恒生銀行
HANG SENG BANK

2020 Annual Report

88 YEARS

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Hang Seng is proud to be marking 88 years of growing and progressing with our customers and the Hong Kong community.

Contents

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

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

2020 Performance at a Glance

Scan this QR Code with your smart phone or tablet to see a summary of our 2020 performance.

Alternatively, visit https://www.hangseng.com/cms/fin/fld/statement/annual-report-2020/index-eng.html

Corporate Profile

Hang Seng Bank is celebrating its 88th anniversary this year. Founded in 1933, the 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 about 290 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 operate 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

	Moody's	Standard & Poor's
Long-term	Long-term Bank Deposit (local and foreign currency): **Aa2**	Long-term Issuer Credit (local and foreign currency): **AA-**
Short-term	Short-term Bank Deposit (local and foreign currency): **Prime-1**	Short-term Issuer Credit (local and foreign currency): **A-1+**
Outlook	Negative	Stable

88 Years, and Ever-growing

On 3 March 1933, Hang Seng opened its doors for business for the first time. Operating initially as a money changer, Hang Seng's assets were modest, with just 11 employees working in an 800-square-foot premises in Sheung Wan. But its principles were lofty: Hang Seng would welcome Hong Kong people from all walks of life and treat them as individuals and honoured guests.

The establishment date of Hang Seng – 3/3/33 – is highly auspicious in local culture. The word for '3' in Cantonese rhymes with the characters for 'life' or 'grow', and the repetition of 3s means 'never-ending', a sentiment that is echoed in the name 'Hang Seng', which means 'ever-growing'.

This year we mark another auspicious date – our 88th anniversary. The number '8' rhymes with the character for 'good fortune' and we hope the repeating 8s will bring never-ending good luck and good fortune to our customers and the communities we serve. Throughout our history, we have remained true to our founding principles and to our name: growing together with the people of Hong Kong by continually innovating and acting to deliver customer-centric services, support livelihoods, strengthen community ties and promote sustainability.

Our long history of putting people first has made us one of Hong Kong's most trusted brands and a banking partner to more than half the adult population. Our goal is to meet the diverse banking needs of all our customers in ways that are convenient, fast, easy and secure – anytime, anywhere.

Our contribution to building a better future for all includes playing an active role in addressing social and environmental issues, such as social mobility, youth development and climate change. It also encompasses a determination to make Hang Seng an employer of choice. We engage our people through a variety of well-being and professional development initiatives, and provide a dynamic workplace environment that encourages creativity, collaboration and different ways of working.

As we look ahead to the next 88 years and continue to transform for the future, we aim to remain 'ever-growing' on all fronts: for our business and for everyone we serve.

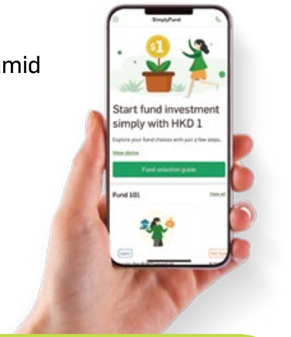
To celebrate our 88th anniversary with the local community, we commissioned 'Colourful Journeys', a playful series of location-specific wall illustrations, for several of our branches. The illustrations reflect the unique characteristics of different local districts and the close relationships we have built with our customers over the years.

Supporting Customers and the Community During the Pandemic

Our accelerated development of digital banking services allowed personal customers to enjoy uninterrupted banking services amid social distancing. e-Banking and digital transactions grew by

124%

year-on-year.



eTicketing service was rolled out at all **74** street-level branch outlets to shorten customer queuing times. Extra protective measures were also implemented, including the installation of acrylic screens to keep customers and staff safe.

A robust technology infrastructure enabled up to

85%

of our office staff to work from home.

We donated

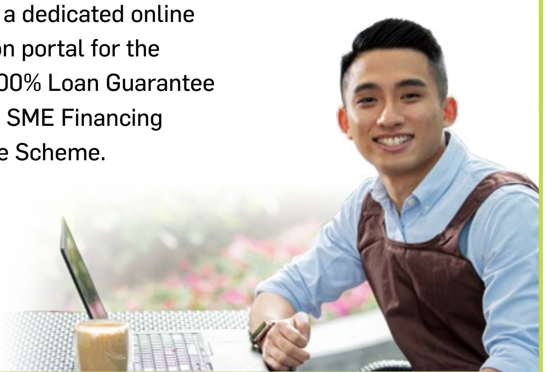
HK$10 million

to support underprivileged children who had to learn from home when schools closed.

To support SMEs in the challenging business environment, we were the

1st bank

to launch a dedicated online application portal for the Special 100% Loan Guarantee under the SME Financing Guarantee Scheme.



When physical DSE mock examinations were cancelled, our youth Instagram page GO! GingerOnion developed an online mock examination to help students maintain momentum.

It registered more than

300,000

engagements.

Results in Brief

For the Year

Profit attributable to shareholders
16,687 HK$m
2019 24,840 HK$m

Profit before tax
19,414 HK$m
2019 28,813 HK$m

Operating profit
20,125 HK$m
2019 28,610 HK$m

Net operating income before change in expected credit losses and other credit impairment charges
36,068 HK$m
2019 43,514 HK$m

Return on average ordinary shareholders' equity
9.6%
2019 15.2%

Cost efficiency ratio
36.6%
2019 30.0%

Earnings per share
8.36 HK$
2019 12.77 HK$

Dividends per share
5.50 HK$
2019 8.20 HK$

At Year-end (at 31 December)

Shareholders' equity
183,100 HK$m
2019 178,810 HK$m

Total assets
1,759,787 HK$m
2019 1,676,991 HK$m

Capital ratios

Common Equity Tier 1 ('CET1') Capital Ratio
16.8%
2019 16.9%

Tier 1 Capital Ratio
18.5%
2019 18.7%

Total Capital Ratio
20.0%
2019 20.8%

Liquidity ratios

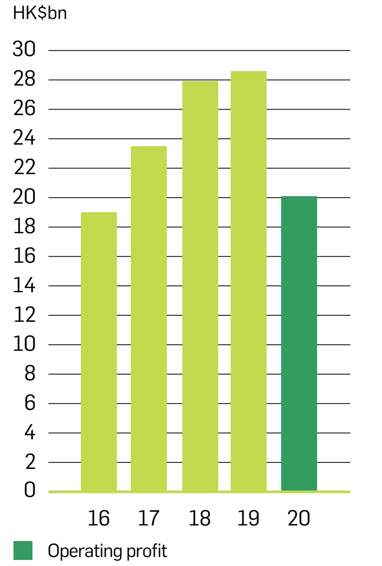
Liquidity Coverage Ratio
230.4%
2019 205.9%

Net Stable Funding Ratio
152.9%
2019 149.1%

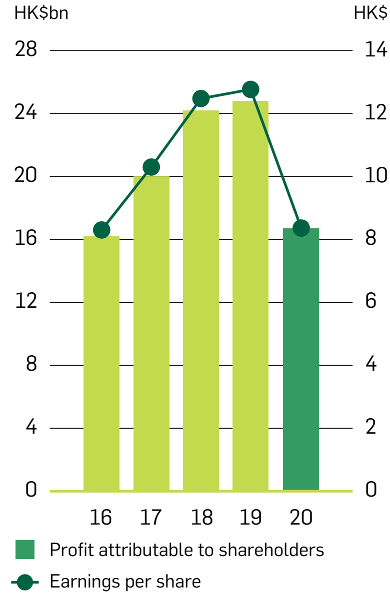
Five-year Financial Summary

	2016	2017	2018	2019	**2020**
For the Year	HK$bn	HK$bn	HK$bn	HK$bn	**HK$bn**
Operating profit	19.0	23.5	27.9	28.6	**20.1**
Profit before tax	19.1	23.7	28.4	28.8	**19.4**
Profit attributable to shareholders	16.2	20.0	24.2	24.8	**16.7**
At Year-end	HK$bn	HK$bn	HK$bn	HK$bn	**HK$bn**
Shareholders' equity	140.6	152.0	162.1	178.8	**183.1**
Issued and paid-up capital	9.7	9.7	9.7	9.7	**9.7**
Total assets	1,377.2	1,478.4	1,571.3	1,677.0	**1,759.8**
Total liabilities	1,236.6	1,326.3	1,409.2	1,498.1	**1,576.6**
Per Share	HK$	HK$	HK$	HK$	**HK$**
Earnings per share	8.30	10.30	12.48	12.77	**8.36**
Dividends per share					
– 1st to 4th interim dividends	6.10	6.70	7.50	8.20	**5.50**
Ratios	%	%	%	%	**%**
Return on average ordinary shareholders' equity	12.1	14.2	16.0	15.2	**9.6**
Post-tax return on average total assets	1.2	1.4	1.6	1.5	**1.0**
Capital ratios					
– Common Equity Tier 1 ('CET1') Capital Ratio	16.6	16.5	16.6	16.9	**16.8**
– Tier 1 Capital Ratio	17.9	17.7	17.8	18.7	**18.5**
– Total Capital Ratio	20.8	20.1	20.2	20.8	**20.0**
Cost efficiency ratio	33.5	30.5	29.5	30.0	**36.6**

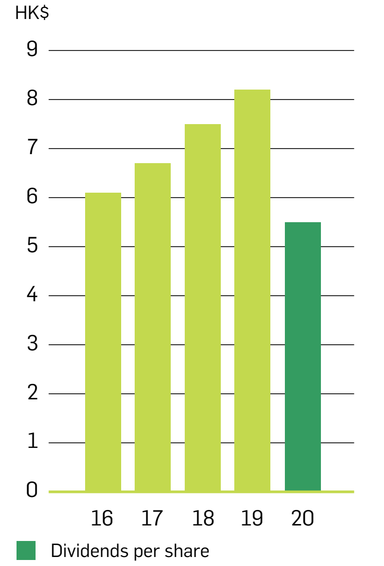
Operating Profit



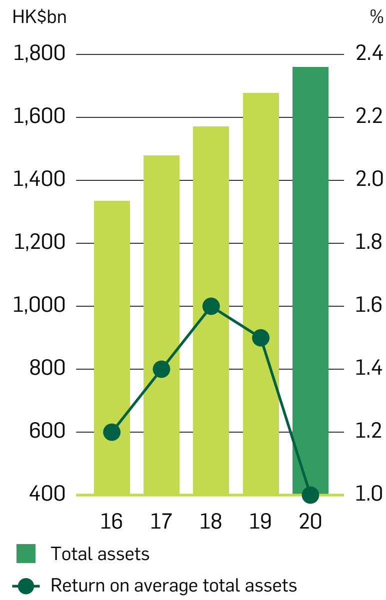
Profit Attributable to Shareholders and Earnings per Share



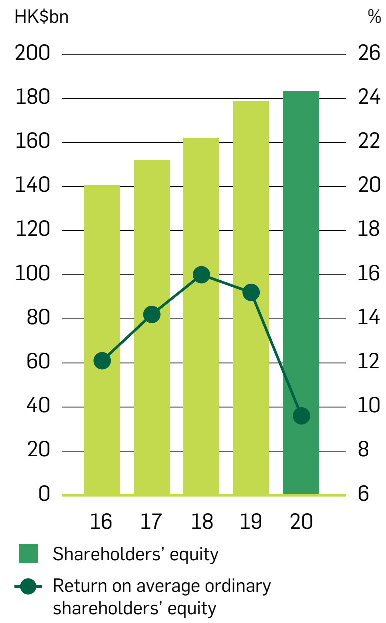
Dividends per Share



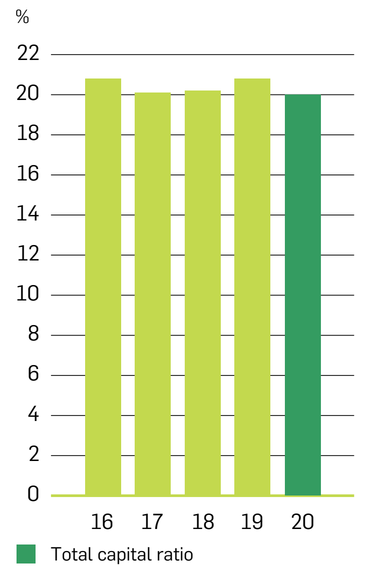
Total Assets and Return on Average Total Assets



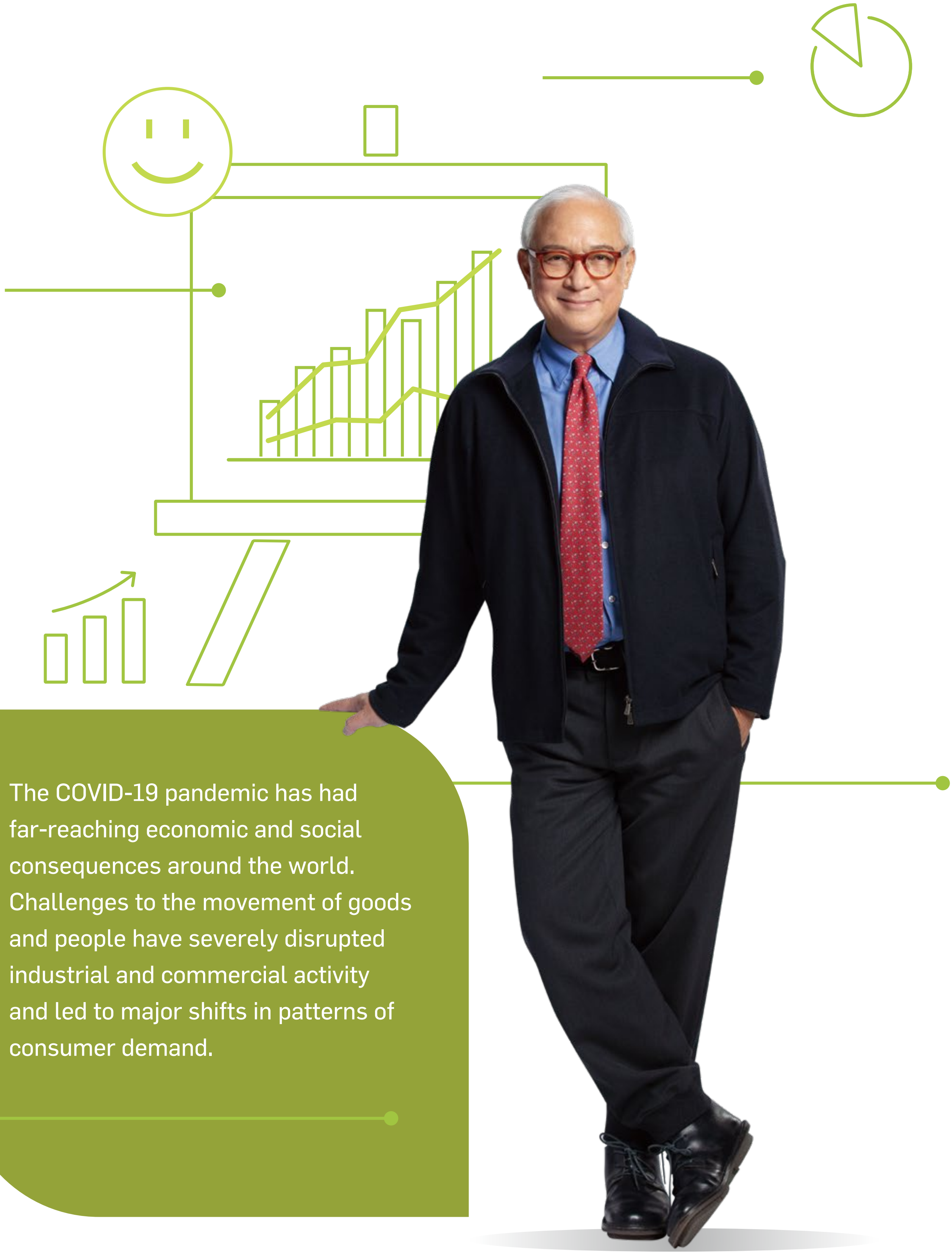
Shareholders' Equity and Return on Average Ordinary Shareholders' Equity



Total Capital Ratio



Chairman's Statement



The COVID-19 pandemic has had far-reaching economic and social consequences around the world. Challenges to the movement of goods and people have severely disrupted industrial and commercial activity and led to major shifts in patterns of consumer demand.

> Our proactive steps to continuously improve agility and resilience enabled us to smoothly engineer our operations to ensure customers enjoyed uninterrupted access to convenient, reliable and safe banking services amid the pandemic environment.

In terms of our business, non-interest income and net interest income were adversely affected by lower transaction volumes as commercial and personal banking customers stepped back from investment plans and spending activity. Low interest rates exerted growing pressure on the net interest margin. The weakened credit environment resulted in an overall increase in expected credit losses for the year and we recorded a net deficit on property revaluation, compared with a net surplus in 2019.

The combined impact of these factors affected our bottom line. Profit attributable to shareholders declined by 33% to HK$16,687m. Earnings per share were HK$8.36 per share. Return on average ordinary shareholders' equity was 9.6%. Return on average total assets was 1.0%.

While the difficult operating conditions in 2020 made it a challenging year for financial performance, there is positive progress in terms of our long-term strategy.

Our proactive steps to continuously improve agility and resilience enabled us to smoothly engineer our operations to ensure customers enjoyed uninterrupted access to convenient, reliable and safe banking services amid the pandemic environment. In traditional Hang Seng fashion, our dynamic approach also made it possible for us to go the extra mile and continue to roll out new service innovations, develop new markets and offer support to those in need. These achievements, which were accomplished while maintaining strong cost control and effective risk management, have further enhanced Hang Seng's institutional sustainability.

The Directors have declared a fourth interim dividend of HK$2.80 per share, bringing the total distribution for 2020 to HK$5.50 per share.

Economic Outlook

The near-term outlook for the global economy is closely tied to the world's ability to bring COVID-19 under control. While the development of vaccines, along with continuing policy support from major central banks, offer some hope for general global economic recovery in the second half of 2021, it is likely that the impacts of the pandemic will continue to reverberate beyond the end of the acute phase of this worldwide crisis. While financial markets have shown some vibrancy since the second half of last year, many real-economy uncertainties remain.

Although Hong Kong recorded an economic contraction for the whole of 2020, there was a return to the path of expansion in the second half. Further growth is potentially within view with the continuation of supportive government policy initiatives and the improvement in financial markets resulting from monetary easing by the US Federal Reserve. The situation remains fragile, however, with much depending on external variables and it may be some time before economic activity returns to its pre-recession level.

Mainland China has had a head-start on recovery from the global health crisis. After seeing its GDP fall by an annual rate of 6.8% in the first quarter of 2020, the economy picked up to register modest growth for the full year. Thus far, industrial production and property investment have been the major drivers of growth. Consumers have been slower to return to 'business as usual', prompting the government to focus on boosting domestic demand in its recent economic strategy. We anticipate the Mainland economy will deliver growth in the range of 6% to 8% in 2021.

A Progressive Approach, A Sustainable Strategy

Following our AGM in May, I shall retire from my position as Chairman of Hang Seng's Board of Directors after 13 years of service. I would like to express my gratitude to my fellow Board members for their support and wise counsel over the years, and to congratulate my successor, Ms Irene Lee. She knows the Bank's business well, having been an Independent Non-executive Director of the Board since May 2014. I have no doubt that Irene's deep experience and far-sighted vision will help lead Hang Seng to even greater success.

I also wish to express sincere thanks and profound appreciation to Hang Seng's professional colleagues, past and present, for their unwavering determination, dedication and drive in executing our vision to provide innovative, best-in-class services to customers. I am extremely proud of what the Bank has achieved during my tenure as Chairman. We have strengthened our position as a market leader through a strategy of customer-centric innovation that combines the power of technology with the expertise and personal touch of our people.

> The pandemic has also reminded people around the world of the importance of community and of working together to overcome major societal challenges. Our deep roots in Hong Kong include a long history of initiatives to enhance local development and well-being.

This past year has been a strong test of the actions we have taken to build a business that is fit for the future and able to handle the challenges that lie ahead. We have shown ourselves to be responsive, adaptable and resilient, with the right infrastructure and culture to overcome difficulties and take advantage of new opportunities.

The pandemic has also reminded people around the world of the importance of community and of working together to overcome major societal challenges. Our deep roots in Hong Kong include a long history of initiatives to enhance local development and well-being. On this front too we are stepping up our actions, with the establishment last year of an ESG Steering Committee that reports to the Executive Committee and the Board, and a renewed commitment to helping to tackle issues that are specific to our community, as well as those that affect the entire planet, such as climate change.

For 88 years, the trusted Hang Seng brand has been built on the strengths and talent of its people, sound financial fundamentals and close community ties. The Bank will continue to grow with its progressive strategy, leveraging the best of technology and its more dynamic corporate culture to further encourage innovation and creativity, supporting customers and the community while providing long-term value for shareholders. It is a privilege to serve as Hang Seng's Chairman and, from another vantage point, I look forward to being a lay cheerleader of Hang Seng Bank in the years to come.

Raymond K. F. Ch'ien

Raymond Ch'ien
Chairman
23 February 2021

Chief Executive's Report

COVID-19 has affected economies around the world in ways that were hard to imagine a year ago. Industry, commerce and the way we live were all seriously disrupted in 2020. Our priority last year was to support our customers through difficult times while ensuring we had robust measures in place to protect the health and safety of our community and our employees.

> Our strategy to invest in digital capabilities, including our omni-channel services platform, facilitated continued business flows amid social distancing measures. Our enhanced agility will enable us to move quickly on new opportunities as economies recover.

Six months ago, we pointed to four key factors that adversely affected our 2020 first-half financial performance. These were:

1. pressure on net interest margin (NIM) and net interest income due to low interest rates;
2. the impact of market volatility on our insurance business;
3. the impact of economic uncertainty on expected credit losses (ECLs); and
4. a net deficit on property revaluation.

Although the contribution to income from our life insurance business contracted year-on-year, we recorded a good recovery in the second half. We achieved a 61% increase in revenue compared with the first half by robustly managing our investment portfolio as equity markets became more active.

The other three factors, however, continued to weigh on our full-year performance. In particular, there was even greater downward pressure on NIM and net interest income in the second half with the decline in HIBOR.

In credit risk management, our strategy continued to be prudent. On a year-on-year basis, our ECLs increased by 49% to HK$2,738m. However, the ECL charge in the second half was 44% lower than in the first half, reflecting the adequacy of our credit loss reserves as well as some signs of an improving economic outlook.

While investment property revaluation recorded a deficit in 2020 against a surplus in 2019, the decline in the second half was less severe than that in the first half.

As a result of these factors, attributable profit for 2020 was down by 33% year-on-year at HK$16,687m.

Our key financials show the impact of the market challenges, but they also reflect our prudent approach and robust control of the balance sheet. Our strategy to invest in digital capabilities, including our omni-channel services platform, facilitated continued business flows amid social distancing measures. Our enhanced agility will enable us to move quickly on new opportunities as economies recover.

The investments and actions we have taken to transform our business over the past several years supported our swift and seamless adaptation to the realities of the pandemic.

Leveraging our digital strength, we continued to provide convenient and easy remote access to banking and wealth management services, while also launching new initiatives to further benefit customers.

We rolled out about 475 digital innovations and enhancements in 2020, more than three times the number in 2019. Major new initiatives such as Savings Planner, SimplyFund and Invest Express have made money management and investment simpler and more accessible, especially for the younger segment. For commercial customers, new digital solutions have helped them to more efficiently track real-time transactions and manage their accounts and cash flows.

In November we unveiled our 'Branch of the Future' service concept at MOSTown in Ma On Shan. It combines innovative technology and service models with in-person expertise and tailor-made services from our team of wealth management professionals to deliver best-in-class, customer-centric banking experiences.

New and enhanced partnerships with market leaders in other sectors such as Dairy Farm and OpenRice have added further value for our customers through spending offers and lifestyle benefits and conveniences.

Our subsidiary Hang Seng Indexes Company continues to track the pulse of the Hong Kong market and support the development of new market segments. The July launch of the Hang Seng TECH Index to follow the performance of the 30 largest innovative technology companies listed in Hong Kong was very well received in both local and international markets.

While technology is central to our long-term strategy, our real competitive strength rests in our people. I am deeply proud of the way in which my colleagues have stepped up to the many challenges created by COVID-19 to ensure uninterrupted services for our customers, while showing care and compassion to the community and each other.

An important part of our business transformation strategy has been to create a new, highly collaborative culture that gives our people more agency to try new ideas, speak up and take decisions. Our people provide the creative energy that drives our business forward. Their professionalism and expertise are what make Hang Seng a highly trusted brand.

Our business is guided by four key brand values – customer-centric, progressive technology, creativity and corporate social responsibility – which are derived from growing and evolving with the community. I am pleased to note our efforts are being recognised. In a banking service survey conducted in the third quarter of last year, we ranked first in Hong Kong for customer service, creativity and inclusion. We also achieved a notable strengthening of our brand appeal among young people, who play an important role in our future business growth.

Financial Overview

As outlined above, the difficult operating environment significantly affected our financial performance.

Net operating income fell by 20% to HK$33,330m.

Net interest income dropped by 17% to HK$26,906m. We recorded increased volumes from balance sheet growth and a 6% rise in average interest-earning assets. However, the persistent low interest rate environment and decline in HIBOR continued to tighten deposit spreads. Year-on-year, NIM fell by 47 basis points, or 21.4%, from 2.20% to 1.73%.

Non-interest income dropped by 19% to HK$9,162m. Income from many of our fee-generating services was down due to the pandemic's disruptive impact on commercial activity and consumer spending. One highlight was fee income from stockbroking and related services, which rose by 58%, as we benefited from increased investor activity in the second half and the popularity of our securities trading mobile app, Invest Express.

Net trading income and net income from financial instruments designated at fair value through profit or loss together grew by 18%, due mainly to increased income from foreign exchange activities.

Net income from assets and liabilities of the insurance business measured at fair value fell by HK$766m to HK$823m, reflecting unfavourable market movements in the first half followed by some recovery in the second half.

Net insurance premium income was down by 2%, with lower income from new business sales largely offset by more renewals business.

Change in ECLs and other credit impairment charges increased by HK$901m to HK$2,738m.

During the year, we proactively supported clients through the difficulties of the pandemic by offering a number of financial relief measures and arrangements. As at the end of December, gross impaired loans and advances as a percentage of gross loans and advances to customers were 0.60%. However, much of the impacted loans and advances are secured by tangible collaterals. We believe our ratio is on the low side of the industry average.

Operating expenses were on par with 2019. Our cost efficiency ratio was 36.6%.

Operating profit fell by 30% to HK$20,125m. Operating profit excluding the change in ECLs and other credit impairment charges declined by 25% to HK$22,863m.

Investment property revaluation recorded a net deficit of HK$636m, compared with a net surplus of HK$35m in 2019, reflecting softer sentiment in the commercial property market.

Profit before tax was down by 33% at HK$19,414m. Attributable profit fell by 33% to HK$16,687m.

Our capital base remains strong. At 31 December 2020, our common equity tier 1 capital ratio was 16.8%, our tier 1 capital ratio was 18.5%, and our total capital ratio was 20.0%, compared with 16.9%, 18.7% and 20.8% respectively at 2019 year-end.

Our strong financial fundamentals will allow us to strategically deploy resources to maintain momentum in our core businesses when economic activity picks up again post-pandemic.

Moving Forward Together for Future Success

The consequences of COVID-19 are still playing out. Financial markets have shown some signs of improvement since the second half of 2020, but uncertainties continue to weigh on the real economy around the world. It could still be some time before we see economic recovery and a gradual return to pre-pandemic levels of business and consumer activities. The low interest rate environment will continue to put pressure on the net interest margin, which will also provide challenges for us.

This year, Hang Seng will proudly celebrate 88 years of service and connection to the Hong Kong community. Since our founding in 1933, we have established ourselves as a trusted brand and the leading local bank by standing with the people of Hong Kong in good times and in bad. We are transforming our business to enhance our long-term capacity to positively transform the lives of customers and the community.

With a more dynamic corporate culture and investing in people and technology, we are building a business that will grow together with our customers, offering innovative, best-in-class services to support them in achieving their financial goals. At the same time, we will continue to play an active role in social development and environmental programmes.

2020 will be a difficult year to forget. It reminded us of the vital importance of human connections. We have nurtured and grown these connections with our customers and the Hong Kong community over the past 88 years. This bond is firm and deep. From this, we have drawn strength to overcome many challenges in the past. We will do so again to move past COVID-19 and build an even better and more sustainable bank, and community, for our future generations.

Finally, on behalf of the management team and all Hang Seng staff members, I would like to wish our Chairman, Raymond Ch'ien, all the very best for after he retires later this year. Over the last 13 years, we have benefitted greatly from his wisdom and guidance. We could not have accomplished so much without his support. We are delighted that Independent Non-executive Director Irene Lee will be our new Chairman. With her rich experience and far-sighted vision, we look forward to working even more closely with her to take the Bank to its next level of success.

Louisa Cheang

Louisa Cheang
Vice-Chairman and Chief Executive
23 February 2021

Management Discussion and Analysis

Our Brand Values

At Hang Seng Bank, customers are at the centre of everything we do. In a fast-changing world, we remain steadfastly focused on being a reliable partner for our customers, and adding value to support them in achieving their goals and aspirations. We anticipate customers' different needs at different life stages or business cycles, and propose suitable financial solutions with thought and care. We also deploy technologies progressively and creatively to make banking and wealth management services easier, faster and more convenient.

As a homegrown financial institution, Hang Seng shares the drive and dreams of Hong Kong people. Young people are key to our sustainable future. Empowering younger generations and extending our care to the wider society and the environment are evidence of our commitment to the community, people, and the future.

In our day-to-day activities, we are guided by our brand values: customer-centric, creativity, progressive technology and corporate social responsibility.

Customer-centric

Creativity

Progressive Technology

Corporate Social Responsibility

Customer-centric

Customers are our partners. We create value for them through a holistic range of products and services to suit a variety of needs. From everyday banking to lifetime financial goals, we are by their side, offering customer-centric solutions, seamless service delivery via integrated online-offline channels and a depth of wealth management expertise.

Proactive and personalised

Flexible solutions

Accessibility

Saving customers' time

Creativity

With globalisation, financial needs are becoming more sophisticated. We take inspiration from our customers' needs, constantly challenging ourselves to think out of the box to develop flexible, innovative and customer-friendly banking solutions for different lifestyles and stages of life.

Purposeful

Needs-oriented

Out-of-the-box thinking

Progressive Technology

At Hang Seng, technology always comes with a human touch. Online and offline banking blend seamlessly, providing experiences which complement lifestyles. Investment, insurance, trading and everyday transactions can be conducted securely and conveniently anywhere, anytime.

- Omni-channel development
- Online and mobile banking
- Virtual assistants
- Cyber security


GORE-TEX SUPREME
happy

Corporate Social Responsibility

As a financial institution with deep roots in Hong Kong, Hang Seng's focus extends beyond banking. Caring for the community, the environment and younger generations are entrenched in our corporate culture. We empower young people with the skills they need to maximise their potential. We work to improve financial literacy, promote sustainable financing and address climate change concerns to help build a prosperous and sustainable future for Hong Kong.

- Treating customers fairly
- Empowering young people
- Helping the underprivileged and vulnerable
- Addressing climate change
- Being a responsible employer

Business Review

The widespread effects of the global COVID-19 pandemic created very difficult operating conditions in 2020. Leveraging our more agile business infrastructure and strong digital platform we were able to smoothly handle significant shifts in how and where our customers preferred to use our services, while also continuing to launch new innovations to make it easier and more convenient for them to meet their financial management needs.

Gross advances to customers were HK$950bn, broadly unchanged from the end of 2019. In the challenging operating environment, we leveraged our deep understanding of local business and close customer relationships to focus on enhancing the quality of our lending assets rather than expanding the size of our portfolio.

Loans for use in Hong Kong rose by 1%. Lending to corporates was on par with the previous year, while lending to individuals grew by 4%, due mainly to increased mortgage business. Loans for use outside Hong Kong were broadly in line with 2019 year-end.

Customer deposits, including certificates of deposit and other debt securities in issue, increased by 4% at HK$1,304bn. We have increased our issuance of certificates of deposit in Hong Kong and the Mainland to diversify our sources of funding. Our strong deposit base provides us with a good foundation for future growth.

Wealth and Personal Banking

Wealth and Personal Banking recorded an 18% year-on-year decrease in net operating income before change in ECLs and other credit impairment charges to HK$19,663m. Operating profit dropped by 31% to HK$10,546m and profit before tax decreased by 32% to HK$10,470m.

Backed by our trusted brand, we leveraged our multi-channel platform to deepen customer relationships, achieving a 7% increase in deposits and a 3% rise in lending. Despite this solid growth in the balance sheet, low interest rates continued to pressure margins, resulting in a 17% decline in net interest income to HK$14,733m.

Non-interest income fell by 22% to HK$4,930m, reflecting the impact of market volatility, investor caution and decreases in banking transactions and card spending. Wealth management business revenue fell by 15% year-on-year.

Amid the pandemic, there was a marked migration of customers to our digital services. New Personal e-Banking registrations increased by 40% year-on-year, mobile app log-ons rose by 73% and the total number of e-Banking and digital transactions grew by 124%.

Customised Financial Solutions

Our new Signature wealth management services provide personalised banking solutions with lifestyle and healthcare considerations for high-net-worth clients with discerning needs. Services are comprehensive and versatile. Customers enjoy access to teams of experts specialising in different financial management, investment and insurance protection disciplines.

With a particular emphasis on younger customers, we launched around 350 new digital solutions and enhancements in 2020, including online and WhatsApp chat channels, an integrated budgeting app, and SimplyFund, an entry-level investment fund platform. We also collaborated with multiple business partners – including New World CLUB and SmarTone – on API initiatives to provide more convenient and value-added banking and lifestyle services.

Leveraging our strong wealth management brand, we launched our new Signature service to provide bespoke banking services to high-net-worth customers. We also continued to attract new business in other segments, recording a 15% year-on-year rise in the Prestige and Preferred Banking customer base.

Total investment services income grew by 19%. We successfully captured increasing investment activity in the second half with our stock trading app and swift adoption of non face-to-face channels to stay in close touch with customers. Strong digital and data analytics capabilities supported enhanced frontline productivity by facilitating our understanding and anticipation of customer needs in fluid market conditions. This made it easier for us to proactively offer the right products and services at the right time.

Insurance income fell by 32%, due mainly to a drop in new business amid the pandemic. Despite the challenges, we made good progress with our digital insurance business, achieving an 89% increase in terms of policy count and a 59% growth in new premiums. We also launched DigiLife, an online insurance information and policy management platform. Active portfolio management improved investment returns from the life insurance portfolio in the second half.

Looking at secured lending, we grew our mortgage balances in Hong Kong by 5% and our new mortgage business continued to rank among the top three. Our collaborations with Midland Realty and mReferral enhanced opportunities to make contact with potential customers and offered a more convenient and streamlined mortgage application process.

Credit card business was adversely affected by changes in consumer behaviour over the year. Nevertheless, we managed to outpace the market in card spending by refocusing our promotions to capture new consumer patterns. We also benefited from the rejuvenation of our enJoy cobranded card reward programme in partnership with Dairy Farm and expanded our Cash Dollars dining rewards network through an API collaboration with OpenRice. Our online food & beverage transactions tripled in 2020 in terms of number, and our e-commerce transactions, excluding travel, grew by 31%.

Newly Transformed MOSTown Branch

MOSTown Branch in Ma On Shan brings to life Hang Seng's 'Branch of the Future' service concept, a combination of innovation and personalised human touch. The new branch showcases innovative technology and service models such as a giant, interactive digital wall, eAppointment, eTicketing and a digital bar, all adding up to an exciting omni-channel banking experience that saves time and maximises ease and simplicity.

Commercial Banking

Commercial Banking recorded a 21% year-on-year decline in net operating income before change in expected credit losses and other credit impairment charges to HK$10,300m. Operating profit and profit before tax both decreased by 42% to HK$5,101m.

As industries faced challenging operating conditions, we focused considerable resources on supporting our existing customers rather than aggressively chasing new business growth in the uncertain environment.

Net interest income fell by 20% to HK$8,307m due to persistently low interest rates. Deposits grew by 5%. Lending was down by 2%.

Although the downgrade of a few customer loans in the difficult economic conditions led to an increase in change in expected credit losses and other credit impairment charges, our overall asset quality remains resilient and we continue to be vigilant in monitoring and managing our credit risk.

Severe disruptions to commercial activity adversely affected non-interest income, which dropped by 23% to HK$1,993m. We moved effectively to capture opportunities when they arose, recording a 14% increase in investment services income from market trading activities. We also achieved double-digit growth in syndicated loan fees and ranked no. 2 in the 2020 League Table for Hong Kong Mandated Arranger in terms of number of syndicated lending deals.

Innovation, Collaboration, Experience & Digital

The ICED Hub is a cool new venture in Commercial Banking's 'Go Digital, Go Simple' vision. ICED Hub draws together four cutting-edge teams (Corporate Digital and Innovation, Business Analytics, Transformation and Data Management, and Information Technology) to innovate for SME clients on their accelerated digital journeys. Customised, creative and timely solutions are incubated in this vibrant co-creation space where there is also active collaboration with external fintech organisations.

A new Business Banking Remote Account Opening Service allows commercial customers to open an account at any time and from any location. As part of our strong support for clients, we actively participated in the Hong Kong Mortgage Corporation's SME Financing Guarantee Scheme (SFGS). We were the first to launch a dedicated online application platform to make it easier for customers to apply for SFGS loan guarantee products.

Customers can simplify and streamline cash flow management by using our corporate API to integrate their daily business operations with our core banking services. Our Digital Business Banking platform provides real-time updates on the status of payments and receivables. Our Flexi-Fixed Deposit offers customers the ability to enjoy preferential interest rates without needing to fix the tenor of their deposit.

Enhancements to our customer service channels, including our AI chatbot BERI, Live Chat and our Customer Contact Centre, provided additional opportunities to strengthen relationships with customers by providing services and support for their specific needs.

Our digital innovations won us several industry awards during the year, including 'API Project of the Year' in the *Asian Banking & Finance* Wholesale Banking Awards 2020, and 'Best Payment Bank in Hong Kong' and 'Best Frictionless Transaction Award – One Collect Merchant Acquisition Solution' in *The Asian Banker* Transaction Banking Awards. We also received the 'Best Payment and Collection Solution' and 'Best in Treasury and Working Capital – SME's Hong Kong' awards from *The Asset*.

Global Banking and Markets

Global Banking and Markets recorded a 2% year-on-year decrease in net operating income before change in expected credit losses and other credit impairment charges to HK$6,146m. Operating profit and profit before tax were both broadly on par with a year earlier at HK$4,979m.

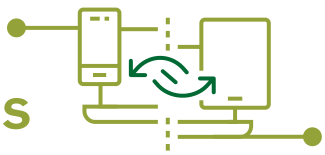
Global Markets

Global Markets recorded a 2% year-on-year increase in net operating income before change in expected credit losses and other credit impairment charges to HK$3,414m. Operating profit and profit before tax both increased by 2% to HK$2,829m.

Net interest income increased by 2% to HK$2,046m. The Markets Treasury team managed interest rate risk effectively, taking steps to proactively defend the interest margin and achieve yield enhancement while upholding prudent risk management standards.

Non-interest income increased by 1% to HK$1,368m. We took actions to further diversify the revenue base and increase product penetration rates among our commercial and personal banking customers. The increase in volatility in foreign exchange markets, together with the changing interest rate environment, resulted in an increase in non-fund income from trading and client activities.

Committed to Supporting SMEs



Hang Seng's strong foundation is built on a long history of working in close partnership with Hong Kong's SMEs. In the challenging operating environment of 2020, we actively supported various relief measures launched by the government to alleviate the pressures faced by SMEs due to the COVID-19 pandemic. This included being the first bank to launch a dedicated online application platform with documents upload function for commercial customers to apply for loans under the SME Financing Guarantee Scheme.

Customer-centric Digital Initiatives

Hang Seng Commercial Banking's newest series of digital services offers remote account opening to payment collection to cash management, helping businesses improve on operational efficiency. Customers can now make use of the Bank's online channels to more easily take care of their business needs and identify business opportunities.

Besides equities and structuring, trading departments responsible for repo, foreign exchange and option trading achieved strong revenue growth, which offset the revenue drop in rates trading. Sales revenue remained resilient despite the challenging market environment. Increased investment in foreign exchange from Wealth and Personal Banking customers and use of interest rate hedging products by corporate customers largely offset a drop in corporate foreign exchange.

Established as part of our commitment to diversifying our sources of revenue, our new Repo Trading department has become a solid source of income since its establishment in the second half of 2019.

Global Banking

Global Banking recorded a 5% year-on-year drop in net operating income before change in expected credit losses and other credit impairment charges to HK$2,732m. Operating profit and profit before tax both fell by 2% to HK$2,150m.

Net interest income fell by 6% to HK$2,372m, reflecting a 65% decline in deposit interest income in the low interest rate environment. The drop in interest income from deposits was somewhat offset by the 7% rise in interest income from lending business, due largely to the success of our lending portfolio optimisation strategy and higher demand for stagging loans in the second half.

We recorded a 2% increase in non-interest income to HK$360m, due mainly to fee income from credit facilities on the back of the solid lending growth.

We also broadened our fee income stream, particularly through our Debt Capital Markets Origination team and effective cross-business collaboration.

Amid the challenges of the COVID-19 pandemic, we assisted customers in need through the Principal Payment Holiday Scheme offered by Hong Kong Monetary Authority.

Hang Seng Indexes

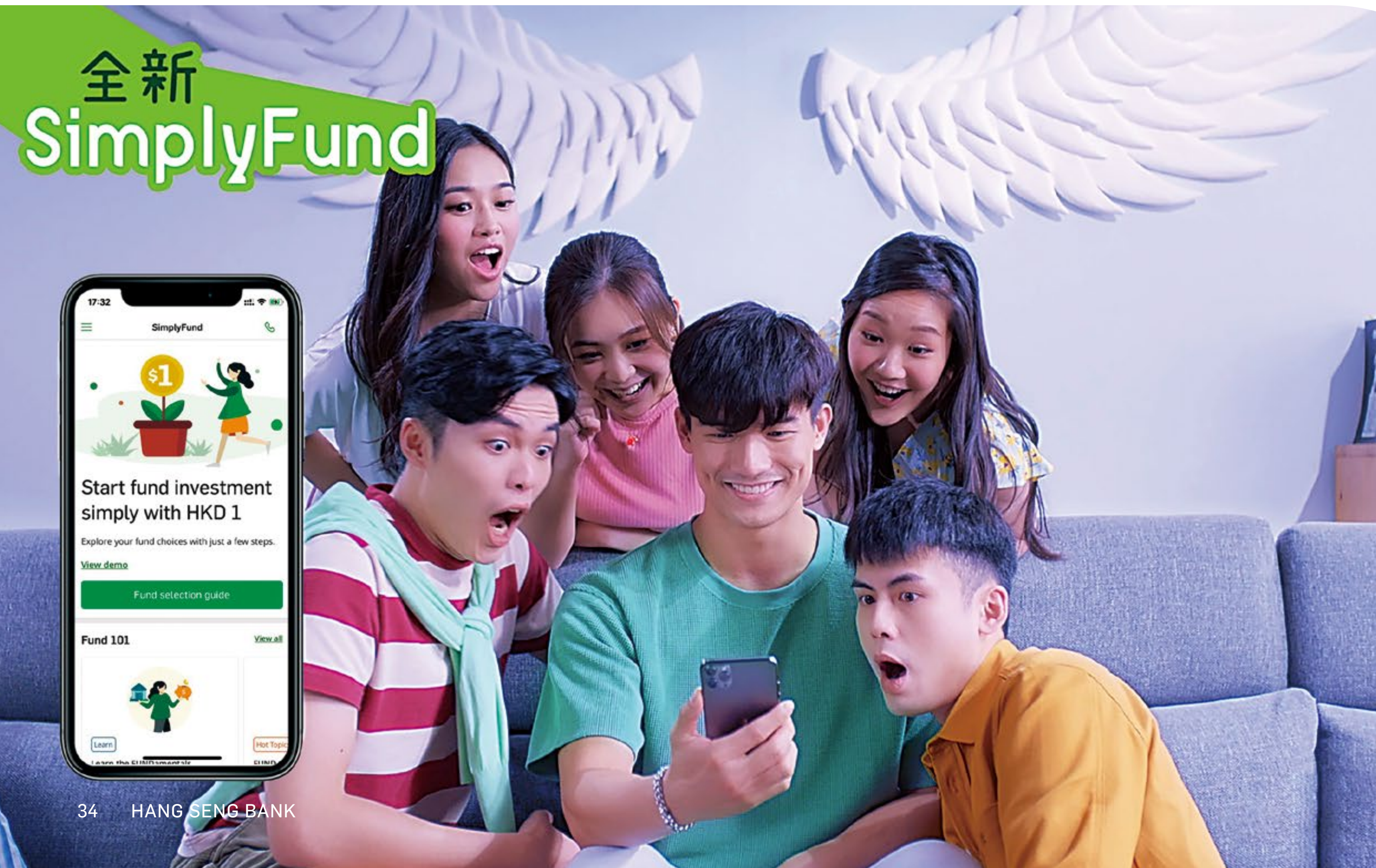
Wholly owned subsidiary Hang Seng Indexes Company Limited (Hang Seng Indexes) continued to lead the way in tracking the performance of Hong Kong and mainland China markets from various aspects, and in supporting the development of new market sectors by compiling and launching new indexes.

Leveraging its deep understanding of current and future market demand, Hang Seng Indexes enriched its suite of offerings in 2020, adding 21 new indexes, with an emphasis on tracking the performance of ESG investing, technology and other 'new economy' sectors, as well as cross-border themes.

With more technology companies choosing to list in Hong Kong, the Hang Seng TECH Index (HSTECH), launched in July 2020, aims to address growing investor interest in this theme by reflecting the performance of the 30 largest innovative technology companies in the market and serving as the basis for various index-linked products. As the sector continues to develop, Hang Seng Indexes aims to have the HSTECH join the Hang Seng Index (HSI) and the Hang Seng China Enterprises Index (HSCEI) as a third flagship index.

As the HSTECH was well received by the local and overseas markets, different financial products linked to the HSTECH were launched in the market. Hong Kong Exchanges and Clearing Limited launched futures and options linked to HSTECH in November 2020 and January 2021 respectively. As at 2020 year-end, Hang Seng Indexes had licensed the HSTECH for use as the basis for launching 14 different funds – 13 exchange-traded funds and an index fund – in markets such as Hong Kong, Taiwan, Singapore, South Korea and the UK.

Hang Seng Indexes continues to keep pace with market developments in the Hong Kong and Mainland markets by making adjustments to constituent eligibility and universe size for its indexes in close consultation with its stakeholders. Following a market consultation exercise conducted in the first quarter of 2020, weighted-voting rights companies and secondary-listed companies from the Greater China region are now eligible for inclusion in the HSI and HSCEI universes. In December, the number of constituents in the HSI was increased to 52 to ensure the leading benchmark continues to provide the best possible coverage of the Hong Kong market.



As part of Hang Seng Indexes' long-standing efforts to support continuous improvement in corporate sustainability and make it easier for investors to follow ESG investment strategies, the company launched an 'ESG Service' on its website in September. The service provides a rich range of ESG resources and information for investors, including a searchable database of over 200 companies that are constituents of the Hang Seng ESG series of indexes.

As at the end of 2020, there were 88 exchange-traded products based on the Hang Seng Family of Indexes worldwide – with listings on 17 different stock exchanges. Assets under management in products passively tracking indexes in the Hang Seng Family of Indexes at 2020 year-end had reached a total of about US$38bn.

