



HONG KONG MONETARY AUTHORITY
香港金融管理局

Annual Report **2023**



HKMA at a Glance

The Hong Kong Monetary Authority (HKMA) is the government authority in Hong Kong responsible for maintaining monetary and banking stability.

The HKMA's four key functions are:

- maintaining currency stability within the framework of the Linked Exchange Rate System;
- promoting the stability and integrity of the financial system, including the banking system;
- helping to maintain Hong Kong's status as an international financial centre, including the maintenance and development of Hong Kong's financial infrastructure; and
- managing the Exchange Fund.

The HKMA is an integral part of the Hong Kong Special Administrative Region Government but operates with a high degree of autonomy, complemented by a high degree of accountability and transparency. The HKMA is accountable to the people of Hong Kong through the Financial Secretary and through the laws passed by the Legislative Council that set out the Monetary Authority's powers and responsibilities. In his control of the Exchange Fund, the Financial Secretary is advised by the Exchange Fund Advisory Committee.

The HKMA's offices

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The HKMA Information Centre

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Opening hours: 10:00 a.m. – 6:00 p.m., Monday to Friday

10:00 a.m. – 1:00 p.m., Saturday
(except public holidays)

The Centre consists of an exhibition area and a library containing materials on Hong Kong's monetary, banking and financial affairs and central banking topics.

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Please refer to the *Guide to Hong Kong Monetary, Banking and Financial Terms* on the HKMA website for brief explanation of some of the terms used in this *Annual Report*.

The *Banking Stability* chapter in this *Annual Report* is the report on the working of the Banking Ordinance and the activities of the office of the Monetary Authority during 2023 submitted by the Monetary Authority to the Financial Secretary in accordance with section 9 of the Banking Ordinance.





Chief Executive's Statement

Resilience in the face of adversity

Reverberations from slowing global economic growth amid a “high for longer” interest rate environment and intensifying geopolitical tensions — not just stemming from the Russia-Ukraine war and China-US tensions but also the outbreak of conflict in the Middle East — were the key themes for the financial markets in 2023. The March banking turmoil in the US and Europe, the most significant system-wide banking stress since the 2008 Global Financial Crisis, weighed further on market sentiment. Major economies grappled with the harsh realities of tightened monetary conditions and greater uncertainty over the inflationary path and interest rate outlook. Adding to the uncertainty was the pace of Mainland China’s economic recovery, which was slower than general market expectations.

With volatility and unpredictability becoming the “new normal” in financial markets, Hong Kong has again demonstrated its well-known ability to adapt, showing remarkable resilience. Since the city’s full-fledged post-COVID reopening last year, much work has been done to attract people back to our dynamic city and reconnect them with Hong Kong. The HKMA has contributed by hosting a series of large-scale international events such as the Global Financial Leaders’ Investment Summit and conferences with the Bank for International Settlements (BIS), which

showcased our vibrant city and helped send the message worldwide that Hong Kong, as a major international financial centre (IFC), is open for business and remains the centre of action and innovation. There are clear signs of gradual recovery, driven by an encouraging revival of inbound tourism and improved private consumption, also supported by a resilient labour market and the various support measures rolled out by the Government. For 2023 as a whole, Hong Kong’s gross domestic product growth bounced back to 3.2% from negative territory in 2022.

The HKMA entered its fourth decade in 2023. The past 30 years have seen the dynamics of the economy and the financial markets change drastically, with technology driving advances beyond anyone’s wildest imagination. The invaluable experience and wisdom gained over the past three decades have enabled us to face the future with confidence. Despite macroeconomic headwinds and an uncertain external environment, the HKMA will continue to uphold its mandate of safeguarding monetary and banking stability in Hong Kong, and will actively pursue developmental opportunities to anchor that stability and cement the city’s status as a leading IFC.

Chief Executive's Statement



Former and current Financial Secretaries of the Government of the Hong Kong Special Administrative Region and Chief Executives of HKMA at a gathering to celebrate the HKMA's 30th anniversary: (from left) Mr Joseph Yam, Mr Henry Tang, Mr Donald Tsang, Mr Paul Chan, Mr Eddie Yue, Mr Antony Leung, Mr John Tsang, and Mr Norman Chan

LERS – Weathering the storms

Last year marked the 40th anniversary of the Linked Exchange Rate System (LERS), a staunch pillar supporting Hong Kong's strong and stable monetary and financial systems. Four decades of transparent and effective operation have nurtured confidence in the LERS and its credibility in the market. Throughout the year, the Hong Kong dollar stayed within the Convertibility Zone and the Hong Kong dollar market operated smoothly, reflecting the strong market confidence in the LERS, a confidence also shared and expressed by the International Monetary Fund and global market players.

Behind this confidence lie the HKMA's proactive efforts in public and market engagements, along with effective surveillance. We spared no effort during the year in communicating with key stakeholders to foster a clear understanding of the functioning of the LERS, which is all the more important in times of volatility, be it stemming from economic stress or political uncertainties. We also strengthened surveillance of our monetary system, leveraging the use of datasets from the trade repository and expanded granular data from banks, as well as advanced data analytics and artificial intelligence, to enhance our capability, enabling more timely and comprehensive analysis of financial stability and macro-prudential surveillance.

Banking system – A major source of stability

Despite a multitude of challenges including the high-interest-rate environment, persistent geopolitical tensions and a challenging credit landscape, Hong Kong's banking system remained stable throughout the year, underpinned by strong capital and liquidity buffers.

As at the end of 2023, the consolidated total capital ratio of local banks stood at 21.1%, well above the international minimum requirement of 8%. The Liquidity Coverage Ratio of large banks edged up to 178.6% as of the fourth quarter of 2023, likewise well above the statutory minimum requirement of 100%. While the classified loan ratio increased slightly from 1.40% at the end of 2022 to 1.56% at the end of 2023, it remained below the long-term historical average of 2.0%. The increase was mainly driven by exposures to Mainland privately-owned enterprise (POE) property developers; but such exposure levels were generally well-contained as a result of banks' prudent credit risk management over the years, and the overall asset quality of the banking sector remained sound.

Chief Executive's Statement

What caught most market players by surprise in 2023 was unquestionably the banking turmoil in the US spilling over to Europe, which created a level of system-wide banking stress unseen since the 2008 Global Financial Crisis. The HKMA remained on high alert as the situation unfolded and took a number of precautionary actions to limit any potential adverse spillover effects on confidence in the local banking and financial systems. This, coupled with the strong capital and liquidity buffers maintained by banks in Hong Kong, meant that our banking sector was largely unaffected by the turmoil, remaining resilient even as the global financial markets were roiled. In the aftermath of this episode, the HKMA conducted a comprehensive internal review with a view to drawing out lessons for the local banking sector and strengthening the HKMA's supervisory effectiveness and agility to handle a banking crisis should one occur.

While prudent credit risk management is important, we have always reiterated our supervisory expectation for banks to be mindful of the need to support the real economy. As the orderly exit from the banking sector's Pre-approved Principal Payment Holiday Scheme commenced in July 2023 with the economic effects of COVID-19 receding, the HKMA worked closely with banks to ensure a gradual and smooth transition to normal loan repayment with flexibility for those borrowers who continued to be under pressure. Earlier this year, recognising that some small and medium-sized enterprises are still facing challenges in their operations despite the end of the pandemic, nine new measures were rolled out to further assist them in obtaining financing from banks.

Having reviewed the risks associated with the local property market in the context of banks' property lending, the HKMA announced in July 2023 the first relaxation of the countercyclical macroprudential measures for residential properties since their introduction in 2009. This relaxation increased the loan-to-value ratio cap for most residential mortgage loans as well as for financing for property development and investment. It was later followed by suspension of the interest rate stress testing requirement in early 2024.

The HKMA's supervision of financial institutions has been moving with the times. With recent years having seen a sharp global increase in fraud cases, we have considerably stepped up our efforts to counter new fraud tactics by introducing a holistic set of measures to protect bank customers. These include enhancing information sharing between banks and with law enforcement agencies; strengthening the monitoring of suspicious transactions (including implementation of real-time fraud monitoring and tightened payment card authentication); empowering customers to have more controls on their payment cards; and educating customers and raising public awareness of frauds with the launch of the Anti-Scam Consumer Protection Charter, as well as a pre-transaction alert mechanism which warns users if a higher-risk Faster Payment System (FPS) transaction is spotted.

In light of a proliferation of innovative and digital banking products and services, the HKMA has worked with the banking industry to step up consumer and investor protection more broadly and enhance the banks' operational and cyber resilience, as well as their collective defences against systemic cyber events. At the same time, all major banks have considerably strengthened their capabilities to respond to, and recover from, destructive ransomware attacks. The HKMA together with the industry has also pursued various consumer data infrastructure projects, such as the "Credit Data Smart" pilot programme to enhance consumer credit reference services, and taken forward a cross-boundary credit reference initiative to facilitate cross-boundary financing activities by corporates.

Fintech and digitalisation can bring about enormous opportunities when the risk is properly managed. Leveraging earlier success in facilitating the uptake of Regtech, the HKMA, with the support of the Securities and Futures Commission (SFC) and the Insurance Authority, published a new Fintech Promotion Roadmap in August 2023 to promote further development of fintech by financial institutions in five focus areas — Wealthtech, Insurtech, Greentech, artificial intelligence and distributed ledger technology. We anticipate local regulators continuing to collaborate and work closely together with their industry sectors in the coming years in order for the Hong Kong financial industry as a whole to keep abreast and reap the benefits of dynamic fintech development.

Chief Executive's Statement

Hong Kong as an IFC – The centre of action and innovation

In 2023, we fully emerged from the pandemic. Hong Kong was not only back in business but its position as one of the world's leading IFCs was further underscored by the return of global investors and our strengthened global network. Domestically, we took the opportunity of the 30th anniversary of the HKMA's establishment to host a series of large-scale, international events with top-level participation from the global financial and banking community to demonstrate Hong Kong's vibrancy and to send a clear message that Hong Kong as an IFC remained relevant and indispensable to global investors and financial institutions seeking growth and innovation. Of particular note was the return of the Global Financial Leaders' Investment Summit, held in November, which attracted to our city more than 350 international and regional leaders from some 160 global financial institutions. Other high-powered events hosted in Hong Kong included a meeting of the Basel Committee on Banking Supervision (Basel Committee) and two HKMA-BIS Conferences which were among the largest gatherings of central bank governors and banking supervisors of the year. These events attest to the global financial sector's commitment to and confidence in Hong Kong.

Externally, 2023 was also a year in which Hong Kong proactively reached out to strengthen its connections with traditional markets including the US and Europe, as well as new destinations such as those in the Middle East. We met with peer regulators and top management of global financial institutions in these markets to both apprise and update them on the opportunities in Hong Kong and the Mainland, while seeking out new collaboration opportunities for Hong Kong.

To complement these engagement efforts, we actively contributed to the work of international and regional forums by taking up certain leadership roles. During the year, I accepted invitations to chair the BIS Meeting of Governors from Major Emerging Market Economies and to co-chair the Financial Stability Board (FSB)'s Regional Consultative Group for Asia. My colleagues are also chairing or co-chairing a number of other important groupings under the Basel Committee, the Financial Action Task Force, and the Executives' Meeting of East Asia-Pacific Central Banks, to name a few. The HKMA's leadership at many regional and international forums is a recognition of Hong Kong's expertise and contribution to international central banking and regulatory efforts in the pursuit of global monetary and financial stability, as well as Hong Kong's importance as an IFC.

To build on the above accomplishments, we must position ourselves as a forward-looking IFC, staying ahead of the curve to ensure our ongoing competitiveness. We have identified three long-term trends in the coming years that will shape our future: namely the continued opening-up of the Mainland, the development of green and sustainable finance and the deployment of fintech. We will continue to support the development of our financial markets to capture the opportunities from these long-term trends while positioning our financial platform to provide leading services to attract more businesses to Hong Kong. For details of our work on green and sustainable finance, readers may refer to our *Sustainability Report 2023*.

Chief Executive's Statement

Mainland opportunities

We continued in 2023 to leverage our unique advantage by promoting and developing our gateway role to the Mainland market as well as our position as the global hub for offshore renminbi business. Concerted efforts were made to deepen and widen the mutual market access schemes with the Mainland. During the year, a series of enhancements to the Cross-boundary Wealth Management Connect scheme were introduced to expand significantly the scope of investment products covered by the scheme and enhance the sale and promotion processes, further widening mutual access to wealth management markets in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA). To underpin the smooth operation of the Southbound leg of the Bond Connect scheme, nine market makers were added to improve secondary liquidity and meet investor demand. In May 2023, the Northbound Trading leg of the Swap Connect scheme was launched, providing global investors with a convenient and secure channel for trading interest rate swap products in the Mainland to facilitate their management of interest rate risks.

Another notable development was the joint announcement in January 2024 by the HKMA and the People's Bank of China of six new measures to deepen financial co-operation between Hong Kong and the Mainland. They include promoting the use of onshore bonds as eligible collateral in offshore markets, starting with the HKMA's Renminbi Liquidity Facility, and further opening up the onshore repo market. These measures would enable Bond Connect investors to better manage liquidity using their existing onshore bond holdings.

We have also made significant progress in our initiatives to make fund transfers within the GBA more convenient for the general public and for corporates. These include facilitative measures for cross-boundary fund flow management by GBA corporates and remittance for purchasing properties in GBA Mainland cities by Hong Kong residents.

The year 2023 also saw further stellar growth in renminbi business, with broad-based expansion across bank deposits, trade settlement payments, and particularly offshore bond issuances and bank lending. To further reinforce Hong Kong's role as the leading offshore renminbi business hub, we have been working to expand the range of offshore renminbi products. In collaboration with the SFC and Hong Kong Exchanges and Clearing Limited, the HKD-RMB Dual Counter Model and the Dual Counter Market Making Programme were launched. These initiatives will facilitate the use of renminbi in equity trading in Hong Kong and represent a significant step in expanding our renminbi investable universe.

Progress made in these areas presents new opportunities for Hong Kong's financial institutions and reinforces our position as the dominant gateway to the Mainland and the pre-eminent global offshore renminbi hub, as well as our role as a global risk management centre.

Fintech

Embracing fintech is another critical success factor in upholding Hong Kong's position as a leading IFC. A clear roadmap was laid down in 2021 when we unveiled the "Fintech 2025" strategy. Three years on, significant progress has been made on all fronts of this strategic plan. In particular, we reached important milestones in our Central Bank Digital Currency (CBDC) journey. On the wholesale level, the Multiple CBDC Bridge (mBridge) platform, co-founded by the HKMA and a number of central banks under the auspices of the BIS Innovation Hub, is progressing to the Minimum Viable Product (MVP) phase. The aim is to use CBDC to cut the cost and time of cross-border settlements, and we target to launch the MVP in 2024 to pave the way for a full production system. On the retail front, building on the success and experience of Phase 1 of the e-HKD pilot programme last year, Phase 2 was launched in early 2024 to delve deeper into selected use cases from Phase 1 and explore new use cases. Research on the e-HKD will continue, which will facilitate our study on the possible implementation of e-HKD. For e-CNY, the use of the FPS for topping up e-CNY wallets was successfully tested. We will continue to work with the Digital Currency Institute of the People's Bank of China to further expand the scope of the cross-boundary e-CNY pilot in Hong Kong.

Chief Executive's Statement

The year 2023 marked the fifth anniversary of the FPS and we were able to celebrate it with an important milestone: the FPS x PromptPay link between Hong Kong and Thailand was launched. Hong Kong residents are now able to make retail payments with the FPS in Thailand, while visitors from Thailand can similarly use their faster payment system, PromptPay, to pay for goods and services in Hong Kong. Over these past five years, we have seen the FPS growing both in terms of adoption and applications. The number of FPS registrations increased more than six-fold from more than 2 million at the end of 2018 to reach 13.6 million at the end of 2023, marking an average annual growth of 46%. The FPS also expanded its reach from person-to-person payments to merchant payments, and now to cross-border payments. I am sure our FPS journey will continue, supporting further payment innovations.

Commercial Data Interchange (CDI), a major financial data infrastructure initiative under the "Fintech 2025" strategy which facilitates banks' credit assessments by offering easier access to corporates' business data, has also made significant headway. Since its launch in October 2022, CDI has facilitated more than 13,000 loan applications and reviews, with estimated credit approvals exceeding HK\$11.7 billion as at the end of 2023. A linkage was successfully established between CDI and the Government's Consented Data Exchange Gateway late last year to facilitate data sharing between Government departments and financial institutions. The Companies Registry became the first Government data source for CDI, enabling banks to obtain company particulars in a straight-through manner, thereby further digitising and streamlining the KYC ("know your customer") process.

Virtual assets are a rapidly advancing space in the fintech universe, carrying with them both risk and opportunity. Considering the potential financial stability implications of market shocks in the virtual asset sector being transmitted to the traditional financial sector through stablecoins, Hong Kong has kick-started the development of stablecoin regulation, in line with recommendations of international regulatory bodies. Taking into account the initial feedback received from an earlier discussion paper in 2022, the Financial Services and the Treasury Bureau and the HKMA issued a public consultation paper in December 2023 on a legislative proposal to implement a new regulatory regime for stablecoin issuers in Hong Kong, with user protection being one of the key focus areas of the proposed regime. A sandbox arrangement was recently introduced, acting as a channel through which the HKMA can communicate its supervisory expectations to potential stablecoin issuers and obtain feedback from them to facilitate subsequent implementation of the regulatory regime.

Hong Kong's financial platform

To support the stability and effective operation of Hong Kong's financial markets and to help Hong Kong stay competitive globally, the HKMA as regulator and facilitator has over the years taken proactive steps to strengthen the city's financial platform. Last year, legislative amendments were made as part of our continuous efforts to strengthen Hong Kong's attractiveness as the family office base of choice in the region by offering more facilitative tax arrangements. Together with other Government agencies, we are also reviewing the existing tax concession measures applicable to funds, family offices and carried interest, with a view to providing even greater incentives for fund managers, family offices and asset owners around the world to establish a presence here or further expand their local operation.

Chief Executive's Statement

As regards bond market development, building on the success of the world's first tokenised government green bond issuance in February 2023, we assisted the Government in issuing another tokenised green bond in four major currencies earlier this year. This is a significant breakthrough as the issuance marked the world's first multi-currency digital green bond. Apart from promoting innovation in Hong Kong's bond market, we have given fresh impetus to our role as a premier bond issuance hub for Mainland local governments and corporates. In 2023, the governments of Hainan province and Shenzhen municipality issued offshore renminbi local government bonds in Hong Kong, for the second and third consecutive year respectively. These issuances, which included blue bonds, green bonds, social bonds and sustainability bonds, further enriched the range of renminbi financial products available in the Hong Kong market. In October 2023, the HKMA and the National Development and Reform Commission signed a Memorandum of Understanding to better support Mainland cross-border financing activities as well as promote the diversified development of Hong Kong's bond market. These are encouraging developments that provide further opportunities for our bond market to flourish. Moreover, with the Financial Secretary's latest announcement to increase the Government borrowing ceiling to HK\$500 billion to cover sustainable finance and infrastructure projects, the local bond market is all set to still grow further in breadth and depth in the years ahead.

Exchange Fund – Staying prudent amid turbulence and uncertainties

Steering the Exchange Fund through global political and financial turbulence in 2023 has been challenging, and the investment performance of the Fund experienced some ups and downs along the way. For the year as a whole, the Exchange Fund recorded an investment income of HK\$226.0 billion, representing an investment return of 5.5%. We continued during the year to diversify our investments through the Long-Term Growth Portfolio, which had an annualised internal rate of return of 11.8% since inception.

The outlook for 2024 remains highly unpredictable and challenging for the Exchange Fund. Apart from the uncertain US policy rate path, geopolitical tensions, which so far have not shown any signs of abating, will continue to overshadow investment activities. And with major countries bracing for elections, 2024 will be a year characterised by political and market anxieties.

Despite the complex investment environment, the HKMA will continue to adhere to its principle of "capital preservation first while maintaining long-term growth". We will continue to manage the Exchange Fund with prudence and flexibility, implement appropriate defensive measures, and maintain a high degree of liquidity. We will also step up efforts to incorporate ESG elements into our investment approach as we work towards the target of net-zero greenhouse gas emissions by 2050 for the Investment Portfolio. Details of our progress in the responsible investment journey can be found in our *Sustainability Report 2023*.

Chief Executive's Statement

Looking ahead with vigilance and confidence

It was shortly after I took on my present role in 2019 that the global COVID-19 pandemic broke out. The subsequent three years of shutdown, coupled with the fallout from the 2019 social unrest, dealt an unprecedented blow to the Hong Kong economy. Yet, it is probably fair to say that the three decades since the establishment of the HKMA in 1993 have been dotted with similar stresses and upheavals of various kinds including the 1998 Asian financial crisis, the 2003 SARS outbreak and the 2008 Global Financial Crisis. Each and every time, Hong Kong has demonstrated its ability to bounce back and emerge stronger. It has never been a question of whether, but a matter of when, and in what better shape.

