	<u>554,720</u>

Equity instruments measured at fair value through other comprehensive income

	2021	2020
Type of equity instruments		
- business facilitation	5,267	7,051

There was no overdue debt securities at 31 December 2021 (2020: Nil). The Group did not hold any asset-backed securities, mortgage-backed securities and collateralised debt obligations in 2021 and 2020.

There was no financial investments determined to be impaired at 31 December 2021 (2020: Nil).

29 Assets pledged, assets transferred and collateral received

Assets pledged

Financial assets pledged to secure liabilities

	2021	2020
Trading assets and financial investments	<u>61,451</u>	<u>45,405</u>
Amount of liabilities secured	<u>62,718</u>	<u>47,893</u>

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.

Assets transferred

Transferred financial assets not qualifying for full derecognition and associated financial liabilities

	2021		2020	
	Carrying amount of Transferred assets	Associated liabilities	Transferred assets	Associated liabilities
Repurchase agreement	13,078	12,374	6,693	6,270
Securities lending agreements	438	-	1,338	-
	<u>13,516</u>	<u>12,374</u>	<u>8,031</u>	<u>6,270</u>

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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

29 Assets pledged, assets transferred and collateral received (continued)

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

	2021	2020
Fair value of collateral permitted to sell or repledge in the absence of default	<u>18,865</u>	<u>13,440</u>
Fair value of collateral actually sold or repledged	<u>4,226</u>	<u>101</u>

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 2021. The class of shares held is ordinary.

<u>Name of company</u>	<u>Place of incorporation & operation</u>	<u>Principal activities</u>	<u>Issued equity capital</u>	<u>Percentage of shareholding</u>
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 PRC laws.

² Represents a foreign-majority-owned contractual joint venture registered under the PRC laws.

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

	2021	2020
Share of net assets	<u>2,341</u>	<u>2,358</u>

The associates are:

<u>Name of company</u>	<u>Place of incorporation and operation</u>	<u>Principal activities</u>	<u>Issued equity capital</u>	<u>Group's interest in equity capital</u>
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 2021 and 2020.

	<u>Assets</u>	<u>Liabilities</u>	<u>Equity</u>	<u>Revenue</u>	<u>Expenses</u>	<u>Revenue Less Expenses</u>
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
2020						
100 per cent	10,564	996	9,568	(254)	51	(305)
The Group's effective interest	2,604	246	2,358	(62)	13	(75)

At 31 December 2021, 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 (2020: Nil).

NOTES TO THE FINANCIAL STATEMENTS (continued)

32 Property, plant and equipment

	2021	2020
Premises	27,281	26,898
Plant and equipment ¹	2,090	1,944
Other right of use assets	1,834	2,083
Premises, plant and equipment	<u>31,205</u>	<u>30,925</u>
Investment properties	<u>9,545</u>	<u>9,415</u>
	<u>40,750</u>	<u>40,340</u>

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
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	<u>27,281</u>	<u>9,545</u>	<u>4,465</u>	<u>41,291</u>
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	<u>-</u>	<u>-</u>	<u>(2,375)</u>	<u>(2,375)</u>
Net book value at 31 December	<u>27,281</u>	<u>9,545</u>	<u>2,090</u>	<u>38,916</u>
Representing:				
- measure at cost	-	-	2,090	2,090
- measure at valuation	27,281	9,545	-	36,826
	<u>27,281</u>	<u>9,545</u>	<u>2,090</u>	<u>38,916</u>
2020				
Cost or valuation:				
At 1 January	29,498	10,121	5,919	45,538
Additions	84	21	1,017	1,122
Disposals and write-offs	-	-	(2,974)	(2,974)
Elimination of accumulated depreciation on revalued premises	(1,033)	-	-	(1,033)
Deficit on revaluation:				
- debited to premises revaluation reserve	(1,542)	-	-	(1,542)
- debited to income statement	-	(892)	-	(892)
Transfer	(165)	165	-	-
Exchange adjustments and other	56	-	20	76
At 31 December	<u>26,898</u>	<u>9,415</u>	<u>3,982</u>	<u>40,295</u>
Accumulated depreciation:				
At 1 January	-	-	(4,514)	(4,514)
Charge for the year (note 12)	(1,033)	-	(458)	(1,491)
Attributable to assets sold or written off	-	-	2,957	2,957
Elimination of accumulated depreciation on revalued premises	1,033	-	-	1,033
Exchange adjustments and other	-	-	(23)	(23)
At 31 December	<u>-</u>	<u>-</u>	<u>(2,038)</u>	<u>(2,038)</u>
Net book value at 31 December	<u>26,898</u>	<u>9,415</u>	<u>1,944</u>	<u>38,257</u>
Representing:				
- measure at cost	-	-	1,944	1,944
- measure at valuation	26,898	9,415	-	36,313
	<u>26,898</u>	<u>9,415</u>	<u>1,944</u>	<u>38,257</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

32 Property, plant and equipment (continued)

(b) Terms of lease

	Premises		Investment properties	
	2021	2020	2021	2020
Leaseholds				
Held in Hong Kong:				
- long leases (over 50 years unexpired)	2,524	2,501	1,666	1,635
- medium leases (10 to 50 years unexpired)	23,742	23,418	7,504	7,409
- short leases (below 10 years unexpired)	-	-	375	371
Held outside Hong Kong:				
- long leases (over 50 years unexpired)	-	-	-	-
- medium leases (10 to 50 years unexpired)	1,015	979	-	-
- short leases (below 10 years unexpired)	-	-	-	-
	<u>27,281</u>	<u>26,898</u>	<u>9,545</u>	<u>9,415</u>

(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:

	2021	2020
Cost less accumulated depreciation at 31 December	<u>6,699</u>	<u>6,873</u>

(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.

	2021	2020
Direct operating expenses arising from investment properties	<u>41</u>	<u>34</u>
Direct operating expenses arising from investment properties that generated rental income	<u>38</u>	<u>32</u>

The Group's total future minimum lease payments receivable under non-cancellable operating leases are as follows:

	2021	2020
Within one year	227	202
One to two years	106	100
Two to three years	50	27
Three to four years	-	3
Four to five years	-	-
	<u>383</u>	<u>332</u>

(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 10 November 2021, and were updated by C&W for any material changes in the valuation as at 31 December 2021. It was confirmed that there was no material change in value since 10 November 2021. 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 2021, there were no transfers into or out of Level 3 (2020: Nil).

