



恒生銀行
HANG SENG BANK

ANNUAL REPORT 2019



SMART LIVING INTELLIGENT BANKING



Our day-to-day lives are moving faster. From smart cities initiatives to AI in our mobile phones, the ways in which we interact with the world around us are evolving every day.

Hang Seng's goal is to make it easy for our customers to manage their finances. We create smart solutions that allow us to deliver fast, simple and convenient banking services for a diverse range of financial needs.

Using human-centric design and technology, we enable customers to manage their finances on their own terms – anywhere, anytime. Smart living... through intelligent banking.

Founded in 1933, Hang Seng is one of Hong Kong's largest listed companies. Our market capitalisation as at 31 December 2019 was HK\$307.8 billion.

We serve over half the adult residents of Hong Kong – more than 3.5 million people – through about 290 service outlets. We also maintain branches in Macau and Singapore and a representative office in Taipei.

Established in May 2007, wholly owned subsidiary Hang Seng Bank (China) Limited is headquartered in Pudong, Shanghai, and operates a mainland China network with outlets in the Pearl River Delta, the Yangtze River Delta, the Bohai Rim Region and midwest China.

Hang Seng is a principal member of the HSBC Group, one of the world's largest banking and financial services organisations.

RATINGS

Moody's

Long-term Bank Deposit
(local/foreign currency)

Aa2/Aa3

Short-term Bank Deposit
(local and foreign currency)

Prime-1

Outlook

Negative(m)*

Standard & Poor's

Long-term Issuer Credit
(local and foreign currency)

AA-

Short-term Issuer Credit
(local and foreign currency)

A-1+

Outlook

Stable

*Outlook on long-term foreign currency bank deposit rating is Stable

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

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

RESULTS IN BRIEF

For the Year

Attributable profit to shareholders

24,840 HK\$m

2018 24,211 HK\$m

Profit before tax

28,813 HK\$m

2018 28,432 HK\$m

Operating profit

28,610 HK\$m

2018 27,947 HK\$m

Net operating income before change in expected credit losses and other credit impairment charges

43,514 HK\$m

2018 41,215 HK\$m

Operating profit before change in expected credit losses and other credit impairment charges

30,447 HK\$m

2018 28,943 HK\$m

Return on average ordinary shareholders' equity

15.2%

2018 16.0%

Cost efficiency ratio

30.0%

2018 29.5%

Earnings per share

12.77 HK\$

2018 12.48 HK\$

Dividends per share

8.20 HK\$

2018 7.50 HK\$

At Year-end (at 31 December)

Shareholders' equity

178,810 HK\$m

2018 162,082 HK\$m

Total assets

1,676,991 HK\$m

2018 1,571,297 HK\$m

Capital ratios

Common Equity Tier 1 ("CET1") Capital Ratio

16.9%

2018 16.6%

Tier 1 Capital Ratio

18.7%

2018 17.8%

Total Capital Ratio

20.8%

2018 20.2%

Liquidity ratios

Liquidity Coverage Ratio

205.9%

2018 214.7%

Net Stable Funding Ratio

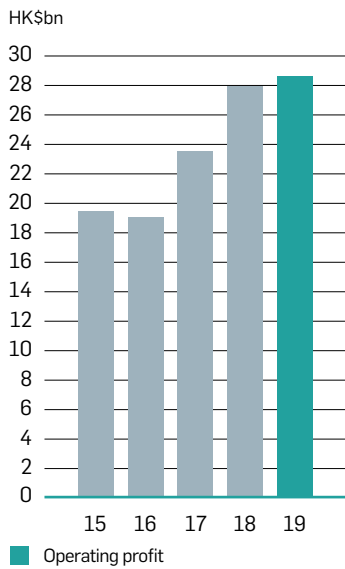
149.1%

2018 154.0%

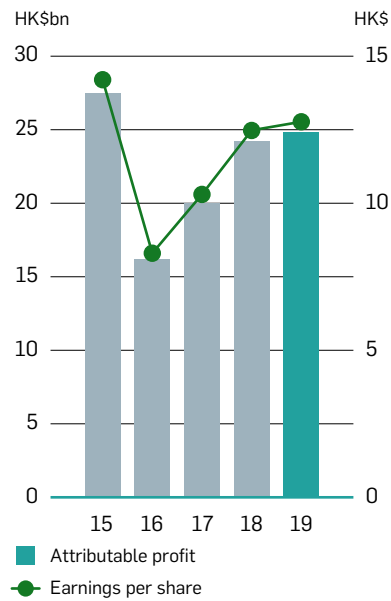
FIVE-YEAR FINANCIAL SUMMARY

	2015	2016	2017	2018	2019
For the Year	HK\$bn	HK\$bn	HK\$bn	HK\$bn	HK\$bn
Operating profit	19.4	19.0	23.5	27.9	28.6
Profit before tax	30.5	19.1	23.7	28.4	28.8
Attributable profit to shareholders	27.5	16.2	20.0	24.2	24.8
At Year-end	HK\$bn	HK\$bn	HK\$bn	HK\$bn	HK\$bn
Shareholders' equity	142.0	140.6	152.0	162.1	178.8
Issued and paid-up capital	9.7	9.7	9.7	9.7	9.7
Total assets	1,334.4	1,377.2	1,478.4	1,571.3	1,677.0
Total liabilities	1,192.4	1,236.6	1,326.3	1,409.2	1,498.1
Per Share	HK\$	HK\$	HK\$	HK\$	HK\$
Earnings per share	14.22	8.30	10.30	12.48	12.77
Dividends per share					
– 1st to 4th interim dividends	5.70	6.10	6.70	7.50	8.20
– special interim dividend	3.00	–	–	–	–
Ratios	%	%	%	%	%
Return on average ordinary shareholders' equity	20.7	12.1	14.2	16.0	15.2
Post-tax return on average total assets	2.1	1.2	1.4	1.6	1.5
Capital ratios					
– Common Equity Tier 1 ("CET1") Capital Ratio	17.7	16.6	16.5	16.6	16.9
– Tier 1 Capital Ratio	19.1	17.9	17.7	17.8	18.7
– Total Capital Ratio	22.1	20.8	20.1	20.2	20.8
Cost efficiency ratio	33.8	33.5	30.5	29.5	30.0

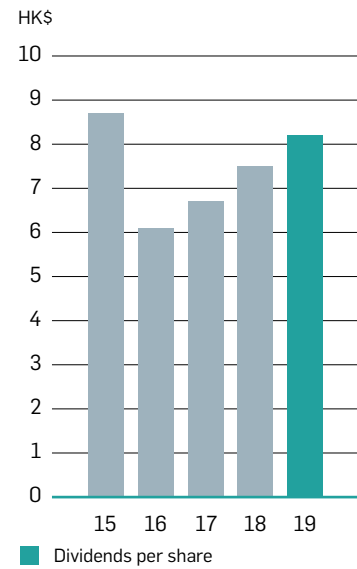
Results



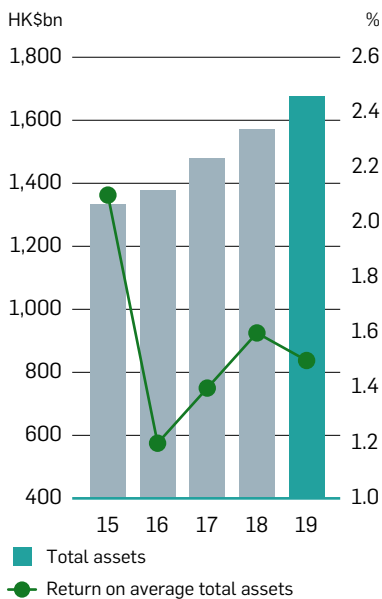
Attributable Profit and Earnings per Share



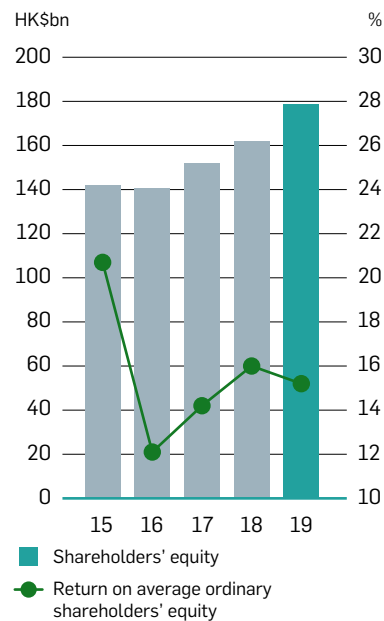
Dividends per Share



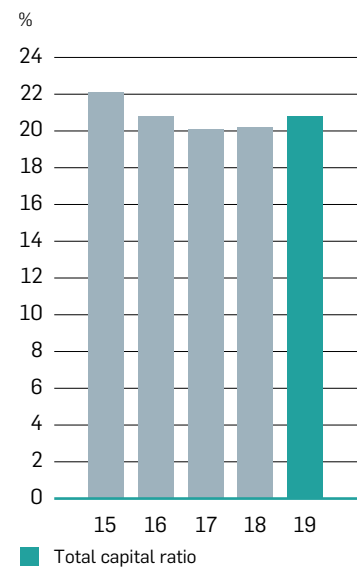
Total Assets and Return on Average Total Assets



Shareholders' Equity and Return on Average Ordinary Shareholders' Equity



Total Capital Ratio



CHAIRMAN'S STATEMENT



2019 was a challenging year for Hong Kong. Externally, ongoing uncertainties regarding the future of the international trade order and other geopolitical factors weighed on the global economy. On the domestic front, business sentiment and the economy were adversely affected by social unrest.

In this fluid operating environment, Hang Seng abided by its customer-centric principles in conducting business. We continued to deliver best-in-class services and experiences. Our investments in people and technology enabled us to achieve better user friendliness at all customer touchpoints across all channels, physical and digital, and deliver continuously improving economic efficiencies for customers and the Bank. Our enhanced capabilities underpinned the resilience of our financial performance.

Attributable profit to shareholders increased by 3% to HK\$24,840m. Earnings per share rose by 2% to HK\$12.77.

Return on average ordinary shareholders' equity was 15.2%, compared with 16.0% for 2018. Return on average total assets was 1.5%, compared with 1.6% for the previous year.

The Directors have declared a fourth interim dividend of HK\$4.00 per share, bringing the total distribution for 2019 to HK\$8.20 per share, compared with HK\$7.50 per share in 2018.

Economic Outlook

The various external and domestic factors that affected the Hong Kong economy last year look set to continue to influence economic performance during 2020.

Hong Kong's economic output shrank by 1.2% in 2019 after expanding by 2.9% in 2018. Businesses operating in retail, trade and other related sectors have been tested by the slowdown in the global economy as well as weaker consumer sentiment. An uptick in the unemployment rate in recent months is another indicator of the potential challenges facing the city's economy. The overhang of continuing social unrest and public health concerns over the novel coronavirus outbreak that came to light in mainland China in early 2020 also have the potential to further increase downside risk. We forecast a mild contraction in Hong Kong's GDP for 2020.

The Mainland economy expanded by 6.1% in 2019, down from a growth rate of 6.7% in the previous year, reflecting the softening of trade activity and a drop in exports demand, which held down growth in industrial production and manufacturing investment. These economic headwinds may become stronger in the months ahead, exacerbated by the impact of the novel coronavirus outbreak. The government's ongoing initiatives to support growth through new fiscal and monetary policy measures may help moderate the adverse effects of these challenges. We expect to see a slowdown in full-year GDP growth for 2020 compared with 2019.

Our actions to build a more agile and resilient organisation have improved our ability to thrive in all types of market conditions and act quickly on new opportunities.

Backed by our well-established competitive strengths, our drive to stay ahead of the curve of the rapid expansion and diversification of the financial needs and preferences of customers will allow us to grow market share. This will underpin our long-term sustainability and ensure our ability to deliver value for shareholders.



Raymond Ch'ien

Chairman

18 February 2020

CHIEF EXECUTIVE'S REPORT



Ongoing international trade tensions abroad and the social situation at home in Hong Kong made 2019 a challenging year for our industry. Given the difficult operating conditions, I am pleased to report that Hang Seng recorded a solid financial performance by continuing to focus on achieving sustainable growth by taking a customer-centric approach to making banking simpler and easier.

Our good performance is reflected beyond the figures. Our investments in technology and systems infrastructure have also reaped significant results in 2019. More than 100 digital innovations and enhancements were rolled out to bring more convenient online and mobile banking solutions to customers. Among the highlights, Hang Seng is the first bank in Hong Kong to use near-field communication technology for mobile cash withdrawal services at its ATMs.

Overall, we increased net operating income before change in expected credit losses and other credit impairment charges by 6% and recorded a 2% rise in operating profit. Operating profit excluding change in expected credit losses and other credit impairment charges grew by 5%. We maintained good momentum in the expansion of our balance sheet, growing loans and deposits by 8% and 5% respectively. All our business lines except Global Markets reported revenue and bottom-line growth.

We maintained a proactive approach to credit risk management, through which we achieved a HK\$375m reduction in expected credit loss charges on actual impaired credit exposures compared with 2018. The overall increase in our credit risk provisions for 2019 reflects the effects of adjustments to key variables in our assessment model in line with current global and regional economic outlooks. While this has had an adverse impact on our bottom line, we are confident in our overall asset quality and the actions we have taken to mitigate potential credit risks.

Our more dynamic and responsive business structure enhanced our capability to provide more services to different types of customers. Our principal aim is excellent service by people and technology to make it faster, simpler and more convenient for clients to take care of their daily banking needs and work towards their long-term financial goals.

On the technology side, we introduced mobile cash withdrawal and e-ticketing services to help customers save time. A new standalone stock trading app, Invest Express, makes it easy for customers to review their portfolios at a glance and act swiftly on investment opportunities in rapidly moving markets. And our digital cash management solutions are supporting a major initiative to improve the efficiency and competitiveness of port services in Hong Kong.

Leveraging data analytics and other digital tools, we have strengthened our ability to provide expert and personalised financial services. Customer access has been widened with

the introduction of lower investment thresholds for online-exclusive investment products and the waiving of minimum balance fees for general and Preferred accounts.

In today's environment, speed and efficiency are crucial to business success. In response, we have dramatically reduced transaction and application processing times for commercial customers. Our new mobile real-time payment tracking service has streamlined cash flow management, allowing businesses to make faster operational decisions.

Although global economic uncertainties moderated trade activity in 2019, our strong cross-border connectivity helped to maintain good momentum for future growth in Mainland-related businesses, particularly in the economically dynamic Greater Bay Area. Hang Seng China achieved a 17% increase in total operating income in 2019. Profit before tax nearly doubled due to solid broad-based growth in the balance sheet as well as active management of credit risks and operating costs.

In the challenging market environment, we became even more closely connected with clients on all fronts by being sensitive to their situations and introducing various relief initiatives.

Our increased capacity to meet a diverse range of customer needs in a wide range of market conditions reinforces our position as a leading provider of banking services and will make our business more resilient over the long term.

Financial Performance

Overall, our customer-centric approach to service drove solid growth momentum in difficult market conditions, with a 6% increase in net operating income before change in expected credit losses and other credit impairment charges to HK\$43,514m. Looking at the bottom line, operating profit was up by 2% to HK\$28,610m and attributable profit to shareholders increased by 3% to HK\$24,840m, reflecting the effects of our investments to support long-term business growth. Operating profit excluding change in expected credit losses and other credit impairment charges was up by 5% at HK\$30,447m.

Net interest income grew by 7% to HK\$32,255m, due mainly to the 7% increase in average interest-earning assets, improved deposit spreads and increased contribution from net-free funds. The net interest margin increased by 2 basis points to 2.20% compared with a year earlier.

Non-interest income remained resilient, increasing by 1% to HK\$11,259m. New and enriched retirement and healthcare offerings and improved investment returns from the life insurance portfolio underpinned good growth in insurance income. This offset the impact of reduced income from stockbroking and related services and retail investment fund sales. Overall, wealth management income grew by 7%.

Operating expenses rose by 7% to HK\$13,057m, due primarily to investments in people, technology and service enhancements that will drive greater operational efficiency and improve our ability to respond quickly to the changing needs of customers and new market opportunities. Our cost efficiency ratio of 30.0%, up just half a percentage point on 2018, remains one of the lowest in the industry.

At the end of December 2019, our common equity tier 1 capital ratio was 16.9% and our tier 1 capital ratio was 18.7%, compared with 16.6% and 17.8% respectively at 31 December 2018. Our total capital ratio was 20.8%, compared with 20.2% at 2018 year-end.

Driving Stronger Connections in an Era of Change

'Business-as-usual' no longer exists. Fast-moving markets, changing lifestyles and service developments in other industries are driving dramatic shifts in what customers expect from and value in financial service providers.

As we start off 2020, we are also facing the additional challenges posed by the novel coronavirus outbreak, which is already having a disruptive impact on economic activity in the Mainland and Hong Kong.

While the situation is continuing to evolve, any prolonged economic slowdown could have an adverse impact across the industry, dampen consumer appetite and put pressure on our forecast for expected credit losses.

With our commitment to supporting customers and the health and well-being of our staff as primary concerns, we will continue to monitor the situation closely and take appropriate action. We have already established a number of relief measures for customers facing particular difficulties.

Working closely with our people and customers to overcome long-term and short-term challenges, we will continue to move ahead with our progressive, customer-centric strategy for transforming our business.

Combining digital innovations with our vast branch network and other existing competitive strengths, our business is becoming more agile and resilient for delivering valued outcomes for customers – simple and convenient banking, more personalised offerings, greater flexibility and choice, and high security standards.

We are placing more emphasis on engagement and building stronger connections: stronger connections with customers by gaining a deeper understanding of their financial priorities and aspirations; stronger connections between our online and offline offerings to deliver a seamless banking experience; stronger connections with strategic partners to develop innovative fintech and lifestyle offerings that make

banking easier and add value to our service proposition; and stronger connections with and among our people to enhance communication and collaboration, as well as encourage a creative and supportive workplace culture.

The drive to build stronger connections extends beyond financial services. As a bank with deep local roots, we are actively involved in community initiatives that promote social mobility and well-being, particularly among younger generations.

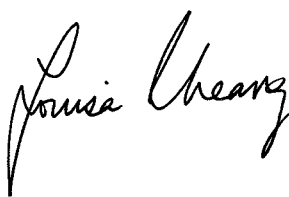
Our flagship community partnership with the Hong Kong Table Tennis Association is heading towards its 30th year. Over the decades, Hang Seng Table Tennis Academy programmes have benefitted hundreds of thousands of individuals. They promote a more physically active community, help youngsters to develop valuable life skills such as courage and perseverance, and nurture young elite athletes – many of whom have gone on to represent Hong Kong on the international stage.

If our customers and community are at the foundation of our decision making, our people are the cornerstone of our success. In an era where 'innovation of service' rapidly becomes 'proliferation of service', we are investing heavily in the professional development and personal well-being of our staff. We believe that the expertise and human touch provided by our people will continue to be a key differentiating factor that marks us out as an industry leader into the future. So while we continue with transformation through technological means, we are also expanding our broad-based employee engagement and training initiatives to attract and nurture talented individuals and strengthen our competitive advantage.

I wish to express sincere appreciation to my colleagues for demonstrating adaptability, creativity, professionalism and resilience during a challenging year for Hong Kong. Their unwavering commitment to serving customers right, and from the heart, was central to our achievements in 2019.

Since the onset of the novel coronavirus outbreak, the staff of Hang Seng have worked tirelessly to protect the health and safety of our customers and each other. Our frontline employees have remained steadfast in their posts to provide essential banking services to customers. I commend them for their selfless dedication and hard work.

In an era of dramatic change, what remains unchanged is Hang Seng's commitment to Hong Kong, and the creation of lasting benefits for our customers, shareholders and the community.



Louisa Cheang

Vice-Chairman and Chief Executive

18 February 2020

MANAGEMENT DISCUSSION AND ANALYSIS



We offer a
diverse range of
service channels

MANAGING WEALTH ON THE GO

The face of banking is changing. People are living increasingly busy and mobile lives, and they want easy-to-use services that are intuitive, fast and secure. We use innovative technology to allow customers to manage their finances, conduct real-time transactions and look after their investments whenever they want and wherever they are.



P.P Payment Platform



What's the balance in my HKD business account?

9:04 am



9:04 am



Welcome to Hang Seng Commercial Banking!

I am Hang Seng Business Virtual Assistant B E R I, designed to answer your questions.





Hi BERI

HELPING SMEs FLY HIGH

The enterprising spirit and can-do attitude of local SMEs are central to the story of Hong Kong's success. As a homegrown bank, we take pride in facilitating the growth of our SME customers by providing flexible service solutions that are simple and convenient to use to enhance their operational efficiency and reduce processing times.



Online Shopping and Overseas Spending Rewards



Any dining offer?

6:05 pm

DORI

I have found these dining offers for you

6:05 pm

CASH DOLLARS

Cash Dollars Rewards

MPOWER Card
Unleash mobile, music and movie privileges
Be inspired
Enjoy endless fun

A SMARTER WAY TO ENJOY LIFE

Our smart banking services make enjoying the rich tapestry of life more rewarding and fun. Whether buying foreign exchange, shopping online or planning overseas travel, there are endless ways to enjoy greater value when you're banking right.



Mortgage



Wealth Accumulation

HANG SENG
MPF

Hang Seng MPF



Education Fund





MOVING FORWARD TOGETHER

Our customers have come to rely on us to help them plan for major personal milestones and handle unexpected challenges and opportunities in life. Our comprehensive wealth management proposition – including retirement planning products, innovative investment services and local market expertise – ensures we always have the right solutions to meet the diverse needs of our customers now and for generations to come.

OPEN AND COMMUNICATIVE

Clear communication, integrity and well-being are key pillars in our corporate culture. As the ways in which people interact continue to change at a rapid pace, we are reaching out to engage and communicate with our customers and our community through new and innovative channels. Our positive and caring approach to building human connections shines through in all aspects of our work.





BUSINESS REVIEW

Operating conditions in Hong Kong were challenging in 2019. Reduced levels of international commercial and industrial activity related to uncertainty over the future shape of global trade had an adverse impact on the city's open economy. During the second half of the year, social disharmony and early signs of rising unemployment served to dampen consumer sentiment in the domestic sector.

Our stronger digital banking capabilities, increasingly integrated offline-online service proposition and faster transaction processing times were just some of the ways in which we made it easier for customers to manage their financial needs and take timely advantage of investment and business opportunities.

Backed by our diverse all-weather portfolio of products and deep-rooted knowledge of the markets we serve, our expert team of financial professionals provided customers with wealth management solutions tailored to help them plan more effectively for major life events and work towards achieving long-term financial goals.

Customer deposits, including certificates of deposit and other debt securities in issue, rose by 5% year-on-year to reach HK\$1,249.8bn. Our healthy balance sheet and strong customer relationships drove the 8% increase in gross loans and advances to customers to HK\$946.4bn.

Retail Banking and Wealth Management

Retail Banking and Wealth Management recorded a 6% increase in both operating profit and profit before tax to HK\$15,199m and HK\$15,371m respectively. Operating profit excluding change in expected credit losses and other credit impairment charges grew by 9% to HK\$16,035m.

Net interest income increased by 7% year-on-year to HK\$17,717m. Amid keen market competition, our strong customer relationships helped us identify new deposits acquisition opportunities to grow deposits by 3% and to increase lending by 8% in Hong Kong.

We grew non-interest income by 13% to HK\$6,342m and achieved a 10% increase in wealth management income.

Improved customer segmentation and analytics, powered by machine learning, helped us gain a deeper understanding of the financial priorities and objectives of

our clients. This greater knowledge enhanced our ability to deliver timely needs-based products and services through a variety of online and physical channels. We captured new wealth management business and recorded a 9% year-on-year increase in the Prestige Signature customer base in Hong Kong.

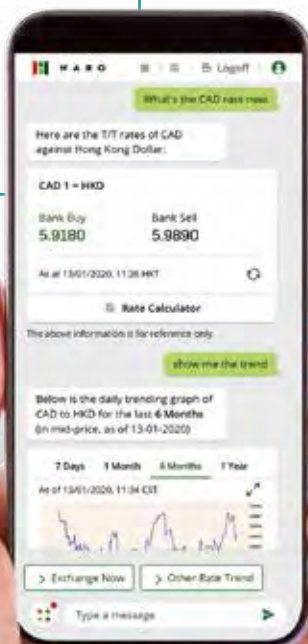
We continued to focus on improving all aspects of the customer experience to make banking easier and more convenient, offering our clients greater choice over how and when they use our services. We upgraded the user interfaces of our mobile banking and Personal e-Banking platforms to offer greater customisation, streamline transaction journeys and complement lifestyles that are increasingly online. Our mobile-first digital service strategy, new entertainment offers under our MPOWER card and lower online investment thresholds attracted more young people to the Hang Seng brand, resulting in a 74% increase in young segment customers.

New digital services such as our Hang Seng Invest Express Stock Trading App and foreign exchange price alerts and order watch are making it easier for customers to act quickly on investment opportunities in fast-moving markets.

Enhanced payment capabilities – including the ability of HARO, our retail banking AI chatbot, to assist with outward transfers – drove strong growth in the use of our P.P payment platform, with a 91% increase in the number of customers registered to use our Faster Payment System services.



We are harnessing the power of digital technology to better serve our clients, making ease of use and greater customisation central to the Hang Seng Personal e-Banking experience. Easy, efficient and convenient banking at your fingertips.



Always innovating to provide a seamless online-offline banking experience



H A R O

H A R O, our retail banking AI chatbot, engages customers in conversation, offering smart, interactive, anytime assistance with a growing range of transactions and enquiries.



Hang Seng is the first Hong Kong bank to apply near-field communication technology for ATM mobile cash withdrawals. Customers can just tap their mobile phones on the NFC sensor to withdraw cash.

HARO's expanded scope and the launch of our new live chat support, which instantly connects customers with our Customer Contact Centre professionals via an online messaging platform, improved service efficiency.

Year-on-year, the number of Personal e-Banking customers increased by 8% and the number of active mobile users rose by 38%.

Innovations such as our Mobile Cash ATM Withdrawal service that leverages QR codes and near-field communication technology and our e-Ticketing system for branch services for all segments are benefitting customers by allowing them to move seamlessly between online and offline channels.

Our drive towards offering a fully integrated online-offline banking experience includes an innovative new service concept for our physical outlets, which we unveiled at our branch at The Hong Kong Polytechnic University during



the year. With an open design and a digital services bar, the branch combines the different strengths of technology and in-person expertise to deliver an enhanced financial services experience.

Insurance income grew by 31%, buoyed by our prudent investment strategy which generated higher returns from the life insurance investment portfolio. We also enriched our retirement planning and healthcare solutions with the launch of new products, including several that enable customers to benefit from the Hong Kong Government's latest tax concession measures. The enhanced choice and coverage provided by our uplifted life insurance proposition improved our life protection product mix to drive an increase in insurance distribution revenue.

With continuing volatility in global financial markets dampening investor interest in securities and investment funds, we leveraged our diverse portfolio of fixed-income and capital-protected products to help customers find opportunities for potential yield enhancement that aligned with their reduced appetite for risk. Overall, investment services income fell by 15%.

Our strong distribution capabilities in the retail mortgage sector enabled us to record an 11% year-on-year increase in mortgage balances. Our market share for new mortgage business was 16%, putting us among the top three in Hong Kong for the year.

We made effective use of data analytics and tailored marketing campaigns to maintain good business momentum in unsecured lending.

Commercial Banking

Commercial Banking reported a 3% increase in both operating profit and profit before tax to HK\$8,795m. Operating profit excluding change in expected credit losses and other credit impairment charges rose by 5% to HK\$9,652m.

Despite the challenging economic environment, we achieved a 12% increase in net interest income to HK\$10,439m, driven primarily by solid growth in lending as well as a slight improvement in deposit yield. We continued to proactively manage credit risk and maintained good overall credit quality.

Non-interest income fell by 16% to HK\$2,574m, reflecting the slowdown in business activity among commercial customers in the uncertain operating environment. This was partly offset by the 12% rise in fee income from credit facilities as we stepped up our participation in the syndicated loan market. We ranked third in the Mandated Arranger League Table for Hong Kong and Macau syndicated loans in terms of number of deals in 2019.

We continued to proactively support local businesses. Our strong customer relationships enabled us to maintain an approval rate of over 90% for SME loan applications processed during the year. To assist SMEs with relatively shorter operating histories, we extended our participation in the Hong Kong Mortgage Corporation's SME Financing Guarantee Scheme to include its new 90% Guarantee Product.

We revamped our Business e-Banking platform to reduce navigation times and make it easier for customers to find the products and services that meet their specific needs. We launched Linkscreen, a screen-sharing technology that enables us to provide online customer support for completing SME loan and commercial card applications. Customers can now ask BERI, our commercial banking AI chatbot, to provide them with a graphical overview of their account position. BERI's expanded capabilities also include assisting with a comprehensive range of foreign exchange services, such as providing market news and real-time exchange rates, in addition to executing foreign exchange transactions.

Our new Hang Seng HSBCnet Track Payments service allows customers to monitor the real-time, end-to-end status of cross-border payments in a fast, simple and transparent manner. We extended the service reach of One Collect, our award-winning integrated point-of-sale terminal, to include online merchants and support payments through the Faster Payment System. We continued to work with clients to develop customised corporate API solutions to further streamline the operational flow of cash management for companies.

Under our strategic alliance with Hong Kong Science and Technology Parks Corporation (HKSTP), our efforts to promote local start-ups and entrepreneurship included the launch of 'Inno Booster', which offers innovation and technology companies a range of preferential banking services. Our focus on tailored service solutions is driving new business and, as at the end of 2019, we had achieved a 17% penetration rate among HKSTP tenants.

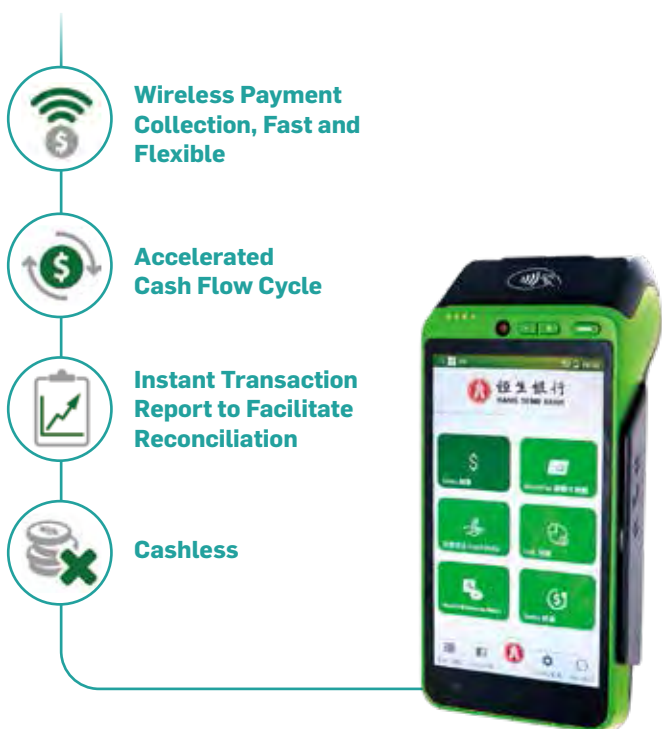




Upgrades at our Tsim Sha Tsui Business Banking Centre are providing customers with a more comfortable and efficient in-branch experience.

Our actions to set new standards in making banking better for customers was recognised with several awards during the year, including 'Best Bank for SMEs, Hong Kong' from *Asiamoney*, 'Best Payment Bank in Hong Kong' and 'Best Automated Advisory/Chatbot Initiative, Application or Programme' at *The Asian Banker's* Transaction Banking Awards, and 'Hong Kong Domestic Technology & Operations Bank of the Year' and 'Hong Kong Liquidity Management Bank of the Year' from *Asian Banking & Finance*.

Hang Seng One Collect With one machine, settle multiple types of payment



Global Banking and Markets

Global Banking and Markets reported a 7% decline in both operating profit and profit before tax to HK\$4,960m. Operating profit excluding change in expected credit losses and other credit impairment charges fell by 4% to HK\$5,104m.

Global Banking

Global Banking achieved a 4% increase in both operating profit and profit before tax to HK\$2,193m. Operating profit excluding change in expected credit losses and other credit impairment charges grew by 9% to HK\$2,332m.

Net interest income increased by 9% to HK\$2,525m, driven by efforts to enhance the lending portfolio mix. In the challenging market environment, our strong customer engagement and deep understanding of market dynamics facilitated a proactive approach to balance sheet management.

On the lending side, we adopted more robust asset optimisation strategies, strengthened our pipeline management, enhanced our syndicated loan capabilities and further integrated onshore-offshore joint decision-making processes. New deposits acquisition business benefitted from our improved capacity to offer customers highly tailored products and services, including industry-specific digital and API-based solutions. These actions yielded good results, with a 32% increase in our deposits base and 11% growth in the loans balance.

Non-interest income grew by 11% to HK\$354m, due mainly to higher fee income from credit facilities on the back of the solid growth in lending.

We continued to use lending and financing to support the efforts of our clients that are working to make their business operations more sustainable. We co-led or participated in a number of green club/syndicated loans during the year, several of which were accredited or won awards.

Global Markets

Global Markets reported a 14% decline in both operating profit and profit before tax to HK\$2,767m. Operating profit excluding change in expected credit losses and other credit impairment charges fell by 14% to HK\$2,772m.

Net interest income decreased by 11% to HK\$2,002m. The adverse effects of the flattening yield curve and tightening

Awards and Recognition

Best Bank – Domestic (Hong Kong)
(20th consecutive year)
THE ASSET

Strongest Bank in Hong Kong and Asia Pacific
THE ASIAN BANKER

Best Bank for SMEs
SIAMONEY

Most Attractive Employer, Banking and Financial Services (Hong Kong)
RANDSTAD

Best Foreign Bank
SECURITY TIMES QUANSHANGCN

Best Trade Finance Product Innovation Bank
TRADING FINANCE

Best Institution in Wealth Management
CHINA FINANCIAL HERALD

Best Institution of Syndicated Loans in Shanghai
SHANGHAI BANKING ASSOCIATION

Constituent stock of Dow Jones Sustainability Asia Pacific Index 2019
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

Junzi Corporation
(Since 2011)
THE HANG SENG UNIVERSITY OF HONG KONG

credit spreads limited the potential for generating revenue through balance sheet management with the deployment of new and maturing funds. The balance sheet management team took proactive steps to manage the interest rate risk, acting to defend the interest margin and achieve yield enhancement while upholding prudent risk management standards.

Non-interest income decreased by 11% to HK\$1,359m. Non-fund income from sales and trading activities fell in the unfavourable market conditions. We stepped up cross-business efforts to deepen the penetration of Global Markets products among Bank customers and rolled out new initiatives to further diversify the revenue base, including the establishment of a repo trading department.

Our active participation in the financial markets was driven by a commitment to providing customers with integrated, competitively priced solutions that meet their specific needs. We received several awards during the year, including 'Top 5 Trading Volume (SPOT)' and 'Top G10 Trader (SPOT)' foreign exchange awards from Refinitiv and 'Top NDIRS Clearing Award (Regional Bank)' from HKEX for our performance in the over-the-counter market with derivatives eligible for central clearing.

Hang Seng Indexes

Wholly owned subsidiary Hang Seng Indexes Company Limited (Hang Seng Indexes) continued to develop new indexes to serve as market performance indicators and as the basis for the development of index-linked products by local and global market participants.

Six new exchange-traded products based on the Hang Seng Family of Indexes were listed in 2019, taking the total number of such products to 76 worldwide – with listings on 17 different stock exchanges. As at the end of 2019, assets under management in products passively tracking indexes in the Hang Seng Family of Indexes had reached a total of about US\$36bn.

The total number of futures and options contracts traded on the Hang Seng Index and the Hang Seng China Enterprises Index (HSCEI) in 2019 was over 125 million.

Leveraging its deep understanding of current and future market demand, Hang Seng Indexes enriched its suite of factor and strategy indexes by launching Covered Call indexes, Currency Hedged indexes and Momentum indexes, expanded its series of sustainability indexes and its Greater Bay Area Index Series, and added other thematic and sector indexes that target different innovative investment themes.

In January 2019, Hang Seng Indexes announced that it was enhancing the HSCEI by removing the fix on the number of constituents by share type in the index, with effect from the regular rebalancing review in June 2019.

In April, Hang Seng Indexes was recognised for its leading regional position in providing index solutions to structured product issuers with the 'Best Index Provider' award at *Structured Retail Products' Asia-Pacific Awards 2019*.

As at the end of 2019, Hang Seng Indexes was compiling more than 800 indexes, including 148 real-time indexes.

FINANCIAL REVIEW

Financial Performance

Income Statement

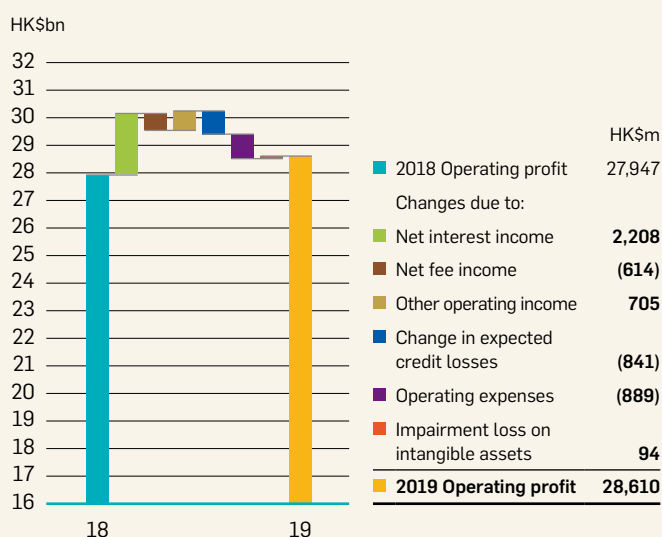
Summary of financial performance

Figures in HK\$m	2019	2018
Total operating income	63,341	55,432
Net operating income before change in expected credit losses and other credit impairment charges	43,514	41,215
Operating expenses	13,057	12,168
Operating profit	28,610	27,947
Profit before tax	28,813	28,432
Attributable profit to shareholders	24,840	24,211
Earnings per share (in HK\$)	12.77	12.48

The operating environment in Hong Kong was challenging in 2019. Factors such as the continuing US-China trade dispute and social unrest had an adverse impact on economic activity, with the economy recording a contraction in the fourth quarter of the year. Against this backdrop, Hang Seng Bank Limited ("the Bank") and its subsidiaries ("the Group") maintained good business momentum and returned solid results for 2019. The Bank's strong capital base and healthy liquidity position provided a firm foundation for continuing with its strategic priorities despite turbulent operating conditions.

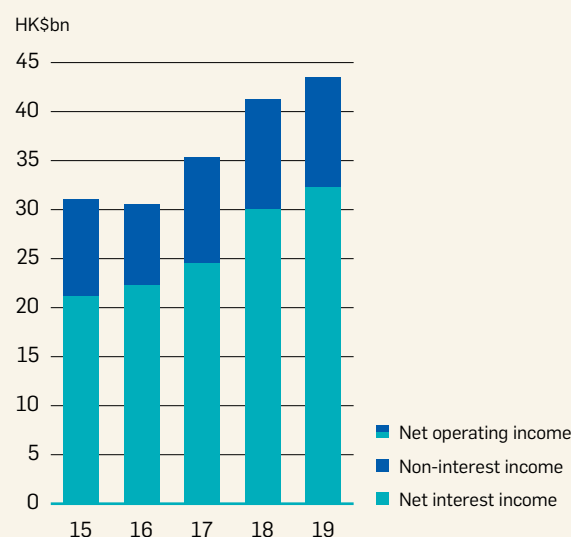
Net operating income before change in expected credit losses and other credit impairment charges was HK\$43,514m, up 6% compared with 2018, driven primarily by robust growth in net interest income. Non-interest income remained in line with the previous year. Wealth management business income increased by 7% compared with 2018, with the increase in insurance business-related income partly offsetting decreases in income from securities broking-related services and retail investment fund sales in the subdued investment environment. Expected credit losses remained sensitive to forward economic guidance, with downside risks such as continuing uncertainties over future international trade policies and the economic outlook for Hong Kong leading the Bank to make higher impairment charge in the second half of the year as part of its prudent risk management strategy. This had an impact on **operating profit** which increased by 2% to HK\$28,610m. **Operating profit excluding change in expected credit losses and other credit impairment charges** rose by 5% to HK\$30,447m. **Attributable profit to shareholders** increased by 3% to HK\$24,840m.