We do not have a crystal ball, and shocks may arise at any time in the global macro environment and financial markets. That is why the HKMA continuously takes proactive, preventive and prudent steps in the discharge of its duties in promoting the stability and integrity of our financial and banking systems, as well as in the management of the Exchange Fund. Looking ahead our dedicated HKMA team will remain vigilant in their service of Hong Kong and in their aim to uphold monetary and banking stability. We shall continue to push boundaries for market development across the key areas of strategic focus to elevate further our status as a leading IFC, always with the same unwavering commitment and optimism that have defined the HKMA since its birth.



Eddie Yue

Chief Executive

Highlights of 2023



Economic and Financial Environment

Despite a challenging external environment, the Hong Kong economy stages a positive growth in 2023, driven by revivals in inbound tourism and domestic demand. The labour market continues to improve alongside the economic recovery, while inflation remains moderate. Economic activities for 2024 are expected to recover further at a moderate pace, although the outlook is clouded by multiple external uncertainties.

The banking sector in Hong Kong remains sound in 2023, supported by strong capital and liquidity buffers. Asset quality remains at a healthy level.



Monetary Stability

Amid market expectations of a “high for longer” US policy rate, the Hong Kong dollar mostly trades on the weak side of the Convertibility Zone in 2023, with the weak-side Convertibility Undertaking being triggered eight times between mid-February and early May. The Hong Kong dollar exchange and money markets remain stable, and continue to trade in a smooth and orderly manner.

2023 marks the 40th anniversary of the Linked Exchange Rate System. As the cornerstone of Hong Kong’s monetary and financial stability, the Linked Exchange Rate System has helped Hong Kong weather a succession of shocks and crises in the past four decades, demonstrating the system’s resilience and robustness.



Banking Stability

The HKMA responds swiftly to the March banking turmoil in the US and Europe — from managing the ripple effects to completing an internal review drawing lessons for the local banking sector, while maintaining its focus on the credit, liquidity and market risk management of banks. In light of escalating cyber threats and increasing use of technology services provided by third parties, the HKMA also works closely with banks to enhance their operational and cyber resilience.

The HKMA enhances consumer protection on payment cards, and through further revision of the Code of Banking Practice as well as the Anti-Scam Consumer Protection Charter. The HKMA works with fellow regulators on a balanced regulatory regime for virtual asset-related activities, streamlines the selling process for sophisticated professional investors, introduces enhancements to the Cross-boundary Wealth Management Connect Pilot Scheme, and commences supervision of trust business. A pilot programme on consumer credit reference services under “Credit Data Smart” is also launched.

The HKMA’s efforts in anti-money laundering and counter-financing of terrorism reflect a commitment to targeting the highest threats under a risk-based approach. To address increasing digital fraud, the HKMA has strengthened ecosystem collaboration through the launch of real-time fraud monitoring, enhanced information sharing between banks and with law enforcement agencies, intensified public education, and launched a new pre-transaction alert mechanism when using the Faster Payment System. In parallel, supervisory technology capabilities have been advanced through the Macro Analytics pilot scheme.

The HKMA makes good progress on implementing international supervisory standards locally, including those on capital adequacy and disclosure, and makes notable efforts in enhancing capacity building in the banking sector.

The HKMA also advances its work to ensure a credible resolution regime, including developing a new resolution standard on accessing critical financial market infrastructures, and completing a review on the implementation of loss-absorbing capacity policy standards.

Highlights of 2023



International Financial Centre

The successful conclusion of the second Global Financial Leaders' Investment Summit and the HKMA-BIS High-Level Conference demonstrates the global financial sector's commitment to and confidence in Hong Kong.

The HKMA works closely with its Mainland and Hong Kong counterparts to deepen and widen the mutual access between the Hong Kong and Mainland financial markets. This includes enhancements to the Cross-boundary Wealth Management Connect Scheme, designation of additional market makers for Southbound Trading under Bond Connect, the successful launch of Northbound Trading of Swap Connect, and the roll-out of the HKD-RMB Dual Counter Model and the Dual Counter Market Making Programme, all of which are effective in solidifying Hong Kong's status as a global hub for offshore renminbi business.

On strengthening the competitiveness of Hong Kong's financial platform, notable progress is made in areas including bond issuance, asset and wealth management, green and sustainable finance, and corporate treasury centres.

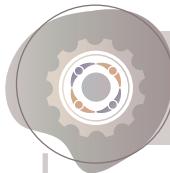
The HKMA continues to make significant progress on various fronts of the "Fintech 2025" strategy. Project mBridge enters the Minimum Viable Product development phase, Phase 1 of the e-HKD Pilot Programme is completed, and Commercial Data Interchange sees increasing usage and the successful linkage with Government data source. Moreover, a new Fintech Promotion Roadmap is announced to further develop Wealthtech, Insurtech, Greentech, artificial intelligence and distributed ledger technology in the banking sector. Meanwhile, the Faster Payment System marks its fifth anniversary and continues to see expanded adoption and enhancements including new functionalities like the linkage with Thailand's PromptPay for cross-border QR payment. Significant progress is also made in relation to developing a regulatory regime for stablecoin issuers, with a public consultation paper published for gathering views on the legislative proposal.



Reserves Management

Despite a volatile and challenging investment environment, the Exchange Fund manages to achieve a decent investment income of HK\$226.0 billion, representing an investment return of 5.5%.

The HKMA continues its efforts on asset diversification and responsible investing. Meanwhile, the Long-Term Growth Portfolio records an annualised internal rate of return of 11.8% since its inception in 2009.



Corporate Functions

The HKMA maintains active communication with the community and the market through different channels to promote public understanding about its policies and operations.

Internally, the HKMA strives to build an agile and professional workforce, maintain rigorous financial discipline and upgrade its digital capabilities to adapt to changes and ensure effective implementation of its policies and initiatives.

Highlights of 2023

Key Figures for 2023



Monetary Stability

HKD exchange rate

7.811 per USD

Base Rate

5.75 %

Backing Ratio

110.7 %

Monetary Base

HK\$ 1,895.9
billionAggregate Balance
(before Discount Window)**HK\$ 45.0**
billion

Banking Stability

Total assets

HK\$ 27.3 trillion

Capital adequacy ratio

21.1 %Loan growth[#]**-3.6** %Liquidity Coverage Ratio
(Q4 2023)**178.6** %Liquidity Maintenance Ratio
(Q4 2023)**65.7** %

Licensees

151
licensed banks**16**
restricted licence banksClassified loan ratio
(all AIs)**1.56** %

Loan-to-deposit ratio

62.8 %**12**
deposit-taking companies**40**
approved money brokers

New residential mortgage loans:

Average loan-to-value ratio[#]**57** %Average debt servicing ratio[#]**40** %**177**
off-site reviews**125**
on-site examinations

G-SIBs for which the HKMA is a member of the Crisis Management Group or Resolution College

14

G-SIBs hosted in Hong Kong

All 29 G-SIBsLoss-absorbing capacity of D-SIBs
(Dec 2023)**26.3** %
of RWA

Notes:

Unless specified, figures are at the end of 2023.

[#] Figures for the year of 2023 as a whole.

Sources: Swift, Bank for International Settlements and HKMA

AIs: Authorized institutions
 CMU: Central Moneymarkets Unit
 CPI: Consumer Price Index
 D-SIBs: Domestic systemically important banks
 EF: Exchange Fund
 FPS: Faster Payment System

G-SIBs: Global systemically important banks
 HKD: Hong Kong dollar
 IFFO: Infrastructure Financing Facilitation Office
 LTGP: Long-Term Growth Portfolio
 RMB: Renminbi
 RTGS: Real Time Gross Settlement

RWA: Risk-weighted amount
 SVF: Stored value facility
 Swift: Society for Worldwide Interbank Financial Telecommunication
 USD: US dollar

¹ Including consultative sessions with AIs to review their implementation of the HKMA's Supervisory Policy Manual module GS-1 on "Climate Risk Management".

Highlights of 2023



International Financial Centre

RMB deposits (incl. outstanding certificates of deposit)



largest offshore RMB liquidity pool

RMB 1,045.3 billion

Offshore RMB bond issuance (incl. certificates of deposit)[#]

RMB 545.1 billion
(+65%)

Outstanding RMB loans

RMB 441.2 billion
(+130%)

Hong Kong's share of RMB Swift payments globally[#]



in the world

> 70%

RMB RTGS average daily turnover[#]

RMB 2.06 trillion
(+25%)

HKD RTGS average daily turnover[#]

HK\$ 1,106.1 billion
(+19%)

Asian international bond issuance[#]

US\$ 87.1 billion equivalent

Average daily turnover under Northbound Bond Connect[#]

RMB 40.1 billion
(+24%)

Availability of four RTGS systems and CMU[#]

100%²

Asian international green and sustainable bond issuance[#]



largest arranging hub

US\$ 29.9 billion equivalent

FPS registrations

13.6 million
(+19%)

Average daily real-time transactions of FPS[#]

1.25 million
(+33%)

Established Limited Partnership Funds

765

IFFO partners

95

SVF accounts

71.4 million
(+16%)

Value of SVF transactions[#]

HK\$ 640.1 billion
(+10%)

Reserves Management



EF investment income[#]

HK\$ 226.0 billion

EF investment return[#]

5.5 %

EF compounded annual investment return (since 1994)

4.5 %

(>2.1% increase in HK composite CPI over the same period)

EF assets

HK\$ 4,016.5 billion

Market value of LTGP investments

HK\$ 517.3 billion

LTGP annualised internal rate of return (since 2009)

11.8 %

Calendar of Events 2023

Monetary Stability

3
May

The HKMA publishes an *inSight* article about the operation of the Linked Exchange Rate System, reinforcing market and public understanding of key monetary issues such as the HKMA's monetary operations, capital flows and interest rate outlook.

24
Jul

The HKMA changes the allotment time of Exchange Fund Bills and Notes from 11:30 a.m. to 4:00 p.m., narrowing the intra-day time gap of allotment and redemption to help make the interbank market more efficient.

Banking

9
Feb

The HKMA updates the Guidance Paper on Transaction Monitoring, Screening and Suspicious Transaction Reporting to support changes authorized institutions are making to improve the effectiveness and efficiency of these control areas and to support the greater use of technology to generate targeted alerts.

24
Mar

The HKMA and the Bank for International Settlements (BIS) jointly organise a conference in Hong Kong titled *Future-proof Supervision for an Innovative Banking World*.

22
Feb

The application period of the 80% Guarantee Product, the 90% Guarantee Product and the Special 100% Loan Guarantee of the SME Financing Guarantee Scheme (SFGS) is extended to end-March 2024.

The Conference marks Hong Kong's first large-scale conference for the international financial regulatory community after the lifting of all social distancing measures and the re-opening of boundary between Hong Kong and the Mainland, attracting over 100 senior officials of central banks and regulatory authorities as well as top executives of financial institutions from more than 25 economies.

22-23
Mar

The HKMA hosts a two-day meeting of the Basel Committee on Banking Supervision. This meeting is the first physical meeting of the Committee outside its headquarters in Basel since the outbreak of the pandemic in 2020, with the aim of discussing the latest banking regulatory and supervisory policies to help maintain global financial stability.



Calendar of Events 2023

Banking

21 Apr

The HKMA hosts a high-level sharing session, attended by senior representatives from the HKMA, the Hong Kong Police Force (HKPF) and retail banks, announcing five anti-fraud initiatives.

The HKMA also launches a Suptech pilot on mule account network analytics, using multi-bank data to identify and mitigate the risks of mule account networks at the systemic level and deliver better outcomes in Anti-Money Laundering (AML) work.



28 Apr

The HKMC Insurance Limited (HKMCI), a wholly-owned subsidiary of The Hong Kong Mortgage Corporation Limited (HKMC), announces the launch of the Dedicated 100% Loan Guarantee Scheme (DLGS) for Cross-boundary Passenger Transport Trade and the DLGS for Travel Sector.

28 Apr

The HKMA, in collaboration with the Securities and Futures Commission (SFC), hosts the first roundtable, bringing together the banking and virtual asset (VA) sectors to promote exchanges on banking services in support of the development of the VA sector in Hong Kong.

2 May

Phase 1 of the Mandatory Reference Checking Scheme is launched to tackle the “rolling bad apples” phenomenon in the banking sector.

9 May

The HKMA publishes a report titled *AML Regtech: Network Analytics*, promoting the adoption of network analytics capability to strengthen the response of banks’ AML systems to deception and other financial crimes.

25 May

The HKMA publishes in the Gazette the revised Guidelines on Anti-Money Laundering and Counter-Financing of Terrorism (AML/CFT Guidelines), in response to the recent legislative amendments to the Anti-Money Laundering and Counter-Terrorist Financing Ordinance.

1 Jun

Supervision of trust business of authorized institutions under the new regime commences.

7 Jun

The HKMA co-hosts the fourth Anti-Money Laundering Regtech Lab (AMLab 4) with Cyberport. It brings together retail banks, Stored Value Facility (SVF) licensees, technology companies and industry experts to innovate and develop a sector-wide approach to real-time fraud monitoring, and help alert potential victims of scams. In the Regtech Connect which follows, technology companies demonstrate relevant Regtech tools and solutions with participating banks and SVF licensees.



Calendar of Events 2023

Banking

20
Jun

The HKMA introduces a comprehensive set of 33 measures to enhance protection of payment card customers in light of the changing patterns of payment card usage by customers and the rise of related unauthorised transactions involving frauds and scams.

20
Jun

The HKMA, The Hong Kong Association of Banks (HKAB) and the HKPF announce the launch of the Financial Intelligence Evaluation Sharing Tool (FINEST), a bank-to-bank information sharing platform, which helps increase banks' ability to share information of corporate accounts for detecting and disrupting fraud and mule account networks more effectively.

23
Jun

The HKMCI announces that the application period for the principal moratorium arrangement under the SFGS is extended by three months.

26
Jun

The HKMA launches a public consultation on review of the three-tier banking system, proposing simplification of the three-tier banking system into two tiers.

29
Jun

The HKMA, together with HKAB, launches the Anti-Scam Consumer Protection Charter to enhance public awareness of safeguarding credit card and personal information, with the full support of the HKPF and the Consumer Council. All 23 card issuing banks in Hong Kong and 15 merchant institutions across different sectors participate in the Charter.



7
Jul

The HKMA issues guidelines to banks adjusting the countercyclical macroprudential measures for property mortgage loans. Key adjustments include increasing the maximum loan-to-value ratios to 70% for self-occupied residential properties valued at HK\$15 million or below; 60% for self-occupied residential properties with a value of more than HK\$15 million and up to HK\$30 million; and 60% for non-residential properties. For mortgage loans assessed based on the net worth of mortgage applicants, the maximum loan-to-value ratio is adjusted upward to 50%.

7
Jul

The HKMCI announces the amendments made to the Mortgage Insurance Programme (MIP) for completed residential properties and the new arrangements in respect of mortgage insurance premium, in order to provide assistance to homebuyers with housing needs.

Calendar of Events 2023

Banking

11
Jul

The HKMA, together with the Banking Sector SME Lending Coordination Mechanism, announces the commencement of an orderly exit from the Pre-approved Principal Payment Holiday Scheme (PPPHS) upon its expiry at the end of July 2023. The partial principal repayment options under the PPPHS are further enhanced to assist corporates' gradual return to normal repayment.

13
Jul

The Hong Kong Deposit Protection Board launches a three-month public consultation on proposed enhancements to the Deposit Protection Scheme.

28
Jul

The HKMA launches the Core Level of the new module on Green and Sustainable Finance (GSF) under the Enhanced Competency Framework for Banking Practitioners. The module aims to facilitate banking practitioners to acquire GSF knowledge and develop professional competencies in GSF-related areas more effectively.

28
Jul

The HKMA and the SFC publish a joint circular to intermediaries on streamlined approach for compliance with suitability obligations when dealing with sophisticated professional investors.

17
Aug

The HKMA and the Accounting and Financial Reporting Council enter into a new Memorandum of Understanding (MoU), agreeing to strengthen collaboration through case referrals, mutual assistance, capacity building and exchange of information.

25
Aug

The HKMA, in collaboration with the SFC and the Insurance Authority (IA), publishes a new Fintech Promotion Roadmap, outlining the key initiatives to give further impetus to Fintech adoption in the financial services industry.

4
Sep

The HKMCI launches the DLGS for Battery Electric Taxis, to encourage taxi owners to replace their liquefied petroleum gas, petrol or hybrid taxis with electric taxis.

21
Sep

To enhance the resilience of the banking sector to climate risk, the HKMA launches the Green Fintech Competition to promote the adoption of green fintech solutions in the Hong Kong banking industry.

Calendar of Events 2023

Banking

22 Sep

The HKMCI announces that amendments are made to the MIP for residential properties under construction so that the applicable eligibility criteria align with those for completed residential properties.

25 Sep

The HKMA publishes a report titled *AML/CFT Regtech: Case Studies and Insights Volume 2*, covering sophisticated AML Regtech solutions and sharing perspectives of banks in various phases of incorporating Regtech in their AML processes.

29 Sep

The HKMA launches two additional spatial datasets, which provide information on physical branches and Automated Teller Machines of 20 retail banks in Hong Kong, via Open Application Programming Interface for public use.

20 Oct

The HKMA and the SFC update the joint circular on intermediaries' virtual asset-related activities to expand retail access to virtual asset dealing, advisory and asset management services.

25 Oct

The Government announces that more flexible repayment options are provided under the SFGS, enabling enterprises to have more time to gradually switch from principal moratorium to normal repayments.

27 Oct

The HKMCI announces a six-month extension of the application period of the DLGS for Cross-boundary Passenger Transport Trade and the DLGS for Travel Sector.

17 Nov

The Multiple Credit Reference Agencies Model is officially named as "Credit Data Smart" and its pilot programme is launched.

22 Nov

The HKMA hosts an annual AML seminar for the banking and SVF sectors, covering subjects including amendments to the Anti-Money Laundering and Counter-Terrorist Financing Ordinance and AML/CFT Guideline and feedback from the thematic review on transaction monitoring system.

24 Nov

The HKMA, together with HKAB and the banking sector, supports the launch of the Anti-Deception Alliance by the HKPF which strengthens the capability of the AML ecosystem to detect, disrupt and deter scams.



29 Nov

The HKMA issues a circular on the expected standards and examples of good practices on the sale and distribution of green and sustainable investment products.

4 Dec

The Monetary Authority, the IA and the SFC entered into an MoU which establishes a framework to strengthen and support effective co-operation and co-ordination between the resolution authorities.

Calendar of Events 2023

Banking

7 Dec

With the support of the HKMA, HKAB and The DTC Association launch the revised Code of Banking Practice to enhance protection of customers in digital banking services.

11 Dec

The HKMA organises the Green and Sustainable Banking Conference to provide a platform for the banking sector and the technology sector to discuss the role of low-carbon technology and green fintech in the net-zero transition in Hong Kong and the Mainland.

The event brings together around 400 participants from banks, technology firms, regulatory authorities and the academia. The Award Presentation Ceremony of the Green Fintech Competition is also held at the conference.



29 Dec

The Banking (Capital) (Amendment) Rules 2023, the Banking (Disclosure) (Amendment) Rules 2023, the Banking (Exposure Limits) (Amendment) Rules 2023, and the Banking (Liquidity) (Amendment) Rules 2023 are gazetted.

Calendar of Events 2023

International Financial Centre

5
Jan

The Government issues around US\$5.75 billion worth of green bonds, denominated in US dollars, euro and renminbi, under the Government Green Bond Programme (GGBP). The triple-currency offering is the largest environmental, social and governance (ESG) bond issuance in Asia.

31
Jan

The HKMA issues the consultation conclusion to the discussion paper on crypto-assets and stablecoins. The HKMA proposes to bring certain activities relating to stablecoins into the regulatory perimeter, and indicates the expected regulatory scope and key regulatory requirements.

16
Feb

The Government successfully offers HK\$800 million of tokenised green bond under the GGBP, which is the first tokenised green bond issued by a government globally.

10
Mar

The HKMA and the SFC launch a joint consultation on proposed amendments to the Clearing Rules for over-the-counter (OTC) derivatives transactions pursuant to the global interest rate benchmark reform.

13
Mar

The Green and Sustainable Finance Cross-Agency Steering Group and CDP¹ co-organise a joint seminar on sustainability reporting. Experts from diverse backgrounds share their insights and experiences on sustainability reporting and the use of the Steering Group Non-listed Company Questionnaire on Climate and Environmental Risk at the panel discussion and case sharing sessions.



14
Mar

The Hong Kong Institute for Monetary and Financial Research (HKIMR), the research arm of the Hong Kong Academy of Finance (AoF) releases an applied research report, titled *Cross-boundary Payment and Settlement Systems in the Greater Bay Area: Current Practices and Recent Developments*.