The total number of futures and options contracts traded on the HSI, the HSCEI and the HSTECH Index in 2020 was over 117 million.

As at the end of 2020, Hang Seng Indexes was compiling more than 1,000 indexes, including 164 real-time indexes.

Online Wealth Management

We care about the customer experience and have been innovating different service channels to serve customers' needs. 'Invest Express' puts stock investment at one's fingertips, an essential for busy investors. To help our customers start financial planning early, 'SimplyFund' and 'Savings Planner' provide tailor-made solutions for young and novice investors, guiding them to gain wealth management insights and helping them to manage their wealth as it grows.

Awards and Recognition

Best Bank – Domestic (Hong Kong)
(21st consecutive year)
THE ASSET

Best Domestic Bank (Hong Kong)
ASIAMONEY

Safest Bank in Hong Kong
GLOBAL FINANCE

Best Mobile Banking Application
THE ASIAN BANKER

Best in Treasury and Working Capital for SMEs
THE ASSET

Constituent Stock of Dow Jones Sustainability Asia Pacific Index 2020
DOW JONES SUSTAINABILITY INDEX

Constituent Stock of FTSE4Good Developed Index
(Since 2001)
FTSE INDEX

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

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

Constituent Stock of Hong Kong Business Sustainability Index (Since 2015)
THE CHINESE UNIVERSITY OF HONG KONG BUSINESS SCHOOL

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

Best Foreign Bank
SECURITY TIMES QUANSHANGCN

Best Institution of Syndicated Loans in Shanghai
SHANGHAI BANKING ASSOCIATION

Best Trade Finance Foreign Bank
TRADING FINANCE

Golden Wealth Management Annual Innovative Wealth Management Product
SHANGHAI SECURITY NEWS

Best Social Responsibility Award
CHINA SOCIAL WELFARE FOUNDATION

Pioneer Cross-border Financing Bank
INTERNATIONAL FINANCE NEWS

Best Public Relations Case Study
SHANGHAI BANKING ASSOCIATION

Financial Review

Financial Performance

Income Statement

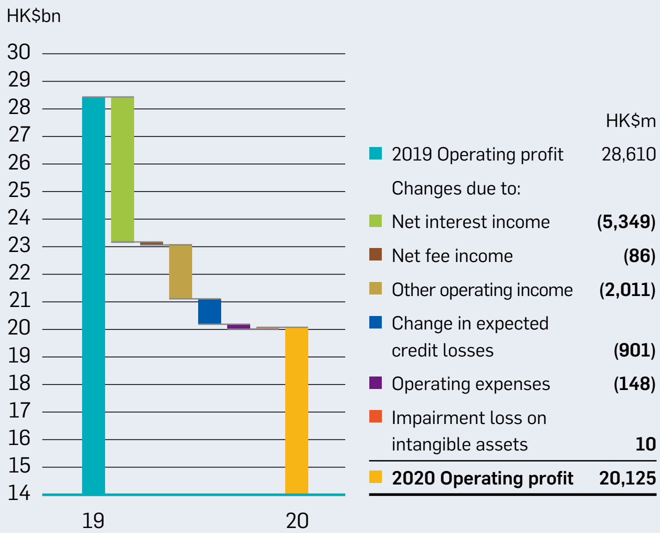
Summary of financial performance

Figures in HK$m	2020	2019
Total operating income	**54,322**	63,341
Net operating income before change in expected credit losses and other credit impairment charges	**36,068**	43,514
Operating expenses	**13,205**	13,057
Operating profit	**20,125**	28,610
Profit before tax	**19,414**	28,813
Profit attributable to shareholders	**16,687**	24,840
Earnings per share (in HK$)	**8.36**	12.77

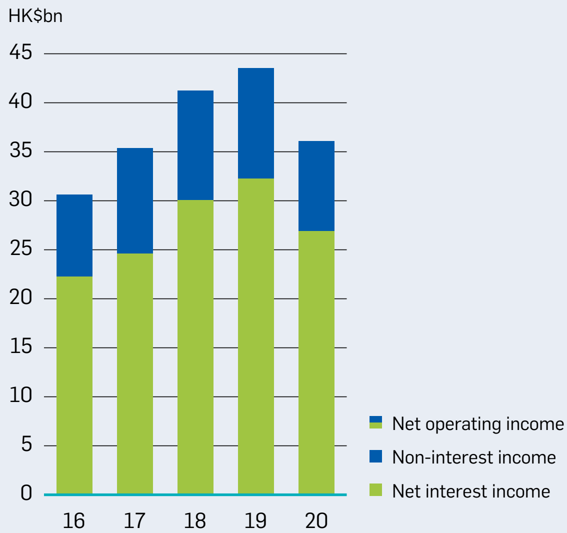
The impact of the COVID-19 pandemic on the global economy and peoples' lives made 2020 one of the most challenging years for business in recent decades. Under the shadow of COVID-19, many industries experienced extremely difficult operating conditions. The economic effects of the pandemic on the Bank's customers were the main driver of the change in the Group's 2020 financial performance, which compares unfavourably with that for 2019. The decline in the Group's income reflects stagnant lending and lower transaction volumes, as well as decreased insurance-related income given the volatile nature of international capital markets particular in the first half of the year. Although the economic outlook remains uncertain, the Group will continue to work closely with the Hong Kong government and regulators, and to use the strength of its balance sheet and business model to support customers, the community and the Hong Kong economy.

The Group delivered a resilient performance in 2020 given the very challenging economic environment created by the global pandemic. **Net operating income before change in expected credit losses and other credit impairment charges** was HK$36,068m, down 17%, due to lower net interest income and non-interest income. Net interest income was 17% lower, reflecting narrowing margins as global interest rates fell in response to the effects of COVID-19. Wealth management business income was down by 14%, due mainly to subdued levels of customer activity, a decrease in insurance business-related income due to lower investment returns and a decline in retail investment fund sales income, although these declines were partly offset by growth in income from securities broking-related services. Operating expenses went up by 1% when compared with 2019. Change in expected credit losses and other credit impairment charges ('ECLs') increased by 49% to HK$2,738m, reflecting higher charges related to stage 3 specific wholesale exposures and the impact from updates to the forward-looking economic outlook model. This had an adverse impact on **operating profit**, which dropped by 30% to HK$20,125m. Investment property revaluation recorded a deficit compared with a surplus for 2019, resulting in a 33% drop in **profit before tax** to HK$19,414m and in **profit attributable to shareholders** to HK$16,687m.

Operating Profit Analysis



Net Operating Income
(Before change in expected credit losses/ loan impairment charges)



Net interest income decreased by HK$5,349m, or 17%, to HK$26,906m, with increased volumes from balance sheet growth more than offset by the narrowing net interest margin. The impact of the significant reduction in interest rates that occurred during the year was reflected in the full-year results, with net interest margin down by 47 basis points to 1.73%, due mainly to balance sheet repricing. Net interest spread declined by 40 basis points to 1.59% and contribution from net-free funds dropped by 7 basis points to 0.14% as a result of the decline in market interest rates.

Figures in HK$m	2020	2019
Net interest income / (expense) arising from:		
– financial assets and liabilities that are not at fair value through profit and loss	27,695	33,299
– trading assets and liabilities	189	299
– financial instruments designated and otherwise mandatorily measured at fair value through profit or loss	(978)	(1,343)
	26,906	32,255
Average interest-earning assets	1,553,012	1,466,871
Net interest spread	1.59%	1.99%
Net interest margin	1.73%	2.20%

Average interest-earning assets grew by HK$86bn, or 6%, to HK$1,553bn, driven by growth in average deposits. The Markets Treasury team managed the interest rate effectively to defend the interest margin and achieve yield enhancement while upholding prudent risk management standards. However, this was more than offset by the compressed deposit spread, despite the shift of funds from time deposits to low-cost savings and current deposits, driven by the progressive interest rate reductions during the year versus a higher market interest rate environment in 2019. The low interest rate environment also led to a reduction in contribution from net-free funds.

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:

Figures in HK$m	2020	2019
Net interest income and expense reported as 'Net interest income'		
– Interest income	35,010	43,214
– Interest expense	(7,346)	(9,966)
– Net interest income	27,664	33,248
Net interest income and expense reported as 'Net income from financial instruments measured at fair value through profit or loss'	(758)	(993)
Average interest-earning assets	1,513,983	1,422,968
Net interest spread	1.69%	2.14%
Net interest margin	1.83%	2.34%

Net fee income decreased by HK$86m, or 1%, to HK$6,367m, reflecting lower levels of customer activity across the Group's fee-generating business activities, due largely by the effects of the pandemic. Income from retail investment funds was down by 14%. Card services income decreased by 22%, due mainly to lower card spending and merchant sales. Account services fees dropped by 17%, due partly to the removal of service fees on certain banking products. Fee income from insurance, trade finance and remittances fell by 7%, 18% and 42% respectively. Credit facilities fees were down by 11%, due to lower corporate lending activity. These declines were significantly offset by stockbroking and related services fee income, which grew by 58% from increased transaction volume, supported in part by the Group' standalone securities trading app.

Net income from financial instruments measured at fair value through profit or loss decreased by HK$382m, or 10%, to HK$3,320m.

Net trading income and net income from financial instruments designated at fair value through profit or loss together rose by HK$380m, or 18%, to HK$2,503m, driven by the increase in income from foreign exchange activities.

Net income from assets and liabilities of insurance businesses measured at fair value through profit or loss fell by HK$766m, or 48%, to HK$823m. Investment returns on financial assets supporting insurance liabilities contracts was substantially impacted, reflecting unfavourable movement in the first half of the year with the significant volatility in global equities prices and a partial recovery in the second half, compared with more favourable market movement trends in 2019. To the extent that these investment returns were attributable to policyholders, there was an offsetting movement reported under '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.

Analysis of income from wealth management business

Figures in HK$m	2020	2019
Investment services income[1]:		
– retail investment funds	1,302	1,521
– structured investment products	447	403
– securities broking and related services	2,118	1,331
– margin trading and others	81	84
	3,948	3,339
Insurance income:		
– life insurance:		
– net interest income and fee income	4,177	3,907
– 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)	724	1,704
– net insurance premium income	15,301	15,652
– net insurance claims and benefits paid and movement in liabilities to policyholders	(18,254)	(19,827)
– movement in present value of in-force long-term insurance business	2,082	4,559
	4,030	5,995
– general insurance and others	245	263
	4,275	6,258
	8,223	9,597

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.

Income from insurance business decreased by HK$1,983m, or 32%, to HK$4,275m. Net interest income and fee income from life insurance business rose by 7%. Investment returns on the life insurance portfolio decreased by HK$980m, or 58%, to HK$724m, mainly driven by the unfavourable equity market performance in 2020 as compared with a favourable equity market performance in 2019. To the extent that these investment 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 2%, reflecting lower new business sales due largely to the impact of the pandemic, partly offset by higher renewals business. In the challenging operating environment, the Group continued to enrich its comprehensive range of tax and retirement planning products as well as healthcare solutions to suit different customer needs, and extended distribution to a new non-face-to-face channel to facilitate sales amid social distancing measures. The Group also supported customers through concessionary measures that provide additional COVID-19-related coverage.

Net insurance claims and benefits paid and movement in liabilities to policyholders decreased by 8%. Despite a strengthening of policyholders' liabilities under the regular review of the discount rate to reflect the decrease in the prevailing interest rate for both 2020 and 2019, the impact was less significant for 2020 than in the previous year. The decrease in movement in liabilities to policyholders also reflects lower new business sales, though this was partly offset by the recapture of a portfolio of policyholders' liabilities that was under a tactical reinsurance arrangement.

The movement in PVIF decreased by 54%, due to lower new business sales and lower impact arising from the above mentioned revision of the discount rate on policyholders' liabilities in 2020 compared with 2019. The effects of these factors were partly offset by a positive adjustment to PVIF to account for the sharing of unfavourable investment returns attributable to policyholders.

General insurance income was down by 7% compared with 2019.

Change in expected credit losses and other credit impairment charges increased by HK$901m, or 49%, to HK$2,738m, reflecting the deterioration in the macro-economic environment as a result of the impact of COVID-19.

Figures in HK$m	2020	2019
Loans and advances to banks and customers	2,608	1,684
– new allowances net of allowance releases	2,757	1,773
– recoveries of amounts previously written off	(104)	(106)
– other movements	(45)	17
Loan commitments and guarantees	33	99
Other financial assets	97	54
	2,738	1,837

The Bank regularly reviews its forward economic guidance to reflect changes in the economic outlook and other factors that may influence the credit environment. The estimated impact of COVID-19 was incorporated in ECLs through additional scenario analysis, which considered different severity and duration assumptions. This included probability weighted shocks to annual GDP and consequential impacts on unemployment and other economic variables, with different economic recovery assumptions.

Change in ECLs reflected a significant increase in stage 1 and stage 2 (unimpaired credit exposures) in the first half of the year, which reflected the then potential future losses in light of the Group's revised economic outlook taking into account deterioration in the forward economic outlook globally as a result of COVID-19. The outlook and economic scenario were updated in 4Q 2020 to reflect the improving economic environment compared with the conditions that were anticipated at the end of the first half, as well as the relatively improved outlook for key economic variables such as GDP and house prices. As a result, change in ECLs for stages 1 and 2 registered a net decrease of HK$594m when compared with 2019, reflecting a more resilient economic performance in 2020. Wealth and Personal Banking ('WPB') accounted for HK$149m of the reduction, with the remaining HK$445m coming from Commercial Banking ('CMB') and Global Banking and Markets ('GBM'). The decrease in ECLs for stage 1 and 2 is also partly due to the downgrade of a handful of corporate customers from stage 2 to stage 3, which led to larger shift between stage 2 and stage 3 ECL charges.

Change in ECLs for stage 3 and purchased or originated credit-impaired exposures (impaired credit exposures) increased by HK$1,495m when compared with 2019, with the rise related largely to a small number of wholesale credit exposures. WPB accounted for HK$286m, due mainly to higher charges on credit card and personal loan portfolios. The remaining HK$1,209m was due to the downgrade of several CMB customers during the year.

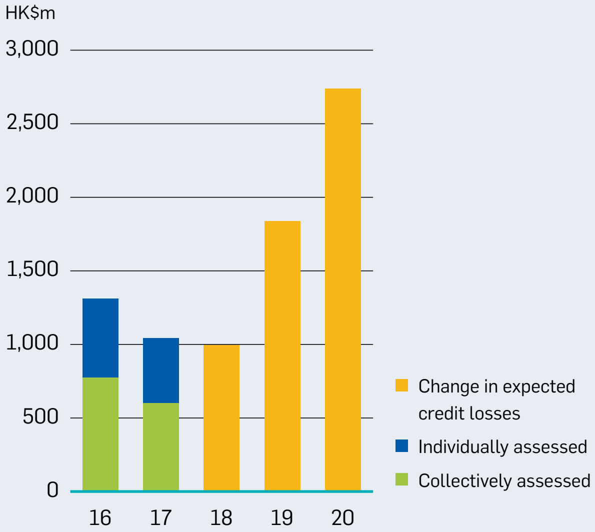
Gross impaired loans and advances were up by HK$3,651m, or 176%, against 2019 year-end at HK$5,724m. Several impaired corporate loans through our Mainland banking subsidiary and Hong Kong office were downgraded during the year as a result of the COVID-19 pandemic. Taking into account the collaterals and the ECL allowances provided, the Group considers that the current provision level is adequate. Gross impaired loans and advances as a percentage of gross loans and advances to customers stood at 0.60% as at 31 December 2020, compared with 0.32% at 30 June 2020 and 0.22% at the end of December 2019. Overall credit quality remained robust.

The Group remains vigilant and will continue to closely monitor the market situation. Regular reviews on credit portfolios and sectors are carried out to help identify and mitigate any potential risks.

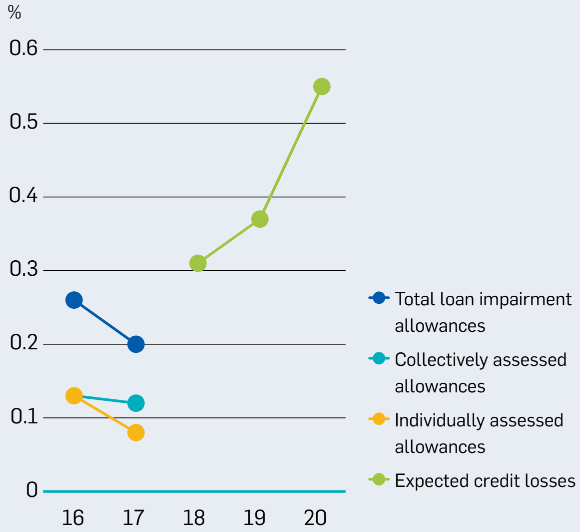
Expected credit losses as a percentage of gross loans and advances to customers are as follow:

	At 31 December 2020	At 31 December 2019
Expected credit losses as a percentage of gross loans and advances to customers	0.55%	0.37%
Gross impaired loans and advances as a percentage of gross loans and advances to customers	0.60%	0.22%

Change in expected credit losses/ loan impairment charges



Expected credit losses/ Loan impairment allowances as a percentage of gross loans and advances to customers



Operating expenses increased by HK$148m, or 1%, to HK$13,205m, reflecting an increase in investments, mainly IT-related costs to enhance our digital capabilities, depreciation and amortisation of intangible assets.

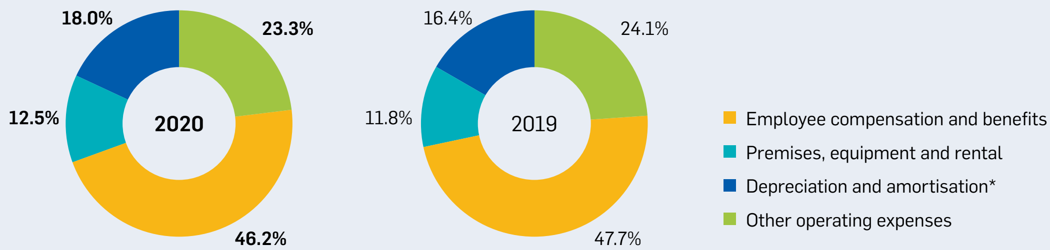
Staff costs were down by 2%, driven by lower performance-related pay and headcount, partly offset by the salary inflation.

Depreciation charges increased by 6%, due mainly to higher depreciation charges on equipment and increased depreciation of right-of-use assets. Amortisation of intangible assets increased by 81%, related mainly to capitalised IT system development costs.

General and administrative expenses were up by 1%. IT costs increased but these were partly offset by lower marketing and advertising expenses.

The cost efficiency ratio increased by 6.6 percentage points to 36.6%, due mainly to the impact of lower revenue resulting from decreased net interest income and wealth management business income amid the pandemic.

Operating Expenses



* Included depreciation of right-of-use assets of HK$595m in 2020 (2019: HK$528m)

Full-time equivalent staff numbers by region	At 31 December 2020	At 31 December 2019
Hong Kong and others	**7,925**	8,629
Mainland	**1,703**	1,761
	9,628	10,390

Reflecting the unfavourable property market as compared with 2019, **net surplus / (deficit) on property revaluation** recorded a net deficit of HK$636m in 2020, compared with a net surplus of HK$35m in the previous year. **Share of profits / (losses) of associates** recorded a loss of HK$75m, compared with a profit of HK$168m for 2019, largely reflecting the revaluation loss of a property investment company.

Second half of 2020 compared with first half of 2020

In this historically challenging year, the Group's first-half results reflect the business impact of the COVID-19 pandemic, the downward movement in interest rates, and geopolitical and macroeconomic risks around the world. The Group's relatively more robust second-half results reflect its actions to grow wealth management business income as financial markets began to recover and a reduction in ECL charges following an improvement in the economic outlook. However, the progressive impact of lower interest rates in the second half continued to have an adverse effect on net interest income, leading to an overall decline in second-half bottom-line performance. 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$16,881m, down by HK$2,306m, or 12%. The impact of the 18% fall in net interest income due to lower interest rates was partly offset by the 8% increase in non-interest income as economic activity began to pick up. Operating profit decreased by HK$2,143m, or 19%, due mainly to higher operating expenses, partly offset by lower ECL charges. The reduction in net deficit on investment property revaluation compared to the first half, together with a share of profits from associates versus a share of losses from associates resulted in a HK$1,599m, or 17%, decrease in profit attributable to shareholders.

Net interest income decreased by HK$2,678m, or 18%, with the increase in average balance sheet growth more than offset by the narrowed net interest margin in the declining low interest rate environment. Average interest-earning assets grew by 5%, driven by the increase in average deposits. Net interest margin was under increased pressure, falling by 44 basis points to 1.52%, reflecting the flow-through of falling interest rates and compressed deposit spreads. Contribution from net-free funds was also adversely affected by the low interest rate environment and the significant drop in HIBOR during the last quarter of the year.

Non-interest income was up by HK$372m, or 8%, due largely to a 32% growth in wealth management business income. Investment services income rose by 11%, driven mainly by increased income from stockbroking and related services, facilitated in part by the Group's standalone securities trading app. Insurance businesses income also grew strongly, rising by 56%, attributable to the success of our active portfolio management following the partial rebound of financial markets in the second half.

Operating expenses increased by HK$619m, or 10%, driven mainly by higher general and administrative expenses with increases in marketing and advertising costs and data-processing fees. The increase in marketing and advertising costs was to support investment services and insurance business, which moved swiftly to capture returning business opportunities and achieved good growth in the second half. These increases in costs were partly offset by reduced staff costs, due mainly to lower headcount through natural attrition. We will continue to actively manage operating expenses to facilitate the continued direction of resources towards further optimising our digital capabilities.

ECL charges decreased by HK$782m, or 44%, largely due to reduced impairment charges under stage 1 and 2 unimpaired credit exposures, partly offset by higher impairment charges on stage 3 impaired credit exposures. Stage 1 and 2 ECL charges increased significantly to HK$904m in the first half, reflecting updates to certain key variables of our prudent model for the economic outlook to account for the challenges of the pandemic. Subsequent updates to these variables to reflect changes in the economic environment during the second half, together with the impact of government support measures, led to a HK$360m net release of stage 1 and 2 ECL charges in the second half. Stage 3 ECL charges increased by HK$482m when compared with first half to HK$1,338m, reflecting the downgrade of several Commercial Banking customers across multiple sectors, partly offset by lower ECL charges on credit cards and personal lending.

Net surplus / (deficit) on property revaluation recorded a lower revaluation deficit of HK$220m when compared with the first half. Share of profits / (losses) of associates recorded a profit of HK$12m, compared with a loss of HK$87m for the first half.

Segmental Analysis

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

Figures in HK$m	Wealth and Personal Banking	Commercial Banking	Global Banking and Markets	Other	Total
Year ended 31 December 2020					
Profit / (loss) before tax	**10,470**	**5,101**	**4,979**	**(1,136)**	**19,414**
Share of profit / (loss) before tax	**53.9%**	**26.3%**	**25.7%**	**(5.9)%**	**100.0%**
Year ended 31 December 2019					
Profit / (loss) before tax	15,371	8,795	4,960	(313)	28,813
Share of profit / (loss) before tax	53.4%	30.5%	17.2%	(1.1)%	100.0%

Wealth and Personal Banking ('WPB') recorded an 18% year-on-year decrease in net operating income before change in expected credit losses and other credit impairment charges to HK$19,663m compared with 2019. Operating profit dropped by 31% to HK$10,546m and profit before tax decreased by 32% to HK$10,470m.

We leveraged advanced data analytics and our digital platform to deepen customer relationships, strengthen engagement and grow our portfolio. Deposit balances grew by 7% and loans balances increased by 3% compared with 2019 year-end. The significant decline in market interest rates during the year, resulted in a 17% drop in net interest income to HK$14,733m.

The volatile global investment markets had an impact on investor activity, resulting in a 22% decrease in non-interest income to HK$4,930m. Wealth management business revenue fell by 15%.

We ramped up the development of our digital infrastructure to meet changes in banking behaviour among our customers. The number of Personal e-Banking new registrations increased by 40% in Hong Kong, mobile app log-ons rose by 73% and the total number of e-Banking and digital transactions grew by 124% year-on-year. We added new online products and services to expand and enrich our suite of customer-centric solutions. We delivered more than 350 new digital features and enhancements in 2020, including online authenticated chat with our customer contact centre, chat with our virtual assistant – HARO – via WhatsApp, our SimplyFund investment platform that offers young and novice investors the opportunity to begin investing with as little as HK$1, and new digital insurance products. We also collaborated with multiple business partners – including New World CLUB and SmarTone – on API initiatives to provide more convenient and value-added banking and lifestyle services.

Total investment services income recorded year-on-year growth of 19%. We achieved strong securities business growth, facilitated in part by the rolling out of new eIPO and financing features in our Invest Express Stock Trading app. We also leveraged strong digital and data analytics capabilities to enhance frontline productivity by facilitating our understanding and anticipation of customer needs in fluid market conditions. This made it easier for us to proactively offer the right products and services at the right time.

Insurance income fell by 32%, due mainly to a drop in new business amid the pandemic. Despite the challenges, we achieved strong digital business growth, recording a 89% increase in terms of policy count and a 59% rise in new premiums, and establishing a good foundation from which to further build our online insurance business. We also launched DigiLife, an online platform that aims to provide an enhanced experience for customers by making it easy for them to view their policy details anytime, anywhere and to purchase different insurance products online. Our active portfolio management improved investment returns from the life insurance portfolio in the second half.

We leveraged our extensive network to strengthen engagement with customers in both the primary and secondary property markets. This helped facilitate the 5% growth in our mortgage balances in Hong Kong. Our new mortgage business continued to rank among the top three in Hong Kong. Our collaborations with Midland Realty and mReferral enhanced opportunities to contact potential customers and offered customers a more convenient and streamlined mortgage application process.

Although card spending was adversely affected by reduced travel and consumer spending amid the pandemic, we launched a series of effective product and marketing initiatives that enabled us to maintain solid momentum and outpace the market average. Our strategy centred on adapting to the changing priorities of our customers, with a shift in focus towards everyday spending and e-commerce, as well as our relaunch of the enJoy Co-brand Card reward programme. We also solicited a new partnership to further expand our Cash Dollar ecosystem and deliver rewarding dining experiences – both in restaurants and when ordering deliveries online – for our cardholders. In 2020, our online food & beverage transactions grew by three times, while our e-commerce transactions, excluding travel, rose by 31% year-on-year.

We continued to build solid customer relationships. Our enhanced data analytics capabilities and more agile business structure enabled us to anticipate changing customer needs and act swiftly to offer suitable products and services. This brought us new business and we recorded a 15% year-on-year rise in the Prestige and Preferred Banking customer base in 2020. To further expand the high-net-worth customer base, we launched Signature, which offers personalised and exclusive banking services to top-tier customers.

Commercial Banking ('CMB') recorded a 21% year-on-year reduction in net operating income before change in expected credit losses and other credit impairment charges to HK$10,300m. Operating profit and profit before tax both decreased by 42% to HK$5,101m.

Net interest income was severely impacted by the low interest rate environment and dropped by 20% to HK$8,307m. With the significant decline in commercial and industrial business activities due to the impact and challenges of the pandemic, non-interest income declined by 23% to HK$1,993m. Our agile business structure enabled us to move quickly to capture opportunities from market trading activities, resulting in a 14% increase in investment services income. We were focused on structured finance and syndicated loans, which led to Hang Seng ranking second in the League Table for Hong Kong Mandated Arranger in terms of number of deals in 2020.

Our dedication to provide swift and safe online transactions ensured our customers experienced seamless banking services during the COVID-19 pandemic. With our new Business Banking Remote Account Opening Service, commercial customers can now open an account anytime, anywhere without the need to make an appointment or visit a Business Banking Centre in person. Customers are also able to apply for the loan guarantee products under Hong Kong Mortgage Corporation's SME Financing Guarantee Scheme ('SFGS') through a dedicated online application platform that includes a documents upload function.

We further enhanced our transactional banking capabilities to make it easier for customers to manage their operating cash flow. We introduced Corporate API, which enables customers to integrate their daily business operations with our core banking services in order to increase the visibility of account balances and transaction activities for greater operational efficiency. Our new payment and receivables tracker enables customers to enjoy real-time, end-to-end tracking of the status of their outward and inward payments. Our Flexi-Fixed Deposit product enables customers to enjoy preferential interest rates without needed to fix the tenor of their deposit.

Other initiatives to improve the service experience of customers include enhancements to our digital channels, including our desktop and mobile e-banking platforms, AI chatbot BERI, Live Chat and Customer Contact Centre. Supported by strong data analytics capabilities, customised services are provided to customers at the right time via their preferred channel.

We continued to support our customers during the pandemic by actively participating in the SFGS. Change in expected credit losses and other credit impairment charges increased due mainly to the downgrade of a few customers with the deterioration in the global economy. We continued to uphold vigilant credit risk management and the overall asset quality remained resilient.

Our commitment to digital innovation has been recognised with awards including 'API Project of the Year' in *Asian Banking & Finance's* Wholesale Banking Awards 2020, and 'Best Payment Bank in Hong Kong' and 'Best Frictionless Transaction Award – One Collect Merchant Acquisition Solution' in *The Asian Banker* Transaction Banking Awards. We also received 'Best Payment and Collection Solution' and 'Best in Treasury and Working Capital – SME's Hong Kong' awards from *The Asset*.

Global Banking and Markets ('GBM') recorded a 2% year-on-year decrease in net operating income before change in expected credit losses and other credit impairment charges to HK$6,146m. Operating profit and profit before tax were both broadly on par with a year earlier at HK$4,979m.

Global Banking ('GB') recorded a 5% year-on-year drop in net operating income before change in expected credit losses and other credit impairment charges to HK$2,732m. After expected credit losses, operating profit and profit before tax both fell by 2% to HK$2,150m.

Net interest income decreased 6% to HK$2,372m as compared with 2019. With our lending portfolio optimisation strategy and the strong demand for stagging loans in the second half of the year, loan interest income grew by 7%. Our proactive approach in offering customers tailor-made cash management solutions helped to drive growth in the current and savings deposits balance, which increased by 46%. However, net interest income from deposits declined year-on-year, due mainly to the adverse impact of the low interest rate environment.

Despite challenging market conditions, non-interest income rose by 2% to HK$360m, due mainly to fee income from credit facilities on the back of the solid growth in lending.

Leveraging strong customer relationships, we continued to broaden the fee income stream, particularly through our Debt Capital Markets Origination team and effective cross-business collaboration. We also continued to help customers in need through the Principal Payment Holiday Scheme offered by HKMA amid the prolonged pandemic situation.

Global Markets ('GM') recorded a 2% year-on-year increase in net operating income before change in expected credit losses and other credit impairment charges to HK$3,414m. Operating profit and profit before tax both increased by 2% to HK$2,829m.

Net interest income increased by 2% to HK$2,046m. The Markets Treasury team managed interest rate risk effectively, taking steps to proactively defend the interest margin and achieve yield enhancement while upholding prudent risk management standards.

Non-interest income increased by 1% to HK$1,368m. The increase in volatility in foreign exchange markets, together with the changing interest rate environment, resulted in an increase in non-fund income from trading and client activities. Besides equities and structuring, trading departments responsible for repo, foreign exchange and option trading achieved strong revenue growth, which offset the revenue drop in rates trading. Sales revenue remained steady despite the negative impact of the COVID-19 pandemic. The increases in foreign exchange investment by WPB customers and use of interest rate hedging products by corporate customers largely offset the drop in corporate foreign exchange. GM continued with initiatives to deepen product penetration among Bank customers through close collaboration with the other business segments.

The new Repo Trading department has become a good source of revenue since its establishment in the second half of 2019, demonstrating our commitment to diversifying our sources of revenue for sustainable business growth.

Balance Sheet Analysis

Assets

Total assets increased by HK$83bn, or 5%, to HK$1,760bn compared with 2019 year-end, with the Group maintaining good business momentum and advancing its strategy of enhancing profitability through sustainable growth.

Cash and balances at central banks decreased by HK$2bn, or 14%, to HK$11bn, due mainly to fund redeployment. Trading assets were down by HK$10bn, or 22%, to HK$37bn, mainly in Hong Kong Exchange Fund Bills.

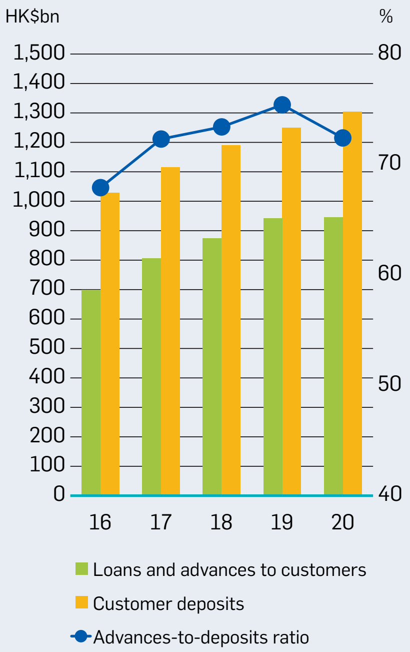
Customer loans and advances (net of ECL allowances) were HK$945bn, broadly unchanged from the end of 2019. In response to the COVID-19 pandemic, the government introduced a number of measures to support businesses and the community. The Group actively supported these measures and launched additional initiatives to support retail and corporate customers. Loans for use in Hong Kong grew by 1%. Lending to industrial, commercial and financial sectors was broadly in line with 2019 year-end, with the growth in wholesale and retail trade and working capital financing for certain large corporate customers operating in industries that are classified under the 'Others' sector largely offset by the decrease in lending to property investment and financial concerns sectors. Lending to individuals grew by 4%, due primarily to a rise in residential mortgages and Government Home Ownership Scheme / Private Sector Participation Scheme / Tenants Purchase Scheme lending, which outweighed the decrease in credit card lending due to lower card spending. Trade finance lending decreased by 20%, due to the slowdown in global trade volumes. Loans for use outside Hong Kong were flat year-on-year, with increased lending by the Group's Mainland banking subsidiary offset by loans for use outside Hong Kong granted by the Hong Kong office.

Financial investments increased by HK$93bn, or 20%, to HK$555bn, reflecting the partial redeployment of the commercial surplus in debt securities for yield enhancement and liquidity management and the increase in insurance financial instrument portfolios.

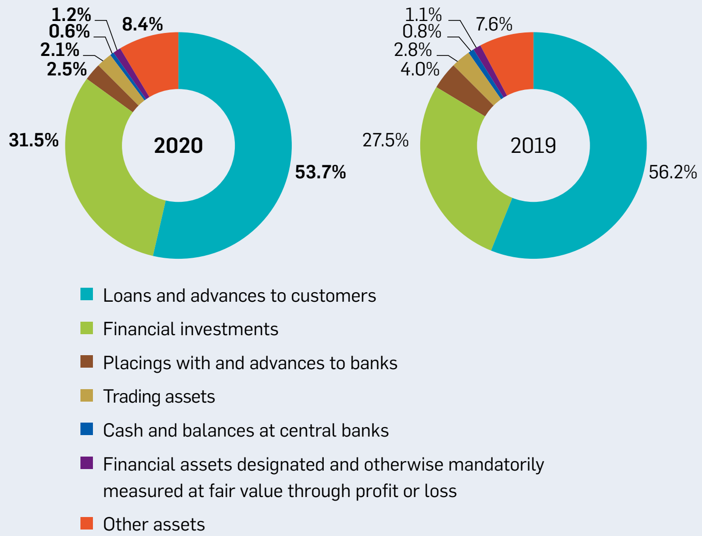
Assets Deployment

Figures in HK$m	At 31 December 2020	%	At 31 December 2019	%
Cash and balances at central banks	11,226	0.6	13,038	0.8
Trading assets	37,117	2.1	47,357	2.8
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	20,695	1.2	18,771	1.1
Placings with and advances to banks	44,357	2.5	65,807	4.0
Loans and advances to customers	944,774	53.7	942,930	56.2
Financial investments	554,720	31.5	461,704	27.5
Other assets	146,898	8.4	127,384	7.6
Total assets	1,759,787	100.0	1,676,991	100.0
Return on average total assets	1.0%		1.5%	

Loans and Advances to Customers and Customer Deposits



Assets Deployment

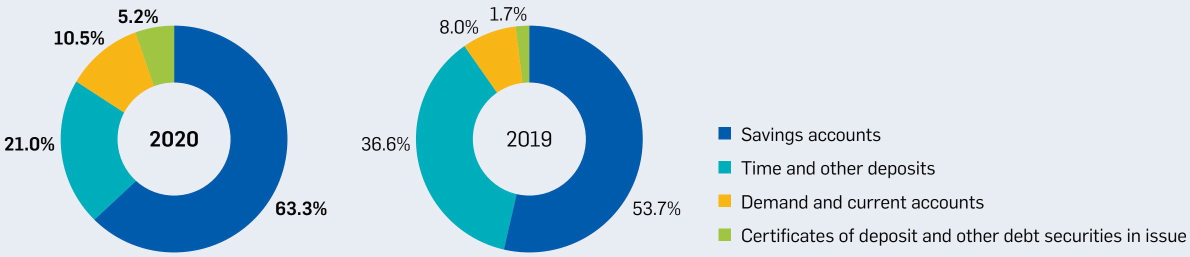


Liabilities and equity

Customer deposits, including certificates of deposit and other debt securities in issue, increased by HK$54bn, or 4%, to HK$1,304bn against the end of 2019. Current and savings deposits increased, but there was a drop in time deposits.

To diversify the funding source, the Group issued more certificates of deposit in the fourth quarter of 2020. At 31 December 2020, the advances-to-deposits ratio was 72.4%, compared with 75.4% at 31 December 2019.

Customer Deposits



Shareholders' equity

Figures in HK$m	At 31 December 2020	At 31 December 2019
Share capital	9,658	9,658
Retained profits	137,580	133,734
Other equity instruments	11,744	11,744
Premises revaluation reserve	17,960	19,889
Cash flow hedging reserve	260	16
Financial assets at fair value through other comprehensive income reserve	4,557	3,296
Other reserves	1,341	473
Total reserves	173,442	169,152
Total shareholders' equity	183,100	178,810
Return on average ordinary shareholders' equity	9.6%	15.2%

At 31 December 2020, shareholders' equity increased by HK$4bn, or 2%, to HK$183bn compared with 2019 year-end. Retained profits were up by HK$4bn, or 3%, reflecting profit accumulation after the appropriation of dividends paid during the year. The premises revaluation reserve decreased by HK$2bn, or 10%, reflecting the unfavourable movement in the commercial property market during the year. Financial assets at fair value through other comprehensive income reserve were up by HK$1bn, or 38%, mainly reflecting the fair value movement of the Group's investments in financial assets measured at fair value.

There was no purchase, sale or redemption by the Bank, or any of its subsidiaries, of the Bank's listed securities during 2020.

Risk

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

Our approach to risk

Our risk appetite

We recognise the importance of a strong risk culture, which refers to our shared attitudes, values and norms 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 will continue to incorporate this 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 to knowingly engage 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 a member of staff or by any business.

Enterprise-wide application

Our risk appetite encapsulates 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 inadequate or failed internal processes, people and systems or from external events.

Our risk appetite is expressed in both quantitative and qualitative terms. It continues to evolve and expand its scope as part of our regular review process.

The Board reviews and approves the Group's risk appetite twice a year to make sure it remains fit for purpose. The risk appetite is considered, developed and enhanced through:

- an alignment with our strategy, purpose, values and customer needs;
- trends highlighted in other Group risk reports;
- communication with risk stewards on the developing risk landscape;
- strength of our capital, liquidity and balance sheet;
- compliance with applicable laws and regulations;
- effectiveness of the applicable control environment to mitigate risk, informed by risk ratings from risk control assessments;
- functionality, capacity and resilience of available systems to manage risk; and
- the level of available staff with the required competencies to manage risks.

We formally articulate our risk appetite through our risk appetite statement ('RAS'), which is approved by the Board on the recommendation of the Risk Committee ('RC'). Setting out our risk appetite ensures that planned business activities provide an appropriate balance of return for the risk we are taking, and 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 fundamental to the development of business line strategies, strategic and business planning, and senior management balanced scorecards.

Performance against the RAS is reported to the Risk Management Meeting ('RMM') regularly so that any actual performance that falls outside the approved risk appetite is discussed and appropriate mitigating actions are determined. 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 business, customers, colleagues, shareholders and the communities that we serve, while ensuring we are able to support our strategy and provide sustainable growth.

We are focused upon implementation of our business strategy and it is critical that we ensure we use active risk management to manage the execution risks.

We will also perform periodic risk assessments, including strategies to ensure retention of key personnel for our continued safe operation.

We use a comprehensive risk management framework across the organisation and across all risk types, underpinned by our culture and values. This outlines 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 sound operational and strategic decision making. It also ensures a consistent approach to identify, assess, manage and report the risks we accept and incur in our activities.

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 ensures the necessary balance in risk / return decisions.
Processes and tools	Risk appetite	The Group has several processes to identify / assess, monitor, manage and report risks to ensure we remain within our risk appetite.
	Enterprise-wide risk management tools	
	Active risk management: identification / assessment, monitoring, management and reporting	
Internal controls	Policies and procedures	Policies and procedures define the minimum requirements for the controls required to manage our risks.
	Control activities	Non-financial risk stewards define the minimum control standards for managing non-financial risks.
	Systems and infrastructure	The Group has systems and / or processes that support the identification, capture and exchange of information to support risk management activities.

Risk governance

The Board has ultimate responsibility for the effective management of risk and approves our risk appetite. It is advised on risk-related matters by the RC.

The Chief Risk Officer, supported by the RMM, holds executive accountability for the ongoing monitoring, assessment and management of the risk environment and the effectiveness of the risk management framework.

The management of regulatory compliance risk and financial crime risk reside with the Head of Regulatory Compliance and Head of Financial Crime Compliance respectively. 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 role as part of the three lines of defence model.

Three lines of defence

To create a robust control environment to manage risks, we use an activity-based three lines of defence model. This model delineates management accountabilities and responsibilities for risk management and the control environment.

This model underpins our approach to risk management by clarifying responsibility and encouraging collaboration, as well as enabling efficient coordination of risk and control activities.

The three lines of defence are summarised below:

- The first line of defence owns the risks and is responsible for identifying, recording, reporting and managing them in line with risk appetite, and ensuring that the right controls and assessments are in place to mitigate them.
- The second line of defence sets the policy and guidelines for managing specific risk areas, provides advice and guidance in relation to the risk, and challenges the first line of defence on effective risk management.
- The third line of defence is our Internal Audit function, which provides independent assurance that our risk management, governance and internal control processes are designed and operating effectively.

Independent risk function

The Group's Risk function, headed by the Chief Risk Officer, is responsible for the Group's risk management framework. This responsibility includes establishing and monitoring of risk profiles and forward-looking risk identification and management. 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 aggregate level and types of risk that the Group is willing to accept in order to achieve its business 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.

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, countries 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 a thematic issue with large unknown components that may form and crystallise beyond a one-year time horizon. If it were to materialise, it could have a significant material impact on 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.

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 2020

There were no material changes to the policies and practices for the management of risk in 2020. However, where required, appropriate exceptional handling approaches were exercised in response to Coronavirus Disease 2019 ('COVID-19') developments.

We have been actively managing the risks resulting from the COVID-19 outbreak and its impacts on our customers and operations during 2020 as well as other key risks described in this section.

In 2020, we enhanced our risk management in the following areas:

- In January 2020, we simplified our approach and articulation of risk management through the combination of our enterprise risk management framework and our operational risk management framework.

- We adopted the HSBC Group model risk policy and associated standards which were revised to improve how we manage model risk and meet enhanced external expectations.

- We continued to focus on simplifying our approach to non-financial risk management. We are driving more effective oversight and better end-to-end identification and management of non-financial risks.

- We continue to support the business and our customers throughout the global pandemic, while continuing to manage financial crime risk. We continued to invest in both advanced analytics and artificial intelligence, which remain key components of our next generation of tools to fight financial crime. From 2021, we will combine our RMM and Financial Crime Risk Management Committee Meetings to ensure a holistic view of all risks.

Areas of special interest

(unaudited)

During 2020, 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 and risks related to COVID-19.

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 outbreak dominated the political and economic landscape through much of 2020. The twin shocks of a public health emergency and the resultant economic fallout have been felt around the world, and hit both advanced and emerging markets. The closure of borders threatened medical and food supplies for many markets, leading to countries and territories focusing efforts on building resilient supply chains closer to home. COVID-19 and the corresponding vaccine rollout will likely dominate the political and economic agenda for most of 2021.

Tensions could be raised as countries compete for access for the array of vaccines under development, approved or pending approval, while the potential differences of protection offered, the speed and scale with which they can be manufactured, and the take-up rates of vaccines will impact the speed of economic recovery.

The COVID-19 outbreak also heightened existing US-China tensions. Tensions span a wide range of issues, including trade, finance, military, technology and human rights. The COVID-19 outbreak has accelerated US and Chinese efforts to reduce mutual dependence in strategic industries such as sensitive technology, pharmaceuticals and precursor chemicals.

A range of tensions in US-China relations could have potential ramifications for the Group and its customers. These tensions may affect the Group as a result of the impact of sanctions (including sanctions that impact the Group's customers), as well as regulatory, reputational and market risks.

The US has imposed a range of sanctions and trade restrictions on Chinese persons and companies, focusing on entities the US believes are involved in human rights violations, information technology and communications equipment and services, and miltary activities. In response, China has announced a number of sanctions and trade restrictions that target or provide authority to target foreign officials and companies, including those in the US.

The Hong Kong Autonomy Act passed by the US provides 'secondary sanctions' authority that allows for the imposition of US sanctions against non-US financial institutions found to be engaged in significant transactions with certain Chinese individuals and entities subject to US sanctions as a result of a US determination that these individuals or entities engaged in activities undermining Hong Kong's autonomy. The US has also imposed restrictions on US persons' ability to engage in transactions in or relating to publicly traded securities of a number of prominent Chinese companies. China has subsequently adopted regulations providing a framework for specific prohibitions against compliance with, and private rights of action for damages resulting from, measures that the government determines have an unjustified extraterritorial application that impairs Chinese sovereignty.

No penalties have yet been imposed against financial institutions under any of these measures, and their scope and application remain uncertain. These and any future measures that may be taken by the US and China may affect the Group, its customers, and the markets in which we operate.

It remains unclear the extent to which the new US administration will impact geopolitical tensions.

While UK-China relations have historically been shaped by strong trade and investment, there are also emerging challenges. Following the implementation of the Hong Kong National Security Law, the UK offered residency rights and a path to citizenship to eligible British National (Overseas) passport holders in Hong Kong. In addition, both the UK and Hong Kong governments have suspended their extradition treaties with each other.

China's expanding data privacy and cybersecurity laws could pose potential challenges to intra-Group data sharing, especially within the Greater Bay Area ('GBA'). China's draft Personal Information Protection Law and Data Security Law, if passed in their current forms, 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. Use of personal data through digital platforms for GBA initiatives may need to take into account these evolving data privacy and cybersecurity obligations.

Most developed markets, including Hong Kong, are expected to recover from the COVID-19 crisis. However, permanent business closures and job losses in some sectors may prevent several developed markets from achieving pre-crisis growth rates or activity levels in the near term.

The contraction in the global economy during 2020 has had varying effects on our customers, with some of them experiencing financial difficulties. This has resulted in an increase in expected credit losses ('ECL') and risk-weighted assets ('RWAs') as explained further in Credit Risk section and Capital Management section.