Operating Profit Analysis



Net Operating Income

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



Net interest income increased by HK\$2,208m, or 7%, to HK\$32,255m, benefitting from the increase in average interest-earning assets and improvement in net interest margin.

Figures in HK\$m	2019	2018
Net interest income/(expense) arising from:		
– financial assets and liabilities that are not at fair value through profit and loss	33,299	31,585
– trading assets and liabilities	299	192
– financial instruments designated and otherwise mandatorily measured at fair value through profit or loss	(1,343)	(1,730)
	32,255	30,047
Average interest-earning assets	1,466,871	1,376,091
Net interest spread	1.99%	2.03%
Net interest margin	2.20%	2.18%

Average interest-earning assets rose by HK\$91bn, or 7%, when compared with 2018. Average customer lending increased by 8%, notably in corporate and commercial and mortgage lending. Average financial investments grew by 8% while average interbank placements fell by 12%.

Net interest margin improved by 2 basis points to 2.20%, mainly from the widening of customer deposits spreads and higher contribution from net free funds as market interest rates rose during 2019. Average loan spread on customer lending reduced, notably in corporate and commercial term lending. The adverse effects of the yield curve flattening and credit spread tightening have limited opportunities for growing revenue from deploying the new funds and funds from maturing balance sheet management portfolios. However, these adverse effects were partly offset by the Bank's effective balance sheet management, including steps to proactively defend the interest margin and achieve yield enhancement.

Compared with the first half of 2019, net interest income increased by HK\$549m, or 3%, benefitting from the favourable impact of the increase in average interest-earning assets, contribution from net free funds as a result of the rising market interest rates, improved deposits spreads and more calendar days in the second half. However, these favourable factors were offset by compressed loan spreads.

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	2019	2018
Net interest income and expense reported as "Net interest income"		
– Interest income	43,214	36,711
– Interest expense	(9,966)	(5,158)
– Net interest income	33,248	31,553
Net interest income and expense reported as "Net income from financial instruments measured at fair value through profit or loss"	(993)	(1,506)
Average interest-earning assets	1,422,968	1,328,533
Net interest spread	2.14%	2.24%
Net interest margin	2.34%	2.37%

FINANCIAL REVIEW

Net fee income decreased by HK\$614m, or 9%, to HK\$6,453m, reflecting the effects of weaker market sentiment on investment-related income. Income from securities broking-related services fell by 20%, in line with the market-wide fall in securities turnover in Hong Kong during the year. Income from retail investment funds was down by 9% from the high level achieved in 2018. Fee income from insurance, account services and remittances fell by 4%, 11% and 20% respectively. These declines were somewhat mitigated by the 12% increase in credit facilities fee income, driven by corporate lending activity.

Net income from financial instruments measured at fair value through profit or loss increased by HK\$1,997m, or 117%, to HK\$3,702m.

Net trading income and net income from financial instruments designated at fair value through profit or loss together was HK\$2,123m, broadly on par with 2018. Foreign exchange income fell, with the less volatile market resulting in lower levels of trading activity by customers. A revaluation loss on foreign currency swaps was more than offset by higher income from derivative trading activities.

Net income from assets and liabilities of insurance business measured at fair value through profit or loss recorded a gain of HK\$1,589m, compared with a loss of HK\$437m for the previous year. Investment returns on financial assets supporting insurance liabilities contracts improved, reflecting the positive movement in the equities markets compared with 2018. 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	2019	2018 (restated)
Investment services income [†] :		
– retail investment funds	1,521	1,670
– structured investment products	403	504
– securities broking and related services	1,331	1,665
– margin trading and others	84	89
	3,339	3,928
Insurance income:		
– life insurance:		
– net interest income and fee income	3,907	3,777
– investment returns on life insurance funds (including share of associate's profit and surplus on property revaluation backing insurance contracts)	1,704	(605)
– net insurance premium income	15,652	14,530
– net insurance claims and benefits paid and movement in liabilities to policyholders	(19,827)	(14,217)
– movement in present value of in-force long-term insurance business	4,559	1,324
	5,995	4,809
– general insurance and others	263	269
	6,258	5,078
Total	9,597	9,006

[†] 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 increased by HK\$1,180m, or 23%, to HK\$6,258m. Net interest income and fee income from life insurance business rose by 3%. Investment returns on the life insurance portfolio recorded a gain of HK\$1,704m compared with a loss of HK\$605m in 2018, mainly reflecting favourable movements in equities markets. 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 increased by 8%, reflecting the success of the Bank's total-solution retirement planning propositions. In particular, riding on the Hong Kong Government's initiatives to increase voluntary retirement saving by individuals, the Bank's new deferred annuity plan – which qualifies as a tax-deductible deferred annuity policy under new regulations – was well received by customers.

Net insurance claims and benefits paid and movement in liabilities to policyholders increased by 39%. The increase was mainly due to the regular review of the discount rate reflecting the lower prevailing interest rate. This had the effect of offsetting the increase in PVIF, resulting in an insignificant overall impact on the income statement.

The movement in PVIF increased by 244%, due mainly to the lower discount rate on insurance contract liabilities described above. The effects of this increase were partly offset by the adjustment to PVIF accounting for sharing of investment returns attributable to policyholders.

General insurance income was broadly in line with the previous year.

Change in expected credit losses and other credit impairment charges increased by HK\$841m, or 84%, to HK\$1,837m.

Figures in HK\$m	2019	2018
Loans and advances to banks and customers	1,684	1,023
– new allowances net of allowance releases	1,773	1,153
– recoveries of amounts previously written off	(106)	(143)
– other movements	17	13
Loan commitments and guarantees	99	(25)
Other financial assets	54	(2)
Change in expected credit losses and other credit impairment charges	1,837	996

FINANCIAL REVIEW

The Bank regularly reviews its forward economic guidance to reflect changes in the economic outlook and other factors that may influence the credit environment. Downside risks for the future performance of the Hong Kong economy increased in 2019. The increase in credit provisions arising from the updating of key macroeconomic variables in the Bank's expected credit losses ("ECL") assessment model, in line with current global and regional economic outlooks, accounts largely for the change in ECL and other credit impairment charges for unimpaired credit exposures (stages 1 & 2) recording a net charge of HK\$1,138m, compared with a net release of HK\$78m for 2018. The increase in ECL charges for stages 1 & 2 amounted to HK\$1,216m. Retail Banking and Wealth Management ("RBWM") accounted for HK\$344m and the remaining HK\$872m was related to Commercial Banking ("CMB") and Global Banking and Markets ("GBM").

ECL charges for impaired credit exposures (stage 3 & purchased or originated credit-impaired) decreased by HK\$375m. The downgrading of several large CMB customers in 2018 did not reoccur in 2019, although the positive impact of this was partly offset by higher charges on credit card and personal loan portfolios under RBWM.

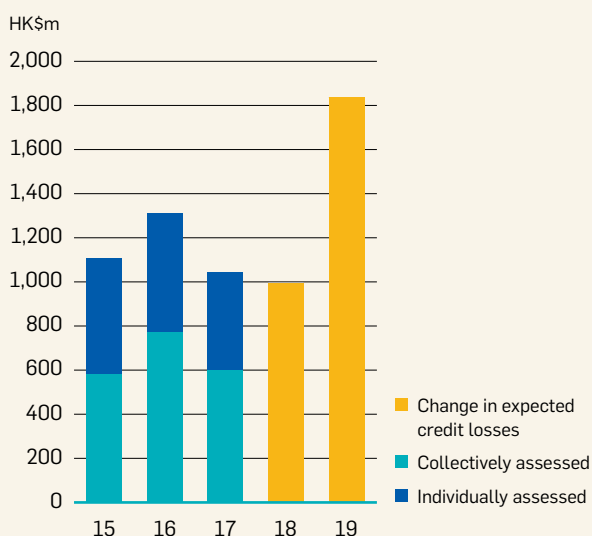
Gross impaired loans and advances were down by HK\$87m, or 4%, against 2018 year-end at HK\$2,073m. Gross impaired loans and advances as a percentage of gross loans and advances to customers stood at 0.22% at the end of December 2019, compared with 0.25% at the end of December in the previous year. Overall credit quality remained robust.

The Bank's senior management will continue to closely monitor market developments and shifts in the economic environment in its management and assessment of the credit performance of financial assets.

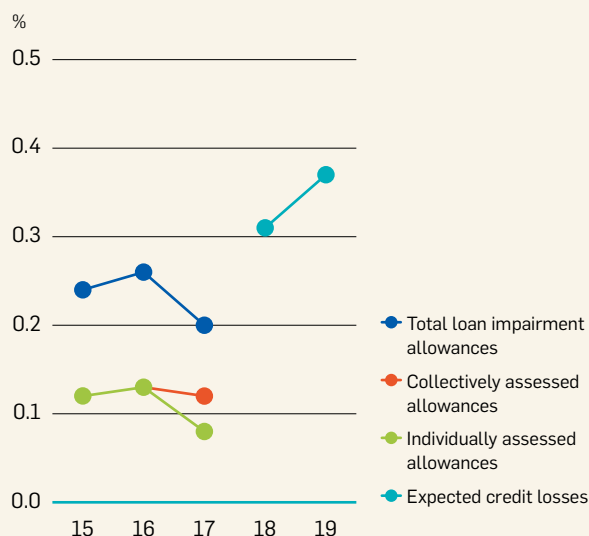
Expected credit losses as a percentage of gross loans and advances to customers are as follow:

	At 31 December 2019	At 31 December 2018
Expected credit losses as a percentage of gross loans and advances to customers	0.37%	0.31%
Gross impaired loans and advances as a percentage of gross loans and advances to customers	0.22%	0.25%

**Change in expected credit losses/
Loan impairment charges**



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



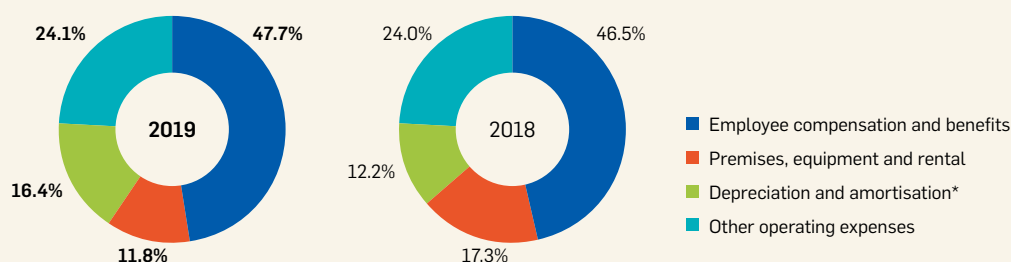
Operating expenses increased by HK\$889m, or 7%, to HK\$13,057m, reflecting the Bank's continued investment in people, technology and operational infrastructure to drive service enhancement and business development in Hong Kong and the Mainland, and better position its operations for future growth. Staff costs were up 10%, due primarily to the salary increment and higher staff-related allowances.

Depreciation charges increased by 45%, due mainly to higher depreciation charges on business premises following the upward commercial property revaluation in last year. Depreciation charges for 2019 also included depreciation of right-of-use assets amounting to HK\$528m following the adoption of HKFRS 16 "Leases", which came into effect on 1 January 2019. Correspondingly, there was a similar decrease in rental expenses under general and administrative expenses.

General and administrative expenses fell by 7%. Excluding the impact of the adoption of HKFRS 16 as stated in the previous paragraph, general and administrative expenses registered an increase when compared with 2018. Continued investment in digital capabilities across all business segments and increases in processing fees led to higher costs, but the effects of these increases were partly offset by lower marketing and advertising expenses.

The Group continued to focus on enhancing operational efficiency while maintaining good growth momentum. The cost efficiency ratio was 30.0%, one of the lowest among banks in Hong Kong.

Operating Expenses



* Included depreciation of right-of-use assets of HK\$528m in 2019 (2018: N/A)

Full-time equivalent staff numbers by region	At 31 December 2019	At 31 December 2018
Hong Kong and others	8,629	8,611
Mainland	1,761	1,741
Total	10,390	10,352

Reflecting the less favourable property market when compared with 2018, **net surplus on property revaluation** decreased by HK\$243m, or 87%, to HK\$35m. **Share of profits of associates** fell by HK\$39m, or 19%, to HK\$168m, mainly reflecting the lower revaluation surplus of a property investment company.

FINANCIAL REVIEW

Second half of 2019 compared with first half of 2019

The operating environment became increasingly challenging in the second half of 2019, with continuing uncertainties over trade flows and other geopolitical factors having an adverse impact on economic growth momentum in Hong Kong. The Group's key financial indicators are generally less favourable in the second half of 2019 when compared with first half of the year. Net operating income before change in expected credit losses and other credit impairment charges was HK\$21,105m, down by HK\$1,304m, or 6%, with the increase in net interest income more than offset by the decline in non-interest income, due largely to a drop in wealth management income. Operating profit decreased by HK\$2,512m, or 16%, due mainly to increased operating expenses and ECL charges. The decrease in net surplus on property revaluation and share of profits of associates resulted in a HK\$2,472m, or 18%, decrease in attributable profit to shareholders.

Net interest income increased by HK\$549m, or 3%, driven mainly by the growth in average interest-earning assets, increased contribution from net-free funds and more calendar days in the second half. Net interest margin was under pressure, narrowing by 2 basis points to 2.19%. Excluding the impact of loss-absorbing capacity debt instruments issued by the Bank during the year, net interest margin rose by 2 basis points. There was an unfavourable change in the liability mix as rising market interest rates prompted customers to shift from current and savings accounts to time deposits.

Non-interest income was down by HK\$1,853m, or 28%, due largely to a drop in wealth management business income as investment activity by customers fell in the less favourable market environment.

Operating expenses rose by HK\$401m, or 6%, driven mainly by higher general and administrative expenses with increases in processing fees and marketing and advertising costs.

ECL charges increased by HK\$817m, or 160%, due largely to the update of forward economic guidance to reflect the more uncertain economic outlook. Unimpaired credit exposures (stages 1 & 2) accounted for 83% of the additional ECL charges, with the remaining charges related to impaired credit exposures (stage 3).

Segmental Analysis

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

Figures in HK\$m	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Other	Total
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%
Year ended 31 December 2018					
Profit/(loss) before tax	14,557	8,575	5,320	(20)	28,432
Share of profit/(loss) before tax	51.2%	30.2%	18.7%	(0.1)%	100.0%

Retail Banking and Wealth Management ("RBWM") recorded a 6% year-on-year increase in both operating profit and profit before tax to HK\$15,199m and HK\$15,371m respectively. Operating profit excluding change in expected credit losses and other credit impairment charges grew by 9% to HK\$16,035m.

Net interest income increased by 7% year-on-year to HK\$17,717m. Despite keen market competition, enhanced analytics and our robust customer-centric digital channels supported solid growth in our balance sheet. Deposits and lending in Hong Kong rose by 3% and 8% respectively compared with 2018 year-end.

We grew non-interest income by 13% to HK\$6,342m, driven mainly by the 10% increase in income from wealth management business.

Hong Kong residential property market recorded a mild growth in transaction against 2018, with significant growth in primary market partly offset by downturn in secondary market. We continued to lead the mortgage market across all segments through uplifted distribution capability in strategic segments, resulting in our mortgage balances increased by 11% in Hong Kong compared with 2018 year-end. Our new mortgage business continued to rank among the top three in Hong Kong with market share 16%.

Ongoing global investment market volatility amid concerns over international trade policies and social discord in Hong Kong had an adverse impact on local investment market sentiment. Revenue from securities and investment services dropped 23% and 10% respectively compared with 2018. More fixed-income products and capital-protected instruments were leveraged to meet the needs of customers with a lower appetite for risk in the uncertain market conditions.

Insurance income grew by 31%. Our prudent investment strategy drove better investment returns from the life insurance investment portfolio. In addition, we enriched our retirement planning and healthcare solutions with launch of new insurance products, including retirement, tax waiver and Voluntary Health Insurance Scheme ("VHIS") products, to enable customers to reap the benefits of the HKSAR Government's latest tax concession measures. Our strong retirement and healthcare proposition uplifted our life protection product mix, which drove an increase in our insurance distribution revenue.

Better customer segmentation, achieved through strong data analytics and machine learning, enabled our team of experts to better leverage our diverse portfolio of wealth management products and deepen relationships with clients by providing more timely needs-based financial products and various online-offline service delivery options to meet different needs. We grew our Prestige Signature customer base by 9% year-on-year in Hong Kong. In mainland China, the Prestige and Preferred customer base grew by 6% compared with a year earlier. We aspired to develop new capabilities and tailored solutions to meet life-stage transformational journey for the younger generations, including the revamp of MPOWER card with mobile, music and movie privileges and lowered the entry level for buying various investment products online. Young segment customers grew 74% year-on-year.

We are committed to investing in fintech and building a robust digital infrastructure to bring greater banking ease and convenience to customers. We continued to uplift our mobile banking and e-Banking user experiences to provide customers with smarter and easier banking services. We upgraded the user interfaces of our mobile banking and e-banking platforms to offer more personalised features. We leveraged technology to further digitise our extensive distribution channels and provide seamless customer service with the launch of new online-offline services such as e-Ticketing and Mobile Cash Withdrawal. We rolled out new online products and services, such as our Hang Seng Invest Express Stock Trading app, and launched "live chat" customer support. We also strengthened the capabilities of HARO, our retail banking AI chatbot assistant, increasing its number of services from service inquiry to conversational banking. We introduced FX price alert and order watch, with enhanced journey to facilitate customers to timely capture market opportunity. Year-on-year, the number of Personal e-Banking customers increased by 8% in Hong Kong, and the number of active mobile banking users grew by 38%.

FINANCIAL REVIEW

Commercial Banking (“CMB”) reported a year-on-year growth of 3% in both operating profit and profit before tax to HK\$8,795m. Operating profit excluding change in expected credit losses and other credit impairment charges rose by 5% to HK\$9,652m.

Despite the challenging external and local economic environments, net interest income rose by 12% to HK\$10,439m, supported by loan balance growth and a slight improvement in the deposit yield. Non-interest income contracted by 16% to HK\$2,574m, reflecting the impact of weakened business sentiment on commercial activity and trade flows during the year. We took actions to mitigate the effects of the challenging operating environment, such as stepping up our participation in the syndicated loan market, which resulted in a 12% increase in fee income from credit facilities. We ranked third in the Mandated Arranger League Table for Hong Kong and Macau syndicated loans in terms of number of deals in 2019 according to Refinitiv LPC.

To support SMEs with relatively shorter operating histories, we extended our participation in the SME Financing Guarantee Scheme operated by the Hong Kong Mortgage Corporation Insurance Limited to include its new 90% Guarantee Product. Riding on our strategic alliance with Hong Kong Science and Technology Parks Corporation, we also developed and launched a tailor-made banking and financing solution, “Inno Booster”, under which eligible innovation and technology companies can enjoy pre-approved loans and other preferential banking service offers.

We moved forward on our continuing digital transformation journey to improve customer experience and satisfaction. We revamped our Business e-Banking website to make it easier for customers to quickly find information and services that meet their specific needs. We expanded the capabilities of our commercial banking AI chatbot assistant, BERI, to allow customers to request graphic representations of their account balances. BERI can also now provide one-stop foreign exchange services, including market news and current exchange rates in addition to executing foreign exchange transactions. We also launched Linkscreen, a screen-sharing technology to provide SME customers with online guidance and support to complete loan and commercial card applications.

To assist customers in streamlining their operational flow, we rolled out various corporate application programming interface solutions for cash management services. The launch of Track Payments allows customers to keep track of the end-to-end status of cross-border payments in a fast, simple and transparent manner. We extended the service of One Collect, our integrated point-of-sale terminal, from offline to online merchants and to support payments through Faster Payment System.

Apart from improving our digital capabilities, we also enhanced our network of physical outlets, including by upgrading our Tsim Sha Tsui Business Banking Centre to provide a more spacious and comfortable environment for our customers.

We continued to be proactive and vigilant in managing credit risk to uphold good overall asset quality.

Our dedicated efforts to provide comprehensive and convenient services have been recognised with a number of awards, including “Best Bank for SMEs, Hong Kong” from Asiamoney, “Best Payment Bank in Hong Kong” and “Best Automated Advisory/Chatbot Initiative, Application or Programme” at the The Asian Banker’s Transaction Banking Awards. We also received awards from Asian Banking & Finance, who recognised us as “Hong Kong Domestic Technology & Operations Bank of the Year” and “Hong Kong Liquidity Management Bank of the Year”.

Global Banking and Markets (“GBM”) reported a 7% decline in both operating profit and profit before tax to HK\$4,960m. Operating profit excluding change in expected credit losses and other credit impairment charges fell by 4% to HK\$5,104m.

Global Banking (“GB”) achieved a 4% increase in both operating profit and profit before tax to HK\$2,193m. Operating profit excluding change in expected credit losses and other credit impairment charges grew by 9% to HK\$2,332m.

Net interest income increased by 9% to HK\$2,525m, which we achieved by enhancing the lending portfolio mix and improving our cash management capabilities. In the challenging market environment, we proactively managed our balance sheet portfolios, resulting in an 11% year-on-year increase in the loan balance. On the deposits side, we took successful steps to increase new deposits business, driving a significant increase of 32% in the deposits balance.

Non-interest income grew by 11% to HK\$354m, mainly reflecting increased fee income from credit facilities on the back of solid lending growth.

Backed by our deep market knowledge and closer engagement with customers, we continued to collaborate with teams across the Bank to enrich our products and services to meet the different needs of clients.

Global Markets (“GM”) reported a 14% decrease in both operating profit and profit before tax to HK\$2,767m. Operating profit excluding change in expected credit losses and other credit impairment charges fell by 14% to HK\$2,772m.

Net interest income decreased by 11% to HK\$2,002m. The adverse effects of the yield curve flattening and tightening credit spreads limited the revenue gained from deploying new funds and funds from maturing balance sheet management portfolios. The balance sheet management team continued to manage 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 decreased by 11% to HK\$1,359m. The flattening yield curve environment, ongoing uncertainty related to the US-China trade dispute, the trend towards deglobalisation and low foreign exchange volatility resulted in a decline in non-fund income from sales and trading activities. We continued with initiatives to deepen the penetration of GM products among customers through close collaboration with the RBWM, CMB and GB teams.

Our response to the challenging conditions in 2019 included stepping up actions to further diversify our revenue flows. In the second half of the year, we established a repo trading department. We were an active participant in the financial markets, aiming to provide customers with fully integrated and tailor-made competitively-priced solutions. Awards such as the Top 5 Trading Volume (SPOT) and Top G10 Trader (SPOT) awards from Refinitiv and the Top NDIRS Clearing Award (Regional Bank) from HKEX recognised our participation in the foreign exchange market and the over-the-counter market with derivatives eligible for central clearing since we joined OTC Clearing Hong Kong Limited as a direct member in 2015.

Balance Sheet Analysis

Assets

Total assets increased by HK\$106bn, or 7%, to HK\$1,677bn compared with 2018 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\$3bn, or 21%, to HK\$13bn reflecting the redeployment of the commercial surplus. Trading assets were broadly in line with 2018 year-end at HK\$47bn. Financial assets designated and otherwise mandatorily measured at fair value grew by HK\$6bn, or 44%, driven by the growth in the life insurance funds investment portfolio. Placing with banks decreased by HK\$14bn, or 17%, to HK\$66bn. Reverse repurchase agreements – non trading was HK\$7bn, driven by demand from the Bank’s Global Markets customers.

Customer loans and advances (net of ECL allowances) grew by HK\$68bn, or 8%, to HK\$943bn compared with the end of 2018. Loans for use in Hong Kong increased by 7%. Lending to industrial, commercial and financial sectors grew by 6%, mainly reflecting growth in lending to property development and investment sectors and working capital financing for certain large corporate customers operating in industries that are classified under “Others” sector. Stronger partnerships with Commercial Banking customers enabled the Bank to grow lending to the manufacturing sector. Lending to transport and transport equipment, recreational activities and information technology sectors registered an increase when compared with the end of 2018. These increases were partly offset by the decrease in lending to the wholesale and retail trade and financial concerns sectors. Lending to individuals increased by 9%, due primarily to a rise in residential mortgages and Government Home Ownership Scheme/Private Sector Participation Scheme/Tenants Purchase Scheme lending. Trade finance lending decreased by 7%, reflecting the maturation of certain trade finance loans during the year. Loans and advances for use outside Hong Kong increased by 13%. This was due largely to growth in the lending granted by the Hong Kong office and the Group’s mainland banking subsidiary.

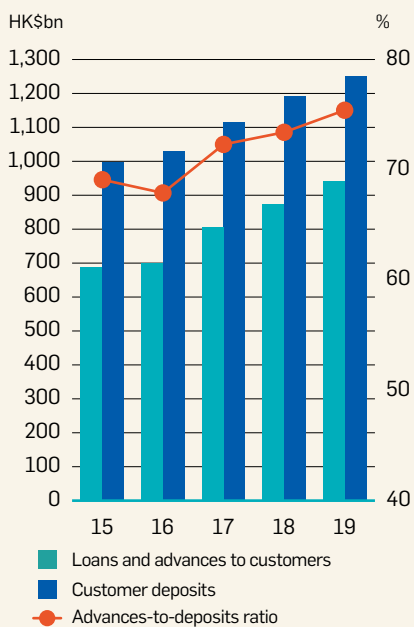
FINANCIAL REVIEW

Financial investments increased by HK\$33bn, or 8%, to HK\$462bn, mainly reflecting the deployment of funds arising from the issuance of Additional Tier 1 ("AT1") capital instruments and non-capital loss-absorbing capacity debt instruments to meet regulatory requirements and further optimise the Bank's capital and funding structure. There was also an increase in the life insurance funds investment portfolio.

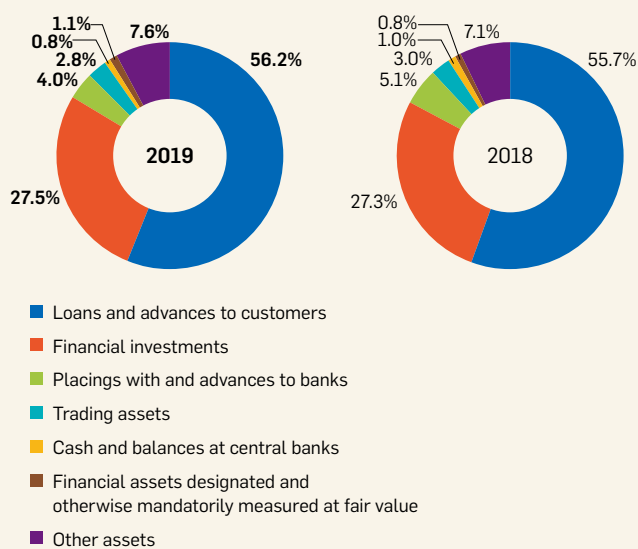
Assets Deployment

Figures in HK\$m	2019	%	2018	%
Cash and balances at central banks	13,038	0.8	16,421	1.0
Placings with and advances to banks	65,807	4.0	79,400	5.1
Trading assets	47,357	2.8	47,164	3.0
Financial assets designated and otherwise mandatorily measured at fair value	18,771	1.1	13,070	0.8
Loans and advances to customers	942,930	56.2	874,456	55.7
Financial investments	461,704	27.5	428,532	27.3
Other assets	127,384	7.6	112,254	7.1
Total assets	1,676,991	100.0	1,571,297	100.0
Return on average total assets	1.5%		1.6%	

Loan and Advances to Customers and Customer Deposits



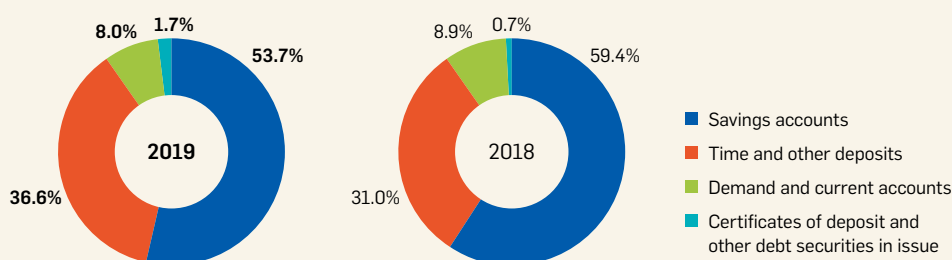
Assets Deployment



Liabilities and equity

Customer deposits, including certificates of deposit and other debt securities in issue, increased by HK\$59bn, or 5%, to HK\$1,250bn against the end of 2018. Customers continued to shift funds from low-cost savings and current deposits to time deposits in response to rising market interest rates during the year. At 31 December 2019, the advances-to-deposits ratio was 75.4%, compared with 73.4% at 31 December 2018.

Customer Deposits



Shareholders' equity

Figures in HK\$m	At 31 December 2019	At 31 December 2018
Share capital	9,658	9,658
Retained profits	133,734	123,350
Other equity instruments	11,744	6,981
Premises revaluation reserve	19,889	19,822
Cash flow hedging reserve	16	(11)
Financial assets at fair value through other comprehensive income reserve	3,296	1,570
Other reserves	473	712
Total reserves	169,152	152,424
Total shareholders' equity	178,810	162,082
Return on average ordinary shareholders' equity	15.2%	16.0%

The Bank issued subordinated liabilities amounting to HK\$19.5bn during the first half of 2019 to meet loss-absorbing capacity requirements and further strengthen the Bank's financial resilience.

At 31 December 2019, shareholders' equity was up by HK\$17bn, or 10%, to HK\$179bn compared with 2018 year-end. Retained profits was up by HK\$10bn, or 8%, reflecting profit accumulation after the appropriation of 2019 interim dividends paid during the year. Other equity instruments, specifically AT1 capital instruments, increased by HK\$5bn, or 68%, reflecting the Bank's cancellation and repayment of an AT1 capital instrument of US\$0.9bn and subsequent issuance of new AT1 capital instruments totalling US\$1.5bn to further optimise its capital structure and comply with regulatory requirements. The premises revaluation reserve remained at broadly the same level as 2018 year-end, with the upward trend in the commercial property market during the first half of 2019 largely nullified by downward movement in the market in the second half. Financial assets at fair value through other comprehensive income reserve increased by HK\$1.7bn, or 110%, 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 2019.

RISK

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

Our approach to risk

Our conservative risk appetite

We have maintained a conservative approach to risk throughout our history. This is central to our business and strategy.

We recognise that the primary role of risk management is to protect our customers, colleagues, shareholders and the communities that we serve while enabling sustainable growth.

We have long recognised 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 employees are responsible for the management of risk, with the ultimate accountability residing with the Board.

The following principles guide the Group's overarching risk appetite and determine how its 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 and is expressed in both quantitative and qualitative terms.

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.

We formally articulate our risk appetite through our risk appetite statement ("RAS"), which is approved by the Board. Setting out our risk appetite helps to make sure 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 the Group. 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, and is formally approved by the Board on a semi-annual basis on the recommendation of the Risk Committee ("RC"). It is fundamental to the development of business line strategies, strategic and business planning, and senior management balanced scorecards.

At a group level, performance against the RAS is reported to the Risk Management Meeting ("RMM") on a monthly basis 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 use an enterprise-wide risk management framework across the organisation and across all risk types, underpinned by our risk culture. This outlines the key principles, policies and practices that we employ in managing material risks, both financial and non-financial.

The framework fosters continuous 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 culture

Our risk culture is reinforced by our values. It is instrumental in aligning the behaviours of individuals with our attitude to assuming and managing risk, which helps to ensure that our risk profile remains in line with our risk appetite. The fostering of a strong risk culture is a key responsibility of our senior executives.

We use clear and consistent employee communications on risk to convey strategic messages and set the tone from senior management and the Board. We also deploy mandatory training on risk and compliance topics to embed skills and understanding in order to strengthen our risk culture and reinforce the attitude to risk in the behaviour expected of employees, as described in our risk policies.

We use the HSBC Group's whistleblowing platform, HSBC Confidential, allowing staff to report matters of concern confidentially. We also maintain an external email address for concerns about accounting and internal financial controls or auditing matters. The Group has a strict policy prohibiting retaliation against those who raise their concerns. All allegations of retaliation reported are escalated to senior management.

Our risk culture is also reinforced by our approach to remuneration. Individual awards, including those for senior executives, are based on compliance with our values and the achievement of financial and non-financial objectives, which are aligned to our risk appetite and global strategy.

RISK

Our risk management framework

Robust risk governance and accountability are embedded throughout the Group through an established enterprise risk management framework that ensures appropriate oversight of and accountability for the effective management of risk at all levels of the organisation and across all risk types.

The Group's risk management framework/policies and RAS or major risk limits are approved by the Board of Directors and they are monitored and reviewed regularly by various Board or management committees, including the Executive Committee, RC, Asset and Liability Management Committee ("ALCO") and RMM.

The following diagram and descriptions summarise key aspects of the 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

Risk governance	Non-executive risk governance	The Board approves the Group's risk appetite, plans and performance targets. It sets the "tone from the top" and is advised by the Group's 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	The operational risk management framework defines minimum standards and processes for managing operational risks and internal controls.
	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 the Group's risk appetite. It is advised by the RC on risk appetite and its alignment with strategy, risk governance and internal controls, and high-level risk related matters.

Executive accountability for the ongoing monitoring, assessment and management of risk environment and the effectiveness of the risk management framework resides with the Group's Chief Risk Officer. He is supported by the RMM.

The management of financial crime risk resides with the Group's Chief Executive who is supported by the Financial Crime Risk Management Committee.

Day-to-day responsibility for risk management is delegated to senior managers with individual accountability for decision making. All employees 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 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 employees 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

The three lines of defence model delineates management accountabilities and responsibilities for risk management and the control environment, which 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 Group's 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 global businesses, including sales and trading functions, to provide challenge, appropriate oversight and balance in risk/return decisions.

Responsibility for minimising both financial and non-financial risk lies with our people. They are required to manage the risks of the business and operational activities for which they are responsible.

We maintain adequate oversight of our risks through various specialist Risk Stewards, along with our aggregate overview through Chief Risk Officer.

RISK

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. It is integrated with other risk management tools such as risk map, stress testing, top and emerging risks report, to ensure consistency in risk management practices. The RAS is reviewed on a semi-annual basis, with formal approval from the Board on the recommendation of the Risk Committee.

The RMM reviews the Group's actual risk appetite profile against the limits set out in the RAS on monthly basis 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

We use a top and emerging risks process to provide a forward-looking view of issues that have 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 between six months and one year, and has the potential to materially affect the Group's financial results, reputation or 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. Stress tests of varying granularity may already have been carried out to assess the impact.

Stress Testing

The Group operates a wide-ranging stress testing programme that supports our risk management and capital planning. It includes execution of stress tests mandated by our regulators as well as internal stress tests. Our stress testing is supported by dedicated teams and infrastructure and is overseen at the most senior level of the Group.

Our stress testing programme assesses our capital strength through a rigorous examination of our resilience to external shocks. It also helps us understand and mitigate risks and informs our decisions about capital levels.

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

Stress testing programme is an important element in our risk management and capital management frameworks. Our capital plan is assessed through a range of stress scenarios which explore risks identified by management. They include potential adverse macroeconomic, geopolitical and operational risk events, and other potential events that are specific to the Group. The selection of scenarios reflects 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.

A reverse stress test is conducted each year in order to understand which potential extreme conditions would make our business model non-viable. Reverse stress testing identifies potential stresses and vulnerabilities which the Group might face, and helps inform early-warning triggers, management actions and contingency plans designed to mitigate risks.

The Group stress testing scenarios, approach and results are reported, where appropriate, to the RMM, RC and Board.

Key developments in 2019

In 2019, we undertook a number of initiatives to enhance our approach to the management of risk. These included:

- We continued to strengthen our approach to managing Non-Financial risk, as set out in the operational risk management framework (“ORMF”). The framework sets out our governance and appetite. It provides a single view of non-financial risks that matter the most and associated controls.
- We adopted the HSBC Group’s simplified risk taxonomy which have consolidated certain existing risks into broader categories. These changes streamline risk reporting and promote common language in our risk management approach. Further simplification will continue during 2020.
- We formed a Resilience Risk sub-function to reflect the growing regulatory importance of Operational Resilience. The leadership of the resilience risk function is the responsibility of the Group’s Head of Resilience Risk.

Areas of special interest

In 2019, the mainland Chinese economy grew at the slowest pace in nearly three decades in the context of rising domestic leverage. The authorities are expected to enact only modest stimulus measures to boost growth. Along with the "phase one" US-China trade deal and plentiful global liquidity, these measures should help emerging-market growth to make a partial recovery. Nevertheless, downside idiosyncratic risks will abound.

Intensified US-China competition continued to feature prominently in 2019. The two countries now compete across multiple dimensions: economic power, diplomatic influence, innovation and advanced technology leadership.

In 2019, we saw heightened levels of risk in Hong Kong. The downside risk is further increased given the coronavirus outbreak, which could further impact the local economy and dampen investor and business sentiment in many sectors where the Group has a material presence. The increasing headwinds will be challenging and we will continue to monitor our portfolios to manage risk exposures. We have carefully reviewed our exposures to help ensure that we continue to support our customers and the Hong Kong economy. We have reviewed and enhanced our business continuity plans to ensure we minimise disruption to our clients and continued safe operations of our branches and employees. The new coronavirus outbreak is being actively monitored. It will have an immediate impact in 2020 on the economic scenarios used for expected credit losses ("ECL"), as key inputs for calculating ECL such as gross domestic product ("GDP") for Hong Kong and mainland China are deteriorating, and the probability of particularly adverse economic scenarios for the short term is higher. The economic scenarios for Hong Kong used for ECL at 31 December 2019 are set out under section "Measurement uncertainty and sensitivity analysis of ECL estimates". In addition, should the virus continue to cause disruption to economic activity in Hong Kong and mainland China through 2020, there could be adverse impacts on income due to lower lending and transaction volumes, and insurance manufacturing revenue. Further ECL could arise from other parts of our business impacted by the disruption to supply chains. This has been included and monitored as one of the Top risks by the Bank.

We have invoked our business continuity plans to help ensure the safety and well-being of our staff while maintaining our ability to support our customers and maintain our business operations.

We regularly conduct stress tests to assess the resilience of our balance sheet and our capital adequacy. We conduct this across the Group and in key sites such as Hong Kong. The stress tests are used to consider our risk appetite and provide insights into our financial stability. In the case of Hong Kong, our balance sheet and capital adequacy remain resilient based on regulatory and internal stress test outcomes.

Our central scenario for Hong Kong, used as a key input for calculating ECL in Hong Kong, has kept pace with expectations of economic growth. The economy entered a technical recession in the second-half of 2019 and recorded negative annual GDP growth for the first time since 2009. This is a result of both tensions over trade and tariffs between the US and China and domestic social unrest. The economy is expected to gradually recover in 2020. We have also developed a number of additional scenarios to capture more extreme downside risks, and have used these in impairment testing and measuring, and to assess our capital resilience. While our economic scenarios used to calculate credit loss capture a range of outcomes, the potential economic impact of the coronavirus was not explicitly considered at the year end due to the limited information and the emergent nature of the outbreak towards the end of 2019.

For further details of all scenarios used in impairment measurements see "Measurement uncertainty and sensitivity analysis of ECL estimates" on pages 57 – 64.