¹ CDP is an international non-profit organisation that runs the global environmental disclosure system for companies.

Calendar of Events 2023

International Financial Centre

4 May

The HKMA hosts its first Data Summit, with discussions focusing on three themes: the streamlining of banking operations through digitalisation, the enhancement of data analytics capabilities with the use of alternative data, and the development of innovative products and services.

The Summit attracts over 260 senior representatives from more than 60 banks, data analytics service providers and data providers.



15 May

Northbound Trading of Swap Connect is officially launched to provide a convenient and secure channel for international investors to trade interest rate swap products on the Mainland via a connection between infrastructure institutions on the Mainland and in Hong Kong, thereby facilitating global investors' management of interest rate risks arising from their allocation to Mainland bonds.

18 May

The HKMA commences the e-HKD² Pilot Programme. A total of 16 firms from the financial, payment and technology sectors are selected to participate in the first round of pilots and took deep dives into potential use cases in six categories, including full-fledged payments, programmable payments, offline payments, tokenised deposits, settlement of Web3 transactions and settlement of tokenised assets.



30 May

The Central Bank of the United Arab Emirates (CBUAE) and the HKMA hold a bilateral meeting in Abu Dhabi and agree to enhance collaboration between the financial services sectors of the two jurisdictions, including financial infrastructure, financial market connectivity between the two jurisdictions and virtual asset regulations and developments.

A joint working group led by the CBUAE and the HKMA, with support from the relevant stakeholders of the two jurisdictions' banking sectors, is formed to take forward the agreed initiatives.



² e-HKD refers to a retail Central Bank Digital Currency in Hong Kong.

Calendar of Events 2023

International Financial Centre

30
May

The HKMC announces the successful completion of its first issuance of infrastructure loan-backed securities under its pilot scheme on infrastructure financing securitisation.

31
May

The International Monetary Fund (IMF) publishes the Staff Report for the 2023 Article IV Consultation with the Hong Kong Special Administrative Region.

The IMF affirms Hong Kong's status as a major international financial centre with robust institutional frameworks, substantial capital and liquidity buffers, high-quality financial sector regulation, and a well-functioning Linked Exchange Rate System. It recognises Hong Kong's strongly recovering economy with post-COVID normalisation of economic activities. It also points out that the Government is proactively solidifying Hong Kong's status as an international financial centre, and strengthening impetus for economic growth and competitiveness.

1
Jun

The HKMA holds a luncheon with major financial institutions and corporates in Dubai, the United Arab Emirates (UAE) to promote Hong Kong's value propositions as a leading international financial centre and strengthen financial collaboration with the UAE, which is attended by around 80 senior representatives from more than 50 major local financial institutions and corporates.



1
Jun

The Government successfully offers close to US\$6 billion worth of green bonds, denominated in US dollars, euro and renminbi under the GGBP.

12
Jul

The HKIMR releases an applied research report, titled *The Digitalisation of Financial Services in Hong Kong: Recent Experience, Regulatory Developments and Considerations for Sustainable Innovation and Growth*.

27
Jul

The Saudi Central Bank and the HKMA hold a bilateral meeting in Riyadh to strengthen collaboration between the financial services sectors in the two jurisdictions. The two authorities also sign an MoU to promote joint deliberations in financial innovation.



22
Aug

The HKMA and the HKMA Infrastructure Financing Facilitation Office hold the first Blended Finance Roundtable, bringing together a diverse range of influential stakeholders to discuss harnessing the power of blended finance to foster innovation and collaboration in addressing global climate challenges.

Calendar of Events 2023

International Financial Centre

24 Aug

The HKMA releases a report titled *Bond Tokenisation in Hong Kong* to summarise the experience learnt from the Government's inaugural tokenised green bond offering and outline potential next steps to promote the wider use of tokenisation technology in Hong Kong's bond market.

24-25 Aug

The HKIMR, ASEAN+3 Macroeconomic Research Office, European Central Bank, European Stability Mechanism and Bank of Finland Institute for Emerging Economies co-organise the workshop on *Recent Developments and Future Prospects of the International Monetary System*. Over 100 participants from central banks, private sector, academia and international financial institutions around the world attend the workshop on site.

29 Aug

The HKMA and the SFC issue a joint consultation conclusion on proposed amendments to the Clearing Rules for OTC derivative transactions pursuant to the global interest rate benchmark reform. The proposal receives general support and the amendments to the Clearing Rules are gazetted for implementation in the third quarter of 2024.

12 Sep

The HKMA, together with the Bank of Israel and the BIS Innovation Hub Hong Kong Centre, publishes a joint report, titled *Project Sela – An accessible and secure retail CBDC ecosystem*, at a report launch conference hosted by the Bank of Israel in Tel Aviv.



13 Sep

The HKMC announces the successful issuance of its second social bonds of close to HK\$20 billion equivalent.

22 Sep

The HKMA designates nine additional financial institutions as market makers for Southbound Trading under Bond Connect to facilitate the provision of secondary liquidity and support the smooth and orderly operation of the scheme.

24-27 Sep

The AoF Financial Leaders Programme completes the inaugural field trip to Shenzhen, with a total of 30 Programme participants joining.

Calendar of Events 2023

International Financial Centre

26
Sep

The HKMA and the State Secretariat for International Finance under the Federal Department of Finance of Switzerland co-organise the sixth Hong Kong-Switzerland Financial Dialogue in Bern, Switzerland.



26
Sep

For the fifth anniversary of the Faster Payment System (FPS), the HKMA organises the "FPS x SME" Seminar, themed *Exploring innovation, raising productivity and creating opportunities*. The seminar aims to assist small and medium-sized enterprises (SMEs) in leveraging the FPS to strengthen their competitiveness and support them in embracing the era of electronic payment.



28
Sep

The People's Bank of China (PBoC), the National Administration of Financial Regulation, the China Securities Regulatory Commission, the State Administration of Foreign Exchange, the HKMA, the SFC and the Monetary Authority of Macao (AMCM) jointly announce the enhancements to the Cross-boundary Wealth Management Connect Pilot Scheme, including refining the eligibility criteria of investors, expanding the scope of participating institutions and products, increasing the individual investor quota and further enhancing the promotion and sales arrangements.

29
Sep

The HKIMR signs a Memorandum of Co-operation to join the ASEAN+3 Finance Think-tank Network (AFTN) as a founding member institution. The AFTN hosts an inaugural meeting of its steering committee among the senior representatives from AFTN's members.

10
Oct

The Government issues the HK\$20 billion three-year retail green bond under the GGBP.

Calendar of Events 2023

International Financial Centre

18 Oct

The National Development and Reform Commission and the HKMA sign an MoU on supporting cross-border financing by Chinese enterprises and promoting the development of the Hong Kong bond market at the third Belt and Road Forum for International Cooperation.

20 Oct

To foster collaboration between the Government and academia on Central Bank Digital Currency (CBDC) research, the HKMA establishes the CBDC Expert Group and signs MoUs with five local universities whose faculty members are participants of the group.

27 Oct

The HKIMR hosts the Thirteenth Annual International Conference on the Chinese Economy, titled *China's Economic Development in a Changing Global Environment*. About 120 participants from central banks, private sector, academia and international financial institutions attend the conference.

30 Oct

The HKMA publishes the *e-HKD Pilot Programme Phase 1 Report* to discuss the key findings, learnings, and the HKMA's assessment of 14 pilots conducted by the 16 participating firms under Phase 1 of the e-HKD Pilot Programme. The report also sets out the next steps of the e-HKD Pilot Programme.

30 Oct-5 Nov

The HKMA co-organises the eighth edition of the city's flagship fintech event, Hong Kong FinTech Week 2023, with the Invest Hong Kong (InvestHK).

The HKMA announces the initiatives to strengthen Hong Kong's fintech capabilities, including: FPS x PromptPay QR Payment, promoting tokenisation in the bond market including exploring a second tokenised government green bond issuance, and e-HKD Pilot Programme.



Calendar of Events 2023

International Financial Centre

6–8 Nov

The HKMA organises the Global Financial Leaders' Investment Summit, which brings together over 350 international and regional leaders from 160 global financial institutions, with more than 90 institutions represented by their group chairmen or CEOs. The theme of main summit is "Living with Complexity" discussing the trends and changes that are reshaping the global financial industry.

During the Summit, the HKMA, the SFC and the AoF co-organise the "Conversations with Global Investors" seminar which features 20 global leading investors and is attended by around 300 overseas and local leaders from the financial, business, and public sectors.



8 Nov

The PBoC, the HKMA and the AMCM sign an MoU on Deepening Fintech Innovation Supervisory Cooperation in the Greater Bay Area. Under the MoU, the three authorities agree to link up, in the form of a network, the PBoC's Fintech Innovation Regulatory Facility, the HKMA's Fintech Supervisory Sandbox and the AMCM's Regulatory Requirements for Innovative Fintech Trials.

15 Nov

The AoF announces the 2024 intake of the Financial Leaders Programme.

22 Nov

The HKMA and the Financial Services Regulatory Authority of the Abu Dhabi Global Market sign an MoU to deepen the ongoing partnership on fintech between the two authorities, particularly in the areas of cross-border trade-related data exchange and business collaboration.



27 Nov

The HKMA launches the Suspicious Proxy ID Alert, to enhance the alert mechanism to users of the associated fraud risks before conducting transactions using FPS proxy identifiers.

Calendar of Events 2023

International Financial Centre

27-28 Nov

The HKMA and the BIS co-organise a High-Level Conference in Hong Kong. The event welcomes more than 300 participants, including over 20 current and former central bank governors, regional and local CEOs of financial institutions, and leading experts from Hong Kong and other parts of Asia. The Conference is the first large-scale gathering of central bank governors in the city since the pandemic.



4 Dec

The HKMA and the Bank of Thailand jointly launch the FPS x PromptPay link for cross-border QR payment between Hong Kong and Thailand to provide a fast, secure and easily accessible cross-border retail payment service to people travelling between the two places.



6 Dec
11-14 Dec

The HKIMR releases an applied research report, titled *Advancing Talent Development in Financial Services: Emerging Global Trends and Their Impact on Hong Kong*.

The HKMA, the ASEAN+3 Macroeconomic Research Office, and the Asian Development Bank Institute jointly host the inaugural Financial Leadership Training Programme in Hong Kong.

Attended by about 30 participants comprising senior representatives from central banks, ministries of finance and related government agencies of Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam, the Programme serves as a platform to promote regional communications and development of leadership skills and professional knowledge with a view to enhancing participants' capacity in safeguarding regional macroeconomic and financial stability.



19 Dec

The Dubai Financial Services Authority and the HKMA announce a partnership aimed at exploring how to further develop policy and regulatory responses to support and enable climate finance in the Middle East and Asia. This new partnership seeks to bolster cross-border collaboration to advance sustainable finance across the two regions and contribute to the net-zero transition.

Calendar of Events 2023

International Financial Centre

21
Dec

The HKMA announces the upcoming launch of the pilot programme of the Interbank Account Data Sharing (IADS) initiative, covering deposit account information, with the participation of 28 banks.

In collaboration with HKAB and the banking industry, the HKMA's Fintech Facilitation Office completes a preliminary study of the IADS initiative. Through the study, the rules and standards facilitating interbank customer-consented data sharing are established for the IADS pilot programme, covering retail, corporate and SME customer segments.

27
Dec

The Financial Services and the Treasury Bureau and the HKMA jointly issue a public consultation paper to gather views on the legislative proposal to regulate issuers of stablecoin.

The HKMA will also introduce a sandbox arrangement for communicating supervisory expectations and guidance on compliance to entities having a genuine interest in and a reasonable plan on issuing fiat-referenced stablecoin in Hong Kong, as well as obtaining their feedback on the proposed regulatory requirements.

Reserves Management

19
Oct

The HKMA and the Silk Road Fund Co., Ltd sign a Co-operation Framework Agreement to form a Belt and Road investment platform.

In the first phase, both sides agree to jointly form the BNR HK Flagship Impact Fund, with total capital not exceeding US\$1 billion or equivalent in renminbi, which focuses on investing in projects in areas such as energy transition and infrastructure.



Calendar of Events 2023

Corporate Functions

26
Apr

The HKMA launches the Common Submission Platform for the banking industry which features a range of submission channels to accommodate the latest technology trends and varying needs across the industry.

28
Apr

The HKMA publishes its first standalone *Sustainability Report 2022*.



19
Jul

The HKMA launches its first financial education board game “\$mart Money Management 321” for primary school students to learn about different payment methods, money management skills, fintech and cybersecurity concepts in a simulation setting.



24
Aug

The HKMA rolls out a new cross-media anti-scam campaign, with a new video and animations featuring cannibal plant and animal trap, to reinforce the public's awareness of refraining from clicking fraudulent links embedded in instant electronic messages purportedly from banks and major merchants.



Priorities for 2024 and Beyond



Entering 2024, the Hong Kong economy is expected to continue to recover at a moderate pace, riding on the ongoing revival of inbound tourism, public infrastructure projects and stable private consumption. However, the external environment is fraught with risks and uncertainties, especially those relating to the future US policy rate path, the global growth prospects, and the evolving geopolitical tensions. That said, Hong Kong's financial system remains well-positioned to weather adverse shocks given its resilience and ample buffers built up over the years.

The HKMA attaches great importance to safeguarding Hong Kong's monetary and financial stability. Looking ahead, we will stay vigilant in the face of the uncertain macroeconomic environment, seeking to promptly identify emerging risks and respond to them in an agile manner. At the same time, we will seek opportunities and create policy headroom to help further enhance Hong Kong's status as a leading international financial centre. In managing the Exchange Fund in this challenging investment environment, we will continue to invest prudently, while remaining flexible, taking defensive measures as appropriate, and maintaining a high degree of liquidity.

Priorities for 2024 and Beyond

Stability and integrity of the financial system

The global economic uncertainties of recent years look set to continue in 2024. The HKMA will keep abreast of latest developments and stay vigilant against potential risks, with the aim of upholding the resilience and stability of the financial system, which are essential for the ongoing provision of critical financial services that support the functioning of the Hong Kong economy.

Staying vigilant against potential risks

Looking into 2024, global financial markets could experience volatility as a result of uncertainties surrounding the US monetary policy outlook, evolving geopolitical risks, and an uneven global economic recovery. 2024 is also a key election year as many major elections are scheduled to be held across the world. The outcome of these elections could further increase market uncertainties. Nevertheless, Hong Kong's financial system is well-positioned to withstand adverse shocks given its resilience and buffers built up over the years. The HKMA also has the capability, the resources and the commitment to safeguard Hong Kong's monetary and financial stability.

The HKMA will continue its efforts to closely monitor any risks and vulnerabilities arising in the domestic and external environments, and will deploy appropriate measures where necessary to maintain Hong Kong's monetary and financial stability. We will also conduct research into issues affecting the Hong Kong economy, assessing and addressing any potential risks associated with these issues.

Maintaining banking stability

In 2023, new geopolitical tensions across the world broke out while others remained unresolved, contributing to political uncertainty and instability that looks set to continue into 2024. Economic pressures in the form of high interest rates were a feature of the global landscape, and rates remain high entering 2024. Within the banking sector, the continued drive towards digitalisation and the implementation of new technology, including artificial intelligence, have brought many advantages but are also posing new operational and cyber security risks as well as supervisory challenges. In such a volatile political, economic and technological landscape, the HKMA strives to ensure banks' ability to withstand shocks through its ongoing supervisory efforts. At the same time, we will continue to enhance and refine our banking supervisory and regulatory frameworks and policies, taking into account technological developments, changes in customer expectations, as well as international standards and best practices.

A risk-based supervisory focus

Credit, liquidity and market risks

In light of the increasingly challenging macroeconomic landscape, a special focus of the HKMA will be on monitoring the asset quality of authorized institutions (AIs) and assessing the effectiveness of their credit risk management and controls, particularly with respect to loan classification and provisioning practices and problem loans management. We will also maintain close dialogue with the banking and commercial sectors with a view to ensuring that AIs are striking an appropriate balance between undertaking prudent credit risk management and fulfilling their financial intermediation function throughout economic cycles. In particular, we will follow up with banks through the Banking Sector SME Lending Coordination Mechanism on the nine new measures rolled out in March 2024 to assist small and medium-sized enterprises in obtaining financing from banks.

Uncertainties in the global economic outlook as well as elevated geopolitical tensions may increase the volatility of both asset prices and cross-border fund flows. The HKMA will make vigilance a priority, and will continue to effectively supervise the liquidity and market risk management of AIs.

Priorities for 2024 and Beyond

Follow-up actions on lessons drawn from the 2023 banking turmoil

The HKMA will implement the follow-up actions identified in the internal review that it undertook in response to the 2023 banking turmoil in the US and Europe. These are actions that will further strengthen supervisory effectiveness and enhance its ability to handle a banking crisis should one arise. They include enhancing the risk capture of AIs' interest rate risk in the banking book in the context of the HKMA's supervisory review process, improving the preparedness of AIs for dealing with liquidity stresses given the continuing digitalisation of banking services, streamlining the HKMA's crisis management processes, and further enhancing inter-agency and cross-border supervisory co-ordination.

Operational and technology risk

The HKMA will continue to monitor AIs' progress towards achieving full compliance with the HKMA Supervisory Policy Manual (SPM) module OR-2 on "*Operational Resilience*", and assess and benchmark banks' tolerance limits for plausible disruptions, with a view to enhancing the overall resilience of the banking system. With respect to cyber risk, we will oversee a new round of self-assessments by AIs under the Cyber Resilience Assessment Framework 2.0 and monitor AIs' implementation of a secure tertiary data backup to enhance their data recovery capabilities if faced with destructive cyber attacks.

Given the accelerating pace of digitalisation in banking operations, the HKMA will keep a close watch on emerging risks arising from the use of advanced technologies such as generative artificial intelligence and distributed ledger technology. We will also collaborate with banks and other relevant stakeholders in operating an agile and pre-emptive mechanism to counter the growing trend of digital fraud.

Combatting money laundering and terrorist financing

In 2024, to uphold the integrity of the banking system and build customer confidence, the HKMA will target high-risk areas and prioritise risk-based regulatory updates, including issuing guidance to support an effective, risk-based implementation of changes to requirements for politically exposed persons, and supporting the implementation of the regulatory regime for stablecoin issuers. We will also issue guidance to help AIs optimise their transaction monitoring systems and to promote the responsible use of artificial intelligence, and focus on controls targeting high-end money laundering through our thematic work. To strengthen the ecosystem response to digital fraud and reduce losses to victims, we will further consult the public and the industry on a proposal to expand the scope of bank-to-bank information sharing from corporate accounts to personal accounts and, based on the feedback received, pursue necessary legislative amendments. We will move to a full build of Macro Analytics 3.0 by pooling data relevant to anti-money laundering across multiple banks and interfacing this with existing ecosystem fraud analysis. This will deliver more rapid cross-bank responses and further enhance our data-driven anti-money laundering and counter-financing of terrorism supervision, enabling us to take quicker, more decisive action against systemic money laundering and terrorist financing risks.

Wealth management and Mandatory Provident Fund-related businesses

In 2024, the HKMA will step up both its on-site examinations and off-site surveillance of AIs' conduct in relation to wealth management and the selling of securities, investment products, and insurance and Mandatory Provident Fund (MPF)-related businesses. More specifically, we will focus on Cross-boundary Wealth Management Connect (Cross-boundary WMC) business, digital distribution and advisory platforms, virtual asset (VA)-related products, long term insurance products and premium financing activities, taking into account the latest market developments as well as evolving international standards.

Priorities for 2024 and Beyond

The HKMA will communicate closely with fellow regulators and the banking industry to provide guidance on regulatory standards in relation to the sale of investment, insurance and MPF products as appropriate. In particular, to support the sustainable and responsible development of the VA sector, we will continue to work with the Government and fellow regulators to ensure that the regulatory regime in place for the VA sector is robust, comprehensive and well-balanced.

The HKMA will facilitate and monitor the industry's implementation of enhancements to Cross-boundary WMC, and continue to engage with the industry and relevant regulatory authorities in order to further enhance the scheme. We will also continue to work with fellow regulators and the industry to streamline the selling process for investment products, and will consolidate and clarify guidance, as appropriate, to facilitate industry compliance. In addition to trust business, we will also commence the supervision of new Type 13 regulated activity under the Securities and Futures Ordinance for AIs providing depositary services for collective investment schemes authorised by the Securities and Futures Commission (SFC), which will come into operation on 2 October 2024.