Central banks have reduced interest rates in most financial markets due to the adverse impact on the timelines and the path for economic recovery from the COVID-19 outbreak, which has in turn increased the likelihood of negative interest rates. This raises a number of risks and concerns, such as the readiness of our systems and processes to accommodate zero or negative rates, the resulting impacts on customers, regulatory constraints and the financial implications given the significant impact that prolonged low interest rates have had, and may continue to have, on our net interest income. For some products, we have floored deposit rates at zero or made decisions not to charge negative rates. This, alongside loans repriced at lower rates, will result in our commercial margins being compressed, which is expected to be reflected in our profitability. The pricing of this risk will need to be carefully considered. These factors may challenge the long-term profitability of the banking sector, including ourselves.

We continually monitor the geopolitical developments and actively manage our credit portfolio through 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') are used to set interest rates on hundreds of trillions of US dollars of different types of financial transactions and are used extensively for valuation purposes, risk measurement and performance benchmarking.

The UK's Financial Conduct Authority ('FCA') announced in July 2017 that it will no longer persuade or require banks to submit rates for the London interbank offered rate ('LIBOR') after 2021. In addition, the 2016 EU Benchmark Regulation, which defines the minimum reliability standards for interest rate benchmarks, has resulted in other regulatory bodies' reassessment of benchmarks. As a result, national working groups are actively discussing the mechanisms for an orderly transition of the five LIBOR currencies, the Euro Overnight Index Average ('EONIA'), and the Singapore interbank offered rate ('SIBOR') to their chosen replacement rates.

As our IBOR transition programme progresses into the execution phase, resilience and operational risks, are heightened due to an expected increase in the number of new near risk-free rate ('RFR') products being rolled out, compressed timelines for transition of legacy IBOR contracts and the extensive systems and process changes required to facilitate both new products and transition. This is being exacerbated by the current interest rate environment where low LIBOR rates, in comparison with replacement RFR, could affect decisions to transition contracts early, further compressing transition timelines. Regulatory compliance, legal and conduct risks may also increase as a result of both the continued sale of products referencing IBORs, as well as the sale of new products referencing RFRs due to the lack of established market conventions.

Financial risks resulting from the discontinuation of IBORs and the development of RFR market liquidity will also affect the Group throughout transition. The differences in IBOR and RFR interest rates will create a basis risk that we need to actively manage through appropriate financial hedging. As contracts are transitioned from IBORs to RFRs, there is a risk that the associated financial hedges will not be aligned.

The continued orderly transition from IBORs continues to be the programme's key objective throughout 2021 and can be broadly grouped into two streams of work: development of alternative rate product capabilities, and the transition of legacy contracts.

Development of alternative rate product capabilities

The Group have been developing system and operational capabilities for alternative rates products during 2020. Further product releases for Sterling Overnight Index Average ('SONIA') and Secured Overnight Financing Rate ('SOFR') in the first half of 2021, in addition to other LIBOR currencies through 2021. These developments have enabled the Group to cease selling certain IBOR-related products.

While IBOR sales do continue for a number of product lines, IBOR exposures that have post-2021 maturities are expected to be reduced as a result of transacting new activities in alternative RFR products as market liquidity builds.

Transition legacy contracts

In addition to offering new alternative rate based products, the development of new product capabilities will also help facilitates the transition of legacy IBOR products. Hang Seng has begun to engage clients to determine their ability to transition in line with the readiness of the alternative rate product availability. The COVID-19 outbreak and the interest rate environment may have affected the ability of clients to transition early and has resulted in compressed timelines for IBOR transition. However, this may be mitigated in part by the recent announcement by InterContinental Exchange Benchmark Administration ('IBA'), the LIBOR Benchmark Administrator, to consult on extending the publication of most US dollar LIBOR setting (excluding one week and two month tenors) to enable the legacy US dollar book transition by 30 June 2023. Despite the proposed extension, regulatory and industry guidance has been clear that market participants should cease writing new US dollar LIBOR contracts as soon as is practicable, and in any event, by the end of 2021. While the extended deadline will result in additional US dollar LIBOR transactions maturing before cessation, not all of them will, hence it is possible that other proposed solutions, including legislative relief, will still be needed.

For the derivatives exposures, the adoption of the International Swaps and Derivatives Association ('ISDA') protocol, which comes into effect in the first quarter of 2021, and the successful changes made by clearing house to discount derivatives using in SOFR and Euro Short Term Rate ('€STR') reduce the risk of a disorderly transition of the derivative market.

For the Group's loan book, our businesses have developed commercial strategies that include active client engagement and communication, providing detailed information on RFR products to assist our clients to transition to a suitable alternative rate or replacement RFR product before IBOR cessation.

Mitigating actions

- We have put in place the IBOR transition programme to facilitate an orderly transition to replacement rates for our business and our clients, which is overseen by the Chief Risk Officer;
- We have and continue to carry out extensive training, communication and client engagement to facilitate appropriate selection of products, with dedicated teams in place to support the development of, and transition to, alternative rate and replacement RFR products;
- We are implementing IT and operational change to enable a longer transition window;
- We have met 2020 regulatory expectations for implementing relevant contractual language changes for loan products;
- We are targeting regulatory set and industry agreed milestones for the cessation of new standard LIBOR trades (sterling LIBOR in the first quarter of 2021, other LIBORs in the second quarter of 2021) leading to a reduction in the Group's IBOR portfolio;
- We have assessed, monitored and are dynamically managing risks, and implemented specific mitigating controls as required;
- We continue to engage with regulatory and industry bodies actively to mitigate risks relating to hedge accounting changes, multiple loan conventions, and those contracts that have no appropriate replacements or no likelihood of renegotiation to transition ('tough legacy').

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 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 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.

These amendments apply from 1 January 2021 with early adoption permitted. The Group has adopted the amendments from 1 January 2020.

(audited) **At 31 December 2020**	**Financial instruments yet to transition to alternative benchmarks, by main benchmark**		
	USD LIBOR	**GBP LIBOR**	**Others[1]**
Non-derivative financial assets[2]	44,268	11,008	260
Non-derivative financial liabilities	3,101	–	–
Derivative notional contract amount	113,010	761	–

[1] Comprises financial instruments referencing other significant benchmark rates yet to transition to alternative benchmarks (JPY LIBOR and SIBOR).

[2] 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 contractually maturity date after 31 December 2021, the date by which LIBOR is expected to cease; and
- are recognised on the Group's Consolidated Balance Sheet.

The administrator of LIBOR, IBA, has announced a proposal to extend the publication date of most USD LIBOR tenors until 30 June 2023. Publication of one week and two month tenors will cease after 31 December 2021. This proposal, if endorsed, would reduce the amounts presented in the above table as some financial instruments included will reach their contractual maturity date prior to 30 June 2023.

Risks related to COVID-19

The COVID-19 outbreak and its effect on the global economy have impacted our customers and our performance, and the future effects of the outbreak remain uncertain. The outbreak necessitated governments to respond at unprecedented levels to protect public health, local economies and livelihoods. It has affected countries at different times and to varying degrees as it has developed. The varying government support measures and restrictions in response have added challenges, given the rapid pace of change and significant operational demands. The speed at which countries and territories will be able to unwind the government support measures and restrictions and return to pre-COVID-19 economic levels will vary based on the levels of infection, local governmental decisions and access to and ability to roll out vaccines. There remains a risk of subsequent waves of infection. Renewed outbreaks emphasise the ongoing threat of COVID-19 even in countries that have recorded lower than average cases so far.

Government restrictions imposed around the world to limit the spread of COVID-19 resulted in a sharp contraction in global economic activity during 2020. At the same time, governments also took steps designed to soften the extent of the damage to investment, trade and labour markets. The rapidly increasing trend of local confirmed COVID-19 cases in Hong Kong since November 2020 would likely hit the pace of business recovery in Hong Kong as the Government has further tightened and prolonged the social distancing measures. Gradual recovery in economic activity is expected in 2021, but this is contingent on the successful containment of the virus and the evolution of other top risks, including social unrest in Hong Kong and tensions between the US and China. It also relies on the willingness and ability of households and businesses to return towards pre-crisis spending levels.

Hong Kong Government has deployed extensive measures to support households and corporates. Measures implemented by Government have included income support to households and funding support to businesses. Some of these measures are being extended.

Apart from Government relief measures, we have initiated market-specific measures to support our personal and business customers through these challenging times, including principal moratorium, payment holidays, the waiver of certain fees and charges, etc. for businesses facing market uncertainty and short-term cash flow issue and for individuals facing salary reduction. 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, as well as customer expectations, can lead to risks as the Group implements large-scale changes in a short period of time. This 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.

At 31 December 2020, our CET1 ratio was 16.8%, compared with 16.9% at 31 December 2019, and our liquidity coverage ratio ('LCR') was 230.4%. Our capital, funding and liquidity position is expected to help us to continue supporting our customers throughout the COVID-19 outbreak.

The COVID-19 outbreak has led to a weakening in GDP in Hong Kong, a key input used for calculating ECL, and there remains the risk of more adverse economic scenarios given its ongoing impact. Furthermore, ECL will also increase from other parts of our business impacted by the disruption to supply chains. The impact will vary by sectors of the economy. The impact of the outbreak on the long-term prospects of businesses in these sectors is uncertain and may lead to significant ECL charges on specific exposures, which may not be fully captured in ECL estimates. In addition, in times of crisis, fraudulent activity is often more prevalent, leading to potentially significant ECL charges or operational losses.

The significant changes in economic and market drivers, customer behaviours and government actions caused by COVID-19 have also impacted the performance of financial models. HKFRS 9 model performance has been impacted over the course of 2020 which has increased reliance on management judgement in determining the appropriate level of ECL estimates. These models are driven by forecasts of economic factors such as GDP and unemployment. The significant volatility in these measures has impacted the reliability of the model outputs. In order to address the model limitations and performance issues, some key models have been enhanced. These models have been independently validated and assessed as having the ability to deliver reliable credit loss estimates, for reducing the reliance on management judgement. HKFRS 9 model redevelopment will continue as the economic consequences of the COVID-19 crisis become clearer over time as economic conditions normalise and actual credit losses occur.

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.

There remain significant uncertainties in assessing the duration of the COVID-19 outbreak and its impact. The actions taken by the various governments and central banks, in particular in Hong Kong, mainland China, the US and the UK, provide an indication of the potential severity of the downturn and post-recovery environment, which from a commercial, regulatory and risk perspective could be significantly different to past crises and persist for a prolonged period. A prolonged period of significantly reduced economic activity as a result of the impact of the outbreak would have a materially adverse effect on our financial condition, results of operations, prospects, liquidity, capital position and credit ratings. We continue to monitor the situation closely, and given the novel or prolonged nature of the outbreak, additional mitigating actions may be required.

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: – 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.
Liquidity and funding risk		
Liquidity risk is the risk that the Group does not have sufficient financial resources to meet its obligations as they fall due or that it can only do so at an excessive cost. Funding risk is the risk that funding considered to be sustainable, and therefore used to fund assets, is not sustainable over time.	Liquidity risk arises from mismatches in the timing of cash flows. Funding risk arises when illiquid asset positions cannot be funded at the expected terms and when required.	Liquidity and funding risk is: – measured using a range of metrics including liquidity coverage ratio and net stable funding ratio; – assessed through the internal liquidity adequacy assessment process; – monitored against the Group's liquidity and funding risk framework; and – managed on a stand-alone basis with no reliance on any Group entity (unless pre-committed) or central bank unless this represents routine established business-as-usual market practice.

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: – 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: – measured through a range of metrics with defined maximum acceptable impact tolerances, and against our agreed risk appetite; – monitored through oversight of enterprise processes, risks, controls and strategic change programmes; and – managed by continual monitoring and thematic reviews.
Regulatory compliance risk		
Regulatory compliance risk is the risk 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: – 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.
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: – 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.

Risks	Arising from	Measurement, monitoring and management of risk
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: – measured by reference to model performance tracking and the output of detailed technical reviews, with key metrics including model review statuses and findings; – monitored against model risk appetite statements, insight from the independent review function, feedback from internal and external audits, and regulatory reviews; and – managed by creating and communicating appropriate policies, procedures and guidance, training colleagues in their application, and supervising their adoption to ensure operational effectiveness.

Description of risks – insurance manufacturing operations

(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
Insurance risk		
Insurance risk is the risk that, over time, the cost of acquiring and administering an insurance contract, and paying claims and benefits may exceed the total amount of premiums received and investment income.	The cost of claims and benefits can be influenced by many factors, including mortality and morbidity experience, as well as lapse and surrender rates.	Insurance risk is: – measured in terms of life insurance liabilities and economic capital allocated to insurance underwriting risk; – monitored through a framework of approved limits and delegated authorities; and – managed through a robust risk control framework which outlines clear and consistent policies, principles and guidance. This includes using product design, underwriting, reinsurance and claims-handling procedures.
Financial risk		

Our ability to effectively match the liabilities arising under insurance contracts with the asset portfolios that back them is contingent on the management of financial risks and the extent to which these risks are borne by the policyholders.	Exposure to financial risks arises from:
	– market risk of changes in the fair values of financial assets or their future cash flows;
	– credit risk; and
	– liquidity risk of entities being unable to make payments to policyholders as they fall due.
		Financial risk is:
		– measured separately for each type of risk:
		  – market risk is measured in terms of economic capital, internal metrics and fluctuations in key financial variables;
		  – credit risk is measured in terms of economic capital and the amount that could be lost if a counterparty fails to make repayments; and
		  – liquidity risk is measured in terms of internal metrics including stressed operational cash flow projections;
		– monitored through a framework of approved limits and delegated authorities; and
		– managed through a robust risk control framework, which outlines clear and consistent policies, principles and guidance. This includes using product design, asset liability matching and bonus rates.

The following information describes the Group's management and control of risks, in particular, those associated with its use of financial instruments ('financial risks'). Major types of risks to which the Group is exposed include credit risk, 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 2020

There were no material changes to the policies and practices for the management of credit risk in 2020. 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.

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.

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 Financial Officer and the Chief Accounting Officer.

(a) Credit Risk

Credit risk management continued

(audited)

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.

Retail lending

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

	Sovereign debt securities and bills	Other debt securities and bills	Wholesale lending		Retail lending	
Credit quality classification[1,2]	External credit rating	External credit rating	Internal credit rating	12-month Basel probability of default %	Internal credit rating	12-month probability-weighted PD %
Strong	BBB and above	A- and above	CRR 1 to CRR 2	0 – 0.169	Band 1 and 2	0 – 0.500
Good	BBB- to BB	BBB+ to BBB-	CRR3	0.170 – 0.740	Band 3	0.501 – 1.500
Satisfactory	BB- to B and unrated	BB+ to B and unrated	CRR 4 to CRR 5	0.741 – 4.914	Band 4 and 5	1.501 – 20.000
Sub-standard	B- to C	B- to C	CRR 6 to CRR 8	4.915 – 99.999	Band 6	20.001 – 99.999
Credit-impaired	Default	Default	CRR 9 to CRR 10	100	Band 7	100

1 Customer risk rating ('CRR').

2 12-month point-in-time ('PIT') probability-weighted probability of default ('PD').

(a) Credit Risk

Credit risk management continued

(audited)

Key risk management processes continued

Quality classification definitions:

- Strong exposures demonstrate a strong capacity to meet financial commitments, with negligible or low probability of default and / or low levels of expected loss.
- Good exposures require closer monitoring and demonstrate a good capacity to meet financial commitments, with low default risk.
- Satisfactory exposures require closer monitoring and demonstrate an average-to-fair capacity to meet financial commitments, with moderate default risk.
- Sub-standard exposures require varying degrees of special attention and default risk is of greater concern.
- Credit-impaired exposures have been assessed as described on note 2(j) on the Consolidated Financial Statements.

Renegotiated loans and forbearance

(audited)

'Forbearance' describes concessions made on the contractual terms of a loan in response to an obligor's financial difficulties.

A loan is classed as 'renegotiated' when we modify the contractual payment terms on concessionary terms because we have significant concerns about the borrowers' ability to meet contractual payments when due.

Non-payment-related concessions (e.g. covenant waivers), while potential indicators of impairment, do not trigger identification as renegotiated loans.

Loans that have been identified as renegotiated retain this designation until maturity or derecognition.

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.

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.

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 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.

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.

(a) Credit Risk

Summary of credit risk

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[5]

	At 31 December 2020		At 31 December 2019 *Re-presented*	
	Gross carrying / nominal amount	Allowance for ECL[1]	Gross carrying / nominal amount	Allowance for ECL[1]
Loans and advances to customers at amortised cost:	949,954	(5,180)	946,443	(3,513)
Placings with and advances to banks at amortised cost	44,357	–	65,808	(1)
Other financial assets measured at amortised costs:	188,872	(187)	164,157	(88)
– cash and balances at central banks	11,226	–	13,038	–
– reverse repurchase agreements – non-trading	13,360	–	6,659	–
– financial investments	134,997	(173)	117,935	(80)
– other assets[2]	29,289	(14)	26,525	(8)
Total gross carrying amount on balance sheet	1,183,183	(5,367)	1,176,408	(3,602)
Loans and other credit related commitments	356,776	(163)	347,921	(145)
Financial guarantee and similar contracts	3,024	(18)	3,825	(7)
Total nominal amount off balance sheet[3]	359,800	(181)	351,746	(152)
Total	1,542,983	(5,548)	1,528,154	(3,754)
	Fair value	Memorandum Allowance for ECL	Fair value	Memorandum Allowance for ECL
Debt instruments measured at Fair Value through Other Comprehensive Income ('FVOCI')[4]	412,845	(9)	337,968	(11)

[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.

[5] In 2020, the Group changed its presentation to include balances with HSBC Group companies. Comparatives have been re-presented accordingly.

(a) Credit Risk

The following table provides an overview of the Group's credit risk by stage and the associated ECL coverage. The financial assets recorded in each stage have the following characteristics:

Stage 1: These financial assets are unimpaired and without significant increase in credit risk on which a 12-month allowance for ECL is recognised.

Stage 2: A significant increase in credit risk has been experienced on these financial assets since initial recognition for which a lifetime ECL is recognised.

Stage 3: There is objective evidence of impairment and the financial assets are therefore considered to be in default or otherwise credit-impaired on which a lifetime ECL is recognised.

POCI: Financial assets that are purchased or originated at a deep discount are seen to reflect the incurred credit losses on which a lifetime ECL is recognised.

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

(audited)

	Gross carrying / nominal amount[1]					Allowance for ECL					ECL coverage %				
	Stage 1	Stage 2	Stage 3	POCI[2]	Total	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
Loans and advances to customers at amortised cost	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%
Placings 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).

(a) Credit Risk

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

(audited)

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

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

	Gross carrying / nominal amount[1]					Allowance for ECL					ECL coverage %				
Re-presented[3]	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	831,840	112,530	2,073	–	946,443	(942)	(1,757)	(814)	–	(3,513)	0.11%	1.56%	39.27%	N/A	0.37%
– personal	329,640	12,405	697	–	342,742	(359)	(884)	(148)	–	(1,391)	0.11%	7.13%	21.23%	N/A	0.41%
– corporate and commercial	486,565	94,182	1,376	–	582,123	(528)	(842)	(666)	–	(2,036)	0.11%	0.89%	48.40%	N/A	0.35%
– non-bank financial institutions	15,635	5,943	–	–	21,578	(55)	(31)	–	–	(86)	0.35%	0.52%	N/A	N/A	0.40%
Placings with and advances to banks at amortised cost	65,808	–	–	–	65,808	(1)	–	–	–	(1)	0.00%	N/A	N/A	N/A	0.00%
Other financial assets measured at amortised cost	161,244	2,913	–	–	164,157	(53)	(35)	–	–	(88)	0.03%	1.20%	N/A	N/A	0.05%
Loans and other credit-related commitments	342,693	5,228	–	–	347,921	(68)	(77)	–	–	(145)	0.02%	1.47%	N/A	N/A	0.04%
– personal	239,003	–	–	–	239,003	–	–	–	–	–	0.00%	N/A	N/A	N/A	0.00%
– corporate and commercial	93,492	4,693	–	–	98,185	(67)	(77)	–	–	(144)	0.07%	1.64%	N/A	N/A	0.15%
– non-bank financial institutions	10,198	535	–	–	10,733	(1)	–	–	–	(1)	0.01%	0.00%	N/A	N/A	0.01%
Financial guarantee and similar contracts	3,282	543	–	–	3,825	(3)	(4)	–	–	(7)	0.09%	0.74%	N/A	N/A	0.18%
– personal	7	–	–	–	7	–	–	–	–	–	0.00%	N/A	N/A	N/A	0.00%
– corporate and commercial	3,265	539	–	–	3,804	(3)	(4)	–	–	(7)	0.09%	0.74%	N/A	N/A	0.18%
– non-bank financial institutions	10	4	–	–	14	–	–	–	–	–	0.00%	0.00%	N/A	N/A	0.00%
At 31 December 2019	1,404,867	121,214	2,073	–	1,528,154	(1,067)	(1,873)	(814)	–	(3,754)	0.08%	1.55%	39.27%	N/A	0.25%

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

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

3 In 2020, the Group changed its presentation to include balances with HSBC Group companies. Comparatives have been re-presented accordingly.

Unless identified at an earlier stage, all financial assets are deemed to have suffered a significant increase in credit risk when they are 30 days past due ('DPD') and are transferred from stage 1 to stage 2. The disclosure below presents the aging of stage 2 loans and advances to customers by those less than 30 and greater than 30 days past due and therefore presents those amounts classified as stage 2 due to aging (30 days past due) and those identified at an earlier stage (less than 30 days past due).

(a) Credit Risk

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

(audited)

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

	At 31 December 2019											
	Gross carrying amount				Allowance for ECL				ECL coverage %			
Loans and advances to customers at amortised cost	Stage 2	Of which: Up-to-date	Of which: 1 to 29 DPD[1]	Of which: 30 and > DPD	Stage 2	Of which: Up-to-date	Of which: 1 to 29 DPD	Of which: 30 and > DPD	Stage 2	Of which: Up-to-date	Of which: 1 to 29 DPD	Of which: 30 and > DPD
– personal	12,405	10,393	1,517	495	(884)	(769)	(59)	(56)	7.13%	7.40%	3.89%	11.31%
– corporate and commercial	94,182	93,725	381	76	(842)	(788)	(18)	(36)	0.89%	0.84%	4.72%	47.37%
– non-bank financial institutions	5,943	5,943	–	–	(31)	(31)	–	–	0.52%	0.52%	N/A	N/A
	112,530	110,061	1,898	571	(1,757)	(1,588)	(77)	(92)	1.56%	1.44%	4.06%	16.11%

1 Days past due ('DPD').

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

(audited)

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

The following table presents the maximum exposure to credit risk from balance sheet and off-balance sheet financial instruments, before taking account of any collateral held or other credit enhancements (unless such credit enhancements meet accounting offsetting requirements). For financial assets recognised on the balance sheet, the maximum exposure to credit risk equals their carrying amount; for financial guarantees and similar contracts granted, it is the maximum amount that we would have to pay if the guarantees were called upon. For loan commitments and other credit-related commitments, it is generally the full amount of the committed facilities.

	2020	2019
Cash and balances at central banks	**11,226**	13,038
Trading assets	**37,072**	47,346
Derivative financial instruments	**17,181**	7,338
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**1,284**	1,413
Reverse repurchase agreements – non-trading	**13,360**	6,659
Placings with and advances to banks	**44,357**	65,807
Loans and advances to customers	**944,774**	942,930
Financial investments	**547,669**	455,823
Other assets	**29,449**	26,707
Financial guarantees and other credit related contingent liabilities[1]	**19,773**	17,772
Loan commitments and other credit related commitments	**556,503**	571,437
	2,222,648	2,156,270

1 Performance and other guarantees were included.

(a) Credit Risk

(ii) Measurement uncertainty and sensitivity analysis of ECL estimates

(audited)

The recognition and measurement of ECL involves the use of significant judgement and estimation. We form multiple economic scenarios based on economic forecasts, apply these assumptions to credit risk models to estimate future credit losses, and probability-weight the results to determine an unbiased ECL estimate.

Methodology

Four economic scenarios have been used to capture the exceptional nature of 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. Three of these scenarios are drawn from consensus forecasts and distributional estimates. These include a central scenario, representing a most likely outcome, a downside and an upside scenario that represent meaningfully different outcomes from the central. 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. Management have chosen to use a fourth scenario to represent their view of severe downside risks. The use of an additional scenario is in line with the HSBC's forward economic guidance ('FEG') methodology and has been regularly used over the course of 2020. Management may include additional scenarios if they feel that the consensus scenarios do not adequately capture the Top and Emerging Risks. Unlike the consensus scenarios, these additional scenarios are driven by narrative assumptions, could be country-specific and may result in shocks that drive economic activity permanently away from trend.

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.

The world economy experienced a deep economic shock in 2020. As COVID-19 spread globally, governments in many of our markets sought to limit the human impact by imposing significant restrictions on mobility, in turn driving the deep falls in activity that were observed in the first half of the year. Restrictions were eased as cases declined in response to the initial measures which in turn supported an initial rebound in economic activity by 3Q 2020. This increase in mobility unfortunately led to renewed transmission of the virus in several countries, such that by year end, infection rates, hospitalisations and deaths had reached dangerously high levels, placing an enormous burden on health-care systems and leading governments to re-impose restrictions on mobility and causing economic activity to decline once more.

Economic forecasts are subject to a high degree of uncertainty in the current environment. Limitations of forecasts and economic models require a greater reliance on management judgement in addressing both the error inherent in economic forecasts and in assessing associated ECL outcomes. The scenarios used to calculate ECL in the Annual Report 2020 are described below.

The consensus Central scenario

The Central scenario features an improvement in economic growth in 2021 as activity and employment gradually return to the levels experienced prior to the outbreak of COVID-19.

Despite the sharp contraction in activity, government fiscal support in advanced economies played a crucial role in averting significant financial distress. At the same time, the HKMA included implementing emergency support measures for funding markets, and either restarting or increasing quantitative easing programs in order to support economies and the financial system. The Government is expected to continue to ensure that households and firms receive an appropriate level of financial support until restrictions on economic activity and mobility can be materially eased. Such support will ensure that labour and housing markets do not experience abrupt, negative corrections and will also limit the extent of long term structural damage to economies.

Differences across markets in the speed and scale of economic recovery in the Central scenario reflect timing differences in the progression of the COVID-19 outbreak, national level differences in restrictions imposed, the coverage achieved by vaccination programmes and the scale of support measures.

(a) Credit Risk

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

(audited)

The consensus Central scenario continued

The key features of our Central scenario are:

- Growth in economic activity in 2021, supported by a successful rollout of vaccination programmes across our key markets. We expect vaccination programmes, coupled with effective non-pharmacological measures to contain the virus to lead to a significant decline in infections across our key markets by the end of 2021 Q3.
- Where fiscal support schemes are available, they will limit the increase in the unemployment rate in 2021. We expect a gradual reversion of the unemployment rate to pre-crisis levels over the course of the projection period as a result of economic recovery and due to the orderly withdrawal of fiscal support.
- Inflation will converge towards central bank targets in our key markets.
- In advanced economies, fiscal support in 2020 led to large deficits and a significant increase in public debt. Fiscal support is expected to continue as needed and deficits are expected to reduce gradually over the projection period. Sovereign debt levels will remain high and our central scenario does not assume fiscal austerity.
- Policy interest rates in key markets will remain at current levels for an extended period and will increase very modestly towards the end of our projection period. Central banks will continue to provide assistance through their asset purchase programmes as needed.
- The West Texas Intermediate oil price is forecast to average US$43 per barrel over the projection period.

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		
2020: Annual average growth rate	(6.4)	2.0
2021: Annual average growth rate	4.3	7.8
2022: Annual average growth rate	2.9	5.3
2023: Annual average growth rate	2.6	5.2
5 years average (2021-2025)	2.9	5.6
Unemployment rate		
2020: Annual average rate	5.8	3.9
2021: Annual average rate	5.0	4.1
2022: Annual average rate	3.9	4.2
2023: Annual average rate	3.8	4.1
5 years average (2021-2025)	4.0	4.0
House price growth		
2020: Annual average growth rate	(0.8)	2.3
2021: Annual average growth rate	(2.2)	4.7
2022: Annual average growth rate	2.4	5.7
2023: Annual average growth rate	5.2	5.0
5 years average (2021-2025)	2.3	4.7
Probability	70.0	80.0

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 trends.

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 prompt deployment of a vaccine; de-escalation of tensions between the US and China and de-escalation of political tensions in Hong Kong.

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	13.8 (4Q21)	20.5 (1Q21)
Unemployment rate	3.0 (3Q22)	3.9 (4Q21)
House price growth	4.9 (1Q22)	12.2 (1Q22)
Probability	5.0	10.0

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 (2021-2022).

(a) Credit Risk

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

(audited)

Downside scenarios

2021 is expected to be a year of economic recovery, but the progression and management of the pandemic presents a key risk to global growth. A new and more contagious strain of the virus increased the transmission rate in Hong Kong and resulted in stringent restrictions to mobility towards the year end. Further risks to international travel also arise.

A number of vaccines have been developed and approved for use at a rapid pace and plans to inoculate significant proportions of national populations in 2021 across many of our key markets are a clear positive for economic recovery. While we expect vaccination programmes to be successful, governments and healthcare authorities face country specific challenges that could affect the speed and spread of vaccinations.

These challenges include the logistics of inoculating a significant proportion of national populations within a limited time-frame and the public acceptance of vaccines. On a global level, supply challenges could affect the pace of roll out and the efficacy of vaccines is yet to be determined. Expansionary fiscal policy in advanced economies in 2020 was supported by accommodative actions taken by Central Banks. This fiscal-monetary nexus has 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, geo-political risks also present a threat. These risks include:

- The potential for increased tensions between the US and Mainland China: the outcome of the 2020 Presidential election in the US signals a more orderly conduct of relations between the US and Mainland China in the future but long term differences between the two nations remain, which could affect sentiment and restrict global economic activity.
- Social and political unrest in Hong Kong: mobility restrictions to combat the spread of COVID-19 and the passage of the National Security Law in 2020 significantly reduced the scale of protests. As COVID-19 diminishes as a threat, such unrest has the potential to return.

The Consensus Downside scenario

In the consensus Downside scenario, economic recovery is considerably weaker compared to the Central scenario. GDP growth remains weak, unemployment rates stay elevated and asset and commodity prices fall before gradually recovering towards their long-run trends. 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	(2.1) (3Q21)	(1.3) (4Q21)
Unemployment rate	6.4 (1Q21)	4.3 (3Q22)
House price growth	(6.8) (3Q21)	0.3 (4Q21)
Probability	20.0	8.0

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 (2021-2022).

Additional Downside scenario

An additional Downside scenario which features a global recession, has been created to reflect management's view of severe risks. Infections rise in 2021 and setbacks to vaccine programmes imply that successful roll out of vaccines only occurs towards the end of 2021 and it takes until the end of 2022 for the pandemic to come to an end. Governments and Central Banks are unable to significantly increase fiscal and monetary programmes which results in abrupt corrections in labour and asset markets.

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

Additional Downside scenario worst outcome

	Hong Kong %	Mainland China %
GDP growth rate	(8.3) (4Q21)	(9.5) (4Q21)
Unemployment rate	6.7 (3Q21)	6.1(3Q22)
House price growth	(21.0) (4Q21)	(19.4) (4Q21)
Probability	5.0	2.0

Note: Extreme point in the additional Downside is 'worst outcome' in the scenario, i.e. lowest GDP growth, highest unemployment rate etc, in first two years of the scenario (2021-2022).

(a) Credit Risk

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

(audited)

Additional Downside scenario continued

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

To inform it's view, management has considered trends in the progression and response to the virus in individual countries, the expected reach and efficacy of vaccine roll-outs over the course of 2021, the size and effectiveness of future government support schemes and the connectivity with other countries. Management has also been guided by the actual response to the COVID-19 outbreak and by the economic experience across countries in 2020. China's visible success at containing the virus and its repeated rapid response to localised outbreaks, coupled with government support programmes and clear signs of economic recovery, have led management to conclude that the economic outlook for mainland China is the least volatile out of all our top markets.

The weights assigned for mainland China reflect this outlook with a probability of 80% for the Central scenario and a total of 10% across the two downside scenarios.

Uncertainty related to the continued impact of the pandemic and the ability of governments to control its spread via restrictions and vaccinations over the course of 2021 also play a prominent role in assigning scenario weights. The weights assigned to Hong Kong remain unchanged at 70% for the Central scenario while a total of 25% across the two downside scenarios.

Critical accounting estimates and judgements

The calculation of ECL under HKFRS 9 involves significant judgements, assumptions and estimates, as set out in the Annual Report and Accounts 2020 under 'Critical accounting estimates and judgements'. The level of estimation uncertainty and judgement has increased since 31 December 2019 as a result of the economic effects of the COVID-19 outbreak, 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, 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 very high degree of estimation uncertainty, particularly in assessing Downside scenarios;

- 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 outbreak. 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; and

- 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, or have extended those deferrals, given limitations in the available credit information on these customers. The use of segmentation techniques for indicators of significant increases in credit risk involves significant estimation uncertainty.

How economic scenarios are reflected in the wholesale calculation of ECL

We have developed a globally consistent methodology for the application of FEG into the calculation of ECL by incorporating FEG into the estimation of the term structure of PD and LGD. For PDs, we consider the correlation of FEG to default rates for a particular industry in a country. For LGD calculations, we consider the correlation of FEG to collateral values and realisation rates for a particular country and industry. PDs and LGDs are estimated for the entire term structure of each instrument.

For impaired loans, ECL is individually assessed based on the likelihood of recovery of that case using discounted cash flow analysis taking into account of the situation of the borrower, the value / quality of the collateral pledged and other recovery actions with consideration of the forward economic guidance. The assessment result is an unbiased and probability-weighted amount determined by evaluating a range of possible outcomes.

(a) Credit Risk

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

(audited)

How economic scenarios are reflected in the retail calculation of ECL

We followed the HSBC global consistent methodology to develop and implement a set of HKFRS 9 models for incorporating forecasts of economic conditions into ECL estimates. 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 leveraging economic response models. The impact of these scenarios on PD is modelled over a period equal to the remaining maturity of 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 leveraging national level forecasts of the house price index and applying the corresponding LGD expectation.

These models are based largely on historic observations and correlations with default rates. Management judgemental 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 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. In the 2019 Annual Report, these were 'Post model adjustments'.

The most severe projections at 31 December 2020 of macroeconomic variables are outside the historical observations on which HKFRS 9 models have been built and calibrated to operate. Moreover, the complexities of governmental support programmes, the impacts on customer behaviours and the unpredictable pathways of the pandemic have never been modelled. Consequently, the HKFRS 9 models, in some cases, generate outputs that appear overly sensitive when compared with other economic and credit metrics. Governmental support programmes and customer payment reliefs have dislocated the correlation between economic conditions and defaults on which models are based. Management judgemental adjustments are required to ensure that an appropriate amount of ECL impairment is recognised.

We have internal governance in place to regularly monitor management judgemental adjustments and, where possible, to reduce the reliance on these through model recalibration or redevelopment, as appropriate. During 2020, the composition of modelled ECL and management judgemental adjustments changed significantly, reflecting the path of the pandemic containment efforts and government support measures, and this is expected to continue to be case until economic conditions improve. Wider-ranging model changes will take time to develop and need more real data on which models can be developed. Models will be revisited over time once the full impacts of COVID-19 are observed. Therefore, we anticipate significant management judgemental adjustments for the foreseeable future.

Management judgemental adjustments made in estimating the reported ECL at 31 December 2020 are set out in the following table. The table includes adjustments in relation to data and model limitations resulting from the pandemic, and as a result of the regular process of model development and implementation. It shows the adjustments applicable to the scenario-weighted ECL numbers. Adjustments in relation to Downside scenarios are more significant, as results are subject to greater uncertainty.

Management judgemental adjustments to ECL[1]	Retail	Wholesale	Total
Low-risk counterparties (banks, sovereigns and government entities)[2]	44	–	44
Corporate lending adjustments	–	686	686
Retail lending adjustments	219	–	219
Retail model default suppression adjustment	503	–	503
Total	766	686	1,452

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

2 Low-risk counterparties for Retail is comprised of adjustments relating to WPB Insurance only.

(a) Credit Risk

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

(audited)

Management judgemental adjustments continued

During 2020, management judgemental adjustments reflected the volatile economic conditions associated with the COVID-19 pandemic. The composition of modelled ECL and management judgemental adjustments changed significantly over 2020 as certain economic measures, such as GDP growth rate, passed the expected low point in a number of key markets and returned towards those reflected in modelled relationships, subject to continued uncertainty in the recovery paths of different economies.

ECL Wholesale adjustments were undertaken in the fourth quarter of 2020 totalling an increase of HK$0.7bn, versus a decrease in second quarter of 2020 of HK$1.9bn. This change came mainly through the improvement in FEG and implementation of model enhancements in Hong Kong and mainland China to address previous model limitations relating to PD projections under extreme scenarios. The effect of these model changes was a significant reduction in ECL in the alternative downside scenario.

Adjustments to corporate exposures principally reflect the outcome of management judgments for high-risk and vulnerable sectors in our key markets, supported by credit experts input, quantitative analyses and benchmarks. Considerations include potential default suppression in some sectors due to government intervention and late-breaking (idiosyncratic) developments.

In Retail, adjustments under low-risk counterparties are from modelled numbers on the insurance portfolio as a result of the overall credit expert best estimates ('CEBE') process.

At 31 December 2020, Retail management judgemental adjustments led to an ECL increase of HK$0.8bn, primarily from additional ECL of HK$0.5bn to reflect adjustments to the timing of default which has been delayed by government support and customer relief measures on potential defaults. Retail lending adjustments of HK$0.2bn address impact from high-risk and vulnerable segments.

The retail model default suppression adjustment was applied as defaults remain temporarily suppressed due to government support and customer relief programmes which have supported stabilised portfolio performance. Retail models are reliant on the assumption that as macroeconomic conditions deteriorate, defaults will crystallise. This adjustment aligns the increase in default due to change in economic conditions to the period of time when defaults are expected to be observed. The retail model default suppression adjustment will be monitored and updated prospectively to ensure appropriate alignment with expected performance taking into consideration the levels and timing of government support and customer relief programmes.

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 tail risk scenarios when assigned a 100% weighting.

For wholesale credit risk exposures, the sensitivity analysis excludes ECL and financial instruments related to defaulted obligors because the measurement of ECL is relatively more sensitive to credit factors specific to the obligor than future economic scenarios. Therefore, it is impracticable to separate the effect of macroeconomic factors in individual assessments.

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.

(a) Credit Risk

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

(audited)

Wholesale and retail sensitivity

The wholesale and retail sensitivity analysis is stated inclusive of post-model adjustments, as appropriate to each scenario. The results tables exclude portfolios held by insurance business and small portfolios. In both the wholesale and retail analysis, the comparative period results for alternative Downside scenarios 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]

ECL of financial instruments subject to significant measurement uncertainty[2]	Hong Kong	Mainland China
	31 December 2020	
Reported ECL	1,606	424
Consensus scenarios		
Central scenario	1,248	364
Upside scenario	626	98
Downside scenario	2,370	932
Alternative scenario	5,315	3,503

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

ECL of financial instruments subject to significant measurement uncertainty[2]	Hong Kong	Mainland China
	31 December 2019	
Reported ECL	1,191	425
Consensus scenarios		
Central scenario	888	384
Upside scenario	694	347
Downside scenario	1,128	410
Alternative scenarios		
Hong Kong and mainland China Alternative Downside scenario 1 ('AD1')	1,909	421
Hong Kong Alternative Downside scenario 2 ('AD2')	2,584	N/A

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.

Retail analysis

The geographies below were selected based on contribution to overall ECL within our retail lending business.

HKFRS 9 ECL sensitivity to future economic conditions[1]

ECL of loans and advances to customers[2]	Hong Kong	Mainland China
	31 December 2020	
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

HKFRS 9 ECL sensitivity to future economic conditions[1]

ECL of loans and advances to customers[2]	Hong Kong	Mainland China
	31 December 2019	
Reported ECL	1,340	16
Consensus scenarios		
Central scenario	1,116	16
Upside scenario	1,063	16
Downside scenario	1,156	16
Alternative scenarios		
AD1	2,073	17
AD2	2,110	N/A

1 ECL sensitivities exclude portfolios utilising less complex modelling approaches.

2 ECL sensitivity includes only on-balance sheet financial instruments to which HKFRS 9 impairment requirements are applied.

(a) Credit Risk

(iii) Reconciliation of changes in gross carrying / nominal amount and allowances for loans and advances to banks and 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 instrument.

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 loans and advances to banks and customers, including loan commitments and financial guarantees[2]

(audited)

	Non credit – impaired				Credit – impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI[1]			
	Gross carrying / nominal amount	Allowance for ECL	Gross carrying / nominal amount	Allowance for ECL	Gross carrying / nominal amount	Allowance for ECL	Gross carrying / nominal amount	Allowance for ECL	Gross carrying / nominal amount	Allowance for ECL
At 1 January 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	(2,639)

(a) Credit Risk

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

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

(audited)

	At 31 December 2020		For the year ended 31 December 2020
	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	1,354,111	(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[3]	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 In 2020, the Group changed its presentation to include balances with HSBC Group companies. Comparatives have been re-presented accordingly.

3 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.

(a) Credit Risk

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

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

(audited)

	Non credit – impaired				Credit – impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI[1]			
Re-presented	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 2019	1,219,376	(777)	53,786	(1,000)	2,154	(959)	6	–	1,275,322	(2,736)
Transfers of financial instruments:										
– transfers from Stage 1 to Stage 2	(83,702)	94	83,702	(94)	–	–	–	–	–	–
– transfers from Stage 2 to Stage 1	18,965	(250)	(18,965)	250	–	–	–	–	–	–
– transfers to Stage 3	(300)	–	(130)	6	430	(6)	–	–	–	–
– transfers from Stage 3	5	–	10	(1)	(15)	1	–	–	–	–
Net remeasurement of ECL arising from transfer of stage	–	151	–	(276)	–	(3)	–	–	–	(128)
New financial assets originated and purchased	208,472	(273)	22,627	(235)	135	(74)	–	–	231,234	(582)
Assets derecognised (including final repayments)	(150,907)	71	(13,601)	172	(148)	70	(6)	–	(164,662)	313
Changes to risk parameters – further lending / (repayment)	33,682	78	(8,887)	(17)	467	15	–	–	25,262	76
Changes in risk parameters – credit quality	–	(131)	–	(457)	–	(797)	–	–	–	(1,385)
Changes to model used for ECL calculation	–	23	–	(186)	–	–	–	–	–	(163)
Assets written off	–	–	–	–	(939)	939	–	–	(939)	939
Foreign exchange and others	(1,968)	–	(241)	–	(11)	–	–	–	(2,220)	–
At 31 December 2019	1,243,623	(1,014)	118,301	(1,838)	2,073	(814)	–	–	1,363,997	(3,666)
										Total
Change in ECL in income statement (charge) / release for the year										(1,869)
Add: Recoveries										106
Add / (less): Others										(17)
Total ECL (charge) / release for the year										(1,780)

	At 31 December 2019		For the year ended 31 December 2019
	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	1,363,997	(3,666)	(1,780)
Other financial assets measured at amortised cost	164,157	(88)	(48)
Summary of financial instruments to which the impairment requirements in HKFRS 9 are applied	1,528,154	(3,754)	(1,828)
Debt instruments measured at FVOCI[3]	337,339	(11)	(6)
Performance and other guarantees not considered for HKFRS 9	13,959	(5)	(3)
Total allowance for ECL / consolidated income statement ECL charge for the year	1,879,452	(3,770)	(1,837)

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

2 In 2020, the Group changed its presentation to include balances with HSBC Group companies. Comparatives have been re-presented accordingly.

3 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.

(a) Credit Risk

(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 2020[3]

	Gross carrying / notional amount							
	Strong	Good	Satisfactory	Sub-standard	Credit-impaired	Total	Allowance for ECL	Net
In-scope for HKFRS 9 impairment								
Loans and advances to customers at amortised cost	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
Placings 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
	1,034,922	248,565	292,971	12,424	5,724	1,594,606	(5,376)	1,589,230
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
	50,305	5,032	199	1	–	55,537	–	55,537
	1,085,227	253,597	293,170	12,425	5,724	1,650,143	(5,376)	1,644,767
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.

[3] In 2020, the Group changed its presentation to include balances with HSBC Group companies. Comparatives have been re-presented accordingly.

(a) Credit Risk

(iv) Credit quality of financial instruments continued

(audited)

Distribution of financial instruments by credit quality at 31 December 2019[3]

Re-presented	Gross carrying / notional amount Strong	Good	Satisfactory	Sub-standard	Credit-impaired	Total	Allowance for ECL	Net
In-scope for HKFRS 9 impairment								
Loans and advances to customers at amortised cost	455,860	245,260	237,925	5,325	2,073	946,443	(3,513)	942,930
– personal	318,307	10,877	12,563	298	697	342,742	(1,391)	341,351
– corporate and commercial	136,360	224,142	215,218	5,027	1,376	582,123	(2,036)	580,087
– non-bank financial institutions	1,193	10,241	10,144	–	–	21,578	(86)	21,492
Placings with and advances to banks at amortised cost	65,370	438	–	–	–	65,808	(1)	65,807
Cash and balances at central banks	13,038	–	–	–	–	13,038	–	13,038
Reverse repurchase agreements – non-trading	4,747	1,912	–	–	–	6,659	–	6,659
Financial investments measured at amortised cost	97,100	16,993	3,842	–	–	117,935	(80)	117,855
Other assets	15,713	4,930	5,876	6	–	26,525	(8)	26,517
Debt instruments measured at fair value through other comprehensive income[1]	336,462	877	–	–	–	337,339	(11)	337,328
	988,290	270,410	247,643	5,331	2,073	1,513,747	(3,613)	1,510,134
Out-of-scope for HKFRS 9 impairment								
Trading assets	47,217	129	–	–	–	47,346	–	47,346
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	316	1,097	–	–	–	1,413	–	1,413
Derivative financial instruments	7,338	–	–	–	–	7,338	–	7,338
	54,871	1,226	–	–	–	56,097	–	56,097
	1,043,161	271,636	247,643	5,331	2,073	1,569,844	(3,613)	1,566,231
Percentage of total credit quality	66%	18%	16%	0%	0%	100%		
Loan and other credit related commitments[2]	276,821	53,205	17,701	194	–	347,921	(145)	347,776
Financial guarantee and similar contracts[2]	237	2,590	990	8	–	3,825	(7)	3,818

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.

3 In 2020, the Group changed its presentation to include balances with HSBC Group companies. Comparatives have been re-presented accordingly.

(a) Credit Risk

(iv) Credit quality of financial instruments continued

(audited)

Distribution of financial instruments to which the impairment requirements in HKFRS 9 are applied, by credit quality and stage distribution at 31 December 2020[3]

	Gross carrying / notional amount							
	Strong	Good	Satisfactory	Sub-standard	Credit-impaired	Total	Allowance for ECL	Net
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 commitments[2]	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 contracts[2]	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	–	–	–	–	–	–	–	–
	893,815	303,539	327,384	12,521	5,724	1,542,983	(5,548)	1,537,435
Debt instruments at FVOCI[1]								
– stage 1	411,036	387	–	–	–	411,423	(9)	411,414
– stage 2	–	–	–	–	–	–	–	–
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
	411,036	387	–	–	–	411,423	(9)	411,414

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.

3 In 2020, the Group changed its presentation to include balances with HSBC Group companies. Comparatives have been re-presented accordingly.