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
<i>Credit risk</i>		
Credit risk is the risk of financial loss if a customer or counterparty fails to meet an obligation under a contract.	Credit risk arises principally from direct lending, trade finance and leasing business, but also from certain other products such as guarantees and derivatives.	Credit risk is: <ul style="list-style-type: none"> – measured as the amount which could be lost if a customer or counterparty fails to make repayments; – monitored within limits, approved by individuals within a framework of delegated authorities; and – managed through a robust risk control framework which outlines clear and consistent policies, principles and guidance for risk managers.
<i>Liquidity and funding risk</i>		
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: <ul style="list-style-type: none"> – 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.
<i>Market risk</i>		
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 on the following page.	Market risk is: <ul style="list-style-type: none"> – measured using sensitivities, value at risk ("VaR") and stress testing, giving a detailed picture of potential gains and losses for a range of market movements and scenarios, as well as tail risks over specified time horizons; – monitored using VaR, stress testing and other measures including the sensitivity of net interest income and the sensitivity of structural foreign exchange; and – managed using risk limits approved by the Group's Chief Risk Officer. These limits are allocated across the Group's legal entities and business lines.
<i>Resilience risk</i>		
Resilience risk is the risk of our inability to provide critical services to our customers, affiliates, and counterparties as a result of sustained and significant operational disruption.	Resilience risk can arise from failures or inadequacies in processes, people, systems or external events. Operational resilience threats have been exemplified in recent years. These may be driven by rapid technological innovation, changing behaviours of our consumers, increasing cyber-threats and attacks, cross-border dependencies, and third-party relationships.	Resilience risk is: <ul style="list-style-type: none"> – measured through a range of metrics with defined maximum acceptable impact tolerances, and against our agreed risk appetite; – monitored through oversight of enterprise processes, risks, controls and strategic change programmes; and – managed by continuous monitoring and thematic reviews.

RISK

Description of risks – banking operations continued

(audited)

Risks	Arising from	Measurement, monitoring and management of risk
Regulatory compliance risk		
Regulatory compliance risk is the risk that we fail to observe the letter and spirit of all relevant laws, codes, rules, regulations and standards of good market practice, and incur fines and penalties and suffer damage to our business as a consequence.	Regulatory compliance risk arises from the risks associated with breaching our duty to our customers and other counterparties, inappropriate market conduct and breaching other regulatory requirements.	Regulatory compliance risk is: <ul style="list-style-type: none"> – measured by reference to identified metrics, incident assessments, regulatory feedback and the judgement and assessment of our Regulatory Compliance teams; – monitored against the first line of defence risk and control assessments, the results of the monitoring and control assurance activities of the second line of defence functions, and the results of internal and external audits and regulatory inspections; and – managed by establishing and communicating appropriate policies and procedures, training employees in them, and monitoring activity to assure their observance. Proactive risk control and/or remediation work is undertaken where required.
Financial crime and fraud risk		
Financial crime and fraud risk is the risk that we knowingly or unknowingly help parties to commit or to further potentially illegal activity through the Group.	Financial crime and fraud risk arises from day-to-day banking operations.	Financial crime and fraud risk is: <ul style="list-style-type: none"> – measured by reference to identified metrics, incident assessments, regulatory feedback and the judgement and assessment of our Financial Crime Compliance teams; – monitored against our financial crime risk appetite statements and metrics, the results of the monitoring and control 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.
Model risk		
Model risk is the risk of adverse consequences from business decisions informed by models, which can be exacerbated by errors in methodology, design or the way they are used.	Model risk arises in both financial and non-financial contexts whenever business decision making includes reliance on models.	Model risk is: <ul style="list-style-type: none"> – measured by reference to model performance tracking and the output of detailed technical reviews, with key metrics including model review statuses and findings; – monitored against model risk appetite statements, insight from the independent review function, feedback from internal and external audits, and regulatory reviews; and – managed by creating and communicating appropriate policies, procedures and guidance, training colleagues in their application, and supervising their adoption to ensure operational effectiveness.
Other material risks		
Pension risk		
Pension risk is the risk of increased costs to the Group from offering post-employment benefit plans to its employees.	Pension risk arises from investments delivering an inadequate return, adverse changes in interest rates or inflation, or members living longer than expected. Pension risk includes operational and reputational risks of sponsoring pension plans.	Pension risk is: <ul style="list-style-type: none"> – measured in terms of the schemes' ability to generate sufficient funds to meet the cost of their accrued benefits; – monitored through the specific risk appetite; and – managed through the appropriate pension risk governance structure and ultimately the RMM.

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.

Description of risks – insurance manufacturing operations

Risks	Arising from	Measurement, monitoring and management of risk
<i>Insurance risk</i>		
Insurance risk is the risk that, over time, the cost of acquiring and administering an insurance contract, and paying claims and benefits may exceed the total amount of premiums received and investment income.	The cost of claims and benefits can be influenced by many factors, including mortality and morbidity experience, as well as lapse and surrender rates.	Insurance risk is: <ul style="list-style-type: none"> – measured in terms of life insurance liabilities and economic capital allocated to insurance underwriting risk; – monitored through a framework of approved limits and delegated authorities; and – managed through a robust risk control framework which outlines clear and consistent policies, principles and guidance. This includes using product design, underwriting, reinsurance and claims-handling procedures.
<i>Financial risk</i>		
Our ability to effectively match the liabilities arising under insurance contracts with the asset portfolios that back them is contingent on the management of financial risks and the extent to which these risks are borne by the policyholders.	Exposure to financial risks arises from: <ul style="list-style-type: none"> – market risk of changes in the fair values of financial assets or their future cash flows; – credit risk; and – liquidity risk of entities being unable to make payments to policyholders as they fall due. 	Financial risk is: <ul style="list-style-type: none"> – measured separately for each type of risk: – 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, insurance risk and operational risk.

(a) Credit Risk

Credit risk is the risk of financial loss if a customer or counterparty fails to meet an obligation under a contract. Credit risk arises principally from direct lending, trade finance and leasing business, but also from other products such as guarantees and credit derivatives.

Credit risk management

(audited)

Key developments in 2019

There were no material changes to the policies and practices for the management of credit risk in 2019. We continued to apply the requirements of HKFRS 9 "Financial Instruments" within Credit Risk.

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.

RISK

(a) Credit Risk continued

Credit risk management continued

(audited)

Governance and structure continued

Credit risk sub-function

(audited)

With the delegation from the Board, credit approval authorities are delegated by the Executive Committee to the Group's 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 with the HSBC Group.

Governance

Management review forums are established in order to provide cross functional and business review of the HKFRS 9 end-to-end process which forms a key part of the overarching HKFRS 9 governance framework.

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 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. These include but not limited to portfolio and counterparty limits, and approval and review controls.

(a) Credit Risk continued

Credit risk management continued

(audited)

Key risk management processes continued

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 point-in-time ("PIT") probability-weighted PD.

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

¹ Customer risk rating ("CRR").

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

Quality classification definitions:

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

RISK

(a) Credit Risk continued

Credit risk management continued

(audited)

Key risk management processes continued

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 continued**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 expected credit losses ("ECL").

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

	At 31 December 2019		At 31 December 2018	
	Gross carrying/ nominal amount	Allowance for ECL ¹	Gross carrying/ nominal amount	Allowance for ECL ¹
Loans and advances to customers at amortised cost:	946,443	(3,513)	877,134	(2,678)
– personal	342,742	(1,391)	317,463	(1,023)
– corporate and commercial	582,123	(2,036)	540,530	(1,613)
– non-bank financial institutions	21,578	(86)	19,141	(42)
Placings with and advances to banks at amortised cost	30,919	(1)	70,608	(2)
Other financial assets measured at amortised costs:	158,422	(88)	142,834	(42)
– cash and balances at central banks	13,038	–	16,421	–
– reverse repurchase agreements – non-trading	1,912	–	–	–
– financial investments	117,935	(80)	99,389	(37)
– other assets ²	25,537	(8)	27,024	(5)
Total gross carrying amount on balance sheet	1,135,784	(3,602)	1,090,576	(2,722)
Loans and other credit related commitments	347,121	(145)	314,620	(55)
Financial guarantee and similar contracts	3,675	(7)	4,168	(1)
Total nominal amount off balance sheet³	350,796	(152)	318,788	(56)
Total	1,486,580	(3,754)	1,409,364	(2,778)
	Fair value	Memorandum Allowance for ECL	Fair value	Memorandum Allowance for ECL
Debt instruments measured at Fair Value through Other Comprehensive Income ("FVOCI") ⁴	337,968	(11)	325,036	(5)

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 The above table does not include balances due from HSBC Group companies.

RISK

(a) Credit Risk continued

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

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

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

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

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

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

(audited)

	Gross carrying/ nominal amount ¹					Allowance for ECL					ECL coverage %				
	Stage 1	Stage 2	Stage 3	POCI 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%
Placements with and advances to banks at amortised cost	30,919	-	-	-	30,919	(1)	-	-	-	(1)	0.00%	N/A	N/A	N/A	0.00%
Other financial assets measured at amortised cost	155,509	2,913	-	-	158,422	(53)	(35)	-	-	(88)	0.03%	1.20%	N/A	N/A	0.06%
Loans and other credit-related commitments	341,893	5,228	-	-	347,121	(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	9,398	535	-	-	9,933	(1)	-	-	-	(1)	0.01%	0.00%	N/A	N/A	0.01%
Financial guarantee and similar contracts:	3,132	543	-	-	3,675	(3)	(4)	-	-	(7)	0.10%	0.74%	N/A	N/A	0.19%
- personal	7	-	-	-	7	-	-	-	-	-	0.00%	N/A	N/A	N/A	0.00%
- corporate and commercial	3,115	539	-	-	3,654	(3)	(4)	-	-	(7)	0.10%	0.74%	N/A	N/A	0.19%
- non-bank financial institutions	10	4	-	-	14	-	-	-	-	-	0.00%	0.00%	N/A	N/A	0.00%
At 31 December 2019	1,363,293	121,214	2,073	-	1,486,580	(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").

(a) Credit Risk continued

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

(audited)

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

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

Loans and advances to customers at amortised cost	At 31 December 2019								
	Gross carrying amount			Allowance for ECL			ECL coverage %		
	Stage 2	Of which: 1 to 29 DPD ¹	Of which: 30 and > DPD	Stage 2	Of which: 1 to 29 DPD	Of which: 30 and > DPD	Stage 2	Of which: 1 to 29 DPD	Of which: 30 and > DPD
- personal	12,405	1,517	495	(884)	(59)	(56)	7.13%	3.89%	11.31%
- corporate and commercial	94,182	381	76	(842)	(18)	(36)	0.89%	4.72%	47.37%
- non-bank financial institutions	5,943	-	-	(31)	-	-	0.52%	N/A	N/A

¹ Days past due ("DPD"). Up to date accounts in stage 2 are not shown in amounts.

	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:	826,192	48,782	2,154	6	877,134	(732)	(987)	(959)	-	(2,678)	0.09%	2.02%	44.52%	0.00%	0.31%
- personal	306,695	10,207	561	-	317,463	(301)	(618)	(104)	-	(1,023)	0.10%	6.05%	18.54%	N/A	0.32%
- corporate and commercial	502,839	36,092	1,593	6	540,530	(403)	(355)	(855)	-	(1,613)	0.08%	0.98%	53.67%	0.00%	0.30%
- non-bank financial institutions	16,658	2,483	-	-	19,141	(28)	(14)	-	-	(42)	0.17%	0.56%	N/A	N/A	0.22%
Placings with and advances to banks at amortised cost	70,409	199	-	-	70,608	(2)	-	-	-	(2)	0.00%	0.00%	N/A	N/A	0.00%
Other financial assets measured at amortised cost	141,889	944	1	-	142,834	(34)	(8)	-	-	(42)	0.02%	0.85%	0.00%	N/A	0.03%
Loans and other credit-related commitments	310,118	4,502	-	-	314,620	(42)	(13)	-	-	(55)	0.01%	0.29%	N/A	N/A	0.02%
- personal	219,048	-	-	-	219,048	-	-	-	-	-	0.00%	N/A	N/A	N/A	0.00%
- corporate and commercial	90,433	4,501	-	-	94,934	(42)	(13)	-	-	(55)	0.05%	0.29%	N/A	N/A	0.06%
- non-bank financial institutions	637	1	-	-	638	-	-	-	-	-	0.00%	0.00%	N/A	N/A	0.00%
Financial guarantee and similar contracts:	3,865	303	-	-	4,168	(1)	-	-	-	(1)	0.03%	0.00%	N/A	N/A	0.02%
- personal	7	-	-	-	7	-	-	-	-	-	0.00%	N/A	N/A	N/A	0.00%
- corporate and commercial	3,848	299	-	-	4,147	(1)	-	-	-	(1)	0.03%	0.00%	N/A	N/A	0.02%
- non-bank financial institutions	10	4	-	-	14	-	-	-	-	-	0.00%	0.00%	N/A	N/A	0.00%
At 31 December 2018	1,352,473	54,730	2,155	6	1,409,364	(811)	(1,008)	(959)	-	(2,778)	0.06%	1.84%	44.50%	0.00%	0.20%

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

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

RISK

(a) Credit Risk continued

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

(audited)

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

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Loans and advances to customers at amortised cost	At 31 December 2018								
	Gross carrying amount			Allowance for ECL			ECL coverage %		
	Stage 2	Of which: 1 to 29 DPD ¹	Of which: 30 and > DPD	Stage 2	Of which: 1 to 29 DPD	Of which: 30 and > DPD	Stage 2	Of which: 1 to 29 DPD	Of which: 30 and > DPD
- personal	10,207	1,287	457	(618)	(45)	(37)	6.05%	3.50%	8.10%
- corporate and commercial	36,092	194	51	(355)	(17)	(21)	0.98%	8.76%	41.18%
- non-bank financial institutions	2,483	-	-	(14)	-	-	0.56%	N/A	N/A

¹ Days past due ("DPD"). Up to date accounts in stage 2 are not shown in amounts.

(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.

	2019	2018
Cash and balances at central banks	13,038	16,421
Trading assets	47,346	47,148
Derivative financial instruments	7,338	8,141
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	1,413	1,331
Reverse repurchase agreements – non-trading	6,659	-
Placings with and advances to banks	65,807	79,400
Loans and advances to customers	942,930	874,456
Financial investments	455,823	424,388
Other assets	26,707	27,019
Financial guarantees and other credit related contingent liabilities ¹	17,772	16,213
Loan commitments and other credit related commitments	571,437	594,457
	2,156,270	2,088,974

¹ Performance and other guarantees were included.

(a) Credit Risk continued

(ii) Measurement uncertainty and sensitivity analysis of ECL estimates

(audited)

Expected credit loss impairment allowances recognised in the financial statements reflect the effect of a range of possible economic outcomes, calculated on a probability-weighted basis, based on the economic scenarios described below. The recognition and measurement of expected credit loss ("ECL") involves the use of significant judgement and estimation. It is necessary to formulate multiple forward-looking economic forecasts and incorporate them into the ECL estimates. We use a standard framework to form economic scenarios to reflect assumptions about future economic conditions, supplemented with the use of management judgement, which may result in using alternative or additional economic scenarios and/or management adjustments.

Methodology

Impairment is calculated in three stages and financial instruments are allocated into one of the three stages where the transfer mechanism depends on whether there is a significant increase/decrease in credit risk in the relevant reporting period. After the allocation, the measurement of ECL, which is the product of PD, loss given default ("LGD") and exposure at default ("EAD"), will reflect the change in risk of default occurring over the remaining life of the instruments.

We have adopted the use of multiple scenarios, representative of our view of forecast economic conditions, sufficient to calculate unbiased expected loss in most economic environments. We rely on an average of external forecasts and their distributions to create three scenarios that represent a "most likely outcome", and two, less likely "outer" scenarios, referred to as the Upside and Downside scenarios. Each outer scenario is consistent with a probability of 10%, while the Central scenario is assigned the remaining 80%, according to the decision of the Group's senior management. This weighting scheme is deemed appropriate for the unbiased estimation of ECL in most circumstances. These three scenarios are referred to as the consensus economic scenarios. Additional scenarios are used to specifically address the forward-looking risks that management consider are not adequately captured by the consensus. Together, these scenarios represent the approach to forward economic guidance. Economic assumptions in the Central consensus economic scenario are set using consensus forecasts which represent the average of forecasts of external economists. Reliance on external forecasts helps ensure that the Central scenario is unbiased and maximise the use of independent information.

The Upside and Downside scenarios are selected with reference to externally available forecast distributions and designed to be cyclical, in that GDP growth, inflation and unemployment usually revert back to the Central scenario after the first three years for major economies. We determine the maximum divergence of GDP growth from the Central scenario using the 10th and the 90th percentile of the entire distribution of forecast outcomes for major economies. While key economic variables are set with reference to external distributional forecasts, we also align the overall narrative of the scenarios to the macroeconomic risks described in the Group's "Top and emerging risks". This ensures that scenarios remain consistent with the more qualitative assessment of these risks. We project additional variable paths using the external provider's global macro model.

The Upside and Downside scenarios are generated once a year, reviewed at each reporting date to ensure that they are an appropriate reflection of management's view and updated if economic conditions change significantly. The Central scenario is generated every quarter. In quarters where only the Central scenario is updated, outer scenarios for use in Wholesale are adjusted such that the relationship between the Central scenario and outer scenarios in the quarter is consistent with that observed at the last full scenario generation. In Retail, three scenarios are run annually to establish the effect of multiple scenarios for each portfolio. This effect is then applied in each quarter with the understanding that the non-linearity of response to economic conditions should not change, unless a significant change in economic conditions occurs.

Additional scenarios are created as required, to address those forward-looking risks that management consider are not adequately captured by the consensus. At the reporting date, we deployed additional scenarios to address the impact of deteriorating trade relations between China and the US on key Asian economies and to address the possibility of a further deterioration in economic growth in Hong Kong.

RISK

(a) Credit Risk continued

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

(audited)

Methodology continued

The Group recognises that the consensus economic scenario approach, using three scenarios, will be insufficient in certain economic environments. Additional analysis may be requested at management's discretion, including the production of extra scenarios. For instance, the recent continued escalation of trade- and tariff-related tensions started from 2018 resulted in management modelling deeper effects of a trade war scenario than currently captured by the consensus Downside scenario for key Asia-Pacific economies. This may result in a change in the weighting scheme assigned to the three scenarios or the inclusion of extra scenarios.

Description of Consensus Economic Scenarios

The economic assumptions presented in this section have been used specifically for the purpose of calculating expected credit loss.

The consensus Central scenario

The Group's central scenario is one of moderate growth over the forecast period 2020-2024. Global GDP growth is expected to be 2.8% on average over the period, which is marginally lower than the average growth rate over the period 2014-2018. Across the key markets, we note that :

- Expected average rates of GDP growth over the 2020-2024 period are lower than average growth rates achieved over the 2014-2018 period in all of our key markets. For China, it is consistent with the theme of ongoing rebalancing from an export-oriented economy to deeper domestic consumption. Short term expectations of economic growth in Hong Kong deteriorated sharply in the second half of 2019.
- The unemployment rate is expected to rise over the forecast horizon in most of our major markets.
- Inflation is expected to be stable and will remain close to central bank targets in our core markets over the forecast period.
- Major central banks have recently lowered their main policy interest rates in 2019 and are expected to continue to maintain a low interest rate environment over the projection horizon. The US Federal Reserve Board ("FRB") resumed asset purchases to provide liquidity and the European Central Bank is expected to restart its asset purchase programmes.
- The West Texas Intermediate oil price is forecast to average US\$59 per barrel over the projection period.

Key macroeconomic variables are shown in the table below:

Central scenario (average 2020 – 2024)

	Hong Kong	Mainland China
GDP growth rate (%)	1.9	5.6
Inflation (%)	2.2	2.4
Unemployment (%)	3.1	4.0
Short term interest rate (%)	1.1	3.8
10-Year treasury bond yield (%)	2.4	N/A
House price growth (%)	3.8	4.6
Equity price growth (%)	5.1	7.9
Probability (%)	50.0	80.0

Note: N/A – not required in credit models

(a) Credit Risk continued**(ii) Measurement uncertainty and sensitivity analysis of ECL estimates** continued*(audited)***The consensus Upside scenario**

The economic forecast distribution of risks (as captured by consensus probability distributions of GDP growth) have shown a decrease in upside risks across our main markets over the course of 2019. Globally, real GDP growth rises in the first two years of the Upside scenario before converging to the Central scenario. Increased confidence, de-escalation of trade tensions and removal of trade barriers, expansionary fiscal policy, stronger oil prices as well as calming of geopolitical tensions are the risk themes that support the 2019 year-end Upside scenario.

Key macroeconomic variables are shown in the table below:

Upside scenario (average 2020 – 2024)

	Hong Kong	Mainland China
GDP growth rate (%)	2.2	5.9
Inflation (%)	2.5	2.7
Unemployment (%)	2.9	3.9
Short term interest rate (%)	1.2	3.9
10-Year treasury bond yield (%)	2.5	N/A
House price growth (%)	5.0	5.8
Equity price growth (%)	6.9	10.7
Probability (%)	10.0	10.0

Note: N/A – not required in credit models

The Downside scenario**The consensus Downside scenarios**

The distribution of risks (as captured by consensus probability distributions of GDP growth) have shown a marginal increase in downside risks over the course of 2019 for Hong Kong. Globally, real GDP growth declines for two years in the Downside scenario before recovering towards its long-run trend. House price growth either stalls or contracts and equity markets correct abruptly in our major markets. The global slowdown in demand drives commodity prices lower and results in an accompanying fall in inflation. Central Banks are expected to enact loose monetary policy, which in some markets, results in a reduction in the key policy interest rate. This is consistent with the key risk themes of the downside, which include an intensification of global protectionism and trade barriers, a slowdown in China, further risks to economic growth in Hong Kong and weaker commodity prices.

RISK

(a) Credit Risk continued

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

The Downside scenario continued

Key macroeconomic variables are shown in the table below:

Downside scenario (average 2020 – 2024)

	Hong Kong	Mainland China
GDP growth rate (%)	1.4	5.6
Inflation (%)	1.9	2.1
Unemployment (%)	3.3	4.0
Short term interest rate (%)	(0.1)	3.6
10-Year treasury bond yield (%)	1.2	N/A
House price growth (%)	2.3	3.9
Equity price growth (%)	(0.7)	1.1
Probability (%)	10.0	–

Note: N/A – not required in credit models

Alternative Downside scenarios have been created to reflect management's view of risk in some of our key markets.

The Alternative Downside scenarios

Hong Kong and mainland China Alternative Downside scenario

Two Alternative Downside scenarios have been implemented for key markets to represent management's view of economic uncertainty arising from trade and tariff tensions between China and the US and the current economic situation in Hong Kong. These scenarios and their associated probabilities are described below.

Hong Kong and mainland China Alternative Downside scenario 1 ("AD1")

A continuation of trade- and tariff-related tensions throughout 2019 resulted in management modelling an Alternative Downside scenario for our key markets. This scenario models the effects of a significant escalation in global tensions, stemming from trade disputes but going beyond increases in tariffs to affect non-tariff barriers, cross-border investment flows and threats to the international trade architecture. This scenario assumes actions that lie beyond currently enacted and proposed tariffs and has been modelled as an addition to the three consensus-driven scenarios for these economies. In management's judgement, the impact on the US and other countries is largely captured by the consensus Downside scenario.

(a) Credit Risk continued**(ii) Measurement uncertainty and sensitivity analysis of ECL estimates** continued*(audited)***The Alternative Downside scenarios** continued**Hong Kong and mainland China Alternative Downside scenario 1 ("AD1")** continued

Key macroeconomic variables are shown in the table below:

Average 2020 – 2024

	Hong Kong	Mainland China
GDP growth rate (%)	0.8	5.2
Inflation (%)	1.6	2.0
Unemployment (%)	5.1	4.3
Short term interest rate (%)	0.7	2.9
10-Year treasury bond yield (%)	1.6	N/A
House price growth (%)	(3.7)	2.6
Equity price growth (%)	(3.3)	(1.6)
Probability (%)	20.0	10.0

Note: N/A – not required in credit models

Hong Kong Alternative Downside scenario 2 ("AD2")

A deep cyclical recessionary scenario has been modelled to reflect Hong Kong specific risks and the possibility of a further deterioration in the economic environment. This scenario has been applied to Hong Kong only and has been assigned a 10% probability.

Average 2020 – 2024

	Hong Kong
GDP growth rate (%)	(0.1)
Inflation (%)	1.3
Unemployment (%)	5.1
Short term interest rate (%)	0.4
10-Year treasury bond yield (%)	1.4
House price growth (%)	(3.7)
Equity price growth (%)	(8.4)
Probability (%)	10.0

The conditions that resulted in departure from the consensus economic forecasts will be reviewed regularly as economic conditions change in future to determine whether these adjustments continue to be necessary.

RISK

(a) Credit Risk continued

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

(audited)

How economic scenarios are reflected in the wholesale calculation of ECL

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

How economic scenarios are reflected in the retail calculation of ECL

We have developed and implemented a globally consistent methodology 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.

Economic scenarios sensitivity analysis of ECL estimates

The ECL outcome is sensitive to judgement and estimations made with regards to the formulation and incorporation of multiple forward-looking economic conditions described above. As a result, management assessed and considered the sensitivity of the ECL outcome against the forward-looking economic conditions 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 significant increase in credit risk as well as the measurement of the resulting ECL.

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, and 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 as the retail ECL for secured mortgage portfolios is sensitive to macroeconomic variables which are incorporated into the future economic scenarios. The population of stage 3 loans at the balance sheet date is determined at that point in time. The impact on ECL of exposures moving from stage 1 (12-month provisioning) to a lifetime provisioning stage (and vice versa) as well as changes in ECL for existing stages 1 and 2 loans as a result of changes in forecasts of future economic conditions is captured in sensitivity analysis by recalculating the ECL for stages 1 and 2, reflecting changes in the population of loans in each stage, and their PD and the LGD factors. Stage 3 ECL would only be sensitive to changes in forecasts of future economic conditions if the LGD of the particular portfolio were sensitive to such changes.

(a) Credit Risk continued**(ii) Measurement uncertainty and sensitivity analysis of ECL estimates** continued*(audited)***Economic scenarios sensitivity analysis of ECL estimates** continued

The economic scenarios are generated to capture the Group's view of a range of possible forecast economic conditions that is sufficient for the calculation of unbiased and probability-weighted ECL. Therefore, the ECL calculated for each of the scenarios represent a range of possible outcomes that have been evaluated to estimate ECL. As a result, the ECL calculated for the Upside and Downside scenarios should not be taken to represent the upper and lower limits of possible actual ECL outcomes. There is a high degree of estimation uncertainty in numbers representing tail risk scenarios when assigned a 100% weighting, and an indicative range is provided for the tail risk sensitivity analysis. A wider range of possible ECL outcomes reflects uncertainty about the distribution of economic conditions and does not necessarily mean that credit risk on the associated loans is higher than for loans where the distribution of possible future economic conditions is narrower. The recalculated ECL for each of the scenarios should be read in the context of the sensitivity analysis as a whole and in conjunction with the narrative disclosures provided below.

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

ECL of financial instruments subject to significant measurement uncertainty	Hong Kong	Mainland China	Hong Kong	Mainland China
	31 December 2019		31 December 2018	
Reported ECL	1,191	425	494	303
Consensus scenarios				
Central scenario	888	384	494	302
Upside scenario	694	347	474	282
Downside scenario	1,128	410	521	328
Alternative scenarios				
AD1	1,909	421	2,318	791
AD2	2,584	N/A	N/A	N/A
Gross carrying amount/nominal amount ²	1,091,943	127,888	848,116	87,892

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 and low credit risk instruments such as debt instruments at FVOCI which have high carrying amounts but low ECL.

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

ECL coverage rates reflect the underlying observed credit defaults, the sensitivity to economic environment, extent of security and the effective maturity of the book. Hong Kong is typically a short-dated book with low defaults, which is reflected in the low ECL coverage ratio.

RISK

(a) Credit Risk continued

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

(audited)

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 conditions¹

ECL of loans and advances to customers ²	Hong Kong	Mainland China	Hong Kong	Mainland China
	31 December 2019		31 December 2018	
Reported ECL	1,340	16	1,089	15
Consensus scenarios				
Central scenario	1,116	16	1,076	14
Upside scenario	1,063	16	1,019	14
Downside scenario	1,156	16	1,103	17
Alternative scenarios				
AD1	2,073	17	1,278	17
AD2	2,110	N/A	N/A	N/A
Gross carrying amount	301,590	17,664	272,135	17,618

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.

ECL coverage rates for retail are reflective of the portfolio quality and sensitivity to the economic environment. Overall, as the level of uncertainty in economy or historical economic variable correlations or credit quality changes, corresponding changes in the ECL sensitivity would occur.

Post-model adjustments

In the context of HKFRS 9, post-model adjustments ("PMAs") are short-term increases or decreases to the ECL at either a customer or portfolio level to account for model deficiencies, expert credit judgement applied following management review and challenge and for any late breaking events. We have internal governance in place to regularly monitor post-model adjustments and where possible to reduce the reliance on these through model recalibration or redevelopment as appropriate.

Post-model adjustments do not include the additional ECL impairment allowances made in respect to the potential economic impact of protests, as these are captured within the existing governance process for multiple economic scenarios impact on ECL.

Post-model adjustments as at 31 December 2019 were immaterial for the Wholesale business and HK\$31m for the Retail business.

(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.

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

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 gross exposure and allowances/provision for loans and advances to banks and customers including loan commitments and financial guarantees

(audited)

	Non credit – impaired				Credit – impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI ¹		Gross exposure	Allowance/provision for ECL
	Gross exposure	Allowance/provision for ECL	Gross exposure	Allowance/provision for ECL	Gross exposure	Allowance/provision for ECL	Gross exposure	Allowance/provision for ECL		
At 1 January 2019	1,210,584	(777)	53,786	(1,000)	2,154	(959)	6	-	1,266,530	(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/ (repayments)	6,635	78	(8,887)	(17)	467	15	-	-	(1,785)	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	1,207,784	(1,014)	118,301	(1,838)	2,073	(814)	-	-	1,328,158	(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)

RISK

(a) Credit Risk continued

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

Reconciliation of gross exposure and allowances/provision for loans and advances to banks and customers including loan commitments and financial guarantees continued

(audited)

	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	1,328,158	(3,666)	(1,780)
Other financial assets measured at amortised cost	158,422	(88)	(48)
Summary of financial instruments to which the impairment requirements in HKFRS 9 are applied/ Summary Consolidated Income Statement	1,486,580	(3,754)	(1,828)
Debt instruments measured at FVOCI ³	337,339	(11)	(6)
Performance and other guarantees not considered for HKFRS 9	13,956	(5)	(3)
Total allowance for ECL/ total income statement ECL charge for the year	1,837,875	(3,770)	(1,837)

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

² The above table does not include balances due from HSBC Group companies.

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 continued**(iii) Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers** continued**Reconciliation of gross exposure and allowances/provision for loans and advances to banks and customers including loan commitments and financial guarantees** continued*(audited)*

	Non credit – impaired				Credit – impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI ¹		Gross exposure	Allowance/provision for ECL
	Gross exposure	Allowance/provision for ECL	Gross exposure	Allowance/provision for ECL	Gross exposure	Allowance/provision for ECL	Gross exposure	Allowance/provision for ECL		
At 1 January 2018	1,110,402	(692)	77,109	(1,175)	2,001	(745)	173	(18)	1,189,685	(2,630)
Transfers of financial instruments:										
– transfers from Stage 1 to Stage 2	(31,781)	61	31,781	(61)	–	–	–	–	–	–
– transfers from Stage 2 to Stage 1	44,845	(427)	(44,845)	427	–	–	–	–	–	–
– transfers to Stage 3	(880)	2	(526)	7	1,406	(9)	–	–	–	–
– transfers from Stage 3	–	–	22	–	(22)	–	–	–	–	–
Net remeasurement of ECL arising from transfer of stage	–	286	–	(219)	–	(5)	–	–	–	62
Net new and further lending/(repayments)	93,785	(65)	(7,898)	206	(226)	109	(159)	10	85,502	260
Changes in risk parameters – credit quality	–	54	–	(191)	–	(1,313)	–	2	–	(1,448)
Assets written off	–	–	–	–	(999)	999	(6)	6	(1,005)	1,005
Foreign exchange and others	(5,787)	4	(1,857)	6	(6)	5	(2)	–	(7,652)	15
At 31 December 2018	1,210,584	(777)	53,786	(1,000)	2,154	(959)	6	–	1,266,530	(2,736)
										Total
Change in ECL in income statement (charge)/release for the year										(1,126)
Add: Recoveries										143
Add/(less): Others										(13)
Total ECL (charge)/release for the year										(996)

	At 31 December 2018		For the year ended 31 December 2018
	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	1,266,530	(2,736)	(996)
Other financial assets measured at amortised cost	142,834	(42)	2
Summary of financial instruments to which the impairment requirements in HKFRS 9 are applied/ Summary Consolidated Income Statement	1,409,364	(2,778)	(994)
Debt instruments measured at FVOCI ³	325,191	(5)	–
Performance and other guarantees not considered for HKFRS 9	12,046	(2)	(2)
Total allowance for ECL/ total income statement ECL charge for the year	1,746,601	(2,785)	(996)

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

² The above table does not include balances due from HSBC Group companies.

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.

RISK

(a) Credit Risk continued

(iv) Credit quality of financial instruments

(audited)

We assess the credit quality of all financial instruments that are subject to credit risk. The credit quality of financial instruments is a point-in-time assessment of the probability of default of financial instruments, whereas HKFRS 9 stages 1 and 2 are determined based on relative deterioration of credit quality since initial recognition. Accordingly, for non-credit impaired financial instruments, there is no direct relationship between the credit quality assessments and HKFRS 9 stages 1 and 2, though typically the lowered credit quality bands exhibit a higher proportion in stage 2.

Distribution of financial instruments by credit quality at 31 December 2019

	Gross carrying / notional amount						Allowance for ECL	Net
	Strong	Good	Satisfactory	Sub- standard	Credit- impaired	Total		
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	30,481	438	–	–	–	30,919	(1)	30,918
Cash and balances at central banks	13,038	–	–	–	–	13,038	–	13,038
Reverse repurchase agreements – non-trading	–	1,912	–	–	–	1,912	–	1,912
Financial investments measured at amortised cost	97,100	16,993	3,842	–	–	117,935	(80)	117,855
Other assets	14,725	4,930	5,876	6	–	25,537	(8)	25,529
Debt instruments measured at fair value through other comprehensive income ¹	336,462	877	–	–	–	337,339	(11)	337,328
	947,666	270,410	247,643	5,331	2,073	1,473,123	(3,613)	1,469,510
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	5,565	–	–	–	–	5,565	–	5,565
	53,098	1,226	–	–	–	54,324	–	54,324
	1,000,764	271,636	247,643	5,331	2,073	1,527,447	(3,613)	1,523,834
Percentage of total credit quality	66%	18%	16%	0%	0%	100%		
Loan and other credit related commitments ²	276,021	53,205	17,701	194	–	347,121	(145)	346,976
Financial guarantee and similar contracts ²	87	2,590	990	8	–	3,675	(7)	3,668

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 The above table does not include balances due from HSBC Group companies.

(a) Credit Risk continued**(iv) Credit quality of financial instruments** continued*(audited)*

Distribution of financial instruments by credit quality at 31 December 2018

	Gross carrying / notional amount						Allowance for ECL	Net
	Strong	Good	Satisfactory	Sub- standard	Credit- impaired	Total		
In-scope for HKFRS 9 impairment								
Loans and advances to customers at amortised cost	434,917	217,902	219,602	2,553	2,160	877,134	(2,678)	874,456
– personal	297,151	11,696	7,851	204	561	317,463	(1,023)	316,440
– corporate and commercial	135,183	196,474	204,925	2,349	1,599	540,530	(1,613)	538,917
– non-bank financial institutions	2,583	9,732	6,826	–	–	19,141	(42)	19,099
Placings with and advances to banks at amortised cost	69,493	1,111	4	–	–	70,608	(2)	70,606
Cash and balances at central banks	16,421	–	–	–	–	16,421	–	16,421
Reverse repurchase agreements – non-trading	–	–	–	–	–	–	–	–
Financial investments measured at amortised cost	83,590	12,054	3,745	–	–	99,389	(37)	99,352
Other assets	18,369	4,667	3,986	1	1	27,024	(5)	27,019
Debt instruments measured at fair value through other comprehensive income ¹	324,037	1,154	–	–	–	325,191	(5)	325,186
	946,827	236,888	227,337	2,554	2,161	1,415,767	(2,727)	1,413,040
Out-of-scope for HKFRS 9 impairment								
Trading assets	47,148	–	–	–	–	47,148	–	47,148
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	300	1,031	–	–	–	1,331	–	1,331
Derivative financial instruments	4,460	1,603	125	26	–	6,214	–	6,214
	51,908	2,634	125	26	–	54,693	–	54,693
	998,735	239,522	227,462	2,580	2,161	1,470,460	(2,727)	1,467,733
Percentage of total credit quality	68%	16%	16%	0%	0%	100%		
Loan and other credit related commitments ²	256,094	32,083	25,954	489	–	314,620	(55)	314,565
Financial guarantee and similar contracts ²	745	2,845	568	10	–	4,168	(1)	4,167

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 The above table does not include balances due from HSBC Group companies.

RISK

(a) Credit Risk continued

(iv) Credit quality of financial instruments continued

(audited)

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

	Gross carrying / notional amount						Allowance for ECL	Net
	Strong	Good	Satisfactory	Sub-standard	Credit-impaired	Total		
Placings with and advances to banks at amortised cost	30,481	438	-	-	-	30,919	(1)	30,918
- stage 1	30,481	438	-	-	-	30,919	(1)	30,918
- stage 2	-	-	-	-	-	-	-	-
- stage 3	-	-	-	-	-	-	-	-
- POCI	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-
Other financial assets measured at amortised cost	124,863	23,835	9,718	6	-	158,422	(88)	158,334
- stage 1	123,773	22,618	9,118	-	-	155,509	(53)	155,456
- stage 2	1,090	1,217	600	6	-	2,913	(35)	2,878
- stage 3	-	-	-	-	-	-	-	-
- POCI	-	-	-	-	-	-	-	-
Loan and other credit-related commitments²	276,021	53,205	17,701	194	-	347,121	(145)	346,976
- stage 1	276,021	50,438	15,408	26	-	341,893	(68)	341,825
- stage 2	-	2,767	2,293	168	-	5,228	(77)	5,151
- stage 3	-	-	-	-	-	-	-	-
- POCI	-	-	-	-	-	-	-	-
Financial guarantees and similar contracts²	87	2,590	990	8	-	3,675	(7)	3,668
- stage 1	87	2,492	553	-	-	3,132	(3)	3,129
- stage 2	-	98	437	8	-	543	(4)	539
- stage 3	-	-	-	-	-	-	-	-
- POCI	-	-	-	-	-	-	-	-
	887,312	325,328	266,334	5,533	2,073	1,486,580	(3,754)	1,482,826
Debt instruments at FVOCI¹								
- 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 The above table does not include balances due from HSBC Group companies.