Oversight of financial market infrastructures

The HKMA aims to promote the safety and efficiency of the financial market infrastructures (FMIs) under its oversight in accordance with the Payment Systems and Stored Value Facilities Ordinance (PSSVFO), the Principles for Financial Market Infrastructures (PFMI) and the various guidance issued by the Committee on Payments and Market Infrastructures (CPMI). We will continue to participate in the CPMI-IOSCO¹ PFMI implementation monitoring and assessment exercise, and in other international working groups to discuss the implementation of new and innovative FMI-related initiatives. We will also participate in the work of international standard-setting bodies, and will review and strengthen our oversight requirements as appropriate to reflect the latest international practices as well as market and technology developments.

Policy development

The HKMA will continue to strengthen and refine its banking supervisory and regulatory frameworks and policies, taking into account international standards and best practices.

Implementation of Basel standards in Hong Kong

The proposed amendments to the Banking (Capital) Rules (BCR) and the Banking (Disclosure) Rules (BDR) for implementing the Basel III final reform package (Final Package) are expected to take effect on 1 January 2025 following the passage of the amended Rules in the Legislative Council. In 2024, the HKMA will continue to prepare the supporting guidance, banking returns and standard disclosure templates and tables needed to facilitate the application of the Rules. In particular, we plan to:

- consult the industry in the second quarter of 2024 on the revisions to the SPM module CA-B-3 on "*Countercyclical Capital Buffer (CCyB)–Geographic Allocation of Private Sector Credit Exposures*" and Return MA(BS)25 "*Quarterly reporting on the Countercyclical Capital Buffer*", reflecting the consequential changes arising from the implementation of the Final Package and the revised Return of International Banking Statistics; and
- finalise the package for effecting the reporting-only requirement for the new standards on market and credit valuation adjustment risks, which starts on 1 July 2024.

Those parts of the proposed amendments to the Banking (Exposure Limits) Rules (BELR) and the Banking (Liquidity) Rules (BLR) that are largely consequential to the implementation of the Final Package under the amended BCR are also targeted to take effect on 1 January 2025. The HKMA plans to finalise the proposed consequential amendments to the related regulatory returns in 2024.

¹ IOSCO refers to the International Organization of Securities Commissions.

Priorities for 2024 and Beyond

Meanwhile, with a new standard on the prudential treatment of banks' crypto-asset exposures and subsequent targeted revisions to the standard having been issued by the Basel Committee on Banking Supervision in December 2022 and December 2023 respectively, local implementation of the standard is planned for 2025. The HKMA will examine the need for potential legislative amendments to various sets of rules, including the BCR, the BDR, the BELR and the BLR, and conduct the statutory consultation on the necessary rule amendments in the first half of 2025.

Other supervisory policies and risk management guidelines

The HKMA plans to update a number of SPM modules in response to lessons learned from the banking turmoil in the US and Europe of March 2023, as well as developments in regulatory requirements and international standards.

These modules include:

- LM-2 on "Sound Systems and Controls for Liquidity Risk Management";
- CA-S-10 on "Financial Instrument Fair Value Practices";
- IC-5 on "Stress-testing";
- IR-1 on "Interest Rate Risk in the Banking Book"; and
- IC-3 on "Reporting Requirements Relating to Authorized Institutions' External Auditors under the Banking Ordinance".

New and revised guidance in the form of Q&As, Codes of Practice, updated SPM modules (e.g. CR-G-8 on "Large Exposures and Risk Concentrations" and CR-G-9 on "Exposures to Connected Parties") and similar documents will also be developed to help AIs understand the requirements under the Banking (Capital) (Amendment) Rules 2023 and the Banking (Exposure Limits) (Amendment) Rules 2023.

Balanced and responsive supervision

Through close communication with the banking sector, the HKMA will continue to explore areas for further refining and streamlining its supervisory policies and practices to support the sustainable development of the banking sector amid the fast-evolving banking environment and risk landscape.

Accounting standards

The International Accounting Standards Board is conducting a post-implementation review of the impairment requirements in International Financial Reporting Standard 9. When the exercise is done, the HKMA will consider any implications arising from the review. We will also maintain regular dialogue with the external auditors of AIs, and assess the implications of other impending accounting standards for the existing prudential requirements on AIs.

Enforcement

The HKMA will continue to improve the effectiveness and efficiency of its complaint handling and of the enforcement actions and other appropriate follow-up actions it takes on issues of concern, by implementing enhanced working procedures, utilising new technological tools and optimising its use of resources. To further streamline its complaint management and enforcement workflows, as well as enhance its data analysis capabilities, the HKMA is developing a new complaint handling and enforcement management system that is planned for implementation in 2025.

The HKMA is also looking to strengthen the protection for bank customers against fraudsters and to foster a more customer-centric culture among banks. To do this, we will step up our collaboration work with law enforcement agencies and banks, share useful intelligence and insights derived from complaints, provide timely feedback to the industry, and educate the public against scams. We will also facilitate the banking industry's engagement with law enforcement agencies and other relevant authorities, and develop joint public-private initiatives to promote the integrity of the banking sector and protect banks and their customers from actual or potential harm caused by financial crime, corruption or personal data breaches.

Priorities for 2024 and Beyond

Resolution

The HKMA is continuing with its multi-year programme to build an operational resolution regime for AIs. For 2024, we will prioritise the following four areas (Table 1), taking into account the follow-up actions identified in the internal review that we undertook in response to the 2023 banking turmoil in the US and Europe.

Table 1 Forward priorities on resolution in 2024



Resolution policy and standards

- Advance the development of policy proposals on the ex-ante capabilities and arrangements that an AI should put in place to support orderly resolution, including those in relation to timely and robust valuations and resolution preparedness
- Review whether there is a need to amend the Financial Institutions (Resolution) Ordinance to enhance the flexibility of resolution initiation



Resolution execution capability

- Enhance crisis management framework and arrangements to support both internal co-ordination and cross-sectoral co-ordination among Hong Kong resolution authorities via the development of playbook and simulation exercises
- Continue to operationalise the stabilization options of a transfer to a bridge institution and bail-in



Resolution planning

- Lead regional resolution planning and co-ordinate with other authorities via 14 Crisis Management Groups and Resolution Colleges to enhance the resolvability of global systemically important banks and the cross-border crisis preparedness of authorities
- Advance resolution planning for domestic systemically important banks and other relevant AIs to enhance their resolvability, including fostering the build-up and maintenance of loss-absorbing capacity resources and the implementation of resolution policy standards on operational continuity, liquidity and funding, contractual recognition of suspension of termination rights, as well as continuity of access to FMs
- Advance development of preferred resolution strategies for relevant AIs with total consolidated assets above HK\$300 billion in co-ordination with the home authorities



International and cross-border co-operation

- Contribute to international policy initiatives on resolution reform at the Financial Stability Board, including resolution strategies and tools, operationalisation of bail-in execution, public sector liquidity backstops, the impact of digital innovation on resolution, and the role of deposit insurance in resolution
- Chair the Study Group on Resolution of the Executives' Meeting of the East Asia-Pacific Central Banks, and co-ordinate regional discussions and studies on resolution

Priorities for 2024 and Beyond

Banking sector development

The HKMA will work on further promoting sound business conduct among banks and fostering the healthy growth of the banking sector. These are important efforts as they contribute to public confidence in the banking sector as well as Hong Kong's overall competitiveness as an international financial centre.

Building a safe and inclusive banking sector

Bank consumer protection

The HKMA will monitor AIs' implementation of and compliance with the revised Code of Banking Practice.

To strengthen consumer protection, we will keep abreast of new developments in innovative banking services (such as those provided through generative artificial intelligence technologies) as well as popular banking products (such as personal credit products), and provide guidance to the banking industry as appropriate. To enhance public awareness of the importance of safeguarding credit card and personal information, we will continue to expand the coverage of the Anti-Scam Consumer Protection Charter.



Mr Eddie Yue, Chief Executive, gives opening remarks at the Anti-Scam Consumer Protection Charter 2.0 event in April 2024, announcing that the coverage of the Charter is expanded to include more institutions and merchants

The HKMA will also continue to participate actively in the international effort on financial consumer protection, with focus on advances in technology in the banking environment as well as surge in scams and frauds arising from the increasing use of digitalised banking channels. We will also continue to monitor the operation and promote the adoption of the payment arrangement for property transactions by mortgage banks and pursue necessary enhancements based on our experience in this area.

As part of its ongoing initiative to promote a sound culture in the banking sector, the HKMA will continue to hold culture dialogues with leadership of AIs to discuss the effectiveness of their culture enhancement efforts and provide supervisory feedback. We will also maintain dialogue with regulators outside Hong Kong on the development of bank culture.

In co-ordination with the banking associations, the HKMA will monitor AIs' implementation of the Mandatory Reference Checking Scheme designed to address the "rolling bad apples"² phenomenon in the banking sector. Improvements to the Scheme will be made as appropriate.

"Credit Data Smart" started service on 26 April 2024, allowing the selected credit reference agencies to officially provide the public with consumer credit reference services. The HKMA will work with the industry associations on various enhancement initiatives to encourage more credit providers to join "Credit Data Smart" and improve its resilience.

Financial inclusion

The HKMA will continue to engage with the banking industry, the business community and other relevant stakeholders to promote financial inclusion in Hong Kong, taking into account market developments and new opportunities arising in the digital age.

² "Rolling bad apples" refers to the situation where individuals have engaged in misconduct behaviour in one institution but can obtain employment elsewhere without disclosing their earlier misconduct to the new employer.

Priorities for 2024 and Beyond

Deposit protection

It is important to ensure that Hong Kong's Deposit Protection Scheme (DPS) remains efficient and effective in protecting depositors and contributing to banking stability in Hong Kong. Following a three-month public consultation on proposed enhancements to the DPS conducted from July to October 2023, the Hong Kong Deposit Protection Board (HKDPB) had consolidated the views and comments received from the public, the banking industry and other key stakeholder groups and issued the consultation conclusions in early 2024. Subject to the legislative process, the HKDPB will strive to put the new protection limit, one of the key enhancements proposed, into effect in 2024. It plans to commence the next review in 2027, three years after the implementation of the enhanced protection limit, with the aim of completing the review exercise in the following year.

To support the implementation of the proposed DPS enhancements, the HKDPB will update relevant guidelines and systems, including the payout procedures and system, as well as the information submission requirements relating to the payout of a merged bank. A comprehensive advertising and public education campaign will also be launched to promote public awareness of the enhanced DPS. In particular, social media campaigns and educational outreach activities will be carried out to engage key target groups, including the younger generation and the elderly.

Future-proofing the banking sector

Technology adoption

The HKMA, the SFC and the Insurance Authority (IA) will press on with their roll-out of the initiatives in the new Fintech Promotion Roadmap published in August 2023. Specifically, we will launch a Fintech Knowledge Hub to make resources more accessible for various fintech ecosystem stakeholders. The Hub will feature a cross-sectoral directory to foster stronger connections between fintech solution providers and financial institutions. We will also undertake a package of initiatives that will include fintech showcase events, roundtables, seminars, training sessions, and the development of practical guidelines and promotional videos. These will all be aimed at giving further impetus to the adoption of the five technology focus areas, namely Wealthtech, Insurtech, Greentech, artificial intelligence and distributed ledger technology.



The report on Hong Kong Fintech Promotion Roadmap:



Regarding supervisory technology (SupTech), the HKMA will introduce additional new functionalities in its end-to-end digital supervisory platform as well as implementing an online survey tool. The aim is to further optimise our supervisory processes and automate the supervisory information management lifecycle, from acquisition to retrieval and analysis. We will also explore additional advanced analytics use cases that leverage novel technologies such as generative artificial intelligence, cognitive automation and decision analytics.

Capacity building in the banking sector

The HKMA is currently consulting the banking industry about an updated module on Competence and Ethical Behaviour in the SPM. The updated module will provide more guidance to AIs on assessing and maintaining the competence of the banking workforce. This updated set of supervisory requirements is expected to take effect in 2024. We will also monitor banks' talent development efforts through a new annual Survey on Talent Development, starting from 2024.

In addition, the HKMA will launch the Professional Level of the Green and Sustainable Finance (GSF) module under the Enhanced Competency Framework (ECF) for Banking Practitioners in 2024, to meet the rapidly growing demand for experienced GSF practitioners in the banking industry. A total of ten ECF modules have been launched to date, and we will also conduct an in-depth review into how effectively the existing ECF modules are supporting the professional development of banking practitioners.

Priorities for 2024 and Beyond



Enhanced Competency Framework



| | |
|-----------------|---|
| 2014 | <input checked="" type="checkbox"/> Private Wealth Management |
| 2016 | <input checked="" type="checkbox"/> Anti-Money Laundering and Counter-Financing of Terrorism (Core Level) |
| 2018 | <input checked="" type="checkbox"/> Cybersecurity <input checked="" type="checkbox"/> Treasury Management <input checked="" type="checkbox"/> Retail Wealth Management <input checked="" type="checkbox"/> Anti-Money Laundering and Counter-Financing of Terrorism (Professional Level) |
| 2019 | <input checked="" type="checkbox"/> Credit Risk Management |
| 2020 | <input checked="" type="checkbox"/> Operational Risk Management |
| 2021 | <input checked="" type="checkbox"/> Fintech |
| 2022 | <input checked="" type="checkbox"/> Compliance |
| 2023 | <input checked="" type="checkbox"/> Green and Sustainable Finance (Core Level) |
| Upcoming | <input type="checkbox"/> Green and Sustainable Finance (Professional Level) |



Following Hong Kong's post-COVID return to normality in early 2023, the HKMA gradually resumed various seminars and events aimed at building capacity in the banking sector. In the coming year, we will continue to organise the Regulator's Dialogue for both bank directors and practitioners. This is a valuable platform where bankers of all levels can engage in interactive discussions on topical banking issues and regulatory developments.

As a major source of the banking workforce is the younger generation, the HKMA will step up its efforts to attract and nurture young talents interested in joining the industry. Through an online platform namely Banking GPS and various career talks, we will seek to enrich our young people's understanding of new developments and career opportunities in the modern banking industry. We will also undertake more initiatives designed to increase students' exposure to real-life work experience and enhance their practical banking knowledge, thus better equipping them for future careers in the banking industry.

International financial centre

Building on Hong Kong's strong foundation and the ample opportunities the city offers, the HKMA will strive to further strengthen Hong Kong's position as an international financial centre in 2024 and beyond.

Staying ahead of technological advances

Hong Kong as a fintech hub in Asia

The HKMA will continue to take forward the initiatives laid out under the "Fintech 2025" strategy, designed to promote the development and use of technology in the financial sector. We will focus on facilitating banks' digitalisation and adoption of fintech, strengthening our work on both wholesale and retail Central Bank Digital Currencies, further developing the next-generation data infrastructure needed for more efficient financial intermediation, and deepening the fintech talent pool. More generally, we will step up our work to strengthen Hong Kong's fintech capabilities, while maintaining close collaboration with strategic partners and key stakeholders both locally and abroad.

Crypto-assets, particularly stablecoins

A public consultation was conducted between December 2023 and February 2024 on the regulation of stablecoin issuers. The HKMA will take forward the legislative work in collaboration with the Government, and will continue to engage with different stakeholders while monitoring market developments and international discussion in formulating and implementing the relevant regulatory regime. Parallel with this, we will administer a stablecoin sandbox arrangement in order to facilitate the exchange of views with the industry on the proposed regulatory regime and requirements.

Dominant gateway to the Mainland and global offshore renminbi business centre

The HKMA will continue to collaborate with Mainland authorities and the financial industry to further develop Hong Kong's offshore renminbi market, with a particular focus on deepening market liquidity, promoting a more diverse range of renminbi products, and enhancing Hong Kong's financial infrastructure. The HKMA will also work on deepening the financial co-operation in the Greater Bay Area, bringing more convenience for corporates and individuals, as well as more opportunities for the banking industry in Hong Kong.

Priorities for 2024 and Beyond

Moreover, the HKMA will continue to enhance connectivity with the Mainland financial market, exploring further enhancements and expansion of the various Mainland-Hong Kong Connect schemes, and working together with relevant Mainland and Hong Kong authorities to provide more diversified risk management and liquidity management tools, including promoting the wider use of onshore bonds as collateral in the international markets, and supporting the further opening up of onshore repo market, which will broaden access to Mainland onshore markets by offshore investors, including Bond Connect investors, and address their growing need for liquidity and risk management as they increase their allocation to renminbi assets.

A hub for asset and wealth management

The HKMA will proactively reach out to the asset and wealth management industry to promote Hong Kong as an international financial centre, with a view to attracting more capital, talent, and financing and investment activities to Hong Kong. We will also continue our work with the Government and the industry to enhance the competitiveness of Hong Kong as an international asset and wealth management hub and a regional destination for corporate treasury centres and investment activities. Specifically, a task force will be set up by the Government to identify opportunities and devise measures to further develop the asset and wealth management industry. To attract fund managers, family offices and asset owners around the world to set up presence or further expand their operation in Hong Kong, we will work with the Government to further enhance the preferential tax regimes for related funds, single family offices and carried interest.

Innovation and technology adoption in bond markets

Whilst the adoption of tokenisation in the bond market is still at an early stage, the technology holds the potential to generate efficiency gains, reduce costs, enhance liquidity, and broaden investor participation in the bond market. Through two batches of tokenised green bond issuances in 2023 and early 2024, the HKMA and the Government have demonstrated the viability of adopting tokenisation technology in real capital market transactions in Hong Kong. We will continue to explore policy initiatives to foster wider adoption of the technology including further issuance of tokenised Government bonds.

Hong Kong's financial infrastructures

The HKMA will continue to maintain the smooth and reliable operation of the various financial infrastructures to strengthen overall resilience and meet international standards. Riding on the rapid adoption of the Faster Payment System (FPS) by the public over the past five years, we will continue to explore more potential use cases in collaboration with the industry and various Government departments, for example, adoption of App-to-App and Web-to-App feature to facilitate on-mobile payments, with a view to further promoting e-payment in Hong Kong. In particular, more work will be done to promote the use of the FPS for merchant payments and business payments.

Leveraging on its successful experience in the past few years, the HKMA will continue engaging with banks and stored value facilities (SVFs) to encourage the public to give electronic lai sees via the FPS during the Chinese New Year.

The HKMA has been supporting the Digital Currency Institute of the People's Bank of China in its pilot testing of digital renminbi (e-CNY) for cross-boundary payments in Hong Kong. We will expand the scope and scale of the testing to cover more Mainland operating institutions, Hong Kong banks and merchants.

Hong Kong's retail payment industry

In its role of supervising SVF licensees and overseeing the designated retail payment systems in accordance with the PSSVFO, the HKMA will continue to refine its risk-based approach having regard to relevant international and local developments, with a view to promoting a safe and efficient retail payment industry.

Priorities for 2024 and Beyond

Other market development initiatives

Hong Kong's treasury markets

The HKMA works closely with the Treasury Markets Association and engages market participants to keep enhancing the professionalism and competitiveness of Hong Kong's treasury market, particularly in relation to financial benchmarks, promotion of the Foreign Exchange Global Code, and opportunities to further develop Hong Kong's treasury market.

Over-the-counter derivatives market

An over-the-counter (OTC) derivatives regime has been introduced in phases in Hong Kong. In close collaboration with the SFC, the HKMA will further develop and refine the implementation rules to make the regulatory regime for the OTC derivatives market more effective. Market consultation on the implementation of updated international standards for mandatory reporting will be conducted in 2024, with implementation planned for 2025.

Developing financial leadership in Hong Kong

Looking ahead, the Hong Kong Academy of Finance (AoF)³ will strengthen its activities across its three areas of work, namely knowledge exchange and overseas collaborations, thought leadership in macro and industry trends, and building a pipeline of future leaders. The Leadership Development Programme will be further developed with a view to fostering leadership talents and broadening the macro and cross-disciplinary perspectives of members and industry participants. The flagship Financial Leaders Programme, launched in 2022, has now been running successfully for two years, and is contributing strongly to AoF's efforts to build a robust alumni network of future financial leaders.



The 2023 cohort of the Financial Leaders Programme with Mr Eddie Yue (front row, centre), Chief Executive of HKMA and Chairman of AoF, and Mr Enoch Fung (front row, third from left), CEO of AoF

The Hong Kong Institute for Monetary and Financial Research (HKIMR), the research arm of the AoF, will continue to pursue research studies on topics that are highly relevant to Hong Kong's financial services industry and regulators. These studies typically cover the fields of monetary policy, banking, and financial market developments, all of which are of strategic importance to Hong Kong and the Asia region. Notable topics include generative artificial intelligence in the financial services industry, long-term investing in a digital economy, and further development of family offices in Hong Kong. In addition to these research activities, efforts are being put into engaging knowledge exchange activities with a diverse range of stakeholders, including local and international researchers and research institutions, to promote the AoF/HKIMR brand and expand its footprint.

Market outreach initiatives

Following up on visits of its delegations to the Middle East in 2023, the HKMA is planning to carry out further overseas visits in 2024, including to Association of Southeast Asian Nations (ASEAN) countries, to reinforce connections and promote Hong Kong's financial services overseas.