NOTES TO THE FINANCIAL STATEMENTS (continued)

32 Property, plant and equipment (continued)

(e) Fair value measurement of properties (continued)

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 the PRC 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.

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
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	-	43
- net surplus/(deficit) on property revaluation	-	82
- depreciation of premises, plant and equipment	(1,001)	-
2020		
Unrealised gains or losses recognised in profit or loss relating to those assets held at the end of the reporting period		
- other operating income	-	(256)
- net surplus/(deficit) on property revaluation	-	(636)
- depreciation of premises, plant and equipment	(1,033)	-

(ii) Information about significant unobservable inputs in Level 3 valuations

	Valuation technique(s)	Unobservable input(s)	Range	
			2021	2020
Investment properties	Income approach (also known as Investment approach)	Market yields (reversionary yield)	2.20% to 4.90%	2.35% to 4.95%
		Market rental	HK\$14.9 to HK\$320 per square foot	HK\$14.6 to HK\$390 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

	2021	2020
Present value of in-force long-term insurance business	22,363	22,551
Internally developed software	2,704	1,737
Acquired software	90	116
Goodwill	329	329
	<u>25,486</u>	<u>24,733</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

33 Intangible assets (continued)

(a) Movement of present value of in-force long-term insurance business ('PVIF')

	2021	2020
At 1 January	22,551	20,469
Movement in present value of in-force long-term insurance business (note 9)	(188)	2,082
- Addition from current year new business	2,332	1,761
- Expected return	(1,625)	(1,569)
- Experience variances	288	192
- Changes in operating assumptions	42	280
- Investment return variances	(606)	812
- Changes in investment assumptions	(604)	606
- Other adjustments	(15)	-
At 31 December	<u>22,363</u>	<u>22,551</u>

The key assumptions used in the computation of PVIF are as follows:

	2021	2020
Risk discount rate	5.4%	5.1%
Expenses inflation	3.0%	3.0%
Average lapse rate:		
- 1st year	2.6%	2.4%
- 2nd year onwards	3.6%	3.8%

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

	2021	2020
At 1 January and at 31 December	<u>329</u>	<u>329</u>

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 2021, there was no impairment of goodwill (2020: 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 2021. 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.

(c) Movement of internally developed application software and acquired software

	2021	2020
Cost:		
At 1 January	3,277	2,363
Additions	1,417	988
Amounts written off	(4)	(89)
Exchange and others	21	15
At 31 December	<u>4,711</u>	<u>3,277</u>
Accumulated amortisation:		
At 1 January	(1,424)	(1,207)
Charge for the year (note 12)	(472)	(297)
Impairment	(10)	-
Amounts written off	4	87
Exchange and others	(15)	(7)
At 31 December	<u>(1,917)</u>	<u>(1,424)</u>
Net book value at 31 December	<u>2,794</u>	<u>1,853</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

34 Other assets

	2021	2020
Items in the course of collection from other banks	3,744	5,062
Bullion	8,470	12,337
Prepayments and accrued income	4,732	3,917
Acceptances and endorsements	11,121	9,027
Less: Allowances for expected credit losses	(12)	(14)
Reinsurers' share of liabilities under insurance contracts (note 40)	5,848	5,471
Settlement accounts	13,711	4,329
Cash collateral	2,343	5,286
Other accounts	3,675	3,511
	<u>53,632</u>	<u>48,926</u>

Other accounts included 'Assets held for sale' of HK\$35m (2020: HK\$28m). There was no 'Retirement benefit assets' in 2021 (2020: HK\$7m).

35 Current, savings and other deposit accounts

	2021	2020
Current, savings and other deposit accounts:		
- as stated in Consolidated Balance Sheet	1,230,216	1,209,472
- structured deposits reported as financial liabilities designated at fair value (note 37)	24,012	26,840
	<u>1,254,228</u>	<u>1,236,312</u>
By type:		
- demand and current accounts	150,127	137,050
- savings accounts	871,281	825,547
- time and other deposits	232,820	273,715
	<u>1,254,228</u>	<u>1,236,312</u>

36 Trading liabilities

	2021	2020
Short positions in securities	<u>44,291</u>	<u>30,937</u>

37 Financial liabilities designated at fair value

	2021	2020
Certificates of deposit in issue (note 38)	-	1,516
Structured deposits (note 35)	24,012	26,840
Other structured debt securities in issue (note 38)	3,005	3,755
Liabilities to customers under investment contracts	382	419
	<u>27,399</u>	<u>32,530</u>

At 31 December 2021, the accumulated loss in fair value attributable to changes in own credit risk for financial liabilities designated at fair value was HK\$2m (2020: accumulated loss HK\$6m).

38 Certificates of deposit and other debt securities in issue

	2021	2020
Certificates of deposit and other debt securities in issue:		
- as stated in Consolidated Balance Sheet	81,567	62,500
- certificates of deposit in issue designated at fair value (note 37)	-	1,516
- other structured debt securities in issue reported as financial liabilities designated at fair value (note 37)	3,005	3,755
	<u>84,572</u>	<u>67,771</u>
By type:		
- certificates of deposit in issue	81,567	64,016
- other debt securities in issue	3,005	3,755
	<u>84,572</u>	<u>67,771</u>

39 Other liabilities

	2021	2020
Items in the course of transmission to other banks	6,102	6,316
Accruals	3,762	3,490
Acceptances and endorsements	11,121	9,027
Retirement benefit liabilities (note 48(a))	339	630
Settlement accounts	1,874	5,124
Cash collateral	2,232	1,060
Lease liabilities	1,880	2,102
Other	3,869	3,585
	<u>31,179</u>	<u>31,334</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