(a) Credit Risk continued**(iv) Credit quality of financial instruments** continued*(audited)*

Distribution of financial instruments to which the impairment requirements in HKFRS 9 are applied, by credit quality and stage distribution at 31 December 2018

	Gross carrying / notional amount						Allowance for ECL	Net
	Strong	Good	Satisfactory	Sub- standard	Credit- impaired	Total		
Placings with and advances to banks at amortised cost	69,493	1,111	4	–	–	70,608	(2)	70,606
– stage 1	69,421	984	4	–	–	70,409	(2)	70,407
– stage 2	72	127	–	–	–	199	–	199
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Loans and advances to customers at amortised cost	434,917	217,902	219,602	2,553	2,160	877,134	(2,678)	874,456
– stage 1	432,339	206,471	186,749	633	–	826,192	(732)	825,460
– stage 2	2,578	11,431	32,853	1,920	–	48,782	(987)	47,795
– stage 3	–	–	–	–	2,154	2,154	(959)	1,195
– POCI	–	–	–	–	6	6	–	6
Other financial assets measured at amortised cost	118,380	16,721	7,731	1	1	142,834	(42)	142,792
– stage 1	117,878	16,384	7,627	–	–	141,889	(34)	141,855
– stage 2	502	337	104	1	–	944	(8)	936
– stage 3	–	–	–	–	1	1	–	1
– POCI	–	–	–	–	–	–	–	–
Loan and other credit-related commitments²	256,094	32,083	25,954	489	–	314,620	(55)	314,565
– stage 1	256,094	30,267	23,494	263	–	310,118	(42)	310,076
– stage 2	–	1,816	2,460	226	–	4,502	(13)	4,489
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Financial guarantees and similar contracts²	745	2,845	568	10	–	4,168	(1)	4,167
– stage 1	745	2,765	355	–	–	3,865	(1)	3,864
– stage 2	–	80	213	10	–	303	–	303
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
	879,629	270,662	253,859	3,053	2,161	1,409,364	(2,778)	1,406,586
Debt instruments at FVOCI¹								
– stage 1	324,037	1,154	–	–	–	325,191	(5)	325,186
– stage 2	–	–	–	–	–	–	–	–
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
	324,037	1,154	–	–	–	325,191	(5)	325,186

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 The above table does not include balances due from HSBC Group companies.

RISK

(a) Credit Risk continued

(v) Credit-impaired loans

(audited)

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

- contractual payments of either principal or interest are past due for more than 90 days;
- there are other indications that the borrower is unlikely to pay, such as when a concession has been granted to the borrower for economic or legal reasons relating to the borrower's financial condition; 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) Collateral and other credit enhancements

Loans and advances

(audited)

Although collateral can be an important mitigant of credit risk, it is the Group's practice to lend on the basis of the customer's ability to meet their obligations out of their cash flow resources rather than rely on the value of security offered. Depending on the customer's standing and the type of product, facilities may be provided unsecured. However, for certain lending decisions a charge over collateral is usually obtained, and is important for the credit decision and pricing, and it is the Bank's practice to obtain that collateral and sell it in the event of default as a source of repayment.

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

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

Personal lending

(audited)

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

Residential mortgages

(audited)

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

(a) Credit Risk continued**(vi) Collateral and other credit enhancements** continued**Residential mortgages** continued*(audited)**Residential mortgages including loan commitments by level of collateral*

	At 31 December 2019			At 31 December 2018		
	Gross carrying/ nominal amount	ECL	ECL coverage %	Gross carrying/ nominal amount	ECL	ECL coverage %
Stage 1						
Fully collateralised	266,916	(2)	0.00	244,155	(1)	0.00
LTV ratio:						
– Less than 70%	240,893	(1)	0.00	225,705	(1)	0.00
– 71% to 90%	18,900	(0)	0.00	13,968	(0)	0.00
– 91% to 100%	7,123	(0)	0.00	4,482	(0)	0.00
Partially collateralised (A)	265	(0)	0.00	17	(0)	0.01
Total	267,181	(2)	0.00	244,172	(1)	0.00
– Collateral value on A	262			16		
Stage 2						
Fully collateralised	5,856	(1)	0.02	4,533	(1)	0.01
LTV ratio:						
– Less than 70%	5,641	(1)	0.00	4,397	(0)	0.01
– 71% to 90%	178	(0)	0.00	126	(0)	0.01
– 91% to 100%	37	–	–	10	–	–
Partially collateralised (B)	–	–	–	–	–	–
Total	5,856	(1)	0.02	4,533	(1)	0.01
– Collateral value on B	–			–		
Stage 3						
Fully collateralised	275	(11)	4.00	185	(8)	4.45
LTV ratio:						
– Less than 70%	271	(11)	4.07	183	(8)	4.48
– 71% to 90%	4	–	–	–	–	–
– 91% to 100%	–	–	–	2	–	–
Partially collateralised (C)	–	–	–	–	–	–
Total	275	(11)	4.00	185	(8)	4.45
– Collateral value on C	–			–		
POCI						
Fully collateralised	–	–	–	–	–	–
LTV ratio:						
– Less than 70%	–	–	–	–	–	–
– 71% to 90%	–	–	–	–	–	–
– 91% to 100%	–	–	–	–	–	–
Partially collateralised (D)	–	–	–	–	–	–
Total	–	–	–	–	–	–
– Collateral value on D	–			–		
	273,312	(14)	0.01	248,890	(10)	0.00

RISK

(a) Credit Risk continued

(vi) Collateral and other credit enhancements continued

Residential mortgages continued

(audited)

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

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 continued**(vi) Collateral and other credit enhancements** continued**Commercial real estate** continued
(audited)*Commercial real estate loans and advances including loan commitments by level of collateral*

	At 31 December 2019			At 31 December 2018		
	Gross carrying/ nominal amount	ECL	ECL coverage %	Gross carrying/ nominal amount	ECL	ECL coverage %
Stage 1						
Not collateralised	103,370	(39)	0.04	103,278	(32)	0.03
Fully collateralised	161,811	(123)	0.08	150,255	(80)	0.05
Partially collateralised (A)	10,214	(9)	0.09	11,540	(9)	0.07
Total	275,395	(171)	0.06	265,073	(121)	0.05
– Collateral value on A	6,975			8,107		
Stage 2						
Not collateralised	3,239	(44)	1.37	2,391	(12)	0.49
Fully collateralised	10,641	(145)	1.35	10,259	(69)	0.67
Partially collateralised (B)	327	(0)	0.14	87	(0)	0.37
Total	14,207	(189)	1.33	12,737	(81)	0.64
– Collateral value on B	191			24		
Stage 3						
Not collateralised	–	–	–	–	–	–
Fully collateralised	113	(3)	2.79	76	–	–
Partially collateralised (C)	–	–	–	–	–	–
Total	113	(3)	2.79	76	–	–
– Collateral value on C	–			–		
POCI						
Not collateralised	–	–	–	–	–	–
Fully collateralised	–	–	–	–	–	–
Partially collateralised (D)	–	–	–	–	–	–
Total	–	–	–	–	–	–
– Collateral value on D	–			–		
	289,715	(363)	0.13	277,886	(202)	0.07

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.

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.

RISK

(a) Credit Risk continued

(vi) Collateral and other credit enhancements continued

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.

Other corporate, commercial and non-bank financial institutions loans and advances including loan commitments by level of collateral

	At 31 December 2019			At 31 December 2018		
	Gross carrying/ nominal amount	ECL	ECL coverage %	Gross carrying/ nominal amount	ECL	ECL coverage %
Stage 1						
Not collateralised	282,589	(259)	0.09	284,966	(196)	0.07
Fully collateralised	133,854	(172)	0.13	144,968	(119)	0.08
Partially collateralised (A)	57,068	(50)	0.09	55,215	(38)	0.07
Total	473,511	(481)	0.10	485,149	(353)	0.07
– Collateral value on A	27,318			24,860		
Stage 2						
Not collateralised	40,475	(292)	0.72	19,253	(154)	0.80
Fully collateralised	53,689	(406)	0.76	13,591	(123)	0.90
Partially collateralised (B)	10,251	(63)	0.61	7,377	(24)	0.32
Total	104,415	(761)	0.73	40,221	(301)	0.75
– Collateral value on B	4,423			3,283		
Stage 3						
Not collateralised	703	(581)	82.76	987	(647)	65.78
Fully collateralised	445	(48)	10.81	380	(21)	5.61
Partially collateralised (C)	116	(33)	28.47	225	(187)	83.10
Total	1,264	(662)	52.43	1,592	(855)	53.82
– Collateral value on C	61			27		
POCI						
Not collateralised	–	–	–	6	–	–
Fully collateralised	–	–	–	–	–	–
Partially collateralised (D)	–	–	–	–	–	–
Total	–	–	–	6	–	–
– Collateral value on D	–			–		
	579,190	(1,904)	0.33	526,968	(1,509)	0.29

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.

(a) Credit Risk continued**(vi) Collateral and other credit enhancements** continued**Other corporate and commercial and financial (non-bank) lending** continued
(audited)

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 2019, HK\$65,807m (2018: HK\$79,400m) of placings with and advances to banks rated CRR 1 to 5, including loan commitments, are uncollateralised.

Derivatives
(audited)

The International Swaps and Derivatives Association ("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.

RISK

(a) Credit Risk continued

(vi) Collateral and other credit enhancements continued

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 2019 are residential properties with carrying amount of HK\$19m (2018: residential properties of HK\$18m).

(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.

(b) Liquidity and funding risk continued

Structure and organisation continued

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

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

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

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

- maintaining compliance with relevant regulatory requirements of the reporting entity;
- projecting cash flows under various stress scenarios and considering the level of liquid assets necessary in relation thereto;
- monitoring liquidity and funding ratios against internal and regulatory requirements;
- maintaining a diverse range of funding sources with adequate back-up facilities;
- managing the concentration and profile of term funding;
- managing contingent liquidity commitment exposures within pre-determined limits;
- maintaining debt financing plans;
- monitoring depositor concentration in order to avoid undue reliance on large individual depositors and ensuring a satisfactory overall funding mix; and
- maintaining liquidity and contingency funding 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. Balance Sheet Management ("BSM") has responsibility for cash and liquidity management.

Liquidity Risk Management carry out independent review, challenge and assurance of the appropriateness of the risk management activities undertaken by ALCM and BSM. Their work includes setting control standards, advice on policy implementation, and review and challenge of reporting.

Internal Audit provide independent assurance that risk is managed effectively.

RISK

(b) Liquidity and funding risk continued

The management of liquidity and funding risk

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 2019, 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 2019, 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 2019, 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.

(b) Liquidity and funding risk continued**The management of liquidity and funding risk** continued**Liquidity and funding risk in 2019***(Unaudited)*

The Group is required to calculate its LCR and NSFR on a consolidated basis in accordance with rule 11(1) of The Banking (Liquidity) Rules ("BLR"). The Group is required to maintain both LCR and NSFR of not less than 100%.

The average LCRs for the periods are as follows:

	Quarter ended							
	31 Dec 2019	30 Sep 2019	30 Jun 2019	31 Mar 2019	31 Dec 2018	30 Sep 2018	30 Jun 2018	31 Mar 2018
Average LCR	201.8%	210.5%	198.5%	210.8%	209.1%	208.2%	209.6%	207.0%

The liquidity position of the Group remained strong and stable in 2019. The average LCR ranged from 198.5% to 210.8% for the reportable quarters. The LCR at 31 December 2019 was 205.9% (214.7% at 31 December 2018).

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 2019	30 Sep 2019	30 Jun 2019	31 Mar 2019	31 Dec 2018	30 Sep 2018	30 Jun 2018	31 Mar 2018
Level 1 assets	309,019	319,073	305,849	309,073	281,615	268,842	262,800	265,754
Level 2A assets	14,257	12,230	12,539	11,577	10,920	10,786	11,615	12,866
Level 2B assets	758	557	550	548	546	549	551	552
Total	324,034	331,860	318,938	321,198	293,081	280,177	274,966	279,172

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

The NSFR for the reportable periods are as follows:

	At quarter ended							
	31 Dec 2019	30 Sep 2019	30 Jun 2019	31 Mar 2019	31 Dec 2018	30 Sep 2018	30 Jun 2018	31 Mar 2018
NSFR	149.1%	148.6%	152.5%	150.3%	154.0%	150.5%	153.6%	152.9%

The funding position of the Group remained strong and stable in 2019. The NSFR was 149.1% for the quarter ended 31 December 2019, highlighting a surplus of 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.

RISK

(b) Liquidity and funding risk continued

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

(audited)

	Within one month	Over one month but within three months	Over three months but within one year	Over one year but within five years	Over five years	Total
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
At 31 December 2018						
Deposits from banks	2,712	–	–	–	–	2,712
Current, savings and other deposit accounts	958,799	110,254	86,342	1,068	–	1,156,463
Repurchase agreements – non-trading	410	–	–	–	–	410
Trading liabilities	33,649	–	–	–	–	33,649
Derivative financial instruments	7,557	284	141	151	–	8,133
Financial liabilities designated at fair value	9,259	11,598	9,881	2,606	445	33,789
Certificates of deposit and other debt securities in issue	377	3,393	–	–	–	3,770
Other financial liabilities	33,411	6,508	2,074	448	–	42,441
	1,046,174	132,037	98,438	4,273	445	1,281,367
Loan commitments	463,177	4,508	–	–	–	467,685
Financial guarantee and credit risk related guarantee contracts	16,388	–	–	–	–	16,388
	479,565	4,508	–	–	–	484,073

(b) Liquidity and funding risk continued

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

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 2019

There were no material changes to our policies and practices for the management of market risk in 2019.

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	<ul style="list-style-type: none"> - Foreign exchange & Commodities - Interest rates - Credit spreads 	<ul style="list-style-type: none"> - Structural foreign exchange - Interest rates - Credit spreads
Risk Measure	Value at risk / Sensitivity analysis	Value at risk / Sensitivity analysis

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.

RISK

(c) Market risk continued

Market risk governance

(audited)

Market risk is managed and controlled through limits approved by the Group's Chief Risk Officer, noting the support of the RMM. These limits are allocated across business lines and to the Group's legal entities, including Hang Seng Bank (China) Limited.

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").

Our aim is to ensure that all market risks are consolidated within operations that have the necessary skills, tools, management and governance to manage them. In certain cases where the market risks cannot be fully transferred, we identify the impact of varying scenarios on valuations or on net interest income resulting from any residual risk positions.

The Wholesale Credit and Traded Risk Models Oversight Committee ("WCMR MOC") is a formal governance committee established to provide oversight on model risk management related matters for traded risk models used in the region. The WCMR MOC is responsible for overseeing, monitoring, and escalating model risk management related matters within Traded risk. It supports accountable individual model approvers in the oversight of model risk. The WCMR MOC reports into the Group's RMM, which oversees all risk types at Group level.

Our control of market risk in the trading and non-trading portfolios is based on a policy of restricting trading within a list of permissible instruments authorised for each business lines, of enforcing new product approval procedures, and of restricting trading in the more complex derivative products only to business lines 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.

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.

(c) Market risk continued**Market risk measures** continued*(unaudited)***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.

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.

RISK

(c) Market risk continued

Market risk measures continued

(unaudited)

Stress testing continued

(audited)

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.

Market risk in 2019

(unaudited)

Market sentiment in 2019 remained fragile with short term market volatilities amid the sustained US-China trade tensions. US-China trade talk outcome, geopolitical events including the evolving situation in the Korean Peninsula, the US policy priorities as well as the key elections in Asia are among the key drivers for market volatility in 2019.

Trading portfolios

(audited)

Value at risk of the trading portfolios

The Trading VaR at 31 December 2019 increased when compared against 31 December 2018 due to the increase in strategic foreign exchange positions. In average terms, the VaR level was lower in 2019 mainly driven by interest rate trading positions.

(c) Market risk continued

Trading portfolios continued

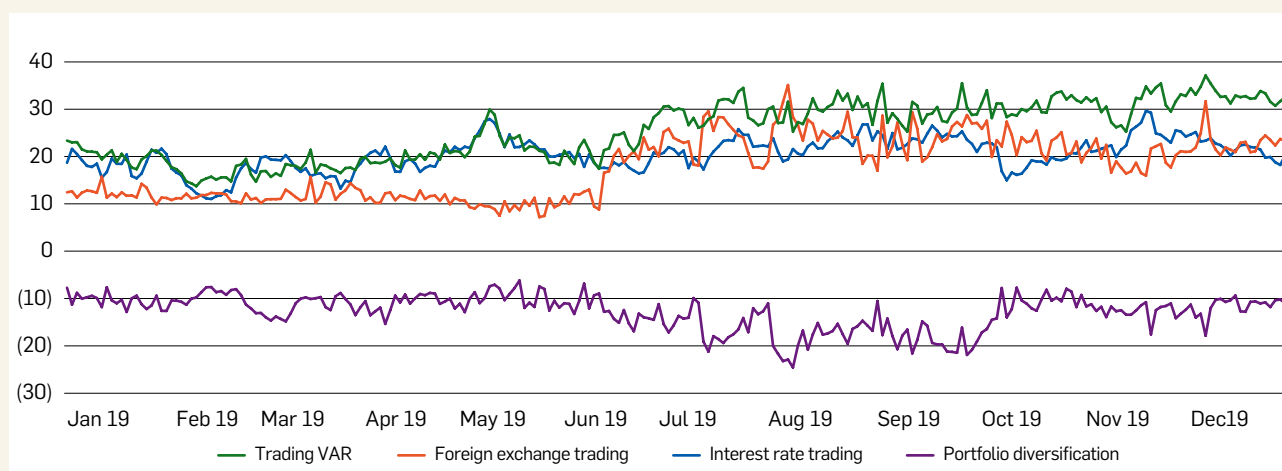
(audited)

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 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)
	At 31 December 2018	Minimum during the year	Maximum during the year	Average for the year
VaR				
Trading	20	19	51	34
Foreign exchange trading	11	8	21	14
Interest rate trading	20	13	46	30
Portfolio diversification	(11)	–	–	(10)

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.

RISK

(c) Market risk continued

Trading portfolios continued

(audited)

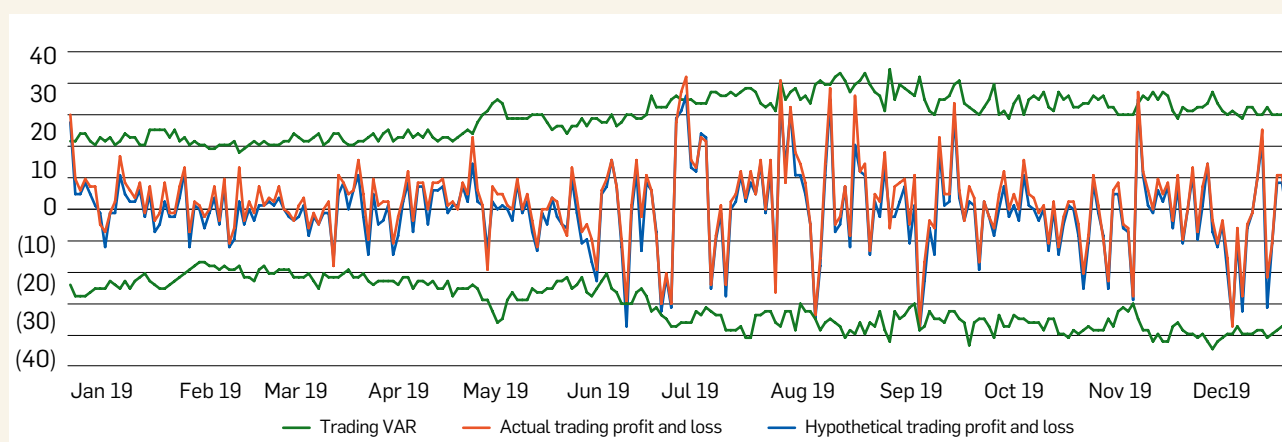
Backtesting

(unaudited)

In 2019, there were four profit exceptions and two loss exceptions at the Group consolidated level.

The graph below shows the daily trading VaR against actual and hypothetical profit and loss for the Group during 2019.

Backtesting of trading VAR against actual and hypothetical profit and loss for 2019 (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)

Banking book interest rate risk is the risk of an adverse impact to earnings or capital due to changes in market interest rates. 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, while balancing the cost of hedging activities to the current revenue stream. Monitoring the sensitivity of projected net interest income 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 Balance Sheet Management ("BSM") 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. BSM manages the banking book interest rate positions transferred to it within the 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 continued**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.

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, which includes business line interest rate pass-on assumptions, reinvestment of maturing assets and liabilities at market rates per shock scenario and prepayment risk. BSM 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 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 2020 and 25 basis points parallel rises or falls in all yield curves at the beginning of year from 1 January 2020.

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 2020 by HK\$2,513m for 100 basis points case and by HK\$622m 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\$3,986m for 100 basis points case and by HK\$981m 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 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)
Change in 2019 projected net interest income				
– HKD	2,247	(2,448)	879	(882)
– USD	356	(809)	220	(220)
– other	539	(600)	195	(140)
Total	3,142	(3,857)	1,294	(1,242)

RISK

(c) Market risk continued

Non-trading portfolios continued

(unaudited)

Sensitivity of net interest income continued

(audited)

The interest rate sensitivities set out in the table above represent the effect of the pro forma movements in projected yield curves based on a static balance sheet size and structure assumption. This effect, however, does not incorporate actions which would probably be taken by BSM or in the business units to mitigate the effect of interest rate risk. In reality, BSM 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.

Key assumptions used in the measurement of interest rate sensitivities include business line interest rate pass-on assumptions, re-investment of maturing assets and liabilities at market rates per shock scenario and prepayment risk. BSM 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 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 2019, the stressed VaR of the portfolio was HK\$1,006m.

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 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
	At 31 December 2018	Maximum impact	Minimum impact
+ 100 basis points parallel move in all yield curves	(139)	(198)	(139)
As a percentage of shareholders' equity at 31 December 2018 (%)	(0.09)	(0.12)	(0.09)
- 100 basis points parallel move in all yield curves	259	361	259
As a percentage of shareholders' equity at 31 December 2018 (%)	0.16	0.22	0.16

(c) Market risk continued**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)".

At 31 December 2019, the US dollar and Chinese renminbi were the currencies in which the Group had non-structural foreign currency positions that were not less than 10% of the total net position in all foreign currencies. The Group also had a Chinese renminbi structural foreign currency position, which was not less than 10% of the total net structural position in all foreign currencies. The net options position is calculated on the basis of delta-weighted positions of all foreign exchange options contracts.

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

Equities exposures*(audited)*

The Group's equities exposures in 2019 and 2018 are mainly long-term equity investments which are reported as "Financial investments" set out in note 28 to the financial statements. Equities held for trading purpose are included under "Trading assets". 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.

Sustained and significant operational disruption means events that affect:

- the stability of the financial system;
- the viability of the Bank and our industry peers; or
- the ability of our customers to access our services

We seek to understand the effects and outcomes of these events, prioritising services which are both vulnerable to disturbance and critical to our customer service offering.

RISK

(d) Resilience risk continued

(unaudited)

Resilience risk management

Operational resilience is our ability to adapt operations to continue functioning when an operational disturbance occurs. We measure resilience in terms of the maximum disruption period – or the impact tolerance – that we are willing to accept for a business service. Resilience risk cannot be managed down to zero, so we concentrate on critical business services that have the highest potential to threaten our ability to provide continued service to our customers. Our resilience strategy is focused on the establishment of robust back-up plans, detailed response methods, alternative delivery channels and recovery options.

The Resilience Risk team provides guidance and stewardship to our businesses and global 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.

Key developments in 2019

In May 2019, we announced the formation of a new Resilience Risk sub-function within the Non-Financial Risk simplified risk taxonomy. Resilience risk was formed to simplify the way we interact with our stakeholders and to deliver clear, consistent and credible responses. Investment in information technology ("IT") Resilience is central to this commitment. Designing and implementing IT Systems that continue to be available to use, in the face of adverse conditions is a key objective. We seek to ensure that we understand the root cause of IT failures and learn lessons both from our own experience and those of others. Since that time, we have undertaken a number of initiatives to develop and embed the new sub-function. These included:

- We consolidated personnel from several previously independent risk functions into a single resilience risk subfunction. These personnel have deep roots in the organisation, across the following risk areas: Information and Security Resilience, Protective Security, Business Continuity and Incident Management, Third-party, and Systems, Data Integrity and Transaction Processing.
- We adopted a new organisational structure which allows us to more efficiently deliver our strengths and expertise across the six resilience risk lenses.
- We developed a Target Operating Model to envision our desired state for the resilience risk function. We compared the desired state to our "as-is" model to identify areas where we need to further develop the resilience risk vision.
- We leveraged internal and external channels to recruit a resilience risk leadership team that is aligned to our core values of being open, dependable and connected.

Key risk management processes

The resilience risk team oversees the identification, management and control of resilience risks. The Risk Control Taxonomy Library is in the process of being restructured to align with the newly formed resilience risk sub-function. Currently the team provides oversight under the existing control taxonomies that are aligned to the previously independent risk areas mentioned above. Global policies and procedures are also being re-written to align with the new resilience risk service catalogue.

(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 2019

There were no material changes to the policies and practices for the management of regulatory compliance risk in 2019, 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, which is headed by the Group's Chief Compliance Officer. Regulatory Compliance is structured as a global function with regional and country Regulatory Compliance teams, which support and advise each global business and global function.

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 2019, 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 and Fraud Risk

(unaudited)

Overview

The Group continued its progress towards implementing an effective financial crime risk management capability across the Group. The Group completed the roll-out of major compliance systems and shifted our focus towards embedding a sustainable approach to financial crime risk management everywhere we operate. This was underpinned by the implementation of a target operating model for the Financial Crime Risk function and by the completion of a country-by-country assessment against our financial crime risk framework.

We continued to embed a sustainable financial crime risk management capability across the Group and we are making good progress with enhancing our financial crime control framework.

Key developments in 2019

During 2019, we continued to increase our efforts to strengthen our ability to combat financial crime. We integrated into our day-to-day operations the majority of the financial crime risk core capabilities delivered through the Global Standards programme to enhance our risk management policies, processes and systems. This programme infrastructure closed in 2019 and we have begun several initiatives to define the next phase of financial crime risk management.

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 to our people. We also continued to invest in the use of artificial intelligence ("AI") and advanced analytics techniques to develop an intelligence-led financial crime risk management framework for the future.

Key risk management processes

Since we established the 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. This helps 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.

We strengthened our approach to affiliate risk management, implementing an effective group-level process to assess and remediate affiliate risk, and established a strong investigations and analytical capability to enable us to proactively identify emergent risk issues.

We continued to deliver an anti-bribery and corruption transformation programme to further enhance the policies and controls around identifying and managing the risks of bribery and corruption across our business. Our transformation programme continued to focus on our anti-fraud and anti-tax evasion capabilities. Further enhancements have been made to our governance and policy frameworks, and to our management information on standardised financial crime controls. We are investing in the next generation of capabilities to fight financial crime by applying advanced analytics and AI. We remain committed to enhancing our risk assessment capabilities and aim to deliver more proactive risk management and improve the customer experience.

(g) Model risk

(unaudited)

Overview

Model risk is the potential for adverse consequences from inappropriate or incorrect business decisions arising from the use of models that have been inadequately designed, implemented or used, or that the model does not perform in line with expectations and predictions. Model risk can lead to financial loss, poor strategic decision making or damage to the Group's reputation.

Key developments in 2019

We elevated model risk to the highest level in line with our simplified risk taxonomy and adopted a globally consistent model risk management framework across the organisation, which enable a more risk-based approach to model risk management.

We set up the Model Risk Steward role in the Group to provide increased support, review and challenge to the businesses and functions to enable effective model risk management embedded in their processes.

We conducted a review of model governance and controls across the organisation, resulting in a range of enhancements to improve effectiveness in overseeing model risk.

Key risk management processes

We regularly review our model risk management policies which require model owning / using businesses and functions to demonstrate a set of 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 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.

RISK

(h) Insurance risk continued

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 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 RBWM 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 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 regulations. 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 risk continued

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

Balance sheet of insurance subsidiaries by type of contract

	Linked contracts ¹	Non-linked contracts ¹	Other assets and liabilities ²	Total
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				
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
2018				
Financial assets:				
– financial assets designated and otherwise mandatorily measured at fair value through profit or loss	186	12,652	–	12,838
– derivative financial instruments	–	219	–	219
– financial investments	–	92,044	7,467	99,511
– other financial assets	13	5,414	519	5,946
Total financial assets	199	110,329	7,986	118,514
Reinsurance assets	–	9,575	–	9,575
Present value of in-force long-term insurance contracts	–	–	15,910	15,910
Other assets	–	6,202	1,471	7,673
Total assets	199	126,106	25,367	151,672
Liabilities under investment contracts designated at fair value				
Liabilities under insurance contracts	61	120,134	–	120,195
Deferred tax	–	6	2,727	2,733
Other liabilities	–	–	2,478	2,478
Total liabilities	193	120,456	5,205	125,854
Shareholders' equity	–	–	25,818	25,818
Total liabilities and shareholders' equity	193	120,456	31,023	151,672

¹ Comprises life insurance contracts and investment contracts

² Comprises shareholder assets and liabilities

RISK

(h) Insurance risk continued

Stress and Scenario Testing

Stress testing forms a key part of the risk management framework for the insurance business. We participate in local and Group-wide regulatory stress tests, including the Bank of England stress test of the banking system, the Hong Kong Monetary Authority stress test, and individual country insurance regulatory stress tests. 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 operations have 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, and developing investment strategies to optimise the expected returns against the cost of economic capital.

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 policyholder, 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.
- using derivatives to protect against adverse market movements or better match liability cash flows;

(h) Insurance risk continued**Key Risk Types** continued**Market risk (insurance)** continued

- 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 those with terminal bonus feature so as to spread out the volatility of return over a longer period of time;
- exiting, to the extent possible, investment portfolios whose risk is considered unacceptable; and
- repricing premiums charged to policyholders.

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.

	2019		2018	
	Impact on profit after tax for the year	Impact on shareholders' equity	Impact on profit after tax for the year	Impact on shareholders' equity
+ 100 basis points shift in yield curves	(202)	(202)	(69)	(69)
- 100 basis points shift in yield curves	126	126	4	4
	2019		2018	
	Impact on profit after tax for the year	Impact on shareholders' equity	Impact on profit after tax for the year	Impact on shareholders' equity
10 per cent increase in equity prices	426	426	306	306
10 per cent decrease in equity prices	(493)	(493)	(252)	(252)
10% increase in USD exchange rate compared to all currencies	143	143	120	120
10% decrease in USD exchange rate compared to all currencies	(143)	(143)	(120)	(120)

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.

RISK

(h) Insurance risk continued

Key Risk Types continued

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 manufacturers:

- risk associated with credit spread volatility and default by debt security counterparties after investing premiums to generate a return for policyholders and shareholders; and
- risk of default by reinsurance counterparties and non-reimbursement for claims made after ceding insurance risk.

The amounts outstanding at the balance sheet date in respect of these items are shown in the table of "Balance sheet of insurance subsidiaries by type of contract" under "Insurance 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 local insurance manufacturing subsidiary, and are aggregated and reported to Group Insurance Credit Risk and Group Credit Risk Functions. 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. The report is circulated quarterly to senior management in Group Insurance Credit Risk and the Chief Risk Officer of the insurance manufacturing subsidiary to identify investments which may be at risk of future impairment.

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 change in 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 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 primarily assessed as "strong" or "good" (as defined on "Credit quality classification" under "Credit risk" section), with 100% of the exposure being neither past due nor impaired (2018: 100%).

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.

(h) Insurance risk continued**Key Risk Types** continued**Liquidity risk (insurance)** continued

Our insurance manufacturing subsidiary is required to complete quarterly liquidity risk reports for Group Insurance Risk function and an annual review of the liquidity risks to which they are exposed.

The following table shows the expected undiscounted cash flows for insurance contract liabilities at 31 December 2019. The liquidity risk exposure is wholly borne by the policyholder in the case of unit-linked business and is shared with the policyholder for DPF products.

Expected maturity of insurance contract liabilities

	Expected cash flows (undiscounted)				Total
	Within 1 year	Over 1 year but within 5 years	Over 5 years but within 15 years	Over 15 years	
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
2018					
Non-linked insurance	14,625	47,534	73,485	93,516	229,160
Linked insurance	10	39	64	36	149
	14,635	47,573	73,549	93,552	229,309

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

Insurance risk

Insurance risk is the 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 subsidiaries by type of contract" under "Insurance risk" section analyses our life insurance risk exposures by type of business.

The Group primarily manages its insurance risk through asset and liability management, product design, pricing and overall proposition management (e.g. lapses management by introducing surrender charges), underwriting policy, claims management process and reinsurance which cedes risks above our acceptable thresholds to an external reinsurer thereby limiting our exposure.

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.

RISK

(h) Insurance risk continued

Key Risk Types continued

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

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 use 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.

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

	2019	2018
+ 100 basis points shift in yield curves	(2,848)	(46)
- 100 basis points shift in yield curves	127	1,375

The impact on PVIF shown above, as well as the impact on profit after tax and net assets shown below, are 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.

Non-economic assumptions

The sensitivity of profit for the year and total equity to reasonably possible changes in assumptions used in respect of insurance businesses is as follows:

	Impact on 2019 results		Impact on 2018 results	
	Profit for the year	Net assets	Profit for the year	Net assets
10 per cent increase in mortality and/or morbidity rates	(57)	(57)	(48)	(48)
10 per cent decrease in mortality and/or morbidity rates	57	57	46	46
10 per cent increase in lapse rates	(68)	(68)	(44)	(44)
10 per cent decrease in lapse rates	75	75	48	48
10 per cent increase in expense rates	(52)	(52)	(57)	(57)
10 per cent decrease in expense rates	53	53	57	57

(h) Insurance risk continued**Key Risk Types** continued**Non-economic assumptions** 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 rates risk is the exposure to a change in the cost of administering insurance contracts. An increase in expense rates will have a negative effect on our profits.

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.

RISK

(h) Insurance risk continued

Assumptions continued

(iii) Discount rates

Rate of interest

	2019	2018
Policies denominated in HKD	1.8%, 2.22% and 2.2%	1.8%, 2.22% and 2.65%
Policies denominated in USD	3.2%, 3.45% and 3.5%	3.4%, 3.45% and 3.5%
Policies denominated in RMB	2.32%, 2.9%, 3.3% and 3.32% as varies by product	2.32%, 2.9%, 3.32% and 3.45% as varies by product

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

Sensitivity to changes in variables

The Group's insurance company 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 company 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 profit after tax for the year and shareholders' equity of the changes in key variables:

	Change in variable %	2019		2018	
		Impact on profit after tax	Impact on shareholders' equity	Impact on profit after tax	Impact on shareholders' equity
Discount rate	+1	4,164	4,164	1,549	1,549
Discount rate	-1	(14,246)	(14,246)	(8,439)	(8,439)
Mortality/Morbidity	+10	(229)	(229)	(140)	(140)
Mortality/Morbidity	-10	148	148	115	115

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.

(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 2019, 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 14 October 2019, the HKMA reduced the CCyB for Hong Kong to 2.0% from 2.5% with immediate effect. On 24 December 2019, the HKMA maintained the D-SIB designation and reduced HLA requirement from 1.5% to 1% from 1 January 2020 for the Group.

CAPITAL MANAGEMENT

Loss-absorbing capacity requirements

(unaudited)

During the year, the HKMA has classified the Bank as a material subsidiary of HSBC's Asian resolution group 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. To meet the requirements, the Bank has cancelled and repaid the perpetual capital instrument of US\$0.9bn, issued new perpetual capital instruments of US\$1.5bn and non-capital loss-absorbing capacity debt instruments totalling HK\$19.5bn to its immediate holding company in the first half of 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 2019, the effect of this requirement is to restrict the amount of reserves which can be distributed to shareholders by HK\$3,509m (2018: HK\$4,982m).

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 2019 and 31 December 2018. 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 continued

(unaudited)

	2019	2018
Common Equity Tier 1 ("CET1") Capital		
Shareholders' equity	143,026	133,990
– Shareholders' equity per Consolidated Balance Sheet	178,810	162,082
– Additional Tier 1 ("AT1") perpetual capital instruments	(11,744)	(6,981)
– Unconsolidated subsidiaries	(24,040)	(21,111)
Non-controlling interests	–	–
– Non-controlling interests per Consolidated Balance Sheet	107	25
– Non-controlling interests in unconsolidated subsidiaries	(107)	(25)
Regulatory deductions to CET1 capital	(31,466)	(32,266)
– Cash flow hedging reserve	(7)	4
– Changes in own credit risk on fair valued liabilities	(5)	(12)
– Property revaluation reserves ¹	(26,631)	(26,543)
– Regulatory reserve	(3,509)	(4,982)
– Intangible assets	(1,027)	(463)
– Defined benefit pension fund assets	(22)	(11)
– Deferred tax assets net of deferred tax liabilities	(110)	(111)
– Valuation adjustments	(155)	(148)
Total CET1 Capital	111,560	101,724
AT1 Capital		
Total AT1 capital before and after regulatory deductions	11,744	6,981
– Perpetual capital instruments	11,744	6,981
Total AT1 Capital	11,744	6,981
Total Tier 1 ("T1") Capital	123,304	108,705
Tier 2 ("T2") Capital		
Total T2 capital before regulatory deductions	14,860	15,517
– Property revaluation reserves ¹	11,984	11,944
– Impairment allowances and regulatory reserve eligible for inclusion in T2 capital	2,876	3,573
Regulatory deductions to T2 capital	(915)	(915)
– Significant capital investments in unconsolidated financial sector entities	(915)	(915)
Total T2 Capital	13,945	14,602
Total Capital	137,249	123,307

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.

CAPITAL MANAGEMENT

Risk-weighted assets by risk type

(unaudited)

	2019	2018
Credit risk	584,631	541,542
Market risk	8,357	11,020
Operational risk	65,868	59,323
Total	658,856	611,885

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:

	2019	2018
CET1 capital ratio	16.9%	16.6%
T1 capital ratio	18.7%	17.8%
Total capital ratio	20.8%	20.2%

In addition, the capital ratios of all tiers as of 31 December 2019 would be reduced by approximately 1.1 percentage point after the prospective fourth interim dividend payment for 2019. The following table shows the pro-forma basis position of the capital ratios after the prospective interim dividend.

	Pro-forma 2019	Pro-forma 2018
CET1 capital ratio	15.8%	15.5%
T1 capital ratio	17.6%	16.6%
Total capital ratio	19.7%	19.0%

Leverage ratio

(unaudited)

	2019	2018
Leverage ratio	7.8%	7.4%
T1 capital	123,304	108,705
Exposure measure	1,572,114	1,477,001

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:

- financial results;
- level of distributable reserves;
- general business conditions and strategies;
- regulatory requirements;
- 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”). The Bank has taken into account the new requirements of the Listing Rules which impose, among others, greater demand on the Board or the Nomination Committee when appointing Independent Non-executive Director (“INED”), which took effect on 1 January 2019, when making necessary disclosure.

Further, 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, to ensure that it is in line with international and local corporate governance best practices. Since the third quarter of 2019, the Bank is in the process of implementing the “Subsidiary Accountability Framework” initiative introduced by the HSBC Group with an aim of simplifying subsidiary oversight framework, and strengthening and enhancing corporate governance. In addition, the Bank has also continued to embed “Ways of Working” Governance implemented since 2018 into the Bank’s Board and Board Committee governance for meeting effectiveness. “Ways of Working” Governance launched by the HSBC Group has been recognised by The Chartered Governance Institute in the United Kingdom by awarding the HSBC Group “Governance Project of the Year 2019”.

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 senior management
- internal control and risk management governance structure
- effective audit functions
- corporate culture, values and standards
- 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 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 13 Directors, of whom two are EDs and 11 are Non-executive Directors (“NEDs”). Among the 11 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.