³ The AoF was set up with the full collaboration of the HKMA, the SFC, the IA and the Mandatory Provident Fund Schemes Authority. It brings together personnel from academia, the industry, professionals and the regulatory community with the aim of developing financial leadership and promoting research collaboration.

Priorities for 2024 and Beyond

International and regional co-operation

Turmoil in financial markets in 2023 demonstrated that regional shocks can quickly ripple throughout the global financial system, making cross-border co-operation between central banks and regulatory authorities of critical importance. The HKMA will therefore continue its active participation in international and regional forums to promote global financial stability.

The HKMA will continue to take on leadership roles in a number of priority work areas of the Financial Stability Board, including those on enhancing the resilience of non-bank financial intermediation, crypto-assets and financial innovation, as well as cross-border payments and regional collaboration. It will also actively contribute to other financial stability topics including non-bank financial leverage, cyber and operational resilience, and addressing financial risks from climate change.

On the regional front, following the success of the inaugural AMRO-HKMA-ADBI⁴ Financial Leadership Programme for senior representatives from central banks, ministries of finance and related government agencies of the ASEAN+3⁵ economies, the HKMA is committed to further developing the training programme as part of its ongoing efforts to strengthen Hong Kong's connections with its fellow Asian economies and support their development.

Sustainability

Challenges arising from climate change and sustainability are among the most pressing issues of our time, and the HKMA is working at multiple levels to address these issues globally, regionally and locally, with a particular focus on the financial industry. Full details of our work and our forward-looking strategies and priorities can be found in the *Sustainability Report 2023*. This is work that must be undertaken collaboratively and on a global scale, and we are therefore continuing to work closely with like-minded peers and international organisations to achieve meaningful change. In 2024, we will step up our efforts to promote a more sustainable financial sector in Hong Kong, while carrying out our duties as a responsible investor and a sustainable organisation.

⁴ AMRO, ASEAN+3 Macroeconomic Research Office, is an international organisation that aims to contribute to the macroeconomic and financial resilience and stability in the ASEAN+3 region. ADBI, Asian Development Bank Institute, is the Tokyo-based think tank of the Asian Development Bank, providing policy research, capacity building, training, and outreach to assist developing countries in Asia and the Pacific.

⁵ ASEAN+3 comprises the ten ASEAN member countries (Brunei, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam), together with China, Japan and South Korea.



About the HKMA

The Hong Kong Monetary Authority is Hong Kong's central banking institution. The HKMA has four main functions:

- maintaining currency stability within the framework of the Linked Exchange Rate System;
- promoting the stability and integrity of the financial system, including the banking system;
- helping to maintain Hong Kong's status as an international financial centre, including the maintenance and development of Hong Kong's financial infrastructure; and
- managing the Exchange Fund.

About the HKMA

HKMA's legal mandate

The HKMA was established on 1 April 1993 after the Legislative Council passed amendments to the Exchange Fund Ordinance in 1992 empowering the Financial Secretary to appoint a Monetary Authority.

The powers, functions and responsibilities of the Monetary Authority are set out in the Exchange Fund Ordinance, the Banking Ordinance, the Financial Institutions (Resolution) Ordinance, the Deposit Protection Scheme Ordinance, the Payment Systems and Stored Value Facilities Ordinance, and other relevant Ordinances. The division of functions and responsibilities in monetary and financial affairs between the Financial Secretary and the Monetary Authority is set out in an exchange of letters dated 25 June 2003. The exchange of letters discloses delegations made by the Financial Secretary to the Monetary Authority. The letters are public documents and can be found on the HKMA website.

The Exchange Fund Ordinance establishes the Exchange Fund under the control of the Financial Secretary. According to the Ordinance, the Fund shall be used primarily for affecting the exchange value of the Hong Kong dollar. It may also be used (whilst having regard to its primary purpose) for maintaining the stability and integrity of the monetary and financial systems of Hong Kong, with a view to maintaining Hong Kong as an international financial centre.

The Monetary Authority is appointed under the Exchange Fund Ordinance to assist the Financial Secretary in performing his functions under the Exchange Fund Ordinance and to perform such other functions as are assigned by other Ordinances or by the Financial Secretary. The office of the Monetary Authority is known as the HKMA, and the Monetary Authority is the Chief Executive of the HKMA.

The Banking Ordinance provides the Monetary Authority with the responsibility and powers for regulating and supervising banking business and the business of taking deposits. Under the Ordinance, the Monetary Authority is responsible for the authorization of licensed banks, restricted licence banks and deposit-taking companies in Hong Kong.

The Financial Institutions (Resolution) Ordinance provides that the Monetary Authority is the resolution authority for banking sector entities. The Monetary Authority is vested with a range of powers to effect the orderly resolution of a non-viable banking sector entity (the failure of which could pose systemic risk). The purpose is to maintain financial stability, while seeking to protect public funds.

The Securities and Futures Ordinance and the Mandatory Provident Fund Schemes Ordinance provide certain powers to the Monetary Authority regarding the securities and mandatory provident fund businesses of banks.

The Monetary Authority has been delegated with powers of inspection and investigation by the Insurance Authority under the Insurance Ordinance in relation to the insurance related businesses of banks.

The Anti-Money Laundering and Counter-Terrorist Financing Ordinance empowers the Monetary Authority to supervise banks' compliance with the customer due diligence and record-keeping requirements under the Ordinance.

The Deposit Protection Scheme Ordinance confers responsibility on the Monetary Authority to assist in the operation of the Deposit Protection Scheme and to trigger payment of compensation from the Deposit Protection Scheme Fund to depositors of a failed licensed bank.

The Payment Systems and Stored Value Facilities Ordinance provides a statutory regime for the Monetary Authority to designate and oversee certain significant clearing and settlement systems and retail payment systems operating in Hong Kong. It also empowers the Monetary Authority to administer a licensing regime for electronic and physical "facilities", which are used to store monetary value and which meet the criteria specified in the Ordinance.

Corporate Governance



As Hong Kong's central banking institution, the HKMA is committed to high standards of corporate governance, as good governance is crucial in maintaining and safeguarding the trust and confidence of the public in the HKMA to fulfil its statutory mandate.

Corporate Governance

To achieve its commitment to good corporate governance, the HKMA:

- puts in place a well-defined governance structure with a high degree of accountability;
- exercises robust controls to manage risks and ensure that staff behaviours at all levels and its day-to-day operations are consistent with specified standards; and
- pursues a policy of high transparency and accessibility, and keeps close contacts with stakeholders.

The HKMA and the Hong Kong Special Administrative Region Government

The HKMA is an integral part of the Hong Kong Special Administrative Region (HKSAR) Government, but is able to employ staff on terms different from those of the civil service in order to attract personnel of the right experience and expertise. The Chief Executive of the HKMA and his staff are public officers. In its day-to-day work, the HKMA operates with a high degree of autonomy within the relevant statutory powers conferred upon, or delegated to, the Monetary Authority.

The Financial Secretary is responsible for determining the monetary policy objective and the structure of the monetary system of Hong Kong: a letter from the Financial Secretary to the Monetary Authority dated 25 June 2003 specifies that these should be currency stability defined as a stable exchange value at around HK\$7.80 to one US dollar maintained by Currency Board arrangements. The Monetary Authority is on his own responsible for achieving the monetary policy objective, including determining the strategy, instruments and operational means for doing so. The Monetary Authority also has responsibilities in relation to the maintenance of the stability and integrity of the monetary system of Hong Kong.

The Financial Secretary, assisted by the Secretary for Financial Services and the Treasury, has responsibility for policies for maintaining the stability and integrity of Hong Kong's financial system and the status of Hong Kong as an international financial centre. In support of these policies, the Monetary Authority's responsibilities include:

- promoting the general stability and effective working of the banking system;
- promoting the development of the debt market, in co-operation with other relevant bodies;
- matters relating to the issuance and circulation of legal tender notes and coins;
- promoting the safety and efficiency of the financial infrastructure through the development of payment, clearing and settlement systems and, where appropriate, the operation of these systems; and
- seeking to promote, in co-operation with other relevant bodies, confidence in Hong Kong's monetary and financial systems, and market development initiatives to help strengthen the international competitiveness of Hong Kong's financial services.

The Exchange Fund is under the control of the Financial Secretary. The Monetary Authority, under delegation from the Financial Secretary, is responsible to the Financial Secretary for the use of the Exchange Fund, and for the investment management of the Fund.

Corporate Governance

Accountability and transparency

The autonomy given to the HKMA in its day-to-day operations, and in the methods it uses to pursue policy objectives determined by the Government, is complemented by a high degree of accountability and transparency.

The HKMA serves Hong Kong by promoting monetary and banking stability, by managing the official reserves effectively, and by developing and overseeing a robust and diverse financial infrastructure. These processes help to strengthen Hong Kong's role as an international financial centre and to foster Hong Kong's economic well-being.

The HKMA must have the confidence of the community if it is to perform its duties well. The HKMA therefore takes seriously the duty of explaining its policies and work to the general public and makes every effort to address any concerns within the community relevant to the HKMA's responsibilities. In particular, the HKMA makes timely clarifications on misinformation and rumours about the HKMA's policies via traditional and social media.

The HKMA is accountable to the people of Hong Kong through the Financial Secretary, who appoints the Monetary Authority, and through the laws passed by the Legislative Council that set out the Monetary Authority's powers and responsibilities. The HKMA also recognises a broader responsibility to promote a better understanding of its roles and objectives and to keep itself informed of community concerns. In its day-to-day operations and in its wider contacts with the community, the HKMA pursues a policy of transparency and accessibility. This policy has two main objectives:

- to keep the financial industry and the public as fully informed about the work of the HKMA as possible, subject to considerations of market sensitivity, commercial confidentiality and statutory restrictions on disclosure of confidential information; and
- to ensure that the HKMA is in touch with, and responsive to, the community it serves.

The HKMA seeks to follow international best practices in its transparency arrangements. It maintains extensive relations with the mass media and produces a range of regular and special publications in both English and Chinese. The HKMA's bilingual website (www.hkma.gov.hk) carries a large number of HKMA publications, press releases, speeches and presentations, in addition to dedicated sections on research, statistics, regulatory resources, consumer information and other topics. Social media platforms are also used to communicate with the public more efficiently in the digital era. The HKMA maintains an Information Centre at its offices, consisting of a library and an exhibition area, which is open to the public six days a week. Further information on the HKMA's work on public communications and engagement is contained in the *Corporate Functions* chapter on pages 185 to 193.

Corporate Governance

Over the years, the HKMA has progressively increased the detail and frequency of its disclosure of information on the Exchange Fund and Currency Board Accounts. Since 1999, the HKMA has participated in the International Monetary Fund's Special Data Dissemination Standard project for central banks. The HKMA publishes records of meetings of the Currency Board Sub-Committee of the Exchange Fund Advisory Committee and the reports on Currency Board operations. The supervisory policies and guidelines on banking have been published on the HKMA website since 1996.

The relations between the HKMA and the Legislative Council play an important part in promoting accountability and transparency. There is a formal commitment from the Chief Executive of the HKMA to appear before the Panel on Financial Affairs of the Legislative Council three times a year to brief Members and to answer questions on the HKMA's work. Representatives from the HKMA attend Legislative Council panel and committee meetings from time to time to explain and discuss particular issues and to assist Members in their scrutiny of draft legislation.

Controls

The HKMA adopts robust internal and external control mechanisms to ensure that it upholds a high standard of staff conduct, prudent risk management as well as appropriate checks and balances. Internal and external audit functions provide independent assessment on the adequacy and effectiveness of the control mechanisms.

Code of Conduct

A Code of Conduct, which provides guidance to staff on their ethical and legal responsibilities, is in place to ensure that staff behaviours are consistent with specified standards at all levels.

Internal controls

Operational controls

All departments and divisions have ownership and responsibility to identify and assess risks of their operational processes and put in place appropriate controls for ensuring proper day-to-day operations of the HKMA. This serves as the first line of defence for risk management.

Corporate Governance

Organisational risk management

Risk management is also undertaken at the corporate level, with the Risk Committee, chaired by the Chief Executive of the HKMA, being one of the cornerstones of the organisational risk management framework.

Potential and emerging risks identified by the functional units, and the adequacy of the control measures and mitigating strategies they devise, are reported to and discussed at the Risk Committee, which decides on appropriate follow-up actions.

Internal audit

The Internal Audit Division of the HKMA independently assesses the adequacy and effectiveness of governance, risk management and control processes of different functional units, and advises on areas for improvement.

External audit

In accordance with section 7 of the Exchange Fund Ordinance, the Audit Commission of the HKSAR Government audits the financial statements of the Exchange Fund. The Commission does not charge for this service. The audited financial statements of the Exchange Fund are included in the *HKMA Annual Report*.

Advisory Committees

The Exchange Fund Advisory Committee

In his control of the Exchange Fund, the Financial Secretary is advised by the Exchange Fund Advisory Committee (EFAC). EFAC is established under section 3(1) of the Exchange Fund Ordinance, which requires the Financial Secretary to consult the Committee in his exercise of control of the Exchange Fund. The Financial Secretary is ex officio Chairman of EFAC. Other members, including the Monetary Authority, are appointed in a personal capacity by the Financial Secretary under the delegated authority of the Chief Executive of the Hong Kong Special Administrative Region. Members of EFAC are appointed for the expertise and experience that they can bring to the Committee. Such expertise and experience include knowledge of monetary, financial and economic affairs and of investment issues, as well as of accounting, management, business and legal matters.

EFAC is assisted in its work by five Sub-Committees, which monitor specific areas of the HKMA's work and report and make recommendations to the Financial Secretary through EFAC. The Committee held four meetings in 2023 to discuss a full range of issues relating to the work of the HKMA, most of which had been previously discussed by the relevant Sub-Committees.

Brief biographies of EFAC Members and the Code of Conduct for EFAC Members can be found on the HKMA website. A Register of Members' Interests, which contains the declarations of interests by Members, is available for public inspection during 10:00 a.m. to 6:00 p.m. Monday to Friday (except public holidays) at the HKMA offices.

The terms of reference for EFAC and its Sub-Committees are available on the HKMA website.



Advisory Committees

Chairman

23 April 2024



The Honourable Paul CHAN Mo-po, GBM, GBS, MH, JP
The Financial Secretary

Members



Mr Eddie YUE, JP
The Monetary Authority



Mr Benjamin HUNG Pi-cheng, BBS, JP
President, International
Standard Chartered Bank



Mr Nicky LO Kar-chun, SBS, JP



Ms Irene LEE Yun-lien
Chairman
Hysan Development Company Limited



The Honourable Rimsky YUEN Kwok-keung, GBM, SC, JP
Temple Chambers



Mr Stephen YIU Kin-wah, JP
Chairman
Insurance Authority

Advisory Committees



Mr Tim LUI Tim-leung, GBS, JP
Chairman
Securities and Futures Commission



Mrs Ayesha MACPHERSON LAU, BBS, JP
Chairman
Mandatory Provident Fund Schemes Authority



Mr SUN Yu, JP
Vice Chairman and Chief Executive
Bank of China (Hong Kong) Limited



Professor TAM Kar-yan, MH, JP
Dean and Chair Professor, School of Business and Management
The Hong Kong University of Science and Technology



Mr Raymund CHAO Pak-ki
Chairman of PwC Asia Pacific
Chairman & CEO of PwC China



Dr the Honourable Victor FUNG Kwok-king, GBM, GBS
Group Chairman
Fung Group



Mr David LIAO Yi-chien
Group Executive, HSBC Group
Co-Chief Executive
The Hongkong and Shanghai Banking Corporation Limited



Mr Michael WONG Yick-kam, SBS, MH, JP
(from 1 September 2023)

Advisory Committees



Mr Jack CHAN Hoi

Chairman, EY China
Regional Managing Partner, EY Greater China
(from 1 March 2024)



The Honourable Bernard Charnwut CHAN, GBM, GBS, JP

Chairman & President
Asia Financial Holdings Limited
(until 31 July 2023)



Mr LAU Ming-wai, GBS, JP

Chairman
Chinese Estates Holdings Limited
(until 31 July 2023)



Ms Agnes CHAN Sui-kuen, BBS

Senior Advisor, Chairman Office, Greater China
Ernst & Young
(until 11 February 2024)

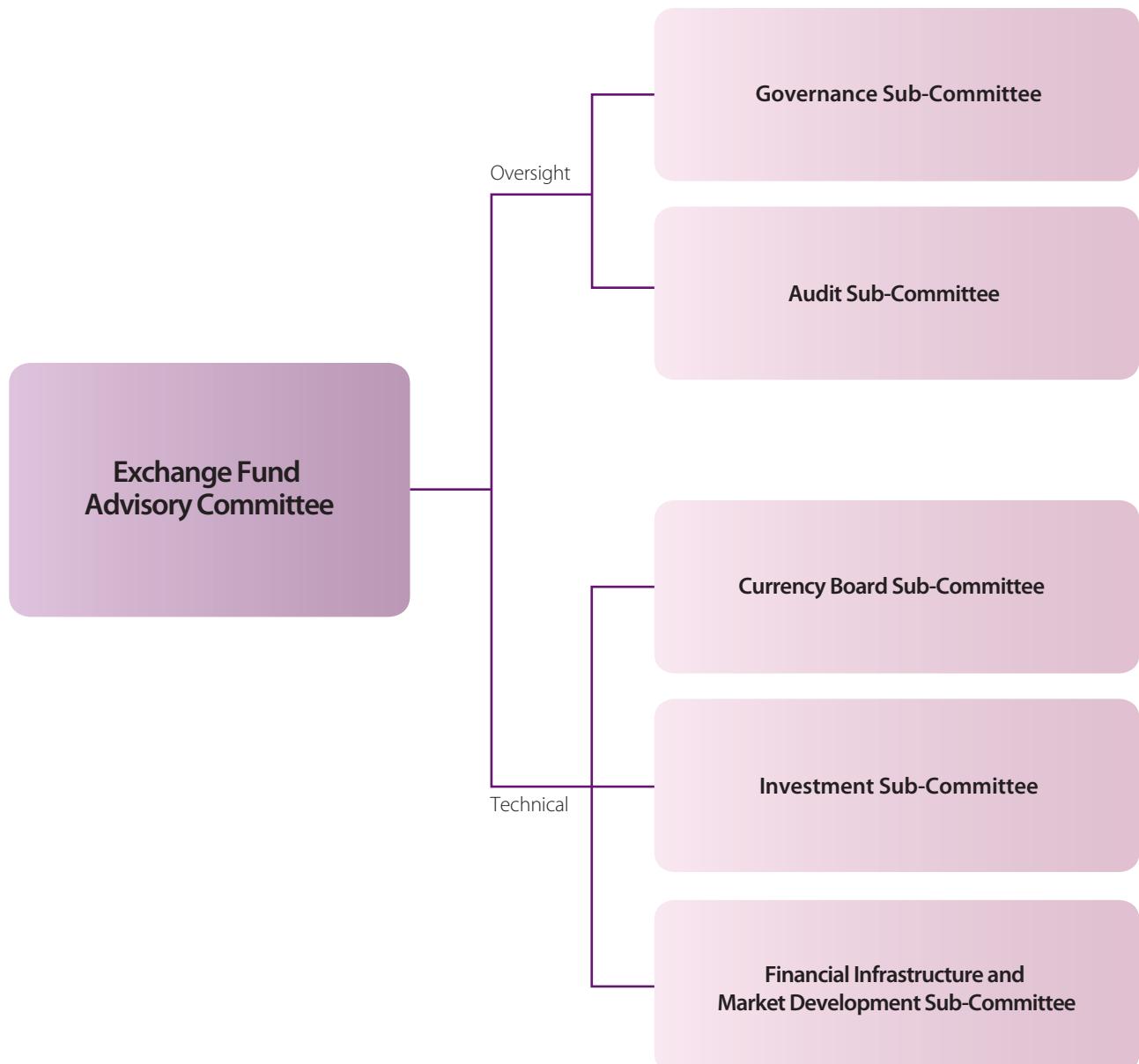
Secretary

Ms Sarah KWOK

Advisory Committees

The Exchange Fund Advisory Committee

Sub-Committee Structure



Advisory Committees

The Exchange Fund Advisory Committee

Governance Sub-Committee

The Governance Sub-Committee monitors the performance of the HKMA and makes recommendations to EFAC on remuneration and human resources policies, and on budgetary, administrative and governance issues. The Sub-Committee met five times in 2023 to consider a range of subjects including the HKMA's expenditure budget, performance assessment, annual pay review and strategic planning matters. The Sub-Committee also received regular reports on the work of the HKMA.