40 Liabilities under insurance contracts

	Gross	Reinsurers' share ¹	Net
2021			
Non-linked			
At 1 January	142,611	(5,471)	137,140
Claims and benefits paid	(11,901)	868	(11,033)
Increase in liabilities to policyholders	17,573	(1,229)	16,344
Foreign exchange and other movements	6,197	(16)	6,181
At 31 December	<u>154,480</u>	<u>(5,848)</u>	<u>148,632</u>
Unit-linked			
At 1 January	69	-	69
Claims and benefits paid	(4)	-	(4)
Increase in liabilities to policyholders	6	-	6
At 31 December	<u>71</u>	<u>-</u>	<u>71</u>
	<u>154,551</u>	<u>(5,848)</u>	<u>148,703</u>
2020			
Non-linked			
At 1 January	132,051	(8,503)	123,548
Claims and benefits paid	(11,770)	1,900	(9,870)
Increase in liabilities to policyholders	17,583	661	18,244
Foreign exchange and other movements	4,747	471	5,218
At 31 December	<u>142,611</u>	<u>(5,471)</u>	<u>137,140</u>
Unit-linked			
At 1 January	69	-	69
Claims and benefits paid	(10)	-	(10)
Increase in liabilities to policyholders	10	-	10
At 31 December	<u>69</u>	<u>-</u>	<u>69</u>
	<u>142,680</u>	<u>(5,471)</u>	<u>137,209</u>

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:

	2021	2020
Included in 'Other assets':		
Current taxation recoverable	9	-
Deferred tax assets	90	183
	<u>99</u>	<u>183</u>
Current tax liabilities:		
Provision for Hong Kong profits tax	580	214
Provision for taxation outside Hong Kong	23	68
	<u>603</u>	<u>282</u>
Deferred tax liabilities	7,302	7,302
	<u>7,905</u>	<u>7,584</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

41 Current tax and deferred tax (continued)

(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 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
At 1 January 2020	345	4,060	(534)	45	3	3,054	6,973
Exchange adjustment and others	-	5	(11)	(4)	-	(7)	(17)
Charged/(credited) to income statement (note 17(a))	201	(170)	(148)	-	-	482	365
Charged/(credited) to reserves	-	(252)	-	4	48	(2)	(202)
At 31 December 2020	546	3,643	(693)	45	51	3,527	7,119

(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\$474m (2020: HK\$480m). Of these amounts, HK\$187m (2020: HK\$213m) 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 2021 (2020: Nil).

(d) Deferred tax liabilities not recognised

There were no deferred tax liabilities not recognised as at 31 December 2021 (2020: Nil).

NOTES TO THE FINANCIAL STATEMENTS (continued)

42 Subordinated liabilities

Nominal value	Description	2021	2020
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	3,101
HK\$5,000 million	Floating rate subordinated loan due Nov 2027, callable from 2026 ⁵	4,985	-
		<u>24,484</u>	<u>19,481</u>
Representing:			
- measured at amortised cost		<u>24,484</u>	<u>19,481</u>

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 Interest rate at three-month US dollar LIBOR plus 1.789 per cent per annum, 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.

During the year, the Bank has issued non-capital loss-absorbing capacity debt instrument totalling HK\$5bn which rank higher than additional tier 1 capital instruments in the event of a winding-up.

The Bank has not had any defaults of principal, interest or other breaches with respect to its debt instruments during 2021 (2020: nil).

43 Share capital

	2021		2020	
	No. of shares	HK\$	No. of shares	HK\$
Ordinary shares, issued and fully paid				
At 1 January and 31 December	<u>1,911,842,736</u>	<u>9,658</u>	<u>1,911,842,736</u>	<u>9,658</u>

44 Other equity instruments

Nominal value	Description	2021	2020
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
		<u>11,744</u>	<u>11,744</u>

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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

45 Contingent liabilities, contractual commitments and guarantees

(a) Off-balance sheet contingent liabilities and commitments

	2021	2020
Contingent liabilities and financial guarantee contracts		
Financial guarantees ¹	2,431	3,024
Performance and other guarantees ²	26,439	16,774
Other contingent liabilities	80	49
	<u>28,950</u>	<u>19,847</u>
Commitments ³		
Documentary credits and short-term trade-related transactions	3,233	3,248
Forward asset purchases and forward deposits placed	10,633	7,432
Undrawn formal standby facilities, credit lines and other commitments to lend	501,054	488,813
	<u>514,920</u>	<u>499,493</u>

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 HK\$365,054m of commitments at 31 December 2021 (2020: HK\$356,776m) 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 2021, capital commitments, mainly related to the commitment for renovation of branches and offices, were HK\$868m (2020: HK\$916m).

NOTES TO THE FINANCIAL STATEMENTS (continued)

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							Amounts not subject to enforceable netting arrangements ¹	Balance sheet total
	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		
Financial assets²									
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	32,638²
Derivatives	14,445	-	14,445	(10,779)	(483)	(989)	2,194	2,736	17,181
Reverse repos, stock borrowing and similar agreements classified as:	13,360	-	13,360	-	(13,360)	-	-	-	13,360
- trading assets	-	-	-	-	-	-	-	-	-
- non-trading assets	13,360	-	13,360	-	(13,360)	-	-	-	13,360
Other assets	4,025	(3,351)	674	-	-	-	674	-	674
At 31 December 2020	31,830	(3,351)	28,479	(10,779)	(13,843)	(989)	2,868	2,736	31,215²
Financial liabilities³									
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	29,099³
Derivatives	18,048	-	18,048	(10,779)	(658)	(5,149)	1,462	2,813	20,861
Repos, stock lending and similar agreements classified as:	2,193	-	2,193	-	(2,193)	-	-	4,077	6,270
- trading liabilities	-	-	-	-	-	-	-	-	-
- non-trading liabilities	2,193	-	2,193	-	(2,193)	-	-	4,077	6,270
Other liabilities	3,563	(3,351)	212	-	-	-	212	-	212
At 31 December 2020	23,804	(3,351)	20,453	(10,779)	(2,851)	(5,149)	1,674	6,890	27,343³

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\$4,018m (2020: HK\$9,733m).

³ Amounts presented in the balance sheet included balances due to HSBC entities of HK\$5,770m (2020: HK\$8,334m).

NOTES TO THE FINANCIAL STATEMENTS (continued)

48 Employee retirement benefits

(a) Defined benefit schemes

The Group operates one defined benefit scheme, the Hang Seng Bank Limited Defined Benefit Scheme ('HSBDBS'), which covers about 16 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. The Hang Seng Bank Limited Pension Scheme, which was closed to new entrants with effect from 31 December 1986, was dissolved and its members and assets were transferred to the HSBDBS in late 2021.