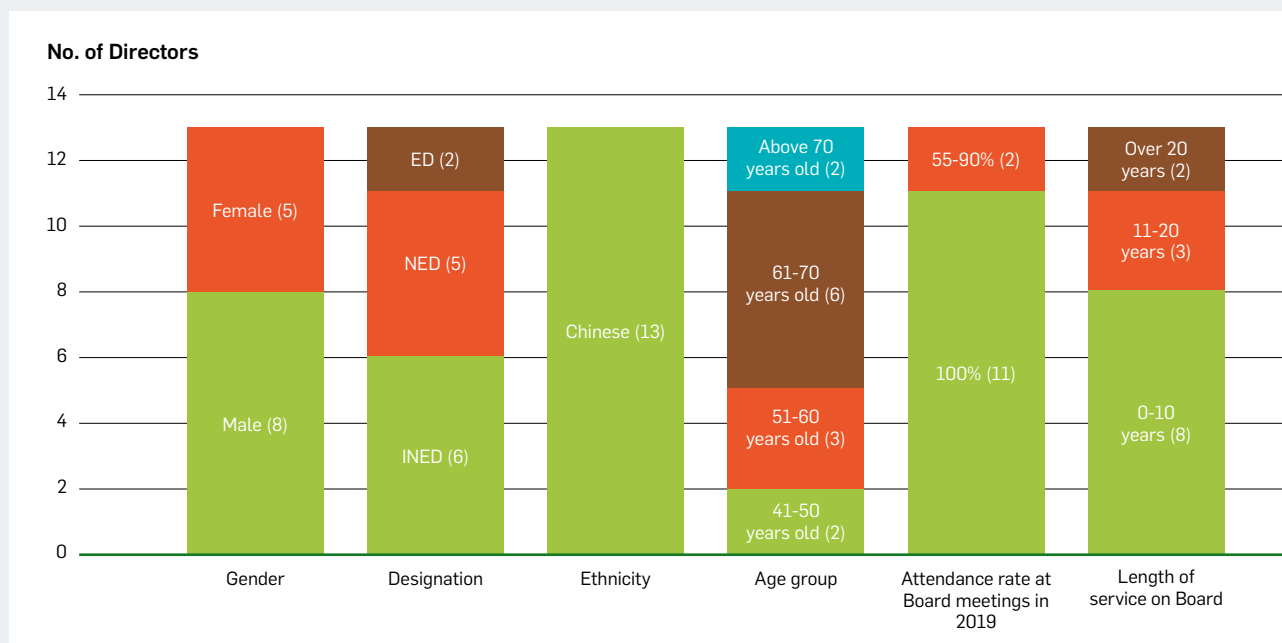
The Board possesses, both as individual Directors and collectively, appropriate experience, competencies and personal qualities, including professionalism and integrity, to discharge its responsibilities adequately and effectively. In addition, the Board collectively has adequate knowledge and expertise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

During the year, 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:



CORPORATE GOVERNANCE REPORT

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 INEDs without the presence of EDs, to facilitate an open and frank discussion among the INEDs on issues relating to the Bank.

The Board also meets with the representatives of HKMA to maintain a regular dialogue with the regulator where HKMA shares with the Board HKMA's overall supervisory assessment of the Bank and their 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 2019 the Bank has also continued to embed HSBC Group's award-winning "Ways of Working" Governance implemented since 2018 into the Bank's Board and Board Committee governance for meeting effectiveness. Pursuant to the "Ways of Working", there are new methods of meeting management, built around a set of tools, templates and guidance. It involves adapting the way the Bank plans agendas, identifying the key questions the Board/Committee papers need to address, and write the management reports in a succinct and structured format. This has been proven 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.

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.

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 2019, the Board held seven meetings (including one meeting with HKMA) and the important matters discussed at Board meetings included:

Strategic Planning	Financial and Business Performance, and Capital Planning
<ul style="list-style-type: none"> – annual review of strategic plan (2018 – 2020) with quarterly updates – update of the Bank's strategic plan on the Mainland – discussion on Greater Bay Area opportunities – business model of Retail Business and Wealth Management – impact of the social unrest in Hong Kong 	<ul style="list-style-type: none"> – financial statements for the year ended 31 December 2018 – interim financial statements for the six months ended 30 June 2019 – declaration of the fourth interim dividend for year 2018 and first three interim dividends for year 2019 – annual operating plan and capital plan for year 2019 – reports on financial and business performance – internal capital adequacy assessment process – individual liquidity adequacy assessment process – stress scenarios and results for Prudential Regulation Authority for 2019 – enterprise-wide stress test results and annual review of the stress testing approach – compliance with loss-absorbing capacity requirements – auditors' remuneration for 2019

Governance and Risk Management	Culture, Human Resources and Remuneration
<ul style="list-style-type: none"> – risk appetite statement and framework for 2019 with quarterly profile update – enterprise 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 – risk data aggregation and risk reporting framework – update on cyber security risk – effectiveness of environmental, social and governance risk management and internal control systems – quarterly reviews of large credit exposures and risk concentrations – significant policies and plans including, but not limited to, Dividend Policy, Disclosure Policy, Recovery Plan, Contingency Funding Plan, Liquidity Management Policy, Connected Lending Policy, Capital Management Policy, Large Credit Exposure Policy, New Product Approval Policy, Conflicts of Interest Policy and Nomination Policy – annual review of credit approval authority limits and overall credit limit to the HSBC Group companies – board effectiveness evaluation for 2018 – review of the effectiveness of the Board and Board Committees, including the revised terms of reference of the Board, Audit Committee, Risk 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 – “Ways of Working” Governance – meeting effectiveness – renewal of continuing connected transactions with annual caps, and approval of a connected transaction – new and revised SPMs issued by HKMA from time to time 	<ul style="list-style-type: none"> – 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 – annual review of the remuneration of EDs, Senior Management and Key Personnel – appointments/remuneration packages of Senior Management or executives – mutual separation terms of a senior executive – pay review for 2019 and variable pay for 2018 – succession planning for Senior Management – performance management relating to Senior Management – re-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.

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 2019.

Directors' interests in securities of the Bank and HSBC Group as at 31 December 2019 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.

CORPORATE GOVERNANCE REPORT

During the year, Directors received briefings and trainings on the following topics:

- Master the Digital Banking Challenge
- Cloud Strategy, Governance and Approach of the Bank
- Artificial Intelligence – its trends in shaping business strategy and risk management
- Asia Pacific Risk Symposium 2019 – Shaping your digital future with confidence
- Strategic implications of Cryptos and Blockchain
- The Latest Global Crypto Trends
- Impact of Virtual Banks
- Future People – Managing Talent Risk
- Global Loan Market Summit
- Climate-related Financial Disclosures
- Climate Risk and Climate Finance – Challenges and Opportunities
- High-Level Seminar in Beijing
- Belt and Road Initiative Forum
- HSBC Global Mandatory Training: Managing Risk at HSBC; Health, Safety and Wellbeing; Data Privacy and Cyber Security; Anti-money Laundering and Sanctions; Anti-bribery and Corruption; Values and Conduct; Insider Risk; and 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:

Directors	Training Areas				
	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					
Mr Nixon L S Chan	✓	✓	✓	✓	✓
Ms Kathleen C H Gan ^{Note 1}	✓	✓	✓	✓	✓
Dr Vincent H S Lo	✓	✓	✓	✓	✓
Mr Kenneth S Y Ng	✓	✓	✓	✓	✓
Mr Peter T S Wong	✓	✓	✓	✓	✓
EDs					
Ms Louisa Cheang	✓	✓	✓	✓	✓
Ms Margaret W H Kwan	✓	✓	✓	✓	✓

^{Note 1} Ms Kathleen C H Gan was appointed as Non-executive Director with effect from 10 May 2019.

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 Ivy S P Chan	Ms Irene Y L Lee*	Mr Kenneth S Y Ng ^{#Note 5}	Dr Raymond K F Ch'ien*	Ms Louisa Cheang
Ms Crystal P S Cheung ^{Note 2}		Mr Michael W K Wu*		Mr Peter T S Wong [#]
Ms Liz T L Chow				Mr Michael W K Wu*
Ms Margaret W H Kwan				
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				
Ms Elaine Y N Wang				
Ms Daphne W K Wat				
Ms May M K Wong ^{Note 3}				
Mr Chee Leong Yeo ^{Note 4}				
Ms Katie K C Yip				

* INEDs

NEDs

^{Note 2} Ms Crystal P S Cheung was appointed as Executive Committee member with effect from 1 June 2019.

^{Note 3} Ms May M K Wong was appointed as Executive Committee member with effect from 1 May 2019.

^{Note 4} Mr Chee Leong Yeo was appointed as Executive Committee member with effect from 1 January 2020.

^{Note 5} Mr Kenneth S Y Ng was appointed as Risk Committee member with effect from 21 January 2019.

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, except the Executive Committee and Nomination Committee, comprise solely of INEDs. Majority of the Nomination Committee members are INEDs while the Executive Committee comprises the Bank's EDs and senior executives.

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 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 HASE 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 Executive, 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, and the effectiveness of the systems of internal control and compliance relating to financial reporting. 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 five meetings and the major work performed by the Committee was as follows:

- reviewed the financial statements for the year ended 31 December 2018 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 2019 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 2018, 31 March 2019, 30 June 2019 and 30 September 2019
- reviewed the annual operating plan and capital plan for year 2019
- reviewed the balance sheet management position
- reviewed 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
- reviewed and adopted the revised Internal Audit Plan
- reviewed the update on internal audit plan for 2019 and approved the internal audit plan for 2020
- reviewed the update on Sarbanes-Oxley Act (SOX) implementation and internal control system assessment as at 31 December 2018 and 30 June 2019
- 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 whistleblowing cases during the year
- 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 and joint venture in Mainland China
- endorsed the appointment of an audit committee member of the Bank's joint venture company on the Mainland.

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 Executive, 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 enterprise 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 five meetings and the major work performed by the Committee was as follows:

- reviewed the update on implementation of HKMA's guidance on bank culture reform, and the progress update on the Bank's culture action plan
- reviewed the routine risk reports submitted by the Management including, but not limited to, enterprise risk management framework, risk governance structure, internal control system assessment, risk appetite statement and framework and profile update, risk maps, top and emerging risks, annual plan and progress update relating to financial crime compliance, regulatory compliance and internal control, 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, risk data aggregation and risk reporting frameworks and other significant policies and plans including, but not limited to, the Bank's Recovery Plan, Contingency Funding Plan, Liquidity Management Policy, Connected Lending Policy, Capital Management Policy, Large Credit Exposure Policy and New Product Approval Policy
- reviewed the report on the alignment of risk and remuneration, and outcome of incentivising compliance for the pay review of performance year 2018
- reviewed the Internal Audit Plan for 2020 and resourcing requirements, the Internal Audit Charter, audit statistics, and internal audit reports and key themes
- reviewed the adequacy of resources, qualifications and experience of staff of the Risk and Compliance function, and their training programmes and budgets
- reviewed the whistle-blowing cases during the year
- reviewed the update of cyber security risk and cyber resilience assessment framework, including the target cyber resilience maturity
- endorsed 2019 Prudential Regulation Authority stress scenarios and results; 2019 enterprise-wide stress test results; and the Bank's stress testing approach
- reviewed first line of defence reports of all lines of businesses, operational resilience programme, implementation status of BCBS 239 compliance, development of data strategy, proactive country analytics investigations, and model risk management
- reviewed deployment of artificial intelligence on audit work
- reviewed interbank offered rate transition and reform
- 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 and joint venture in Mainland China
- approved the appointment of the Bank's Chief Risk Officer and endorsed the appointment of risk committee Chairmen and members of the Bank's subsidiary and joint venture company on the Mainland

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 regularly meets 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 determines 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 2019, the Committee has engaged an external consultant to undertake an independent review of the Bank's remuneration policy and its implementation for year 2019.

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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 2019, the Remuneration Committee held three meetings on the following agenda:

- endorsed the remuneration packages of Executive Directors, senior management and key personnel of the Bank
- endorsed the proposed variable pay for 2018 and pay review proposal for 2019
- reviewed the report on the alignment of risk and remuneration, and outcome of incentivising compliance for performance year 2018 variable pay
- reviewed the revised remuneration policy to further strengthen the governance in response to tightened regulatory requirements
- approved the appointment of independent reviewer for the annual review of the Bank's remuneration policy and its implementation
- reviewed the outcome of the independent review by an external reviewer of the Bank's remuneration policy and remuneration system, and the adequacy and effectiveness of its implementation
- reviewed the Remuneration Committee's effectiveness in discharging its role and responsibilities, and its terms of reference
- endorsed remuneration packages for two senior executives
- endorsed appointment of remuneration committee chairmen and members of the Bank's subsidiary and joint venture company on the Mainland

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. The Nomination Policy is also available on the website of the Bank (www.hangseng.com). The Bank will from time to time review the Nomination Policy and monitor its implementation to ensure its compliance with regulatory requirements and good corporate governance practices.

The Committee also considers, among other things, the structure, size and composition of the Board and Non-executive Board Committees, independence of INEDs, re-election of Directors, term of appointment of NEDs, time commitment required from NEDs, appointment to Board Committees, and approves the appointment to the position of "manager" as defined under the Banking Ordinance.

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

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

- endorsed the appointment of an 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
- reviewed the succession planning for the Board and senior management
- reviewed the independence of INEDs
- reviewed the time commitment required from NEDs
- endorsed the renewal of terms of appointment of NEDs
- endorsed the re-election of Directors
- endorsed the Nomination Policy
- 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 2019 are as follows:

	Meetings held in 2019						
	AGM	Board	Executive Committee	Audit Committee	Risk Committee	Remuneration Committee	Nomination Committee
Number of Meetings	1	7	9	5	5	2	2
Directors							
Dr Raymond K F Ch'ien* (Chairman)	1/1	7/7	-	-	-	2/2	2/2
Ms Louisa Cheang (Vice-Chairman and Chief Executive)	1/1	7/7	9/9	-	-	-	2/2
Dr John C C Chan*	1/1	7/7	-	-	-	2/2	2/2
Mr Nixon L S Chan [#]	1/1	7/7	-	-	-	-	-
Ms L Y Chiang*	0/1	7/7	-	5/5	-	2/2	-
Ms Kathleen C H Gan ^{# Note 6}	-	3/3	-	-	-	-	-
Ms Margaret W H Kwan	1/1	7/7	9/9	-	-	-	-
Ms Irene Y L Lee*	1/1	7/7	-	5/5	5/5	-	-
Ms Sarah C Legg ^{# Note 7}	-	3/3	-	-	-	-	-
Dr Eric K C Li*	1/1	7/7	-	5/5	5/5	-	-
Dr Vincent H S Lo [#]	0/1	7/7	-	-	-	-	-
Mr Kenneth S Y Ng ^{# Note 8}	1/1	7/7	-	-	5/5	-	-
Mr Peter T S Wong [#]	1/1	4/7	-	-	-	-	2/2
Mr Michael W K Wu*	0/1	6/7	-	-	4/5	-	2/2
Senior Management							
Mrs Eunice Chan	-	-	9/9	-	-	-	-
Ms Ivy S P Chan	-	-	9/9	-	-	-	-
Ms Crystal P S Cheung ^{Note 9}	-	-	5/5	-	-	-	-
Mr Walter S W Cheung ^{Note 10}	-	-	3/3	-	-	-	-
Ms Liz T L Chow	-	-	9/9	-	-	-	-
Mr Donald Y S Lam	-	-	7/9	-	-	-	-
Mr Gilbert M L Lee	-	-	9/9	-	-	-	-
Mr S K Lee ^{Note 11}	-	-	3/4	-	-	-	-
Mr Andrew W L Leung	-	-	9/9	-	-	-	-
Mr Godwin C C Li	-	-	9/9	-	-	-	-
Mr Ryan Y S Song	-	-	9/9	-	-	-	-
Ms Elaine Y N Wang	-	-	9/9	-	-	-	-
Ms Daphne W K Wat	-	-	9/9	-	-	-	-
Ms May M K Wong ^{Note 12}	-	-	6/6	-	-	-	-
Ms Katie K C Yip	-	-	8/9	-	-	-	-
Average Attendance Rate	75%	96%	97%	100%	95%	100%	100%

* INEDs

NEDs

Note 6 Ms Kathleen C H Gan was appointed as Non-executive Director with effect from 10 May 2019.

Note 7 Ms Sarah C Legg stepped down from the Board with effect from 1 March 2019.

Note 8 Mr Kenneth S Y Ng was appointed as Risk Committee member with effect from 21 January 2019.

Note 9 Ms Crystal P S Cheung was appointed as Executive Committee member with effect from 1 June 2019.

Note 10 Mr Walter S W Cheung ceased to be Executive Committee member with effect from 1 May 2019.

Note 11 Mr S K Lee ceased to be Executive Committee member with effect from 1 June 2019.

Note 12 Ms May M K Wong was appointed as Executive Committee member with effect from 1 May 2019.

Remuneration of Directors, Senior Management and Key Personnel

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

Remuneration of Directors

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

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

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

No individual Director will be involved in decisions relating to his/her own remuneration.

The current scale of Director's fees, and fees for chairmen and members of the Non-executive Board Committees, namely, Audit Committee, Risk Committee, Remuneration Committee and Nomination Committee, are set out below:

	(HK\$)		(HK\$)
Board of Directors ^{Note 13}		Remuneration Committee/ Nomination Committee	
Chairman	650,000	Chairman	90,000
Non-executive Directors	500,000	Members	60,000
Audit Committee / Risk Committee			
Chairman	290,000		
Members	180,000		

^{Note 13} 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 2019 is set out in Note 14 to the Bank's 2019 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 14} and five Key Personnel^{Note 15} in 2019. The aggregate amount of remuneration^{Note 16} 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		2019	2018
Fixed remuneration			
1	Number of employees	22	21
2	Total fixed remuneration (HK\$ '000)	63,245	58,080
3	Of which: cash-based	63,245	58,080
Variable remuneration			
4	Number of employees ^{Note 17}	22	21
5	Total variable remuneration (HK\$ '000) ^{Note 18}	54,221	56,169
6	Of which: cash-based	31,055	31,943
7	Of which: deferred	10,256	10,447
8	Of which: shares or other share-linked instruments	23,166	24,226
9	Of which: deferred	13,404	13,884
10	Total remuneration (HK\$ '000)	117,466	114,249

^{Note 14} 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 15} 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 16} 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 17} Number of employees disclosed above includes leavers who may have zero variable pay.

^{Note 18} No deferred variable remuneration had been reduced through performance adjustments in 2019 and 2018.

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

Special payments	2019		2018	
	Number of employees	Total amount (HK\$ '000)	Number of employees	Total amount (HK\$ '000)
1	Guaranteed bonuses	–	–	–
2	Severance payments	–	–	–

CORPORATE GOVERNANCE REPORT

The aggregate amount of deferred and retained variable remuneration of Senior Management and Key Personnel is set out below:

	Deferred and retained remuneration (HK\$ '000)	2019		2018	
		Cash	Shares	Cash	Shares
1	Total amount of outstanding deferred remuneration ^{Note 19 & 21}	19,423	34,359	17,452	37,929
2	<i>Of which: Total amount of outstanding deferred and retained remuneration exposed to ex post explicit and/or implicit adjustment</i>	19,423	34,359	17,452	37,929
3	Total amount of amendment during the year due to ex post implicit adjustments ^{Note 22}	–	(2,397)	–	(5,986)
4	Total amount of deferred remuneration paid out in the financial year ^{Note 20 & 21}	6,376	20,070	9,148	25,173

^{Note 19} Outstanding, unvested, deferred remuneration is exposed to ex post explicit adjustments via malus.

^{Note 20} Paid and vested variable pay made to Material Risk Takers is subject to clawback.

^{Note 21} There is no reduction of deferred remuneration and retained remuneration due to ex post explicit adjustments during 2019 and 2018 via the application of malus and/or clawback.

^{Note 22} 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 8.5% lower as at 31 December 2019 when compared to that of 31 December 2018.

Other relevant remuneration disclosures are set out in Notes 14, 15 and 50(b) to the Bank's 2019 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.

The Directors acknowledge their responsibilities for preparing the accounts of the Bank. As at 31 December 2019, 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 2019 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, 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 2019 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.

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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, 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 2019, fees paid to the Bank's external auditor for audit services amounted to HK\$23.5 million, compared with HK\$22.4 million in 2018. For non-audit services, the fees paid to the Bank's external auditor amounted to HK\$9.7 million, compared with HK\$8.5 million in 2018. In 2019, the non-audit service assignments covered by these fees included the following:

Nature of service	Fees paid (HK\$ million)
Other assurance services	8.5
Tax services	1.2
	9.7

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.

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 2019. 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. An explanation of the detailed procedures of conducting a poll will be provided to shareholders at the AGM, to ensure that shareholders are familiar with such procedures.

The Bank's last AGM was held on Thursday, 9 May 2019 at Hang Seng Bank Headquarters, 83 Des Voeux Road Central, Hong Kong. All the resolutions proposed at that meeting were approved by the shareholders by poll voting. 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 May 2020, 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 2020.

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 requisitioner(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 requisitioner(s).

The requisition must also state (a) the name(s) of the requisitioner(s), (b) the contact details of the requisitioner(s), and (c) the number of ordinary shares of the Bank held by the requisitioner(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.

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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 financial results, level of distributable reserves, general business conditions and strategies, regulatory requirements, 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 2019 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 2019, the Bank's share of the costs included HK\$962 million for system development, HK\$715 million for data processing, and HK\$451 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\$65 million and markets Mandatory Provident Fund for its immediate holding company and a fellow subsidiary during year 2019 with a fee income of HK\$134 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 2019: HK\$382 million) as contracts of significance for 2019.

Continuing Connected Transactions

(a) On 21 June 2016, Hang Seng Insurance Company Limited ("HSIC"), a wholly-owned subsidiary of the Bank, entered into the following agreements, all of which have been renewed or amended on 21 June 2019:

- (i) A management services agreement ("Previous Management Services Agreement") with HSBC Life (International) Limited ("INHK") for a term of three years which expired on 21 June 2019, pursuant to which INHK, directly or through one or more of its affiliates, provided certain management services to HSIC.

INHK charged HSIC for the provision of the services on a fully absorbed cost basis plus a mark-up of 10% for actuarial and risk analytics services and a mark-up of 6% for all other services. These charges, which were subject to an annual cap, were determined following negotiation on an arm's length basis and in accordance with the policy of the HSBC Group, which took into account the transfer pricing guidelines of the Organisation for Economic Co-operation and Development ("OECD").

- (ii) An investment management agreement ("Previous Investment Management Agreement") with HSBC Global Asset Management (Hong Kong) Limited ("AMHK") for a term of three years which expired on 21 June 2019, pursuant to which AMHK acted as investment manager in respect of certain of HSIC's assets held from time to time. AMHK delegated to HSBC Alternative Investments Limited ("HAIL") the management of part of such assets by way of a bespoke portfolio in accordance with a specific management mandate ("Previous Specific Management Mandate") entered into between HSIC, AMHK and HAIL on 21 June 2016.

HSIC paid AMHK, on a quarterly basis, a fee of between 0.05% and 0.35% per annum of the mean value of the assets under management. HSIC also paid HAIL a fee of not more than 0.5% per annum of the aggregate value of assets under management in a bespoke portfolio together with a performance fee of 10% per annum in respect of the amount by which the return of such portfolio exceeded a benchmark return of 8% per annum. The above fees, which were subject to an annual cap, were determined on an arm's length basis. Subject to the caps under the Previous Investment Management Agreement not being exceeded, HSIC and AMHK may subsequently agree to vary the above fees.

- (iii) 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.

HSIC paid HAIL a fee of between 0.1% and 0.75% per annum of the aggregate value of assets under management as an annual retainer fee and an annual management fee on an aggregate basis. In addition to the aforesaid, a performance fee of 15% carried interest will be paid 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 were 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.

Pursuant to a fund monitoring agreement entered into between HSIC and HAIL on 12 December 2016 ("2016 Fund Monitoring Agreement"), which superseded the fund monitoring agreement entered into between HSIC and HAIL on 12 December 2013 ("2013 Fund Monitoring Agreement"), HAIL provided fund monitoring and reporting services for certain private equity investments made by HSIC for a term of three years ending on 12 December 2019. HSIC paid HAIL a fee of 0.04% per annum on the aggregate USD commitments in such investments, which was the same as the 2013 Fund Monitoring Agreement, subject to an annual cap of US\$75,000 (approximately HK\$585,000). The aforesaid fee was determined on an arm's length basis. The 2016 Fund Monitoring Agreement was subsequently terminated with effect from 22 June 2019 and replaced by the New Fund Monitoring Agreement (as defined below).

Each of the 2013 Fund Monitoring Agreement and the 2016 Fund Monitoring Agreement, on a standalone basis, was a "de minimis" continuing connected transaction under Chapter 14A of the Listing Rules and was fully exempt from the reporting, announcement, shareholders' approval and annual review requirements under the Listing Rules. However, the Bank considered that due to the similarity of the services provided under the Previous Investment Management Agreement, the PE Investment Management Agreement and the 2016 Fund Monitoring 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.

Details of the terms of the Previous Management Services Agreement, the Previous Investment Management Agreement, the PE Investment Management Agreement and the 2013 Fund Monitoring Agreement, and the relevant annual caps and fee caps were announced by the Bank on 21 June 2016.

(b) On 21 June 2019, HSIC renewed or amended and entered into the following agreements:

- (i) A new management services agreement ("New Management Services Agreement") with INHK for a term of three years, pursuant to which INHK, directly or through one or more of its affiliates, provides certain management services to HSIC.

INHK charges HSIC a fee for the provision of the services on a fully absorbed cost basis plus a mark-up of 10% for actuarial and risk analytics services and a mark-up of 6% for all other services. 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 OECD transfer pricing guidelines.

- (ii) A new investment management agreement ("New Investment Management Agreement") with AMHK for a term of three years, pursuant to which AMHK acts as investment manager in respect of certain of HSIC's assets held from time to time. AMHK has delegated to 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.

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 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% annually. The above fees, which are subject to an annual cap, were determined on an arm's length basis.

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- (iii) A new fund monitoring agreement ("New Fund Monitoring Agreement") with HAIL for another term of three years commencing from 22 June 2019 which superseded the 2016 Fund Monitoring Agreement. 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) Subsequent to the PE Investment Management Agreement entered into with HAIL on 21 June 2016, certain minor amendments were made to the PE Investment Management Agreement on 4 May 2018 and 10 May 2018, and on 21 June 2019, the PE Investment Management Agreement was amended and restated to remove the retainer fee and increase the management fee cap.

HSIC has agreed to pay HAIL between 0.35% and 0.75% per annum of the aggregate value of assets under management as an annual management fee on an aggregate basis, and in order to ensure full alignment of interests between the two parties, a performance fee of 15% carried interest if certain hurdle rates of return are achieved for HSIC in respect of the investments made in each year of the investment period under the PE Investment Management Agreement. The above fees, which are subject to certain fee caps, were determined on an arm's length basis.

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 2019, the aggregate amount paid and payable under the Previous Management Services Agreement and the New Management Services Agreement was approximately HK\$60 million, whereas the aggregate amount paid and payable under the Previous Investment Management Agreement and the Previous Specific Management Mandate together with the New Investment Management Agreement and the New Specific Management Mandate was approximately HK\$33 million, both of which were within the annual caps for the year ended 31 December 2019 of HK\$236 million and HK\$142 million, respectively. The management fee of approximately US\$4,939,046 (equivalent to HK\$38,499,663) was paid and payable under the PE Investment Management Agreement for the year ended 31 December 2019, which was within the annual cap on management fee of US\$8,000,000 (approximately HK\$62,400,000). No retainer fee nor performance fee was payable under the PE Investment Management Agreement for 2019. Further, for the year ended 31 December 2019, the aggregate amount payable under the 2016 Fund Monitoring Agreement and the New Fund Monitoring Agreement was approximately US\$53,118 (equivalent to HK\$413,573), 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.

Connected Transaction

Reference is made to the PE Investment Management Agreement entered into between HSIC and HAIL on 21 June 2016 which was subsequently amended and restated on 21 June 2019. Pursuant to the aforesaid agreement, HAIL acts as investment manager in respect of certain private equity fund investments to be made by HAIL on behalf of HSIC. In order to facilitate a more streamlined investment execution process, HSIC has decided to establish a limited partnership vehicle, being H5 LP Inc. ("H5 LP"), through which new private equity fund investments will be made. This investment structure has been established to mirror as closely as possible all of the existing investment arrangements provided under the PE Investment Management Agreement.

On 5 February 2019, HSIC, HSBC (Guernsey) GP PCC Limited ("HGGP") and HSBC Management (Guernsey) Limited ("HMGL") entered into a limited partnership agreement ("Limited Partnership Agreement") pursuant to which HSIC, as investor, and HGGP, as general partner have established H5 LP for the purpose of making private equity investments. Under the Limited Partnership Agreement, HMGL has been appointed as manager to manage the assets of H5 LP in accordance with the Limited Partnership Agreement, and may engage HAIL as exclusive investment advisor to provide HMGL with investment advisory services. HSIC is the sole investor of H5 LP.

CORPORATE GOVERNANCE REPORT

At the time of entry into the Limited Partnership Agreement, the said agreement was a “de minimis” transaction under Chapter 14A of the Listing Rules and was fully exempt from the requirements set out in Chapter 14A of the Listing Rules. The Limited Partnership Agreement was amended and restated on 28 October 2019 to increase the size of the investment mandate such that it is subject to the reporting and announcement requirements in respect of connected transactions under Chapter 14A of the Listing Rules. HSIC has agreed to commit a total of US\$1,160,000,000 (equivalent to HK\$9,048,000,000) to H5 LP, with US\$580,000,000 (equivalent to HK\$4,524,000,000) to be invested during each of 2019 and 2020 investment years. HSIC's liability under the Limited Partnership Agreement is limited to the aggregate of its undrawn commitments.

Details of the terms of the Limited Partnership Agreement and the relevant capital contributions were announced by the Bank on 28 October 2019.

HGGP and HMGL, both being indirect wholly-owned subsidiaries of HSBC Group, the ultimate controlling shareholder of the Bank, are therefore connected persons of the Bank. The Limited Partnership Agreement is therefore a connected transaction of the Bank. The Bank has complied with the disclosure requirements in accordance with Chapter 14A of the Listing Rules.

Culture

Business Principles and Values

The Bank has a set of clear business principles and corporate values. “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 expects leaders and managers 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.

In 2019, the Bank launched a culture programme to reinforce and embed five behavioural objectives supported by culture-building initiatives, people managers' workshops, internal campaigns and communications across the Bank, with the purpose 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, the prevention of bribery, use of information, insider dealing and personal dealings, personal benefits, outside activities, and equal opportunities policy, are covered in the Code.

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 Staff Code of Conduct.

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 2019, the Bank's total headcount was 10,331 representing an increase of 33, or +0.3%, compared with a year earlier. The total headcount comprised 3,145 executives, 4,549 officers and 2,637 clerical and non-clerical staff.

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.

A bi-annual Bank-wide employee survey was conducted in the first half of 2019. The results show that the percentage of employees who would recommend the Bank as a great place to work remains high, due in large part to positive employee experience. A majority of staff recognise the Bank's genuine commitment to encouraging colleagues to speak up. The Bank continues to run a variety of programmes to strengthen the capabilities of people managers to facilitate open team exchange, promote effective listening skills and encourage a robust speak-up culture to further enhance staff engagement.

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.

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. The Bank also offers Professional Study and Qualifications Programme to support staff members to pursue professional or academic qualifications. On average, the Bank's staff members received 5.5 days of training in 2019.

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

Robust recruitment activities continued throughout 2019 to support the Bank's execution of the business strategy and to replace out-going staff, including front line sales, experienced professionals and specialists.

Young talents are developed through well-structured onboarding and development programmes. Trainee programmes in selected business areas are in place to develop professional competence and to build future talents for key roles. Staff engagement and retention focus on people managers' roles in everyday performance and development conversations with their staff, offer of career advancement opportunities and market competitive remuneration.

In addition, the Bank has consistently participated in the FinTech Internship programme co-launched by HKMA and the Applied Science and Technology Research Institute for the past three years. The Bank has sponsored 26 interns for six to twelve-month placements to support talent pipeline building for FinTech development in Hong Kong.

The Bank has also offered employment to 40 "young olds" in branch services supporting community initiatives by NGOs and the Labour Department to promote retraining and employment opportunities for older age groups.

Corporate Sustainability

As a homegrown bank and a good corporate citizen, the Bank shares the drive, determination and dreams of the people of Hong Kong in working to build a bright future for the city and promote sustainable development.

Community

A primary goal of the Bank's community investment is to create greater opportunities for young people, who represent the future of Hong Kong. With an emphasis on employability, entrepreneurship, financial literacy and care for the community, the Bank's programmes offer young people the chance to explore their ideas and aspirations, maintain good physical and emotional well-being, and develop the personal qualities and skills that will enable them to thrive in a fast-changing environment.

In 2019, the Bank's community investment programmes and staff volunteering initiatives touched over 2.5 million people. Featured below are our flagship programmes which were delivered in partnership with trusted local organisations:

- Hang Seng Table Tennis Academy was established in 2001 as a key initiative under the Bank's long-term partnership with Hong Kong Table Tennis Association ("HKTTA"). The Academy's community-focused programmes encourage people from all walks of life to be more physically active by participating in sport, and help participants to develop valuable life skills such as perseverance and a strong sense of fair play. The Academy also provides specialist training and programmes to nurture and support young table tennis talents as they pursue their long-term sporting aspirations. In 2020, we will celebrate nearly three decades of partnering with the HKTTA to support young people in Hong Kong and the development of international-class table tennis in the city.
- Launched in 2019, the 'I am...!' online platform and mobile app provide personalised career and academic advice for young people. Offering interactive online mentorship, the portal is the first of its kind designed for the youth of Hong Kong.
- The Hang Seng Youth Career Planning Scheme offers at-risk youths and juvenile ex-offenders an opportunity to explore career possibilities.

Over the past decade, the Bank has invested HK\$282 million in community development programmes in Hong Kong, including HK\$33 million in 2019.

Alongside financial support, the Bank also invests resources such as volunteer time, professional expertise and practical support. Colleagues enjoy two days of volunteer leave per year to support worthy causes. In 2019, over 80 community-based activities were organised for Bank volunteers, focusing on areas such as enhancing the social well-being of vulnerable and underprivileged groups, improving financial literacy and economic mobility, and environmental stewardship.

CORPORATE GOVERNANCE REPORT

The Corporate Responsibility Committee, which is chaired by the Bank's Vice-Chairman and Chief Executive, is responsible for setting the Bank's community investment strategy and programmes. The Committee assesses proposals and oversees the implementation of community investment initiatives. Senior executives from various functions and business units serve as Committee members.

Environment

The Bank strives to lead by example in driving Hong Kong towards a lower-carbon economy. It was Hong Kong's first domestic bank to attain ISO 14001 certification for all its offices and branches in 2011. Guided by its own Environmental Policy, the Bank has implemented a range of management practices that aim to ensure the Bank conducts activities in an environmentally responsible manner and promotes sustainable development and environmentally conscious practices among its staff, customers, business partners and suppliers.

The Bank has established an Environmental Management Committee. It is chaired by an Executive Committee member and is responsible for ensuring that the Bank's environmental management system and business strategies complement each other as well as support continual improvement in environmental performance.

The Bank sets annual targets for minimising the negative environmental effects of its business, and engages in activities that have a positive impact on promoting the conservation of natural resources and biodiversity. Working towards a reduction in its greenhouse gas emissions, the Bank set a 2019 target of reducing annual energy consumption by 2% compared with 2018. Through various efforts, the Bank exceeded its target by reducing greenhouse gas emissions from energy use by 3.18% and cutting its consumption of electricity by 3.23% in 2019.

In support of renewable energy and resource conservation, the Bank replaced air-conditioning systems in branches and investment buildings, and purchased Renewable Energy Certificates from CLP and Hong Kong Electric. The Bank's efforts to support local renewable energy generation were recognised with a Renewable Energy Contribution Award in the CLP Smart Energy Award 2019.

The Bank is currently undertaking a Bank-wide office enhancement programme that has adopted international standards of energy efficiency and workplace sustainability among its primary design objectives. The Bank's environmentally conscious renovation of Hang Seng 113 earned it a Merit award in the Hong Kong Green Building Council's Green Building Award 2019.

The Bank's operations comply with all applicable environmental regulations and guidelines in Hong Kong, such as the Waste Disposal Ordinance (Cap. 354). In 2019, no sanction for breach in environmental laws or regulations was identified or reported.

Health and Safety

The Bank has a demonstrated commitment to occupational health and safety ("OH&S") in the workplace with employee engagement through committees, forums and working groups in the development of an OH&S Policy and Management System. By successfully implementing the certified BS OHSAS 18001:2007-compliant Safety Management System ("OHSMS"), the Bank marks its achievement to be the first bank world-wide to conform to this internationally acclaimed best practice aiming at reducing the exposure of the Bank's staff, contractors and customers to OH&S risks associated with its business activities at premises over which it has control. With the on-going implementation of OHSMS, the Bank not only demonstrates its commitment, but also proves that its OHSMS remains healthy and effective. As such, it allows the Bank to readily identify, monitor and control potential OH&S risks within the Bank premises and in turn to provide for a safer workplace environment for the Bank's staff and customers.

The Bank provides a range of training and activities to enhance the knowledge of its staff in OH&S, fire safety, manual operation, and office safety. A number of staff have acquired Qualified First Aider status so as to offer prompt assistance to their colleagues and customers in the event of a medical emergency or accident whilst awaiting the arrival of the ambulance. Some Qualified First Aiders have also been trained to operate the Automated External Defibrillators installed in the Bank premises.

The Bank implements a Contingency Plan for Communicable Disease, which sets out the key issues to be addressed and the actions to be taken by various units in response to the occurrence of a serious communicable disease, and the keeping of adequate stock of face masks to cater for the needs of its staff in response to an outbreak of influenza pandemic. Staff have been made aware through the Bank-wide intranet of the importance of personal hygiene and health, and the contingency measures to be adopted, to enable the Bank to continue with its services to the community during an outbreak of a serious communicable disease.

The Bank places strong importance on all aspects of health and safety and in maintaining workplace safety and comfort for its staff and customers. In year 2019, the Bank organised the "2019 Fire Safety Prevention Month" awareness campaign to offer a series of fun and educational activities including Mascot Design Competition, Lucky Draw, Promotional Road Shows, Fire Safety Seminars and more, with the purpose to inspire, raise awareness, and most importantly to enhance the overall fire safety culture across the Bank. Living in the hectic lifestyle of Hong Kong can sometimes cause people to forget about their own health. Various health problems such as risk of heart diseases, diabetes, hypertension and more can arise from the lack of regular exercise, unhealthy diet, and from the stressful environment. As such, the Bank has implemented a Health & Wellbeing Program "We support" which consisted of a series of activities, such as Healthy Recipe Competition, Healthy Eating Seminars, Exercise Challenges and Workshops, Stress Management Seminars to support staff and encourage them to adopt and maintain a healthy and balanced lifestyle focusing on Staying Active, Eating Healthy, and to maintain a Well Managed Stress Level.

For more details of the Bank's sustainability initiatives and performance in 2019, please refer to its Corporate Sustainability Report 2019 to be made available on the Bank's website (www.hangseng.com) by May 2020.