Chairman

Mr Nicky LO Kar-chun, SBS, JP

Members

The Honourable Rimsky YUEN Kwok-keung, GBM, SC, JP
Temple Chambers

Mr Stephen YIU Kin-wah, JP
Chairman
Insurance Authority

Mr Tim LUI Tim-leung, GBS, JP
Chairman
Securities and Futures Commission

Mrs Ayesha MACPHERSON LAU, BBS, JP
Chairman
Mandatory Provident Fund Schemes Authority

Professor TAM Kar-yan, MH, JP
Dean and Chair Professor, School of Business and Management
The Hong Kong University of Science and Technology

Mr Raymund CHAO Pak-ki
Chairman of PwC Asia Pacific
Chairman & CEO of PwC China

Dr the Honourable Victor FUNG Kwok-king, GBM, GBS
Group Chairman
Fung Group

Mr Michael WONG Yick-kam, SBS, MH, JP
(from 1 September 2023)

Mr Jack CHAN Hoi
Chairman, EY China
Regional Managing Partner, EY Greater China
(from 1 March 2024)

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Chairman & President
Asia Financial Holdings Limited
(until 31 July 2023)

Mr LAU Ming-wai, GBS, JP
Chairman
Chinese Estates Holdings Limited
(until 31 July 2023)

Ms Agnes CHAN Sui-kuen, BBS
Senior Advisor, Chairman Office, Greater China
Ernst & Young
(until 11 February 2024)

Secretary

Ms Sarah KWOK

Advisory Committees

The Exchange Fund Advisory Committee

Audit Sub-Committee

The Audit Sub-Committee reviews and reports on the HKMA's financial reporting process and the adequacy and effectiveness of the internal control systems of the HKMA. The Sub-Committee reviews the HKMA's financial statements, and the composition and accounting principles adopted in such statements. It also examines and reviews with both the external and internal auditors the scope and results of their audits. None of the members of the Sub-Committee performs any executive functions in the HKMA. The Sub-Committee met two times in 2023 and received reports on the work of the Risk Committee and the Internal Audit Division.

Chairman

Mr Stephen YIU Kin-wah, JP

Chairman
Insurance Authority

Members

Mr Tim LUI Tim-leung, GBS, JP

Chairman
Securities and Futures Commission

Mr Jack CHAN Hoi

Chairman, EY China
Regional Managing Partner, EY Greater China
(from 1 March 2024)

Ms Agnes CHAN Sui-kuen, BBS

Senior Advisor, Chairman Office, Greater China
Ernst & Young
(until 11 February 2024)

Mr Raymund CHAO Pak-ki

Chairman of PwC Asia Pacific
Chairman & CEO of PwC China

Mr LAU Ming-wai, GBS, JP

Chairman
Chinese Estates Holdings Limited
(until 31 July 2023)

Secretary

Ms Sarah KWOK

Advisory Committees

The Exchange Fund Advisory Committee

Currency Board Sub-Committee

The Currency Board Sub-Committee monitors and reports on the Currency Board arrangements that underpin Hong Kong's Linked Exchange Rate System. It is responsible for ensuring that Currency Board operations are in accordance with established policy, recommending improvements to the Currency Board system, and ensuring a high degree of transparency in the operation of the system. Records of the Sub-Committee's meetings and the reports on Currency Board operations submitted to the Sub-Committee are published regularly. In 2023, the Sub-Committee met four times.

Chairman

Mr Eddie YUE, JP
The Monetary Authority

Members

Mr Arthur YUEN, JP
Deputy Chief Executive
Hong Kong Monetary Authority

Mr Darryl CHAN, JP
Deputy Chief Executive
Hong Kong Monetary Authority

Professor Lawrence J. LAU, GBS, JP
Ralph and Claire Landau Professor of Economics
The Chinese University of Hong Kong

Mrs Helen CHAN, SBS

Professor Michael SONG Zheng
Wei Lun Professor of Economics
Chairman, Department of Economics
The Chinese University of Hong Kong

Mr SUN Yu, JP
Chairperson
The Hong Kong Association of Banks
(until 31 December 2023)

Secretary

Ms Sarah KWOK

Mr Howard LEE, JP
Deputy Chief Executive
Hong Kong Monetary Authority

Dr John GREENWOOD, SBS, OBE
Chief Economist
International Monetary Monitor Limited

Dr PENG Wensheng
Chief Economist, Head of Research Department
China International Capital Corporation Limited
Dean of the CICC Global Institute (CGI)

Professor TANG Heiwei
Director, Asia Global Institute
Victor and William Fung Professor in Economics, HKU Business School

Ms Luanne LIM
Chairperson
The Hong Kong Association of Banks
(from 1 January 2024)

Advisory Committees

The Exchange Fund Advisory Committee

Investment Sub-Committee

The Investment Sub-Committee monitors the HKMA's investment management work and makes recommendations on the investment policy and strategy of the Exchange Fund and on risk management and other related matters. The Sub-Committee held five meetings during 2023.

Chairman

Mr Eddie YUE, JP
The Monetary Authority

Members

Mr Howard LEE, JP
Deputy Chief Executive
Hong Kong Monetary Authority

Mr Stephen YIU Kin-wah, JP
Chairman
Insurance Authority

Mr Raymund CHAO Pak-ki
Chairman of PwC Asia Pacific
Chairman & CEO of PwC China

Mr Michael WONG Yick-kam, SBS, MH, JP
(from 1 September 2023)

Mr Nicky LO Kar-chun, SBS, JP

Professor TAM Kar-yan, MH, JP
Dean and Chair Professor, School of Business and Management
The Hong Kong University of Science and Technology

Dr the Honourable Victor FUNG Kwok-king, GBM, GBS
Group Chairman
Fung Group

Secretary

Ms Sarah KWOK

Advisory Committees

The Exchange Fund Advisory Committee

Financial Infrastructure and Market Development Sub-Committee

The Financial Infrastructure and Market Development Sub-Committee makes recommendations on measures to further develop Hong Kong's status as an international financial centre and strengthen the international competitiveness of Hong Kong's financial services, including promoting the development, operational excellence, safety and efficiency of the financial infrastructure in Hong Kong; and promoting the development of Hong Kong as an offshore renminbi centre and fostering the development of other enabling factors. It also makes recommendations on initiatives for the HKMA and monitors the work of the HKMA. In 2023, the Sub-Committee met four times.

Chairman

Mr Eddie YUE, JP
The Monetary Authority

Members

Mr Arthur YUEN, JP
Deputy Chief Executive
Hong Kong Monetary Authority

Mr Darryl CHAN, JP
Deputy Chief Executive
Hong Kong Monetary Authority

Mr Dennis CHOW Chi-in
Chair, Deloitte Asia Pacific
Deputy Chair, Deloitte Global

Ms Angel NG Yin-yeo

Professor TAM Kar-yan, MH, JP
Dean and Chair Professor, School of Business and Management
The Hong Kong University of Science and Technology

Mr Michael WONG Yick-kam, SBS, MH, JP
(from 1 September 2023)

Mr CHEN Leiming
Senior Vice President
Ant Group
(from 15 September 2023)

Mr Howard LEE, JP
Deputy Chief Executive
Hong Kong Monetary Authority

Mrs Ayesha MACPHERSON LAU, BBS, JP
Chairman
Mandatory Provident Fund Schemes Authority

The Honourable Rimsky YUEN Kwok-keung, GBM, SC, JP
Temple Chambers

Ms Diana CESAR, JP
Executive Director and Chief Executive
Hang Seng Bank

Ms Luanne LIM
Chief Executive Officer, Hong Kong
The Hongkong and Shanghai Banking Corporation Limited

Ms Susan CHAN Wai-lan
Deputy Head of Asia Pacific, Head of Greater China
BlackRock
(from 15 September 2023)

Dr JIA Hongrui
Chief Executive Officer
SPDB International Holdings Limited
(from 15 September 2023)

Advisory Committees

Mrs Florence YIP CHIU Kwai-fong, JP

Senior Advisor
PricewaterhouseCoopers
(from 15 September 2023)

Mr Leong CHEUNG

(until 30 June 2023)

Mr Ericson CHAN

Group Chief Information & Digital Officer
Zurich Insurance Company
(until 31 July 2023)

Mrs Ann KUNG YEUNG Yun-chi, BBS, JP

Advisor
Bank of China (Hong Kong) Limited
(until 31 July 2023)

Ms Amy LO Choi-wan, JP

Co-Head UBS Wealth Management APAC
Head and Chief Executive UBS Hong Kong Branch
UBS
(until 31 July 2023)

Mr Stephen CHAN Man

Deputy Chief Executive
Bank of China (Hong Kong) Limited
(from 1 February 2024)

The Honourable Bernard Charnwut CHAN, GBM, GBS, JP

Chairman & President
Asia Financial Holdings Limited
(until 31 July 2023)

Ms Mary HUEN Wai-yi, JP

Executive Director and Chief Executive Officer, Hong Kong
Cluster Chief Executive Officer (Hong Kong, Taiwan & Macau)
Standard Chartered Bank (Hong Kong) Limited
(until 31 July 2023)

Ms Miranda KWOK Pui-fong, JP

Non-Executive Director
China Construction Bank (Asia) Corporation Limited
(until 31 July 2023)

Dr Jim LAI

Chairman of Fusion Bank
(until 1 September 2023)

Secretary

Ms Sarah KWOK

Advisory Committees

Banking Advisory Committee

The Banking Advisory Committee is established under section 4(1) of the Banking Ordinance to advise the Chief Executive of the Hong Kong Special Administrative Region on matters relating to the Banking Ordinance, in particular matters relating to banks and the carrying on of banking business. The Committee consists of the Financial Secretary as the Chairman, the Monetary Authority, and other persons appointed by the Financial Secretary under the delegated authority of the Chief Executive of the Hong Kong Special Administrative Region.

Three joint meetings of the Banking Advisory Committee and the Deposit-taking Companies Advisory Committee were held in 2023.

Chairman

The Honourable Paul CHAN Mo-po, GBS, MH, JP
The Financial Secretary

Ex Officio Member

Mr Eddie YUE, JP
The Monetary Authority

Members

The Honourable Christopher HUI Ching-yu, GBS, JP
Secretary for Financial Services and the Treasury

Mr SUN Yu, JP
Vice Chairman and Chief Executive
Bank of China (Hong Kong) Limited
Representing Bank of China (Hong Kong) Limited

Ms Luanne LIM
Chief Executive Officer, Hong Kong
The Hongkong and Shanghai Banking Corporation Limited
Representing The Hongkong and Shanghai Banking Corporation Limited

Ms Mary HUEN Wai-yi, JP
Executive Director and Chief Executive Officer, Hong Kong
Cluster Chief Executive Officer (Hong Kong, Taiwan & Macau)
Standard Chartered Bank (Hong Kong) Limited
Representing Standard Chartered Bank (Hong Kong) Limited

Mr Tim LUI Tim-leung, GBS, JP
Chairman
Securities and Futures Commission
Representing Securities and Futures Commission

The Honourable CHAN Chun-ying, JP
Member
Legislative Council

Mr Paul YANG
Chief Executive Officer
Corporate and Institutional Banking Asia Pacific
BNP Paribas

Ms Angel NG Yin-yeo
(until 12 April 2024)

Secretary

Ms Jasmin FUNG

Advisory Committees

Deposit-taking Companies Advisory Committee

The Deposit-taking Companies Advisory Committee is established under section 5(1) of the Banking Ordinance to advise the Chief Executive of the Hong Kong Special Administrative Region on matters relating to the Banking Ordinance, in particular matters relating to deposit-taking companies and restricted licence banks and their carrying on of a business of taking deposits.

The Committee consists of the Financial Secretary as the Chairman, the Monetary Authority, and other persons appointed by the Financial Secretary under the delegated authority of the Chief Executive of the Hong Kong Special Administrative Region.

Three joint meetings of the Banking Advisory Committee and the Deposit-taking Companies Advisory Committee were held in 2023.

Chairman

The Honourable Paul CHAN Mo-po, GBM, GBS, MH, JP
The Financial Secretary

Ex Officio Member

Mr Eddie YUE, JP
The Monetary Authority

Members

The Honourable Christopher HUI Ching-yu, GBS, JP
Secretary for Financial Services and the Treasury

Mrs Lourdes A. SALAZAR
Chairperson
The DTC Association (The Hong Kong Association of Restricted Licence Banks and Deposit-taking Companies)
Representing The DTC Association

Ms Gilly WONG Fung-han
Chief Executive
Consumer Council
Representing the Consumer Council

The Honourable Elizabeth QUAT, BBS, JP
Member
Legislative Council

Mr CHONG Yam-kiang
Executive Director and Chief Executive
Public Bank (Hong Kong) Limited

Mr Dennis CHOW Chi-in
Chair, Deloitte Asia Pacific
Deputy Chair, Deloitte Global

Secretary

Ms Jasmin FUNG

Chief Executive's Committee

23 April 2024

The Chief Executive's Committee comprises the Chief Executive of the HKMA, who chairs the Committee, the Deputy Chief Executives, the Senior Executive Director and other senior staff. The Committee meets regularly to report to the Chief Executive on the progress of major tasks being undertaken by the various departments of the HKMA and to advise him on policy matters relating to the operations of the HKMA.



Eddie YUE, JP
Chief Executive



Arthur YUEN, JP
Deputy Chief Executive



Howard LEE, JP
Deputy Chief Executive



Darryl CHAN, JP
Deputy Chief Executive
(from 1 November 2022)
Executive Director
(External)
(until 23 April 2023)



Raymond LI, JP
Senior Executive Director
Chief Executive Officer
Hong Kong Mortgage Corporation

Chief Executive's Committee



Stefan GANNON, JP
Special Adviser to CE



Karen KEMP, JP
General Counsel



Carmen CHU, JP
Executive Director
(Banking Supervision)
(from 23 April 2024)
Executive Director
(Enforcement and AML)
(until 22 April 2024)



Grace LAU, JP
Executive Director
(Risk and Compliance)
Chief Risk Officer
(Exchange Fund Investment Office)



Lillian CHEUNG, JP
Executive Director
(Research)



Raymond CHAN, JP
Executive Director
(Enforcement and AML)
(from 23 April 2024)
Executive Director
(Banking Supervision)
(until 22 April 2024)



Daryl HO, JP
Executive Director
(Monetary Management)
(from 6 November 2023)
Executive Director
(Banking policy)
(until 5 November 2023)



Alan AU, JP
Executive Director
(Banking Conduct)



Colin POU, JP
Executive Director
(Financial Infrastructure)



Donald CHEN
Executive Director
(Banking policy)
(from 6 December 2023)
Executive Director
(Corporate Services)
(until 5 December 2023)



Kenneth HUI
Executive Director
(External)
(from 24 April 2023)



Archie NG
Executive Director
(Corporate Services)
(from 14 February 2024)



Francis CHU, JP
Deputy Chief Executive Officer
(Exchange Fund Investment Office)
(until 10 March 2023)

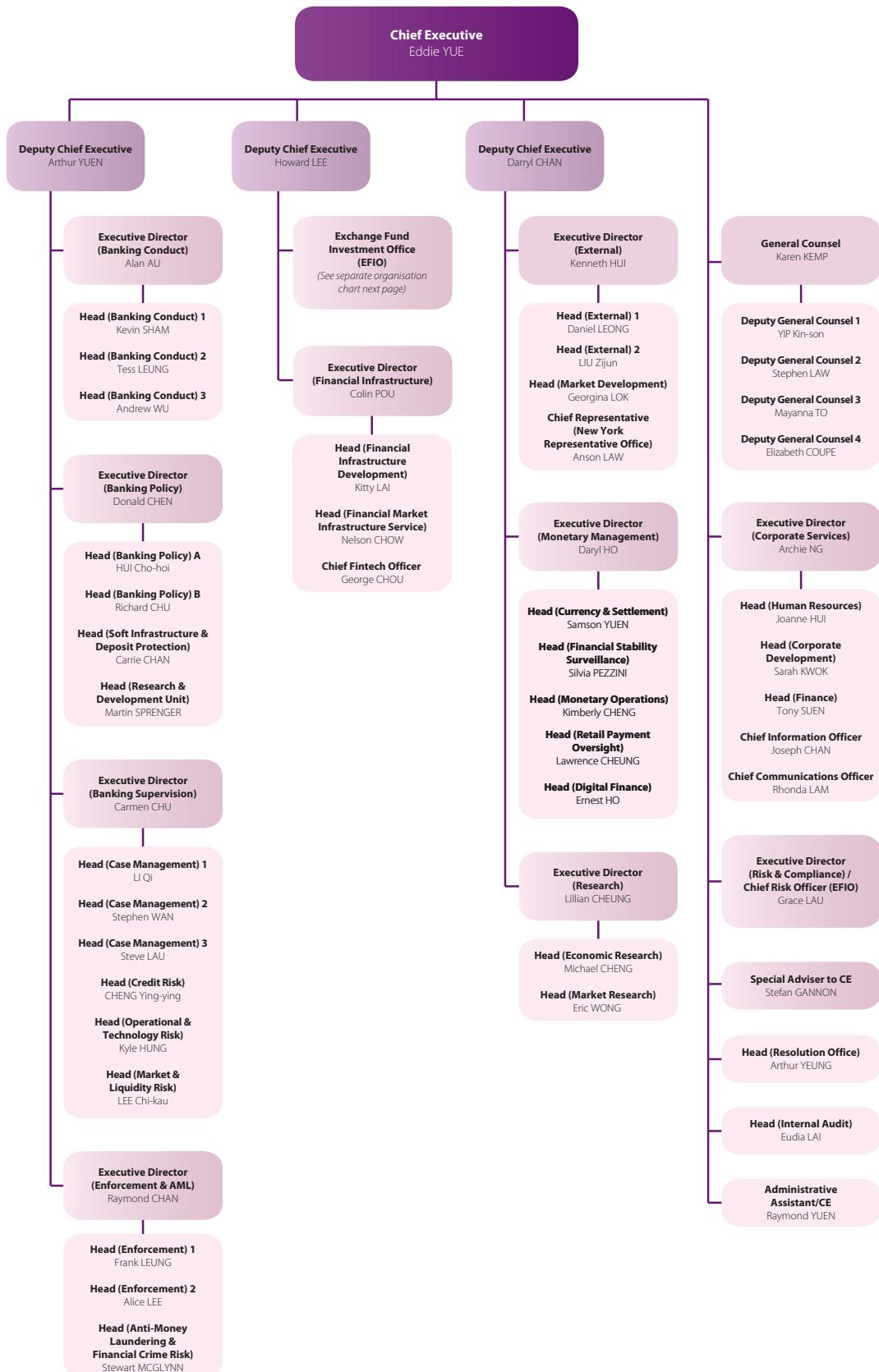


Clara CHAN
Executive Director
(Monetary Management)
(until 8 October 2023)

Organisation Chart

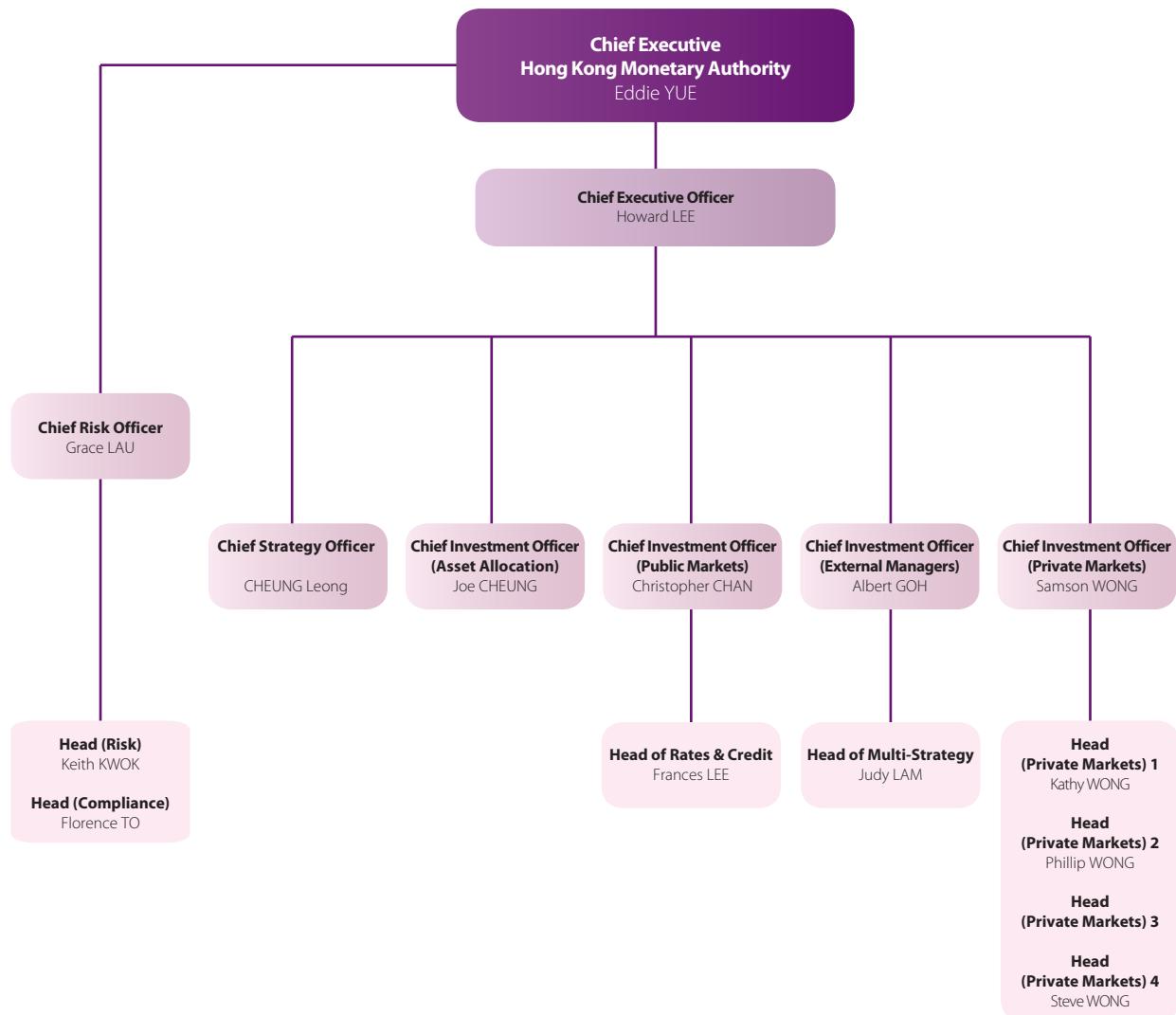
Hong Kong Monetary Authority

23 April 2024



Organisation Chart

Exchange Fund Investment Office



Economic and Financial Environment



Despite a challenging external environment, the Hong Kong economy staged a positive growth in 2023, thanks to the revivals in inbound tourism and domestic demand. The labour market continued to improve alongside the economic recovery, while inflation remained moderate. Asset markets remained soft amid tightened financial conditions and weak market sentiment. Economic activities for 2024 are expected to recover further at a moderate pace, although the outlook is clouded by multiple external uncertainties.