(a) Credit Risk

(iv) Credit quality of financial instruments continued

(audited)

Distribution of financial instruments to which the impairment requirements in HKFRS 9 are applied, by credit quality and stage distribution at 31 December 2019 [3]

	Gross carrying / notional amount							
Re-presented	Strong	Good	Satisfactory	Sub-standard	Credit-impaired	Total	Allowance for ECL	Net
Loans and advances to customers at amortised cost	455,860	245,260	237,925	5,325	2,073	946,443	(3,513)	942,930
– stage 1	454,420	208,914	168,025	481	–	831,840	(942)	830,898
– stage 2	1,440	36,346	69,900	4,844	–	112,530	(1,757)	110,773
– stage 3	–	–	–	–	2,073	2,073	(814)	1,259
– POCI	–	–	–	–	–	–	–	–
Placings with and advances to banks at amortised cost	65,370	438	–	–	–	65,808	(1)	65,807
– stage 1	65,370	438	–	–	–	65,808	(1)	65,807
– stage 2	–	–	–	–	–	–	–	–
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Other financial assets measured at amortised cost	130,598	23,835	9,718	6	–	164,157	(88)	164,069
– stage 1	129,508	22,618	9,118	–	–	161,244	(53)	161,191
– stage 2	1,090	1,217	600	6	–	2,913	(35)	2,878
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Loan and other credit-related commitments [2]	276,821	53,205	17,701	194	–	347,921	(145)	347,776
– stage 1	276,821	50,438	15,408	26	–	342,693	(68)	342,625
– stage 2	–	2,767	2,293	168	–	5,228	(77)	5,151
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Financial guarantees and similar contracts [2]	237	2,590	990	8	–	3,825	(7)	3,818
– stage 1	237	2,492	553	–	–	3,282	(3)	3,279
– stage 2	–	98	437	8	–	543	(4)	539
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
	928,886	325,328	266,334	5,533	2,073	1,528,154	(3,754)	1,524,400
Debt instruments at FVOCI [1]								
– stage 1	336,462	877	–	–	–	337,339	(11)	337,328
– stage 2	–	–	–	–	–	–	–	–
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
	336,462	877	–	–	–	337,339	(11)	337,328

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.

3 In 2020, the Group changed its presentation to include balances with HSBC Group companies. Comparatives have been re-presented accordingly.

(a) Credit Risk

(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; and
- the loan is otherwise considered to be in default. If such unlikeliness to pay is not identified at an earlier stage, it is deemed to occur when an exposure is 90 days past due, even where regulatory rules permit default to be defined based on 180 days past due. Therefore, the definitions of credit-impaired and default are aligned as far as possible so that stage 3 represents all loans that are considered defaulted or otherwise credit-impaired.

(vi) Customer relief programmes

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 2020.

Personal lending		**At 31 December 2020**
Number of customers granted mortgages payment holidays	Thousands	**0.57**
Drawn loan value of customers granted mortgage payment holidays	HK$m	**1,739**
Total mortgages	HK$m	**284,111**
Payment holidays as a proportion of total mortgages	%	**0.6**
Number of customers granted other personal lending payment holidays	Thousands	**0.24**
Drawn loan value of customers granted other personal lending payment holidays	HK$m	**537**
Total other personal lending	HK$m	**68,454**
Payment holidays as a proportion of total other personal lending	%	**0.8**
Wholesale lending		
Number of customers under customer relief schemes	Thousands	**0.22**
Drawn loan value of customers under customer relief schemes	HK$m	**13,658**
Total wholesale loans and advances to customers	HK$m	**597,389**
Customer relief as a proportion of total wholesale loans and advances to customers	%	**2.3**
Total customer relief as a proportion of total loans and advances to customers	%	**1.7**

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.

(a) Credit Risk

(vi) Customer relief programmes continued

(audited)

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:
  - Up to 60-day extension of import or export trade loans;
  - Taxi / public light bus hire purchase loans: Up to 6-month principal moratorium;
  - Secured loans: 6-month principal moratorium;
  - Loans under SME Financing Guarantee Scheme: Up to 6-month principal moratorium;
- A supplemental industry-wide relief programme initiated by the Hong Kong Monetary Authority ('HKMA') for eligible corporates with turnover not exceeding HK$800m and other prescribed criteria was launched in May 2020. The Pre-approved Principal Payment Holiday Scheme ('PPPHS') entailed essentially a up to 90-day tenor extension for trade facilities and up to 6-month principal payment holiday for other loans. On 2 September 2020, the HKMA announced that this scheme has been extended for a further six months to April 2021;
- A special 100% Loan Guarantee under the SME Financing Guarantee Scheme ('SFGS100') was launched in April 2020. 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 ('HKMCI'), a quasi-government agency. In September 2020, the HKMCI has further enhanced the maximum loan amount to HK$5m and loan tenor to 5 years.

(a) Credit Risk

(vi) Customer relief programmes continued

(audited)

Customer relief schemes in Hong Kong continued

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 Instalment Relief Loan of up to HK$30,000 with a maximum tenor of 24 months for existing customers employed in the affected industries (e.g. tourism, entertainment, catering and retail industries). The choice of repayment period is from 6 months to 24 months.

(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.

(a) Credit Risk

(vii) Collateral and other credit enhancements continued

(audited)

Residential mortgages

(audited)

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

	At 31 December 2020			At 31 December 2019		
	Gross carrying / nominal amount	ECL	ECL coverage %	Gross carrying / nominal amount	ECL	ECL coverage %
Stage 1						
Fully collateralised	281,826	(1)	0.00	266,916	(2)	0.00
LTV ratio:						
– Less than 70%	238,721	(1)	0.00	240,893	(1)	0.00
– 71% to 90%	31,581	(0)	0.00	18,900	(0)	0.00
– 91% to 100%	11,524	(0)	0.00	7,123	(0)	0.00
Partially collateralised (A)	77	(0)	0.00	265	(0)	0.00
Total	281,903	(1)	0.00	267,181	(2)	0.00
– *Collateral value on A*	73			262		
Stage 2						
Fully collateralised	5,010	(0)	0.00	5,856	(1)	0.02
LTV ratio:						
– Less than 70%	4,698	(0)	0.00	5,641	(1)	0.00
– 71% to 90%	257	(0)	0.00	178	(0)	0.00
– 91% to 100%	55	(0)	0.00	37	–	–
Partially collateralised (B)	1	–	–	–	–	–
Total	5,011	(0)	0.00	5,856	(1)	0.02
– *Collateral value on B*	1			–		
Stage 3						
Fully collateralised	481	(45)	9.36	275	(11)	4.00
LTV ratio:						
– Less than 70%	467	(45)	9.64	271	(11)	4.07
– 71% to 90%	14	(0)	0.14	4	–	–
– 91% to 100%	–	–	–	–	–	–
Partially collateralised (C)	5	–	–	–	–	–
Total	486	(45)	9.27	275	(11)	4.00
– *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*	–			–		
	287,400	(46)	0.02	273,312	(14)	0.01

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

(a) Credit Risk

(vii) Collateral and other credit enhancements

continued

(audited)

Residential mortgages continued

(audited)

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

Other personal lending

(audited)

Other personal lending consists primarily of personal loans, overdrafts and credit cards, all of which are generally unsecured, except lending to private banking customers which are generally secured.

Corporate and commercial and financial (non-bank) lending

(audited)

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

Commercial real estate

(audited)

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

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

(a) Credit Risk

(vii) Collateral and other credit enhancements continued

(audited)

Commercial real estate continued

(audited)

	At 31 December 2020			At 31 December 2019		
	Gross carrying / nominal amount	ECL	ECL coverage %	Gross carrying / nominal amount	ECL	ECL coverage %
Stage 1						
Not collateralised	98,686	(41)	0.04	103,370	(39)	0.04
Fully collateralised	151,276	(110)	0.07	161,811	(123)	0.08
Partially collateralised (A)	4,690	(5)	0.11	10,214	(9)	0.09
Total	254,652	(156)	0.06	275,395	(171)	0.06
– *Collateral value on A*	3,700			6,975		
Stage 2						
Not collateralised	3,864	(4)	0.10	3,239	(44)	1.37
Fully collateralised	24,248	(210)	0.87	10,641	(145)	1.35
Partially collateralised (B)	1,081	(14)	1.30	327	(0)	0.14
Total	29,193	(228)	0.78	14,207	(189)	1.33
– *Collateral value on B*	889			191		
Stage 3						
Not collateralised	–	–	–	–	–	–
Fully collateralised	129	(18)	13.95	113	(3)	2.79
Partially collateralised (C)	–	–	–	–	–	–
Total	129	(18)	13.95	113	(3)	2.79
– *Collateral value on C*	–			–		
POCI						
Not collateralised	–	–	–	–	–	–
Fully collateralised	–	–	–	–	–	–
Partially collateralised (D)	–	–	–	–	–	–
Total	–	–	–	–	–	–
– *Collateral value on D*	–			–		
	283,974	(402)	0.14	289,715	(363)	0.13

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

(a) Credit Risk

(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.[1]

	At 31 December 2020			At 31 December 2019 *Re-presented*		
	Gross carrying / nominal amount	ECL	ECL coverage %	Gross carrying / nominal amount	ECL	ECL coverage %
Stage 1						
Not collateralised	266,101	(371)	0.14	283,389	(259)	0.09
Fully collateralised	139,653	(252)	0.18	133,854	(172)	0.13
Partially collateralised (A)	46,560	(69)	0.15	57,068	(50)	0.09
Total	452,314	(692)	0.15	474,311	(481)	0.10
– *Collateral value on A*	20,574			27,318		
Stage 2						
Not collateralised	36,635	(198)	0.54	40,475	(292)	0.72
Fully collateralised	55,445	(512)	0.92	53,689	(406)	0.76
Partially collateralised (B)	15,051	(207)	1.38	10,251	(63)	0.61
Total	107,131	(917)	0.86	104,415	(761)	0.73
– *Collateral value on B*	7,724			4,423		
Stage 3						
Not collateralised	1,903	(1,342)	70.52	703	(581)	82.76
Fully collateralised	945	(37)	3.92	445	(48)	10.81
Partially collateralised (C)	1,763	(428)	24.28	116	(33)	28.47
Total	4,611	(1,807)	39.19	1,264	(662)	52.43
– *Collateral value on C*	1,084			61		
POCI						
Not collateralised	1	–	–	–	–	–
Fully collateralised	–	–	–	–	–	–
Partially collateralised (D)	–	–	–	–	–	–
Total	1	–	–	–	–	–
– *Collateral value on D*	–			–		
	564,057	(3,416)	0.61	579,990	(1,904)	0.33

1 In 2020, the Group changed its presentation to include balances with HSBC Group companies. Comparatives have been re-presented accordingly.

(a) Credit Risk

(vii) Collateral and other credit enhancements

continued

(audited)

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

(audited)

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

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

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

Placings with and advances to banks

(audited)

Placings with and advances to banks are typically unsecured. At 31 December 2020, HK$44,357m (2019: HK$65,807m) 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.

(a) Credit Risk

(vii) Collateral and other credit enhancements

continued

(audited)

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 2020 are residential properties and commercial properties with carrying amount of HK$24m and HK$4m respectively (2019: residential properties of HK$19m).

(b) 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 maintain a comprehensive liquidity and funding risk management framework ('LFRF') which aims to allow it to withstand very severe liquidity stresses. It is based on global policies that are designed to be adaptable to changing business models, markets and regulations. The LFRF comprises policies, metrics and controls 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 liquidity coverage ratio ('LCR') and the net stable funding ratio ('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.

Structure and organisation

Asset, Liability and Capital Management ('ALCM') teams are responsible for the application of the LFRF at a local operating entity level. The elements of the LFRF are underpinned by a robust governance framework, the two major elements of which are:

- Asset and Liability Management Committees ('ALCOs') at the Group and entity level; and
- annual internal liquidity adequacy assessment process ('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.

(b) Liquidity and Funding Risk

(audited)

Structure and organisation continued

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 LFRF 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.

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

Internal Audit provide independent assurance that risk is managed effectively.

The management of liquidity and funding risk

Funding and liquidity plans form part of the annual operating plan that is approved by the Board. The critical Board risk appetite measures are the LCR and NSFR. An appropriate funding and liquidity profile is managed through a wider set of measures:

- a minimum LCR requirement;
- a minimum NSFR requirement;
- 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.

The LCR and NSFR metrics are to be supplemented by an internal liquidity metric ('ILM') in 2021.

(b) Liquidity and Funding Risk

(audited)

The management of liquidity and funding risk

continued

Liquidity coverage ratio

(unaudited)

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

At 31 December 2020, 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 2020, 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 2020, all the Group's principal operating entities were above 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)

The LFRF 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.

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 immaterial.

Liquidity and funding risk in 2020

(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%.

(b) Liquidity and Funding Risk

(audited)

The management of liquidity and funding risk continued

The average LCRs for the periods are as follows:

	Quarter ended							
	31 Dec 2020	**30 Sep 2020**	**30 Jun 2020**	**31 Mar 2020**	31 Dec 2019	30 Sep 2019	30 Jun 2019	31 Mar 2019
Average LCR	**207.8%**	**199.4%**	**198.0%**	**181.6%**	201.8%	210.5%	198.5%	210.8%

The liquidity position of the Group remained strong and stable in 2020. The average LCR ranged from 181.6% to 207.8% for the reportable quarters. The LCR at 31 December 2020 was 230.4% (205.9% at 31 December 2019).

The composition of the Group's high quality liquid assets ('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 amount (average value) at quarter ended							
	31 Dec 2020	**30 Sep 2020**	**30 Jun 2020**	**31 Mar 2020**	31 Dec 2019	30 Sep 2019	30 Jun 2019	31 Mar 2019
Level 1 assets	**384,837**	**356,059**	**315,876**	**297,826**	309,019	319,073	305,849	309,073
Level 2A assets	**14,498**	**15,031**	**15,415**	**15,056**	14,257	12,230	12,539	11,577
Level 2B assets	**2,563**	**2,092**	**1,795**	**1,224**	758	557	550	548
Total	**401,898**	**373,182**	**333,086**	**314,106**	324,034	331,860	318,938	321,198

The NSFR for the reportable periods are as follows:

	At quarter ended							
	31 Dec 2020	**30 Sep 2020**	**30 Jun 2020**	**31 Mar 2020**	31 Dec 2019	30 Sep 2019	30 Jun 2019	31 Mar 2019
NSFR	**152.9%**	**149.2%**	**151.0%**	**146.0%**	149.1%	148.6%	152.5%	150.3%

The funding position of the Group remained strong and stable in 2020. The NSFR was 152.9% for the quarter ended 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.

(b) Liquidity and Funding Risk

(audited)

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

(audited)

	Within 1 month	Over 1 month but within 3 months	Over 3 months but within 1 year	Over 1 year but within 5 years	Over 5 years	Total
At 31 December 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
	1,185,951	134,294	80,219	12,697	14,494	1,427,655
Loan commitments	499,493	–	–	–	–	499,493
Financial guarantee and credit risk related guarantee contracts	19,847	–	–	–	–	19,847
	519,340	–	–	–	–	519,340
At 31 December 2019						
Deposits from banks	2,491	–	–	–	–	2,491
Current, savings and other deposit accounts	992,697	144,226	68,648	486	–	1,206,057
Repurchase agreements – non-trading	1,878	–	–	–	–	1,878
Trading liabilities	37,976	–	–	–	–	37,976
Derivative financial instruments	6,883	8	90	438	11	7,430
Financial liabilities designated at fair value	13,529	7,354	6,123	2,408	426	29,840
Certificates of deposit and other debt securities in issue	692	5,346	10,684	754	–	17,476
Other financial liabilities	21,089	6,223	3,370	906	255	31,843
Subordinated liabilities	159	–	336	1,784	20,516	22,795
	1,077,394	163,157	89,251	6,776	21,208	1,357,786
Loan commitments	498,670	–	–	–	–	498,670
Financial guarantee and credit risk related guarantee contracts	17,843	–	–	–	–	17,843
	516,513	–	–	–	–	516,513

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.

(c) Market Risk

(audited)

Overview

Market risk is the risk that movements in market factors, including foreign exchange rates and commodity prices, interest rates, credit spreads and equity 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 2020

There were no material changes to our policies and practices for the management of market risk in 2020.

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	– Structural 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 in order 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.

Each major operating entity has an independent market risk management and control function which is responsible for measuring market risk exposures in accordance with the policies defined by Group Risk, and monitoring and reporting these exposures against the prescribed limits on a daily basis. Each operating entity is required to assess the market risks arising on each product in its business and to transfer them to either its Global Markets for management, or to separate books managed under the supervision of the Asset and Liability Management Committee ('ALCO').

The Traded Risk function enforces the controls around trading in permissible instruments approved for each site as well as new product approval procedures. Trading Risk also restricts trading in the more complex derivatives products to offices with appropriate levels of product expertise and robust control systems.

Market risk measures

(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.

(c) Market Risk

(audited)

Market risk measures continued

(unaudited)

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 primarily 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.

Standard VaR is calculated at a 99% confidence level for a one-day holding period while Stressed VaR uses a 10-day holding period and a 99% confidence interval based on a continuous one-year historical significant stress period. The VaR models used by the Group are predominantly based on historical simulation which incorporate the following features:

- historical market rates and prices are calculated with reference to foreign exchange rates, commodity prices, interest rates, equity prices and the associated volatilities;
- potential market movements which are calculated with reference to data from the past two years; and
- Standard VaR is calculated to a 99% confidence level and using a one-day holding period.

The models also incorporate the effect of the option features on the underlying exposures. The nature of the VaR models means that an increase in observed market volatility will lead to an increase in VaR without any changes in the underlying positions.

VaR model limitations

Although a valuable guide to risk, VaR should always be viewed in the context 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 aims to capture and capitalise material market risks that are not adequately covered in the VaR model.

Risk factors are reviewed on a regular basis and 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.

(c) Market Risk

(audited)

Market risk measures continued

(unaudited)

Stress testing

(audited)

Stress testing is an important tool 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 abnormal 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 referral limits.

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 2020

(unaudited)

Global financial conditions worsened rapidly with the onset of the COVID-19 outbreak from mid-February 2020. Market volatility reached extreme levels across most asset classes and equity prices fell sharply. In credit markets, spreads and yields reached multi-year highs. The gold market experienced COVID-19 related disruption in refining and transportation, affecting the relative pricing of gold futures contracts. Oil prices collapsed due to rising oversupply as demand reduced materially from the economic slowdown. Financial markets stabilised from April onwards, as governments announced economic recovery programmes and key central banks intervened to provide liquidity and support asset prices. Global equity markets substantially recovered from their losses in February-March and credit spreads reverted towards pre-COVID-19 levels. Markets remained susceptible to further bouts of volatility triggered by increases in COVID-19 cases and deaths, and various geopolitical risks.

We managed market risk prudently during 2020. Sensitivity exposures remained within appetite as the business pursued its core market-making activity in support of our customers during the outbreak. We also managed our portfolios to protect the business from potential future deterioration in credit conditions. Market risk continued to be managed using a complementary set of exposure measures and limits, including stress and scenario analysis.

Trading portfolios

(audited)

Value at risk of the trading portfolios

The Trading VaR at 31 December 2020 increased when compared against 31 December 2019 due to the increase in interest rate trading positions. In average terms, the VaR level was also higher in 2020.

(c) Market Risk

(audited)

Trading portfolios continued

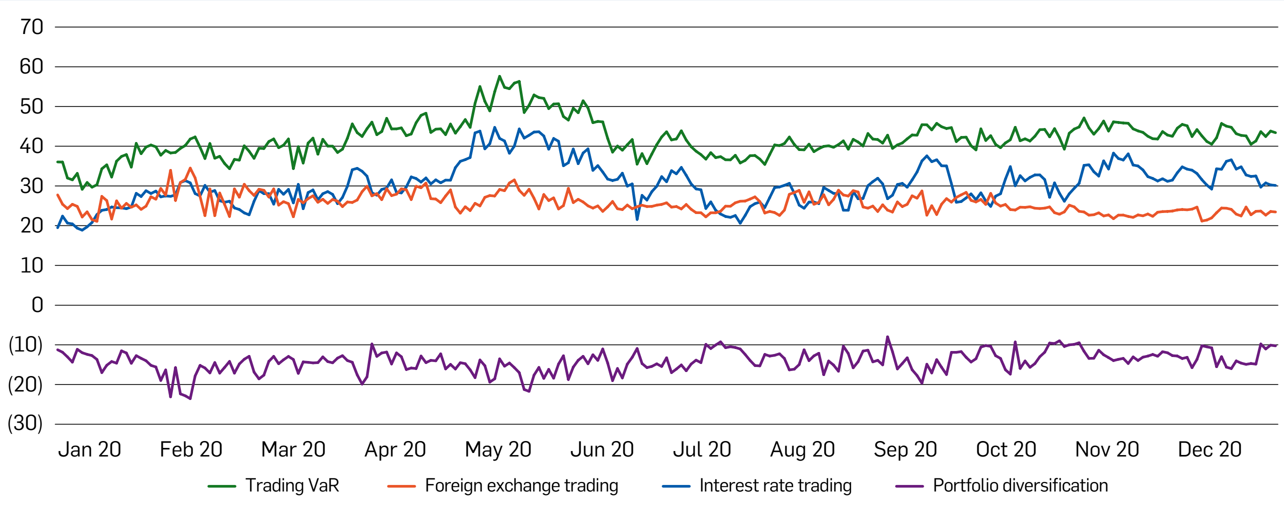
(audited)

Value at risk of the trading portfolios continued

The daily levels of total trading VaR over the last year are set out in the graph below.

Daily VaR (trading portfolios), 99% 1 day (HK$m)

(unaudited)



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

Trading, 99% 1 day

(audited)

	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)**
	At 31 December 2019	Minimum during the year	Maximum during the year	Average for the year
VaR				
Trading	32	14	37	25
Foreign exchange trading	23	7	35	18
Interest rate trading	20	11	30	20
Portfolio diversification	(11)	–	–	(13)

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.

(c) Market Risk

(audited)

Trading portfolios continued

(audited)

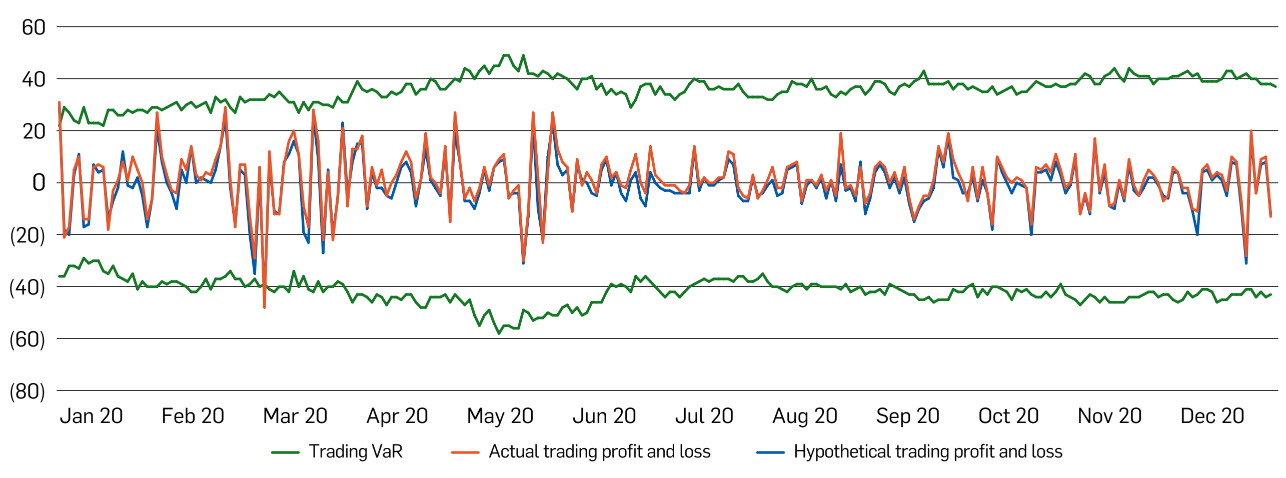
Backtesting

(unaudited)

In 2020, there were one profit exception and one 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 2020.

Backtesting of trading VaR against actual and hypothetical profit and loss for 2020 (HK$m)



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

The actual number of profits or losses in excess of VaR over this period can be used to gauge how well the models are performing. A VaR model is deemed satisfactory if it experiences less than five profit or loss exceptions in a 250-day period.

Non-trading portfolios

(unaudited)

Interest Rate Risk in the Banking Book ('IRRBB') is the risk of an adverse impact to earnings or capital due to changes in market interest rates that affect the bank's banking book positions. The risk arises from timing mismatches in the repricing of non-traded assets and liabilities and is the potential adverse impact of changes in interest rates on earnings and capital.

In its management of the risk, the Group aims to mitigate the impact of future interest rate movements which could reduce future net interest income or its net worth, while balancing the cost of hedging activities to the current revenue stream. Monitoring the sensitivity of projected net interest income and of the present value of expected net cash flows under varying interest rate scenarios is a key part of this.

In order to manage structural interest rate risk, non-traded assets and liabilities are transferred to Markets Treasury based on their re-pricing and maturity characteristics. For assets and liabilities with no defined maturity or re-pricing characteristics, behaviouralisation is used to assess the interest rate risk profile. Markets Treasury manages the banking book interest rate positions transferred to it within approved limits. ALCO is responsible for monitoring and reviewing its overall structural interest rate risk position. Interest rate behaviouralisation policies have to be formulated in line with the Group's behaviouralisation policies and approved at least annually by ALCO.

(c) Market Risk

(audited)

Non-trading portfolios continued

(unaudited)

Sensitivity of net interest income

(audited)

A principal part of the Group's management of non-traded interest rate risk is to monitor the sensitivity of projected net interest income at least quarterly under varying interest rate scenarios (simulation modelling), where all other economic variables are held constant. This monitoring is undertaken at bank level by ALCO, where the Group forecasts both one-year and five-year NII sensitivities across a range of interest rate scenarios.

Sensitivity of net interest income reflects the Group's sensitivity of earnings due to changes in market interest rates. The Group forecasts net interest income sensitivities across a range of interest rate scenarios based on a static balance sheet assumption.

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 2021 and 25 basis points parallel rises or falls in all yield curves at the beginning of year from 1 January 2021.

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 projected net interest income for the year ending 31 December 2021 by HK$4,159m for 100 basis points case and by HK$1,041m for 25 basis points case, while such a series of parallel falls in all-in yield curves would decrease projected net interest income by HK$3,136m for 100 basis points case and by HK$1,262m for 25 basis points case.

The sensitivity of projected net interest income is described as follows:

	100bp parallel increase	100bp parallel decrease	25bp parallel increase	25bp parallel decrease
Change in 2021 projected net interest income				
– HKD	**2,679**	**(1,311)**	**670**	**(759)**
– USD	**411**	**(694)**	**103**	**(230)**
– other	**1,069**	**(1,131)**	**268**	**(273)**
Total	**4,159**	**(3,136)**	**1,041**	**(1,262)**
Change in 2020 projected net interest income				
– HKD	1,514	(2,411)	374	(601)
– USD	445	(973)	112	(242)
– other	554	(602)	136	(138)
Total	2,513	(3,986)	622	(981)

The interest rate sensitivities set out in the table above represent the effect of the movements in projected yield curves based on a constant balance sheet size and structure. This effect, however, does not incorporate actions which would probably be taken by Markets Treasury or in the business units to mitigate the effect of interest rate risk. In reality, Markets Treasury proactively seeks to change the interest rate risk profile to optimise net revenues. The net interest income sensitivity calculations assume that interest rates of all maturities move by the same amount in the 'up-shock' scenario. Rates are not assumed to become negative in the 'down-shock' scenario unless the central bank rate is already negative and then not assumed to go further negative, which may, in certain currencies, effectively result in non-parallel shock. In addition, the net interest income sensitivity calculations take into account of the effect on net interest income of anticipated differences in changes between interbank interest rates and interest rates over which the entity has discretion in terms of the timing and extent of rate changes.

(c) Market Risk

(audited)

Non-trading portfolios continued

(unaudited)

Sensitivity of net interest income continued

(audited)

Key assumptions used in the measurement of interest rate sensitivities include business line interest rate pass-on assumptions, re-investment of maturing assets and refinancing of liabilities at market rates per shock scenario and prepayment risk. Markets Treasury is modelled based on no management actions i.e. the risk profile at the month end is assumed to remain constant throughout the forecast horizon. The projections make other assumptions, including that contractually fixed term positions run to maturity, managed rate products and non-interest bearing balances, such as interest-free current accounts, are subject to interest rate risk behaviouralisation.

Sensitivity of economic value of equity

Economic value of equity ('EVE') represents the present value of the future banking book cash flows that could be distributed to equity providers under a managed run-off scenario. This equates to the current book value of equity plus the present value of future net interest income 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 movements in interest rates, where all other economic variables are held constant. The Group is required to monitor EVE sensitivity as a percentage of Tier 1 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.

Sensitivity of reserves

The Group measures the potential downside risk to the CET1 ratio due to interest rate and credit spread risk in the Hold to Collect and Sell ('HTC&S') portfolio by the portfolio's stressed VaR, using 99% confidence level and an assumed holding period of one quarter. At 31 December 2020, the stressed VaR of the portfolio was HK$1,281m.

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 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**
	At 31 December 2019	Maximum impact	Minimum impact
+ 100 basis points parallel move in all yield curves	(76)	(118)	(76)
As a percentage of shareholders' equity at 31 December 2019 (%)	(0.04)	(0.07)	(0.04)
– 100 basis points parallel move in all yield curves	182	224	180
As a percentage of shareholders' equity at 31 December 2019 (%)	0.10	0.13	0.10

(c) Market Risk

(audited)

Non-trading portfolios continued

(unaudited)

Foreign exchange exposures

(audited)

The Group's structural foreign exchange exposure, monitored using sensitivity analysis, represents the Group's foreign currency investments in subsidiaries, branches and associates, and 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 by the Group's ALCO with the primary objective of ensuring, where practical, that the Group's and the Bank's capital ratios are largely protected from the effect of changes in exchange rates.

Exchange differences on structural exposures are recognised in 'Other comprehensive income'.

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.

Equities exposures

(audited)

The Group's equities exposures in 2020 and 2019 are reported as 'Financial assets designated and otherwise mandatorily measured at fair value through profit or loss', 'Financial investments' and 'Trading assets' in the financial statements. These are subject to trading limit and risk management control procedures and other market risk regime.

(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 2020

Resilience Risk continued to provide guidance and stewardship to our businesses and functions about how we can prevent, adapt, and learn from resilience-related threats when something goes wrong. We view resilience through six lenses: strategic change and emerging threats, third-party risk, information and data resilience, payments and processing resilience, systems and cyber resilience, and protective security risk. In 2020 we have:

- Restructured the Risk Taxonomy and Control Library and conducted Risk and Control Assessment refreshes accordingly;
- Streamlined and simplified the policies for Resilience Risk;
- Developed a Target Operating Model to envision our desired state for the Operational and Resilience Risk function. We compared the desired state to our 'as-is' model to identify areas where we need to further develop the Operational and Resilience Risk vision; and
- Deployed risk management oversight of the material change initiatives across our businesses.

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 their 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 that we will not be able to prevent all disruption, but we prioritise investment to continuously improve our response and recovery capability for our most important business services.

(d) Resilience Risk

(unaudited)

Governance and structure

A principal senior management meeting for Resilience Risk governance is the Resilience Risk Governance Meeting, co-chaired by Head of Resilience Risk and Chief Information Officer, with an escalation path to the HASE Risk Management Meeting and HSBC Asia Pacific Resilience Risk Governance Meeting.

Business operations continuity

As a result of COVID-19, we successfully implemented business continuity responses and continued to maintain the majority of service level agreements. We did not experience any major impacts to the supply chain 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 colleagues remains unchanged and no significant incidents impacted our buildings or people.

(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 2020

There were no material changes to the policies and practices for the management of regulatory compliance risk in 2020, 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 with the support and guidance provided by regional and country Regulatory Compliance teams.

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 2020, 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.

(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 arises from day-to-day banking operations.

Financial crime risk management

Key developments in 2020

In 2020, we continued to strengthen our fight against financial crime and to enhance our financial crime risk management capability. Amid the challenges posed by COVID-19 pandemic, we introduced a number of financial crime risk management measures to support the business and our customers. These included:

- We supported the most vulnerable customers and those in financial difficulty, including the raising of fraud awareness during this period;
- The Compliance function proactively engaged with other parts of the organisation to ensure financial crime risks were considered as part of COVID-19-related decisions; and
- We supported customers and the organisation through policy exceptions and introducing virtual onboarding.

We consistently review the effectiveness of our financial crime risk management framework, which includes consideration of geopolitical and wider economic factors. The sanctions regulatory environment has remained changeable and uncertain during the course of 2020 due to the ongoing geopolitical tensions between the US and China, and the increasing divergence in sanctions policies between the US and the EU on Iran and Russia. We comply with all applicable sanctions regulations in the jurisdictions in which we operate, and continue to monitor the geopolitical landscape for ongoing developments. We also continued to progress several key financial crime risk management initiatives, including:

- We continued to strengthen our anti-fraud capabilities, focusing on threats posed by new and existing technologies, and have delivered a comprehensive fraud training programme across the bank.
- We continued to invest in the use of artificial intelligence ('AI') and advanced analytics techniques to manage financial crime risk, and we published our principles for the ethical use of Big Data and AI.
- We continued to work on strengthening our ability to combat money laundering and terrorist financing. In particular, we focused on the use of technology to enhance our risk management processes while minimising the impact to the customer. We also continued to develop our approach of intelligence led financial crime risk management, in part, through enhancements to our automated transaction monitoring systems.

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.

(f) Financial Crime Risk

(unaudited)

Financial crime risk management continued

Key risk management processes

The Group continued to deliver a programme to further enhance the policies and controls around identifying and managing the risks of bribery and corruption across our business. Recognising that the fight against financial crime is a constant challenge, we maintained our investment in operational controls and new technology to deter and detect criminal activity in the banking system. The Group continued to simplify our governance and policy frameworks, and our management information reporting process which demonstrates the effectiveness of our financial crime controls. We remain committed to enhancing our risk assessment capabilities and to delivering more proactive risk management, including our ongoing investment in the next generation of capabilities to fight financial crime by applying advanced analytics and AI.

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 helping to protect the communities we serve. We are a strong advocate of public-private partnerships and participate in a number of information-sharing initiatives around the world.

The Group have been an advocate for a more effective international framework for managing financial crime risk, whether through engaging directly with intergovernmental bodies such as the Financial Action Task Force, the global money laundering and terrorist financing watchdog, or via our key role in industry groups such as the Wolfsberg Group and the Institute of International Finance.

(g) Model Risk

(unaudited)

Overview

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.

Key developments in 2020

We adopted the refined HSBC Group model risk policy to enable a more risk-based approach to model risk management.

We reviewed the model governance arrangements overseeing model risk, resulting in a range of enhancements to the underlying structure to improve effectiveness and increase business engagement.

We worked with the businesses and functions to develop the Model Risk Control Assessments based on the new model risk controls in the Risk Control Library.

The consequences of COVID-19 on HKFRS 9 model performance and reliability has resulted in enhanced monitoring of those models and related model adjustments. Dramatic changes to model inputs such as GDP and unemployment rates have made the model results less reliable. As a result, greater reliance has been placed on management underlays / overlays based on business judgement to derive expected credit losses.

Key risk management processes

We use a variety of modelling approaches, including regression, simulation, sampling, machine learning and judgemental scorecards for a range of business applications, in activities such as customer selection, product pricing, financial crime transaction monitoring, creditworthiness evaluation and financial reporting.

We regularly review our model risk management policies and procedures, and require the first line of defence to demonstrate comprehensive and effective model risk controls.

We report on model risk to RMM on a regular basis. We also review the effectiveness of our model oversight structure to ensure appropriate understanding and ownership of model risk is embedded in the businesses and functions.

(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. 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. It also reduces distribution costs for our products by using our established branch network and direct channels, and enables us to control the quality of the sale process and the products themselves to ensure our customers receive products which address their specific needs at the best value.

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 enterprise 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 financial crime 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.

(h) Insurance Manufacturing Operation Risk

(audited)

Measurement continued

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

Balance sheet of insurance manufacturing subsidiaries by type of contract

	Linked contracts[1]	Non-linked contracts[1]	Other assets and liabilities[2]	Total
2020				
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	8,122	263	8,424
Total financial assets	238	145,963	6,440	152,641
Reinsurance assets	–	5,714	–	5,714
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
Other liabilities	–	–	9,742	9,742
Total liabilities	206	142,902	13,518	156,626
Shareholders' equity	–	–	31,796	31,796
Total liabilities and shareholders' equity	206	142,902	45,314	188,422
2019				
Financial assets:				
– financial assets designated and otherwise mandatorily measured at fair value through profit or loss	198	18,350	–	18,548
– derivative financial instruments	–	357	–	357
– financial investments	–	99,723	6,792	106,515
– other financial assets	10	6,093	622	6,725
Total financial assets	208	124,523	7,414	132,145
Reinsurance assets	–	8,791	–	8,791
Present value of in-force long-term insurance contracts	–	–	20,469	20,469
Other assets	–	6,378	1,555	7,933
Total assets	208	139,692	29,438	169,338
Liabilities under investment contracts designated at fair value	135	294	–	429
Liabilities under insurance contracts	69	132,051	–	132,120
Deferred tax	–	8	3,362	3,370
Other liabilities	–	–	3,996	3,996
Total liabilities	204	132,353	7,358	139,915
Shareholders' equity	–	–	29,423	29,423
Total liabilities and shareholders' equity	204	132,353	36,781	169,338

1 Comprises life insurance contracts and investment contracts

2 Comprises shareholder assets and liabilities

(h) Insurance Manufacturing Operation Risk

(audited)

Stress and Scenario Testing

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

Key Risk Types

The key risks for the insurance operations are market risks (in particular interest rate and equity), credit risks and liquidity risks, followed by insurance underwriting risk and operational risks.

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 insurance 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, amongst others, some or all of the techniques listed below, depending on the nature of the contracts written:

- for products with DPF, adjusting dividends 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 uncertainty over the receipt of all future premiums and the timing of claims; and also because 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 reviews and decides on appropriate asset holdings and investment strategy in supporting 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.

(h) Insurance Manufacturing Operation Risk

(audited)

Market risk (insurance) continued

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.

	2020	2019
	Impact on profit after tax and shareholders' equity	Impact on profit after tax and shareholders' equity
+ 100 basis points shift in yield curves	(750)	(202)
– 100 basis points shift in yield curves	787	126
10 per cent increase in equity prices	442	426
10 per cent decrease in equity prices	(468)	(493)
10% increase in USD exchange rate compared to all currencies	126	143
10% decrease in USD exchange rate compared to all currencies	(126)	(143)

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 policyholder 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 'reinsurance assets' 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.

(h) Insurance Manufacturing Operation Risk

(audited)

Credit risk (insurance) continued

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 (2019: 0%). The credit quality of financial assets is included under the Credit Risk section. The risk associated with credit spread volatility is to a large extent migrated by holding debt securities to maturity, and sharing a degree of credit spread experience with policyholders.

Liquidity risk (insurance)

Liquidity risk is the risk that an insurance operation, though solvent, either does not have sufficient financial resources available to meet its obligations when they fall due, or can secure them only at excessive cost.

Risk is managed by cashflow matching and maintaining sufficient cash resources; investing in high-credit-quality investments with deep and liquid markets, monitoring investment concentrations and restricting them where appropriate and establishing committed contingency borrowing facilities.

Our insurance manufacturing subsidiary is required to complete quarterly liquidity risk reports andan 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 2020.

Expected maturity of insurance contract liabilities

	Expected cash flows (undiscounted)				
	Within 1 year	Over 1 year but within 5 years	Over 5 years but within 15 years	Over 15 years	Total
2020					
Non-linked insurance	**15,106**	**48,599**	**79,035**	**109,096**	**251,836**
Linked insurance	**11**	**41**	**62**	**32**	**146**
	15,117	**48,640**	**79,097**	**109,128**	**251,982**
2019					
Non-linked insurance	14,553	49,006	76,441	108,011	248,011
Linked insurance	12	42	67	36	157
	14,565	49,048	76,508	108,047	248,168

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

(h) Insurance Manufacturing Operation Risk

(audited)

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.

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

Effect on profit after tax and total equity at 31 Dec	2020	2019
10 per cent increase in mortality and / or morbidity rates	(100)	(57)
10 per cent decrease in mortality and / or morbidity rates	99	57
10 per cent increase in lapse rates	(92)	(68)
10 per cent decrease in lapse rates	100	75
10 per cent increase in expense rates	(63)	(52)
10 per cent decrease in expense rates	63	53

(h) Insurance Manufacturing Operation Risk

(audited)

Insurance risk continued

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 after applying risk margins to reflect any uncertainty in the underlying assumptions. 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 assumptions proposed for use in the determination of the PVIF. 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.

(h) Insurance Manufacturing Operation Risk

(audited)

Insurance risk continued

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:

	2020	2019
+ 100 basis points shift in yield curves	**(2,891)**	(2,848)
– 100 basis points shift in yield curves	**875**	127

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:

	2020	2019
10 per cent increase in mortality and / or morbidity rates	**(141)**	(107)
10 per cent decrease in mortality and / or morbidity rates	**139**	136
10 per cent increase in lapse rates	**(163)**	(114)
10 per cent decrease in lapse rates	**174**	133
10 per cent increase in expense rates	**(116)**	(102)
10 per cent decrease in expense rates	**116**	102

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.

(h) Insurance Manufacturing Operation Risk

(audited)

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	**2020**	2019
Policies denominated in HKD	**2.15%**	2.20%
Policies denominated in USD	**3.40%**	3.50%
Policies denominated in RMB	**3.20%**	3.30%

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

(h) Insurance Manufacturing Operation Risk

(audited)

Process used to determine assumptions for long-term insurance contracts continued

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:

	Change in variable %	2020	2019
		Impact on the policy reserves	Impact on the policy reserves
Discount rate	+1	(6,269)	(4,987)
Discount rate	-1	18,541	17,061
Mortality / Morbidity	+10	497	274
Mortality / Morbidity	-10	(417)	(177)

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 +/-1% 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.

Capital Management

(Figures expressed in millions of Hong Kong dollars unless otherwise indicated)(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 uses the current exposure method to calculate its default risk exposures. 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%.

The Banking (Capital) (Amendment) Rules 2014 came into effect on 1 January 2015 to implement the Basel III capital buffer requirements in Hong Kong. The requirements were phased-in from 2016 to 2019, in line with the Basel phase-in arrangements, and reached full implementation in 2019. At 31 December 2020, 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 designed to ensure banks build up capital outside periods of stress at 2.5%. 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 16 March 2020, the HKMA reduced the CCyB for Hong Kong to 1.0% from 2.0% with immediate effect. On 30 December 2020, the HKMA maintained the D-SIB designation as well as HLA requirement at 1% for the Group.

Loss-absorbing capacity requirements

(unaudited)

The HKMA has 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, with phased implementation periods starting from 1 July 2019.

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 2020, the effect of this requirement is to restrict the amount of reserves which can be distributed to shareholders by HK$1,323m (2019: HK$3,509m).

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.

The following table sets out the composition of the Group's capital base under Basel III at 31 December 2020 and 31 December 2019. 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.

Capital base

(unaudited)

	2020	2019
Common Equity Tier 1 ('CET1') Capital		
Shareholders' equity	145,915	143,026
– Shareholders' equity per Consolidated Balance Sheet	183,100	178,810
– Additional Tier 1 ('AT1') perpetual capital instruments	(11,744)	(11,744)
– Unconsolidated subsidiaries	(25,441)	(24,040)
Non-controlling interests	–	–
– Non-controlling interests per Consolidated Balance Sheet	95	107
– Non-controlling interests in unconsolidated subsidiaries	(95)	(107)
Regulatory deductions to CET1 capital	(27,306)	(31,466)
– Cash flow hedging reserve	(51)	(7)
– Changes in own credit risk on fair valued liabilities	(10)	(5)
– Property revaluation reserves [1]	(24,067)	(26,631)
– Regulatory reserve	(1,323)	(3,509)
– Intangible assets	(1,566)	(1,027)
– Defined benefit pension fund assets	(6)	(22)
– Deferred tax assets net of deferred tax liabilities	(183)	(110)
– Valuation adjustments	(100)	(155)
Total CET1 Capital	118,609	111,560
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	130,353	123,304
Tier 2 ('T2') Capital		
Total T2 capital before regulatory deductions	11,762	14,860
– Property revaluation reserves [1]	10,831	11,984
– Impairment allowances and regulatory reserve eligible for inclusion in T2 capital	931	2,876
Regulatory deductions to T2 capital	(1,045)	(915)
– Significant capital investments in unconsolidated financial sector entities	(1,045)	(915)
Total T2 Capital	10,717	13,945
Total Capital	141,070	137,249

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.

Risk-weighted assets by risk type

(unaudited)

	2020	2019
Credit risk	624,487	584,631
Market risk	14,332	8,357
Operational risk	66,709	65,868
Total	705,528	658,856

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:

	2020	2019
CET1 capital ratio	16.8%	16.9%
T1 capital ratio	18.5%	18.7%
Total capital ratio	20.0%	20.8%

In addition, the capital ratios of all tiers as of 31 December 2020 would be reduced by approximately 0.8 percentage point after the prospective fourth interim dividend payment for 2020. The following table shows the pro-forma basis position of the capital ratios after the prospective interim dividend.

	Pro-forma 2020	Pro-forma 2019
CET1 capital ratio	16.1%	15.8%
T1 capital ratio	17.7%	17.6%
Total capital ratio	19.2%	19.7%

Leverage ratio

(unaudited)

	2020	2019
Leverage ratio	7.9%	7.8%
T1 capital	130,353	123,304
Exposure measure	1,641,358	1,572,114

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

Dividend policy

Objective

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

Considerations

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

- regulatory requirements;
- financial results;
- level of distributable reserves;
- general business conditions and strategies;
- strategic business plan and capital plan;
- statutory and regulatory restrictions on dividend payment;
- 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.

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 2020.

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. The Bank has also implemented the 'Subsidiary Accountability Framework' initiative introduced by the HSBC Group to simplify the subsidiary oversight framework, and strengthen and enhance corporate governance; and continued to embed 'Ways of Working' Governance into Board and Board Committee governance to enhance meeting effectiveness. Lastly, a comprehensive Subsidiary Governance Review was initiated by the HSBC Group in 2020 for sharing of best governance practices, with full support of the Board.

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, he 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 12 Directors, of whom two are EDs and 10 are Non-executive Directors ('NEDs'). Among the 10 NEDs, six 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.