OTHER INFORMATION

Organisational Structure

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

Businesses	Functions
Retail Banking and Wealth Management	Audit
Commercial Banking	Communications
Global Banking	Corporate Governance & Secretariat
Global Markets	Corporate Sustainability
	Financial Control
	Financial Crime Compliance
	Human Resources
	Legal
	Marketing
	Risk and Compliance
	HASE Operations, Services and Technology
	Strategic Planning and Corporate Development

BIOGRAPHICAL DETAILS OF DIRECTORS AND SENIOR MANAGEMENT

BOARD OF DIRECTORS



Dr Raymond CH'IEN Kuo Fung GBS, CBE, JP INDEPENDENT NON-EXECUTIVE CHAIRMAN AGED 68

Joined the Board since August 2007

Other positions held within Hang Seng Group

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

Other major appointments

- Justice of the Peace
- ^A 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
- ^A Swiss Re Limited – Independent Non-executive Director
- The Hongkong and Shanghai Banking Corporation Limited
 - Independent Non-executive Director

Past major appointments

- 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)
- ^A MTR Corporation Limited
 - Non-executive Chairman (2003 – 2015)
- ^A The Wharf (Holdings) Limited
 - Independent Non-executive Director (2002 – 2015)
- ^A UGL Limited – Non-executive Director (2012 – 2014)
- ^A Convenience Retail Asia Limited
 - Independent Non-executive Director (2001 – 2014)

- Hong Kong Mercantile Exchange Limited
 - Independent Non-executive Director (2009 – 2013)
- ^A China.com Inc – Chairman (1999 – 2013)
- Ascendas China Commercial Fund Management Limited
 - Chairman (2011 – 2012)
- ^A CDC Software Corporation – Director (2009 – 2012)
- The Hong Kong/European Union Business Cooperation Committee
 - Chairman (2005 – 2012)
- ^A CDC Corporation – Chairman (1999 – 2011)
- HSBC Private Equity (Asia) Limited – Chairman (1997 – 2010)
- The APEC Business Advisory Council
 - Hong Kong Member (2004 – 2009)
- ^A Inchcape plc
 - Independent Non-executive Director (1997 – 2009)
- ^A 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 56

Joined the Board since July 2017

Other positions held within Hang Seng Group

- ^A 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
- ^A 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
- The Hang Seng University of Hong Kong
 - Chairman of the Board of Governors
- The Hongkong and Shanghai Banking Corporation Limited
 - Director
- 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

- ^A Treasury Wine Estates Limited
 - Independent Non-executive Director

Past major appointments

- HSBC Amanah Malaysia Berhad
 - Non-Independent Executive Director (2017 – 2018)
- HSBC – Group Head of Retail Banking (2014 – 2017)
- The Hongkong and Shanghai Banking Corporation Limited
 - 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)

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 76

Joined the Board since August 1995

Other positions held within Hang Seng Group

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

Other major appointments

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

Past major appointments

- ^A RoadShow Holdings Limited
 – Chairman and Non-executive Director (2001 – 2017)
^A Swire Properties Limited
 – Independent Non-executive Director (2010 – 2017)
 The Community Chest of Hong Kong
 – Third Vice President; Chairman of Public Relations
 Committee (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)
^A 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)



Mr Nixon CHAN Lik Sang NON-EXECUTIVE DIRECTOR AGED 67

Joined the Board since January 2014

Past major appointments

- Anti-Money Laundering and Counter-Terrorist Financing
 (Financial Institutions) Review Tribunal
 – Member (2012 – 2018)
 Employers' Federation of Hong Kong
 – Chairman of Banking and Financial Services Group
 (2013 – 2016)
 EPS Company (Hong Kong) Limited – Director (2011 – 2016)
^A Hang Seng Bank Limited
 – Executive Director (2014 – 2016)
 Head of Retail Banking and Wealth Management
 (2011 – 2016)
 Member of Executive Committee (2009 – 2016)
 Head of Corporate and Commercial Banking (2009 – 2011)

- Hang Seng Management College – Governor (2010 – 2016)
 Hang Seng School of Commerce – Director (2009 – 2016)
 TransUnion Limited – Director (2011 – 2016)
 MasterCard Asia/Pacific Advisory Board
 – Director (2012 – 2015)
 Small and Medium Enterprises Committee
 – Member (2009 – 2014)
 The Hongkong and Shanghai Banking Corporation Limited
 – Senior Executive, Commercial Banking (2005 – 2009)
 Held various senior positions in commercial banking and
 personal financial services (1993 – 2005)

Qualifications

- Bachelor's Degree in Business Administration
 – The University of Hawaii, USA



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

BOARD OF DIRECTORS



Ms CHIANG Lai Yuen JP INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 54

Joined the Board since September 2010

Other positions held within Hang Seng Group

- ^A 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
- ^A 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)



Ms Kathleen GAN Chieh Huey NON-EXECUTIVE DIRECTOR AGED 45

Joined the Board since May 2019

Other major appointments

- The Hongkong and Shanghai Banking Corporation Limited
 - Alternate Chief Executive
- HSBC Asia Holdings Limited – Director
- HSBC Bank (China) Company Limited – Supervisor
- HSBC Global Services Limited – Director ^(Note 1)
- ^A HSBC Holdings plc – Group General Manager; Head of Finance

Past major appointments

- HSBC Asia Pacific Holdings (UK) Limited
 - Director (2015 – 2019) ^(Note 1)
- HSBC Insurance (Asia) Limited – Director (2015 – 2019) ^(Note 1)
- HSBC Insurance (Asia-Pacific) Holdings Limited
 - Director (2016 – 2019) ^(Note 1)
- HSBC Life (International) Limited – Director (2015 – 2019) ^(Note 1)

- HSBC Securities Investments (Asia) Limited
 - Director (2015 – 2019) ^(Note 1)
- The Hongkong and Shanghai Banking Corporation Limited
 - Chief Financial Officer, Asia Pacific (2015 – 2019) ^(Note 1)
 - Global Chief Financial Officer, Global Commercial Banking (2010 – 2015)
 - Global Chief Risk Officer, Global Commercial Banking (2011 – 2014)
- 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 RETAIL BANKING AND WEALTH MANAGEMENT AGED 60

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 66

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

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

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.

BOARD OF DIRECTORS



Dr Eric Li Ka Cheung GBS, OBE, JP INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 66

Joined the Board since February 2000

Other positions held within Hang Seng Group

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

Other major appointments

- Justice of the Peace
- ^A 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 ^(Note 1)
- ^A SmarTone Telecommunications Holdings Limited
 - Independent Non-executive Director;
 - Chairman of Audit Committee
- ^A 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
- ^A Transport International Holdings Limited
 - Independent Non-executive Director;
 - Chairman of Audit Committee
- ^A Wong's International Holdings Limited
 - Independent Non-executive Director;
 - Chairman of Audit Committee

Past major appointments

- Legal Aid Services Council – Chairman (2012 – 2019) ^(Note 1)
- Li, Tang, Chen & Co, Certified Public Accountants
 - Senior Partner (1978 – 2019) ^(Note 1)
- Independent Commission on Remuneration for the Members of the District Councils of HKSAR Government
 - Chairman (2013 – 2019) ^(Note 1)
- 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)

^A 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)

^A 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 (Practising)
- 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 71

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
^A Great Eagle Holdings Limited – Non-executive Director
 Shanghai Tongji University; Shanghai University
 – Advisory Professorship
 Shui On Group – Chairman
^A Shui On Land Limited – Chairman
^A 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)

^A Shui On Land Limited – Chief Executive Officer (2004 – 2011)
^A China Telecom Corporation Limited
 – Independent Non-executive Director (2002 – 2008)
^A 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 69

Joined the Board since March 2014

Other positions held within Hang Seng Group

^A 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
 – Non-executive Director; Member of Audit Committee
 HSBC Bank (Vietnam) Ltd. – Chairman of Board of Supervision
^A 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)
^A 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



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



Mr Peter WONG Tung Shun JP NON-EXECUTIVE DIRECTOR AGED 68

Joined the Board since May 2005

Other positions held within Hang Seng Group

^A Hang Seng Bank Limited – Member of Nomination Committee

Other major appointments

Justice of the Peace

Chongqing Mayor’s International Economic Advisory Council
– Member

Hong Kong General Chamber of Commerce
– Deputy Chairman; Chairman of Membership Committee;
Member of Chairman’s Committee;
Member of General 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;
Chairman of Nomination Committee;
Member of Remuneration Committee

^A HSBC Holdings plc
– Group Managing Director;
Member of Group Management Board

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 Community Chest of Hong Kong
– Board Member;
First Vice President;
Chairman of Executive 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

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) ^(Note 1)

^A Bank of Communications Co., Ltd.
– Vice Chairman and Non-executive Director (2016 – 2019)

^A 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)

^A 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)

^A 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

Mr Michael WU Wei Kuo INDEPENDENT NON-EXECUTIVE DIRECTOR AGED 49

Joined the Board since September 2010

Other positions held within Hang Seng Group

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

Other major appointments

- Hongkong Caterers Limited
 - Executive Director and Company Secretary
- ^A Hongkong Land Holdings Limited – Non-executive Director
- ^A 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

- ^A 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 2019 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 2019 are disclosed in the section "Directors' and Alternate Chief Executives' Interests" of the Report of the Directors attached to the Bank's 2019 Annual Report.
- 3 Some Directors (as disclosed in the section "Biographical Details of Directors and Senior Management – Board of Directors" of the Bank's 2019 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 2019 Annual Report.
- 4 Save as disclosed in the section "Biographical Details of Directors and Senior Management – Board of Directors" of the Bank's 2019 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 2019 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.

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

SENIOR MANAGEMENT





From left to right

Ms Daphne W K Wat
Head of Global Banking

Ms Margaret W H Kwan
Executive Director and
Head of Retail Banking and
Wealth Management

Mr Donald Y S Lam
Head of Commercial Banking

Ms Louisa W W Cheang
Vice-Chairman and
Chief Executive

Ms Liz T L Chow
Head of Global Markets

Mr Andrew W L Leung
Chief Financial Officer

SENIOR MANAGEMENT

Ms Louisa CHEANG Wai Wan VICE-CHAIRMAN AND CHIEF EXECUTIVE

(Biographical details are set out on page 140)

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

(Biographical details are set out on page 143)

Mrs Eunice CHAN CHIEF OPERATING OFFICER AGED 57

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 Ivy CHAN Shuk Pui HEAD OF BUSINESS DEVELOPMENT AGED 54

Joined the Bank since July 2014

Major positions held within Hang Seng Group

Hang Seng Bank Limited
– Head of Business Development; Member of Executive Committee

Past major positions

Hang Seng Bank Limited – Chief Risk Officer (2014 – 2019)
The Hongkong and Shanghai Banking Corporation Limited
– Chief Risk Officer, HSBC Bank (Taiwan) Limited (2010 – 2014)
Senior Manager of Credit Risk Management Department (2005 – 2010)
Senior Relationship Manager of Credit Risk Management Department (2002 – 2005)
Treasury Credit Risk Manager (1997 – 2001)
Various positions in HSBC in the areas of Trade Services, Retail Banking, Corporate Banking Relationship Manager, Credit Operations (1988 – 1997)

Qualifications

Professional Diploma in Company Secretaryship and Administration
– The Hong Kong Polytechnic University

Ms Crystal CHEUNG Pui Sze HEAD OF FINANCIAL CRIME COMPLIANCE AGED 40

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 Certified Anti-Money Laundering Professional
– Hong Kong Institute of Bankers

BIOGRAPHICAL DETAILS OF DIRECTORS AND SENIOR MANAGEMENT

Ms Liz CHOW Tan Ling HEAD OF GLOBAL MARKETS AGED 46

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 56

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 42

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 57

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 55

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 46

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

Ms Elaine WANG Yee Ning HEAD OF HUMAN RESOURCES AGED 58

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 Daphne WAT Wing Kam HEAD OF GLOBAL BANKING AGED 53

Joined the Bank since June 1997

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
– Deputy Head of Corporate Banking, Commercial Banking Division (2016 – 2018; 2011 – 2013)
Head of Large Corporate, Commercial Banking Division (2014 – 2016)
Head of Credit Control Department, Risk Management (2009 – 2011)
Senior Relationship Manager, Global Banking (2000 – 2009)
Relationship Manager, Global Banking (1997 – 2000)
Bank of Tokyo-Mitsubishi (HK) Limited
– Relationship Manager (1988 – 1997)

Qualifications

Chartered Financial Analyst
Bachelor of Social Science in Economics – The University of Hong Kong
Master of Business Administration
– The Hong Kong University of Science and Technology

BIOGRAPHICAL DETAILS OF DIRECTORS AND SENIOR MANAGEMENT

Ms WONG May Kay HEAD OF COMMUNICATIONS AND CORPORATE SUSTAINABILITY AGED 57

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 50

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

Ms Katie YIP Kay Chun HEAD OF REGULATORY COMPLIANCE AGED 58

Joined the Bank since February 2005

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

Standard Chartered Bank

– Regional Head of Legal & Compliance, North East Asia (2004)

Various positions in the area of Legal & Compliance (1992 – 2004)

Johnson Stokes & Master – Assistant Solicitor (1990 – 1992)

Baker & McKenzie – Associate (1987 – 1990)

Qualifications

Practising Solicitor in Hong Kong

Master of Arts in Jurisprudence – Wadham College, Oxford University, UK

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 2019.

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 2019, 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\$4.20 (2018: HK\$3.90) per share totalling HK\$8,031m (2018: HK\$7,455m) during the year. The Directors also declared the fourth interim dividend of HK\$4.0 per share totalling HK\$7,647m (2018: HK\$3.60 per share totalling HK\$6,883m), which will be paid on 20 March 2020.

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 2019 are set out in note 30 to the financial statements for the year ended 31 December 2019.

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 2019.

Equity-linked Agreements

For the year ended 31 December 2019, 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 2019, calculated under Part 6 of the Hong Kong Companies Ordinance, amounted to HK\$94,427m (2018: HK\$86,400m). 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\$31m. For further details of the Bank's corporate social responsibility activities and expenditures, please refer to the section "Corporate Sustainability" 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, Mr Nixon L S 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.

Ms Sarah C Legg stepped down from the Board with effect from 1 March 2019.

Save for Ms Kathleen C H Gan, who was appointed as Non-executive Director with effect from 10 May 2019, all the other Directors, who were in office on the date of this report, had served on the Board of the Bank throughout the year. Ms Gan will retire under the provisions of the Bank's Articles of Association and, being eligible, offer herself for election at the Bank's 2020 Annual General Meeting ("2020 AGM") to be held in May, the notice of which will be sent to shareholders at least 20 clear business days before the said meeting.

The Directors retiring by rotation in accordance with the Bank's Articles of Association at the Bank's 2020 AGM are Dr Raymond K F Ch'ien, Mr Nixon L S Chan, Ms L Y Chiang, Mr Kenneth S Y Ng and Mr Michael W K Wu. Mr Nixon L S Chan, who has joined the Board since January 2014, has informed the Board of his intention of not seeking re-election at the 2020 AGM in order to devote more time to his other commitments and areas of interest. Mr Chan will therefore retire from the Board at the conclusion of the 2020 AGM.

No Director proposed for election or re-election at the 2020 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 2019 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 2019, 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 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	468,284	–	–	190,431 ⁽²⁾	658,715	0.00
Dr John C C Chan	24,605 ⁽¹⁾	–	–	–	24,605	0.00
Mr Nixon L S Chan	146,615	–	–	2,446 ⁽²⁾	149,061	0.00
Ms Kathleen C H Gan	265,871	–	–	55,573 ⁽²⁾	321,444	0.00
Ms Margaret W H Kwan	60,453	10,041	–	20,104 ⁽²⁾	90,598	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	2,394,448	27,442	–	987,692 ⁽²⁾	3,409,582	0.02
Alternate Chief Executives:						
Mrs Eunice L C Y Chan	17,167	–	–	12,228 ⁽²⁾	29,395	0.00
Mr Donald Y S Lam	149,649	–	–	23,905 ⁽²⁾	173,554	0.00
Mr Andrew W L Leung	12,866	–	–	20,824 ⁽²⁾	33,690	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 2019, were as follows:

	Awards held as at 1 January 2019	Awards made during the Director's/Alternate Chief Executive's term of office in 2019	Awards released during the Director's/Alternate Chief Executive's term of office in 2019	Awards held as at 31 December 2019
Directors:				
Ms Louisa Cheang	199,074	112,656	128,051	190,431 ⁽¹⁾
Mr Nixon L S Chan	11,773	–	9,972	2,446 ⁽¹⁾
Ms Kathleen C H Gan	55,332 ⁽²⁾	–	–	55,573 ⁽¹⁾
Ms Margaret W H Kwan	14,224	28,240	22,604	20,104 ⁽¹⁾
Mr Kenneth S Y Ng	7,474	–	7,665	–
Mr Peter T S Wong	718,038	263,343	562,525	441,157 ⁽¹⁾
Alternate Chief Executives:				
Mrs Eunice L C Y Chan	11,883	6,251	6,670	12,228 ⁽¹⁾
Mr Donald Y S Lam	19,824	27,231	23,649	23,905 ⁽¹⁾
Mr Andrew W L Leung	17,448	13,019	10,874	20,824 ⁽¹⁾

Notes:

⁽¹⁾ These included additional shares arising from scrip dividends.

⁽²⁾ This represented the awards held by Ms Kathleen C H Gan on 10 May 2019 when she was appointed as Non-executive Director of the Bank.

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 2019, 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 2019.

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 a Director of The Hongkong and Shanghai Banking Corporation Limited.

Ms Kathleen C H Gan is a Group General Manager and Head of Finance of HSBC Holdings plc. She is also an Alternate Chief Executive of The Hongkong and Shanghai Banking Corporation Limited and 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 a 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 Management Board 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 and Risk Committee of the Bank, each of which consists of not less than three Independent Non-executive Directors, 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 2019.

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 2019, 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 2019, 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.

REPORT OF THE DIRECTORS

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 2019 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 2020 AGM.

On behalf of the Board

Raymond Ch'ien

Chairman

Hong Kong, 18 February 2020

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5	Net income from financial instruments measured at fair value through profit or loss	36	Trading liabilities
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7	Dividend income	38	Certificates of deposit and other debt securities in issue
8	Net insurance premium income	39	Other liabilities
9	Other operating income	40	Liabilities under insurance contracts
10	Net insurance claims and benefits paid and movement in liabilities to policyholders	41	Current tax and deferred tax
11	Change in expected credit losses and other credit impairment charges	42	Subordinated liabilities
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CONSOLIDATED INCOME STATEMENT

for the year ended 31 December 2019

(Expressed in millions of Hong Kong dollars)

		2019	2018
	note		
Interest income	3	44,190	37,633
Interest expense	3	(11,935)	(7,586)
Net interest income		32,255	30,047
Fee income		9,072	9,669
Fee expense		(2,619)	(2,602)
Net fee income	4	6,453	7,067
Net income from financial instruments measured at fair value through profit or loss	5	3,702	1,705
Gains less losses from financial investments	6	22	57
Dividend income	7	143	146
Net insurance premium income	8	15,652	14,530
Other operating income	9	5,114	1,880
Total operating income		63,341	55,432
Net insurance claims and benefits paid and movement in liabilities to policyholders	10	(19,827)	(14,217)
Net operating income before change in expected credit losses and other credit impairment charges		43,514	41,215
Change in expected credit losses and other credit impairment charges	11	(1,837)	(996)
Net operating income		41,677	40,219
Employee compensation and benefits		(6,229)	(5,656)
General and administrative expenses		(4,692)	(5,025)
Depreciation expenses		(1,972)	(1,363)
Amortisation of intangible assets		(164)	(124)
Operating expenses	12	(13,057)	(12,168)
Impairment loss on intangible assets		(10)	(104)
Operating profit		28,610	27,947
Net surplus on property revaluation	16	35	278
Share of profits of associates		168	207
Profit before tax		28,813	28,432
Tax expense	17	(3,991)	(4,244)
Profit for the year		24,822	24,188
Attributable to:			
Shareholders of the Bank		24,840	24,211
Non-controlling interests		(18)	(23)
(Figures in HK\$)			
Earnings per share – basic and diluted	18	12.77	12.48

The notes on pages 169 to 241 form part of these Financial Statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

for the year ended 31 December 2019
(Expressed in millions of Hong Kong dollars)

	2019	2018
Profit for the year	24,822	24,188
Other comprehensive income		
Items that will be reclassified subsequently to income statement when specific conditions are met:		
Debt instruments at fair value through other comprehensive income:		
– fair value changes taken to equity	771	319
– fair value changes transferred to income statement:		
– on hedged items	(760)	36
– on disposal	(26)	(24)
– expected credit losses recognised in income statement	6	–
– deferred taxes	1	(87)
– exchange difference	(3)	13
Cash flow hedge reserve:		
– fair value changes taken to equity	344	489
– fair value changes transferred to income statement	(312)	(384)
– deferred taxes	(5)	(17)
Exchange differences on translation of:		
– financial statements of overseas branches, subsidiaries and associates	(238)	(664)
Items that will not be reclassified subsequently to income statement:		
Change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	(5)	(4)
Equity instruments:		
– fair value changes taken to equity	1,808	(562)
– exchange difference	(71)	(163)
Premises:		
– unrealised surplus on revaluation of premises	888	2,458
– deferred taxes	(150)	(410)
– exchange difference	(7)	(13)
Defined benefit plans:		
– actuarial gains/(losses) on defined benefit plans	252	(703)
– deferred taxes	(41)	116
Exchange difference and others ¹	(76)	–
Other comprehensive income for the year, net of tax	2,376	400
Total comprehensive income for the year	27,198	24,588
Total comprehensive income for the year attributable to:		
– shareholders of the Bank	27,216	24,611
– non-controlling interests	(18)	(23)
	27,198	24,588

¹ Include mainly exchange difference arising from cancellation of additional tier 1 (“AT1”) capital instrument.

CONSOLIDATED BALANCE SHEET

at 31 December 2019

(Expressed in millions of Hong Kong dollars)

		2019	2018
	note		
ASSETS			
Cash and balances at central banks	22	13,038	16,421
Trading assets	23	47,357	47,164
Derivative financial instruments	24	7,338	8,141
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	25	18,771	13,070
Reverse repurchase agreements – non-trading		6,659	–
Placings with and advances to banks	26	65,807	79,400
Loans and advances to customers	27	942,930	874,456
Financial investments	28	461,704	428,532
Interest in associates	31	2,520	2,444
Investment properties	32	10,121	10,108
Premises, plant and equipment	32	32,362	30,510
Intangible assets	33	21,954	16,751
Other assets	34	46,430	44,300
Total assets		1,676,991	1,571,297
LIABILITIES AND EQUITY			
Liabilities			
Deposits from banks		2,491	2,712
Current, savings and other deposit accounts	35	1,203,458	1,154,415
Repurchase agreements – non-trading		1,878	410
Trading liabilities	36	37,976	33,649
Derivative financial instruments	24	7,462	8,270
Financial liabilities designated at fair value	37	29,580	33,454
Certificates of deposit and other debt securities in issue	38	17,190	3,748
Other liabilities	39	35,183	45,247
Liabilities under insurance contracts	40	132,120	120,195
Current tax liabilities	41	4,159	696
Deferred tax liabilities	41	7,083	6,394
Subordinated liabilities	42	19,494	–
Total liabilities		1,498,074	1,409,190
Equity			
Share capital	43	9,658	9,658
Retained profits		133,734	123,350
Other equity instruments	44	11,744	6,981
Other reserves		23,674	22,093
Total shareholders' equity		178,810	162,082
Non-controlling interests		107	25
Total equity		178,917	162,107
Total equity and liabilities		1,676,991	1,571,297

Louisa Cheang *Vice-Chairman and Chief Executive*

John C C Chan *Director*

Eric K C Li *Director*

Andrew W L Leung *Chief Financial Officer*

The notes on pages 169 to 241 form part of these Financial Statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the year ended 31 December 2019

(Expressed in millions of Hong Kong dollars)

	Share capital	Other equity instruments ¹	Retained profits ²	Other reserves					Total shareholders' equity	Non-controlling interests	Total equity
				Premises revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Others ³			
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 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 ⁴	-	-	(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 ⁵	-	-	(14,914)	-	-	-	-	-	(14,914)	-	(14,914)
Coupons paid to holders of 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 During 2019, the Bank has cancelled and repaid the AT1 capital instrument of US\$900m and issued new AT1 capital instruments of US\$1,500m.

² 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 2019, the effect of this requirement is to restrict the amount of reserves which can be distributed by the Group to shareholders by HK\$3,509m (2018: HK\$4,982m).

³ 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.

⁴ Include exchange difference arising from cancellation of AT1 capital instrument.

⁵ Dividends paid represented the payment of fourth interim dividend of 2018 and the first three interim dividends of 2019 amounted to HK\$6,883m and HK\$8,031m respectively.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY continued

for the year ended 31 December 2019

(Expressed in millions of Hong Kong dollars)

	Share capital	Other equity instruments ¹	Retained profits ²	Other reserves					Total shareholders' equity	Non-controlling interests	Total equity
				Premises revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Others ³			
At 31 December 2017	9,658	6,981	113,646	18,379	2,116	(99)	706	643	152,030	49	152,079
Impact on transition to HKFRS 9	-	-	(776)	-	(78)	-	-	-	(854)	-	(854)
At 1 January 2018	9,658	6,981	112,870	18,379	2,038	(99)	706	643	151,176	49	151,225
Profit for the year	-	-	24,211	-	-	-	-	-	24,211	(23)	24,188
Other comprehensive income (net of tax)	-	-	(587)	2,035	(468)	88	(664)	(4)	400	-	400
Debt instruments at fair value through other comprehensive income	-	-	-	-	257	-	-	-	257	-	257
Equity instruments at fair value through other comprehensive income	-	-	-	-	(725)	-	-	-	(725)	-	(725)
Cash flow hedges	-	-	-	-	-	88	-	-	88	-	88
Change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	-	-	-	-	-	-	-	(4)	(4)	-	(4)
Property revaluation	-	-	-	2,035	-	-	-	-	2,035	-	2,035
Actuarial losses on defined benefit plans	-	-	(587)	-	-	-	-	-	(587)	-	(587)
Exchange differences and others	-	-	-	-	-	-	(664)	-	(664)	-	(664)
Total comprehensive income for the year	-	-	23,624	2,035	(468)	88	(664)	(4)	24,611	(23)	24,588
Dividends paid	-	-	(13,382)	-	-	-	-	-	(13,382)	-	(13,382)
Coupon paid to holder of AT1 capital instrument	-	-	(418)	-	-	-	-	-	(418)	-	(418)
Movement in respect of share-based payment arrangements	-	-	(5)	-	-	-	-	31	26	-	26
Others	-	-	69	-	-	-	-	-	69	(1)	68
Transfers	-	-	592	(592)	-	-	-	-	-	-	-
At 31 December 2018	9,658	6,981	123,350	19,822	1,570	(11)	42	670	162,082	25	162,107

¹ During 2019, the Bank has cancelled and repaid the AT1 capital instrument of US\$900m and issued new AT1 capital instruments of US\$1,500m.

² 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 2019, the effect of this requirement is to restrict the amount of reserves which can be distributed by the Group to shareholders by HK\$3,509m (2018: HK\$4,982m).

³ Other reserves comprise share-based payment reserve and own credit risk reserve. The share-based payment reserve is used to record the amount relating to share awards and options granted to employees of the Group by the ultimate holding company. The own credit risk reserve is for the change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk.

CONSOLIDATED STATEMENT OF CASH FLOWS

for the year ended 31 December 2019
(Expressed in millions of Hong Kong dollars)

	2019	2018 <i>Re-presented</i>
Profit before tax	28,813	28,432
Adjustments for non-cash items:		
Depreciation and amortisation ¹	2,136	1,487
Net interest income	(32,255)	(30,047)
Dividend income	(143)	(146)
Gains less losses from financial investments	(22)	(57)
Share of profits of associates	(168)	(207)
Net surplus on property revaluation	(35)	(278)
Change in expected credit losses and other credit impairment charges	1,837	996
Impairment loss on intangible assets	10	104
Loans and advances written off net of recoveries	(833)	(862)
Movement in present value of in-force long-term insurance business ("PVIF")	(4,559)	(1,324)
Interest received	40,464	37,175
Interest paid	(11,038)	(6,964)
Elimination of exchange differences and other non-cash items	(4,420)	418
Changes in operating assets and liabilities		
Change in trading assets	(193)	6,540
Change in derivative financial instruments	(5)	(204)
Change in financial assets designated and otherwise mandatorily measured at fair value through profit or loss	(5,701)	(3,150)
Change in reverse repurchase agreements – non-trading	(1,250)	–
Change in placings with and advances to banks maturing after one month	7,738	15,522
Change in loans and advances to customers	(71,369)	(70,759)
Change in other assets	(1,172)	(6,400)
Change in repurchase agreements – non-trading	1,468	(1,979)
Change in deposits from banks	(221)	(964)
Change in current, savings and other deposit accounts	49,043	79,578
Change in trading liabilities	4,327	(54,621)
Change in financial liabilities designated at fair value	(3,874)	32,407
Change in certificates of deposit and other debt securities in issue	13,442	3,148
Change in other liabilities	2,989	5,458
Change in liabilities under insurance contracts	11,925	4,650
Dividends received from financial investments	146	145
Tax paid	(40)	(3,840)
Net cash from operating activities	27,040	34,258

CONSOLIDATED STATEMENT OF CASH FLOWS continued

for the year ended 31 December 2019

(Expressed in millions of Hong Kong dollars)

	2019	2018 <i>Re-presented</i>
Purchase of financial investments	(641,602)	(570,567)
Proceeds from sale or redemption of financial investments	601,272	547,327
Repayment of shareholders' loan from an associated company	2	74
Purchase of property, plant and equipment and intangible assets (excluding PVIF)	(1,734)	(892)
Net cash inflow from the sales of loan portfolio	2,057	2,505
Net cash from investing activities	(40,005)	(21,553)
Interest paid for subordinated liabilities	(371)	–
Principal and interest elements of lease payments	(546)	–
Dividends paid	(14,914)	(13,382)
Coupons paid to holder of AT1 capital instruments	(342)	(418)
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	8,007	(13,800)
Net decrease in cash and cash equivalents	(4,958)	(1,095)
Cash and cash equivalents at 1 January	98,061	100,647
Exchange differences in respect of cash and cash equivalents	(401)	(1,491)
Cash and cash equivalents at 31 December²	92,702	98,061
Cash and cash equivalents comprise ³ :		
– cash and balances at central banks	13,038	16,421
– balances with banks	5,677	7,765
– items in the course of collection from other banks	5,650	7,236
– placings with and advances to banks maturing within one month	42,253	46,021
– reverse repurchase agreements – non-trading with banks within one month	5,409	–
– treasury bills	29,555	41,454
– net settlement accounts with banks and cash collateral to banks within one month ²	(2,129)	(10,783)
– less: items in the course of transmission to other banks	(6,751)	(10,053)
	92,702	98,061

¹ The impact of the right-of-use assets ("ROU") recognised under HKFRS 16 at the beginning of 2019 is not recognised in 2018.

² In 2019, the Group changed its presentation to include settlement accounts with bank counterparties of one month or less on a net basis. Comparatives have been re-presented.

³ At 31 December 2019, HK\$11,112m (2018: HK\$14,821m) was not available for use by the Group, of which HK\$7,616m (2018: HK\$9,155m) related to mandatory deposits at Central banks.

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2019

(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 2019. These 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 2019

On 1 January 2019, the Group adopted the requirements of HKFRS 16 and recognised lease liabilities in relation to leases which had previously been classified as "operating leases" in accordance with HKAS 17 "*Leases*". These liabilities were measured at the present value of the remaining lease payments, discounted at the lessee's incremental borrowing rate as at 1 January 2019. The associated right-of-use ("ROU") assets were measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments recognised on balance sheet at 31 December 2018. In addition, the practical expedients permitted by the standard was applied where operating leases with a remaining lease term of less than 12 months as at 1 January 2019 were treated as short-term leases.

The differences between HKAS 17 and HKFRS 16 are summarised in the table below:

HKAS 17	HKFRS 16
Leases were classified as either finance or operating leases. Payments made under operating leases were charged to profit or loss on a straight-line basis over the period of the lease.	<p>Leases are recognised as a ROU asset and a corresponding liability at the date at which the leased asset is made available for use. Lease payments are allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease term so as to produce a constant period rate of interest on the remaining balance of the liability. The ROU asset is depreciated over the shorter of the ROU asset's useful economic life and the lease term on a straight-line basis.</p> <p>In determining lease term, the Group considers all facts and circumstances that create an economic incentive to exercise an extension option or not exercise a termination option over the planning horizon of five years.</p> <p>In general, it is not expected that the discount rate implicit in the lease is available so the lessee's incremental borrowing rate is used. This is the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of a similar value in a similar economic environment with similar terms and conditions. The rates are determined for each economic environment in which the Group operates by adjusting swap rates with funding spreads (OCS) and cross currency basis where appropriate.</p>

The Group adopted the requirements of HKFRS 16 retrospectively, with the cumulative effect of initially applying the standard recognised as an adjustment to the opening balance of retained earnings at that date. Comparatives were not restated. In relation to the operating lease that were under HKAS17 "*Leases*", the adoption of the standard increased assets by HK\$1.4bn and increased financial liabilities by the same amount with no effect on net assets or retained earnings.

NOTES TO THE FINANCIAL STATEMENTS

1. Basis of Preparation continued

(a) Compliance with Hong Kong Financial Reporting Standards continued

Standards adopted during the year ended 31 December 2019 continued

Interest Rate Benchmark Reform: Amendments to HKFRS 9 and HKAS 39 'Financial Instruments'

Amendments to HKFRS 9 and HKAS 39 were issued in November 2019 that modify the specific hedge accounting requirements so that entities apply those hedge accounting requirements assuming that the interest rate benchmark on which the hedged cash flows and cash flows of the hedging instrument are based is not altered as a result of interest rate benchmark reform. These amendments apply from 1 January 2020 with early adoption permitted. The Group has adopted the amendments from 1 January 2019 and has made the additional disclosures in Note 24(c) as required by the amendments. There is no material impact upon the early adoption of such amendment.

Amendment to HKAS 12 "Income Taxes"

An amendment to HKAS 12 was issued in February 2018 as part of the Annual Improvement Cycle. The amendment clarifies that an entity should recognise the tax consequences of dividends where the transactions or events that generated the distributable profits are recognised. This amendment was applied on 1 January 2019 to the income tax consequences of distributions recognised on or after the beginning of the earliest comparative period. As a consequence, income tax related to distributions on perpetual subordinated loans will be presented in profit or loss rather than equity. As a result of its application, the impact on profit after tax for the year ended 31 December 2019 was immaterial (2018: nil) with no effect on equity.

(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 Management section.
- Capital disclosures under HKAS 1 "Presentation of Financial Statements" under Capital Management.

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 2019.

(d) Future Accounting Developments

The HKICPA has issued a number of new standards which are not yet effective for the year ended 31 December 2019 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 and sets out the requirements that an entity should apply in accounting for insurance contracts it issues and reinsurance contracts it holds. HKFRS 17 is effective from 1 January 2021. However, HKICPA is considering delaying the mandatory implementation date by one year and may make additional changes to the standard. 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.

1. Basis of Preparation continued

(e) Critical accounting estimates and judgements

The preparation of financial information requires the use of estimates and judgements about future conditions. In view of the inherent uncertainties and the high level of subjectivity involved in the recognition or measurement of items highlighted as the critical accounting estimates and judgements in note 2 below, it is possible that the outcomes in the next financial year could differ from those on which management's estimates are based. This could result in materially different estimates and judgements from those reached by management for the purpose of 2019 financial statements. Management's selection of the Group's accounting policies which contain critical estimates and judgements reflects the materiality of the items to which the policies are applied and the high degree of judgement and estimation uncertainty involved.

2. Significant accounting policies

(a) Interest income and expense

Interest income and expense for all financial instruments are recognised in "Interest income" and "Interest expense" respectively in the income statement. Effective interest method is used for those financial instruments that are not at fair value through profit or loss.

The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, where appropriate, a shorter period, to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the Group estimates cash flows considering all contractual terms of the financial instrument but excluding future credit losses. The calculation includes all amounts paid or received by the Group that are an integral part of the effective interest rate of a financial instrument, including transaction costs and all other premiums or discounts.

(b) Non-interest income

(i) Fee income

Fee income is earned from a diverse range of services provided by the Group to its customers and is accounted for as follows:

- income earned on the execution of a significant act is recognised as revenue when the act is completed (for example, fees arising from negotiating, or participating in the negotiation of, a transaction for a third party); and
- income earned from the provision of services is recognised as revenue when the services are provided (for example, asset management services).

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

(a) Net trading income

Net trading income comprises all gains and losses from changes in the fair value of financial assets and financial liabilities held for trading, together with the related dividend. Gains or losses arising from changes in fair value of derivatives are recognised in Net trading income to the extent as described in the accounting policy set out in note 2(i). Gains and losses on foreign exchange trading and other transactions are also reported as Net trading income except for those gains and losses on translation of foreign currencies recognised in other comprehensive income and accumulated separately in equity in the foreign exchange reserve in accordance with the accounting policy set out in note 2(v).

(b) Net income from financial instruments designated at fair value

Net income/(expense) from financial instruments designated at fair value comprises all gains and losses from changes in the fair value of financial assets and financial liabilities designated at fair value, including derivatives managed in conjunction with the financial assets and liabilities designated at fair value. Dividends arising on those financial instruments are also included.

(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.

NOTES TO THE FINANCIAL STATEMENTS

2. Significant accounting policies continued

(b) Non-interest income continued

(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.

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.

When applying a model with observable inputs, estimates are made to reflect uncertainties in fair values resulting from a lack of market data inputs, for example, as a result of illiquidity in the market. For these instruments, the fair value measurement is less reliable. Inputs into valuations based on observable data are inherently uncertain because there is little or no current market data available from which to determine the level at which an arm's length transaction would occur under normal business conditions. However, in most cases there is some market data available on which to base a determination of fair value, for example historical data, and the fair values of most financial instruments are based on some market observable inputs even when observable inputs are significant.

The Group's details of valuation of financial instruments is depicted in note 51 "Fair value of financial instruments".

2. Significant accounting policies continued

(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".

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.

2. Significant accounting policies continued

(h) Financial instruments designated at fair value continued

– 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 ("ECL") 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 unlikelihood 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.

NOTES TO THE FINANCIAL STATEMENTS

2. Significant accounting policies continued

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

Write-off

Financial assets (and the related impairment allowances) are normally written off, either partially or in full, when there is no realistic prospect of recovery. Where loans are secured, this is generally after receipt of any proceeds from the realisation of collateral. In circumstances where the net realisable value of any collateral has been determined and there is no reasonable expectation of further recovery, write-off may be earlier.

Renegotiation

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

A loan that is renegotiated is derecognised if the existing agreement is cancelled and a new agreement is made on substantially different terms or if the terms of an existing agreement are modified such that the renegotiated loan is a substantially different financial instrument. Any new loans that arise following derecognition events in these circumstances are considered to be POCI and will continue to be disclosed as renegotiated loans.

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

Loan modifications 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 judgements, 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:

2. Significant accounting policies continued

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

Significant increase in credit risk (stage 2) continued

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

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

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

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

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.

2. Significant accounting policies continued

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

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.

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

Model	Regulatory capital	HKFRS 9
PD	<ul style="list-style-type: none"> – Through the cycle (represents long-run average PD throughout a full economic cycle) – The definition of default includes a backstop of 90+ days past due – Regulatory floors may apply according to regulatory requirements 	<ul style="list-style-type: none"> – Point in time (based on current conditions, adjusted to take into account estimates of future conditions that will impact PD) – An obligor/an account being 90 days past due or above is considered as defaulted – No floors is required under HKFRS 9
EAD	<ul style="list-style-type: none"> – Cannot be lower than current balance 	<ul style="list-style-type: none"> – Amortisation captured for term products
LGD	<ul style="list-style-type: none"> – Downturn LGD (consistent losses expected to be suffered during a severe but plausible economic downturn) – Regulatory floors may apply according to regulatory requirements – Discounted using cost of capital – All collection costs included 	<ul style="list-style-type: none"> – Expected LGD (based on estimate of loss given default including the expected impact of future economic conditions such as changes in value of collateral) – No floors is required under HKFRS 9 – Discounted using the effective interest rate of the loan – Only costs associated with obtaining/selling collateral included
Other		<ul style="list-style-type: none"> – Discounted back from point of default to balance sheet date

2. Significant accounting policies continued

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

Measurement of ECL continued

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" on pages 57-64.

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.

2. Significant accounting policies continued

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

Critical accounting estimates and judgements continued

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 as at 31 December 2019. As a result, the adoption of HKFRS 16 does not have a significant impact in this regard.

(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.

2. Significant accounting policies continued

(n) Premises, plant and equipment continued

(i) Land and buildings continued

Revaluations are performed by professionally qualified valuers, on a market basis, with sufficient regularity to ensure that the net carrying amount does not differ materially from the fair value at the reporting date. Surpluses arising on revaluation are credited firstly to the income statement to the extent of any deficits arising on revaluation previously charged to the income statement in respect of the same land and buildings, and are thereafter taken to other comprehensive income and are accumulated separately in the "Premises revaluation reserve". Deficits arising on revaluation, are firstly set off against any previous revaluation surpluses included in the "Premises revaluation reserve" in respect of the same land and buildings, and are thereafter recognised in the income statement.

Depreciation is calculated to write off the valuation of the land and buildings over their estimated useful lives as follows:

- freehold land is not depreciated;
- leasehold land is depreciated over the unexpired terms of the leases; and
- buildings and improvements thereto are depreciated at the greater of 2% per annum on the straight-line basis or over the unexpired terms of the leases or over the remaining estimated useful lives of the buildings.