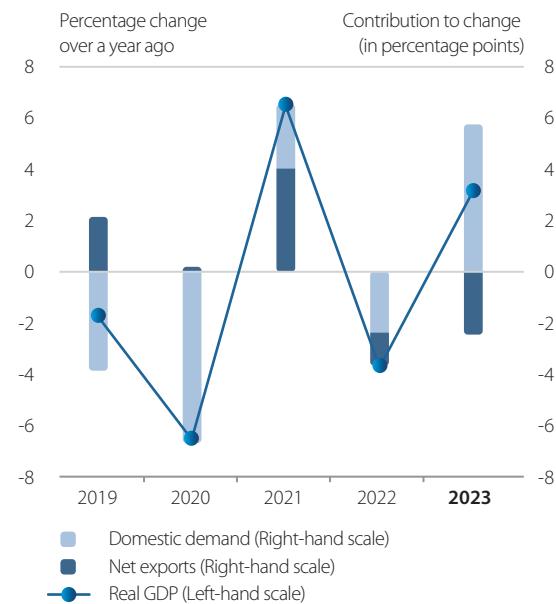
Economic and Financial Environment

The economy in review

Real activities

Having navigated through the severe challenges posed by the pandemic in the previous year, the Hong Kong economy grew steadily by 3.2% in 2023 (Table 1 and Chart 1). Domestically, private consumption recovered notably on the back of improved labour market conditions and various support initiatives introduced by the Government, such as the Consumption Voucher Scheme and a series of promotional campaigns. Despite tightened financial conditions, overall investment expenditure registered significant growth against a low base of comparison from the previous year. Externally, Hong Kong's exports of services rebounded, due mainly to the robust revival of inbound tourism. However, their positive impact on growth was more than offset by the strong recovery in outbound tourism, which was measured as imports of services. On the other hand, exports of goods remained lacklustre amid weak external demand, and put a drag on Hong Kong's gross domestic product (GDP) growth.

Chart 1 Real GDP growth by contribution



Source: Census and Statistics Department

Table 1 Real GDP growth by expenditure component (period-over-period)

| (% Period-over-period, unless otherwise specified) | 2023 | | | | | 2022 | | | | |
|--|--------------|--------------|--------------|--------------|---------------|-------|-------|-------|-------|--------|
| | Q1 | Q2 | Q3 | Q4 | 2023 | Q1 | Q2 | Q3 | Q4 | 2022 |
| Gross Domestic Product (year-on-year growth) | 4.8 | (1.1) | 0.2 | 0.4 | 3.2 | (2.5) | 0.4 | (2.5) | 0.3 | (3.7) |
| Private consumption expenditure | 2.9 | 1.5 | 4.1 | 4.3 | | (4.0) | (1.4) | (4.9) | (4.3) | |
| Government consumption expenditure | 1.2 | 3.3 | (0.7) | (0.6) | 7.3 | (9.9) | 8.2 | 0.7 | 2.2 | (2.2) |
| Gross domestic fixed capital formation | (3.5) | (4.8) | 1.8 | 1.4 | (4.3) | 3.8 | 6.2 | (4.0) | 2.8 | 8.0 |
| Exports | - | - | - | - | 10.8 | - | - | - | - | (7.4) |
| Exports of goods | 0.4 | (0.2) | 0.1 | 2.9 | (10.3) | (7.3) | (4.9) | (7.3) | (8.4) | (14.0) |
| Exports of services | 14.3 | 4.3 | 0.5 | 2.0 | 21.2 | 1.0 | (0.9) | (0.0) | 3.0 | (0.5) |
| Imports | | | | | | | | | | |
| Imports of goods | 2.3 | (1.1) | 1.3 | 1.7 | (8.6) | (7.8) | 0.3 | (9.6) | (7.9) | (13.2) |
| Imports of services | 12.0 | 6.2 | 3.2 | 4.8 | 26.2 | (3.7) | 0.7 | 1.2 | 5.4 | (1.2) |

Note: The seasonally-adjusted quarter-on-quarter rates of change in the gross domestic fixed capital formation are not available.

Source: Census and Statistics Department

Economic and Financial Environment

Inflation

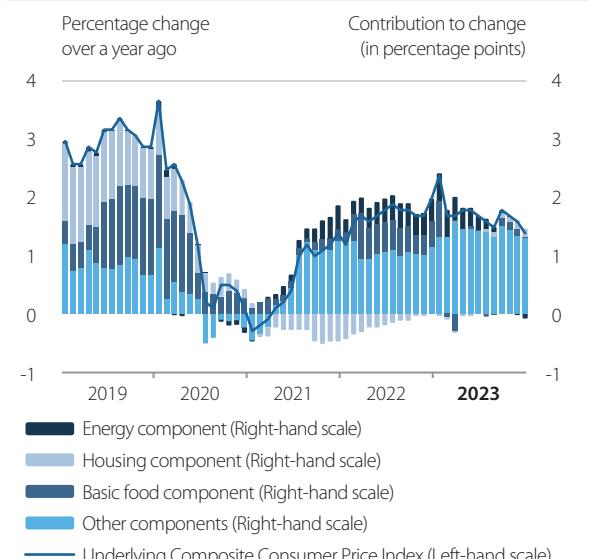
Local inflation remained moderate in 2023 as external price pressures gradually eased, while domestic cost pressures remained broadly in check despite rising slightly as the economy recovered (Chart 2)¹. For 2023 as a whole, the underlying and headline inflation rates were 1.7% and 2.1% respectively.

Labour market

Labour market conditions improved further in 2023, with the unemployment rate falling to a decade-low level of 2.8% in July and hovering at a low level for the remaining months of the year² (Chart 3). Both labour demand and labour supply increased, as reflected respectively by the pick-up in total employment (Chart 3) and in the labour force. In view of Hong Kong's manpower shortages, the Government rolled out various labour importation schemes³ and talent attraction initiatives⁴ in 2023. Meanwhile, with tight labour market conditions, the year-on-year growth rates of nominal wages and of labour earnings increased gradually towards their pre-pandemic levels.

Chart 2

Underlying consumer price inflation

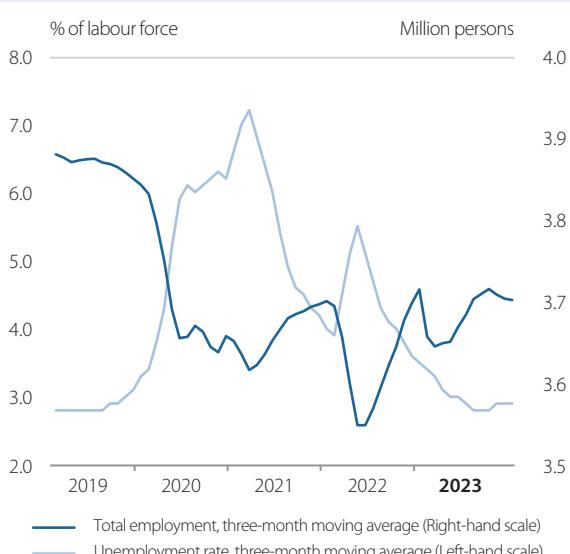


Note: "Energy" items include electricity, town gas, liquefied petroleum gas and other fuel, and motor fuel.

Sources: Census and Statistics Department and HKMA staff estimates

Chart 3

Labour market conditions



Source: Census and Statistics Department

¹ Private housing rentals increased by 5.9% in 2023. On the commercial front, rentals increased by 3.7% and 3.1% respectively for private retail premises and flatted factories, while rentals for office spaces decreased by 0.3%. The year-on-year growth rate of nominal payroll increased to 3.6% in 2023 from 2.3% in the previous year.

² The underemployment rate (three-month moving average) also trended down to 1.0% in December 2023 from 1.5% a year earlier.

³ The Government launched sector-specific labour importation schemes for the construction and transport sectors in July, and started accepting applications for the Enhanced Supplementary Labour Scheme covering various other sectors from September.

⁴ In 2023, over 220,000 applications were received under various talent attraction schemes. Of these, over 130,000 applications have been approved, and around 90,000 talents have arrived in Hong Kong.

Economic and Financial Environment

Stock market

After stabilising in early 2023, the local stock market turned sluggish in the second half. Extending its rebound in late 2022, the Hang Seng Index rose to a year-high daily close of 22,689 on 27 January 2023. It then retreated and dropped further to low levels by December (Chart 4), reflecting weak market sentiment due to the banking sector problems in the US and Switzerland in March, as well as weaker global economic prospects and tightened financial conditions in the second half. The Hang Seng Index closed the year at 17,047, down notably by 13.8% from the end of 2022, and marking the fourth consecutive year of decline.

Property market

The residential property market experienced a rebound in the first four months of 2023 on the back of the resumption of normalcy in the Mainland and Hong Kong, but softened subsequently alongside rising mortgage rates⁵ and weak market sentiment. Overall, housing prices dropped by 6.9% year on year in 2023, while housing transactions further declined by 4.5% to a record-low of 43,002 units. Housing affordability remained stretched despite improving slightly along with the downward adjustment of housing prices. Similarly, the non-residential property markets continued to face headwinds, with prices of offices, retail premises and flatted factories softened further. The rentals for offices remained under pressure due to high vacancy rates amid the increasing prevalence of work-from-home arrangements and large supply. On the other hand, the rentals for retail premises increased in 2023 with the revival of inbound tourism and the improvement in private consumption.

Chart 4 Asset prices



Sources: Rating and Valuation Department and Hong Kong Exchanges and Clearing Limited

⁵ The effective mortgage interest rates increased from 3.375–3.625% to 4.125% during the year, adding to the repayment burden of mortgage borrowers.

Economic and Financial Environment

Outlook for the economy

Economic environment

In 2024, the Hong Kong economy is expected to continue its recovery at a moderate pace. Inbound tourism is set to expand further alongside the continuous improvement in handling capacity and the Government's effort to promote mega events, while local consumption activities should be supported by a steady labour market. The various infrastructure projects to be taken forward by the Government will also lend support to the economy. Meanwhile, Hong Kong's exports of goods will likely stabilise alongside the expected upturn in the global technology cycle. The Government forecasts real GDP to grow steadily by 2.5%–3.5% in 2024⁶. However, the outlook is clouded by multiple risks and uncertainties, including those stemming from the US policy rate path, the pace of technology cycle recovery, the prospects for global economic growth, and evolving geopolitical tensions.

Inflation and the labour market

Local inflation is expected to remain mild in 2024, with softened external price pressures helping to offset the upward pressures on domestic costs amid further economic recovery and rising housing rentals. Market consensus forecasts a headline inflation rate of 2.1% in 2024, while the Government projects the headline and underlying inflation rates to be 2.4% and 1.7% respectively. On the other hand, the labour market is expected to be supported by the ongoing economic recovery, while the various labour importation and talent attraction schemes will continue to help alleviate manpower shortages across different industries.

⁶ Market consensus forecasts a real GDP growth of 2.8% for Hong Kong in 2024.

Economic and Financial Environment

Performance of the banking sector

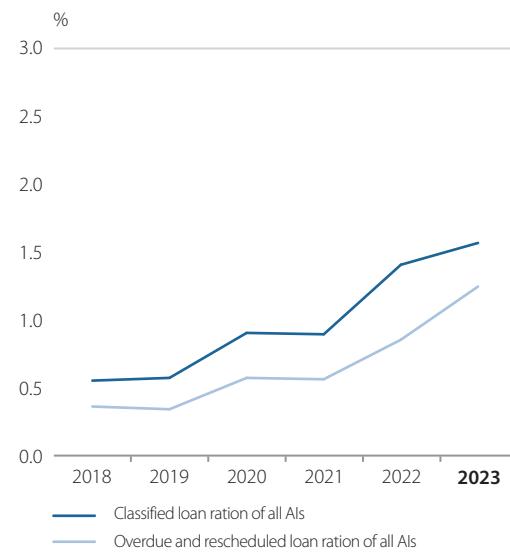
In 2023, the Hong Kong banking sector faced a number of challenges including a high interest rate environment, heightened volatility in global financial markets caused by the March banking turmoil in the US and Europe, and a slower-than-expected economic recovery in the Mainland and Hong Kong. Despite these multiple headwinds, the Hong Kong banking sector remained sound and continued to be supported by strong capital and liquidity buffers. The asset quality of the banking sector remained healthy despite an increase in the classified loan ratio. The profitability of banks improved notably, driven by higher net interest income.

Asset quality

The classified loan ratio of the banking sector rose to 1.56% at the end of 2023 from 1.40% at the end of 2022, with the overdue and rescheduled loan ratio increasing to 1.24% from 0.85% during the same period (Chart 5). The classified loan ratio for Mainland-related lending also rose to 2.58% at the end of 2023 from 2.26% a year before. The increase in the classified loan ratio was mainly due to downgrades of exposures to Mainland property developers. Nevertheless, the provisions set aside by banks remained sufficient. The provision coverage ratio (i.e. total provisions to classified loans) stood at 75% at the end of 2023. If the market value of collateral held against the classified loans is taken into account, the adjusted provision coverage ratio would reach around 145%. Meanwhile, the delinquency ratios of residential mortgage lending and credit card lending remained low, at 0.08% and 0.30% respectively, at the end of 2023 (Chart 6).

Chart 5

Asset quality of the banking sector

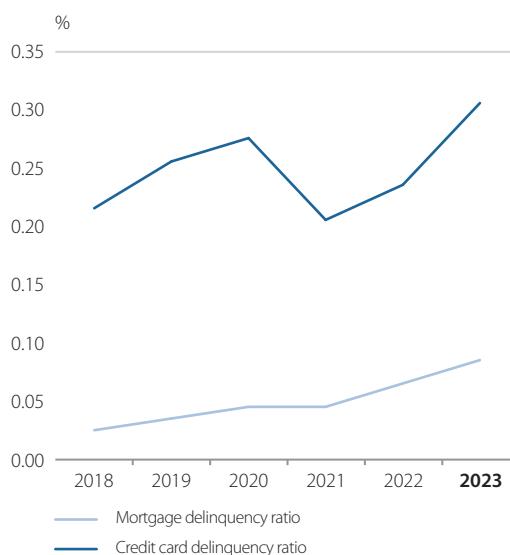


Note: Figures cover Hong Kong offices, overseas branches and major overseas subsidiaries.

Source: HKMA

Chart 6

Delinquency ratios of residential mortgage lending and credit card lending



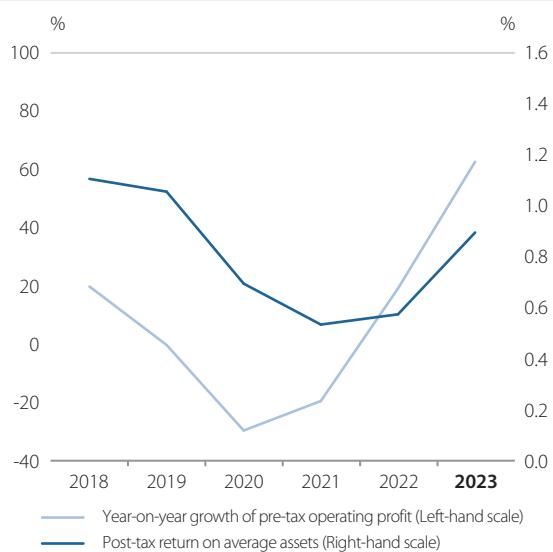
Source: HKMA

Economic and Financial Environment

Profitability trends

The banking sector recorded notable profit growth in 2023. The aggregate pre-tax operating profit of retail banks increased by 62.1% in the year, while the post-tax return on average assets rose to 0.89% from 0.57% during the same period (Chart 7). The improvement in profit was predominantly the result of an increase in net interest income (+30%), coupled with a significant gain in investments held for trading in 2023 as compared to a mild loss in the previous year. This was partly offset by an increase in loan impairment charges (+28%), as specific provisions were set aside for new classified loans. Against the backdrop of rising interest rates, the net interest margin of retail banks widened to 1.68% in 2023 from 1.31% a year before (Chart 8). Meanwhile, retail banks' cost-to-income ratio fell to 38.8% in 2023 from 48.0% in 2022 (Chart 9).

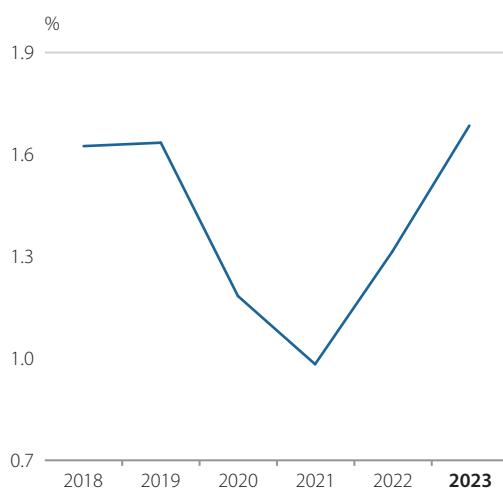
Chart 7 Retail banks' performance



Source: HKMA

Chart 8

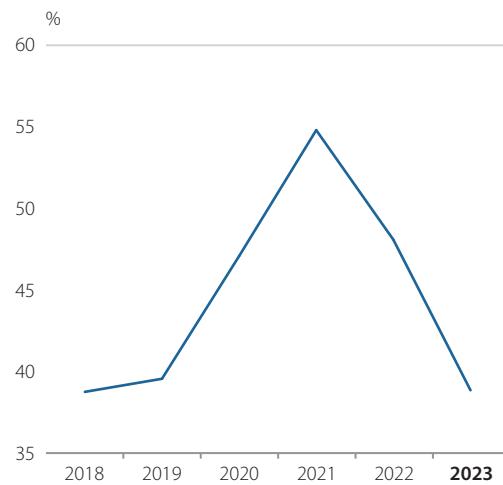
Retail banks' net interest margin



Source: HKMA

Chart 9

Retail banks' cost-to-income ratio



Source: HKMA

Economic and Financial Environment

Balance sheet trends

The banking sector's balance sheet grew by 0.9% in 2023, as growths in negotiable debt instruments held (+8.6%) and interbank lending (+4.4%) were mostly offset by a decline in total loans. Given the subdued loan demand amid higher borrowing costs and a weakened global economic outlook, total loans decreased by 3.6% in 2023. Of the total loans, loans for use in Hong Kong remained broadly stable (-0.4%), while loans for use outside Hong Kong and trade finance decreased by 10.4% and 13.1% respectively. Mainland-related lending fell by 6.6% in 2023.