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 (28 - 48%).

(i) Cumulative actuarial gains/(losses) recognised in other comprehensive income in respect of defined benefit schemes

	2021	2020
At 1 January	(1,209)	(1,199)
Actuarial gains/(losses) recognised in other comprehensive income	<u>352</u>	<u>(10)</u>
At 31 December	<u>(857)</u>	<u>(1,209)</u>

(ii) Movements in the scheme assets and present value of the defined benefit obligations

Net asset/(liability) under defined benefit schemes

	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 from changes in demographic assumptions	-	66	66
- Actuarial gains from changes in financial assumptions	-	-	-
- Actuarial gains from experience	<u>228</u>	<u>58</u>	<u>286</u>
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	<u>4,361</u>	<u>(4,700)</u>	<u>(339)</u>
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)	

The Group expects to make HK\$98m of contributions to defined benefit schemes during 2022 (2020: expected contributions for 2021 was HK\$109m).

NOTES TO THE FINANCIAL STATEMENTS (continued)

48 Employee retirement benefits (continued)

(a) **Defined benefit schemes** (continued)

(ii) Movements in the scheme assets and present value of the defined benefit obligations (continued)

Net asset/(liability) under defined benefit schemes (continued)

	Fair value of scheme assets	Present value of defined benefit obligations	Net defined benefit (liability)/ asset
At 1 January 2020	4,567	(5,211)	(644)
Current service cost (note 12)	-	(163)	(163)
Interest income/(cost) on the defined benefit scheme asset/(liability) (note 12)	77	(87)	(10)
Remeasurement effects recognised in other comprehensive income	319	(329)	(10)
- Actuarial losses from changes in demographic assumptions	-	(3)	(3)
- Actuarial losses from changes in financial assumptions	-	(236)	(236)
- Actuarial gains/(losses) from experience	319	(90)	229
Contributions by the Group	211	-	211
Benefits paid	(488)	488	-
Others	-	-	-
Administrative costs and taxes paid by scheme (note 12)	(7)	-	(7)
At 31 December 2020	<u>4,679</u>	<u>(5,302)</u>	<u>(623)</u>
Retirement benefit liabilities recognised in Consolidated Balance Sheet (included in 'Other liabilities') (note 39)	4,520	(5,150)	(630)
Retirement benefit assets recognised in Consolidated Balance Sheet (included in 'Other accounts' of 'Other assets')	159	(152)	7
Present value of defined benefit obligation relating to:			
- Actives		(5,153)	
- Pensioners		(149)	

(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:

	2022	2023	2024	2025	2026	2027-2031
HSBDBS	401	501	439	428	398	2,120

The duration of the HSBDBS is 6.0 years (2020: 6.1 years) under the disclosure assumptions adopted.

NOTES TO THE FINANCIAL STATEMENTS (continued)

48 Employee retirement benefits (continued)

(a) **Defined benefit schemes** (continued)

(iv) Fair value of scheme assets by asset classes

	Value	Quoted market price in active market	Of which placed with the Group and HSBC Group
2021			
Fair value of scheme assets			
- Index ETFs/Funds	1,575	1,575	-
- Bonds	2,652	2,652	-
- Other*	134	134	40
	<u>4,361</u>	<u>4,361</u>	<u>40</u>
2020			
Fair value of scheme assets			
- Index ETFs/Funds	2,014	2,014	-
- Bonds	2,595	2,595	-
- Other*	70	70	32
	<u>4,679</u>	<u>4,679</u>	<u>32</u>

* Other mainly consists of cash and deposits.

(v) Key actuarial financial assumptions

The scheme is funded defined benefit schemes and is administered by trustees with assets held separately from those of the Group. The latest annual actuarial valuations at 31 December 2021 were 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 103 per cent (2020: 102 per cent) of the benefits accrued to scheme members, after allowing for expected future increases in salaries, and the resulting surplus amounted to HK\$130m (surplus in 2020: HK\$88m). On a wind-up basis, the actuarial value of the HSBDBS assets represented 112 per cent (2020: 109 per cent) of the members' vested benefits, based on salaries at that date, and the resulting surplus amounted to HK\$474m (surplus in 2020: HK\$360m).

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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

48 Employee retirement benefits (continued)

(a) Defined benefit schemes (continued)

(v) Key actuarial financial assumptions (continued)

The present value of the scheme's obligation was a final lump sum salary and payment of HK\$4,700m (2020: HK\$5,150m). 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

	HSBDBS %
2021	
Discount rate	1.25
Expected rate of salary increases	4.00
of which:	
- 2022	4.00
- thereafter	4.00
2020	
Discount rate	0.45
Expected rate of salary increases	2.00
of which:	
- 2021	2.00
- thereafter	4.00

The Group determines the discount rates to be applied to its obligations in consultation with the schemes' 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 2021	2020
Discount rate		
- change in retirement benefit obligation at year end from a 25bps increase	(69)	(78)
- change in retirement benefit obligation at year end from a 25bps decrease	71	81
Rate of salary increase		
- change in retirement benefit obligation at year end from a 25bps increase	74	88
- change in retirement benefit obligation at year end from a 25bps decrease	(73)	(86)

(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:

	2021	2020
Amounts charged to the income statement (note 12)	<u>331</u>	<u>309</u>

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 (2020: HK\$0.03m).

NOTES TO THE FINANCIAL STATEMENTS (continued)

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

<u>Award</u>	<u>Policy</u>
Deferred Share Awards	<ul style="list-style-type: none"> - 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')	<ul style="list-style-type: none"> - 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.

(a) HSBC share awards

	2021	2020
	Number	Number
	('000)	('000)
Outstanding at 1 January	1,378	984
Additions during the year	962	1,059
Less: Released/ Lapsed in the year	(834)	(665)
Outstanding at 31 December	<u>1,506</u>	<u>1,378</u>

The closing price of the HSBC Holdings plc share at 31 December 2021 was £4.49 (2020: £3.79).

The weighted average remaining vesting period as at 31 December 2021 was 0.96 years (2020: 1.17 years (restated)).