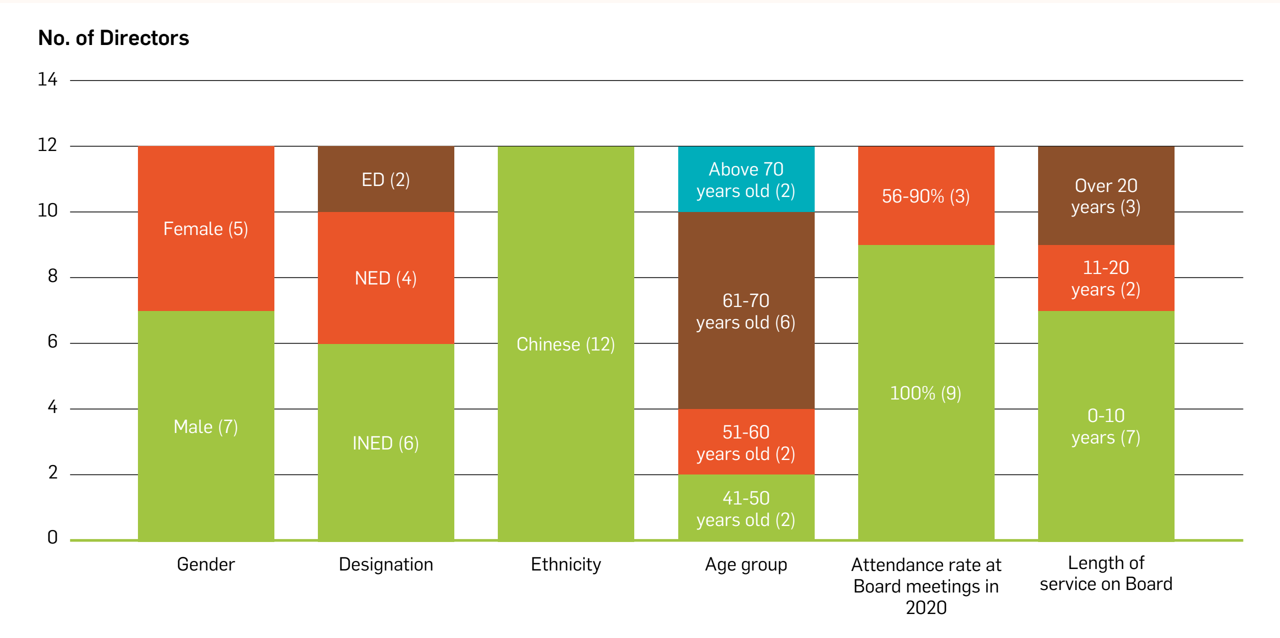
The Board possesses, both as individual Directors and collectively, appropriate experience, competencies and personal qualities, including professionalism and integrity, to discharge its responsibilities adequately and effectively. In addition, the Board collectively has adequate knowledge and expertise 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 is set out in the following chart:



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

Further, the Bank has received from each of the INEDs an annual confirmation of his / her independence. The independence of the INEDs has been assessed in accordance with the guidelines set out in Rule 3.13 of the Listing Rules, and the SPM CG-1 issued by HKMA. Following such assessment, the Board has affirmed that all the INEDs continue to be independent.

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 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 2020, the Bank has also continued to embed HSBC Group's 'Ways of Working' Governance in Board and Board Committee governance to enhance meeting effectiveness. The new methods of meeting management introduced by this meeting approach has 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, HSBC Group has initiated a comprehensive Subsidiary Governance Review of the Bank in 2020 for sharing of best governance practices, with the full support of the Bank's Board of Directors. The three themes of the Subsidiary Governance Review covered tenure and succession of Directors, management and Board relationship and reporting quality, and the time spent by the Board on considering strategy and top talents. The findings and recommendations from the Subsidiary Governance Reviewwere reported to the Board in November 2020. Highlights of the actions arising from the Subsidiary Governance Review include succession planning for the Board and the establishment of a robust and on-going board succession process; enhancement of quality, frequency and timeliness of reporting to the Board to ensure that Management provides insightful and balanced information and allows the Board sufficient opportunity to engage before decisions are required; refreshing the NED training experience; and more closed NED session and strategy session.

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 2020 and for the sake of health and safety under the prevailing pandemic, the Board and Board Committees had mostly met by zoom conferencing facilities, with meeting papers uploaded onto an electronic board portal.

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 2020, the Board held nine meetings (including one meeting with HKMA) and the important matters discussed at Board meetings included:

Strategic Planning

- annual review of strategic plan (2018 – 2020) with quarterly updates
- strategic plan of Hang Seng Indexes Company Limited (2020 – 2025)
- impact of, and challenges and opportunities presented by the COVID-19 pandemic on the Bank's business and operations
- long-term ESG vision and strategy
- review of the Bank's data strategy
- update on the Bank's digital proposition

Financial and Business Performance, and Capital Planning

- financial statements for the year ended 31 December 2019
- interim financial statements for the six months ended 30 June 2020
- declaration of the fourth interim dividend for year 2019 and first three interim dividends for year 2020
- annual operating plan and capital plan for year 2020
- reports on financial and business performance
- internal capital adequacy assessment process
- individual liquidity adequacy assessment process

Risk Management

- risk appetite statement and framework for 2020, with quarterly risk appetite profile update and semi-annual review of the risk appetite statement
- risk management framework and risk governance structure
- internal control system assessment
- report on self-assessment and compliance with Basel Committee on Banking Supervision 239 Programme
- update on cyber security risk
- review of Data Strategy and update on data migration to Cloud
- quarterly review of large credit exposures and risk concentrations
- significant policies, plans and framework including, but not limited to, Recovery Plan, Contingency Funding Plan, Liquidity Management Policy, Connected Lending Policy, Capital Management Policy, Large Credit Exposure Policy, Retail Credit Risk Policies, Third Party Risk Policy, Strategic Risk Management Policy, 2020 and 2021 Traded Risk Limits, Traded Risk Limit Amendment Policy, Model Risk Management Policy, Reputational Risk Management Policy, Non-financial Risk Optimisation Programme, HSBC Operational Risk Management Framework, Outsourcing Management Framework, and the framework for disclosure of inside information
- annual review of credit approval authority limits and overall credit limit to the HSBC Group companies

Governance

- HSBC Subsidiary Accountability Framework
- findings and recommendations from the Subsidiary Governance Review and update on implementation progress
- Board succession planning
- ESG governance structure and effectiveness of ESG risk management and internal control systems, as well as the Corporate Sustainability Report for 2019
- review of the effectiveness of the Board and Board Committees, including the revised terms of reference of the Board, Executive Committee and Remuneration Committee
- review of the structure, size and composition of the Board and the Non-executive Board Committees
- subsidiary boards and committees governance and interaction
- new and revised SPMs issued by HKMA from time to time

Culture	Human Resources and Remuneration
– update on Culture Review of the Bank and annual review of the Bank's Culture Statement – 'RIGHT together' culture initiatives adopted by the Bank – update on self-initiated project sponsored by CE to promote conduct awareness and effective financial crime risk management – annual review of the implementation of corporate values and business principles	– annual review of the remuneration policy and remuneration system – annual review of alignment of risk and remuneration – pay review for 2020 and variable pay for 2019 – review of fees payable to Directors 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 new Chairman of the Board and changes to Board Committee composition – appointment of INED and Board Committee member – appointments and remuneration packages of Senior Management – succession planning for the Board and Senior Management – performance management relating to Senior Management – re-election and election of Directors – terms of appointment of NEDs – review of independence of INEDs

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 the policy on the term of appointment of NEDs, term of appointment of each NED is three years except that where a NED has served on the Board for more than nine years, then his / her term of appointment is one year. 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 2020.

Directors' interests in securities of the Bank and HSBC Group as at 31 December 2020 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:

- New connected lending requirements under the Banking (Exposure Limits) Rules
- Data privacy workshop
- Impact of climate change on financial institutions
- Update on cyber security risk
- Insights on ESG and guideline on ESG reporting
- Update on interbank offered rate transition and reform
- Notifiable transactions and connected transaction rules
- Values and conduct
- Insider risk
- Competition law

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

	Training Areas				
Directors	Governance matters	Regulatory matters	Business / Management	Risk and Control	Digital and Technology
INEDs					
Dr Raymond K F Ch'ien	✓	✓	✓	✓	✓
Dr John C C Chan	✓	✓	✓	✓	✓
Ms L Y Chiang	✓	✓	✓	✓	✓
Ms Irene Y L Lee	✓	✓	✓	✓	✓
Dr Eric K C Li	✓	✓	✓	✓	✓
Mr Michael W K Wu	✓	✓	✓	✓	✓
NEDs					
Ms Kathleen C H Gan	✓	✓	✓	✓	✓
Dr Vincent H S Lo	✓	✓	✓	✓	✓
Mr Kenneth S Y Ng	✓	✓	✓	✓	✓
Mr Peter T S Wong	✓	✓	✓	✓	✓
EDs					
Ms Louisa Cheang	✓	✓	✓	✓	✓
Ms Margaret W H Kwan	✓	✓	✓	✓	✓

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 is as follows:

Board

Executive Committee	Audit Committee	Risk Committee	Remuneration Committee	Nomination Committee
Ms Louisa Cheang *(Chairman)*	Dr Eric K C Li* *(Chairman)*	Ms Irene Y L Lee* *(Chairman)*	Dr John C C Chan* *(Chairman)*	Dr Raymond K F Ch'ien* *(Chairman)*
Mrs Eunice Chan	Ms L Y Chiang*	Dr Eric K C Li*	Ms L Y Chiang*	Dr John C C Chan*
Ms Crystal P S Cheung	Ms Irene Y L Lee*	Mr Kenneth S Y Ng#	Dr Raymond K F Ch'ien*	Ms Louisa Cheang
Ms Rose M Cho [Note 1]		Mr Michael W K Wu*		Ms Irene Y L Lee* [Note 3]
Ms Liz T L Chow				Mr Peter T S Wong#
Ms Margaret W H Kwan				Mr Michael W K Wu*
Mr Donald Y S Lam				
Mr Gilbert M L Lee				
Mr Andrew W L Leung				
Mr Godwin C C Li				
Mr Ryan Y S Song				
Mr Christopher H K Tsang [Note 2]				
Ms Elaine Y N Wang				
Ms May M K Wong				
Mr Chee Leong Yeo				

* INEDs

\# NEDs

[Note 1] Ms Rose M Cho was appointed as Executive Committee member with effect from 16 January 2021.

[Note 2] Mr Christopher H K Tsang was appointed as Executive Committee member with effect from 1 May 2020.

[Note 3] Ms Irene Y L Lee was appointed as Nomination Committee member with effect from 28 December 2020.

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. It exercises the powers, authorities and discretions as delegated by the Board in so far as they concern the management and day-to-day running of the Bank in accordance with its terms of reference and such other policies and directives as the Board may determine from time to time. The Executive Committee also sub-delegates credit, investment and capital expenditure authorities to its members and the Bank's senior executives.

To further enhance the Bank's risk management framework and in line with best practices, the Bank has set up a Risk Management Meeting, a risk meeting of the Executive Committee, to provide recommendations and advice to the Bank's Chief Risk Officer on enterprise-wide management of all risks, policies and guidelines for the management of risk within the Group. Risk Management Meetings are held not less than ten times each year. Minutes of Risk Management Meetings are provided to the Executive Committee and the Risk Committee for review and oversight purpose.

Audit Committee

The Audit Committee meets at least four times a year with the Bank's executives including the Chief Financial Officer, Chief Risk Officer, Head of Audit, and representatives from the Bank's external auditor. The Committee reviews, among other things, the Bank's financial reporting, the nature and scope of audit reviews, the effectiveness of the systems of internal control and compliance relating to financial reporting, and the operation and effectiveness of whistleblowing policies and procedures. The Audit Committee is also responsible for making recommendations to the Board on the appointment, re-appointment, removal and remuneration of the Bank's external auditor. In addition, the Bank has adopted HSBC Group's *HSBC Confidential* whereby all staff members may report incidents of improprieties on a strictly confidential and secured basis so that the same can be timely and thoroughly investigated and appropriate actions can be taken promptly.

The Audit Committee reports to the Board following each Audit Committee meeting, drawing the Board's attention to significant issues or matters of which the Board should be aware, identifying any matters in respect of which it considers that action or improvement is needed, and making relevant recommendations.

During the year, the Audit Committee held four meetings and the major work performed by the Committee was as follows:

- reviewed the financial statements for the year ended 31 December 2019 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 2020 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 2019, 31 March 2020, 30 June 2020 and 30 September 2020
- reviewed the annual operating plan and capital plan for year 2020 and the revised internal capital targets for 2020 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 revised Internal Audit Plan and Internal Audit Charter for 2020, and reviewed the resources arrangements, audit statistics, internal audit reports and key themes, and the progress for the draft Annual Audit Planning for 2021

- reviewed the update on Sarbanes-Oxley Act (SOX) implementation, internal control system assessment and accounting reconciliations control certificates as of 31 December 2019 and 30 June 2020
- 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 2020 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 the Audit Committee Certificate of the Bank and its subsidiaries
- endorsed the appointment of Audit Committee members of the Bank and its subsidiary
- 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

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, Head of Regulatory Compliance, Head of Financial Crime Compliance, 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), regulatory compliance reports, annual plan and progress update relating to financial crime compliance and regulatory compliance, and summary of HKMA's regulatory on-site examinations
- reviewed the enterprise wide risk assessment report, internal capital adequacy assessment process, and endorsed the individual liquidity adequacy assessment process, credit approval authority limits, and other significant policies and plans including, but not limited to, the Bank's Recovery Plan, Corporate Lending Policy, Contingency Funding Plan, Liquidity Management Policy, Connected Lending Policy, Capital Management Policy, Large Credit Exposure Policy, Retail Credit Risk Policy, New Product Approval Policy, Strategic Risk Management Policy, Third Party Risk Policy, 2020 and 2021 Traded Risk Limits, Traded Risk Limit Amendment Policy, Reputational Risk Management Policy, Model Risk Management Policy, HSBC Operational Risk Management Framework, and Outsourcing Management Framework

- approved the annual plan of the Risk function for 2020 including risk priorities for 2020
- reviewed the report on the alignment of risk and remuneration, and outcome of incentivising compliance for performance year 2019 variable pay
- reviewed the revised Internal Audit Plan and the Internal Audit Charter for 2020, and the resources arrangements, audit statistics, internal audit reports and key themes, and the progress for the draft Annual Audit Planning for 2021
- 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 2020 and the operation and effectiveness of the whistleblowing arrangements
- reviewed the update of cyber security risk and cyber resilience assessment framework, including the target cyber resilience maturity
- reviewed the operational resilience programme, implementation status of BCBS 239 compliance, development of data strategy, proactive country analytics investigations, and model risk management
- reviewed the Risk Committee's independence and effectiveness in discharging its role and responsibilities, and its terms of reference
- approved the Risk Committee Certificate of the Bank and its subsidiaries
- endorsed the appointment of Risk Committee member of the Bank's subsidiary
- reviewed the composition of the Risk Committees of the Bank and its subsidiaries
- reviewed the information cascaded from and escalated significant issues to the Risk Committee of The Hongkong and Shanghai Banking Corporation Limited

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 2020, the Committee has engaged an external consultant to undertake an independent review of the Bank's remuneration policy and its implementation for year 2020.

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 2020, the Remuneration Committee held three 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 2019 and pay review proposal for 2020, and the update on 2020 performance and pay review process and changes to performance management

- 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 2019 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 endorsed its revised terms of reference for the Board's approval
- approved the Remuneration Committee Certificate of the Bank and its subsidiaries
- endorsed the remuneration packages for senior management and recommended to the Board for approval
- endorsed the consequence management actions proposed by the Management
- reviewed the composition of the Remuneration Committees of the Bank and its subsidiary
- reviewed the information cascaded from and escalated significant issues to the Remuneration Committee of The Hongkong and Shanghai Banking Corporation Limited

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. Since 2019, 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 three meetings and the major work performed by the Committee was as follows:

- endorsed the appointment of INED and Board Committee member
- approved the appointment of Executive Committee member 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
- approved the role profile of the Chairman of the Board, and endorsed and recommended for the Board's approval the proposed new Chairman of the Board and changes to Board Committee composition
- 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 and election of Directors
- reviewed the revised appointment letter for NEDs
- 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 2020 are as follows:

	Meetings held in 2020						
	AGM	Board	Executive Committee	Audit Committee	Risk Committee	Remuneration Committee	Nomination Committee
Number of Meetings	1	9	11	4	4	3	3
Directors							
Dr Raymond K F Ch'ien* *(Chairman)*	1/1	9/9	–	–	–	3/3	3/3
Ms Louisa Cheang *(Vice-Chairman and Chief Executive)*	1/1	9/9	10/11	–	–	–	3/3
Dr John C C Chan*	1/1	9/9	–	–	–	3/3	3/3
Mr Nixon L S Chan# Note 4	1/1	2/2	–	–	–	–	–
Ms L Y Chiang*	1/1	9/9	–	4/4	–	3/3	–
Ms Kathleen C H Gan#	1/1	7/9	–	–	–	–	–
Ms Margaret W H Kwan	1/1	9/9	10/11	–	–	–	–
Ms Irene Y L Lee* Note 5	1/1	8/9	–	4/4	4/4	–	–
Dr Eric K C Li*	1/1	9/9	–	4/4	4/4	–	–
Dr Vincent H S Lo#	1/1	9/9	–	–	–	–	–
Mr Kenneth S Y Ng#	1/1	9/9	–	–	4/4	–	–
Mr Peter T S Wong#	1/1	5/9	–	–	–	–	2/3
Mr Michael W K Wu*	1/1	9/9	–	–	4/4	–	3/3
Senior Management							
Mrs Eunice Chan	–	–	10/11	–	–	–	–
Ms Ivy S P Chan Note 6	–	–	6/6	–	–	–	–
Ms Crystal P S Cheung	–	–	10/11	–	–	–	–
Ms Liz T L Chow	–	–	10/11	–	–	–	–
Mr Donald Y S Lam	–	–	11/11	–	–	–	–
Mr Gilbert M L Lee	–	–	10/11	–	–	–	–
Mr Andrew W L Leung	–	–	11/11	–	–	–	–
Mr Godwin C C Li	–	–	11/11	–	–	–	–
Mr Ryan Y S Song	–	–	9/11	–	–	–	–
Mr Christopher H K Tsang Note7	–	–	7/7	–	–	–	–
Ms Elaine Y N Wang	–	–	11/11	–	–	–	–
Ms Daphne W K Wat Note8	–	–	11/11	–	–	–	–
Ms May M K Wong	–	–	11/11	–	–	–	–
Mr Yeo Chee Leong Note 9	–	–	11/11	–	–	–	–
Ms Katie K C Yip Note 10	–	–	3/4	–	–	–	–
Average Attendance Rate	100%	94%	95%	100%	100%	100%	93%

* INEDs

NEDs

Note 4 Mr Nixon L S Chan stepped down from the Board with effect from 22 May 2020.

Note 5 Ms Irene Y L Lee was appointed as Nomination Committee member with effect from 28 December 2020.

Note 6 Ms Ivy S P Chan ceased to be Executive Committee member with effect from 1 July 2020.

Note 7 Mr Christopher H K Tsang was appointed as Executive Committee member with effect from 1 May 2020.

Note 8 Ms Daphne W K Wat ceased to be Executive Committee member with effect from 16 January 2021.

Note 9 Mr Yeo Chee Leong was appointed as Executive Committee member with effect from 1 January 2020.

Note 10 Ms Katie K C Yip ceased to be Executive Committee member with effect from 1 May 2020.

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$)
Board of Directors [Note 11]	
Chairman	860,000
Non-executive Directors	660,000
Audit Committee / Risk Committee	
Chairman	400,000
Members	230,000

	(HK$)
Remuneration Committee / Nomination Committee	
Chairman	100,000
Members	70,000

[Note 11] 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 2020 is set out in Note 14 to the Bank's 2020 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 12] and eight Key Personnel [Note 13] in 2020. The aggregate amount of remuneration [Note 14] 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	2020	2019
	Fixed remuneration		
1	Number of employees	25	22
2	Total fixed remuneration (HK$ '000)	77,061	63,245
3	Of which: cash-based	77,061	63,245
	Variable remuneration		
4	Number of employees Note 15	25	22
5	Total variable remuneration (HK$ '000) Note 16	51,689	54,221
6	Of which: cash-based	31,190	31,055
7	*Of which: deferred*	*8,532*	*10,256*
8	Of which: shares or other share-linked instruments	20,500	23,166
9	*Of which: deferred*	*11,993*	*13,404*
10	**Total remuneration (HK$ '000)**	**128,750**	**117,466**

Note 12 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 13 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 14 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 15 Number of employees disclosed above includes leavers who may have zero variable pay.

Note 16 No deferred variable remuneration had been reduced through performance adjustments in 2020 and 2019.

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

		2020		2019	
	Special payments	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:

		2020		2019	
	Deferred and retained remuneration (HK$ '000)	Cash	Shares	Cash	Shares
1	Total amount of outstanding deferred remuneration Note 17 & 19	25,404	27,811	19,423	34,359
2	*Of which: Total amount of outstanding deferred and retained remuneration exposed to ex post explicit and / or implicit adjustment*	*25,404*	*27,811*	*19,423*	*34,359*
3	Total amount of amendment during the year due to ex post implicit adjustments Note 20	–	(13,649)	–	(2,397)
4	Total amount of deferred remuneration paid out in the financial year Note 18 & 19	6,484	22,116	6,376	20,070

Note 17 Outstanding, unvested, deferred remuneration is exposed to ex post explicit adjustments via malus.

Note 18 Paid and vested variable pay made to Material Risk Takers is subject to clawback.

Note 19 There is no reduction of deferred remuneration and retained remuneration due to ex post explicit adjustments during 2020 and 2019 via the application of malus and / or clawback.

Note 20 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 36.0% lower as at 31 December 2020 when compared to that of 31 December 2019.

Other relevant remuneration disclosures are set out in Notes 14, 15 and 50(b) to the Bank's 2020 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 2018 – 2020 was approved by the Board in November 2017. 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 2020, 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 2020 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, Financial Crime Risk Management Committee, Regulatory Compliance Risk Management Committee, 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 sections 'Risk Management' and 'Capital Management' 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 2020 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 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 2020, fees paid to the Bank's external auditor for audit services amounted to HK$26.5 million, compared with HK$23.5 million in 2019. For non-audit services, the fees paid to the Bank's external auditor amounted to HK$10.5 million, compared with HK$9.7 million in 2019. In 2020, the non-audit service assignments covered by these fees included HKD$10.5 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. Including the two results announcements, around a hundred meetings with analysts and fund managers were held in 2020. In addition, the Bank's Vice-Chairman and Chief Executive, 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, EDs, 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 Friday, 22 May 2020 ('2020 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 2020 AGM, in order to minimise attendance in person, while still enabling shareholders to vote and ask questions. The 2020 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 2020 AGM through a live webcast of the AGM which could be accessed by going to the webcast link provided on any browser enabled device. 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. All the resolutions proposed at that meeting were approvedby poll. Details of the poll results are available under the section 'Investor Relations' of the Bank's website (www.hangseng.com).

The next AGM will be held in the second quarter of 2021, 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 2021.

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 'Capital Management' 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 2020 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 2020, the Bank's share of the costs included HK$1,075 million for system development, HK$658 million for data processing, and HK$584 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$35 million and markets Mandatory Provident Fund for its immediate holding company during the year 2020 with a fee income of HK$137 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 2020: HK$515 million) as contracts of significance for 2020.

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 21 June 2019, and 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 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 2020, the aggregate amount paid and payable under the New Management Services Agreement was approximately HK$41 million, whereas the aggregate amount paid and payable under the New Investment Management Agreement and the New Specific Management Mandate was approximately HK$36 million, both of which were within the annual caps for the year ended 31 December 2020 of HK$227 million and HK$100 million respectively. The management fee of approximately US$3,029,739 (equivalent to HK$23,485,416) was paid and payable under the PE Investment Management Agreement for the year ended 31 December 2020, 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 2020. Further, for the year ended 31 December 2020, the aggregate amount paid and payable under the New Fund Monitoring Agreement was approximately US$46,469 (equivalent to HK$360,204), 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 '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.

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. Leaders and managers are expected to bring to life the corporate values of 'Dependable, Open and Connected' in everyday work.

Three values-aligned behaviours (Accountability, Good Judgement and Speaking Up) underpin effective financial crime risk management culture and good conduct outcomes. 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 behaviours.

A behavioural led culture change programme 'RIGHT Together' was launched in 2019. The Bank continues to embed culture actions with five behavioural focus 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.

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 has also been updated in 2020 to encompass management accountability expectations for people managers.

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.

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 2020, the Bank's total headcount was 9,563 representing a decrease of 768*, or -7.4%, compared with a year earlier. The total headcount comprised 3,285 executives (46% are male and 54% are female), 4,188 officers (39% are male and 61% are female) and 2,090 clerical and non-clerical staff (33% are male and 67% are female).

** Talents are the most important asset of the Bank. The emphasis for 2020 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 and composition of pay in the markets in which the Bank operates. 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.

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 new 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.

To gain a deeper understanding of the impact of the COVID-19 pandemic on staff, the Bank conducted three company-wide employee surveys in 2020. A 'pulse check' survey in May was designed to gather information and feedback on the physical, mental and financial well-being of employees, while two regular employee surveys, conducted in the first and second halves of the year, focused on staff engagement, and confidence and trust in the Bank's strategy, culture and leadership. Responses to the surveys support the Bank's observations that employees are demonstrating high levels of resilience and adaptability in the very challenging operating environment.

To cope with the 'new normal' created by the COVID-19 pandemic, the Bank has implemented a wide range of supportive and wellness promotion initiatives, including flexible working arrangements, technology enhancements, and process re-designs to enable remote working. Overall, these initiatives have been positively received by staff. Employees generally show positive engagement and confidence in the strategy and future of the Bank. The survey findings also show that employees feel comfortable to speak up without fear. This reflects the Bank's efforts to highlight the importance and positive impact of embracing a 'speak-up' culture in the workplace. The Bank will continue to facilitate and promote new ways of working, innovations and enhanced technology in its ongoing mission to become a more efficient and agile organisation.

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 online portal with access to learning resources on wide-ranging banking, technical and management subjects, e-Learning, Classroom Training and Virtual Training Class, to support staff learning and development. In order to fully develop staff competence and potential and to help them quickly integrate into the Bank, new joiners are provided with a comprehensive induction programme of the Bank's history, vision, culture, values, risk management and corporate governance. To equip staff members with necessary skills and knowledge to meet future challenges and professional requirements, especially those who are involved in regulated businesses and activities, the Bank offers a wide range of training and development programmes in the areas of relationship management, sales, products, operations, compliance, credit and risk. Apart from these programmes, the Bank has a series of anti-money laundering, conduct, anti-bribery and corruption training programmes to strengthen the financial crime risk management culture. On average, the Bank's staff members in Hong Kong undertook 3.8 days of learning and development programme in 2020.The Bank also 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 2020, the Bank has participated in the HKMA Banking Talent Programme to offer 6 month internships to fresh graduates, and offer 12-month employment contracts to experienced hires under the 'HKMA Financial Industry Recruitment Scheme for Tomorrow'.

Environmental, Social and Governance

Global and local socio-economic dynamics are undergoing transformation in response to the COVID-19 pandemic. The Bank has been taking a proactive approach to managing Environmental, Social and Governance (ESG) issues, facilitating the Bank's ability to keep pace with the fast-changing operating landscape.

In 2020, the Bank further stepped up its focus on ESG by establishing a high-level ESG Steering Committee chaired by the Bank's Vice-Chairman and Chief Executive to oversee ESG strategy and strengthen its ESG governance structure. The Steering Committee is supported by four Working Groups (ESG Strategy, Environmental, Corporate Social Responsibility and ESG Disclosure), each led by a member of the Bank's Executive Committee.

Reflecting the Bank's determination to be the leading organisation for ESG in the local banking industry, the Bank is the first home-grown bank in Hong Kong to sign up as a supporter of the Task Force on Climate-related Financial Disclosure (TCFD).

Starting from 2021, the Bank's ESG strategy will enhance focus in the following areas:

– **Environmental:** To be a domestic leader in reducing environmental impact from our daily operations, and offering customers a wider range of green and sustainable finance solutions;

– **Social:** To commit to enable young generations to reach their full potentials by offering tailored banking services, developing their future skills, and nurturing a workplace that promotes their wellbeing and professional development;

– **Governance:** To fully comply with the rules and regulations including climate-related risk management and ESG reporting disclosure.

For more details of the Bank's ESG vision, initiatives and performance, please refer to its 2020 Environmental, Social and Governance Report.

Environment

As the first local bank to sign up as a supporter of TCFD and to attain ISO 14001 certification for all its offices and branches, the Bank strives to lead by example in actions to transition to a lower-carbon economy. Guided by its 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.

In 2020, the newly established Environmental Working Group took over the work of the previous Environmental Management Committee. Chaired by the Bank's Chief Operating Officer, this Working Group is responsible for maintaining and monitoring the environmental management system to ensure it supports continuous enhancement of the environmental performance from the Bank's operations.

The Bank has been undertaking a Bank-wide office enhancement programme that includes initiatives to make its workplaces more energy efficient and sustainable which make reference to internationally recognised standards.

One of the Bank's new ESG ambitions is for its operations to be 'carbon neutral' by 2030. In support of this goal, the Bank has established targets to reduce electricity consumption and Scope 2 Greenhouse Gas Emissions, and will source some of its electricity from renewable energy schemes organised by local electricity providers. The Bank has further set up other specific environmental targets that are designed to minimise the negative environmental impacts arising from its Hong Kong operations:

Aspects	2030 Targets
Electricity Consumption	Reduce absolute electricity consumption by 30% using 2018 as base year
Greenhouse Gas Emissions	Reduce absolute Scope 1 and 2 emissions by 30%* using 2018 as base year
Water Consumption	Reduce water consumption by 24% using 2018 as base year
Waste Diversion	Divert 80% of waste away from landfill
Paper Consumption	Reduce paper consumption by 35% using 2019 as base year

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

When compared to its performance in 2019, the Bank has reduced greenhouse gas emissions from energy use by 6.48%, electricity consumption by 4.97% and general office waste to be disposed to landfill by 16.06% in 2020. This is considered to be a combined result of the environmental reduction initiatives implemented by various business units and the COVID-19 impact of more employees working remotely from home and conducting virtual meetings in the Bank's Hong Kong operations.

It is worthy to note that the recent installation of chilled ceiling air conditioning systems in the Bank's three largest office premises has improved energy efficiency of air-conditioning systems by 25%.

Furthermore, in recognition of its support for the development of renewable energy in Hong Kong, the Bank received the 'Renewable Energy Contribution Award' in CLP's Smart Energy Award 2020.

The Bank's operations comply with all applicable environmental regulations and guidelines in Hong Kong, such as the Waste Disposal Ordinance (Cap. 354). In 2020, no cases of non-compliance with environmental laws or regulations were reported.

Community

The Bank is a long-time advocate of helping to create a civic culture that supports sustainable positive development of the society. The Bank's community investment strategy is designed around the four pillars of 'Future Skills', 'Promoting Sustainable Finance and Financial Literacy', 'Addressing Climate Change' and 'Care for the Community'. Together, they illustrate the Bank's approach in addressing the needs of the community. The 'Addressing Climate Change' pillar was added as a key focus in 2020 to better respond to this pressing global issue and to align with the Bank's environmental management approach. As a responsible corporate citizen, the Bank believes that all enterprises, regardless of industry and size, have an obligation to invest efforts to mitigate climate-related risks and to help protect society against the adverse effects of climate change.

Support for young people continued to be a key priority for the Bank in 2020. Amongst its many initiatives, it is providing members of the young generation, regardless of their socioeconomic background, with future skills learning opportunities to help equip them with the ability to adapt and thrive in a fast-changing environment.

In response to the COVID-19-related school closures, the Bank offered timely assistance to young students in need. It co-led establishment of the 'Hang Seng Academic Assistance Programme' with St. James' Settlement, which also involved participation from seven other charitable organisations and 13 primary schools. The Programme provided tutoring and other academic support to disadvantaged primary and lower secondary school students whose schooling had been interrupted. More than 4,600 underprivileged students benefitted from tutoring and counselling. The day-care services offered to families enabled parents to continue working while their children were out of school. The Programme also donated laptops, schoolbags and provided food subsidies to students.

The COVID-19 pandemic along with subsequent social distancing requirements and safeguards had a significant impact on delivery of the Bank's community investment programmes and activities during the year. With the safety and good health of everyone in Hong Kong as its top priority, the Bank took an agile and flexible approach to finding ways to continue to support the community by refining existing initiatives and developing new ones. It collaborated with NGOs to understand the needs of different groups and successfully carried out many of its community programmes via a mix of online and offline channels. Some activities were conducted online in the form of virtual classes and workshops. The Bank also mobilised its employee volunteers to make phone calls to the elderly to provide emotional support and offer advice on hygiene and other pandemic-related protective measures.

During the year the Bank invested more than HK$30 million in its community investment programmes, bringing the total amount in the past 10 years to HK$282 million.

Health and Safety

The Bank commits to ensure a best in class occupational health and safety workplace environment. To achieve this, the Bank developed a BS OHSAS 18001:2007 Occupational Health and Safety Management System ('OHSMS'), with an aim to minimise the occupational health and safety associated risk to staff, customers and contractors with its business activities within the Bank's premises. In 2020, the Bank successfully upgraded its BS OHSAS 18001:2007 certification to the newly launched ISO 45001 OHSMS.

The Bank's proactive strategies are aimed at enhancing the health and safety, wellbeing of the Bank staff 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;
– enhancing an integrated work health and safety management system;
– 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 using the hierarchy of controls;
– providing effective information, wellbeing programs and training for the Bank staff;
– 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;
– 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 to report unsafe conditions and practices immediately. The Bank staff are also required to comply with the Occupational Health and Safety Act that applies to the work being performed as well as all safe policies 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 implements a Contingency Plan for Communicable Disease, which sets out the actions to be taken by various units in response to the occurrence of a serious communicable disease. In addition, the Bank keeps an adequate stock of hygiene consumables, such as cleaning products, face masks, and etc, to cater for the needs of its staff in response to an outbreak of influenza pandemic. 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 serious communicable disease.

In 2020, the Bank implemented 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 2020, please refer to its 2020 Environmental, Social and Governance Report to be made available on the Bank's website (www.hangseng.com) by June 2021.

Other Information

Organisational Structure

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

Businesses	Functions	
Wealth and Personal Banking	Audit	Legal
Commercial Banking	Communications	Marketing
Global Banking	Corporate Governance & Secretariat	Regulatory Compliance
Global Markets	Corporate Sustainability	Risk
	Financial Control	Digital Business Services
	Financial Crime Compliance	Strategic Planning and Corporate Development
	Human Resources	

Biographical Details of Directors and Senior Management

Board of Directors

Dr Raymond CH'IEN Kuo Fung GBS, CBE, JP INDEPENDENT NON-EXECUTIVE CHAIRMAN AGED 69

Joined the Board since August 2007

Other positions held within Hang Seng Group

∧ Hang Seng Bank Limited
– Chairman of Nomination Committee;
Member of Remuneration Committee

Other major appointments

Justice of the Peace
∧ China Resources Power Holdings Company Limited
– Independent Non-executive Director
Federation of Hong Kong Industries – Honorary President
Hong Kong CPPCC (Provincial) Members Association Limited
– Deputy Director of One Belt One Road and Guangdong-Hong Kong-Macau Greater Bay Area Construction Advisory Committee
Swiss Re Asia Pte. Ltd. – Independent Non-executive Director
∧ Swiss Re Limited – Independent Non-executive Director

Past major appointments

The Hongkong and Shanghai Banking Corporation Limited
– Independent Non-executive Director (1997 – 2020) (Note 1)
Economic Development Commission of HKSAR Government
– Non-official Member (2013 – 2018)
The Tianjin Municipal Committee of the Chinese People's Political Consultative Conference
– Member of Standing Committee (2008 – 2018)
University of Pennsylvania, USA – Trustee (2006 – 2016)
∧ MTR Corporation Limited
– Non-executive Chairman (2003 – 2015)
∧ The Wharf (Holdings) Limited
– Independent Non-executive Director (2002 – 2015)
∧ UGL Limited – Non-executive Director (2012 – 2014)
∧ Convenience Retail Asia Limited
– Independent Non-executive Director (2001 – 2014)
Hong Kong Mercantile Exchange Limited
– Independent Non-executive Director (2009 – 2013)
∧ China.com Inc – Chairman (1999 – 2013)
Ascendas China Commercial Fund Management Limited
– Chairman (2011 – 2012)
∧ CDC Software Corporation – Director (2009 – 2012)
The Hong Kong/European Union Business Cooperation Committee
– Chairman (2005 – 2012)
∧ CDC Corporation – Chairman (1999 – 2011)
HSBC Private Equity (Asia) Limited – Chairman (1997 – 2010)
The APEC Business Advisory Council
– Hong Kong Member (2004 – 2009)
∧ Inchcape plc
– Independent Non-executive Director (1997 – 2009)
∧ HSBC Holdings plc
– Independent Non-executive Director (1998 – 2007)
Independent Commission Against Corruption
– Chairman of Advisory Committee on Corruption (1998 – 2006)
Executive Council of HKSAR Government – Member (1997 – 2002)
Executive Council of Hong Kong, then under British Administration
– Member (1992 – 1997)

Qualifications

Doctoral Degree in Economics – University of Pennsylvania, USA

Major awards

Chevalier de l'Ordre du Merite Agricole of France (2008)
Gold Bauhinia Star (1999)
Commander in the Most Excellent Order of the British Empire (1994)

Ms Louisa CHEANG Wai Wan VICE-CHAIRMAN AND CHIEF EXECUTIVE AGED 57

Joined the Board since July 2017

Other positions held within Hang Seng Group

∧ Hang Seng Bank Limited
– Chairman of Executive Committee;
Member of Nomination Committee
Hang Seng Bank (China) Limited
– Chairman; Chairman of Nomination Committee
Hang Seng Indexes Company Limited
– Chairman of Hang Seng Index Advisory Committee
Chairman of other subsidiaries in Hang Seng Group

Other major appointments

China Union Pay – International Advisor
Hang Seng School of Commerce
– Chairman of the Board of Directors
Ho Leung Ho Lee Foundation – Member of Board of Trustees
∧ HSBC Holdings plc – Group General Manager
Jiangsu Service Association for Hong Kong Enterprise Investment
– Honorary President
Qianhai & Shekou Area of Shenzhen, China (Guangdong) Pilot Free Trade Zone, and Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone of Shenzhen
– Member of the Consulting Committee
The Community Chest of Hong Kong
– Board Member; Member of Executive Committee
The Hang Seng University of Hong Kong
– Chairman of the Board of Governors
The Hong Kong Institute of Bankers – Vice President
The Twelfth Jiangsu Provincial Committee of the Chinese People's Political Consultative Conference – Member
The University of Hong Kong – Member of the Court
∧ Treasury Wine Estates Limited
– Independent Non-executive Director

Past major appointments

The Hongkong and Shanghai Banking Corporation Limited
– Director (2017 – 2020) (Note 1)
Alternate Chief Executive (2009 – 2014)
Regional Head of Retail Banking and Wealth Management, Asia Pacific (2010 – 2014)
Regional Director of Personal Financial Services, Asia Pacific (2009 – 2010)
Head of Personal Financial Services, Hong Kong (2007 – 2009)
Head of Marketing, Asia Pacific (2004 – 2007)
Head of Marketing, Hong Kong (2002 – 2003)
Senior Manager Product and Marketing (2000 – 2001)
Senior Manager Credit Card Product Development (1999 – 2000)
HSBC Amanah Malaysia Berhad
– Non-Independent Executive Director (2017 – 2018)
HSBC – Group Head of Retail Banking (2014 – 2017)

Qualifications

Bachelor of Social Sciences – The University of Hong Kong
Honorary Certified Financial Management Planner
– The Hong Kong Institute of Bankers

Major awards

Chapter Honoree of Beta Gamma Sigma
– The University of Hong Kong Chapter (2018)

Dr John CHAN Cho Chak GBS, JP INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 77

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; Second Vice President and Campaign Committee Chairman; 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

∧ RoadShow Holdings Limited
- Chairman and Non-executive Director (2001 – 2017)

∧ Swire Properties Limited
- Independent Non-executive Director (2010 – 2017)

The Community Chest of Hong Kong
- Third Vice President and Public Relations Committee Chairman (2014 – 2015)

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)

Ms CHIANG Lai Yuen JP INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 55

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

Aviation Development and Three-runway System Advisory Committee – Member

∧ Chen Hsong Holdings Limited
- Chairman; Executive Director; Chief Executive Officer

Chen Hsong Investments Limited – Director

China Shenzhen Machinery Association – Vice-President

Federation of Shenzhen Industries – Vice-Chairman

The Shenzhen Committee of the Chinese People's Political Consultative Conference
- Member of Standing Committee

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 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)

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

Ms Kathleen GAN Chieh Huey NON-EXECUTIVE DIRECTOR AGED 46

Joined the Board since May 2019

Other major appointments

HSBC Bank (China) Company Limited – Supervisor
HSBC Global Services Limited – Director
∧ HSBC Holdings plc – Group 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

Ms Margaret KWAN Wing Han

EXECUTIVE DIRECTOR AND HEAD OF WEALTH AND PERSONAL BANKING AGED 61

Joined the Board since May 2017

Other positions held within Hang Seng Group

∧ Hang Seng Bank Limited – Member of Executive Committee
Hang Seng Bank (Trustee) Limited – Director
Hang Seng Credit Limited – Director
Hang Seng Finance Limited – Director
Hang Seng Indexes Company Limited
– Member of Hang Seng Index Advisory Committee
Hang Seng Insurance Company Limited – Director
Hang Seng Investment Management Limited – Director
Hang Seng Securities Limited – Chairman
Hang Seng Security Management Limited – Director
Haseba Investment Company Limited – Director

Other major appointments

Employers' Federation of Hong Kong
– Elected Member of General Committee
Securities and Futures Commission
– Member of Process Review Panel

Past major appointments

∧ Hang Seng Bank Limited
– Head of Consumer Assets (2013 – 2016)
Head of Unsecured Loans (2005 – 2013)
Senior Marketing and Business Development Manager, Unsecured Lending (2002 – 2005)
Senior Marketing Communications Manager (2001 – 2002)
Manager, Marketing Communications (1995 – 2001)
∧ Standard Chartered Bank – Advertising Manager (1990 – 1994)

Qualifications

Bachelor of Social Sciences in Business Studies
– The University of Hong Kong

Ms Irene LEE Yun Lien INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 67

Joined the Board since May 2014

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited
- Chairman of Risk Committee;
  Member of Audit Committee;
  Member of Nomination Committee (Note 1)

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 Group Remuneration 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

^ 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

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

Dr Eric LI Ka Cheung GBS, OBE, JP INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 67

Joined the Board since February 2000

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited
– Chairman of Audit Committee;
Member of Risk Committee

Other major appointments

Justice of the Peace
^ China Resources Beer (Holdings) Company Limited
– Independent Non-executive Director;
Chairman of Audit Committee
Hang Seng School of Commerce – Director
Hong Kong Children Foundation Limited – Honorary Chairman
Long Win Bus Company Limited – Director
SHINEWING (HK) CPA Limited – Honorary Chairman
^ SmarTone Telecommunications Holdings Limited
– Independent Non-executive Director;
Chairman of Audit Committee
^ Sun Hung Kai Properties Limited
– Independent Non-executive Director;
Chairman of Audit Committee
The Education University of Hong Kong Foundation
– Member of the Board of Stewards
The Hang Seng University of Hong Kong – Governor
The Hong Kong Jockey Club
– Steward; Chairman of Audit Committee
The Kowloon Motor Bus Company (1933) Limited – Director
The Thirteenth National Committee of the Chinese People's Political Consultative Conference – Member
^ Transport International Holdings Limited
– Independent Non-executive Director;
Chairman of Audit Committee
^ Wong's International Holdings Limited
– Independent Non-executive Director;
Chairman of Audit Committee

Past major appointments

Legal Aid Services Council – Chairman (2012 – 2019)
Li, Tang, Chen & Co, Certified Public Accountants
– Senior Partner (1978 – 2019)
Independent Commission on Remuneration for the Members of the District Councils of HKSAR Government
– Chairman (2013 – 2019)
Home Affairs Bureau
– Member of the Board of Trustees of the Sir Edward Youde Memorial Fund (2017 – 2019)
The Financial Reporting Council
– Member of Honorary Advisory Panel (2013 – 2019)
Convenor and Member of Financial Reporting Review Committee (2007 – 2013)
^ RoadShow Holdings Limited –
– Independent Non-executive Director (2004 – 2017)
Chairman of Audit Committee (2005 – 2017)
The Education University of Hong Kong
– Chairman of Finance Committee;
Treasurer of the Council (2009 – 2015)
The Presidium of the Election of Deputies of the Hong Kong Special Administrative Region to the Twelfth National People's Congress – Member (2013)
^ Bank of Communications Co., Ltd.
– Independent Non-executive Director;
Chairman of Audit Committee (2007 – 2013)
HKSAR Commission on Strategic Development
– Member (2007 – 2013)
Hong Kong Monetary Authority
– Chairman of Process Review Committee (2004 – 2010)
Meadville Holdings Limited
– Independent Non-executive Director;
Chairman of Remuneration Committee (2007 – 2010)
The International Federation of Accountants
– Board Member (2004 – 2006)
The Legislative Council of Hong Kong
– Member (1991 – 2004)
Chairman of Public Accounts Committee (1995 – 2004)

Qualifications

BA (Economics) Honours Degree – University of Manchester, UK
Fellow – Hong Kong Institute of Certified Public Accountants
Hon Doctor of Laws – University of Manchester, UK
Hon Doctor of Social Sciences – Hong Kong Baptist University
Hon Doctor of Social Sciences
– The Education University of Hong Kong
Hon Fellow – The Chinese University of Hong Kong
Hon Fellow – The Hong Kong Polytechnic University

Major awards

Gold Bauhinia Star (2003)
Officer of the Most Excellent Order of the British Empire (1996)

Dr Vincent LO Hong Sui GBM, JP NON-EXECUTIVE DIRECTOR AGED 72

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)

Mr Kenneth NG Sing Yip NON-EXECUTIVE DIRECTOR AGED 70

Joined the Board since March 2014

Other positions held within Hang Seng Group

^ Hang Seng Bank Limited – Member of Risk Committee

Other major appointments

Hong Kong General Chamber of Commerce
– Vice Chairman of Legal Committee
HSBC Bank Australia Limited
– Independent Non-executive Director;
Member of Audit Committee;
Member of Nomination Committee
HSBC Bank (Vietnam) Ltd. – Chairman of Board of Supervision
^ Ping An Insurance (Group) Company of China, Ltd.
– Independent Non-executive Director
The University of Hong Kong
– Member of Asian Institute of International Financial Law Advisory Board of the Faculty of Law

Past major appointments

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

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

Mr Peter WONG Tung Shun GBS, JP NON-EXECUTIVE DIRECTOR AGED 69

Joined the Board since May 2005

Other positions held within Hang Seng Group

∧ Hang Seng Bank Limited – Member of Nomination Committee

Other major appointments

Justice of the Peace
Hong Kong General Chamber of Commerce
– Chairman; Chairman of Chairman's Committee; Chairman of General Committee; Chairman of Membership Committee
Hong Kong Monetary Authority
– Member of The Exchange Fund Advisory Committee
Hong Kong Trade Development Council
– Council Member; Member of Belt and Road Committee
HSBC Bank (China) Company Limited
– Chairman and Non-executive Director; Member of Nomination Committee; Member of Remuneration Committee
∧ HSBC Holdings plc
– Group Managing Director; Member of Group Executive Committee
Our Hong Kong Foundation Limited – Special Counsellor
Qianhai & Shekou Area of Shenzhen, China (Guangdong) Pilot Free Trade Zone, and Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone of Shenzhen
– Member of the Consulting Committee
The Hongkong and Shanghai Banking Corporation Limited
– Deputy Chairman and Chief Executive; Executive Director
The Hong Kong Institute of Bankers – President
The Thirteenth National Committee of the Chinese People's Political Consultative Conference
– Member; Vice Chairman of Committee for Agricultural and Rural Affairs

Past major appointments

HSBC Bank (China) Company Limited
– Chairman of Nomination Committee (2012 – 2020) (Note 1)
Chongqing Mayor's International Economic Advisory Council
– Member (2010 – 2020) (Note 1)
The Community Chest of Hong Kong
– Board Member (2014 – 2020)
First Vice President and Executive Committee Chairman (2015 – 2020)
International Consultative Conference on the Future Economic Development of Guangdong Province
– Economic Advisor to the Governor of Guangdong Province of the People's Republic of China (2013 – 2019)
∧ Bank of Communications Co., Ltd.
– Vice Chairman and Non-executive Director (2016 – 2019)
∧ Cathay Pacific Airways Limited
– Independent Non-executive Director (2009 – 2018)
Hong Kong General Chamber of Commerce
– Vice Chairman (2016 – 2018)
Economic Development Commission of HKSAR Government
– Non-official Member (2013 – 2018)
HSBC Bank Malaysia Berhad
– Non-Independent Executive Director (2017 – 2018)
The Eleventh Hubei Provincial Committee of the Chinese People's Political Consultative Conference
– Member (2012 – 2018)
Member of Standing Committee (2013 – 2018)
International Advisor to the Mayor of Tianjin (2010 – 2013)
Greater Pearl River Delta Business Council
– Member (2006 – 2013)
HSBC Bank (Vietnam) Ltd
– Vice-Chairman and Non-executive Director (2010 – 2012)
∧ Ping An Insurance (Group) Company of China, Ltd.
– Non-executive Director (2006 – 2012)
Hong Kong Institute for Monetary Research
– Member of the Board of Directors (2010 – 2011)
HSBC Bank Australia Limited
– Non-executive Director (2010 – 2011)
∧ Hong Kong Exchanges and Clearing Limited
– Member of Risk Management Committee (2010)
Hong Kong Trade Development Council
– Chairman of Financial Services Advisory Committee (2006 – 2010)
Hong Kong Monetary Authority
– Member of Banking Advisory Committee (2005 – 2010)
The Hong Kong Association of Banks
– Chairman (2001, 2004, 2006 and 2009)

Qualifications

Bachelor's Degree in Computer Science; MBA in Marketing and Finance; MSc in Computer Science – Indiana University, USA
Fellow – The Hong Kong Management Association
Honorary Fellow – The Hong Kong Institute of Bankers

Major awards

Gold Bauhinia Star (2020)

Mr Michael WU Wei Kuo INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 50

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 (Note 1)

^ 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)

Notes:

1 New appointments or cessation of appointments since the date of the Bank's 2020 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 2020 are disclosed in the section 'Directors' and Alternate Chief Executives' Interests' of the Report of the Directors attached to the Bank's 2020 Annual Report.