On revaluation of the land and buildings, depreciation accumulated during the year will be eliminated. Depreciation charged on revaluation surplus of the land and buildings is transferred from "Premises revaluation reserve" to "Retained profits".

On disposal of the land and buildings, the profit and loss is calculated as the difference between the net sales proceeds and the net carrying amount and recognised in the income statement. Surpluses relating to the land and buildings disposed of included in the "Premises revaluation reserve" are transferred as movements in reserves to "Retained profits".

The land owned by Hong Kong Government permits its use under leasehold arrangements. Similar arrangements exist in mainland China. The Group accounts for its interests in own use of the leasehold land as owned assets.

(ii) Other plant and equipment

Furniture, plant and equipment, are stated at cost less depreciation calculated on the straight-line basis to write off the assets over their estimated useful lives, which are generally between 3 and 20 years. On disposal, the profit and loss is calculated as the difference between the net sales proceeds and the net carrying amount.

Plant and equipment are subject to review for impairment if there are events or changes in circumstances that indicate that the carrying amount may not be recoverable.

(o) Goodwill and intangible assets

(i) Goodwill

Goodwill arises on business combinations, including the acquisition of subsidiaries or associates when the cost of acquisition exceeds the fair value of the Group's share of the identifiable assets, liabilities and contingent liabilities acquired and is reported in the Consolidated Balance Sheet. If the Group's interest in the fair value of the identifiable assets, liabilities and contingent liabilities of an acquired business is greater than the cost of acquisition, the excess is recognised immediately in the income statement. Goodwill on acquisitions of associates is included in "Interest in associates" and is not tested separately for impairment.

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.

NOTES TO THE FINANCIAL STATEMENTS

2. Significant accounting policies continued

(o) Goodwill and intangible assets continued

(i) Goodwill continued

At the date of disposal of a business, attributable goodwill is included in the Group's share of net assets in the calculation of the gain or loss on disposal.

(ii) Intangible assets

Intangible assets include PVIF, acquired software licences and capitalised development costs of computer software programmes.

- The PVIF is stated at a valuation determined at the reporting date by using the methodology as described in note 2(t).
- Computer software acquired is stated at cost less amortisation and impairment allowances. Amortisation of computer software is charged to the income statement over its estimated useful life. Costs incurred in the development phase of a project to produce application software for internal use are capitalised and amortised over the software's estimated useful life, usually five years.

Intangible assets that have an indefinite estimated useful life or are not yet ready for use are tested for impairment annually. Intangible assets that have a finite estimated useful life, except for the PVIF, are stated at cost less amortisation and accumulated impairment losses and are amortised over their estimated useful lives. Estimated useful life is the lower of legal duration and expected economic life. Intangible assets are subject to impairment review if there are events or changes in circumstances that indicate that the carrying amount may not be recoverable.

(p) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Income tax is recognised in the income statement except to the extent that it relates to items recognised in other comprehensive income or directly in equity, in which case it is recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable profits for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years. Current tax assets and liabilities are settled on an individual taxable entity basis.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purpose and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits. Deferred tax assets are recognised to the extent that it is probable that taxable profits will be available, against which deductible temporary differences can be utilised at each reporting date.

Deferred tax is calculated using the tax rates that are expected to apply in the periods in which the assets will be realised or the liabilities settled. Deferred tax assets and liabilities are not discounted. Deferred tax assets and liabilities are offset when they arise in the same tax reporting group and relate to income taxes levied by the same taxation authority, and when a legal right to offset exists in the entity.

(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.

2. Significant accounting policies continued

(q) Employee benefits continued

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 adjusted for unrecognised past service costs. In the case of a defined benefit asset, it is limited to unrecognised past service costs plus the present value of available refunds and reductions in future contributions to the plan.

(r) Provisions

Provisions are recognised when it is probable that an outflow of economic benefits will be required to settle a present legal or constructive obligation arising from past events and a reliable estimate can be made as to the amount of the obligation. Contingent liabilities, which include certain guarantees and letters of credit pledged as collateral security, are possible obligations that arise from past events whose existence will be confirmed only by the occurrence, or non-occurrence, of one or more uncertain future events not wholly within the control of the Group; or are present obligations that have arisen from past events but are not recognised because it is not probable that settlement will require the outflow of economic benefits, or because the amount of the obligations cannot be reliably measured. Contingent liabilities are not recognised in the financial statements but are disclosed unless the probability of settlement is remote.

(s) Financial guarantees

Financial guarantees are contracts that require the Group to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the terms of the loans or debt instruments.

Financial guarantee liabilities are initially recognised at their fair value, and subsequently carried at the higher of:

- the amount determined in accordance with the expected credit loss model under HKFRS 9 "*Financial Instruments*" and
- the amount initially recognised less, where appropriate, the cumulative amount of income recognised in accordance with the principles of HKFRS 15 "*Revenue from Contracts with Customers*".

Financial guarantees are included within other liabilities.

(t) Insurance contracts

Through its insurance subsidiaries, 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.

NOTES TO THE FINANCIAL STATEMENTS

2. Significant accounting policies continued

(t) Insurance contracts continued

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.

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.

2. Significant accounting policies continued

(u) Investment contracts

Customer liabilities under linked investment contracts are measured at fair value and reported under "Financial liabilities designated at fair value through profit or loss". 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". 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.

(w) Operating segments

The Group's operating segments are determined to be customer group segment because the chief operating decision maker uses customer group information in order to make decisions about allocating resources and assessing performance.

HKFRS 8 "*Operating Segments*" requires segmental disclosure to be based on the way that the Group's chief operating decision maker regards and manages the Group, with the amounts reported for each reportable segment being the measures reported to the Group's chief operating decision maker for the purpose of assessing segmental performance and making decision about operating matters.

(x) Related parties

For the purposes of these financial statements, parties are considered to be related to the Group if the Group has the ability, directly or indirectly, to control the party or exercise significant influence over the party in making financial and operating decisions, or vice versa, or where the Group and the party are members of the same group. Related parties may be individuals (being members of key management personnel, significant shareholders and/or their close family members) or other entities which are under the significant influence of related parties of the Group or post-employment benefit scheme. Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group and its holding companies, directly or indirectly, including any directors (whether executive or otherwise) and Executive Committee members of the Group and its holding companies.

NOTES TO THE FINANCIAL STATEMENTS

3. Interest income/interest expense

(a) Interest income

	2019	2018
Interest income arising from:		
– financial assets that are not at fair value through profit and loss	43,214	36,711
– trading assets	927	874
– financial assets designated and otherwise mandatorily measured at fair value through profit or loss	49	48
	44,190	37,633
of which:		
– interest income from impaired financial assets	35	41

(b) Interest expense

	2019	2018
Interest expense arising from:		
– financial liabilities that are not at fair value through profit and loss	9,915	5,126
– trading liabilities	628	682
– financial liabilities designated at fair value	1,392	1,778
	11,935	7,586
of which:		
– interest expense from subordinated liabilities	420	–

4. Net fee income

	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Other	Total
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
2018					
– securities broking and related services	1,514	166	24	–	1,704
– retail investment funds	1,662	20	–	–	1,682
– insurance	511	86	64	–	661
– account services	330	191	6	–	527
– remittances	89	492	38	–	619
– cards	1,383	1,602	29	–	3,014
– credit facilities	25	438	137	–	600
– trade services	–	419	27	–	446
– other	75	79	34	228	416
Fee income	5,589	3,493	359	228	9,669
Fee expense	(1,081)	(1,453)	(59)	(9)	(2,602)
	4,508	2,040	300	219	7,067

4. Net fee income continued

	2019	2018
of which:		
Net fee income, other than amounts included in determining the effective interest rate, arising from financial assets or financial liabilities that are not held for trading nor designated at fair value	2,270	2,247
– fee income	4,624	4,608
– fee expense	(2,354)	(2,361)
Net fee income on trust and other fiduciary activities where the Group holds or invests assets on behalf of its customers	794	870
– fee income	884	943
– fee expense	(90)	(73)

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

	2019	2018
Net trading income	2,198	1,936
– trading income	2,197	1,928
– other trading income – hedging ineffectiveness		
– on cash flow hedges	–	–
– on fair value hedges	1	8
Net income/(expense) from financial instruments designated at fair value through profit or loss	(75)	207
Net income/(expense) from assets and liabilities of insurance businesses measured at fair value through profit or loss	1,589	(437)
– financial assets held to meet liabilities under insurance and investment contracts	1,615	(440)
– liabilities to customers under investment contracts	(26)	3
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	(10)	(1)
	3,702	1,705

6. Gains less losses from financial investments

	2019	2018
Net gains/(losses) from disposal of debt securities measured at amortised cost	(4)	33
Net gains from disposal of debt securities measured at fair value through other comprehensive income	26	24
	22	57

7. Dividend income

	2019	2018
Dividend income:		
– listed investments	130	124
– unlisted investments	13	22
	143	146

8. Net insurance premium income

	Non-linked	Unit-linked	Total
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
2018			
Gross insurance premium income	16,548	3	16,551
Reinsurers' share of gross insurance premium income	(2,021)	–	(2,021)
Net insurance premium income	14,527	3	14,530

9. Other operating income

	2019	2018
Rental income from investment properties	342	341
Movement in present value of in-force long-term insurance business (note 33(a))	4,559	1,324
Net losses from disposal of fixed assets	(7)	(5)
Net losses from the derecognition of loans and advances to customers measured at amortised cost	(3)	(4)
Others	223	224
	5,114	1,880

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

	Non-linked	Unit-linked	Total
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
2018			
Claims, benefits and surrenders paid	13,999	14	14,013
Movement in liabilities	2,266	(20)	2,246
Gross claims and benefits paid and movement in liabilities to policyholders	16,265	(6)	16,259
Reinsurers' share of claims, benefits and surrenders paid	(1,404)	–	(1,404)
Reinsurers' share of movement in liabilities	(638)	–	(638)
Reinsurers' share of claims and benefits paid and movement in liabilities to policyholders	(2,042)	–	(2,042)
Net insurance claims and benefits paid and movement in liabilities to policyholders	14,223	(6)	14,217

11. Change in expected credit losses and other credit impairment charges

	2019	2018
Loans and advances to banks and customers	1,684	1,023
– new allowances net of allowance releases	1,773	1,153
– recoveries of amounts previously written off	(106)	(143)
– other movements	17	13
Loan commitments and guarantees	99	(25)
Other financial assets	54	(2)
	1,837	996

12. Operating expenses

	2019	2018
Employee compensation and benefits:		
– salaries and other costs*	5,744	5,225
– retirement benefit costs		
– defined benefit scheme (note 48(a))	192	172
– defined contribution scheme (note 48(b))	293	259
	6,229	5,656
General and administrative expenses:		
– rental expenses	82	611
– other premises and equipment	1,466	1,498
– marketing and advertising expenses	423	526
– other operating expenses	2,721	2,390
	4,692	5,025
Depreciation of premises, plant and equipment (note 32)	1,444	1,363
Depreciation of right-of-use assets	528	N/A
Amortisation of intangible assets (note 33)	164	124
	13,057	12,168
* of which:		
share-based payments (note 49(d))	29	45
Cost efficiency ratio	30.0%	29.5%

13. The emoluments of the five highest paid individuals

(a) The aggregate emoluments

	2019	2018
Salaries, allowances and benefits in kind	28	25
Retirement scheme contributions	2	2
Variable bonuses		
– Cash bonus	16	15
– Share-based payment	17	17
	63	59

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

	2019 Number of Individuals	2018 Number of Individuals
HK\$		
6,000,001 – 6,500,000	1	1
7,000,001 – 7,500,000	1	2
7,500,001 – 8,000,000	1	–
12,000,001 – 12,500,000	–	1
16,000,001 – 16,500,000	1	–
25,500,001 – 26,000,000	–	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 (2018: two) Executive Directors which are included in note 14. There is no Non-executive Director included in the table above (2018: 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								Total 2018 '000
	Fees '000	Salaries, allowances and benefits in kind ⁽⁶⁾ '000	Contribution to retirement benefit schemes ⁽⁴⁾ '000	Variable bonus ⁽⁵⁾				Total 2019 '000	
				Cash		Shares			
				Deferred '000	Non- deferred '000	Deferred '000	Non- deferred '000		
Executive Directors									
Ms Louisa Cheang, Chief Executive ⁽¹⁾	–	11,268	685	4,128	2,691	4,672	2,691	26,135	25,792
Ms Margaret W H Kwan ⁽¹⁾	–	4,102	171	664	981	722	981	7,621	7,455
Non-Executive Directors									
Dr Raymond K F Ch'ien ⁽³⁾	800	–	–	–	–	–	–	800	800
Dr John C C Chan ⁽³⁾	650	–	–	–	–	–	–	650	650
Mr Nixon Chan	500	–	–	–	–	–	–	500	500
Ms L Y Chiang ⁽³⁾	740	–	–	–	–	–	–	740	640
Mr Kenneth S Y Ng	680	–	–	–	–	–	–	680	500
Dr Fred Zulu Hu ⁽³⁾ (Resigned on 8 May 2018)	–	–	–	–	–	–	–	–	275
Dr Henry K S Cheng ⁽³⁾ (Resigned on 10 May 2018)	–	–	–	–	–	–	–	–	208
Ms Irene Y L Lee ⁽³⁾	970	–	–	–	–	–	–	970	920
Ms Sarah C Legg ⁽²⁾ (Resigned on 1 Mar 2019)	83	–	–	–	–	–	–	83	500
Dr Eric K C Li ⁽³⁾	970	–	–	–	–	–	–	970	920
Dr Vincent H S Lo	500	–	–	–	–	–	–	500	500
Mr Richard Y S Tang ⁽³⁾ (Resigned on 10 May 2018)	–	–	–	–	–	–	–	–	512
Mr Peter T S Wong ⁽²⁾	560	–	–	–	–	–	–	560	560
Mr Michael W K Wu ⁽³⁾	740	–	–	–	–	–	–	740	733
Ms Kathleen C H Gan ⁽²⁾ (Appointed on 10 May 2019)	321	–	–	–	–	–	–	321	–
Past Directors	–	–	1,657	–	–	–	–	1,657	2,041
	7,514	15,370	2,513	4,792	3,672	5,394	3,672	42,927	43,506
2018	8,218	14,810	3,179	4,707	3,645	5,302	3,645		

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 2019 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\$1.657m in 2019.
- ⁽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

	2019	2018
Statutory audit services	23	22
Non-statutory audit services and others	10	9
	33	31

16. Net surplus on property revaluation

	2019	2018
Surplus of revaluation on investment properties	35	278

17. Tax expense

(a) Taxation in the Consolidated Income Statement represents:

	2019	2018
Current tax – provision for Hong Kong profits tax		
Tax for the year	3,527	3,888
Adjustment in respect of prior years	(62)	19
	3,465	3,907
Current tax – taxation outside Hong Kong		
Tax for the year	47	55
Adjustment in respect of prior years	(11)	–
	36	55
Deferred tax (note 41(b))		
Origination and reversal of temporary differences	490	282
Total tax expense	3,991	4,244

The current tax provision is based on the estimated assessable profit for 2019, 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 (2018: 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:

	2019	2018
Profit before tax	28,813	28,432
Notional tax on profit before tax, calculated at Hong Kong tax rate of 16.5% (2018: 16.5%)	4,754	4,691
Tax effect of:		
– different tax rates in other countries/areas	70	32
– non-taxable income and non-deductible expenses	(591)	(579)
– share of results of associates	(28)	(34)
– others	(214)	134
Actual charge for taxation	3,991	4,244

18. Earnings per share - basic and diluted

The calculation of basic and diluted earnings per share is based on earnings of HK\$24,421m in 2019 (2018: HK\$23,863m), 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 2018).

19. Dividends/Distributions

(a) Dividends attributable to the year:

	2019		2018	
	per share HK\$	HK\$m	per share HK\$	HK\$m
First interim	1.40	2,677	1.30	2,485
Second interim	1.40	2,677	1.30	2,485
Third interim	1.40	2,677	1.30	2,485
Fourth interim	4.00	7,647	3.60	6,883
	8.20	15,678	7.50	14,338

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:

	2019	2018
Fourth interim dividend in respect of the previous year, approved and paid during the year, of HK\$3.60 per share (2018: HK\$3.10 per share)	6,883	5,927

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

	2019	2018
US\$900 million Floating rate perpetual capital instrument (coupon rate at one-year US dollar LIBOR plus 3.84 per cent) ¹	232	418
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	110	–
US\$600 million Fixed to floating rate perpetual capital instrument (coupon rate at 6.0 per cent and then three-month US dollar LIBOR plus 4.06 per cent from the first call date) ²	–	–
	342	418

¹ This subordinated loan was early repaid in the first half of 2019 and distributions were made on repayment.

² These subordinated loans were issued in the first half of 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.

- **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.

20. Segmental analysis continued

(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.

	Retail Banking and Wealth Management	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 value 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

(a) Segmental result continued

	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Other	Total
2018					
Net interest income/(expense)	16,515	9,331	4,566	(365)	30,047
Net fee income	4,508	2,040	300	219	7,067
Net income/(loss) from financial instruments measured at fair through profit or loss	(398)	543	1,518	42	1,705
Gains less losses from financial investments	31	3	23	–	57
Dividend income	–	–	–	146	146
Net insurance premium income	13,513	1,017	–	–	14,530
Other operating income	1,347	264	7	262	1,880
Total operating income	35,516	13,198	6,414	304	55,432
Net insurance claims and benefits paid and movement in liabilities to policyholders	(13,401)	(816)	–	–	(14,217)
Net operating income before change in expected credit losses and other credit impairment charges	22,115	12,382	6,414	304	41,215
Change in expected credit losses and other credit impairment charges	(371)	(602)	(23)	–	(996)
Net operating income	21,744	11,780	6,391	304	40,219
Operating expenses*	(7,391)	(3,205)	(1,071)	(501)	(12,168)
Impairment loss on intangible assets	–	–	–	(104)	(104)
Operating profit/(loss)	14,353	8,575	5,320	(301)	27,947
Net surplus on property revaluation	–	–	–	278	278
Share of profits of associates	204	–	–	3	207
Profit/(Loss) before tax	14,557	8,575	5,320	(20)	28,432
Share of profit/(loss) before tax	51.2%	30.2%	18.7%	(0.1)%	100.0%
Operating profit/(loss) excluding change in expected credit losses and other credit impairment charges	14,724	9,177	5,343	(301)	28,943
* Depreciation/amortisation included in operating expenses	(25)	(3)	(2)	(1,457)	(1,487)
At 31 December 2018					
Total assets	475,964	382,359	661,736	51,238	1,571,297
Total liabilities	931,201	307,798	163,123	7,068	1,409,190
Interest in associates	2,442	–	–	2	2,444
Non-current assets acquired during the year	328	20	2	542	892

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 2019					
Total operating income	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
Year ended 31 December 2018					
Total operating income	53,004	2,200	269	(41)	55,432
Profit before tax	27,887	437	108	–	28,432
At 31 December 2018					
Total assets	1,482,980	106,124	22,103	(39,910)	1,571,297
Total liabilities	1,324,871	93,611	21,093	(30,385)	1,409,190
Equity	158,109	12,513	1,010	(9,525)	162,107
Share capital	9,658	9,857	–	(9,857)	9,658
Interest in associates	2,442	2	–	–	2,444
Non-current assets*	56,235	1,125	9	–	57,369
Contingent liabilities and commitments	428,206	50,274	5,593	–	484,073

* 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 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
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 ¹	–	–	–	–	–	–	–	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

¹ The maturity for subordinated liabilities is based on the earliest date on which the Group is required to pay, i.e. the callable date.

NOTES TO THE FINANCIAL STATEMENTS

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
2018									
Assets									
Cash and balances at central banks	16,421	–	–	–	–	–	–	–	16,421
Trading assets	47,164	–	–	–	–	–	–	–	47,164
Derivative financial instruments	7,319	55	118	30	25	219	375	–	8,141
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	163	1	–	–	–	–	293	12,613	13,070
Placings with and advances to banks	53,785	21,187	3,114	–	–	–	1,100	214	79,400
Loans and advances to customers	92,608	43,195	67,363	52,720	35,289	101,256	241,008	241,017	874,456
Financial investments	88,094	92,691	62,893	12,443	12,578	39,272	51,580	68,981	428,532
Accrued income and other financial assets	21,426	4,708	2,115	261	181	638	–	642	29,971
Financial assets	326,980	161,837	135,603	65,454	48,073	141,385	294,356	323,467	1,497,155
Non-financial assets	–	–	–	–	–	–	–	74,142	74,142
Total assets	326,980	161,837	135,603	65,454	48,073	141,385	294,356	397,609	1,571,297
Liabilities									
Deposits from banks	2,712	–	–	–	–	–	–	–	2,712
Current, savings and other deposit accounts	957,598	110,254	46,208	25,450	13,848	821	236	–	1,154,415
Repurchase agreements – non-trading	410	–	–	–	–	–	–	–	410
Trading liabilities	33,649	–	–	–	–	–	–	–	33,649
Derivative financial instruments	7,547	284	65	63	80	84	147	–	8,270
Financial liabilities designated at fair value	9,101	11,598	6,053	2,019	1,697	1,031	1,510	445	33,454
Certificates of deposit and other debt securities in issue	355	3,393	–	–	–	–	–	–	3,748
Accruals and other financial liabilities	34,354	6,508	2,110	337	118	445	5	–	43,877
Financial liabilities	1,045,726	132,037	54,436	27,869	15,743	2,381	1,898	445	1,280,535
Non-financial liabilities	–	–	–	–	–	–	–	128,655	128,655
Total liabilities	1,045,726	132,037	54,436	27,869	15,743	2,381	1,898	129,100	1,409,190

22. Cash and balances at central banks

	2019	2018
Cash in hand	8,975	7,816
Balances at central banks	4,063	8,605
	13,038	16,421

23. Trading assets

	2019	2018
Treasury bills	24,894	26,700
Other debt securities	22,452	20,448
Debt securities	47,346	47,148
Investment funds	11	16
	47,357	47,164

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	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
Exchange rate	830,511	22,468	852,979	5,265	254	5,519	5,197	542	5,739
Interest rate	388,463	62,699	451,162	1,741	591	2,332	1,766	185	1,951
Equity and other	34,795	–	34,795	290	–	290	580	–	580
At 31 December 2018	1,253,769	85,167	1,338,936	7,296	845	8,141	7,543	727	8,270

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.

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.

The interest rate risk of the Group's fixed rate debt securities issued is managed in a non-dynamic risk management strategy.

(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) Hedging instruments impacted by IBORs reform

Interest Rate Benchmark Reform: Amendments to HKFRS 9 and HKAS 39 *"Financial Instruments"*

Following the request received by the Financial Stability Board, a fundamental review and reform of the major interest rate benchmarks is under way across the world's largest financial markets. This reform was not contemplated when the standard was published, and consequently the HKICPA has published a set of temporary exceptions from applying specific hedge accounting requirements to provide clarification on how the standard should be applied in these circumstances.

Amendments to HKFRS 9 and HKAS 39 were issued in November 2019 and modified specific hedge accounting requirements (the "temporary exceptions"). For example, under the temporary exceptions, Inter-Bank Offered Rates ("IBORs") are assumed to continue unaltered for the purposes of hedge accounting until such time as the uncertainty is resolved.

The application of this set of temporary exceptions is mandatory for accounting periods starting on or after 1 January 2020, but early adoption is permitted and the Group has elected to apply these exceptions for the year ended 31 December 2019. Significant judgement will be required in determining when uncertainty is expected to be resolved and therefore when the temporary exceptions will cease to apply. However, at 31 December 2019, the uncertainty existed and therefore the temporary exceptions applied to all of Group's hedge accounting relationships that reference benchmarks subject to reform or replacement.

24. Derivative financial instruments continued

(c) Hedging instruments impacted by IBORs reform continued

Interest Rate Benchmark Reform: Amendments to HKFRS 9 and HKAS 39 *"Financial Instruments"* continued

The Group has cash flow and fair value hedge accounting relationships that are exposed to different IBORs, predominantly US Dollar LIBOR, Sterling LIBOR, and EURIBOR. Many of the existing derivatives, loans, bonds, and other financial instruments designated in relationships referencing these benchmarks will transition to new Risk-Free Rates ("RFRs") in different ways and at different times. External progress on the transition to RFRs is being monitored, with the objective of ensuring a smooth transition for the Group's hedge accounting relationships. The specific issues arising will vary with the details of each hedging relationship, but may arise due to the transition of existing products included in the designation, a change in expected volumes of products to be issued, a change in contractual terms of new products issued, or a combination of these factors. Some hedges may need to be de-designated and new relationships entered into, while others may survive the market wide benchmarks reform.

The hedge accounting relationships that are affected by the adoption of the temporary exceptions hedge items presented in the Consolidated Balance Sheet as Financial assets designated and otherwise mandatorily measured at fair value through other comprehensive income and Loans and advances to customers.

At 31 December 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 benchmarks reform and impacted by the temporary exceptions.

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

	2019	2018
Debt securities	2	6
Equity shares	6,916	5,472
Investment funds	10,442	6,267
Other	1,411	1,325
	18,771	13,070

26. Placings with and advances to banks

	2019	2018
Balances with banks	5,677	7,765
Placings with and advances to banks maturing within one month	42,253	46,021
Placings with and advances to banks maturing after one month but less than one year	12,717	24,302
Placings with and advances to banks maturing after one year	5,161	1,314
Less: Expected credit losses	(1)	(2)
	65,807	79,400
of which:		
Placings with and advances to central banks	7,616	9,155

There were no overdue advances, impaired advances and rescheduled advances to banks at 31 December 2019 (2018: Nil).

NOTES TO THE FINANCIAL STATEMENTS

27. Loans and advances to customers

(a) Loans and advances to customers

	2019	2018
Gross loans and advances to customers	946,443	877,134
Less: Expected credit losses	(3,513)	(2,678)
	942,930	874,456
	%	%
Expected credit losses as a percentage of gross loans and advances to customers	0.37	0.31

	2019	2018
Gross impaired loans and advances	2,073	2,160
	%	%
Gross impaired loans and advances as a percentage of gross loans and advances to customers	0.22	0.25

(b) Net investments in finance leases

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:

	2019	2018
Finance leases	–	–
Hire purchase contracts	7,407	6,779
	7,407	6,779

	Present value of minimum lease payments receivable	Interest income relating to future periods	Total minimum lease payments receivable
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		
2018			
Amounts receivable:			
– within one year	434	140	574
– over one year but within five years	1,302	488	1,790
– after five years	5,074	939	6,013
	6,810	1,567	8,377
Expected credit losses	(31)		
Net investments in finance leases and hire purchase contracts	6,779		

28. Financial investments

	2019	2018
Financial investments measured at fair value through other comprehensive income:		
– treasury bills	212,041	217,636
– debt securities	125,927	107,400
– equity shares	5,881	4,144
	343,849	329,180
Debt instruments measured at amortised cost:		
– treasury bills	500	1,842
– debt securities	117,435	97,547
Less: Expected credit losses	(80)	(37)
	117,855	99,352
	461,704	428,532

Equity instruments measured at fair value through other comprehensive income

	2019	2018
Type of equity instruments		
– business facilitation	5,881	4,144
At 31 December	5,881	4,144

There was no overdue debt securities at 31 December 2019 (2018: Nil). The Group did not hold any asset-backed securities, mortgage-backed securities and collateralised debt obligations in 2019 and 2018.

There was no financial investments determined to be impaired at 31 December 2019 (2018: Nil).

29. Assets pledged, assets transferred and collateral received

Assets pledged

Financial assets pledged to secure liabilities

	2019	2018
Trading assets and financial investments	44,405	37,591
Amount of liabilities secured	44,685	39,603

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

	2019		2018	
	Carrying amount of transferred assets	Carrying amount of associated liabilities	Carrying amount of transferred assets	Carrying amount of associated liabilities
Repurchase agreement	2,062	1,878	452	410
Securities lending agreements	1,039	–	460	–
	3,101	1,878	912	410

NOTES TO THE FINANCIAL STATEMENTS

29. Assets pledged, assets transferred and collateral received continued

Assets transferred continued

Transferred financial assets not qualifying for full derecognition and associated financial liabilities continued

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

	2019	2018
Fair value of collateral permitted to sell or repledge in the absence of default	5,659	–
Fair value of collateral actually sold or repledged	–	–

30. Subsidiaries

The following is a list of the principal subsidiaries at 31 December 2019:

Name of company	Place of incorporation	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 Finance Limited	Hong Kong SAR	Lending	HK\$1,000,000,000	100%
Hang Seng Credit Limited	Hong Kong SAR	Lending	HK\$200,000,000	100%
Hang Seng Bank (Trustee) Limited	Hong Kong SAR	Trustee service	HK\$3,000,000	100%
Hang Seng (Nominee) Limited	Hong Kong SAR	Nominee service	HK\$100,000	100%
Hang Seng Life Limited*	Hong Kong SAR	Retirement benefits and life assurance	HK\$970,000,000	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%
Haseba Investment Company Limited	Hong Kong SAR	Investment holding	HK\$6,000	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%
Hang Seng Real Estate Management Limited	Hong Kong SAR	Property management	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%

* Inactive

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.

30. Subsidiaries continued

All the above companies are unlisted. All subsidiaries are held directly by the Bank except for Hang Seng Life Limited and Hang Seng Indexes Company Limited. The principal places of operation are the same as the places of incorporation.

Some 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

	2019	2018
Share of net assets	2,520	2,444

The associates are:

Name of company	Place of incorporation and operation	Principal activity	Group's interest in equity capital	Issued equity capital
Unlisted				
Barrowgate Limited	Hong Kong SAR	Property investment	24.64%	HK\$10,000
GZHS Research Co., Ltd.	People's Republic of China	Conduct market/securities analysis and publish research reports	33.00%	RMB44,680,000

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 2019 and 2018.

For the year ended 31 December 2019, the financial results of GZHS was included in the Consolidated Financial Statements based on financial statements drawn up to 30 September 2019, but taking into account any changes in the subsequent period from 1 October 2019 to 31 December 2019 that would materially affect the results. The Group has taken advantage of the provision contained in HKAS 28 (2011) "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
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
2018						
100 per cent	10,456	995	9,461	948	210	738
The Group's effective interest	2,691	247	2,444	262	55	207

At 31 December 2019, 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 (2018: Nil).

32. Property, plant and equipment

	2019	2018
Premises	29,498	29,344
Plant and equipment ¹	1,405	1,166
Other right of use assets	1,459	N/A
Premises, plant and equipment	32,362	30,510
Investment properties	10,121	10,108
	42,483	40,618

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
2019				
Cost or valuation:				
At 1 January	29,344	10,108	5,368	44,820
Additions	215	31	665	911
Disposals	–	–	(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)
Disposals	–	–	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

32. Property, plant and equipment continued

(a) Movement in owned property, plant and equipment continued

	Premises	Investment properties	Plant and equipment	Total
2018				
Cost or valuation:				
At 1 January	27,157	10,166	5,241	42,564
Additions	60	278	261	599
Disposals	–	–	(107)	(107)
Elimination of accumulated depreciation on revalued premises	(936)	–	–	(936)
Surplus on revaluation:				
– credited to premises revaluation reserve	2,458	–	–	2,458
– credited to income statement	–	321	–	321
Transfer	657	(657)	–	–
Exchange adjustments and other	(52)	–	(27)	(79)
At 31 December	29,344	10,108	5,368	44,820
Accumulated depreciation:				
At 1 January	–	–	(3,899)	(3,899)
Charge for the year (note 12)	(936)	–	(427)	(1,363)
Disposals	–	–	102	102
Elimination of accumulated depreciation on revalued premises	936	–	–	936
Exchange adjustments and other	–	–	22	22
At 31 December	–	–	(4,202)	(4,202)
Net book value at 31 December	29,344	10,108	1,166	40,618
Representing:				
– measure at cost	–	–	1,166	1,166
– measure at valuation	29,344	10,108	–	39,452
	29,344	10,108	1,166	40,618

(b) Terms of lease

	Premises		Investment properties	
	2019	2018	2019	2018
Leaseholds				
Held in Hong Kong:				
– long leases (over 50 years unexpired)	2,895	2,911	1,623	1,583
– medium leases (10 to 50 years unexpired)	25,664	25,482	8,093	8,525
– short leases (below 10 years unexpired)	–	–	405	–
Held outside Hong Kong:				
– long leases (over 50 years unexpired)	–	–	–	–
– medium leases (10 to 50 years unexpired)	939	951	–	–
– short leases (below 10 years unexpired)	–	–	–	–
	29,498	29,344	10,121	10,108

NOTES TO THE FINANCIAL STATEMENTS

32. Property, plant and equipment continued

(c) The carrying amount of all premises which have been stated in the balance sheet would have been as follows had they been stated at cost less accumulated depreciation:

	2019	2018
Cost less accumulated depreciation at 31 December	7,022	6,938

(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.

	2019	2018
Direct operating expenses arising from investment properties	35	37
Direct operating expenses arising from investment properties that generated rental income	33	34

The Group's total future minimum lease payments receivable under non-cancellable operating leases are as follows:

	2019	2018
Within one year	257	295
Over one year but within five years	N/A	168
One to two years	124	N/A
Two to three years	27	N/A
Three to four years	9	N/A
Four to five years	3	N/A
After five years	–	N/A
	420	463

(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 6 November 2019, and were updated by C&W for any material changes in the valuation as at 31 December 2019. It was confirmed that there was no material change in value since 6 November 2019. 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 2019, there were no transfers into or out of Level 3 (2018: Nil).

32. Property, plant and equipment continued

(e) Fair value measurement of properties continued

(i) Fair value hierarchy continued

The fair value of 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 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.

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
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)	–
2018		
Unrealised gains or losses recognised in profit or loss relating to those assets held at the end of the reporting period		
– other operating income	–	43
– net surplus on property revaluation	–	278
– depreciation of premises, plant and equipment	(936)	–

(ii) Information about significant unobservable inputs in Level 3 valuations

	Valuation technique(s)	Unobservable input(s)	Range	
			2019	2018
Investment properties	Investment approach	Market yields (reversionary yield)	2.4% to 4.95%	2.4% to 4.95%
		Market rental	HK\$15.5 to HK\$709 per square foot	HK\$16.7 to HK\$804 per square foot
Premises	Direct comparison approach	Premium (discount) on characteristic of the properties	-20% to 20%	-20% to 20%

The fair value measurement for investment properties is positively correlated to the market rental but inversely correlated to the market yields. The valuations for premises held for own use 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 characteristic will result in a higher fair value measurement.

33. Intangible assets

	2019	2018
Present value of in-force long-term insurance business	20,469	15,910
Internally developed software	1,057	434
Acquired software	99	78
Goodwill	329	329
	21,954	16,751

(a) Movement of present value of in-force long-term insurance business ("PVIF")

	2019	2018
At 31 December	15,910	14,574
Impact on transition to HKFRS 9	N/A	12
At 1 January	15,910	14,586
Movement in present value of in-force long-term insurance business (note 9)	4,559	1,324
– Addition from current year new business	2,760	2,642
– Expected return	(1,272)	(1,164)
– Experience variances	32	(152)
– Changes in operating assumptions	72	(871)
– Investment return variances	6	1,263
– Changes in investment assumptions	2,961	(394)
At 31 December	20,469	15,910

The key assumptions used in the computation of PVIF are as follows:

	2019	2018
Risk discount rate	5.4%	5.2%
Expenses inflation	3.0%	3.0%
Average lapse rate:		
– 1st year	2.4%	2.4%
– 2nd year onwards	5.1%	3.8%

The sensitivity of PVIF valuation to changes in individual assumptions at the balance sheet dates is shown in the Management Discussion and Analysis.

(b) Goodwill

	2019	2018
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 2019, there was no impairment of goodwill (2018: 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 2019. The PVIF is determined by discounting future earnings expected from the current business, taking into account factors such as future mortality, lapse rates, levels of expenses and risk discount rate. The above details are shown in note 33(a) and the Management Discussion and Analysis.

33. Intangible assets continued

(c) Movement of internally developed application software and acquired software

	2019	2018
Cost:		
At 1 January	1,754	1,600
Additions	823	293
Amounts written off	(211)	(129)
Exchange and others	(3)	(10)
At 31 December	2,363	1,754
Accumulated amortisation:		
At 1 January	(1,242)	(1,149)
Charge for the year (note 12)	(164)	(124)
Impairment	(10)	(104)
Amounts written off	211	129
Exchange and others	(2)	6
At 31 December	(1,207)	(1,242)
Net book value at 31 December	1,156	512

34. Other assets

	2019	2018
Items in the course of collection from other banks	5,650	7,236
Bullion	9,394	5,257
Prepayments and accrued income	4,503	4,276
Acceptances and endorsements	8,336	6,868
Less: Expected credit losses	(8)	(5)
Reinsurers' share of liabilities under insurance contracts (note 40)	8,503	8,788
Settlement accounts	4,175	4,796
Cash collateral	2,216	1,838
Other accounts	3,661	5,246
	46,430	44,300

Other accounts included "Assets held for sale" of HK\$19m (2018: HK\$18m). It also included "Retirement benefit assets" of HK\$26m (2018: HK\$13m).

There was no accumulated loss recognised directly in equity relating to assets held for sale for 2019 and 2018. There was no significant impaired, overdue or rescheduled other assets at the year-end of 2019 and 2018.

35. Current, savings and other deposit accounts

	2019	2018
Current, savings and other deposit accounts:		
– as stated in Consolidated Balance Sheet	1,203,458	1,154,415
– structured deposits reported as financial liabilities designated at fair value (note 37)	24,498	28,594
	1,227,956	1,183,009
By type:		
– demand and current accounts	99,431	106,096
– savings accounts	670,573	707,158
– time and other deposits	457,952	369,755
	1,227,956	1,183,009

36. Trading liabilities

	2019	2018
Short positions in securities	37,976	33,649

37. Financial liabilities designated at fair value

	2019	2018
Certificates of deposit in issue (note 38)	2,014	2,008
Structured deposits (note 35)	24,498	28,594
Other structured debt securities in issue (note 38)	2,639	2,404
Liabilities to customers under investment contracts	429	448
	29,580	33,454

At 31 December 2019, the accumulated loss in fair value attributable to changes in own credit risk for financial liabilities designated at fair value was HK\$5m (2018: accumulated gain HK\$1m).

38. Certificates of deposit and other debt securities in issue

	2019	2018
Certificates of deposit and other debt securities in issue:		
– as stated in Consolidated Balance Sheet	17,190	3,748
– certificates of deposit in issue designated at fair value (note 37)	2,014	2,008
– other structured debt securities in issue reported as financial liabilities designated at fair value (note 37)	2,639	2,404
	21,843	8,160
By type:		
– certificates of deposit in issue	19,204	5,756
– other debt securities in issue	2,639	2,404
	21,843	8,160

39. Other liabilities

	2019	2018
Items in the course of transmission to other banks	6,751	10,053
Accruals	4,634	4,190
Acceptances and endorsements	8,336	6,868
Retirement benefit liabilities (note 48(a))	670	834
Settlement accounts	8,410	17,213
Cash collateral	688	995
Lease liabilities	1,438	N/A
Other	4,256	5,094
	35,183	45,247

40. Liabilities under insurance contracts

	Gross	Reinsurers' share ¹	Net
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
Foreign exchange and other movements	–	–	–
At 31 December	69	–	69
	132,120	(8,503)	123,617
2018			
Non-linked			
At 1 January	115,464	(8,232)	107,232
Claims and benefits paid	(13,999)	1,404	(12,595)
Increase in liabilities to policyholders	16,265	(2,042)	14,223
Foreign exchange and other movements	2,404	82	2,486
At 31 December	120,134	(8,788)	111,346
Unit-linked			
At 1 January	81	–	81
Claims and benefits paid	(14)	–	(14)
Decrease in liabilities to policyholders	(6)	–	(6)
Foreign exchange and other movements	–	–	–
At 31 December	61	–	61
	120,195	(8,788)	111,407

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:

	2019	2018
Included in "Other assets":		
Current taxation recoverable	49	47
Deferred tax assets	110	111
	159	158
Current tax liabilities:		
Provision for Hong Kong profits tax	4,140	673
Provision for taxation outside Hong Kong	19	23
	4,159	696
Deferred tax liabilities	7,083	6,394
	11,242	7,090

(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 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
At 31 December 2017	207	3,743	(108)	(37)	(19)	2,019	5,805
Impact on transition to HKFRS 9	–	–	(178)	–	–	1	(177)
At 1 January 2018	207	3,743	(286)	(37)	(19)	2,020	5,628
Exchange adjustment and others	1	(4)	(30)	(3)	–	11	(25)
Charged/(credited) to income statement (note 17(a))	4	(110)	(51)	–	–	439	282
Charged/(credited) to reserves	–	410	–	87	17	(116)	398
At 31 December 2018	212	4,039	(367)	47	(2)	2,354	6,283

(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\$780m (2018: HK\$1,236m). Of these amounts, HK\$241m (2018: HK\$239m) have no expiry date and the remaining will expire within 10 years.