(b) Calculation of fair value

The fair values of share options at the date of grant of the options are calculated using a Black-Scholes model. 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

	2021	2020
Equity-settled share-based payments	34	38
Cash-settled share-based payments	2	-
Income statement charge for restricted share awards (note 12)	<u>36</u>	<u>38</u>

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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

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.

A fellow subsidiary company was appointed as fund manager 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 2021, the Bank has paid coupons on AT1 capital instruments of HK\$703m to its immediate holding company (2020: HK\$700m).

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	
	2021	2020	2021	2020
Interest income	87	221	61	65
Interest expense	(522)	(584)	-	-
Other operating income/(expenses)	120	134	(37)	(31)
Operating expenses*	(1,105)	(810)	(2,921)	(2,237)
Amounts due from:				
Reverse repurchase agreements – non-trading	1,094	5,530	-	-
Placings with and advances to banks	20,196	19,903	7,334	6,151
Derivative financial instruments	2,770	4,100	154	103
Other assets	10,343	2,480	874	161
	<u>34,403</u>	<u>32,013</u>	<u>8,362</u>	<u>6,415</u>
Amounts due to:				
Current, savings and other deposit accounts	2,018	2,502	-	-
Deposits from banks	304	8,030	94	-
Repurchase agreements - non-trading	2,471	2,193	-	-
Derivative financial instruments	2,920	5,925	379	216
Certificates of deposit and other debt securities in issue	25,500	50,000	-	-
Subordinated liabilities	24,484	19,481	-	-
Other liabilities	587	177	422	307
	<u>58,284</u>	<u>88,308</u>	<u>895</u>	<u>523</u>
Derivative contracts:				
Contract amount	450,551	467,118	28,095	20,381
Guarantees	392	3	-	-
Commitments	3,763	800	-	-

* Representing the operating expenses paid to immediate holding company and its subsidiaries, of which HK\$1,046m was capitalised as intangible assets in the Group's consolidated balance sheet (2020: HK\$721m).

NOTES TO THE FINANCIAL STATEMENTS (continued)

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 15 to 16. 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:

	2021	2020
Salaries, allowances and benefits in kind	68	70
Retirement scheme contributions	5	5
Variable bonuses		
- Cash bonus	20	23
- Share-based payment	14	16
	<u>107</u>	<u>114</u>

(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:

	2021	2020
<i>For the year</i>		
Interest income	445	740
Interest expense	35	85
Fees and commission income	9	15
Maximum aggregate amount of loans and advances	60,112	45,274
<i>At the year-end</i>		
Loans and advances	47,031	41,894
Deposits	9,197	11,640
Guarantees issued	526	558
Undrawn commitments	4,589	4,789

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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

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 2021 are shown as below.

	2021		2020	
	Highest balance during the year	Balance at 31 December	Highest balance during the year	Balance at 31 December
- Loans and advances	17,392	13,751	17,511	14,387
- Guarantees issued	305	205	431	237

The above relevant transactions in 2021 and 2020 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:

	2021		2020	
	Highest balance during the year	Balance at 31 December	Highest balance during the year	Balance at 31 December
Amounts due from associates [#]	7,465	7,465	6,973	247
Amounts due to associates [#]	4,238	106	2,361	1,061

<i>For the year</i>	2021	2020
Total operating income	16	68

[#] Including 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 2021 amounted to HK\$679m comprising HK\$668m relating to share option schemes and HK\$11m relating to share award schemes (2020: HK\$688m comprising HK\$668m relating to share option schemes and HK\$20m relating to share award schemes).

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

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 Banking and Markets ('GBM'). GBM'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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

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 2021 are consistent with those applied for the Annual Report 2020. The following table provides an analysis of financial instruments carried at fair value and bases of valuation:

	Fair value hierarchy			Third party total	Amounts with HSBC entities *	Total
	Quoted market price Level 1	Using observable inputs Level 2	With significant unobservable inputs Level 3			
Recurring fair value measurements						
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
2020						
Assets						
Trading assets	33,371	3,746	-	37,117	-	37,117
Derivative financial instruments	295	12,680	3	12,978	4,203	17,181
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	9,903	1,859	8,933	20,695	-	20,695
Financial investments	359,139	57,850	2,907	419,896	-	419,896
Liabilities						
Trading liabilities	30,937	-	-	30,937	-	30,937
Derivative financial instruments	8	14,712	-	14,720	6,141	20,861
Financial liabilities designated at fair value	-	26,828	5,702	32,530	-	32,530

* 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
2021							
Transfer from Level 1 to Level 2	17,130	1,207	-	-	-	-	-
Transfer from Level 2 to Level 1	6,011	481	-	-	-	-	-
2020							
Transfer from Level 1 to Level 2	8,214	251	-	-	-	-	-
Transfer from Level 2 to Level 1	12,011	664	-	-	-	-	-

Transfers between levels of the fair value hierarchy are deemed to occur at the end of each quarterly reporting period. Transfers into and out of levels of the fair value hierarchy are primarily attributable to observability of valuation inputs and price transparency.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

51 Fair value of financial instruments *(continued)*

(a) Fair value of financial instruments carried at fair value *(continued)*

Fair value adjustments

Fair value adjustments are adopted when the Group determines there are additional factors considered by market participants that are not incorporated within the valuation model. Movements in the level of fair value adjustments do not necessarily result in the recognition of profits or losses within the income statement, such as when models are enhanced and therefore fair value adjustments may no longer be required.

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' which arises when the underlying value of the derivative prior to any CVA is positively correlated to the PD of the counterparty. 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.