3 Some Directors (as disclosed in the section 'Biographical Details of Directors and Senior Management – Board of Directors' of the Bank's 2020 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 2020 Annual Report.

4 Save as disclosed in the section 'Biographical Details of Directors and Senior Management – Board of Directors' of the Bank's 2020 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 Mr Michael W K Wu's spouse is the niece of Dr 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 2020 Annual Report.

8 None of the Directors, except Ms Margaret W H Kwan, has signed service contract with the Bank. The term of appointment of Non-executive Directors (including Independent Non-executive Directors) is three years except that where a Non-executive Director (or an Independent Non-executive Director) has served on the Board for more than nine years, then his/her term of appointment is one year.

9 Biographical details of Directors of the Bank are also available on the website of the Bank at www.hangseng.com.

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

Senior Management

From left to right

Mr Donald Y S Lam Head of Commercial Banking
Ms Margaret W H Kwan Executive Director and Head of Wealth and Personal Banking
Ms Louisa W W Cheang Vice-Chairman and Chief Executive
Mr Andrew W L Leung Chief Financial Officer
Ms Liz T L Chow Head of Global Markets
Ms Rose M Cho Head of Global Banking

Senior Management

Ms Louisa CHEANG Wai Wan VICE-CHAIRMAN AND CHIEF EXECUTIVE

(Biographical details are set out on page 148)

Ms Margaret KWAN Wing Han EXECUTIVE DIRECTOR AND HEAD OF WEALTH AND PERSONAL BANKING

(Biographical details are set out on page 150)

Mrs Eunice CHAN CHIEF OPERATING OFFICER AGED 58

Joined the Bank since March 2016

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 (Nominee) Limited – Director
Hang Seng Real Estate Management Limited – Director
Hang Seng Securities Limited – Director
Hang Seng Security Management Limited – Director

Past major positions

The Hongkong and Shanghai Banking Corporation Limited
- Head of Operations Asia Pacific (2015 – 2016)
  Regional Head of Service Delivery Asia Pacific (2012 – 2015)
  Head of Service Delivery Hong Kong (2011 – 2012)
  Head of Securities Operations Centre (2007 – 2011)
  Senior Manager, Network Services Centre Operations (2004 – 2007)
  Manager, Implementation (Payment and Cash Management) (2001 – 2004)

Qualifications

Bachelor of Arts (Major in Economics) – University of Brandon, Canada

Ms Crystal CHEUNG Pui Sze HEAD OF FINANCIAL CRIME COMPLIANCE AGED 41

Joined the Bank since June 2019

Major positions held within Hang Seng Group

Hang Seng Bank Limited
- Head of Financial Crime Compliance; Member of Executive Committee

Past major positions

The Hongkong and Shanghai Banking Corporation Limited
- Regional Head of Regulatory Compliance,
  Global Trade and Receivables Finance, Asia Pacific (2018 – 2019)
  Regional Head of Financial Crime Compliance,
  Commercial Banking, Asia Pacific (2013 – 2018)
  Senior Anti-Money Laundering Manager, Asia Pacific (2007 – 2013)

Standard Chartered Bank (Hong Kong) Limited
- Compliance Advisor, Anti-Money Laundering (2005 – 2007)

PrimeCredit Limited – Compliance Manager (2004 – 2005)
Hutchison Whampoa Limited
- Officer, Group Management Services (2002 – 2004)

KPMG, Hong Kong – Accountant (2001 – 2002)

Qualifications

Bachelor of Economics and Finance – The University of Hong Kong
Fellow – The Association of Chartered Certified Accountants, UK
Member of Associate Anti-Money Laundering Professional
- Hong Kong Institute of Bankers

Ms Rose CHO Mui HEAD OF GLOBAL BANKING AGED 49

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

Ms Liz CHOW Tan Ling HEAD OF GLOBAL MARKETS AGED 47

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

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

Mr Donald LAM Yin Shing HEAD OF COMMERCIAL BANKING AGED 57

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

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

Mr Gilbert LEE Man Lung HEAD OF STRATEGY & PLANNING AND CHIEF OF STAFF TO CE AGED 43

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

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
Associate – 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

Mr Andrew LEUNG Wing Lok CHIEF FINANCIAL OFFICER AGED 58

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

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 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

Note: Definition of senior management is set out in the 'Corporate Governance Report' section in this Annual Report.

Senior Management

Mr Godwin LI Chi Chung COMPANY SECRETARY AND GENERAL COUNSEL AGED 56

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 (Nominee) 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

Mr Ryan SONG Yue Sheng VICE-CHAIRMAN AND CHIEF EXECUTIVE OF HANG SENG BANK (CHINA) LIMITED AGED 47

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

Mr Christopher TSANG Hing Keung HEAD OF REGULATORY COMPLIANCE AGED 54

Joined the Bank since April 2020

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Head of Regulatory Compliance; Member of Executive Committee
Hang Seng Investment Management Limited – Director
Hang Seng Investment Services Limited – Director
Hang Seng Securities Limited – Director

Past major positions

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

Ms Elaine WANG Yee Ning HEAD OF HUMAN RESOURCES AGED 59

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

Ms WONG May Kay HEAD OF COMMUNICATIONS AND CORPORATE SUSTAINABILITY AGED 58

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

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

Mr YEO Chee Leong CHIEF RISK OFFICER AGED 51

Joined the Bank since January 2018

Major positions held within Hang Seng Group

Hang Seng Bank Limited
- Chief Risk Officer; Member of Executive Committee

Hang Seng Investment Management Limited – Director
Hang Seng Investment Services Limited – Director
Hang Seng Securities Limited – Director
Hang Seng Security Management Limited – Director

Past major positions

Hang Seng Bank Limited
- Head of Wholesale Credit and Market Risk (2018 – 2019)

Australia and New Zealand Banking Group Limited
- Held various positions including Acting Chief Risk Officer, Hong Kong and North East Asia; Regional Head of Credit, North Asia (2015 – 2018)

The Hongkong and Shanghai Banking Corporation Limited
- Senior Manager of Wholesale Credit and Market Risk, Asia Pacific (2013 – 2015)
  Head of Wholesale Credit and Market Risks, Singapore (2009 – 2013)
  Senior Vice-President and Sector Head of Commercial Banking, Singapore (2007 – 2009)
  Senior Vice-President and Head of Trade Services of Middle Office, Singapore (2004 – 2006)
  Vice President of Corporate Banking, Singapore (2000 – 2004)

Sumitomo Mitsui Banking Corporation, Singapore
- Head of Credit, Global Trade Finance Department (2006 – 2007)

DBS Bank, Singapore – Held various positions including Assistant Vice-President (1993 – 2000)

Qualifications

Bachelor of Business – Nanyang Technological University, Singapore
Master of Applied Finance – Macquarie University, Australia

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 2020.

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 2020, an indication of likely future development in the Group's business, a discussion of the Group's environmental policies and performance, and its compliance with the relevant laws and regulations that have a significant impact on the Group and an account of the Group's key relationships with its employees, customers and suppliers that have a significant impact on the Group can be found in the sections 'Five-Year Financial Summary', 'Chairman's Statement', 'Chief Executive's Report', 'Management Discussion and Analysis' and 'Corporate Governance Report' of this Annual Report. The aforesaid form part of this report.

Profits and Dividends

The consolidated profit of the Bank and its subsidiaries and associates for the year is set out under the consolidated income statement of this Annual Report.

The Directors declared and paid the first to third interim dividends of HK$2.70 (2019: HK$4.20) per share totalling HK$5,161m (2019: HK$8,031m) during the year. The Directors also declared the fourth interim dividend of HK$2.80 per share totalling HK$5,353m (2019: HK$4.00 per share totalling HK$7,647m), which will be paid on 25 March 2021.

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 2020 are set out in note 30 to the financial statements for the year ended 31 December 2020.

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 2020.

Equity-linked Agreements

For the year ended 31 December 2020, 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 2020, calculated under Part 6 of the Hong Kong Companies Ordinance, amounted to HK$99,841m (2019: HK$94,427m). 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 Dr Raymond K F Ch'ien, Ms Louisa Cheang, Dr John C C Chan, Ms L Y Chiang, Ms Kathleen C H Gan, Ms Margaret W H Kwan, Ms Irene Y L Lee, Dr Eric K C Li, Dr Vincent H S Lo, Mr Kenneth S Y Ng, Mr Peter T S Wong and Mr Michael W K Wu.

Mr Nixon L S Chan retired from the Board with effect from the conclusion of the Bank's 2020 Annual General Meeting ('AGM') held on 22 May 2020.

All the Directors, who were in office on the date of this report, had served on the Board of the Bank throughout the year.

As announced by the Bank on 4 January 2021, Dr Raymond K F Ch'ien will retire as Director of the Bank and will cease to be the Chairman of the Board with effect from the conclusion of the Bank's 2021 AGM ('2021 AGM') to be held in Q2 2021, in order to devote more time to his other commitments and areas of interest. The Board has resolved to appoint Ms Irene Y L Lee, currently an Independent Non-executive Director of the Bank, to succeed Dr Ch'ien as the Chairman of the Board with effect from the conclusion of the 2021 AGM. Notice of the 2021 AGM will be sent to shareholders at least 20 clear business days before the AGM.

The Directors who are required to retire by rotation pursuant to the Bank's Articles of Association at the 2021 AGM are : Ms Louisa Cheang, Ms Margaret W H Kwan, Ms Irene Y L Lee and Mr Peter T S Wong.

No Director proposed for re-election at the 2021 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 2020 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 2020, 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						
Directors:						
Dr John C C Chan	1,000[1]	–	–	–	1,000	0.00
Ms Kathleen C H Gan	2,500	–	–	–	2,500	0.00
Ms Margaret W H Kwan	65	–	–	–	65	0.00
Number of ordinary shares of US$0.50 each in HSBC Holdings plc						
Directors:						
Dr Raymond K F Ch'ien	59,799	–	–	–	59,799	0.00
Ms Louisa Cheang	557,085	–	–	213,883[2]	770,968	0.00
Dr John C C Chan	24,605[1]	–	–	–	24,605	0.00
Ms Kathleen C H Gan	313,245	–	–	77,852[2]	391,097	0.00
Ms Margaret W H Kwan	83,479	10,041	–	23,543[2]	117,063	0.00
Ms Irene Y L Lee	11,904	–	–	–	11,904	0.00
Dr Eric K C Li	–	64,813	–	–	64,813	0.00
Mr Kenneth S Y Ng	440,723	–	–	–	440,723	0.00
Mr Peter T S Wong	2,601,899	27,442	–	1,053,482[2]	3,682,823	0.02
Mr Michael W K Wu	–	100,000	–	–	100,000	0.00
Alternate Chief Executives:						
Mrs Eunice L C Y Chan	24,432	–	–	12,571[2]	37,003	0.00
Mr Donald Y S Lam	171,126	–	–	28,747[2]	199,873	0.00
Mr Andrew W L Leung	12,866	–	–	20,296[2]	33,162	0.00

Notes:

[1] 1,000 shares in the Bank and 4,371 shares in HSBC Holdings plc were jointly held by Dr 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.

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 2020, were as follows:

	Awards held as at 1 January 2020	Awards made during the Director's/Alternate Chief Executive's term of office in 2020	Awards released during the Director's/Alternate Chief Executive's term of office in 2020	Awards held as at 31 December 2020
Directors:				
Ms Louisa Cheang	190,431	130,028	106,576	213,883
Ms Kathleen C H Gan	55,573	76,899	54,620	77,852
Ms Margaret W H Kwan	20,104	30,073	26,634	23,543
Mr Peter T S Wong	441,157	309,853	244,063	506,947
Alternate Chief Executives:				
Mrs Eunice L C Y Chan	12,228	6,660	6,317	12,571
Mr Donald Y S Lam	23,905	28,997	24,155	28,747
Mr Andrew W L Leung	20,824	9,247	9,775	20,296

During the year, Ms Kathleen C H Gan, Mrs Eunice L C Y Chan and Mr 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 2020, 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 2020.

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:

Ms Louisa Cheang is a Group General Manager of HSBC Holdings plc and was a Director of The Hongkong and Shanghai Banking Corporation Limited for the period up to 10 August 2020.

Ms Kathleen C H Gan is a Group General Manager and Head of Finance of HSBC Holdings plc. She is also the Supervisor of HSBC Bank (China) Company Limited, which is a wholly-owned subsidiary of The Hongkong and Shanghai Banking Corporation Limited.

Mr 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.

Mr Peter T S Wong is a Group Managing Director and a member of Group Executive Committee of HSBC Holdings plc. He is also the Deputy Chairman, Chief Executive and Executive Director of The Hongkong and Shanghai Banking Corporation Limited; and Chairman and Non-executive Director of HSBC Bank (China) Company 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 six 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 three 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 2020.

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 2020, 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 2020, 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 2020 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 2021 AGM.

On behalf of the Board

Raymond Ch'ien
Chairman
Hong Kong, 23 February 2021

2020 Financial Statements

Consolidated Income Statement

for the year ended 31 December 2020
(Expressed in millions of Hong Kong dollars)

	note	2020	2019
Interest income	3	**35,697**	44,190
Interest expense	3	**(8,791)**	(11,935)
Net interest income		**26,906**	32,255
Fee income		**8,588**	9,072
Fee expense		**(2,221)**	(2,619)
Net fee income	4	**6,367**	6,453
Net income from financial instruments measured at fair value through profit or loss	5	**3,320**	3,702
Gains less losses from financial investments	6	**(10)**	22
Dividend income	7	**157**	143
Net insurance premium income	8	**15,301**	15,652
Other operating income	9	**2,281**	5,114
Total operating income		**54,322**	63,341
Net insurance claims and benefits paid and movement in liabilities to policyholders	10	**(18,254)**	(19,827)
Net operating income before change in expected credit losses and other credit impairment charges		**36,068**	43,514
Change in expected credit losses and other credit impairment charges	11	**(2,738)**	(1,837)
Net operating income		**33,330**	41,677
Employee compensation and benefits		**(6,102)**	(6,229)
General and administrative expenses		**(4,720)**	(4,692)
Depreciation expenses		**(2,086)**	(1,972)
Amortisation of intangible assets		**(297)**	(164)
Operating expenses	12	**(13,205)**	(13,057)
Impairment loss on intangible assets		**–**	(10)
Operating profit		**20,125**	28,610
Net surplus/(deficit) on property revaluation	16	**(636)**	35
Share of profits/(losses) of associates		**(75)**	168
Profit before tax		**19,414**	28,813
Tax expense	17	**(2,744)**	(3,991)
Profit for the year		**16,670**	24,822
Profit attributable to:			
Shareholders of the Bank		**16,687**	24,840
Non-controlling interests		**(17)**	(18)
(Figures in HK$)			
Earnings per share – basic and diluted	18	**8.36**	12.77

The notes on pages 177 to 241 form part of these Financial Statements.

Consolidated Statement of Comprehensive Income

for the year ended 31 December 2020
(Expressed in millions of Hong Kong dollars)

	2020	2019
Profit for the year	**16,670**	24,822
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 changes taken to equity	**759**	771
– fair value changes transferred to income statement:		
– on hedged items	**(663)**	(760)
– on disposal	**(3)**	(26)
– expected credit losses recognised in income statement	**(2)**	6
– deferred taxes	**(4)**	1
– exchange difference	**4**	(3)
Cash flow hedge reserve:		
– fair value changes taken to equity	**(823)**	344
– fair value changes transferred to income statement	**1,115**	(312)
– deferred taxes	**(48)**	(5)
Exchange differences on translation of:		
– financial statements of overseas branches, subsidiaries and associates	**854**	(238)
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		
– before deferred taxes	**(1)**	(7)
– deferred taxes	**–**	2
Equity instruments designated at fair value through other comprehensive income:		
– fair value changes taken to equity	**920**	1,808
– exchange difference	**250**	(71)
Premises:		
– unrealised surplus/(deficit) on revaluation of premises	**(1,542)**	888
– deferred taxes	**252**	(150)
– exchange difference	**19**	(7)
Defined benefit plans:		
– actuarial gains/(losses) on defined benefit plans	**(10)**	252
– deferred taxes	**2**	(41)
Exchange difference and others[1]	**–**	(76)
Other comprehensive income for the year, net of tax	**1,079**	2,376
Total comprehensive income for the year	**17,749**	27,198
Total comprehensive income for the year attributable to:		
– shareholders of the Bank	**17,766**	27,216
– non-controlling interests	**(17)**	(18)
	17,749	27,198

[1] Include mainly exchange difference arising from cancellation of additional tier 1 ('AT1') capital instrument during 2019.

The notes on pages 177 to 241 form part of these Financial Statements.

Consolidated Balance Sheet

at 31 December 2020
(Expressed in millions of Hong Kong dollars)

	note	2020	2019
ASSETS			
Cash and balances at central banks	22	**11,226**	13,038
Trading assets	23	**37,117**	47,357
Derivative financial instruments	24	**17,181**	7,338
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	25	**20,695**	18,771
Reverse repurchase agreements – non-trading		**13,360**	6,659
Placings with and advances to banks	26	**44,357**	65,807
Loans and advances to customers	27	**944,774**	942,930
Financial investments	28	**554,720**	461,704
Interest in associates	31	**2,358**	2,520
Investment properties	32	**9,415**	10,121
Premises, plant and equipment	32	**30,925**	32,362
Intangible assets	33	**24,733**	21,954
Other assets	34	**48,926**	46,430
Total assets		**1,759,787**	1,676,991
LIABILITIES AND EQUITY			
Liabilities			
Deposits from banks		**12,943**	2,491
Current, savings and other deposit accounts	35	**1,209,472**	1,203,458
Repurchase agreements – non-trading		**6,270**	1,878
Trading liabilities	36	**30,937**	37,976
Derivative financial instruments	24	**20,861**	7,462
Financial liabilities designated at fair value	37	**32,530**	29,580
Certificates of deposit and other debt securities in issue	38	**62,500**	17,190
Other liabilities	39	**31,334**	35,183
Liabilities under insurance contracts	40	**142,680**	132,120
Current tax liabilities	41	**282**	4,159
Deferred tax liabilities	41	**7,302**	7,083
Subordinated liabilities	42	**19,481**	19,494
Total liabilities		**1,576,592**	1,498,074
Equity			
Share capital	43	**9,658**	9,658
Retained profits		**137,580**	133,734
Other equity instruments	44	**11,744**	11,744
Other reserves		**24,118**	23,674
Total shareholders' equity		**183,100**	178,810
Non-controlling interests		**95**	107
Total equity		**183,195**	178,917
Total equity and liabilities		**1,759,787**	1,676,991

Raymond Ch'ien *Chairman*
Louisa Cheang *Vice-Chairman and Chief Executive*
Eric K C Li *Director*

Andrew W L Leung *Chief Financial Officer*

The notes on pages 177 to 241 form part of these Financial Statements.

Consolidated Statement of Changes in Equity

for the year ended 31 December 2020
(Expressed in millions of Hong Kong dollars)

				Other reserves							
	Share capital	Other equity instruments	Retained profits[1]	Premises revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Others[2]	Total shareholders' equity	Non-controlling interests	Total equity
At 1 January 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[3]	–	–	(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 2020, the effect of this requirement is to restrict the amount of reserves which can be distributed by the Group to shareholders by HK$1,323m (2019: HK$3,509m).

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 2019 and the first three interim dividends of 2020 amounted to HK$7,647m and HK$5,161m respectively.

Consolidated Statement of Changes in Equity continued

for the year ended 31 December 2020
(Expressed in millions of Hong Kong dollars)

	Share capital	Other equity instruments	Retained profits[1]	Other reserves: Premises revaluation reserve	Other reserves: Financial assets at FVOCI reserve	Other reserves: Cash flow hedge reserve	Other reserves: Foreign exchange reserve	Other reserves: Others[2]	Total shareholders' equity	Non-controlling interests	Total equity
At 1 January 2019	9,658	6,981	123,350	19,822	1,570	(11)	42	670	162,082	25	162,107
Profit for the year	–	–	24,840	–	–	–	–	–	24,840	(18)	24,822
Other comprehensive income (net of tax)	–	–	135	731	1,726	27	(238)	(5)	2,376	–	2,376
Debt instruments at fair value through other comprehensive income	–	–	–	–	(11)	–	–	–	(11)	–	(11)
Equity instruments designated at fair value through other comprehensive income	–	–	–	–	1,737	–	–	–	1,737	–	1,737
Cash flow hedges	–	–	–	–	–	27	–	–	27	–	27
Change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	–	–	–	–	–	–	–	(5)	(5)	–	(5)
Property revaluation	–	–	–	731	–	–	–	–	731	–	731
Actuarial gains on defined benefit plans	–	–	211	–	–	–	–	–	211	–	211
Exchange differences and others	–	–	(76)	–	–	–	(238)	–	(314)	–	(314)
Total comprehensive income for the year	–	–	24,975	731	1,726	27	(238)	(5)	27,216	(18)	27,198
Cancellation and repayment of AT1 capital instrument	–	(6,981)	–	–	–	–	–	–	(6,981)	–	(6,981)
Issue of new AT1 capital instruments	–	11,744	–	–	–	–	–	–	11,744	–	11,744
Dividends paid	–	–	(14,914)	–	–	–	–	–	(14,914)	–	(14,914)
Coupons paid on AT1 capital instruments	–	–	(342)	–	–	–	–	–	(342)	–	(342)
Movement in respect of share-based payment arrangements	–	–	1	–	–	–	–	4	5	–	5
Others	–	–	–	–	–	–	–	–	–	100	100
Transfers	–	–	664	(664)	–	–	–	–	–	–	–
At 31 December 2019	9,658	11,744	133,734	19,889	3,296	16	(196)	669	178,810	107	178,917

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 2020, the effect of this requirement is to restrict the amount of reserves which can be distributed by the Group to shareholders by HK$1,323m (2019: HK$3,509m).

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 2019 and the first three interim dividends of 2020 amounted to HK$7,647m and HK$5,161m respectively.

Consolidated Statement of Cash Flows

for the year ended 31 December 2020
(Expressed in millions of Hong Kong dollars)

	2020	2019
Profit before tax	**19,414**	28,813
Adjustments for non-cash items:		
Depreciation and amortisation	**2,383**	2,136
Net interest income	**(26,906)**	(32,255)
Dividend income	**(157)**	(143)
Gains less losses from financial investment	**10**	(22)
Share of profits/(losses) of associates	**75**	(168)
Net surplus/(deficit) on property revaluation	**636**	(35)
Change in expected credit losses and other credit impairment charges	**2,738**	1,837
Impairment loss on intangible assets	**–**	10
Loans and advances written off net of recoveries	**(987)**	(833)
Movement in present value of in-force long-term insurance business ('PVIF')	**(2,082)**	(4,559)
Interest received	**35,139**	40,464
Interest paid	**(9,425)**	(11,038)
Elimination of exchange differences and other non-cash items	**(11,261)**	(4,420)
Changes in operating assets and liabilities		
Change in trading assets	**10,240**	(193)
Change in derivative financial instruments	**3,556**	(5)
Change in financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**(1,924)**	(5,701)
Change in reverse repurchase agreements – non-trading maturing after one month	**(7,701)**	(1,250)
Change in placings with and advances to banks maturing after one month	**10,054**	7,738
Change in loans and advances to customers	**(9,574)**	(71,369)
Change in other assets	**(1,808)**	(1,172)
Change in repurchase agreements – non trading	**4,392**	1,468
Change in deposits from banks	**10,452**	(221)
Change in current, savings and other deposit accounts	**6,014**	49,043
Change in trading liabilities	**(7,039)**	4,327
Change in financial liabilities designated at fair value	**2,950**	(3,874)
Change in certificates of deposit and other debt securities in issue	**45,310**	13,442
Change in other liabilities	**3,664**	2,989
Change in liabilities under insurance contract	**10,560**	11,925
Dividends received from financial investments	**157**	146
Tax paid	**(6,207)**	(40)
Net cash from operating activities	**82,673**	27,040

Consolidated Statement of Cash Flows continued

for the year ended 31 December 2020
(Expressed in millions of Hong Kong dollars)

	2020	2019
Purchase of financial investments	**(714,554)**	(641,602)
Proceeds from sale or redemption of financial investments	**657,899**	601,272
Repayment of shareholders' loan from an associated company	**2**	2
Purchase of property, plant and equipment and intangible assets (excluding PVIF)	**(2,110)**	(1,734)
Net cash inflow from the sales of loan portfolio	**6,059**	2,057
Net cash from investing activities	**(52,704)**	(40,005)
Interest paid for subordinated liabilities	**(541)**	(371)
Principal and interest elements of lease payments	**(596)**	(546)
Dividends paid	**(12,808)**	(14,914)
Coupons paid on AT1 capital instruments	**(700)**	(342)
Cancellation and repayment of AT1 capital instrument	**–**	(7,058)
Proceeds from issuance of new AT1 capital instruments	**–**	11,744
Proceeds from issuance of subordinated liabilities	**–**	19,494
Net cash from financing activities	**(14,645)**	8,007
Net increase/(decrease) in cash and cash equivalents	**15,324**	(4,958)
Cash and cash equivalents at 1 January	**92,702**	98,061
Exchange differences in respect of cash and cash equivalents	**1,589**	(401)
Cash and cash equivalents at 31 December	**109,615**	92,702
Cash and cash equivalents comprise[1]:		
– cash and balances at central banks	**11,226**	13,038
– balances with banks	**6,039**	5,677
– items in the course of collection from other banks	**5,062**	5,650
– placings with and advances to banks maturing within one month	**30,494**	42,253
– reverse repurchase agreements with banks maturing within one month	**4,409**	5,409
– treasury bills	**54,793**	29,555
– net settlement accounts with banks and cash collateral to banks within one month	**3,908**	(2,129)
– less: items in the course of transmission to other banks	**(6,316)**	(6,751)
	109,615	92,702

[1] At 31 December 2020, the amount of cash and cash equivalents that was not available for use by the Group was HK$28,169m (2019: HK$11,112m), of which HK$11,011m (2019: HK$7,616m) related to mandatory deposits at central banks.

Notes to the Financial Statements

For the year ended 31 December 2020
(Figures expressed in millions of Hong Kong dollars unless otherwise indicated)

1. Basis of preparation

(a) Compliance with Hong Kong Financial Reporting Standards

The consolidated financial statements comprise the financial statements of Hang Seng Bank Limited ('the Bank') and its subsidiaries ('the Group') made up to 31 December 2020. 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 2020

Amendments to HKFRS 16 'Lease'

In June 2020, HKICPA has issued the amendments to HKFRS 16 with effective date 1 June 2020. The amendments provide practical expedient for lessee to account for COVID-19 related rent concessions in profit or loss instead of lease modification. The Group has adopted these amendments retrospectively from 1 January 2020 with insignificant impact.

Interest Rate Benchmark Reform Phase 2

Amendments to HKFRS 9, HKAS 39, HKFRS 7, HKFRS 4 and HKFRS 16 issued in October 2020 represents the second phase of the HKICPA's project on the effects of interest rate benchmark reform, addressing issues affecting financial statements when changes are made to contractual cash flows and hedging relationship as a result of the reform.

Under these amendments, changes made to a financial instrument 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 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.

These amendments apply from 1 January 2021 with early adoption permitted. The Group has adopted these amendments from 1 January 2020 and has made the additional disclosure as required in the amendments. Further information is included in the 'Areas of special interest' section.

(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*' and HKFRS 7 '*Financial Instruments: Disclosures*' concerning the nature and extent of risks relating to insurance contracts and financial instruments under Insurance Risk and Credit Risk respectively in 'Risk' section.

- Capital disclosures under HKAS 1 '*Presentation of Financial Statement*' in 'Capital Management' section.

- IBOR transition in 'Areas of special interest' section.

In accordance with the Group's policy to provide disclosures that help stakeholders to understand the Group's performance, financial position and changes thereto, the information provided in the Notes to the Financial Statements and the Risk disclosures in the MD&A goes beyond the minimum levels required by accounting standards, statutory and regulatory requirements.

(c) Consolidation

The Group controls and consequently consolidates an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Control is initially assessed based on consideration of all facts and circumstances, and is subsequently reassessed when there are significant changes to the initial setup.

Where an entity is governed by voting rights, the Group would consolidate when it holds, directly or indirectly, the necessary voting rights to pass resolutions by the governing body. In all other cases, the assessment of control is more complex and requires judgement of other factors, including having exposure to variability of returns, power over relevant activities or holding the power as agent or principal.

All intra-group transactions are eliminated on consolidation.

The consolidated financial statements also include the attributable share of the results and reserves of associates based on the financial statements prepared at dates not earlier than three months prior to 31 December 2020.

1. Basis of preparation continued

(d) Future Accounting Developments

The HKICPA has issued a number of new standards which are not yet effective for the year ended 31 December 2020 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 and there may be changes to implementation decisions as practice evolves, therefore the likely 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 PVIF asset recognised; rather the estimated future profit will be included in the measurement of the Insurance contract liability as the contractual service margin ('CSM') and gradually recognised in revenue as services are provided over the duration of the insurance contract. 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. Depending on the measurement model, changes in market conditions for certain products (measured under the General Measurement Approach) are immediately recognised in profit or loss, whilst for other products (measured under the Variable Fee Approach) they will be included in the measurement of CSM;

- In accordance with HKFRS 17, directly attributable costs will be included in the results of insurance services as profit is recognised over the duration of the insurance contracts and 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.

(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 2020 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).

2. Significant accounting policies continued

(b) Non-interest income continued

(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.

(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 best evidence of fair value is a quoted price in an actively traded principal market. In the event that the market for a financial instrument is not active, and the valuation technique uses only observable market data, the reliability of the fair value measurement is high. However, when valuation techniques include one or more significant unobservable inputs, they rely to a greater extent on management judgement and the fair value derived becomes less reliable. In absence of observable valuation inputs, due to lack of or a reduced volume of similar transactions, management judgement is required to assess the price at which an arm's length transaction would occur under normal business conditions, in which case management may rely on historical prices for that particular financial instrument or on recent prices for similar instruments.

2. Significant accounting policies continued

(d) Valuation of financial instruments continued

Critical accounting estimates and judgements continued

The main assumptions and estimates which management consider when applying a model with valuation techniques are:

- the likelihood and expected timing of future cash flows on the instrument. Judgement may be required to assess the counterparty's ability to service the instrument in accordance with its contractual terms. Future cash flows may be sensitive to changes in market rates;

- selecting appropriate discount rate for the instrument. Judgement is required to assess what a market participant would regard as the appropriate spread of the rate for an instrument over the appropriate risk-free rate; and

- judgement to determine what model to use to calculate fair value in areas where the choice of valuation model is particularly subjective, for example, when valuing complex derivatives.

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'.

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:

– Long-term debt issues

The interest and/or foreign exchange exposure on certain fixed rate debt securities issued has been matched with the interest and/or foreign exchange exposure on certain swaps as part of a documented risk management strategy.

– Financial assets and financial liabilities under unit-linked and non-linked investment contracts

A contract under which the Group does not accept significant insurance risk from another party is not classified as an insurance contract, other than investment contracts with discretionary participation features ('DPF'), but is accounted for as a financial liability. Customer liabilities under linked and certain non-linked investment contracts issued by insurance subsidiaries are determined based on the fair value of the assets held in the linked funds. If no fair value designation was made for the related assets, at least some of the assets would otherwise be measured at either fair value through other comprehensive income or amortised cost. The related financial assets and liabilities are managed and reported to management on a fair value basis. Designation of the financial assets and related liabilities at fair value allows changes in fair values to be recorded in the income statement and presented in the same line.

(i) Derivatives

Derivatives are financial instruments that derive their value from the price of underlying item such as equities, interest rates or other indices. Derivatives are recognised initially and are subsequently measured at fair value. Derivatives are classified as assets when their fair value is positive or as liabilities when their fair value is negative. This includes embedded derivatives in financial liabilities which are bifurcated from the host contract when they meet the definition of a derivative on a stand-alone basis.

Where the derivatives are managed with debt securities issued by the Group that are designated at fair value, the contractual interest is shown in 'Interest expense' together with the interest payable on the issued debt.

Hedge accounting

The Group designates certain derivatives as either (i) hedges of the change in fair value of recognised assets or liabilities or firm commitments ('fair value hedge'); or (ii) hedges of highly probable future cash flows attributable to a recognised asset or liability, or a forecast transaction ('cash flow hedge').

At the inception of a hedging relationship, the Group documents the relationship between the hedging instruments and the hedged items, its risk management objective and its strategy for undertaking the hedge. The Group requires a documented assessment, both at hedge inception and on an ongoing basis, of whether or not the hedging instruments, are highly effective in offsetting the changes attributable to the hedged risks in the fair values or cash flows of the hedged items.

(i) Fair value hedge

Changes in the fair value of derivatives that are designated and qualified as fair value hedging instruments are recorded in the income statement within 'Net income from financial instruments measured at fair value through profit or loss', along with changes in the fair value of the hedged assets or liabilities attributable to the hedged risk.

If the hedging relationship no longer meets the criteria for hedge accounting, the hedge accounting is discontinued. The cumulative adjustment to the carrying amount of a hedged item is amortised to the income statement based on a recalculated effective interest rate over the residual period to maturity, unless the hedged item has been derecognised.

(ii) Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualified as cash flow hedges is recognised in other comprehensive income and accumulated separately in equity. Any gain or loss in fair value relating to an ineffective portion is recognised immediately in the income statement within 'Net income from financial instruments measured at fair value through profit or loss'.

The accumulated gains and losses recognised in other comprehensive income are recycled to the income statement in the periods in which the hedged item will affect profit or loss.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss at that time remains in equity until the forecast transaction is ultimately recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was recognised in other comprehensive income is immediately reclassified to the income statement.

2. Significant accounting policies continued

(i) Derivatives continued

Hedge accounting continued

(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.

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 ECL allowance.

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.

2. Significant accounting policies continued

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

Renegotiation continued

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 that are not credit-impaired

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 re-negotiated at market rates and no payment-related concession has been provided.

Significant increase in credit risk (stage 2)

An assessment of whether credit risk has increased significantly is performed at each reporting period by considering the change in the risk of default occurring over the remaining life of the financial instrument. The assessment explicitly or implicitly considers if the financial instrument has experienced a significant increase in credit risk, taking into account reasonable and supportable information, including information about past events, current conditions and future economic conditions. The assessment is unbiased, probability-weighted, and to the extent relevant, uses forward-looking information consistent with that used in the measurement of ECL. The analysis of credit risk is multifactor. The determination of whether a specific factor is relevant and its weight compared with other factors depends on the type of product, the characteristics of the financial instrument, the borrower and the geographical region. Therefore, it is not possible to provide a single set of criteria that will determine what is considered to be a significant increase in credit risk and these criteria will differ for different types of lending, particularly between retail and wholesale. However, unless identified at an earlier stage, all financial assets are deemed to have suffered a significant increase in credit risk when 30 days past due. In addition, wholesale loans that are individually assessed, typically corporate and commercial customers, and included on a watch or worry list are included in stage 2.

For wholesale portfolios, the quantitative comparison assesses default risk using a lifetime probability of default which encompasses a wide range of information including the obligor's customer risk rating ('CRR'), macroeconomic condition forecasts and credit transition probabilities. Significant increase in credit risk is measured by comparing the average probability of default ('PD') for the remaining term estimated at origination with the equivalent estimation at reporting date (or that the origination PD has doubled in the case of origination CRR greater than 3.3). The significance of changes in PD was informed by expert credit risk judgment, referenced to historical credit migrations and to relative changes in external market rates. The quantitative measure of significance varies depending on the credit quality at origination as follows:

Origination CRR	Significance trigger – PD to increase by
0.1-1.2	15bps
2.1-3.3	30bps
Greater than 3.3 and not impaired	2x

For loans originated prior to the implementation of HKFRS 9, the origination PD does not include adjustments to reflect expectations of future macroeconomic conditions since these are not available without the use of hindsight. In the absence of this data, origination PD must be approximated assuming through-the-cycle ('TTC') PDs and TTC migration probabilities, consistent with the instrument's underlying modelling approach and the CRR at origination. For these loans, the quantitative comparison is supplemented with additional CRR deterioration based thresholds as set out in the table below:

Origination CRR	Additional significance criteria – Number of CRR grade notches deterioration required to identify as significant credit deterioration (stage 2) (> or equal to)
0.1	5 notches
1.1-4.2	4 notches
4.3-5.1	3 notches
5.2-7.1	2 notches
7.2-8.2	1 notches
8.3	0 notches

2. Significant accounting policies continued

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

Significant increase in credit risk (stage 2) continued

For certain portfolios of debt securities where external market ratings are available and credit ratings are not used in credit risk management, the debt securities will be in stage 2 if their credit risk increases to the extent they are no longer considered investment grade. Investment grade is where the financial instrument has a low risk of incurring losses, the structure has a strong capacity to meet its contractual cash flow obligations in the near term and adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil their contractual cash flow obligations.

For retail portfolios, default risk is assessed using a reporting date PD derived from credit history which incorporate all available information about the customer. This PD is adjusted for the effect of macroeconomic forecasts and is considered to be a reasonable approximation of a lifetime PD measure. Retail exposures are divided into account level and homogeneous segment level measurement. Within each portfolio, the stage 2 accounts are defined as accounts with 12-month PD greater than the average 12-month PD of loans in that portfolio 12 months before they become 30 days past due.

Unimpaired and without significant increase in credit risk (stage 1)

ECL resulting from default events that are possible within the next 12 months ('12-month ECL') are recognised for financial instruments that remain in stage 1.

Purchased or originated credit-impaired ('POCI')

Financial assets that are purchased or originated at a deep discount that reflects the incurred credit losses are considered to be POCI. This population includes the recognition of a new financial instrument following a renegotiation where concessions have been granted for economic or contractual reasons relating to the borrower's financial difficulty that otherwise would not have been considered. The amount of change-in-lifetime ECL is recognised in profit or loss until the POCI is derecognised, even if the lifetime ECL are less than the amount of ECL included in the estimated cash flows on initial recognition.

Movement between stages

Financial assets can be transferred between the different stages (other than POCI) depending on their relative increase in credit risk since initial recognition. Financial instruments are transferred out of stage 2 if their credit risk is no longer considered to be significantly increased since initial recognition based on the assessments described above. Except for renegotiated loans, financial instruments are transferred out of stage 3 when they no longer exhibit any evidence of credit impairment as described above. For wholesale portfolios, renegotiated loans that are not POCI will continue to be in stage 3 until there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows, observed over a minimum one-year period and there are no other indicators of impairment. While for retail portfolios, renegotiated loans remain in stage 3 for their renegotiated lifetime. For loans that are assessed for impairment on a portfolio basis, the evidence typically comprises a history of payment performance against the original or revised terms, as appropriate to the circumstances. For loans that are assessed for impairment on an individual basis, all available evidence is assessed on a case-by-case basis.

Measurement of ECL

The assessment of credit risk, and the estimation of ECL, are unbiased and probability-weighted, and incorporate all available information which is relevant to the assessment including information about past events, current conditions and reasonable and supportable forecasts of future events and economic conditions at the reporting date. In addition, the estimation of ECL should take into account the time value of money.

In general, the Group calculates ECL using three main components, PD, a loss given default ('LGD') and the exposure at default ('EAD').

The 12-month ECL is calculated by multiplying the 12-month PD, LGD and EAD. Lifetime ECL is calculated using the lifetime PD instead. The 12-month and lifetime PDs represent the probability of default occurring over the next 12 months and the remaining maturity of the instrument respectively.

The EAD represents the expected balance at default, taking into account the repayment of principal and interest from the balance sheet date to the default event together with any expected drawdowns of committed facilities. The LGD represents expected losses on the EAD given the event of default, taking into account, among other attributes, the mitigating effect of collateral value at the time it is expected to be realised and the time value of money.

2. Significant accounting policies continued

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

Measurement of ECL continued

The Group leverages the Basel framework where possible, with recalibration to meet the differing HKFRS 9 requirements as follows:

Model	Regulatory capital	HKFRS 9
PD	– Through the cycle (represents long-run average PD throughout a full economic cycle) – The definition of default includes a backstop of 90+ days past due – Regulatory floors may apply according to regulatory requirements	– Point in time (based on current conditions, adjusted to take into account estimates of future conditions that will impact PD) – An obligor/an account being 90 days past due or above is considered as defaulted – No floors is required under HKFRS 9
EAD	– Cannot be lower than current balance	– Amortisation captured for term products
LGD	– Downturn LGD (consistent losses expected to be suffered during a severe but plausible economic downturn) – Regulatory floors may apply according to regulatory requirements – Discounted using cost of capital – All collection costs included	– Expected LGD (based on estimate of loss given default including the expected impact of future economic conditions such as changes in value of collateral) – No floors is required under HKFRS 9 – Discounted using the effective interest rate of the loan – Only costs associated with obtaining/selling collateral included
Other		– Discounted back from point of default to balance sheet date

While 12-month PDs are recalibrated from Basel models where possible, the lifetime PDs are determined by projecting the 12-month PD using a term structure. For the wholesale methodology, the lifetime PD also takes into account credit migration, i.e. a customer migrating through the CRR bands over its life.

The ECL for wholesale stage 3 is determined on an individual basis using a discounted cash flow ('DCF') methodology. The expected future cash flows are based on the credit risk officer's estimates as at the reporting date, reflecting reasonable and supportable assumptions and projections of future recoveries and expected future receipts of interest. Collateral is taken into account if it is likely that the recovery of the outstanding amount will include realisation of collateral based on its estimated fair value of collateral at the time of expected realisation, less costs for obtaining and selling the collateral. The cash flows are discounted at a reasonable approximation of the original effective interest rate. For significant cases, cash flows under four different scenarios are probability-weighted by reference to the three economic scenarios applied more generally by the Group and the judgement of the credit risk officer in relation to the likelihood of the workout strategy succeeding or receivership being required. For less significant cases, the effect of different economic scenarios and work-out strategies is approximated and applied as an adjustment to the most likely outcome.

Period over which ECL is measured

Expected credit loss is measured from the initial recognition of the financial asset. The maximum period considered when measuring ECL (be it 12-month or lifetime ECL) is the maximum contractual period over which the Group is exposed to credit risk. For wholesale overdrafts, credit risk management actions are taken no less frequently than on an annual basis and therefore this period is to the expected date of the next substantive credit review. The date of the substantive credit review also represents the initial recognition of the new facility. However, where the financial instrument includes both a drawn and undrawn commitment and the contractual ability to demand repayment and cancel the undrawn commitment does not serve to limit the Group's exposure to credit risk to the contractual notice period, the contractual period does not determine the maximum period considered. Instead, ECL is measured over the period the Group remains exposed to credit risk that is not mitigated by credit risk management actions. This applies to retail revolving loan, overdrafts and credit cards, where the period is the average time taken for stage 2 exposures to default or close as performing accounts, determined on a portfolio basis and ranging from between two and six years. In addition, for these facilities it is not possible to identify the ECL on the loan commitment component separately from the financial asset component. As a result, the total ECL is recognised in the loss allowance for the financial asset unless the total ECL exceeds the gross carrying amount of the financial asset, in which case the ECL in excess of the carrying amount of the financial asset is recognised as a provision.

Forward-looking economic forecast

The Group applies multiple forward-looking global economic scenarios determined with reference to external forecast distributions representative of our view of forecast economic conditions. This approach is considered sufficient to calculate unbiased expected credit loss in most economic environments. In certain economic environments, additional analysis may be necessary and result in additional scenarios or adjustments, to reflect a range of possible economic outcomes for an unbiased expected credit loss estimate. The detailed methodology is disclosed in 'Measurement uncertainty and sensitivity analysis of ECL estimates'.

2. Significant accounting policies continued

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

Critical accounting estimates and judgements

In determining ECL, management is required to exercise judgement in defining what is considered to be a significant increase in credit risk and in making assumptions and estimates to incorporate relevant information about past events, current conditions and forecasts of economic conditions. Judgement has been applied in determining the lifetime and point of initial recognition of revolving facilities.

The PD, LGD and EAD models which support these determinations are reviewed regularly in light of differences between loss estimates and actual loss experience, but given that HKFRS 9 requirements have only just been applied, there has been little time available to make these comparisons. Therefore, the underlying models and their calibration, including how they react to forward-looking economic conditions, remain subject to review and refinement. This is particularly relevant for lifetime PDs, which have not been previously used in regulatory modelling and for the incorporation of 'Upside scenarios' which have not been subject to experience gained through stress testing.

The exercise of judgement in making estimations requires the use of assumptions which are highly subjective and very sensitive to the risk factors, in particular to changes in economic and credit conditions across a large number of geographical areas. Many of the factors have a high degree of interdependency and there is no single factor to which loan impairment allowances as a whole are sensitive. Therefore, sensitivities are considered in relation to key portfolios which are particularly sensitive to a few factors and the results should be further extrapolated. Risk Management section (a) 'Credit Risk' under MD&A sets out the assumptions underlying the Central scenario and information about how scenarios are developed in relation to the Group's top and emerging risks and its judgements, informed by consensus forecasts of professional industry forecasters. The adjustment from the ECL determined by using the Central scenario alone, which is used to calculate an unbiased expected loss, provides an indication of the overall sensitivity of ECL to different economic assumptions.