There was no other temporary difference for which no deferred tax asset is recognised in the balance sheet as at 31 December 2019 (2018: Nil).

(d) Deferred tax liabilities not recognised

There were no deferred tax liabilities not recognised as at 31 December 2019 (2018: Nil).

42. Subordinated liabilities

Nominal value	Description	2019	2018
HK\$5,460 million	Floating rate subordinated loan due May 2028, callable from 2027 ¹	5,460	–
HK\$4,680 million	Floating rate subordinated loan due June 2029, callable from 2028 ²	4,680	–
HK\$6,240 million	Floating rate subordinated loan due June 2026, callable from 2025 ³	6,240	–
US\$400 million	Floating rate subordinated loan due June 2030, callable from 2029 ⁴	3,114	–
		19,494	–
Representing:			
- measured at amortised cost		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.

During the year, the Bank has issued non-capital loss-absorbing capacity debt instruments totalling HK\$19.5bn which rank higher than additional tier 1 capital instruments in the event of a winding-up.

The Bank has not had any defaults of principal, interest or other breaches with respect to its debt instruments during 2019.

43. Share capital

	2019		2018	
	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	2019	2018
US\$900 million	Floating rate perpetual capital instrument callable from December 2019 ¹	–	6,981
US\$900 million	Fixed to floating rate perpetual capital instrument callable from September 2024 ¹	7,044	–
US\$600 million	Fixed to floating rate perpetual capital instrument callable from June 2024 ²	4,700	–
		11,744	6,981

¹ The US\$900 million floating rate perpetual capital instrument was cancelled and reissued as fixed to floating rate perpetual capital instrument in June 2019. 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% 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 and commitments

(a) Off-balance sheet contingent liabilities and commitments

	2019	2018
Contingent liabilities and financial guarantee contracts		
Financial guarantees ¹	3,825	4,168
Performance and other guarantees ²	13,959	12,048
Other contingent liabilities	59	172
	17,843	16,388
Commitments³		
Documentary credits and short-term trade-related transactions	2,570	3,310
Forward asset purchases and forward deposits placed	4,356	2,895
Undrawn formal standby facilities, credit lines and other commitments to lend	491,744	461,480
	498,670	467,685

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\$347,121m of commitments at 31 December 2019 (2018: HK\$314,620m) 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. The amount of the loan commitments shown above reflects, where relevant, the expected level of take-up of pre-approved facilities. 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 2019, capital commitments, mainly related to the commitment for renovation of branches and offices, were HK\$851m (2018: HK\$639m).

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” for derivatives and reverse repurchase/repurchase, stock borrowing/lending and similar arrangements 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
- cash and non-cash collaterals are received and pledged in respect of the transactions described above.

	Amounts subject to enforceable netting arrangements								
	Effects of offsetting in the balance sheet			Amounts not set off in the balance sheet				Amounts not subject to enforceable netting arrangements ¹	Balance sheet total
	Gross amounts	Amounts offset	Net Amounts reported in the balance sheet	Financial instruments	Non-cash collateral	Cash collateral	Net amount		
Financial assets²									
Derivatives	6,568	–	6,568	(5,254)	–	(527)	787	770	7,338
Reverse repos, stock borrowing and similar agreements classified as:	5,673	–	5,673	–	(5,673)	–	–	986	6,659
– trading assets	–	–	–	–	–	–	–	–	–
– non-trading assets	5,673	–	5,673	–	(5,673)	–	–	986	6,659
Other assets	2,079	(1,625)	454	–	–	–	454	–	454
At 31 December 2019	14,320	(1,625)	12,695	(5,254)	(5,673)	(527)	1,241	1,756	14,451²
Derivatives	7,161	–	7,161	(4,937)	–	(434)	1,790	980	8,141
Reverse repos, stock borrowing and similar agreements classified as:	–	–	–	–	–	–	–	–	–
– trading assets	–	–	–	–	–	–	–	–	–
– non-trading assets	–	–	–	–	–	–	–	–	–
Other assets	1,112	(889)	223	–	–	–	223	–	223
At 31 December 2018	8,273	(889)	7,384	(4,937)	–	(434)	2,013	980	8,364²
Financial liabilities³									
Derivatives	6,618	–	6,618	(5,254)	–	(415)	949	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)	–	(415)	953	2,722	9,344³
Derivatives	7,299	–	7,299	(4,937)	–	(1,421)	941	971	8,270
Repos, stock lending and similar agreements classified as:	–	–	–	–	–	–	–	410	410
– trading liabilities	–	–	–	–	–	–	–	–	–
– non-trading liabilities	–	–	–	–	–	–	–	410	410
Other liabilities	966	(889)	77	–	–	–	77	–	77
At 31 December 2018	8,265	(889)	7,376	(4,937)	–	(1,421)	1,018	1,381	8,757³

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\$6,520m (2018: HK\$1,927m).

³ Amounts presented in the balance sheet included balances due to HSBC entities of HK\$2,073m (2018: HK\$2,144m).

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 equities 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

	2019	2018
At 1 January	(1,451)	(748)
Actuarial gains/(losses) recognised in other comprehensive income	252	(703)
At 31 December	(1,199)	(1,451)

48. Employee retirement benefits continued

(a) Defined benefit schemes continued

(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 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 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 Consolidated Balance Sheet (included in “Other liabilities”)	4,407	(5,077)	(670)
Retirement benefit assets recognised in Consolidated 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)	

The Group expects to make HK\$118m of contributions to defined benefit schemes during 2020.

NOTES TO THE FINANCIAL STATEMENTS

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 2018	5,019	(5,055)	(36)
Current service cost (note 12)	–	(166)	(166)
Interest income/(cost) on the defined benefit scheme asset/(liability) (note 12)	83	(83)	–
Remeasurement effects recognised in other comprehensive income	(270)	(433)	(703)
– Actuarial gains/(losses) from changes in demographic assumptions	–	(9)	(9)
– Actuarial gains/(losses) from changes in financial assumptions	–	(273)	(273)
– Actuarial gains/(losses) from experience	(270)	(151)	(421)
Contributions by the Group	120	–	120
Benefits paid	(490)	490	–
Others	(30)	–	(30)
Administrative costs and taxes paid by scheme (note 12)	(6)	–	(6)
At 31 December 2018	4,426	(5,247)	(821)
Retirement benefit liabilities recognised in balance sheet (included in “Other liabilities”)	4,266	(5,100)	(834)
Retirement benefit assets recognised in balance sheet (included in “Other accounts” of “Other assets”)	160	(147)	13
Present value of defined benefit obligation relating to:			
– Actives		(5,103)	
– Pensioners		(144)	

(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:

	2020	2021	2022	2023	2024	2025-2029
HSBDBS	392	594	578	489	457	2,025
HSBPS	11	11	10	9	9	37

The duration of the principal scheme HSBDBS is 6.1 years (2018: 6.3 years) under the disclosure assumptions adopted.

48. Employee retirement benefits continued

(a) Defined benefit schemes continued

(iv) Fair value of scheme assets by asset classes

	Value	Quoted market price in active market	Of which placed with the Group
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
2018			
Fair value of scheme assets			
– Index ETFs/Funds	1,217	1,217	–
– Bonds	3,004	3,004	–
– Other*	205	205	101
	4,426	4,426	101

* Other mainly consists of cash and deposits.

(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 2019 were performed by Joseph Yip, 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 (2018: 97 per cent) of the benefits accrued to scheme members, after allowing for expected future increases in salaries, and the resulting surplus amounted to HK\$87m (deficit in 2018: HK\$124m). On a wind-up basis, the actuarial value of the HSBDBS assets represented 104 per cent (2018: 99 per cent) of the members' vested benefits, based on salaries at that date, and the resulting surplus amounted to HK\$155m (deficit in 2018: HK\$24m).

The determinations for actuarial funding valuation purposes are based on different methods and assumptions from those used for financial reporting purposes, and as a result should neither be compared nor related to other determinations included in these financial statements.

NOTES TO THE FINANCIAL STATEMENTS

48. Employee retirement benefits continued

(a) Defined benefit schemes continued

(v) The Principal Scheme's key actuarial financial assumptions continued

The present value of the principal scheme's obligation was a final lump sum salary of HK\$5,077m (2018: HK\$5,100m). 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 %
2019	
Discount rate	1.75
Expected rate of salary increases	4.00
<i>of which:</i>	
– 2020	4.00
– thereafter	4.00
2018	
Discount rate	1.90
Expected rate of salary increases	4.00
<i>of which:</i>	
– 2019	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.

(vi) Actuarial assumption sensitivities

The discount rate and rate of pay 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	
	2019	2018
Discount rate		
– change in retirement benefit obligation at year end from a 25bps increase	(76)	(78)
– change in retirement benefit obligation at year end from a 25bps decrease	78	81
– change in 2020/2019 retirement benefit cost from a 25bps increase	(2)	(2)
– change in 2020/2019 retirement benefit cost from a 25bps decrease	2	2
Rate of pay increase		
– change in retirement benefit obligation at year end from a 25bps increase	86	88
– change in retirement benefit obligation at year end from a 25bps decrease	(84)	(86)
– change in 2020/2019 retirement benefit cost from a 25bps increase	5	5
– change in 2020/2019 retirement benefit cost from a 25bps decrease	(5)	(5)

48. Employee retirement benefits continued

(b) Defined contribution schemes

The principal defined contribution scheme for Group employees joining on or after 1 April 1999 is the HSBC Group Hong Kong Local Staff Defined Contribution Scheme. The Group also operates the Hang Seng Insurance Company Limited Employees' Provident Fund. 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:

	2019	2018
Amounts charged to the income statement (note 12)	293	259

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\$0.04m (2018: HK\$0.1m).

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	<ul style="list-style-type: none"> – Vesting of awards generally subject to continued employment with the Group – Vesting often staggered over a period ranging from three to five years – Certain shares 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
International Employee Share Purchase Plan	<ul style="list-style-type: none"> – The plan was introduced in 2013 – Eligible employees make contributions up to the local equivalent of GBP250 per month which are applied in the purchase of shares on a quarterly basis. For every three shares purchased, the employee is granted a matching award by the HSBC Group of one share – The matching award vests subject to continued employment with the Group and retention of the purchased shares in the plan until the third anniversary of the start of the relevant plan year

(a) Savings-related share option plan

The number of options, weighted average exercise price, and the weighted average remaining contractual life for options outstanding at the balance sheet date, are as follows:

Option scheme with exercise price set in Hong Kong dollars

	2019		2018	
	Weighted average exercise price HK\$	Number ('000)	Weighted average exercise price HK\$	Number ('000)
Outstanding at 1 January	–	–	55.47	10
Exercised in the year	–	–	55.47	(6)
Less: Cancellation/ Lapsed in the year	–	–	55.47	(4)
Outstanding at 31 December	–	–	55.47	–

The weighted average share price at the date the options were exercised was HK\$83.67 in 2018.

NOTES TO THE FINANCIAL STATEMENTS

49. Share-based payments continued

(b) HSBC share awards

	2019 Number (‘000)	2018 Number (‘000)
Outstanding at 1 January	917	1,018
Additions during the year	654	513
Less: Released/ Lapsed in the year	(587)	(614)
Outstanding at 31 December	984	917

The closing price of the HSBC Holdings plc share at 31 December 2019 was £5.92 (2018: £6.47).

The weighted average remaining vesting period as at 31 December 2019 was 0.60 years (2018: 0.62 years).

(c) 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.

(d) Reconciliation of total incentive awards to income statement charge

	2019	2018
Restricted share awards	29	45
Savings-related share awards and option plans	–	–
Income statement charge (note 12)	29	45
Equity-settled share-based payments	27	38
Cash-settled share-based payments	2	7
	29	45

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, acceptance and placement of interbank deposits, correspondent banking transactions, off-balance sheet transactions and the provision of other banking and financial services. The activities were on substantially the same terms, including interest rates and security, as for comparable transactions with third party counterparties.

The Group used the IT service of, and shared an automated teller machine network with, its immediate holding company. The Group also shares the costs of certain IT projects with and used certain processing services of fellow subsidiaries.

The Group maintained a staff retirement benefit scheme for which a fellow subsidiary company acts as trustee and the Group's immediate holding company act 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 the marketing of Mandatory Provident Fund products for its immediate holding company and distributed retail investment funds for a fellow subsidiary company.

During 2019, the Bank has paid coupon on AT1 capital instrument of HK\$342m to its immediate holding company (2018: HK\$418m).

50. Material related-party transactions continued

(a) Immediate holding company and its subsidiaries and fellow subsidiaries continued

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	
	2019	2018	2019	2018
Interest income	401	136	60	6
Interest expense	(542)	(102)	–	–
Other operating income/(expenses)	166	174	(29)	(15)
Operating expenses*	(760)	(639)	(1,961)	(1,247)
Amounts due from:				
Reverse repurchase agreements – non-trading	4,747	–	–	–
Placings with and advances to banks	30,961	8,578	3,928	214
Derivative financial instruments	1,718	1,903	55	24
Other assets	955	462	33	216
	38,381	10,943	4,016	454
Amounts due to:				
Current, savings and other deposit accounts	2,514	2,413	–	–
Deposits from banks	449	936	25	54
Derivative financial instruments	1,986	1,959	87	185
Certificates of deposit and other debt securities in issue	–	3,000	–	–
Subordinated liabilities	19,494	–	–	–
Other liabilities	190	868	269	178
	24,633	9,176	381	417
Derivative contracts:				
Contract amount	440,810	397,020	18,296	16,059

* 2019 operating expenses included payment of HK\$593m (2018: HK\$107m) of software costs which were capitalised as intangible assets in the balance sheet of the Group.

(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:

	2019	2018
Salaries, allowances and benefits in kind	63	60
Retirement scheme contributions	5	5
Variable bonuses		
– Cash bonus	26	28
– Share-based payment	20	21
	114	114

NOTES TO THE FINANCIAL STATEMENTS

50. Material related-party transactions continued

(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:

	2019	2018
For the year		
Interest income	410	568
Interest expense	123	85
Fees and commission income	10	28
Maximum aggregate amount of loans and advances	18,627	28,866
At the year-end		
Loans and advances	17,419	26,089
Deposits	7,926	14,318
Guarantees issued	349	373
Undrawn commitments	1,363	3,112

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.

(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 2019 are shown as below.

	2019		2018	
	Highest balance during the year	Balance at 31 December	Highest balance during the year	Balance at 31 December
– Loans and advances	16,497	15,359	26,290	23,769
– Guarantees issued	348	345	382	369

The above relevant transactions in 2019 and 2018 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.

50. Material related-party transactions continued

(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:

	2019		2018	
	Highest balance during the year	Balance at 31 December	Highest balance during the year	Balance at 31 December
Amounts due from associates [#]	6,782	2,116	7,122	5,106
Amounts due to associates [#]	2,811	396	1,700	419
For the year			2019	2018
Net interest income			112	100
Operating expenses			(9)	(30)

[#] 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 2019 amounted to HK\$673m comprising HK\$668m relating to share option schemes and HK\$5m relating to share award schemes (2018: HK\$669m comprising HK\$668m relating to share option schemes and HK\$1m relating to share award schemes).

NOTES TO THE FINANCIAL STATEMENTS

51. Fair value of financial instruments

(a) Fair value of financial instruments carried at fair value

The accounting policies, control framework and hierarchy used to determine fair values in 2019 are consistent with those applied for the Annual Report 2018. The following table provides an analysis of financial instruments carried at fair value and bases of valuation:

	Fair value hierarchy			Third party total	Amounts with HSBC entities*	Total
	Quoted market price Level 1	Using observable inputs Level 2	With significant unobservable inputs Level 3			
Recurring fair value measurements 2019						
Assets						
Trading assets	43,731	3,626	–	47,357	–	47,357
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	10,607	2,655	5,509	18,771	–	18,771
Derivative financial instruments	307	5,255	3	5,565	1,773	7,338
Financial investments	287,807	53,863	2,179	343,849	–	343,849
Liabilities						
Trading liabilities	37,976	–	–	37,976	–	37,976
Financial liabilities designated at fair value	–	21,839	7,741	29,580	–	29,580
Derivative financial instruments	23	5,366	–	5,389	2,073	7,462
2018						
Assets						
Trading assets	44,591	2,573	–	47,164	–	47,164
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	6,386	2,595	4,089	13,070	–	13,070
Derivative financial instruments	386	5,804	24	6,214	1,927	8,141
Financial investments	284,696	43,197	1,287	329,180	–	329,180
Liabilities						
Trading liabilities	33,649	–	–	33,649	–	33,649
Financial liabilities designated at fair value	–	21,140	12,314	33,454	–	33,454
Derivative financial instruments	29	6,026	71	6,126	2,144	8,270

* Included structured instruments and derivative contracts transacted with HSBC entities which were mainly classified within Level 2 of the valuation hierarchy.

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

	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 31 December 2019								
Transfer from Level 1 to Level 2	–	–	–	–	–	–	–	
Transfer from Level 2 to Level 1	–	–	1,268	–	–	–	–	
At 31 December 2018								
Transfer from Level 1 to Level 2	–	–	–	–	–	–	–	
Transfer from Level 2 to Level 1	55,329	7,217	–	–	–	–	–	

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.

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.

51. Fair value of financial instruments continued

(a) Fair value of financial instruments carried at fair value continued

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.

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.

51. Fair value of financial instruments continued

(a) Fair value of financial instruments carried at fair value continued

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

Effects 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.

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
2019							
Private equity	2,179	–	5,509	–	–	–	–
Structured notes	–	–	–	–	–	7,741	–
Derivatives	–	–	–	3	–	–	–
	2,179	–	5,509	3	–	7,741	–
2018							
Private equity	1,287	–	4,089	–	–	–	–
Structured notes	–	–	–	–	–	12,314	–
Derivatives	–	–	–	24	–	–	71
	1,287	–	4,089	24	–	12,314	71

51. Fair value of financial instruments continued

(a) Fair value of financial instruments carried at fair value continued

Effects of changes in significant unobservable assumptions to reasonably possible alternatives continued

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 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)	–

NOTES TO THE FINANCIAL STATEMENTS

51. Fair value of financial instruments continued

(a) Fair value of financial instruments carried at fair value continued

Effects of changes in significant unobservable assumptions to reasonably possible alternatives 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 2018	1,455	–	1,832	8	392	–	3
Total gains or losses recognised in profit or loss							
– net income from financial instruments measured at fair value through profit or loss	–	–	334	26	6	51	9
Total gains or losses recognised in other comprehensive income							
– fair value losses	(170)	–	–	–	–	–	–
– exchange differences	–	–	–	–	–	–	–
Purchases	34	–	2,460	–	–	1	–
Issues/deposit taking	–	–	–	–	–	9,316	–
Settlements	–	–	(569)	–	–	(1,158)	–
Transfers out	(32)	–	–	(17)	(398)	(164)	(5)
Transfers in	–	–	32	7	–	4,268	64
At 31 December 2018	1,287	–	4,089	24	–	12,314	71
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	–	–	334	24	–	54	71

In 2019, the transfer out of Level 3 financial assets designated and otherwise mandatorily measured at fair value through profit or loss reflected the change in observability of valuation inputs and price transparency. The transfer out of Level 3 derivative assets was predominantly resulted from change in observability in equity volatility. The transfer out/in of Level 3 liabilities designated at fair value reflected the change in observability of equity volatility.

51. Fair value of financial instruments continued

(a) Fair value of financial instruments carried at fair value continued

Effect of changes in significant unobservable assumptions to reasonably possible alternatives

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
2019				
Private equity	275	(275)	140	(140)
Derivatives	1	(1)	–	–
	276	(276)	140	(140)
2018				
Private equity	204	(204)	51	(51)
Derivatives	20	(20)	–	–
	224	(224)	51	(51)

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 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 P/B ratios Liquidity Discount	27 – 40 0.45 – 1.63 10% – 60%
Derivatives	3	Option model	Equity Volatility	13.23% – 22.82%
Liabilities				
Structured notes	7,741	Option model	Equity Volatility FX Volatility	11.23% – 18.22% 1.13% – 16.92%

	Fair value at 31 Dec 2018	Valuation technique(s)	Unobservable input(s)	Range
Assets				
Private equity	5,376	Net asset value	N/A	N/A
		Market-comparable approach	Earnings Multiple P/B ratios Liquidity Discount	24 – 31 0.52 – 1.25 10% – 30%
Derivatives	24	Option model	Equity Volatility	26.99% – 38.27%
Liabilities				
Structured notes	12,314	Option model	Equity Volatility FX Volatility Equity and Equity Index Correlation	14.95% – 55.96% 1.04% – 16.66% 0.17 – 0.69
Derivatives	71	Option model	Equity Volatility	24.52% – 34.53%

NOTES TO THE FINANCIAL STATEMENTS

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
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					
Repurchase agreements – non-trading	1,878	–	1,878	–	1,878
Deposits from banks	2,491	–	2,491	–	2,491
Current, savings and other deposit accounts	1,203,458	–	1,203,538	–	1,203,538
Certificates of deposit and other debt securities in issue	17,190	–	17,178	–	17,178
Subordinated liabilities	19,494	–	20,333	–	20,333
2018					
Financial Assets					
Reverse repurchase agreements – non-trading	–	–	–	–	–
Placings with and advances to banks	79,400	–	79,345	–	79,345
Loans and advances to customers	874,456	–	–	875,505	875,505
Financial investments – at amortised cost	99,352	2,619	96,641	–	99,260
Financial Liabilities					
Repurchase agreements – non-trading	410	–	410	–	410
Deposits from banks	2,712	–	2,712	–	2,712
Current, savings and other deposit accounts	1,154,415	–	1,154,216	–	1,154,216
Certificates of deposit and other debt securities in issue	3,748	–	3,748	–	3,748

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. From time to time, we may engage a third-party valuation specialist to measure the fair value of a pool of loans. The fair value of loans reflects expected credit losses at the balance sheet date and estimates of market participants' expectations of credit losses over the life of the loans, and the fair value effect of repricing between origination and the balance sheet date. For credit impaired loans, fair value is estimated by discounting the future cash flows over the time period they are expected to be recovered.

(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 2019, the Group's interests in unconsolidated structured entities were recognised in financial assets mandatorily measured at fair value through profit or loss of HK\$10,442m and trading assets of HK\$11m (2018: financial assets mandatorily measured at fair value through profit or loss of HK\$6,267m and trading assets of HK\$16m). 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\$4,350m (2018: HK\$2,895m) to invest in several private equity funds for funding future private equity investments in global companies under respective investment contracts.

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

	2019	2018
ASSETS		
Cash and balances at central banks	11,725	11,559
Trading assets	46,786	46,647
Derivative financial instruments	6,566	7,165
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	177	163
Reverse repurchase agreements – non-trading	5,673	–
Placings with and advances to banks	53,350	63,929
Loans and advances to customers	870,343	811,268
Amounts due from subsidiaries	16,742	13,406
Financial investments	331,133	310,179
Investments in subsidiaries	20,166	19,925
Investment properties	4,313	4,385
Premises, plant and equipment	26,060	24,478
Intangible assets	1,041	422
Other assets	26,702	26,327
Total assets	1,420,777	1,339,853
LIABILITIES AND EQUITY		
Liabilities		
Deposits from banks	2,444	2,712
Current, savings and other deposit accounts	1,154,177	1,105,869
Trading liabilities	37,976	33,649
Derivative financial instruments	6,620	7,295
Financial liabilities designated at fair value	6,367	6,436
Certificates of deposit and other debt securities in issue	3,542	3,748
Amounts due to subsidiaries	11,544	6,955
Other liabilities	27,091	38,254
Current tax liabilities	4,025	687
Deferred tax liabilities	2,921	2,889
Subordinated liabilities	19,494	–
Total liabilities	1,276,201	1,208,494
Equity		
Share capital	9,658	9,658
Retained profits	103,517	96,887
Other equity instruments	11,744	6,981
Other reserves	19,657	17,833
Shareholders' equity	144,576	131,359
Total equity and liabilities	1,420,777	1,339,853

Louisa Cheang *Vice-Chairman and Chief Executive*

John C C Chan *Director*

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 2019

	Other reserves								Total equity
	Share capital	Other equity instruments ¹	Retained profits ²	Premises revaluation reserve ³	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Others ⁴	
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 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 ⁵	-	-	(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 ⁶	-	-	(14,914)	-	-	-	-	-	(14,914)
Coupons paid to holders of AT1 capital instruments	-	-	(342)	-	-	-	-	-	(342)
Movement in respect of share-based payment arrangements	-	-	1	-	-	-	-	4	5
Others	-	-	-	-	-	-	-	-	-
Transfers	-	-	557	(557)	-	-	-	-	-
At 31 December 2019	9,658	11,744	103,517	15,954	3,002	16	16	669	144,576

55. Bank balance sheet and statement of changes in equity continued

Bank statement of changes in equity for the year ended 31 December 2019 continued

	Share capital	Other equity instruments ¹	Retained profits ²	Other reserves					Total equity
				Premises revaluation reserve ³	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Others ⁴	
At 31 December 2017	9,658	6,981	89,757	14,619	1,980	(99)	20	643	123,559
Impact on transition to HKFRS 9	–	–	(916)	–	4	–	–	–	(912)
At 1 January 2018	9,658	6,981	88,841	14,619	1,984	(99)	20	643	122,647
Profit for the year	–	–	21,875	–	–	–	–	–	21,875
Other comprehensive income (net of tax)	–	–	(587)	1,805	(761)	88	1	(5)	541
Debt instruments at fair value through other comprehensive income	–	–	–	–	(18)	–	–	–	(18)
Equity instruments at fair value through other comprehensive income	–	–	–	–	(743)	–	–	–	(743)
Cash flow hedges	–	–	–	–	–	88	–	–	88
Change in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	–	–	–	–	–	–	–	(5)	(5)
Property revaluation	–	–	–	1,805	–	–	–	–	1,805
Actuarial losses on defined benefit plans	–	–	(587)	–	–	–	–	–	(587)
Exchange differences and others	–	–	–	–	–	–	1	–	1
Total comprehensive income for the year	–	–	21,288	1,805	(761)	88	1	(5)	22,416
Dividends paid	–	–	(13,382)	–	–	–	–	–	(13,382)
Coupon paid to holder of AT1 capital instrument	–	–	(418)	–	–	–	–	–	(418)
Movement in respect of share-based payment arrangements	–	–	(4)	–	–	–	–	31	27
Others	–	–	69	–	–	–	–	–	69
Transfers	–	–	493	(493)	–	–	–	–	–
At 31 December 2018	9,658	6,981	96,887	15,931	1,223	(11)	21	669	131,359

¹ During 2019, the Bank has cancelled and repaid the AT1 capital instrument of US\$900m and issued new AT1 capital instruments of US\$1,500m.

² 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 2019, the effect of this requirement is to restrict the amount of reserves which can be distributed by the Bank to shareholders by HK\$3,421m (2018: HK\$4,785m).

³ The premises revaluation reserve represents the difference between the fair value of the premises and its original depreciated cost. There is no premises revaluation reserve related to premises classified as assets held for sale included in "Other assets" in the balance sheet at 31 December 2019 (2018: Nil).

⁴ 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.

⁵ Include exchange difference arising from cancellation of AT1 capital instrument.

⁶ Dividends paid in 2019 represented the payment of fourth interim dividend of 2018 and the first three interim dividends of 2019 amounted to HK\$6,883m and HK\$8,031m respectively.

55. Bank balance sheet and statement of changes in equity continued

Bank statement of changes in equity for the year ended 31 December 2019 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 2019, 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\$94,427m (2018: HK\$86,400m). After considering regulatory capital requirement and business development needs, an amount of HK\$7,647m (2018: HK\$6,883m) has been declared as the proposed fourth interim dividend in respect of the financial year ended 31 December 2019. The difference between the aggregate distributable reserves of HK\$94,427m and the Bank's retained profit of HK\$103,517m as reported above mainly represents the exclusion of unrealised revaluation gain on investment properties and the regulatory reserve of the Bank.

56. Events after the balance sheet date

Coronavirus and impact on ECL

The ECL at 31 December 2019 was estimated based on a range of forecast economic conditions as at that date. Since early January 2020, the coronavirus outbreak has spread across mainland China and beyond, causing disruption to business and economic activity. The impact on gross domestic product ("GDP") and other key indicators will be considered when determining the severity and likelihood of downside economic scenarios that will be used to estimate ECL under HKFRS 9 in 2020.

57. Approval of financial statements

The financial statements were approved and authorised for issue by the Board of Directors on 18 February 2020.

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 162 to 241, which comprise:

- the consolidated balance sheet as at 31 December 2019;
- the consolidated income statement for the year then ended;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes¹ to the consolidated financial statements, which include a summary of significant accounting policies.

¹ Certain required disclosures as described in Note 1(b) have been presented elsewhere in the Annual Report 2019, 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 2019, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the Hong Kong Companies Ordinance.

Basis for Opinion

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSA") issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters identified in our audit are summarised as follows:

- Impairment of loans and advances to customers
- Information Technology access management
- The present value of in-force long-term insurance business and liabilities under non-linked life insurance contracts

Key Audit Matters continued

Impairment of loans and advances to customers

Nature of the Key Audit Matter

This is the second year that expected credit losses ("ECL") have been reported under HKFRS 9. The underlying processes and controls have continued to mature during the year, with an increased focus on back-testing. The Bank has also updated one of its wholesale ECL models during the year.

The credit environment appears to have remained relatively benign during the year, in part due to low interest rates globally. However, there are a growing number of specific risks.

We continued to critically assess the more judgemental decisions made by management, in particular the severity and likelihood of various economic scenarios (including the base, upside and various downside scenarios) that form part of the forward economic guidance and their impact on ECL. We also considered:

- the controls over the determination of customer credit ratings and probabilities of default, and the impact they had on the determination of significant increases in credit risk;
- the appropriateness of post model adjustments made to reflect model and data limitations; and
- the estimation of specific impairment for wholesale exposures that had defaulted.

How our audit addressed the Key Audit Matter

We performed the following audit procedures over the ECL allowances which included:

- We performed risk based substantive testing of models that were updated during the year, including independently rebuilding the modelling for certain assumptions;
- We independently assessed the updates to the scripts used in the underlying tool to calculate ECL to ensure that they reflected approved updates to models, parameters and inputs;
- We tested controls over the inputs of critical data into source systems and the flow and transformation of data between source systems to the impairment calculation system. We also performed substantive testing over a sample of the critical data used in the year end ECL calculation;
- We tested the review and challenge of multiple economic scenarios by an expert panel and internal governance committee, and assessed the reasonableness and likelihood of these scenarios using our economic experts. We assessed the reasonableness of alternative downside scenarios by considering them against the relevant economic, political and other events. We compared the severity and magnitude of the scenarios to external forecasts and data from historical economic downturns, and also considered the sensitivities of the scenarios on the ECL;
- We observed management's challenge forums to assess the ECL output and approval of post model adjustments; and
- We tested the approval of the key inputs, assumptions and discounted cash-flows that supported the impairment provisions for a sample of significant individually assessed loans.

Relevant references in the Annual Report 2019

- Management Discussion and Analysis – Risk, (a) Credit Risk, pages 49 – 78
- Note 2: Significant accounting policies, (j) Impairment of amortised cost and FVOCI financial assets, pages 175 – 180
- Note 11: Change in expected credit losses and other credit impairment charges, page 189
- Note 27 (a): Loans and advances to customers, page 202

Matters discussed with the Audit Committee

At each Audit Committee meeting, there was a discussion on changes made to models and the inputs into them; the impact of evolving geopolitical risks, such as the social unrest in Hong Kong and the US-China trade tensions; and impairment of significant wholesale exposures.

Key Audit Matters continued

Information Technology ("IT") access management

Nature of the Key Audit Matter

Our audit approach relies extensively on automated controls and therefore on the effectiveness of controls over IT systems.

In previous years, we identified and reported that controls over access to applications, operating systems and data in the financial reporting process required improvements. Access management controls are critical to ensure that changes to applications and underlying data are made in an appropriate manner. Appropriate access and change controls contribute to mitigating the risk of potential fraud or errors as a result of changes to applications and data.

Management implemented remediation activities that have contributed to progress being made in reducing the risk over access management in the financial reporting process. Controls continue to require some improvements going forward.

How our audit addressed the Key Audit Matter

We tested access rights to applications, operating systems and databases relied upon for financial reporting. Specifically, we tested that:

- New access requests for joiners were properly reviewed and authorised;
- User access rights were removed on a timely basis when an individual left or moved role;
- Access rights to applications, operating systems and databases were periodically monitored for appropriateness; and
- Highly privileged access was restricted to appropriate personnel.

Other areas that were independently assessed included password policies, security configurations, controls over changes to code, data and configurations and that the ability to make such change via privileged operating system or database access in the production environment was appropriately restricted.

Where control deficiencies were identified, we performed a range of other procedures which included:

- Where access outside of policy was identified, we understood the nature of the access, and, where required, obtained additional evidence on whether that access had been exploited;
- We performed testing of controls to manage the monitoring of business access, including access that would allow a user to potentially override segregations of duty; and
- We also performed substantive testing of whether users inappropriately hold access to key functionality underpinning financial reporting processes, specific year-end reconciliations (i.e. custodian, bank account and suspense account reconciliations) and confirmations with external counterparties.

Relevant references in the Annual Report 2019

- Management Discussion and Analysis – Risk, (d) Resilience risk, pages 91-92

Key Audit Matters continued

The present value of in-force long-term insurance business (“PVIF”) and liabilities under non-linked life insurance contracts

Nature of the Key Audit Matter

The Group has recorded an asset for PVIF of HK\$20,469 million and liabilities under non-linked life insurance contracts of HK\$132,051 million as at 31 December 2019.

The determination of these balances requires the use of appropriate actuarial methodologies and also highly judgemental assumptions, including assumptions over long term economic returns, longevity, mortality, persistency and expenses. Small movements in 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 with the Audit Committee the results of our testing procedures over key assumptions used in the valuation of the PVIF asset and the liabilities under non-linked life insurance contracts including testing of changes made during the reporting period to the models and to the basis of the determination of key assumptions.

How our audit addressed the Key Audit Matter

We understood and tested the controls in place for the determination of the valuation of the PVIF asset and the liabilities under non-linked life insurance contracts. Specifically, these included controls over:

- Policy data reconciliations from the policyholder administration system to the actuarial valuation system;
- Assumptions setting;
- Review and determination of valuation methodologies;
- Restriction of user access to the actuarial models; and
- Production and approval of the actuarial results.

With the assistance of our actuarial experts, we independently assessed the appropriateness of the models, methodologies and the reasonableness of the assumptions used. Specifically, these included assumptions in respect of:

- Economic assumptions, including discount rate and long-term investment return assumptions;
- Operating assumptions and policyholder behaviour, such as longevity, mortality, morbidity and persistency; and
- Future costs of obtaining and maintaining the insurance business.

Our challenge and evaluation of the key judgements and assumptions made by management included whether these were supported by relevant experience and market information.

Relevant references in the Annual Report 2019

- Management Discussion and Analysis – Risk, (h) Insurance risk, page 97
- Note 2: Significant accounting policies, (t) Insurance contracts, pages 183 – 184
- Note 33: Intangible assets, page 210
- Note 40: Liabilities under insurance contracts, page 213

INDEPENDENT AUDITOR'S REPORT

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 2019, 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 2019, 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 HKSAAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

continued

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

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

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

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

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, 18 February 2020

ANALYSIS OF SHAREHOLDERS

As at 31 December 2019	Shareholders		Number of Shares	
	Number	Percentage of total	Number in millions	Percentage of total
Number of shares held				
1 – 500	6,433	35.99	1.48	0.08
501 – 2,000	5,430	30.38	6.60	0.35
2,001 – 5,000	2,821	15.78	9.61	0.50
5,001 – 20,000	2,391	13.38	24.27	1.27
20,001 – 50,000	534	2.99	16.73	0.88
50,001 – 100,000	145	0.81	10.41	0.54
100,001 – 200,000	64	0.36	9.38	0.49
Over 200,000	55	0.31	1,833.36	95.89
	17,873	100.00	1,911.84	100.00
Geographical Distribution				
Hong Kong	17,607	98.51	1,908.80	99.84
Malaysia	47	0.26	0.32	0.02
Singapore	40	0.22	1.74	0.09
Canada	40	0.22	0.13	0.01
Macau	29	0.16	0.13	0.01
United Kingdom	28	0.16	0.03	0.00
Australia	26	0.15	0.08	0.00
United States of America	24	0.13	0.13	0.01
Others	32	0.18	0.48	0.02
	17,873	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 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 2019 to the date of Report of the Directors of this Annual Report (unless otherwise stated) are set out below:

CHAN Ka Lok	LI Chi Kwong Jason
CHAN May Yee	LI Jianfeng
CHAN Ping Chung Eddie	LIANG Chun Fei Belle
CHAN Shuk Pui Ivy*	LIM Sau Fung
Sridhar CHANDRASEKHARAN*	LIU Yu
CHEANG Wai Wan Louisa	LUI Man Chung Raymond
CHEN Kwan Yiu Edward	LUK Ting Lung Alan
CHENG Cheng Shing Agnes	MAU Suet Fan*
CHEUNG Ho Fai Derek	MENG Xiao*
CHEUNG Pui Sze	MO Yuen Man Anita
CHEUNG Yiu Kwong*	MUK Chung Wing
FAN Gordon	NG Kar Wah
FU Yin Ho	NGAN Man Kit*
HO Wing Hung	POON Chun Ming David*
JIA Tingyu*	POON Sun Cheong
JIN Jiejun	PUN Tze Wah*
Bryce Leslie JOHNS	SHEN Sibao
KONG Kwong Ming	SIT Wing Fai Wilfred
KWAN Wing Han Margaret	SONG Yan
KWAN Wing Shing Vincent	SONG Yue Sheng Ryan
LAM Hei Yin Joe	TANG Chee Ping Wilson*
LAM Yin Shing Donald	WANG Xiao Kun
LEE Pui Shan	WANG Yee Ning Elaine
LEE Sai Kit*	Stuart Kingsley WHITE
LEE Yuk Shan	WONG Chun Fai*
LEONG Ka Chai*	WONG Wai Hung
LEUNG Cheuk Yee Eunice	YEO Chee Leong
LEUNG Kin Ping	YIP Kay Chun Katie
LEUNG Wing Lok	YOU Anshan
LEUNG Yee Mei Annie*	YUEN Kin Chung
LI Chi 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

Nixon L S Chan

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 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

Depository*

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 Depository Receipts Programme through The Bank of New York Mellon Corporation.

Annual Report 2019

This Annual Report 2019 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 2019 on the Bank's website and wish to receive a printed copy; or

B) receive this Annual Report 2019 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 2019 on the Bank's website, have difficulty in reading or gaining access to this Annual Report 2019 via the Bank's website for any reason, the Bank will promptly send this Annual Report 2019 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

2019 Full Year Results

Announcement date

18 February 2020

2019 Annual Report

to be posted to shareholders in April 2020

Annual General Meeting

to be held in May, the notice of which will be sent to shareholders at least 20 clear business days before the said meeting.



83 Des Voeux Road Central, Hong Kong
www.hangseng.com

Member HSBC Group