Model limitation

Models used for portfolio valuation purposes may be based upon a simplifying set of assumptions that do not capture all 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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

51 Fair value of financial instruments (continued)

(a) Fair value of financial instruments carried at fair value (continued)

Financial instruments measured at fair value using a valuation technique with significant unobservable inputs - Level 3

	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
2021							
Investment funds and equity shares	1,369	-	15,071	-	-	-	-
Structured notes	-	-	-	-	-	6,023	-
Derivatives	-	-	-	17	-	-	-
	<u>1,369</u>	<u>-</u>	<u>15,071</u>	<u>17</u>	<u>-</u>	<u>6,023</u>	<u>-</u>
2020							
Investment funds and equity shares	2,907	-	8,933	-	-	-	-
Structured notes	-	-	-	-	-	5,702	-
Derivatives	-	-	-	3	-	-	-
	<u>2,907</u>	<u>-</u>	<u>8,933</u>	<u>3</u>	<u>-</u>	<u>5,702</u>	<u>-</u>

Movement in Level 3 financial instruments

	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
At 1 January 2021	2,907	-	8,933	3	-	5,702	-
Total gains or losses recognised in profit or loss							
- net income 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 gains	(1,538)	-	-	-	-	(2)	-
- exchange differences	-	-	-	-	-	93	-
Purchases	-	-	4,922	-	-	-	-
Issues/ deposit taking	-	-	-	-	-	12,155	-
Sales	-	-	-	-	-	-	-
Settlements	-	-	(1,707)	-	-	(12,198)	-
Transfers out	-	-	-	-	-	(152)	(3)
Transfers in	-	-	-	15	-	427	-
At 31 December 2021	<u>1,369</u>	<u>-</u>	<u>15,071</u>	<u>17</u>	<u>-</u>	<u>6,023</u>	<u>-</u>
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 from financial instruments measured at fair value through profit or loss	-	-	2,923	(1)	-	(12)	(1)

NOTES TO THE FINANCIAL STATEMENTS (continued)

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	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
At 1 January 2020	2,179	-	5,509	3	-	7,741	-
Total gains or losses recognised in profit or loss							
- net income from financial instruments measured at fair value through profit or loss	-	-	612	9	-	(17)	5
Total gains or losses recognised in other comprehensive income							
- fair value gains	728	-	-	-	-	2	-
- exchange differences	-	-	-	-	-	132	-
Purchases	-	-	3,244	-	-	-	-
Issues/ deposit taking	-	-	-	-	-	12,589	-
Sales	-	-	-	-	-	-	-
Settlements	-	-	(432)	-	-	(15,496)	-
Transfers out	-	-	-	(9)	-	(576)	(5)
Transfers in	-	-	-	-	-	1,327	-
At 31 December 2020	<u>2,907</u>	<u>-</u>	<u>8,933</u>	<u>3</u>	<u>-</u>	<u>5,702</u>	<u>-</u>
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 from financial instruments measured at fair value through profit or loss	-	-	530	3	-	(50)	-

In 2021, the transfer out/in of Level 3 derivative assets and liabilities were predominantly resulted from change in observability in equity volatility. The transfer out/in of Level 3 financial liabilities designated at fair value reflected the change in observability of FX and equity volatility.

Effect of changes in significant unobservable assumptions to reasonably possible alternatives

The key unobservable inputs to Level 3 financial instruments include volatility and correlation for structured notes and deposits valued using option models, bid quotes for corporate bonds valued using approaches that take into account of market comparables, and multiple items for investment funds and equity shares and strategic investments. In the absence of an active market, the fair value of investment funds and equity shares and strategic investments is estimated on the basis of an analysis of the investee's financial position and results, risk profile, prospects and other factors, as well as by reference to market valuations for similar entities quoted in an active market, or the price at which similar companies have changed ownership. The change in fair values due to changes in reasonably possible alternative assumptions for these unobservable inputs is not significant.

Favourable and unfavourable changes are determined on the basis of sensitivity analysis. The sensitivity analysis aims to measure a range of fair values consistent with the application of a 95% confidence interval. Methodologies take account of the nature of the valuation technique employed, the availability and reliability of observable proxies and historical data. When the available data is not amenable to statistical analysis, the quantification of uncertainty is judgemental, but remains guided by the 95% confidence interval. The sensitivity of Level 3 fair values to reasonably possible alternative assumptions is not significant.

NOTES TO THE FINANCIAL STATEMENTS (continued)

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
2021				
Investment funds and equity shares	754	(754)	68	(68)
Derivatives	-	-	-	-
	<u>754</u>	<u>(754)</u>	<u>68</u>	<u>(68)</u>
2020				
Investment funds and equity shares	447	(447)	145	(145)
Derivatives	-	-	-	-
	<u>447</u>	<u>(447)</u>	<u>145</u>	<u>(145)</u>

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 Dec 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 P/B ratios Liquidity Discount	42 - 47 0.29 - 1.91 10% - 60%
Derivatives	17	Option model	Equity Volatility	22.89% - 56.99%
Liabilities				
Structured notes	6,023	Option model	Equity Volatility FX Volatility	7.08% - 32.46% 2.72% - 19.69%
	Fair value at 31 Dec 2020	Valuation technique(s)	Unobservable input(s)	Range
Assets				
Investment funds and equity shares	11,840	Net asset value	N/A	N/A
		Market-comparable approach	Earnings Multiple P/B ratios Liquidity Discount	31 - 53 0.35 - 2.20 10% - 60%
Derivatives	3	Option model	Equity Volatility	29.07% - 57.94%
Liabilities				
Structured notes	5,702	Option model	Equity Volatility FX Volatility	6.89% - 30.67% 6.05% - 22.68%

NOTES TO THE FINANCIAL STATEMENTS (continued)

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
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
2020					
Financial Assets					
Reverse repurchase agreements – non-trading	13,360	-	13,354	-	13,354
Placings with and advances to banks	44,357	-	44,325	-	44,325
Loans and advances to customers	944,774	-	-	936,466	936,466
Financial investments – at amortised cost	134,824	21,986	124,289	-	146,275
Financial Liabilities					
Deposits from banks	12,943	-	12,943	-	12,943
Current, savings and other deposit accounts	1,209,472	-	1,209,501	-	1,209,501
Repurchase agreements – non-trading	6,270	-	6,270	-	6,270
Certificates of deposit and other debt securities in issue	62,500	-	62,539	-	62,539
Subordinated liabilities	19,481	-	20,092	-	20,092

NOTES TO THE FINANCIAL STATEMENTS (continued)

51 Fair value of financial instruments (continued)

(b) Fair value of financial instruments not carried at fair value (continued)

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.

(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 2021, the Group's interests in unconsolidated structured entities were recognised in financial assets mandatorily measured at fair value through profit or loss of HK\$22,863m and trading assets of HK\$41m (2020: financial assets mandatorily measured at fair value through profit or loss of HK\$15,158m and trading assets of HK\$45m). 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\$7,671m (2020: HK\$7,427m) to invest in several alternative investment funds for funding future alternative investments in global companies under respective investment mandates.