(k) Sale and repurchase agreements

Where securities are sold subject to commitment to repurchase them at a pre-determined price ('repos'), they remain on the balance sheet and a liability is recorded in respect of the consideration received in 'Repurchase agreements-non-trading'. Conversely, securities purchased under analogous commitments to resell ('reverse repos') are not recognised on the balance sheet and the consideration paid is recorded in 'Reverse repurchase agreements-non-trading'. The difference between the sale and repurchase price is treated as interest income and recognised over the life of the agreement.

Securities lending and borrowing transactions are generally secured, with collateral taking the form of securities or cash advanced or received. The transfer of securities to counterparties under these agreements is not normally reflected on the balance sheet. Cash collateral advanced or received is recorded as an asset or a liability respectively.

(l) Subsidiaries and associates

The Group classifies investments in entities which it controls as subsidiaries. The Group classifies investments in entities over which it has significant influence, and that are neither subsidiaries nor joint arrangement, as associates.

The Group's investments in subsidiaries and associates are stated at cost less any impairment losses. Investment in associates is recognised using the equity method. Under this method, such investments are initially stated at cost, including attributable goodwill, and are adjusted thereafter for the post-acquisition change in the Group's share of net assets less any impairment losses. An impairment loss recognised in prior periods shall be reversed through the income statement if, and only if, there has been a change in the estimates used to determine the recoverable amount of the investment since the last impairment loss was recognised.

(m) Investment properties

Investment properties are land and/or buildings which are owned or held under a leasehold interest to earn rental income and/or for capital appreciation. Investment properties are stated at fair value with changes in fair value being recognised in the income statement. Fair values are determined by independent professional valuers, primarily on the basis of capitalisation of net incomes with due allowance for outgoings and reversionary income potential. Property interests which are held under operating leases to earn rentals, or for capital appreciation, or both, are classified and accounted for as investment property on a property-by-property basis.

The Group previously elected to apply HKAS 40 '*Investment Properties*' to account for all its leasehold properties that were held for investment purposes.

2. Significant accounting policies continued

(n) Premises, plant and equipment

(i) Land and buildings

The following land and buildings held for own use are stated in the balance sheet at their revalued amount, being their fair value at the date of the revaluation less any subsequent accumulated depreciation and impairment losses:

– leasehold land and buildings where the fair value of the land cannot be reliably separated from the value of the building at inception of the lease and the premises are not clearly held under an operating lease; and

– leasehold land and buildings where the value of the land can be reliably separated from the value of the building at inception of the lease and the term of the lease is not less than 50 years.

Revaluations are performed by professionally qualified valuers, on a market basis, with sufficient regularity to ensure that the net carrying amount does not differ materially from the fair value at the reporting date. Surpluses arising on revaluation are credited firstly to the income statement to the extent of any deficits arising on revaluation previously charged to the income statement in respect of the same land and buildings, and are thereafter taken to other comprehensive income and are accumulated separately in the 'Premises revaluation reserve'. Deficits arising on revaluation, are firstly set off against any previous revaluation surpluses included in the 'Premises revaluation reserve' in respect of the same land and buildings, and are thereafter recognised in the income statement.

Depreciation is calculated to write off the valuation of the land and buildings over their estimated useful lives as follows:

– freehold land is not depreciated;

– leasehold land is depreciated over the unexpired terms of the leases; and

– buildings and improvements thereto are depreciated at the greater of 2% per annum on the straight-line basis or over the unexpired terms of the leases or over the remaining estimated useful lives of the buildings.

On revaluation of the land and buildings, depreciation accumulated during the year will be eliminated. Depreciation charged on revaluation surplus of the land and buildings is transferred from 'Premises revaluation reserve' to 'Retained profits'.

On disposal of the land and buildings, the profit and loss is calculated as the difference between the net sales proceeds and the net carrying amount and recognised in the income statement. Surpluses relating to the land and buildings disposed of included in the 'Premises revaluation reserve' are transferred as movements in reserves to 'Retained profits'.

The land owned by Hong Kong Government permits its use under leasehold arrangements. Similar arrangements exist in mainland China. The Group accounts for its interests in own use of the leasehold land as owned assets.

(ii) Other plant and equipment

Furniture, plant and equipment, are stated at cost less depreciation calculated on the straight-line basis to write off the assets over their estimated useful lives, which are generally between 3 and 20 years. On disposal, the profit and loss is calculated as the difference between the net sales proceeds and the net carrying amount.

Plant and equipment are subject to review for impairment if there are events or changes in circumstances that indicate that the carrying amount may not be recoverable.

(o) Goodwill and intangible assets

(i) Goodwill

Goodwill arises on business combinations, including the acquisition of subsidiaries or associates when the cost of acquisition exceeds the fair value of the Group's share of the identifiable assets, liabilities and contingent liabilities acquired and is reported in the consolidated balance sheet. If the Group's interest in the fair value of the identifiable assets, liabilities and contingent liabilities of an acquired business is greater than the cost of acquisition, the excess is recognised immediately in the income statement. Goodwill on acquisitions of associates is included in 'Interest in associates' and is not tested separately for impairment.

Goodwill is allocated to cash-generating units ('CGUs') for the purpose of impairment testing, which is undertaken at the lowest level at which goodwill is monitored for internal management purposes. Impairment testing is performed at least annually, and whenever there is an indication that the CGU may be impaired, by comparing the recoverable amount of a CGU with the carrying value of its net assets, including attributable goodwill. The recoverable amount of an asset is the higher of, its fair value less cost to sell, and its value in use. Value in use is the present value of the expected future cash flows from a CGU. If the recoverable amount of the CGU is less than the carrying value, an impairment loss is charged to the income statement. Any write-off in excess of the carrying value of goodwill is limited to the fair value of the individual assets and liabilities of the CGU. Goodwill is stated at cost less any accumulated impairment losses, if any.

At the date of disposal of a business, attributable goodwill is included in the Group's share of net assets in the calculation of the gain or loss on disposal.

2. Significant accounting policies continued

(o) Goodwill and intangible assets continued

(ii) Intangible assets

Intangible assets include PVIF, acquired software licences and capitalised development costs of computer software programmes.

- The PVIF is stated at a valuation determined at the reporting date by using the methodology as described in note 2(t).

- Computer software acquired is stated at cost less amortisation and impairment allowances. Amortisation of computer software is charged to the income statement over its estimated useful life. Costs incurred in the development phase of a project to produce application software for internal use are capitalised and amortised over the software's estimated useful life, usually five years.

Intangible assets that have an indefinite estimated useful life or are not yet ready for use are tested for impairment annually. Intangible assets that have a finite estimated useful life, except for the PVIF, are stated at cost less amortisation and accumulated impairment losses and are amortised over their estimated useful lives. Estimated useful life is the lower of legal duration and expected economic life. Intangible assets are subject to impairment review if there are events or changes in circumstances that indicate that the carrying amount may not be recoverable.

(p) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Income tax is recognised in the income statement except to the extent that it relates to items recognised in other comprehensive income or directly in equity, in which case it is recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable profits for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years. Current tax assets and liabilities are settled on an individual taxable entity basis.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purpose and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits. Deferred tax assets are recognised to the extent that it is probable that taxable profits will be available, against which deductible temporary differences can be utilised at each reporting date.

Deferred tax is calculated using the tax rates that are expected to apply in the periods in which the assets will be realised or the liabilities settled. Deferred tax assets and liabilities are not discounted. Deferred tax assets and liabilities are offset when they arise in the same tax reporting group and relate to income taxes levied by the same taxation authority, and when a legal right to offset exists in the entity.

(q) Employee benefits

(i) Salaries, annual bonuses, paid annual leave, leave passage and the cost to the Group of non-monetary benefits are accrued in the year in which the associated services are rendered by the employees. Provision is made in respect of paid leave entitlement accumulated during the year, which can be carried forward into future periods for compensated absence or payment in lieu if the employee leaves employment.

(ii) The Group provides retirement benefits for staff members and operates defined benefit and defined contribution schemes and participates in mandatory provident fund schemes in accordance with the relevant laws and regulations.

Payments to defined contribution plans and state-managed retirement benefit plans, where the Group's obligations under the plans are equivalent to a defined contribution plan, are charged as an expense as they incur.

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.

The net defined benefit asset or liability recognised in the balance sheet represents the difference between the fair value of plan assets and the present value of the defined benefit obligations. In the case of a defined benefit asset, it 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.

2. Significant accounting policies continued

(s) Financial guarantees

Financial guarantees are contracts that require the Group to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the terms of the loans or debt instruments.

Financial guarantee liabilities are initially recognised at their fair value, and subsequently carried at the higher of:

- the amount determined in accordance with the expected credit loss model under HKFRS 9 '*Financial Instruments*' and
- the amount initially recognised less, where appropriate, the cumulative amount of income recognised in accordance with the principles of HKFRS 15 '*Revenue from Contracts with Customers*'.

Financial guarantees are included within other liabilities.

(t) Insurance contracts

Through its insurance subsidiary, the Group issues contracts to customers that contain insurance risk, financial risk or a combination thereof. A contract under which the Group accepts significant insurance risk from another party, by agreeing to compensate that party on the occurrence of a specified uncertain future event, is classified as an insurance contract. An insurance contract may also transfer financial risk, but is accounted for as an insurance contract if the insurance risk is significant.

A contract issued by the Group that transfers financial risk, without significant insurance risk, is classified as an investment contract, and is accounted for as a financial instrument. The financial assets held by the Group for the purpose of meeting liabilities under insurance and investment contracts are classified and accounted for based on their classifications as set out in notes 2(e) to 2(i)

Insurance contracts are accounted for as follows:

Net earned insurance premiums

Premiums for life insurance contracts are accounted for when receivable, except in unit-linked insurance contracts where premiums are accounted for when liabilities are recognised.

Reinsurance premiums, netted by the reinsurers' share of provision for unearned premiums, are accounted for in the same reporting period as the premiums for the direct insurance contracts to which they relate.

Claims and reinsurance recoveries

Gross insurance claims for life insurance contracts reflect the total cost of all claims arising during the reporting period, including policyholder cash dividend payment upon policy anniversary and payments of maturities, surrenders and death claims. Reinsurance recoveries are accounted for in the same period as the related claims.

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

A value is placed on insurance contracts that are classified as long-term insurance business or long-term investment contracts with discretionary participating features ('DPF') and in force at the reporting date. This asset represents the present value of the shareholders' interest in the profits expected to emerge from those insurance contracts written at the reporting date.

The PVIF is determined by discounting future earnings expected to emerge from business currently in force, using appropriate assumptions in assessing factors such as future mortality and morbidity, lapse rates, levels of expenses and a risk discount rate that reflects the risk premium attributable to the respective long-term insurance business. The valuation has also included explicit risk margins for non-economic risks in the projection assumptions, and explicit allowances for financial options and guarantees using stochastic methods. Risk discount rates are set on an active basis with reference to market risk free yields and incorporate the explicit margins and allowances for certain risks and uncertainties in place of implicit adjustments. Movements in the PVIF are included in other operating income on a pre-tax basis. The PVIF is reported under 'Intangible assets' in the balance sheet.

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.

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.

2. Significant accounting policies continued

(w) Operating segments

The Group's operating segments are determined to be customer group segment because the chief operating decision maker uses customer group information in order to make decisions about allocating resources and assessing performance.

HKFRS 8 '*Operating Segments*' requires segmental disclosure to be based on the way that the Group's chief operating decision maker regards and manages the Group, with the amounts reported for each reportable segment being the measures reported to the Group's chief operating decision maker for the purpose of assessing segmental performance and making decision about operating matters.

(x) Related parties

For the purposes of these financial statements, parties are considered to be related to the Group if the Group has the ability, directly or indirectly, to control the party or exercise significant influence over the party in making financial and operating decisions, or vice versa, or where the Group and the party are members of the same group. Related parties may be individuals (being members of key management personnel, significant shareholders and/or their close family members) or other entities which are under the significant influence of related parties of the Group or post-employment benefit scheme. Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group and its holding companies, directly or indirectly, including any directors (whether executive or otherwise) and Executive Committee members of the Group and its holding companies.

3 Interest income/interest expense

(a) Interest income

	2020	2019
Interest income arising from:		
– financial assets that are not at fair value through profit and loss	**35,010**	43,214
– trading assets	**642**	927
– financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**45**	49
	35,697	44,190
of which:		
– interest income from impaired financial assets	**27**	35

(b) Interest expense

	2020	2019
Interest expense arising from:		
– financial liabilities that are not at fair value through profit and loss	**7,315**	9,915
– trading liabilities	**453**	628
– financial liabilities designated at fair value	**1,023**	1,392
	8,791	11,935
of which:		
– interest expense from subordinated liabilities	**515**	420

4. Net fee income

	Wealth and Personal Banking	Commercial Banking	Global Banking and Markets	Other	Total
2020					
– 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	**1,175**	**1,142**	**48**	**–**	**2,365**
– credit facilities	**22**	**433**	**143**	**–**	**598**
– trade services	**–**	**334**	**31**	**–**	**365**
– other	**131**	**110**	**39**	**242**	**522**
Fee income	**5,314**	**2,641**	**391**	**242**	**8,588**
Fee expense	**(1,100)**	**(1,045)**	**(90)**	**14**	**(2,221)**
	4,214	**1,596**	**301**	**256**	**6,367**
2019					
– securities broking and related services	1,167	171	27	–	1,365
– retail investment funds	1,511	23	–	–	1,534
– insurance	491	80	66	–	637
– account services	294	168	7	–	469
– remittances	70	382	41	–	493
– cards	1,433	1,548	32	–	3,013
– credit facilities	25	489	158	–	672
– trade services	–	409	37	–	446
– other	84	84	26	249	443
Fee income	5,075	3,354	394	249	9,072
Fee expense	(1,147)	(1,409)	(73)	10	(2,619)
	3,928	1,945	321	259	6,453

	2020	2019
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)	**1,743**	2,270
– fee income	**3,711**	4,624
– fee expense	**(1,968)**	(2,354)
Net fee income on trust and other fiduciary activities where the Group holds or invests assets on behalf of its customers	**982**	794
– fee income	**1,069**	884
– fee expense	**(87)**	(90)

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

	2020	2019
Net trading income	2,318	2,198
– trading income	2,327	2,197
– other trading income/(expense) from ineffective fair value hedge	(9)	1
Net income/(expense) from financial instruments designated at fair value through profit or loss	185	(75)
Net income/(expense) from assets and liabilities of insurance businesses measured at fair value through profit or loss	823	1,589
– financial assets held to meet liabilities under insurance and investment contracts	842	1,615
– liabilities to customers under investment contracts	(19)	(26)
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	(6)	(10)
	3,320	3,702

6. Gains less losses from financial investments

	2020	2019
Net losses from disposal of debt securities measured at amortised cost	(13)	(4)
Net gains from disposal of debt securities measured at fair value through other comprehensive income	3	26
	(10)	22

7. Dividend income

	2020	2019
Dividend income:		
– listed investments	144	130
– unlisted investments	13	13
	157	143

8. Net insurance premium income

	Non-linked	Unit-linked	Total
2020			
Gross insurance premium income	14,510	3	14,513
Reinsurers' share of gross insurance premium income	788	–	788
Net insurance premium income	15,298	3	15,301
2019			
Gross insurance premium income	16,903	3	16,906
Reinsurers' share of gross insurance premium income	(1,254)	–	(1,254)
Net insurance premium income	15,649	3	15,652

9. Other operating income

	2020	2019
Rental income from investment properties	**272**	342
Movement in present value of in-force long-term insurance business (note 33(a))	**2,082**	4,559
Net losses from disposal of fixed assets	**(19)**	(7)
Net losses from the derecognition of loans and advances to customers measured at amortised cost	**(4)**	(3)
Others	**(50)**	223
	2,281	5,114

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

	Non-linked	Unit-linked	Total
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	**18,244**	**10**	**18,254**
2019			
Claims, benefits and surrenders paid	12,386	5	12,391
Movement in liabilities	8,767	8	8,775
Gross claims and benefits paid and movement in liabilities to policyholders	21,153	13	21,166
Reinsurers' share of claims, benefits and surrenders paid	(2,138)	–	(2,138)
Reinsurers' share of movement in liabilities	799	–	799
Reinsurers' share of claims and benefits paid and movement in liabilities to policyholders	(1,339)	–	(1,339)
Net insurance claims and benefits paid and movement in liabilities to policyholders	19,814	13	19,827

11. Change in expected credit losses and other credit impairment charges

	2020	2019
Loans and advances to banks and customers	**2,608**	1,684
– new allowances net of allowance releases	**2,757**	1,773
– recoveries of amounts previously written off	**(104)**	(106)
– other movements	**(45)**	17
Loan commitments and guarantees	**33**	99
Other financial assets	**97**	54
	2,738	1,837

12. Operating expenses

	2020	2019
Employee compensation and benefits:		
– salaries and other costs*	**5,613**	5,744
– retirement benefit costs		
– defined benefit scheme (note 48(a))	**180**	192
– defined contribution scheme (note 48(b))	**309**	293
	6,102	6,229
General and administrative expenses:		
– rental expenses	**27**	82
– other premises and equipment	**1,617**	1,466
– marketing and advertising expenses	**369**	423
– other operating expenses	**2,707**	2,721
	4,720	4,692
Depreciation of premises, plant and equipment (note 32)	**1,491**	1,444
Depreciation of right-of-use assets	**595**	528
Amortisation of intangible assets (note 33)	**297**	164
	13,205	13,057
* of which:		
share-based payments (note 49(c))	**38**	29
Cost efficiency ratio	**36.6%**	30.0%

13. The emoluments of the five highest paid individuals

(a) The aggregate emoluments

	2020	2019
Salaries, allowances and benefits in kind	**29**	28
Retirement scheme contributions	**2**	2
Variable bonuses		
– Cash bonus	**13**	16
– Share-based payment	**14**	17
	58	63

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

	2020 Number of Individuals	2019 Number of Individuals
HK$		
5,500,001 – 6,000,000	**1**	–
6,000,001 – 6,500,000	**–**	1
6,500,001 – 7,000,000	**1**	–
7,000,001 – 7,500,000	**1**	1
7,500,001 – 8,000,000	**–**	1
13,000,001 – 13,500,000	**1**	–
16,000,001 – 16,500,000	**–**	1
24,500,001 – 25,000,000	**1**	–
26,000,001 – 26,500,000	**–**	1
	5	5

The emoluments of the five highest paid individuals set out above include the emoluments of two (2019: two) Executive Directors which are included in note 14. There is no Non-executive Director included in the table above (2019: Nil).

14. Directors' remunerations

The emoluments of the Directors of the Bank disclosed pursuant to section 383 of the Hong Kong Companies Ordinance (Cap.622) and the Companies (Disclosure of Information about Benefits of Directors) Regulation were set out below:

	Emoluments								
				Variable bonus[5]					
				Cash		Shares			
	Fees '000	Salaries, allowances and benefits in kind[6] '000	Contribution to retirement benefit schemes[4] '000	Deferred '000	Non-deferred '000	Deferred '000	Non-deferred '000	Total 2020 '000	Total 2019 '000
Executive Directors									
Ms Louisa Cheang, Chief Executive[1]	–	11,570	685	3,632	2,422	4,212	2,422	24,943	26,135
Ms Margaret W H Kwan[1]	–	3,604	18	576	863	636	863	6,560	7,621
Non-Executive Directors									
Dr Raymond K F Ch'ien[3]	1,030	–	–	–	–	–	–	1,030	800
Dr John C C Chan[3]	830	–	–	–	–	–	–	830	650
Mr Nixon Chan (Resigned on 22 May 2020)	275	–	–	–	–	–	–	275	500
Ms L Y Chiang[3]	960	–	–	–	–	–	–	960	740
Mr Kenneth S Y Ng	890	–	–	–	–	–	–	890	680
Ms Irene Y L Lee[3]	1,296	–	–	–	–	–	–	1,296	970
Ms Sarah C Legg[2] (Resigned on 1 Mar 2019)	–	–	–	–	–	–	–	–	83
Dr Eric K C Li[3]	1,290	–	–	–	–	–	–	1,290	970
Dr Vincent H S Lo	660	–	–	–	–	–	–	660	500
Mr Peter T S Wong[2]	730	–	–	–	–	–	–	730	560
Mr Michael W K Wu[3]	960	–	–	–	–	–	–	960	740
Ms Kathleen C H Gan[2]	660	–	–	–	–	–	–	660	321
Past Directors	–	–	1,674	–	–	–	–	1,674	1,657
	9,581	15,174	2,377	4,208	3,285	4,848	3,285	42,758	42,927
2019	7,514	15,370	2,513	4,792	3,672	5,394	3,672		

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 2020 into the retirement benefit schemes of which the Bank's 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$1.674m in 2020.

(5) The amount of variable bonus (deferred and non-deferred) comprises the cash and the estimated purchase cost of the award of HSBC Holdings plc Restricted Share.

(6) Benefits in kind mainly include estimated money value of other non-cash benefits: accommodation, car, insurance premium.

(7) Remunerations/emoluments for Executive Directors are for services in connection with management of the affairs of the Hang Seng Bank and its subsidiary undertakings.

15. Auditors' remuneration

	2020	2019
Statutory audit services	**26**	23
Non-statutory audit services and others	**11**	10
	37	33

16. Net surplus/(deficit) on property revaluation

	2020	2019
Surplus/(deficit) on investment property revaluation	**(636)**	35

17. Tax expense

(a) Taxation in the Consolidated Income Statement represents:

	2020	2019
Current tax – provision for Hong Kong profits tax		
Tax for the year	**2,344**	3,527
Adjustment in respect of prior years	**(57)**	(62)
	2,287	3,465
Current tax – taxation outside Hong Kong		
Tax for the year	**93**	47
Adjustment in respect of prior years	**(1)**	(11)
	92	36
Deferred tax (note 41(b))		
Origination and reversal of temporary differences	**365**	490
Total tax expense	**2,744**	3,991

The current tax provision is based on the estimated assessable profit for 2020, 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 (2019: 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:

	2020	2019
Profit before tax	**19,414**	28,813
Notional tax on profit before tax, calculated at Hong Kong tax rate of 16.5% (2019: 16.5%)	**3,203**	4,754
Tax effect of:		
– different tax rates in other countries/areas	**68**	70
– non-taxable income and non-deductible expenses	**(289)**	(591)
– share of losses/(profits) of associates	**12**	(28)
– others	**(250)**	(214)
Actual charge for taxation	**2,744**	3,991

18. Earnings per share – basic and diluted

The calculation of basic and diluted earnings per share is based on earnings of HK$15,987m in 2020 (2019: HK$24,421m), 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 2019).

19. Dividends/Distributions

(a) Dividends attributable to the year:

	2020		2019	
	per share HK$	HK$m	per share HK$	HK$m
First interim	**1.10**	**2,103**	1.40	2,677
Second interim	**0.80**	**1,529**	1.40	2,677
Third interim	**0.80**	**1,529**	1.40	2,677
Fourth interim	**2.80**	**5,353**	4.00	7,647
	5.50	**10,514**	8.20	15,678

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:

	2020	2019
Fourth interim dividend in respect of the previous year, approved and paid during the year, of HK$4.00 per share (2019: HK$3.60 per share)	**7,647**	6,883

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

	2020	2019
US$900 million Floating rate perpetual capital instrument (coupon rate at one-year US dollar LIBOR plus 3.84 per cent)[1]	**–**	232
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)[2]	**421**	110
US$600 million Fixed to floating rate perpetual capital instrument (coupon rate at 6.00 per cent and then three-month US dollar LIBOR plus 4.06 per cent from the first call date)[2]	**279**	–
	700	342

1 This subordinated loan was early repaid in 2019 and distributions were made on repayment.

2 These subordinated loans were issued in 2019.

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 (formerly 'Retail Banking and Wealth Management')** 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 and wealth management;

- **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, 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 are reported under the 'Other' segment. When these premises are utilised by business segments, notional rent will be charged to the relevant business segments with reference to market rates.

20. Segmental analysis continued

(a) Segmental result continued

	Wealth and Personal Banking	Commercial Banking	Global Banking and Markets	Other	Total
2020					
Net interest income/(expense)	14,733	8,307	4,418	(552)	26,906
Net fee income	4,214	1,596	301	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)	36,951	11,266	6,146	(41)	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	19,663	10,300	6,146	(41)	36,068
Change in expected credit losses and other credit impairment charges	(973)	(1,771)	6	–	(2,738)
Net operating income/(loss)	18,690	8,529	6,152	(41)	33,330
Operating expenses*	(8,144)	(3,428)	(1,173)	(460)	(13,205)
Operating profit/(loss)	10,546	5,101	4,979	(501)	20,125
Net deficit on property revaluation	–	–	–	(636)	(636)
Share of profits/(losses) of associates	(76)	–	–	1	(75)
Profit/(loss) before tax	10,470	5,101	4,979	(1,136)	19,414
Share of profit/(loss) before tax	53.9%	26.3%	25.7%	(5.9)%	100.0%
Operating profit/(loss) excluding change in expected credit losses and other credit impairment charges	11,519	6,872	4,973	(501)	22,863
** Depreciation/amortisation included in operating expenses*	(23)	(8)	(3)	(2,349)	(2,383)
At 31 December 2020					
Total assets	545,383	404,157	785,858	24,389	1,759,787
Total liabilities	1,035,454	323,783	217,188	167	1,576,592
Interest in associates	2,358	–	–	–	2,358
Non-current assets acquired during the year	162	52	3	1,893	2,110

20. Segmental analysis continued

(a) Segmental result continued

	Wealth and Personal Banking	Commercial Banking	Global Banking and Markets	Other	Total
2019					
Net interest income/(expense)	17,717	10,439	4,527	(428)	32,255
Net fee income	3,928	1,945	321	259	6,453
Net income/(loss) from financial instruments measured at fair through profit or loss	1,977	396	1,366	(37)	3,702
Gains less losses from financial investments	(3)	(1)	26	–	22
Dividend income	–	–	–	143	143
Net insurance premium income	13,930	1,722	–	–	15,652
Other operating income	4,807	42	–	265	5,114
Total operating income	42,356	14,543	6,240	202	63,341
Net insurance claims and benefits paid and movement in liabilities to policyholders	(18,297)	(1,530)	–	–	(19,827)
Net operating income before change in expected credit losses and other credit impairment charges	24,059	13,013	6,240	202	43,514
Change in expected credit losses and other credit impairment charges	(836)	(857)	(144)	–	(1,837)
Net operating income	23,223	12,156	6,096	202	41,677
Operating expenses*	(8,024)	(3,361)	(1,136)	(536)	(13,057)
Impairment loss on intangible assets	–	–	–	(10)	(10)
Operating profit/(loss)	15,199	8,795	4,960	(344)	28,610
Net surplus on property revaluation	–	–	–	35	35
Share of profits/(losses) of associates	172	–	–	(4)	168
Profit/(Loss) before tax	15,371	8,795	4,960	(313)	28,813
Share of profit/(loss) before tax	53.4%	30.5%	17.2%	(1.1)%	100.0%
Operating profit/(loss) excluding change in expected credit losses and other credit impairment charges	16,035	9,652	5,104	(344)	30,447
** Depreciation/amortisation included in operating expenses*	(25)	(4)	(2)	(2,105)	(2,136)
At 31 December 2019					
Total assets	522,253	405,779	712,927	36,032	1,676,991
Total liabilities	971,389	303,606	201,948	21,131	1,498,074
Interest in associates	2,522	–	–	(2)	2,520
Non-current assets acquired during the year	152	25	9	1,548	1,734

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 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					
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	**455,594**	**57,825**	**5,921**	**–**	**519,340**
Year ended 31 December 2019					
Total operating income/(loss)	60,530	2,580	271	(40)	63,341
Profit before tax	27,732	913	168	–	28,813
At 31 December 2019					
Total assets	1,578,710	120,696	23,239	(45,654)	1,676,991
Total liabilities	1,404,716	107,172	22,070	(35,884)	1,498,074
Equity	173,994	13,524	1,169	(9,770)	178,917
Share capital	9,658	10,018	–	(10,018)	9,658
Interest in associates	2,522	(2)	–	–	2,520
Non-current assets*	63,001	1,415	21	–	64,437
Contingent liabilities and commitments	460,924	49,529	6,060	–	516,513

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

21. Maturity analysis of assets and liabilities

The following table provides an analysis of consolidated total assets and liabilities by residual contractual maturity at the balance sheet date. These balances are included in the maturity analysis as follows:

- Trading assets and liabilities (including trading derivatives but excluding reverse repos, repos and debt securities in issue) are included in the 'Not more than 1 month' time bucket, because trading balances are typically held for short periods of time.

- Financial assets and liabilities with no contractual maturity (such as equity securities) are included in the 'Over 5 years' time bucket. Undated or perpetual instruments are classified based on the contractual notice period which the counterparty of the instrument is entitled to give. Where there is no contractual notice period, undated or perpetual contracts are included in the 'Over 5 years' time bucket.

- Non-financial assets and liabilities with no contractual maturity are included in the 'Over 5 years' time bucket.

- Liabilities under insurance contracts are included as 'Non-financial liabilities' and reported in the 'Over 5 years' time bucket. 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.

21. Maturity analysis of assets and liabilities continued

Maturity analysis of assets and liabilities

	Not more than 1 month	Over 1 month but not more than 3 months	Over 3 months but not more than 6 months	Over 6 months but not more than 9 months	Over 9 months but not more than 1 year	Over 1 year but not more than 2 years	Over 2 years but not more than 5 years	Over 5 years	Total
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
Placings 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	286,435	236,968	137,414	74,579	67,313	169,940	332,800	368,776	1,674,225
Non-financial assets	–	–	–	–	–	–	–	85,562	85,562
Total assets	286,435	236,968	137,414	74,579	67,313	169,940	332,800	454,338	1,759,787
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[1]	–	–	–	–	–	–	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	1,185,821	133,964	59,793	8,433	11,380	3,251	8,397	13,921	1,424,960
Non-financial liabilities	–	–	–	–	–	–	–	151,632	151,632
Total liabilities	1,185,821	133,964	59,793	8,433	11,380	3,251	8,397	165,553	1,576,592

[1] The maturity for subordinated liabilities is based on the earliest date on which the Group is required to pay, i.e. the callable date.

21. Maturity analysis of assets and liabilities continued

Maturity analysis of assets and liabilities continued

	Not more than 1 month	Over 1 month but not more than 3 months	Over 3 months but not more than 6 months	Over 6 months but not more than 9 months	Over 9 months but not more than 1 year	Over 1 year but not more than 2 years	Over 2 years but not more than 5 years	Over 5 years	Total
2019									
Assets									
Cash and balances at central banks	13,038	–	–	–	–	–	–	–	13,038
Trading assets	47,357	–	–	–	–	–	–	–	47,357
Derivative financial instruments	6,936	5	97	29	77	102	92	–	7,338
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	177	2	–	–	–	–	303	18,289	18,771
Reverse repurchase agreements – non-trading	5,409	1,250	–	–	–	–	–	–	6,659
Placings with and advances to banks	47,930	10,070	2,647	–	–	1,146	4,014	–	65,807
Loans and advances to customers	81,037	52,359	65,278	46,855	44,916	131,971	260,694	259,820	942,930
Financial investments	61,100	120,756	63,657	13,959	12,645	39,692	66,989	82,906	461,704
Accrued income and other financial assets	19,858	3,619	2,677	786	186	509	11	625	28,271
Financial assets	282,842	188,061	134,356	61,629	57,824	173,420	332,103	361,640	1,591,875
Non-financial assets	–	–	–	–	–	–	–	85,116	85,116
Total assets	282,842	188,061	134,356	61,629	57,824	173,420	332,103	446,756	1,676,991
Liabilities									
Deposits from banks	2,491	–	–	–	–	–	–	–	2,491
Current, savings and other deposit accounts	990,689	144,226	59,235	4,390	4,442	387	89	–	1,203,458
Repurchase agreements – non-trading	1,878	–	–	–	–	–	–	–	1,878
Trading liabilities	37,976	–	–	–	–	–	–	–	37,976
Derivative financial instruments	6,792	8	8	8	34	122	426	64	7,462
Financial liabilities designated at fair value	13,399	7,354	4,130	863	1,008	2,400	–	426	29,580
Certificates of deposit and other debt securities in issue	664	5,346	4,116	3,022	3,342	–	700	–	17,190
Subordinated liabilities	–	–	–	–	–	–	–	19,494	19,494
Accruals and other financial liabilities	22,591	6,223	2,764	518	520	371	498	250	33,735
Financial liabilities	1,076,480	163,157	70,253	8,801	9,346	3,280	1,713	20,234	1,353,264
Non-financial liabilities	–	–	–	–	–	–	–	144,810	144,810
Total liabilities	1,076,480	163,157	70,253	8,801	9,346	3,280	1,713	165,044	1,498,074

22. Cash and balances at central banks

	2020	2019
Cash in hand	**6,937**	8,975
Balances at central banks	**4,289**	4,063
	11,226	13,038

23. Trading assets

	2020	2019
Treasury bills	**16,533**	24,894
Other debt securities	**20,539**	22,452
Debt securities	**37,072**	47,346
Investment funds/equity shares	**45**	11
	37,117	47,357

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
Exchange rate	**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	**1,577,102**	**92,783**	**1,669,885**	**17,003**	**178**	**17,181**	**18,806**	**2,055**	**20,861**
Exchange rate	883,348	14,949	898,297	4,869	267	5,136	4,821	60	4,881
Interest rate	462,424	56,197	518,621	1,603	135	1,738	1,581	625	2,206
Equity and other	33,145	–	33,145	464	–	464	375	–	375
At 31 December 2019	1,378,917	71,146	1,450,063	6,936	402	7,338	6,777	685	7,462

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.

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 2020, HK$46,175m (2019: HK$47,028m) of the notional amounts of interest rate derivatives designated in hedge accounting relationships represent the extent of the risk exposure managed by the Group that is directly affected by market-wide IBOR reform. 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 2020 Annual Report.

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

	2020	2019
Debt securities	**2**	2
Equity shares	**4,253**	6,916
Investment funds	**15,158**	10,442
Other	**1,282**	1,411
	20,695	18,771

26. Placings with and advances to banks

	2020	2019
Balances with banks	**6,039**	5,677
Placings with and advances to banks maturing within one month	**30,494**	42,253
Placings with and advances to banks maturing after one month but less than one year	**1,531**	12,717
Placings with and advances to banks maturing after one year	**6,293**	5,161
Less: Expected credit losses	**–**	(1)
	44,357	65,807
of which:		
Placings with and advances to central banks	**13,216**	7,616

There were no overdue advances, impaired advances and rescheduled advances to banks at 31 December 2020 (2019: Nil).

27. Loans and advances to customers

(a) Loans and advances to customers

	2020	2019
Gross loans and advances to customers	**949,954**	946,443
Less: Expected credit losses	**(5,180)**	(3,513)
	944,774	942,930
	%	%
Expected credit losses as a percentage of gross loans and advances to customers	**0.55**	0.37

	2020	2019
Gross impaired loans and advances	**5,724**	2,073
	%	%
Gross impaired loans and advances as a percentage of gross loans and advances to customers	**0.60**	0.22

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
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**
	7,718	**1,534**	**9,252**
Expected credit losses	**(94)**		
Net investments in finance leases and hire purchase contracts	**7,624**		
2019			
Amounts receivable:			
– within one year	356	152	508
– one to two years	358	130	488
– two to three years	363	132	495
– three to four years	359	133	492
– four to five years	356	134	490
– after five years	5,675	1,017	6,692
	7,467	1,698	9,165
Expected credit losses	(60)		
Net investments in finance leases and hire purchase contracts	7,407		

28. Financial investments

	2020	2019
Financial investments measured at fair value through other comprehensive income:		
– treasury bills	**268,031**	212,041
– debt securities	**144,814**	125,927
– equity shares	**7,051**	5,881
	419,896	343,849
Debt instruments measured at amortised cost:		
– treasury bills	**3,667**	500
– debt securities	**131,330**	117,435
Less: Expected credit losses	**(173)**	(80)
	134,824	117,855
	554,720	461,704

28. Financial investments continued

Equity instruments measured at fair value through other comprehensive income

	2020	2019
Type of equity instruments		
– business facilitation	7,051	5,881

There was no overdue debt securities at 31 December 2020 (2019: Nil). The Group did not hold any asset-backed securities, mortgage-backed securities and collateralised debt obligations in 2020 and 2019.

There was no financial investments determined to be impaired at 31 December 2020 (2019: Nil).

29. Assets pledged, assets transferred and collateral received

Assets pledged

Financial assets pledged to secure liabilities

	2020	2019
Trading assets and financial investments	45,405	44,405
Amount of liabilities secured	47,893	44,685

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

	2020		2019	
	Carrying amount of		Carrying amount of	
	Transferred assets	Associated liabilities	Transferred assets	Associated liabilities
Repurchase agreement	6,693	6,270	2,062	1,878
Securities lending agreements	1,338	–	1,039	–
	8,031	6,270	3,101	1,878

The financial assets shown above include amounts transferred to third parties that do not qualify for derecognition, notably debt securities held by counterparties as collateral under repurchase agreements and debt securities lent under securities lending agreements. As the substance of these transactions is secured borrowings, the collateral assets continue to be recognised in full and the related liabilities, reflecting the Group's obligation to repurchase the transferred assets for a fixed price at a future date, are also recognised on the balance sheet. As a result of these transactions, the Group is unable to use, sell or pledge the transferred assets for the duration of the transactions. The Group remains exposed to interest rate risk, credit risk and market risk on these pledged instruments. The counterparty's recourse is not limited to the transferred assets.

Collateral received

Assets accepted as collateral related primarily to standard securities lending, reverse repurchase agreements and derivative margining. These transactions are conducted under terms that are usual and customary to standard securities lending, reverse repurchase agreements and derivative margining.

Fair value of collateral accepted as security for assets

	2020	2019
Fair value of collateral permitted to sell or repledge in the absence of default	13,440	5,659
Fair value of collateral actually sold or repledged	101	–

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 2020. The class of shares held is ordinary.

Name of company	Place of incorporation & operation	Principal activities	Issued equity capital	Percentage of shareholding
Hang Seng Bank (China) Limited[1]	People's Republic of China	Banking	RMB8,317,500,000	100%
Hang Seng Insurance Company Limited	Hong Kong SAR	Retirement benefits and life assurance	HK$6,426,184,570	100%
Hang Seng Investment Management Limited	Hong Kong SAR	Fund management	HK$10,000,000	100%
Hang Seng Securities Limited	Hong Kong SAR	Stockbroking	HK$26,000,000	100%
Yan Nin Development Company Limited	Hong Kong SAR	Investment holding	HK$100,000	100%
Hang Seng Indexes Company Limited	Hong Kong SAR	Index compilation and licensing	HK$10,000	100%
High Time Investments Limited	Hong Kong SAR	Investment holding	HK$2,250,010,000	100%
Hang Seng Qianhai Fund Management Company Limited[2]	People's Republic of China	Fund raising, fund sales and asset management	RMB500,000,000	70%

1 Represents a wholly foreign owned limited liability company registered under the 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

	2020	2019
Share of net assets	**2,358**	2,520

The associates are:

Name of company	Place of incorporation and operation	Principal activities	Issued equity capital	Group's interest in equity capital
Unlisted				
Barrowgate Limited	Hong Kong SAR	Property investment	HK$10,000	24.64%
GZHS Research Co., Ltd.	People's Republic of China	Conduct market/securities analysis and publish research reports	RMB44,680,000	33.00%

The interests in Barrowgate Limited and GZHS Research Co., Ltd. ('GZHS') are owned by the subsidiaries of the Bank.

The above two associates are accounted for using the equity method in the Consolidated Financial Statements as at 31 December 2020 and 2019.

31. Interest in associates continued

For the year ended 31 December 2020, the financial results of GZHS was included in the Consolidated Financial Statements based on financial statements drawn up to 30 September 2020, but taking into account any changes in the subsequent period from 1 October 2020 to 31 December 2020 that would materially affect the results. The Group has taken advantage of the provision contained in HKAS 28 'Investments in Associates and Joint Ventures' whereby it is permitted to include the attributable share of associates' results based on accounts drawn up to a non-coterminous period end where the difference must be no greater than three months.

	Assets	Liabilities	Equity	Revenue	Expenses	Revenue Less Expenses
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)**
2019						
100 per cent	11,256	1,025	10,231	891	206	685
The Group's effective interest	2,773	253	2,520	221	53	168

At 31 December 2020, 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 (2019: Nil).

32. Property, plant and equipment

	2020	2019
Premises	**26,898**	29,498
Plant and equipment[1]	**1,944**	1,405
Other right of use assets	**2,083**	1,459
Premises, plant and equipment	**30,925**	32,362
Investment Properties	**9,415**	10,121
	40,340	42,483

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
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	**26,898**	**9,415**	**3,982**	**40,295**
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	**–**	**–**	**(2,038)**	**(2,038)**
Net book value at 31 December	**26,898**	**9,415**	**1,944**	**38,257**
Representing:				
– measure at cost	**–**	**–**	**1,944**	**1,944**
– measure at valuation	**26,898**	**9,415**	**–**	**36,313**
	26,898	**9,415**	**1,944**	**38,257**

32. Property, plant and equipment continued

(a) Movement in owned property, plant and equipment continued

	Premises	Investment properties	Plant and equipment	Total
2019				
Cost or valuation:				
At 1 January	29,344	10,108	5,368	44,820
Additions	215	31	665	911
Disposals and write-offs	–	–	(106)	(106)
Elimination of accumulated depreciation on revalued premises	(1,032)	–	–	(1,032)
Surplus on revaluation:				
– credited to premises revaluation reserve	888	–	–	888
– credited to income statement	–	80	–	80
Transfer	98	(98)	–	–
Exchange adjustments and other	(15)	–	(8)	(23)
At 31 December	29,498	10,121	5,919	45,538
Accumulated depreciation:				
At 1 January	–	–	(4,202)	(4,202)
Charge for the year (note 12)	(1,032)	–	(412)	(1,444)
Attributable to assets sold or written off	–	–	99	99
Elimination of accumulated depreciation on revalued premises	1,032	–	–	1,032
Exchange adjustments and other	–	–	1	1
At 31 December	–	–	(4,514)	(4,514)
Net book value at 31 December	29,498	10,121	1,405	41,024
Representing:				
– measure at cost	–	–	1,405	1,405
– measure at valuation	29,498	10,121	–	39,619
	29,498	10,121	1,405	41,024

(b) Terms of lease

	Premises		Investment properties	
	2020	2019	**2020**	2019
Leaseholds				
Held in Hong Kong:				
– long leases (over 50 years unexpired)	**2,501**	2,895	**1,635**	1,623
– medium leases (10 to 50 years unexpired)	**23,418**	25,664	**7,409**	8,093
– short leases (below 10 years unexpired)	**–**	–	**371**	405
Held outside Hong Kong:				
– long leases (over 50 years unexpired)	**–**	–	**–**	–
– medium leases (10 to 50 years unexpired)	**979**	939	**–**	–
– short leases (below 10 years unexpired)	**–**	–	**–**	–
	26,898	29,498	**9,415**	10,121

(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:

	2020	2019
Cost less accumulated depreciation at 31 December	**6,873**	7,022

32. Property, plant and equipment continued

(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.

	2020	2019
Direct operating expenses arising from investment properties	**34**	35
Direct operating expenses arising from investment properties that generated rental income	**32**	33

The Group's total future minimum lease payments receivable under non-cancellable operating leases are as follows:

	2020	2019
Within one year	**202**	257
One to two years	**100**	124
Two to three years	**27**	27
Three to four years	**3**	9
Four to five years	**–**	3
	332	420

(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 30 October 2020, and were updated by C&W for any material changes in the valuation as at 31 December 2020. It was confirmed that there was no material change in value since 30 October 2020. 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 2020, there were no transfers into or out of Level 3 (2019: Nil).

The fair value of tenanted investment properties is determined using 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 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 Direct Comparison Approach by making reference to comparable sales transactions as available in the relevant market and have also taken into account the development costs that will be expended to complete the development.

32. Property, plant and equipment continued

(e) Fair value measurement of properties continued

(i) Fair value hierarchy continued

Reconciliation of fair value measurements in Level 3 of the fair value hierarchy

Reconciliation of the movement between opening and closing balances of Level 3 properties measured at fair value using a valuation technique with significant unobservable inputs is under note 32(a). The following table details the gains or losses recognised in profit or loss in relation to the Level 3 premises and investment properties:

	Premises	Investment properties
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 deficit on property revaluation	**–**	**(636)**
– depreciation of premises, plant and equipment	**(1,033)**	**–**
2019		
Unrealised gains or losses recognised in profit or loss relating to those assets held at the end of the reporting period		
– other operating income	–	45
– net surplus on property revaluation	–	35
– depreciation of premises, plant and equipment	(1,032)	–

(ii) Information about significant unobservable inputs in Level 3 valuations

	Valuation technique(s)	Unobservable input(s)	Range 2020	Range 2019
Investment properties	Investment approach	Market yields (reversionary yield)	**2.35% to 4.95%**	2.4% to 4.95%
		Market rental	**HK$14.6 to HK$390 per square foot**	HK$15.5 to HK$709 per square foot
	Direct comparison approach	Premium (discount) on characteristic of the properties	**-20% to +20%**	N/A
Premises	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

	2020	2019
Present value of in-force long-term insurance business	**22,551**	20,469
Internally developed software	**1,737**	1,057
Acquired software	**116**	99
Goodwill	**329**	329
	24,733	21,954

33. Intangible assets continued

(a) Movement of present value of in-force long-term insurance business ('PVIF')

	2020	2019
At 1 January	**20,469**	15,910
Movement in present value of in-force long-term insurance business (note 9)	**2,082**	4,559
– Addition from current year new business	**1,761**	2,760
– Expected return	**(1,569)**	(1,272)
– Experience variances	**192**	32
– Changes in operating assumptions	**280**	72
– Investment return variances	**812**	6
– Changes in investment assumptions	**606**	2,961
At 31 December	**22,551**	20,469

The key assumptions used in the computation of PVIF are as follows:

	2020	2019 *Restated*
Risk discount rate	**5.1%**	5.4%
Expenses inflation	**3.0%**	3.0%
Average lapse rate:		
– 1st year	**2.4%**	2.4%
– 2nd year onwards	**3.8%**	3.7%

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

	2020	2019
At 1 January and at 31 December	**329**	329

Goodwill arising from acquisition of the remaining 50 per cent of Hang Seng Life Limited from HSBC Insurance (Asia-Pacific) Holdings Limited amounted to HK$329m is allocated to cash-generating units of Life Insurance – Hang Seng Insurance Company Limited ('HSIC') for the purpose of impairment testing.

During 2020, there was no impairment of goodwill (2019: 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 2020. 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 of the Annual Report 2020.

33. Intangible assets continued

(c) Movement of internally developed application software and acquired software

	2020	2019
Cost:		
At 1 January	**2,363**	1,754
Additions	**988**	823
Amounts written off	**(89)**	(211)
Exchange and others	**15**	(3)
At 31 December	**3,277**	2,363
Accumulated amortisation:		
At 1 January	**(1,207)**	(1,242)
Charge for the year (note 12)	**(297)**	(164)
Impairment	**–**	(10)
Amounts written off	**87**	211
Exchange and others	**(7)**	(2)
At 31 December	**(1,424)**	(1,207)
Net book value at 31 December	**1,853**	1,156

34. Other assets

	2020	2019
Items in the course of collection from other banks	**5,062**	5,650
Bullion	**12,337**	9,394
Prepayments and accrued income	**3,917**	4,503
Acceptances and endorsements	**9,027**	8,336
Less: Expected credit losses	**(14)**	(8)
Reinsurers' share of liabilities under insurance contracts (note 40)	**5,471**	8,503
Settlement accounts	**4,329**	4,175
Cash collateral	**5,286**	2,216
Other accounts	**3,511**	3,661
	48,926	46,430

Other accounts included 'Assets held for sale' of HK$28m (2019: HK$19m). It also included 'Retirement benefit assets' of HK$7m (2019: HK$26m).