53 Comparative figures

Certain comparative figures in the Consolidated Financial Statements have been reclassified to conform with current year's presentation.

54 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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

55 Bank balance sheet and statement of changes in equity

Bank balance sheet at 31 December

	2021	2020
ASSETS		
Cash and balances at central banks	13,339	9,745
Trading assets	46,324	35,590
Derivative financial instruments	10,891	14,358
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	77	77
Reverse repurchase agreements – non-trading	18,821	13,360
Placings with and advances to banks	51,299	28,635
Loans and advances to customers	908,267	866,379
Amounts due from subsidiaries	46,177	37,826
Financial investments	330,121	389,060
Investments in subsidiaries	20,166	20,166
Investment properties	4,058	4,014
Premises, plant and equipment	25,111	24,942
Intangible assets	2,616	1,718
Other assets	33,178	31,654
Total assets	1,510,445	1,477,524
LIABILITIES AND EQUITY		
Liabilities		
Deposits from banks	1,160	9,028
Current, savings and other deposit accounts	1,163,170	1,153,163
Repurchase agreements - non-trading	6,160	101
Trading liabilities	44,291	30,937
Derivative financial instruments	10,083	18,002
Financial liabilities designated at fair value	4,335	7,232
Certificates of deposit and other debt securities in issue	69,255	55,597
Amounts due to subsidiaries	20,882	12,099
Other liabilities	19,378	21,814
Current tax liabilities	155	134
Deferred tax liabilities	2,788	2,783
Subordinated liabilities	24,484	19,481
Total liabilities	1,366,141	1,330,371
Equity		
Share capital	9,658	9,658
Retained profits	105,140	106,200
Other equity instruments	11,744	11,744
Other reserves	17,762	19,551
Shareholders' equity	144,304	147,153
Total equity and liabilities	1,510,445	1,477,524

Diana Cesar *Executive Director and Chief Executive*
Clement K M Kwok *Director*

Andrew W L Leung *Chief Financial Officer*

NOTES TO THE FINANCIAL STATEMENTS (continued)

55 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					Total equity
				Premises revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Others ²	
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)
Change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	-	-	-	-	-	-	-	-	-
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 ³	-	-	(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
At 1 January 2020	9,658	11,744	103,517	15,954	3,002	16	16	669	144,576
Profit for the year	-	-	15,632	-	-	-	-	-	15,632
Other comprehensive income (net of tax)	-	-	(8)	(1,127)	1,309	244	1	2	421
Debt instruments at fair value through other comprehensive income	-	-	-	-	208	-	-	-	208
Equity instruments designated at fair value through other comprehensive income	-	-	-	-	1,101	-	-	-	1,101
Cash flow hedges	-	-	-	-	-	244	-	-	244
Change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	-	-	-	-	-	-	-	2	2
Property revaluation	-	-	-	(1,127)	-	-	-	-	(1,127)
Actuarial losses on defined benefit plans	-	-	(8)	-	-	-	-	-	(8)
Exchange differences and others	-	-	-	-	-	-	1	-	1
Total comprehensive income for the year	-	-	15,624	(1,127)	1,309	244	1	2	16,053
Dividends paid	-	-	(12,808)	-	-	-	-	-	(12,808)
Coupons paid on AT1 capital instruments	-	-	(700)	-	-	-	-	-	(700)
Movement in respect of share-based payment arrangements	-	-	17	-	-	-	-	15	32
Transfers	-	-	550	(550)	-	-	-	-	-
At 31 December 2020	9,658	11,744	106,200	14,277	4,311	260	17	686	147,153

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 2021, the effect of this requirement is to restrict the amount of reserves which can be distributed by the Bank to shareholders by HK\$363m (2020: HK\$1,332m).

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 2021 represented the payment of fourth interim dividend of 2020 and the first three interim dividends of 2021 amounted to HK\$5,353m and HK\$6,309m respectively.

NOTES TO THE FINANCIAL STATEMENTS *(continued)*

55 **Bank balance sheet and statement of changes in equity** *(continued)*

Bank statement of changes in equity for the year ended 31 December *(continued)*

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 2021, 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\$99,320m (2020: HK\$99,841m). After considering regulatory capital requirement and business development needs, an amount of HK\$3,441m (2020: HK\$5,353m) has been declared as the proposed fourth interim dividend in respect of the financial year ended 31 December 2021. The difference between the aggregate distributable reserves of HK\$99,320m and the Bank's retained profit of HK\$105,140m as reported above mainly represents the exclusion of unrealised revaluation gain on investment properties and the regulatory reserve of the Bank.

56 **Approval of financial statements**

The financial statements were approved and authorised for issue by the Board of Directors on 22 February 2022.

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 191 to 263, comprise:

- the consolidated balance sheet as at 31 December 2021;
- 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 notes¹ 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 2021, 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 2021, 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 ("HKSA") 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; and
- The present value of in-force long-term insurance business ("PVIF") and liabilities under non-linked life insurance contracts

Key Audit Matters (continued)

Allowances for expected credit losses (“ECL”) on loans and advances to customers

Nature of the Key Audit Matter

At 31 December 2021, the Group recorded allowances for ECL on loans and advances to customers of HK\$6,928m.

The determination of the ECL on 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 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 as well as the prospects of future recoverability of credit impaired wholesale exposures.

The progression of the COVID-19 and other current macroeconomic conditions impact the inherent risk and estimation uncertainty involved in determining the ECL on loans and advances to customers.

Management judgmental adjustments to ECL on loans and advances to customers therefore continue to be made. This includes judgmental adjustments to the ECL for certain wholesale sectors, as well as adjustments related to the retail portfolio.

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 management judgmental adjustments made to derive the ECL on loans and advances to customers. We further discussed the governance and controls over the process in determining ECL on loans and advances to customers.

Key Audit Matters (continued)

Allowances for expected credit losses on loans and advances to customers (continued)

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 judgmental adjustments; and
- Review of input and assumptions applied in estimating the recoverability of credit-impaired wholesale exposures.

We performed substantive audit procedures over the compliance of ECL methodologies with the requirements of HKFRS 9. We engaged professionals with experience in ECL modelling to assess the appropriateness of changes to models during the year, and for a sample of those models, we independently reperformed the modelling for certain aspects of the ECL calculation. We also assessed the appropriateness of methodologies and related models that did not change during the year.

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 judgmental adjustments, we challenged the appropriateness of these and assessed the ECL determined.

We further considered whether the judgements made in selecting the significant assumptions and determining the management judgmental adjustments 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 Annual Report 2021 in the context of the applicable financial reporting framework.

Relevant references in the Annual Report 2021

- Management Discussion and Analysis – Risk, (a) Credit Risk, pages 59-94
 - Note 2 on the consolidated financial statements: Significant accounting policies, (j) Impairment of amortised cost and FVOCI financial assets, pages 203-208
 - Note 11 on the consolidated financial statements: Change in expected credit losses and other credit impairment charges, page 219
 - Note 27 (a) on the consolidated financial statements: Loans and advances to customers, pages 231
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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 2021, the Group has recorded an asset for PVIF of HK\$22,363m and liabilities under non-linked life insurance contracts of HK\$154,480m.

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 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 additional 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 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 Annual Report 2021 in the context of the applicable financial reporting framework.

Relevant references in the Annual Report 2021

- Management Discussion and Analysis – Risk, (h) Insurance manufacturing operation risk, pages 120-127
 - Note 2 on the consolidated financial statements: Significant accounting policies, (t) Insurance contracts, pages 213 – 214
 - Note 33 on the consolidated financial statements: Intangible assets, pages 237 - 238
 - Note 40 on the consolidated financial statements: Liabilities under insurance contracts, page 240
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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 2021 (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 2021, 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 2021, 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 HKSAAs, 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. Tam Man Kit, James.

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong, 22 February 2022

ANALYSIS OF SHAREHOLDERS

As at 31 December 2021	Shareholders		Number of Shares	
	Number	Percentage of total	Number in millions	Percentage of total
Number of shares held				
1 - 500	6,166	36.26	1.42	0.07
501 - 2,000	5,196	30.55	6.32	0.33
2,001 - 5,000	2,663	15.66	9.08	0.48
5,001 - 20,000	2,238	13.16	22.80	1.19
20,001 - 50,000	499	2.93	15.71	0.82
50,001 - 100,000	131	0.77	9.43	0.49
100,001 - 200,000	62	0.36	9.10	0.48
Over 200,000	52	0.31	1,837.98	96.14
	17,007	100.00	1,911.84	100.00
Geographical Distribution				
Hong Kong	16,747	98.47	1,909.05	99.85
Malaysia	47	0.28	0.30	0.02
Canada	42	0.25	0.13	0.01
Singapore	38	0.22	1.74	0.09
United Kingdom	28	0.16	0.03	0.00
Macau	27	0.16	0.13	0.01
Australia	25	0.15	0.08	0.00
United States of America	23	0.13	0.12	0.01
Others	30	0.18	0.26	0.01
	17,007	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
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 2021 to the date of Report of the Directors of this Annual Report (unless otherwise stated) are set out below:

CESAR Diana Ferreira	LI Chi Chung
CHAN Ka Lok	LI Chi Kwong Jason*
CHAN May Yee	LI Jianfeng
CHAN Ping Chung Eddie	LIANG Chun Fei Belle
CHEANG Wai Wan Louisa*	LIM Sau Fung
CHEN Kwan Yiu Edward	LIU Lai Ka
CHEN Yu Sheng	LIU Yu
CHENG Cheng Shing Agnes	LUI Man Chung Raymond
CHEUNG Ho Fai Derek	LUK Ting Lung Alan*
CHEUNG Pui Sze*	MO Yuen Man Anita
CHIU Wai Man Vivien	MUK Chung Wing
CHOW Tan Ling	NG Kar Wah
FAN Gordon	POON Sun Cheong
FU Yin Ho	SHEN Sibao
JIN Jiejun	SIT Wing Fai Wilfred
Bryce Leslie JOHNS*	SONG Yan*
Gregory Thomas HINGSTON	SONG Yue Sheng Ryan
KONG Kwong Ming	SUEN Wai Kwan Grace
KWAN Wing Han Margaret*	TIN Ho Ting
KWAN Wing Shing Vincent	TSANG Hing Keung
LAM Hei Yin Joe	WANG Xiao Kun
LAM Yin Shing Donald	WANG Yee Ning Elaine
LAW Soo Ping Alison	Stuart Kingsley WHITE
LEE Pui Shan	WONG Wai Hung
LEE Wah Lun Rannie	YAM Chi Fai
LEE Yuk Shan	YEO Chee Leong*
LEUNG Cheuk Yee Eunice*	YOU Anshan
LEUNG Kin Ping	YUEN Kin Chung
LEUNG Wing Lok	

* 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

Directors

John C C Chan GBS, JP

L Y Chiang JP

Kathleen C H Gan

Clement K M Kwok

David Y C Liao

Vincent H S Lo GBM, JP

Kenneth S Y Ng

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 505000
Louisville, KY 40233-5000, 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 2021

This Annual Report 2021 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 2021 on the Bank's website and wish to receive a printed copy; or
- B) receive this Annual Report 2021 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 2021 on the Bank's website, have difficulty in reading or gaining access to this Annual Report 2021 via the Bank's website for any reason, the Bank will promptly send this Annual Report 2021 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

2021 Full Year Results

Announcement date 22 February 2022

2021 Fourth Interim Dividend #

Announcement date 22 February 2022

Book close and record date 9 March 2022

Payment date 22 March 2022

2021 Annual Report

to be posted to shareholders at or about the end of March 2022

Annual General Meeting

to be held in Q2 2022, 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, 9 March 2022, during which no transfer of shares can be registered. In order to qualify for the fourth interim dividend for 2021, 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 no later than 4:30 pm on Tuesday, 8 March 2022. The fourth interim dividend will be payable on Tuesday, 22 March 2022 to shareholders whose names appear on the register of shareholders of the Bank on Wednesday, 9 March 2022. Shares of the Bank will be traded ex-dividend as from Monday, 7 March 2022.