There was no accumulated loss recognised directly in equity relating to assets held for sale for 2020 and 2019. There was no significant impaired, overdue or rescheduled other assets at the year-end of 2020 and 2019.

35. Current, savings and other deposit accounts

	2020	2019
Current, savings and other deposit accounts:		
– as stated in Consolidated Balance Sheet	**1,209,472**	1,203,458
– structured deposits reported as financial liabilities designated at fair value (note 37)	**26,840**	24,498
	1,236,312	1,227,956
By type:		
– demand and current accounts	**137,050**	99,431
– savings accounts	**825,547**	670,573
– time and other deposits	**273,715**	457,952
	1,236,312	1,227,956

36. Trading liabilities

	2020	2019
Short positions in securities	**30,937**	37,976

37. Financial liabilities designated at fair value

	2020	2019
Certificates of deposit in issue (note 38)	**1,516**	2,014
Structured deposits (note 35)	**26,840**	24,498
Other structured debt securities in issue (note 38)	**3,755**	2,639
Liabilities to customers under investment contracts	**419**	429
	32,530	29,580

At 31 December 2020, the accumulated loss in fair value attributable to changes in own credit risk for financial liabilities designated at fair value was HK$6m (2019: accumulated loss HK$5m).

38. Certificates of deposit and other debt securities in issue

	2020	2019
Certificates of deposit and other debt securities in issue:		
– as stated in Consolidated Balance Sheet	**62,500**	17,190
– certificates of deposit in issue designated at fair value (note 37)	**1,516**	2,014
– other structured debt securities in issue reported as financial liabilities designated at fair value (note 37)	**3,755**	2,639
	67,771	21,843
By type:		
– certificates of deposit in issue	**64,016**	19,204
– other debt securities in issue	**3,755**	2,639
	67,771	21,843

39. Other liabilities

	2020	2019
Items in the course of transmission to other banks	**6,316**	6,751
Accruals	**3,490**	4,634
Acceptances and endorsements	**9,027**	8,336
Retirement benefit liabilities (note 48(a))	**630**	670
Settlement accounts	**5,124**	8,410
Cash collateral	**1,060**	688
Lease liabilities	**2,102**	1,438
Other	**3,585**	4,256
	31,334	35,183

40. Liabilities under insurance contracts

	Gross	Reinsurers' share[1]	Net
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	**142,611**	**(5,471)**	**137,140**
Unit-linked			
At 1 January	**69**	**–**	**69**
Claims and benefits paid	**(10)**	**–**	**(10)**
Increase in liabilities to policyholders	**10**	**–**	**10**
At 31 December	**69**	**–**	**69**
	142,680	**(5,471)**	**137,209**
2019			
Non-linked			
At 1 January	120,134	(8,788)	111,346
Claims and benefits paid	(12,386)	2,138	(10,248)
Increase in liabilities to policyholders	21,153	(1,339)	19,814
Foreign exchange and other movements	3,150	(514)	2,636
At 31 December	132,051	(8,503)	123,548
Unit-linked			
At 1 January	61	–	61
Claims and benefits paid	(5)	–	(5)
Increase in liabilities to policyholders	13	–	13
At 31 December	69	–	69
	132,120	(8,503)	123,617

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:

	2020	2019
Included in 'Other assets':		
Current taxation recoverable	**–**	49
Deferred tax assets	**183**	110
	183	159
Current tax liabilities:		
Provision for Hong Kong profits tax	**214**	4,140
Provision for taxation outside Hong Kong	**68**	19
	282	4,159
Deferred tax liabilities	**7,302**	7,083
	7,584	11,242

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 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**
At 1 January 2019	212	4,039	(367)	47	(2)	2,354	6,283
Exchange adjustment and others	–	1	3	(1)	–	4	7
Charged/(credited) to income statement (note 17(a))	133	(130)	(170)	–	–	657	490
Charged/(credited) to reserves	–	150	–	(1)	5	39	193
At 31 December 2019	345	4,060	(534)	45	3	3,054	6,973

(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$480m (2019: HK$780m). Of these amounts, HK$213m (2019: HK$241m) 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 2020 (2019: Nil).

(d) Deferred tax liabilities not recognised

There were no deferred tax liabilities not recognised as at 31 December 2020 (2019: Nil).

42. Subordinated liabilities

Nominal value	Description	2020	2019
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]	**3,101**	3,114
		19,481	19,494
Representing:			
– measured at amortised cost		**19,481**	19,494

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.

The Bank has not had any defaults of principal, interest or other breaches with respect to its debt instruments during 2020 (2019: nil).

43. Share capital

	2020		2019	
	No. of shares	**HK$**	No. of shares	HK$
Ordinary shares, issued and fully paid				
At 1 January and 31 December	**1,911,842,736**	**9,658**	1,911,842,736	9,658

44. Other equity instruments

Nominal value	Description	2020	2019
US$900 million	Fixed to floating rate perpetual capital instrument callable from September 2024[1]	**7,044**	7,044
US$600 million	Fixed to floating rate perpetual capital instrument callable from June 2024[2]	**4,700**	4,700
		11,744	11,744

1 Coupon rate is 6.03% and then three-month US dollar LIBOR plus 4.02 per cent from the first call date.

2 Coupon rate is 6.00% and then three-month US dollar LIBOR plus 4.06 per cent from the first call date.

The additional tier 1 capital instruments, which are qualified as loss-absorbing capacity, are perpetual and subordinated. The coupon payments of these capital instruments may be cancelled at the sole discretion of the Bank. The capital instruments will be written down at the point of non-viability on the occurrence of a trigger event as defined in the Banking (Capital) Rules. They rank higher than ordinary shares in the event of a winding-up.

45. Contingent liabilities, contractual commitments and guarantees

(a) Off-balance sheet contingent liabilities and commitments

	2020	2019
Contingent liabilities and financial guarantee contracts		
Financial guarantees[1]	**3,024**	3,825
Performance and other guarantees[2]	**16,774**	13,959
Other contingent liabilities	**49**	59
	19,847	17,843
Commitments[3]		
Documentary credits and short-term trade-related transactions	**3,248**	2,570
Forward asset purchases and forward forward deposits placed	**7,432**	4,356
Undrawn formal standby facilities, credit lines and other commitments to lend	**488,813**	491,744
	499,493	498,670

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$356,776m of commitments at 31 December 2020 (2019: HK$347,921m) 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 2020, capital commitments, mainly related to the commitment for renovation of branches and offices, were HK$916m (2019: HK$851m).

47. Offsetting of financial assets and financial liabilities

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously ('the offset criteria').

The 'Amounts not set off in the balance sheet' include transactions where:

- the counterparty has an offsetting exposure with the Group and a master netting or similar arrangement is in place with a right of set off only in the event of default, insolvency or bankruptcy, or the offset criteria are otherwise not satisfied; and
- in the case of derivatives and reverse repurchase/repurchase, stock borrowing/lending and similar arrangements, cash and non-cash collaterals has been received and pledged.

	Amounts subject to enforceable netting arrangements								
	Effects of offsetting in the balance sheet			Amounts not set off in the balance sheet					
	Gross amounts	Amounts offset	Net Amounts reported in the balance sheet	Financial instruments	Non-cash collateral	Cash collateral	Net amount	Amounts not subject to enforceable netting arrangements[1]	Balance sheet total
Financial assets[2]									
Derivatives	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	31,215[2]
Restated									
Derivatives	6,568	–	6,568	(5,254)	(378)	(656)	280	770	7,338
Reverse repos, stock borrowing and similar agreements classified as:	5,673	–	5,673	–	(5,671)	(2)	–	986	6,659
– trading assets	–	–	–	–	–	–	–	–	–
– non-trading assets	5,673	–	5,673	–	(5,671)	(2)	–	986	6,659
Other assets	2,079	(1,625)	454	–	–	–	454	–	454
At 31 December 2019	14,320	(1,625)	12,695	(5,254)	(6,049)	(658)	734	1,756	14,451[2]
Financial liabilities[3]									
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	27,343[3]
Restated									
Derivatives	6,618	–	6,618	(5,254)	(447)	(917)	–	844	7,462
Repos, stock lending and similar agreements classified as:	–	–	–	–	–	–	–	1,878	1,878
– trading liabilities	–	–	–	–	–	–	–	–	–
– non-trading liabilities	–	–	–	–	–	–	–	1,878	1,878
Other liabilities	1,629	(1,625)	4	–	–	–	4	–	4
At 31 December 2019	8,247	(1,625)	6,622	(5,254)	(447)	(917)	4	2,722	9,344[3]

1 These exposures continue to be secured by financial collateral, but the Bank may not have sought or been able to obtain a legal opinion evidencing enforceability of the offsetting right.

2 Amounts presented in the balance sheet included balances due from HSBC entities of HK$9,733m (2019: HK$6,520m).

3 Amounts presented in the balance sheet included balances due to HSBC entities of HK$8,334m (2019: HK$2,073m).

48. Employee retirement benefits

(a) Defined benefit schemes

The Group operates two defined benefit schemes, the Hang Seng Bank Limited Defined Benefit Scheme ('HSBDBS'), which is the principal scheme which covers about 18 per cent of the Group's employees, and the Hang Seng Bank Limited Pension Scheme ('HSBPS'). HSBDBS was closed to new entrants with effect from 1 April 1999, and HSBPS was closed to new entrants with effect from 31 December 1986. 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.

These schemes are 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 Index ETFs/funds and bonds, with low investment and liquidity risk. Each investment manager has been assigned an investment mandate with the target asset allocation. The target asset allocations for the portfolio are as follows: Bonds (0 – 62%) and Index ETFs/funds (0 – 38%).

(i) Cumulative actuarial gains/(losses) recognised in other comprehensive income in respect of defined benefit schemes

	2020	2019
At 1 January	**(1,199)**	(1,451)
Actuarial gains/(losses) recognised in other comprehensive income	**(10)**	252
At 31 December	**(1,209)**	(1,199)

(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 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 gains/(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	**4,679**	**(5,302)**	**(623)**
Retirement benefit liabilities recognised in Consolidated Balance Sheet (included in 'Other liabilities')	**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)**	

The Group expects to make HK$109m of contributions to defined benefit schemes during 2021 (2019: expected contributions for 2020 was HK$118m).

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 2019	4,426	(5,247)	(821)
Current service cost (note 12)	–	(170)	(170)
Interest income/(cost) on the defined benefit scheme asset/(liability) (note 12)	82	(96)	(14)
Remeasurement effects recognised in other comprehensive income	530	(278)	252
– Actuarial gains/(losses) from changes in demographic assumptions	–	–	–
– Actuarial gains/(losses) from changes in financial assumptions	–	(48)	(48)
– Actuarial gains/(losses) from experience	530	(230)	300
Contributions by the Group	117	–	117
Benefits paid	(580)	580	–
Others	–	–	–
Administrative costs and taxes paid by scheme (note 12)	(8)	–	(8)
At 31 December 2019	4,567	(5,211)	(644)
Retirement benefit liabilities recognised in balance sheet (included in 'Other liabilities')	4,407	(5,077)	(670)
Retirement benefit assets recognised in balance sheet (included in 'Other accounts' of 'Other assets')	160	(134)	26
Present value of defined benefit obligation relating to:			
– Actives		(5,080)	
– Pensioners		(131)	

(iii) Benefits expected to be paid

Benefits expected to be paid from the HSBDBS and HSBPS to retirees over each of the next five years, and in aggregate for the five years thereafter, are as follows:

	2021	2022	2023	2024	2025	2026-2030
HSBDBS	451	558	490	425	410	2,064
HSBPS	11	10	10	10	9	38

The duration of the principal scheme HSBDBS is 6.1 years (2019: 6.1 years) under the disclosure assumptions adopted.

(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**
2020			
Fair value of scheme assets			
– Index ETFs/Funds	**2,014**	**2,014**	**–**
– Bonds	**2,595**	**2,595**	**–**
– Other*	**70**	**70**	**32**
	4,679	**4,679**	**32**
2019			
Fair value of scheme assets			
– Index ETFs/Funds	1,722	1,722	–
– Bonds	2,724	2,724	–
– Other*	121	121	63
	4,567	4,567	63

* Other mainly consists of cash and deposits.

48. Employee retirement benefits continued

(a) Defined benefit schemes continued

(v) The Principal Scheme's key actuarial financial assumptions

These schemes are funded defined benefit schemes and are administered by trustees with assets held separately from those of the Group. The latest annual actuarial valuations at 31 December 2020 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 principal scheme assets of HSBDBS represented 102 per cent (2019: 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$88m (surplus in 2019: HK$87m). On a wind-up basis, the actuarial value of the HSBDBS assets represented 109 per cent (2019: 104 per cent) of the members' vested benefits, based on salaries at that date, and the resulting surplus amounted to HK$360m (surplus in 2019: HK$155m).

The determinations for actuarial funding valuation purposes are based on different methods and assumptions from those used for financial reporting purposes, and as a result should neither be compared nor related to other determinations included in these financial statements.

The present value of the principal scheme's obligation was a final lump sum salary and payment of HK$5,150m (2019: HK$5,077m). 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 principal scheme

	HSBDBS %
2020	
Discount rate	**0.45**
Expected rate of salary increases	**2.00**
of which:	
– 2021	**2.00**
– thereafter	**4.00**
2019	
Discount rate	1.75
Expected rate of salary increases	4.00
of which:	
– 2020	4.00
– 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.

48. Employee retirement benefits continued

(a) Defined benefit schemes continued

(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	
	2020	2019
Discount rate		
– change in retirement benefit obligation at year end from a 25bps increase	**(78)**	(76)
– change in retirement benefit obligation at year end from a 25bps decrease	**81**	78
Rate of salary increase		
– change in retirement benefit obligation at year end from a 25bps increase	**88**	86
– change in retirement benefit obligation at year end from a 25bps decrease	**(86)**	(84)

(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:

	2020	2019
Amounts charged to the income statement (note 12)	**309**	293

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 (2019: HK$0.04m).

49. Share-based payments

The Group participated in various share compensation plans as listed in the following tables that are operated by the HSBC Group for acquiring of HSBC Holdings plc shares. These are to be settled by the delivery of shares of HSBC Holdings plc.

Share awards and option plans

Award	**Policy**
Deferred Share Awards	– Vesting of awards generally subject to continued employment with the Group – Vesting often staggered over a period ranging from three to seven years – Vested shares may be subject to a retention requirement post-vesting – Awards are generally subject to the rules of Share Plan and any performance conditions – Awards granted from 2010 onwards are subject to a malus provision prior to vesting – Awards granted to material risk takers from 2015 onwards are subject to clawback post-vesting
International Employee Share Purchase Plan ('Sharematch')	– The plan was introduced in 2013 – Shares are purchased in the market each quarter up to a maximum of GBP750, or the equivalent in local currency – Matching shares are added at a ratio of one free share for every three purchased – Matching awards vest subject to continued employment and retention of the purchased shares for a maximum period of two years and nine months.

49. Share-based payments continued

(a) HSBC share awards

	2020 Number ('000)	2019 Number ('000)
Outstanding at 1 January	**984**	917
Additions during the year	**1,059**	654
Less: Released/Lapsed in the year	**(665)**	(587)
Outstanding at 31 December	**1,378**	984

The closing price of the HSBC Holdings plc share at 31 December 2020 was £3.79 (2019: £5.92).

The weighted average remaining vesting period as at 31 December 2020 was 0.59 years (2019: 0.60 years).

(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

	2020	2019
Equity-settled share-based payments	**38**	27
Cash-settled share-based payments	**–**	2
Income statement charge for restricted share awards (note 12)	**38**	29

The above charge was computed from the fair values of the share-based payment transaction when contracted, that arose under employee share awards made in accordance with HSBC's reward structures.

50. Material related-party transactions

(a) Immediate holding company and its subsidiaries and fellow subsidiaries

The Group entered into transactions with its immediate holding company and its subsidiaries as well as its fellow subsidiaries in the ordinary course of business, mainly including lending activities, the acceptance and placement of interbank deposits, correspondent banking transactions, off-balance sheet transactions and the provision of other banking and financial services. The activities were on substantially the same terms, including interest rates and security, as for comparable transactions with third party counterparties.

The Group used the IT service of, and shared an automated teller machine network with, its immediate holding company. The Group also shares the costs of certain IT projects with and used certain processing services of fellow subsidiaries.

The Group maintained a staff retirement benefit scheme for which fellow subsidiary companies act 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. The fees on these transactions are determined on an arm's length basis.

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 2020, the Bank has paid coupons on AT1 capital instruments of HK$700m to its immediate holding company (2019: HK$342m).

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	
	2020	2019	**2020**	2019
Interest income	**221**	401	**65**	60
Interest expense	**(584)**	(542)	**–**	–
Other operating income/(expenses)	**134**	166	**(31)**	(29)
Operating expenses*	**(810)**	(760)	**(2,237)**	(1,961)
Amounts due from:				
Reverse repurchase agreements – non-trading	**5,530**	4,747	**–**	–
Placings with and advances to banks	**19,903**	30,961	**6,151**	3,928
Derivative financial instruments	**4,100**	1,718	**103**	55
Other assets	**2,480**	955	**161**	33
	32,013	38,381	**6,415**	4,016
Amounts due to:				
Current, savings and other deposit accounts	**2,502**	2,514	**–**	–
Deposits from banks	**8,030**	449	**–**	25
Repurchase agreements – non-trading	**2,193**	–	**–**	–
Derivative financial instruments	**5,925**	1,986	**216**	87
Certificates of deposit and other debt securities in issue	**50,000**	–	**–**	–
Subordinated liabilities	**19,481**	19,494	**–**	–
Other liabilities	**177**	190	**307**	269
	88,308	24,633	**523**	381
Derivative contracts:				
Contract amount	**467,118**	440,810	**20,381**	18,296

* 2020 operating expenses included payment of HK$721m (2019: HK$593m) of software costs which were capitalised as intangible assets in the Consolidated Balance Sheet of the Group.

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 remained unchanged at 15. 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:

	2020	2019
Salaries, allowances and benefits in kind	70	63
Retirement scheme contributions	5	5
Variable bonuses		
– Cash bonus	23	26
– Share-based payment	16	20
	114	114

(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:

	2020	2019
For the year		
Interest income	740	410
Interest expense	85	123
Fees and commission income	15	10
Maximum aggregate amount of loans and advances	45,274	18,627
At the year-end		
Loans and advances	41,894	17,419
Deposits	11,640	7,926
Guarantees issued	558	349
Undrawn commitments	4,789	1,363

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; this includes exposures to key management personnel, their relatives and companies that may be directly or indirectly influenced or controlled by such individuals.

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 2020 are shown as below.

	2020		2019	
	Highest balance during the year	**Balance at 31 December**	Highest balance during the year	Balance at 31 December
– Loans and advances	**17,511**	**14,387**	16,497	15,359
– Guarantees issued	**431**	**237**	348	345

The above relevant transactions in 2020 and 2019 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. Details of interests in associates can be found in note 31. Transactions and balances during the year with associates were as follows:

	2020		2019	
	Highest balance during the year	**Balance at 31 December**	Highest balance during the year	Balance at 31 December
Amounts due from associates[#]	**6,973**	**247**	6,782	2,116
Amounts due to associates[#]	**2,361**	**1,061**	2,811	396

For the year	**2020**	2019
Total operating income	**68**	112
Operating expenses	**–**	(9)

[#] Representing associates in HSBC Group

The disclosure of the year-end balance and the highest amounts outstanding during the year is considered to be the most meaningful information to represent the amount of transactions and outstanding balances during the year.

The transactions resulting in outstanding balances arose in the ordinary course of business and on substantially the same terms, including interest rates and security, as for comparable transactions with third party counterparties.

(g) Ultimate holding company

The Group participates in various share option and share plans operated by HSBC Holdings plc whereby share options or shares of HSBC Holdings plc are granted to employees of the Group. As disclosed in note 49, the Group recognises an expense in respect of these share options and share awards. The cost borne by the ultimate holding company in respect of these share options and share awards is treated as a capital contribution and is recorded under 'Other reserves' . The balance of this reserve as at 31 December 2020 amounted to HK$688m comprising HK$668m relating to share option schemes and HK$20m relating to share award schemes (2019: HK$673m comprising HK$668m relating to share option schemes and HK$5m relating to share award schemes).

51. Fair value of financial instruments

(a) Fair value of financial instruments carried at fair value

Control framework

Fair values are subject to a control framework designed to ensure that they are either determined or validated by a function independent of the risk-taker.

Where fair values are determined by reference to externally quoted prices or observable pricing inputs to models, independent price determination or validation is utilised. For inactive markets, the Group sources alternative market information, with greater weight given to information that is considered to be more relevant and reliable. Examples of the factors considered are price observability, instrument comparability, consistency of data sources, underlying data accuracy and timing of prices.

For fair values determined using valuation models, the control framework includes development or validation by independent support functions of the model logic, inputs, model outputs and adjustments. Valuation models are subject to a process of due diligence before becoming operational and are calibrated against external market data on an ongoing basis.

Changes in fair value are generally subject to a profit and loss analysis process and are disaggregated into high-level categories including portfolio changes, market movements and other fair value adjustments.

The majority of financial instruments measured at fair value are in Global 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 Group's 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 a LIBOR-based discount curve. The difference in the valuations is attributable to the Group's own credit spread. This methodology is applied consistently across all securities.

Structured notes issued and certain other hybrid instruments are included within 'Financial liabilities designated at fair value' and are measured at fair value. The credit spread applied to these instruments is derived from the spreads at which the Group issues structured notes.

Gains and losses arising from changes in the credit spread of liabilities issued by the Group reverse over the contractual life of the debt, provided that the debt is not repaid at a premium or a discount.

Fair value hierarchy

Fair values of financial assets and liabilities are determined according to the following hierarchy:

- Level 1 – valuation technique using quoted market price: financial instruments with quoted prices for identical instruments in active markets that the Group can access at the measurement date.

- Level 2 – valuation technique using observable inputs: financial instruments with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets and financial instruments valued using models where all significant inputs are observable.

- Level 3 – valuation technique with significant unobservable inputs: financial instruments valued using valuation techniques where one or more significant inputs are unobservable.

51. Fair value of financial instruments continued

(a) Fair value of financial instruments carried at fair value continued

The accounting policies, control framework and hierarchy used to determine fair values in 2020 are consistent with those applied for the Annual Report 2019. The following table provides an analysis of financial instruments carried at fair value and bases of valuation:

	Fair value hierarchy					
	Quoted market price Level 1	Using observable inputs Level 2	With significant unobservable inputs Level 3	Third party total	Amounts with HSBC entities*	Total
Recurring fair value measurements						
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**
2019						
Assets						
Trading assets	43,731	3,626	–	47,357	–	47,357
Derivative financial instruments	307	5,255	3	5,565	1,773	7,338
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	10,607	2,655	5,509	18,771	–	18,771
Financial investments	287,807	53,863	2,179	343,849	–	343,849
Liabilities						
Trading liabilities	37,976	–	–	37,976	–	37,976
Derivative financial instruments	23	5,366	–	5,389	2,073	7,462
Financial liabilities designated at fair value	–	21,839	7,741	29,580	–	29,580

* Included structured instruments and 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
2020							
Transfer from Level 1 to Level 2	**8,214**	**251**	**–**	**–**	**–**	**–**	**–**
Transfer from Level 2 to Level 1	**12,011**	**664**	**–**	**–**	**–**	**–**	**–**
2019							
Transfer from Level 1 to Level 2	–	–	–	–	–	–	–
Transfer from Level 2 to Level 1	–	–	1,268	–	–	–	–

51. Fair value of financial instruments continued

(a) Fair value of financial instruments carried at fair value continued

Transfers between Level 1 and Level 2 fair values continued

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.

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.

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
2020							
Private equity	**2,907**	**–**	**8,933**	**–**	**–**	**–**	**–**
Structured notes	**–**	**–**	**–**	**–**	**–**	**5,702**	**–**
Derivatives	**–**	**–**	**–**	**3**	**–**	**–**	**–**
	2,907	**–**	**8,933**	**3**	**–**	**5,702**	**–**
2019							
Private equity	2,179	–	5,509	–	–	–	–
Structured notes	–	–	–	–	–	7,741	–
Derivatives	–	–	–	3	–	–	–
	2,179	–	5,509	3	–	7,741	–

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 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	**2,907**	**–**	**8,933**	**3**	**–**	**5,702**	**–**
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)**	**–**

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 2019	1,287	–	4,089	24	–	12,314	71
Total gains or losses recognised in profit or loss							
– net income from financial instruments measured at fair value through profit or loss	–	–	256	(15)	–	59	(71)
Total gains or losses recognised in other comprehensive income							
– fair value gains	892	–	–	–	–	–	–
– exchange differences	–	–	–	–	–	–	–
Purchases	–	–	1,684	–	–	–	–
Issues/deposit taking	–	–	–	–	–	21,721	–
Sales	–	–	(3)	–	–	–	–
Settlements	–	–	(438)	–	–	(26,041)	–
Transfers out	–	–	(79)	(6)	–	(316)	–
Transfers in	–	–	–	–	–	4	–
At 31 December 2019	2,179	–	5,509	3	–	7,741	–
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	–	–	341	3	–	(94)	–

In 2020, the transfer out 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 private equity and strategic investments. In the absence of an active market, the fair value of private equity 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.

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
2020				
Private equity	**447**	**(447)**	**145**	**(145)**
Derivatives	**–**	**–**	**–**	**–**
	447	**(447)**	**145**	**(145)**
2019				
Private equity	275	(275)	140	(140)
Derivatives	1	(1)	–	–
	276	(276)	140	(140)

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 2020	Valuation technique(s)	Unobservable input(s)	Range
Assets				
Private equity	**11,840**	Net asset value	N/A	**N/A**
		Market-comparable approach	Earnings Multiple	**31 – 53**
			P/B ratios	**0.35 – 2.20**
			Liquidity Discount	**10% – 60%**
Derivatives	**3**	Option model	Equity Volatility	**29.07% – 57.94%**
Liabilities				
Structured notes	**5,702**	Option model	Equity Volatility	**6.89% – 30.67%**
			FX Volatility	**6.05% – 22.68%**

	Fair value at 31 Dec 2019	Valuation technique(s)	Unobservable input(s)	Range
Assets				
Private equity	7,688	Net asset value	N/A	N/A
		Market-comparable approach	Earnings Multiple	27 – 40
			P/B ratios	0.45 – 1.63
			Liquidity Discount	10% – 60%
Derivatives	3	Option model	Equity Volatility	13.23% – 22.82%
Liabilities				
Structured notes	7,741	Option model	Equity Volatility	11.23% – 18.22%
			FX Volatility	1.13% – 16.92%

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
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**
2019					
Financial Assets					
Reverse repurchase agreements – non-trading	6,659	–	6,659	–	6,659
Placings with and advances to banks	65,807	–	65,739	–	65,739
Loans and advances to customers	942,930	–	–	940,506	940,506
Financial investments – at amortised cost	117,855	15,418	106,569	–	121,987
Financial Liabilities					
Deposits from banks	2,491	–	2,491	–	2,491
Current, savings and other deposit accounts	1,203,458	–	1,203,538	–	1,203,538
Repurchase agreements – non-trading	1,878	–	1,878	–	1,878
Certificates of deposit and other debt securities in issue	17,190	–	17,178	–	17,178
Subordinated liabilities	19,494	–	20,333	–	20,333

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.

51. Fair value of financial instruments continued

(b) Fair value of financial instruments not carried at fair value continued

(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 2020, the Group's interests in unconsolidated structured entities were recognised in financial assets mandatorily measured at fair value through profit or loss of HK$15,158m and trading assets of HK$45m (2019: financial assets mandatorily measured at fair value through profit or loss of HK$10,442m and trading assets of HK$11m). These collective investment funds include investment in unit trusts, private equity funds, hedge 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$7,427m (2019: HK$4,350m) to invest in several alternative investment funds for funding future alternative invesments 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.

55. Bank balance sheet and statement of changes in equity

Bank balance sheet at 31 December

	2020	2019
ASSETS		
Cash and balances at central banks	**9,745**	11,725
Trading assets	**35,590**	46,786
Derivative financial instruments	**14,358**	6,566
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**77**	177
Reverse repurchase agreements – non-trading	**13,360**	5,673
Placings with and advances to banks	**28,635**	53,350
Loans and advances to customers	**866,379**	870,343
Amounts due from subsidiaries	**37,826**	16,742
Financial investments	**389,060**	331,133
Investments in subsidiaries	**20,166**	20,166
Investment properties	**4,014**	4,313
Premises, plant and equipment	**24,942**	26,060
Intangible assets	**1,718**	1,041
Other assets	**31,654**	26,702
Total assets	**1,477,524**	1,420,777
LIABILITIES AND EQUITY		
Liabilities		
Deposits from banks	**9,028**	2,444
Current, savings and other deposit accounts	**1,153,163**	1,154,177
Repurchase agreements – non-trading	**101**	–
Trading liabilities	**30,937**	37,976
Derivative financial instruments	**18,002**	6,620
Financial liabilities designated at fair value	**7,232**	6,367
Certificates of deposit and other debt securities in issue	**55,597**	3,542
Amounts due to subsidiaries	**12,099**	11,544
Other liabilities	**21,814**	27,091
Current tax liabilities	**134**	4,025
Deferred tax liabilities	**2,783**	2,921
Subordinated liabilities	**19,481**	19,494
Total liabilities	**1,330,371**	1,276,201
Equity		
Share capital	**9,658**	9,658
Retained profits	**106,200**	103,517
Other equity instruments	**11,744**	11,744
Other reserves	**19,551**	19,657
Shareholders' equity	**147,153**	144,576
Total equity and liabilities	**1,477,524**	1,420,777

Raymond Ch'ien *Chairman*
Louisa Cheang *Vice-Chairman and Chief Executive*
Eric K C Li *Director*

Andrew W L Leung *Chief Financial Officer*

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: Premises revaluation reserve	Other reserves: Financial assets at FVOCI reserve	Other reserves: Cash flow hedge reserve	Other reserves: Foreign exchange reserve	Other reserves: Others[2]	Total equity
At 1 January 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[3]	–	–	(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 2020, the effect of this requirement is to restrict the amount of reserves which can be distributed by the Bank to shareholders by HK$1,332m (2019: HK$3,421m).

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 2020 represented the payment of fourth interim dividend of 2019 and the first three interim dividends of 2020 amounted to HK$7,647m and HK$5,161m respectively.

55. Bank balance sheet and statement of changes in equity continued

Bank statement of changes in equity for the year ended 31 December continued

				Other reserves					
	Share capital	Other equity instruments	Retained profits[1]	Premises revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Others[2]	Total equity
At 1 January 2019	9,658	6,981	96,887	15,931	1,223	(11)	21	669	131,359
Profit for the year	–	–	21,188	–	–	–	–	–	21,188
Other comprehensive income (net of tax)	–	–	140	580	1,779	27	(5)	(4)	2,517
Debt instruments at fair value through other comprehensive income	–	–	–	–	24	–	–	–	24
Equity instruments designated at fair value through other comprehensive income	–	–	–	–	1,755	–	–	–	1,755
Cash flow hedges	–	–	–	–	–	27	–	–	27
Change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	–	–	–	–	–	–	–	(4)	(4)
Property revaluation	–	–	–	580	–	–	–	–	580
Actuarial gains on defined benefit plans	–	–	211	–	–	–	–	–	211
Exchange differences and others	–	–	(71)	–	–	–	(5)	–	(76)
Total comprehensive income for the year	–	–	21,328	580	1,779	27	(5)	(4)	23,705
Cancellation and repayment of AT1 capital instrument	–	(6,981)	–	–	–	–	–	–	(6,981)
Issue of new AT1 capital instruments	–	11,744	–	–	–	–	–	–	11,744
Dividends paid	–	–	(14,914)	–	–	–	–	–	(14,914)
Coupons paid on AT1 capital instruments	–	–	(342)	–	–	–	–	–	(342)
Movement in respect of share-based payment arrangements	–	–	1	–	–	–	–	4	5
Transfers	–	–	557	(557)	–	–	–	–	–
At 31 December 2019	9,658	11,744	103,517	15,954	3,002	16	16	669	144,576

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 2020, the effect of this requirement is to restrict the amount of reserves which can be distributed by the Bank to shareholders by HK$1,332m (2019: HK$3,421m).

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 2020 represented the payment of fourth interim dividend of 2019 and the first three interim dividends of 2020 amounted to HK$7,647m and HK$5,161m respectively.

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 2020, 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$99,841m (2019: HK$94,427m). After considering regulatory capital requirement and business development needs, an amount of HK$5,353m (2019: HK$7,647m) has been declared as the proposed fourth interim dividend in respect of the financial year ended 31 December 2020. The difference between the aggregate distributable reserves of HK$99,841m and the Bank's retained profit of HK$106,200m 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 23 February 2021.

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') set out on pages 170 to 241, which comprise:

– the consolidated balance sheet as at 31 December 2020;

– the consolidated income statement for the year then ended;

– the consolidated statement of comprehensive income for the year then ended;

– the consolidated statement of changes in equity for the year then ended;

– the consolidated statement of cash flows for the year then ended; and

– the notes[1] to the consolidated financial statements, which include a summary of significant accounting policies.

[1] Certain required disclosures as described in Note 1 (b) have been presented elsewhere in the Annual Report 2020, 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 2020, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ('HKFRSs') issued by the Hong Kong Institute of Certified Public Accountants ('HKICPA') and have been properly prepared in compliance with the Hong Kong Companies Ordinance.

Basis for Opinion

We conducted our audit in accordance with Hong Kong Standards on Auditing ('HKSAs') issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants ('the Code'), and we have fulfilled our other ethical responsibilities in accordance with the Code.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters identified in our audit are summarised as follows:

– Expected credit losses on loans and advances to customers;

– Information Technology access management; and

– The present value of in-force long-term insurance business ('PVIF') and liabilities under non-linked life insurance contracts.

Key Audit Matters continued

Expected credit losses on loans and advances to customers

Nature of the Key Audit Matter

At 31 December 2020, the Group recorded an expected credit loss ('ECL') provision on loans and advances to customers of HK$5,180m.

The determination of the ECL provision requires the use of complex credit risk methodologies based on the Group's historic experience of the correlations between defaults and losses, borrower creditworthiness and economic conditions, which can result in limitations in their reliability to appropriately estimate ECL. Significant judgement and subjectivity are involved in determining whether these methodologies and their application in models remain appropriate and in determining the quantum of any management judgemental adjustments required to account for late breaking events, model deficiencies and expert credit judgement applied following management review and challenge.

Significant judgement is also required to determine assumptions, which involve subjectivity and estimation uncertainty. The significant assumptions include those with greater levels of management judgement and for which variations have the most significant impact on ECL. Specifically, these include likelihoods of economic scenarios, any alternative and additional scenarios used, customer risk ratings and probabilities of default, and the prospects of future recoverability of credit impaired wholesale exposures. Likewise, there is inherent uncertainty with the consensus economic forecasts data from external economists.

The ongoing COVID-19 pandemic and continued geopolitical tensions between the US and China increase the inherent risk and estimation uncertainty involved in determining the ECL provision and the level of credit risk associated with the Group's customers. The speed and severity of the economic shock caused specifically by the COVID-19 pandemic and consequent government and regulator responses may have altered the correlations between losses, borrower creditworthiness and economic conditions, as well as impacted economic factors such as GDP and unemployment, and consequently the extent and timing of customer defaults. This broadens the range of possible outcomes in estimating ECLs, which increases the judgement required in assessing the appropriateness of existing methodologies and economic forecasts data from external economists, and in determining assumptions. ECLs have been adjusted through management judgemental adjustments to reflect these limitations. In addition, certain changes to models used for the ECL determination have been made during 2020.

Matters discussed with the Audit Committee

We discussed the appropriateness of the methodologies, their application, significant assumptions, significant data and disclosures with the Audit Committee, giving consideration to the ongoing COVID-19 pandemic and continued geopolitical tensions between the US and China. We further discussed the governance and controls over ECL, with a focus on the impact from the COVID-19 pandemic.

In relation to the methodologies, we focused our discussions on:

- methodology application and model validation, including where models were changed during the year; and
- the identification and assessment of model limitations and resulting management judgemental adjustments made to derive the ECL, in particular for approaches adopted in response to the COVID-19 pandemic.

In relation to significant assumptions and data, we focused on those which are most sensitive including:

- the severity and likelihood of economic scenarios and the probabilities assigned to those scenarios;
- the determination and migration of customer risk ratings; and
- assumptions around the future recoverability of significant credit impaired wholesale exposures.

We further discussed the associated disclosures in the Annual Report 2020, in particular the impact of the COVID-19 pandemic on determining ECL and continued geopolitical tensions between the US and China, and the resulting estimation uncertainty.

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 provision. Specifically, these included controls over:

- Model development, validation and monitoring;
- Determination and approval of consensus and alternative economic scenarios;
- Approval of the probability weightings assigned to economic scenarios;
- Assigning customer risk ratings and probabilities of default;
- The input of critical data into source systems and the flow and transformation of critical data between source systems to the impairment ECL models;
- Determination and approval of management judgemental adjustments; and
- Review of input and assumptions applied in estimating the recoverability of credit-impaired wholesale exposures.

Key Audit Matters continued

Expected credit losses on loans and advances to customers continued

How our audit addressed the Key Audit Matter continued

We performed substantive audit procedures over the compliance of ECL methodologies with the requirements of HKFRS 9. We engaged professionals with experience in ECL modelling to assess the appropriateness of 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, giving specific considerations to the COVID-19 pandemic and whether management judgemental adjustments were needed. Where management judgemental adjustments were made, we assessed ECL determined and the analysis supporting them.

We further performed the following to assess the significant assumptions, data and disclosures:

- We challenged the Bank's basis for determining significant assumptions and, where relevant, their interrelationships;
- We involved our economic experts in assessing the reasonableness of the severity and likelihood of the Group's economic scenarios. These assessments considered the sensitivity of the ECL provision to variations in the severity and likelihood of different economic scenarios;
- We tested a sample of customer risk ratings assigned to wholesale exposures;
- We have independently assessed other significant assumptions and obtained relevant corroborating evidence. We further considered whether the judgments made in selecting the significant assumptions would give rise to indicators of possible management bias;
- We performed various substantive audit procedures over critical data used in the determination of ECL to ensure these are relevant and reliable; and
- We assessed the adequacy of the disclosures in relation to expected credit losses on loans and advances to customers made in the Annual Report 2020 in the context of the applicable financial reporting framework.

Relevant references in the Annual Report 2020

– Management Discussion and Analysis – Risk, (a) Credit Risk, pages 60 – 89

– Note 2 on the consolidated financial statements: Significant accounting policies, (j) Impairment of amortised cost and FVOCI financial assets, pages 182 – 186

– Note 11 on the consolidated financial statements: Change in expected credit losses and other credit impairment charges, page 194

– Note 27(a) on the consolidated financial statements: Loans and advances to customers, page 207

Information Technology ('IT') access management

Nature of the Key Audit Matter

The Group has operations across a few locations supporting a wide range of products and services, resulting in an IT environment that is large, complex and increasingly reliant on third parties. The Group's financial reporting processes rely upon a significant element of this IT environment, both within the Group's operations and financial reporting.

Access management controls are an important part of the IT environment to ensure both access and changes made to systems and data are appropriate. Our audit approach relies extensively on the effectiveness of IT access management.

Matters discussed with the Audit Committee

The significance of IT access management to our audit was discussed at Audit Committee meetings during the year. We further presented identified control observations related to IT access management and discussed our related audit response.

Key Audit Matters continued

Information Technology ('IT') access management continued

How our audit addressed the Key Audit Matter

IT access management controls in place were tested for systems and data relevant to financial reporting that we relied upon as part of our audit. Specifically, these included controls over:

- Authorising new access requests;
- The timely removal of access rights;
- Periodic monitoring of the appropriateness of access rights to systems and data;
- Restricting highly privileged access to appropriate personnel;
- The accuracy of information about IT users to facilitate access management;
- Segregation of access across IT and business functions;
- Changes made to systems and data; and
- Understanding and assessing reliance on third parties, including Service Organisation controls reports.

We also independently assessed controls related to password policies and system configurations, and performed substantive audit procedures in relation to access right removal, privileged access, IT user information and segregation of duties.

We performed further testing where control deficiencies were identified, including:

- Where inappropriate access was identified, we understood and assessed the nature of the access, and when required, obtained additional evidence on the appropriateness of activities performed; and
- Where necessary, we identified and tested compensating business controls and performed other audit procedures that addressed the risk that inappropriate changes were made to systems and data.

Relevant references in the Annual Report 2020

– Management Discussion and Analysis – Risk (d), Resilience risk, pages 101 – 102

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, the Group has recorded an asset for PVIF of HK$22,551m and liabilities under non-linked life insurance contracts of HK$142,611m.

The determination of these balances requires the use of complex actuarial methodologies that are applied in models and involves significant judgement about future outcomes. Specifically, significant judgement is required in deriving the economic assumptions, and assumptions related to longevity, mortality, persistency and expenses. These assumptions are subject to estimation uncertainty, and movements in certain of these assumptions can have a material impact on 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 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 the liabilities under non-linked life insurance carrying values, including economic assumptions and assumptions related to longevity, mortality, persistency and expenses.

Key Audit Matters continued

How our audit addressed the Key Audit Matter

We tested controls in place over the determination of 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 valuation methodologies and corresponding models;
- restriction of user access to the models; and
- production and approval of the actuarial results.

With the assistance of our actuarial experts, we performed the following audit procedures to assess the methodologies used, their application, significant assumptions, data and disclosures:

- We assessed the appropriateness of the methodologies used, their application and the mathematical accuracy of the calculations;
- We challenged the Group's basis for determining significant assumptions and, where relevant, their interrelationships. We have independently assessed these assumptions and obtained relevant corroborating evidence. We further considered whether the judgements made in selecting the significant 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 the liabilities under non-linked life insurance contracts made in the Annual Report 2020 in the context of the applicable financial reporting framework.

Relevant references in the Annual Report 2020

– Management Discussion and Analysis – Risk, (h) Insurance manufacturing operation risk, page 106

– Note 2 on the consolidated financial statements: Significant accounting policies, (t) Insurance contracts, pages 189 – 190

– Note 33 on the consolidated financial statements: Intangible assets, pages 214 – 216

– Note 40 on the consolidated financial statements: Liabilities under insurance contracts, page 218

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 other than 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 2020, which is expected to be made available to us after the date of this auditor's report.

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, apart from 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.

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 2020, if we conclude that there is a material misstatement therein, we are required to communicate the matter to the Audit Committee and take appropriate action considering our legal rights and obligations.

Responsibilities of Directors and the Audit Committee for the Consolidated Financial Statements

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

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

The Audit Committee is responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

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

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

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

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

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

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

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

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements continued

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, 23 February 2021

Analysis of Shareholders

As at 31 December 2020	Shareholders		Number of Shares	
	Number	Percentage of total	Number in millions	Percentage of total
Number of shares held				
1 – 500	6,339	36.19	1.46	0.08
501 – 2,000	5,365	30.63	6.53	0.34
2,001 – 5,000	2,753	15.72	9.39	0.49
5,001 – 20,000	2,298	13.12	23.41	1.23
20,001 – 50,000	504	2.88	15.85	0.83
50,001 – 100,000	136	0.77	9.77	0.51
100,001 – 200,000	67	0.38	9.81	0.51
Over 200,000	54	0.31	1,835.62	96.01
	17,516	100.00	1,911.84	100.00
Geographical Distribution				
Hong Kong	17,253	98.50	1,909.00	99.85
Malaysia	48	0.27	0.32	0.02
Canada	42	0.24	0.14	0.01
Singapore	38	0.22	1.75	0.09
Macau	28	0.16	0.13	0.01
United Kingdom	28	0.16	0.03	0.00
Australia	25	0.14	0.08	0.00
United States of America	24	0.14	0.13	0.01
Others	30	0.17	0.26	0.01
	17,516	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

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 2020 to the date of Report of the Directors of this Annual Report (unless otherwise stated) are set out below:

CHAN Ka Lok

CHAN May Yee

CHAN Ping Chung Eddie

CHAN Shuk Pui Ivy*

CHEANG Wai Wan Louisa

CHEN Kwan Yiu Edward

CHENG Cheng Shing Agnes

CHEUNG Ho Fai Derek

CHEUNG Pui Sze

CHOW Tan Ling

FAN Gordon

FU Yin Ho

HO Wing Hung*

JIN Jiejun

Bryce Leslie JOHNS

KONG Kwong Ming

KWAN Wing Han Margaret

KWAN Wing Shing Vincent

LAM Hei Yin Joe

LAM Yin Shing Donald

LEE Pui Shan

LEE Yuk Shan

LEUNG Cheuk Yee Eunice

LEUNG Kin Ping

LEUNG Wing Lok

LI Chi Chung

LI Chi Kwong Jason

LI Jianfeng

LIANG Chun Fei Belle

LIM Sau Fung

LIU Yu

LUI Man Chung Raymond

LUK Ting Lung Alan

MO Yuen Man Anita

MUK Chung Wing

NG Kar Wah

POON Sun Cheong

SHEN Sibao

SIT Wing Fai Wilfred

SONG Yan

SONG Yue Sheng Ryan

TSANG Hing Keung

WANG Xiao Kun

WANG Yee Ning Elaine

Stuart Kingsley WHITE

WONG Wai Hung

YAM Chi Fai

YEO Chee Leong

YIP Kay Chun, Katie*

YOU Anshan

YUEN Kin Chung

* 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

Raymond K F Ch'ien GBS, CBE, JP

Vice-Chairman

Louisa Cheang

Directors

John C C Chan GBS, JP
L Y Chiang JP
Kathleen C H Gan
Margaret W H Kwan
Irene Y L Lee
Eric K C Li GBS, OBE, JP
Vincent H S Lo GBM, JP
Kenneth S Y Ng
Peter T S Wong GBS, JP
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 2020

This Annual Report 2020 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 2020 on the Bank's website and wish to receive a printed copy; or

B) receive this Annual Report 2020 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 2020 on the Bank's website, have difficulty in reading or gaining access to this Annual Report 2020 via the Bank's website for any reason, the Bank will promptly send this Annual Report 2020 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

2020 Full Year Results

Announcement date	23 February 2021

2020 Fourth Interim Dividend*

Announcement date	23 February 2021
Book close and record date	10 March 2021
Payment date	25 March 2021

2020 Annual Report

to be posted to shareholders at or about the end of March 2021

Annual General Meeting

to be held in Q2 2021, 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, 10 March 2021, during which no transfer of shares can be registered. In order to qualify for the fourth interim dividend, 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, 9 March 2021. The fourth interim dividend will be payable on Thursday, 25 March 2021 to shareholders whose names appear on the register of shareholders of the Bank on Wednesday, 10 March 2021. Shares of the Bank will be traded ex-dividend as from Monday, 8 March 2021.

Published by
Hang Seng Bank Limited

Concept, design and art direction by
Yellow Creative (HK) Limited

Photography by
Ringo Tang

Printed in Hong Kong by
DG3 Asia Limited

恒生銀行
HANG SENG BANK

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