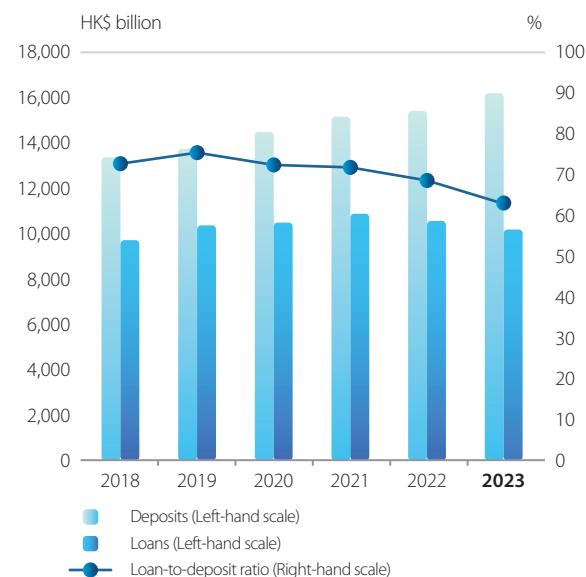
On the liability side, total deposits rose by 5.1% in 2023, compared with a growth of 1.7% in 2022. As total loans declined while total deposits grew, the overall loan-to-deposit ratio decreased to 62.8% at the end of 2023 from 68.5% a year before (Chart 10).

Capital adequacy

The banking sector remained well capitalised in 2023. The consolidated total capital ratio of locally incorporated authorized institutions (AIs) stood at 21.1% at the end of 2023, compared with 20.1% a year before. The Tier 1 capital ratio was 18.9% (Chart 11). Both ratios were well above their respective international minimum requirements. The Basel III leverage ratio was 7.9% at the end of 2023 (Chart 12).

Chart 10

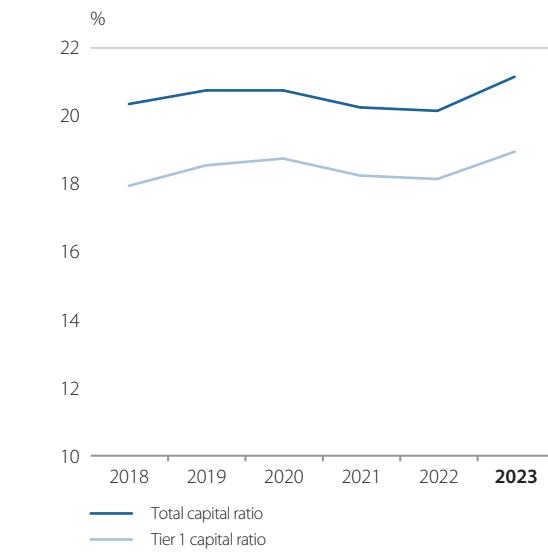
Loans and deposits of the banking sector



Source: HKMA

Chart 11

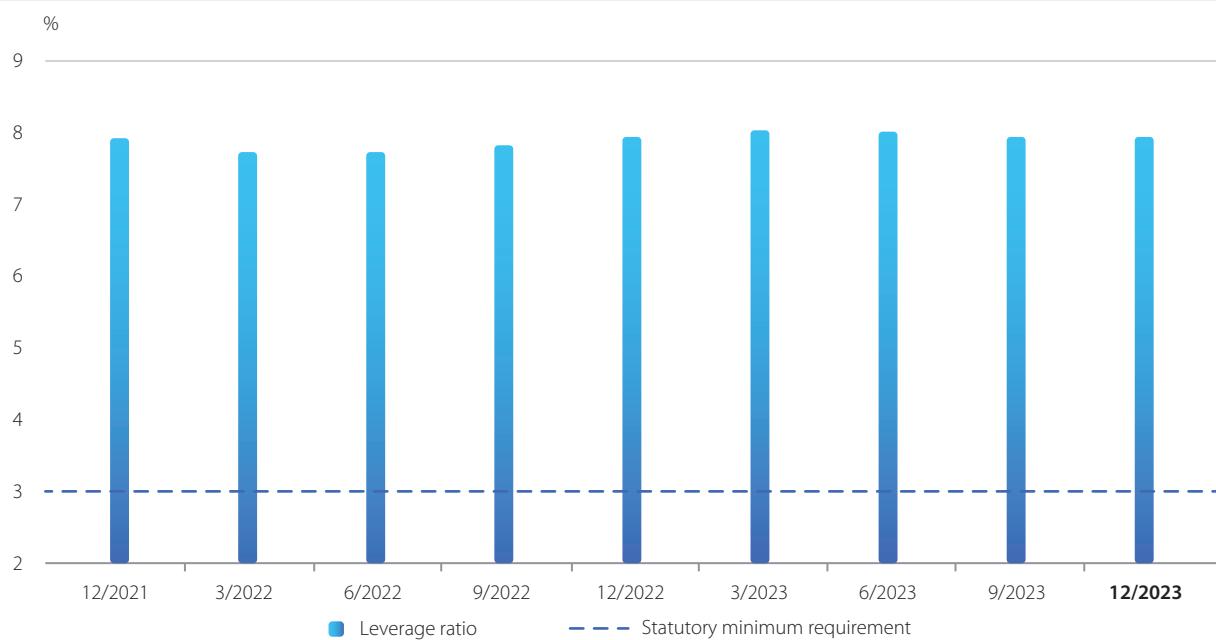
Consolidated capital ratios of locally incorporated AIs



Source: HKMA

Economic and Financial Environment

Chart 12 Consolidated leverage ratio of locally incorporated AIs



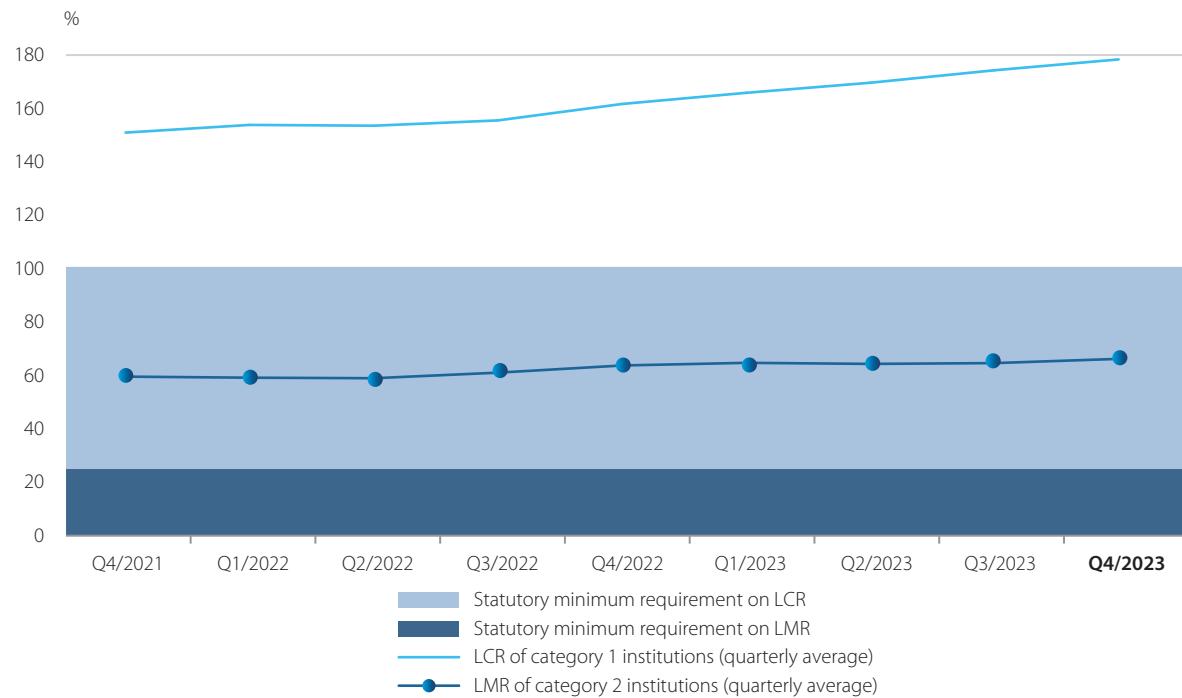
Source: HKMA

Liquidity conditions

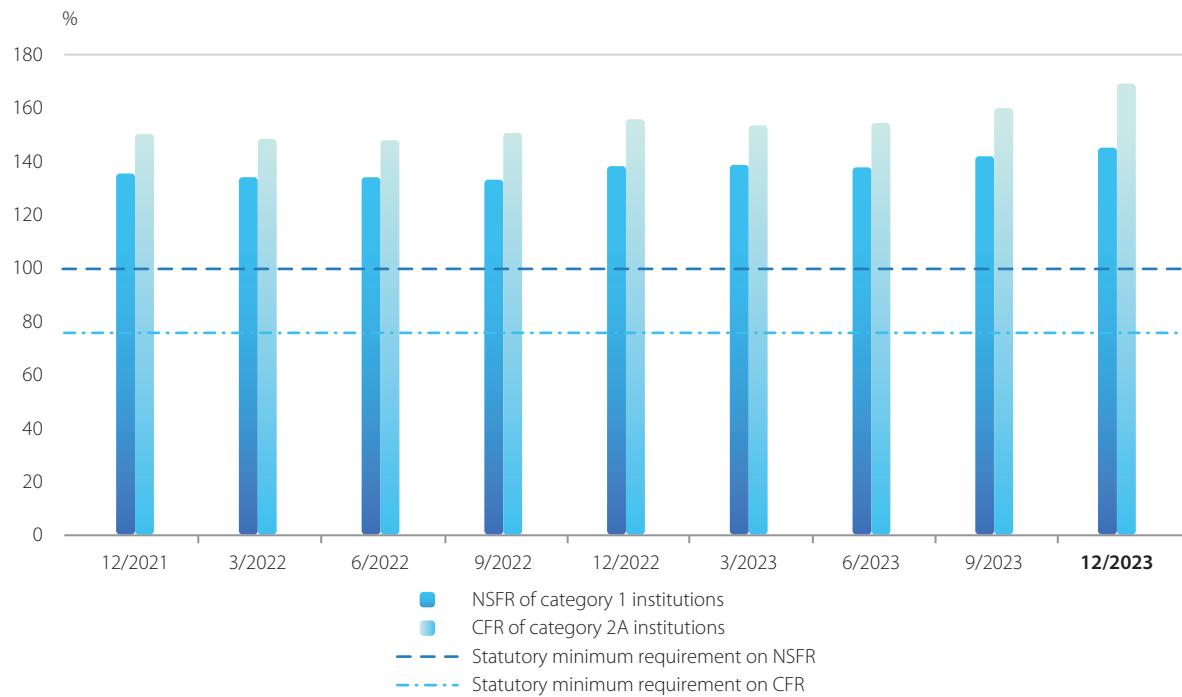
The banking sector continued to maintain a strong liquidity position. The quarterly average Liquidity Coverage Ratio (LCR) of category 1 institutions was 178.6% in the fourth quarter of 2023, and the quarterly average Liquidity Maintenance Ratio (LMR) of category 2 institutions was 65.7% (Chart 13). The main source of funding for the banking

sector continued to be customer deposits. The Net Stable Funding Ratio (NSFR) of category 1 institutions and the Core Funding Ratio (CFR) of category 2A institutions were 144.4% and 169.4% respectively at the end of 2023 (Chart 14). All four ratios were well above the statutory minimum requirements.

Economic and Financial Environment

Chart 13**Liquidity ratios of designated AIs**

Source: HKMA

Chart 14**Funding ratios of designated AIs**

Source: HKMA

Monetary Stability



In 2023, amid market expectations of a “high for longer” US policy rate, the Hong Kong dollar mostly traded on the weak side of the Convertibility Zone, with the weak-side Convertibility Undertaking being triggered eight times between mid-February and early May. The Hong Kong dollar had regained some momentum since May and traded around the central parity rate of 7.8 at year end. Under the Linked Exchange Rate System, which marked its 40th anniversary in 2023, the Hong Kong Interbank Offered Rates generally track their US dollar counterparts, while also being affected by local supply and demand. Overall, the Hong Kong dollar exchange and money markets remained stable and traded in a smooth and orderly manner. As the cornerstone of Hong Kong’s monetary and financial stability, the Linked Exchange Rate System has shown its strength and resilience to various external shocks time after time.

Monetary Stability

Objectives

The overriding objective of Hong Kong's monetary policy is currency stability. This is defined as a stable external exchange value of Hong Kong's currency, in terms of its exchange rate in the foreign exchange market against the US dollar, within a band of HK\$7.75–7.85 to US\$1. The structure of the monetary system is characterised by Currency Board arrangements, requiring the Monetary Base to be at least 100% backed by US dollar reserves held in the Exchange Fund, and changes in the Monetary Base to be 100% matched by corresponding changes in US dollar reserves.

The Monetary Base (Table 1) comprises:

- Certificates of Indebtedness, which provide full backing to the banknotes issued by the three note-issuing banks;
- Government-issued currency notes and coins in circulation;
- The Aggregate Balance, which is the sum of clearing account balances kept with the HKMA; and
- Exchange Fund Bills and Notes (EFBNs) issued by the HKMA on behalf of the Government.

Table 1 Monetary Base

| HK\$ million | 31 December 2023 | 31 December 2022 |
|--|---------------------|---------------------|
| Certificates of Indebtedness ^a | 592,585 | 605,575 |
| Government-issued currency notes and coins in circulation ^a | 12,927 | 13,151 |
| Balance of the banking system ^b | 44,950 | 96,251 |
| EFBNs issued ^c | 1,245,451 | 1,200,422 |
| Total | 1,895,913 | 1,915,399 |

- a. The Certificates of Indebtedness and the Government-issued currency notes and coins in circulation shown here are stated at Hong Kong dollar face values. The corresponding items shown in the balance sheet of the Exchange Fund in this *Annual Report* are in Hong Kong dollars equivalent to the US dollar amounts required for their redemption at the prevailing exchange rates on the reporting date. This arrangement is in accordance with the accounting principles generally accepted in Hong Kong.
- b. Balance of the banking system shown here is the carrying value before the amount advanced to the banks under the Discount Window Operations. In accordance with the accounting principles generally accepted in Hong Kong, the corresponding item shown in the balance sheet of the Exchange Fund in this *Annual Report* includes the amount of these advances.
- c. The amount of EFBNs shown here refers to their fair value. In accordance with the accounting principles generally accepted in Hong Kong, the EFBNs held by the HKMA on behalf of the Exchange Fund in relation to its trading of the EFBNs in the secondary market are offset against the EFBNs issued, and the net amount is recorded in the balance sheet. The EFBNs allotted on tender dates but not yet settled are included in the balance sheet but are excluded from the Monetary Base. Therefore, the amount of EFBNs shown here is different from that in the balance sheet of the Exchange Fund in this *Annual Report*.

The stability of the Hong Kong dollar exchange rate is maintained through an automatic interest rate adjustment mechanism and the firm commitment by the HKMA to honour the Convertibility Undertakings (CUs). With the HKMA standing ready to sell (or buy) Hong Kong dollars to (or from) banks in exchange for US dollars upon request at

HK\$7.75 (or HK\$7.85) per US dollar when the strong-side (or weak-side) CU is triggered, the Aggregate Balance will expand (or contract) to push down (or up) Hong Kong dollar interest rates, helping move the Hong Kong dollar back to within the Convertibility Zone of 7.75 to 7.85.

Monetary Stability

Review of 2023

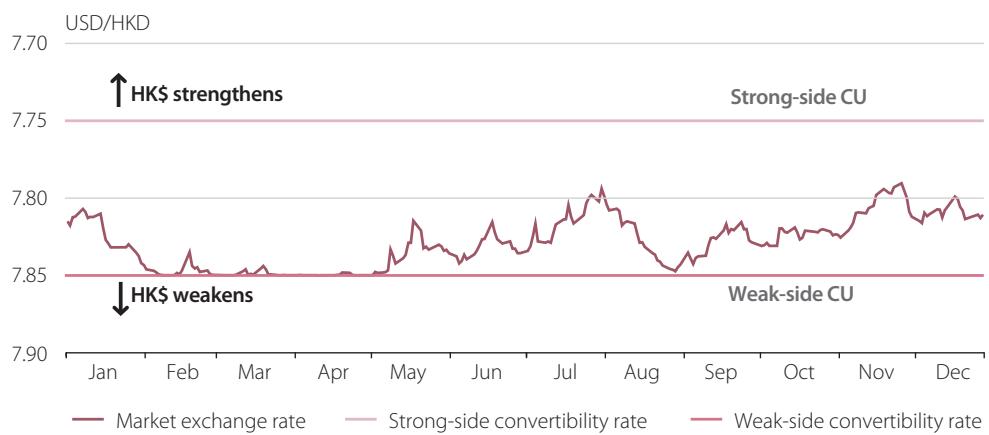
Exchange rate stability

Amid the market expectation of a “high for longer” US policy rate, the Hong Kong dollar remained soft and mostly traded on the weak side of the Convertibility Zone throughout 2023. The weak-side CU was triggered eight times from mid-February to early May. The Hong Kong dollar exchange rate regained some strength during early May to July, partly

driven by dividend payment-related demand from listed companies and half-year-end funding needs by corporates. Thereafter, the Hong Kong dollar was mainly driven by the changes in local funding demands, such as buying flows through the Southbound Stock Connect, and traded around the central parity rate of 7.8 at year end (Chart 1). Overall, the Hong Kong dollar exchange market continued to function normally throughout 2023.

Chart 1

Market exchange rate in 2023



Monetary Stability

From February to May, the HKMA purchased a total of HK\$51.5 billion at the weak-side CU at the request of banks in accordance with the design of the Linked Exchange Rate System (LERS). Reflecting the triggering of the weak-side CU, the Aggregate Balance decreased from HK\$96.3 billion at the end of 2022 to HK\$45.0 billion at the end of 2023.

Meanwhile, the outstanding EFBNs increased slightly from HK\$1,200.4 billion to HK\$1,245.5 billion during the year. The total of the Aggregate Balance and outstanding EFBNs therefore declined from HK\$1,296.7 billion at the end of 2022 to HK\$1,290.4 billion at the end of 2023 (Chart 2).

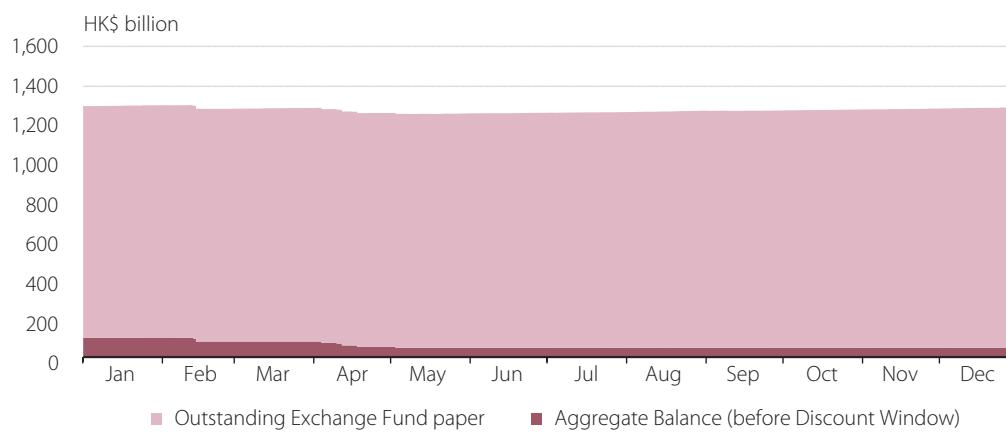
The Monetary Base as a whole remained fully backed by foreign exchange reserves.

HK\$1,290.4 billion

Total Aggregate Balance and outstanding EFBNs

Chart 2

Aggregate Balance (before Discount Window) and outstanding Exchange Fund papers in 2023



Monetary Stability

Money market

Under the LERS, the Hong Kong Interbank Offered Rates (HIBORs) generally track their US dollar counterparts. As the US continued to raise interest rates in the first seven months of 2023, the HIBORs generally rose (Chart 3). For the year as a whole, the overnight, 1-month and 3-month HIBORs increased respectively by 286, 92 and 16 basis points to 6.09%, 5.27% and 5.15% at year end.

Following the increases in the target range for the US federal funds rate, the Base Rate was adjusted upwards four times by a total of one percentage point (i.e. 100 basis points) from 4.75% to 5.75%.¹ On the retail front, following the US policy rate hikes, many banks raised their Best Lending Rates by 12.5 basis points in early May and another 12.5 basis points in late July. Some banks also increased the cap on HIBOR-based mortgage rates of newly approved mortgage loans during the year, and the average interest rate of new mortgage loans rose from 3.35% in 2022 to 4.13% in December 2023. Overall, Hong Kong's money markets continued to function normally. Discount Window borrowing increased to HK\$38.8 billion in 2023 from HK\$8.4 billion in 2022 and no abnormality was noted in the relevant usage.

Chart 3 Hong Kong Interbank Offered Rates in 2023



¹ The adjustments of the Base Rate were in accordance with the established formula, which sets the Base Rate at either 50 basis points above the lower bound of the prevailing target range for the US federal funds rate or the average of the five-day moving averages of the overnight and one-month HIBORs, whichever is the higher.

Monetary Stability

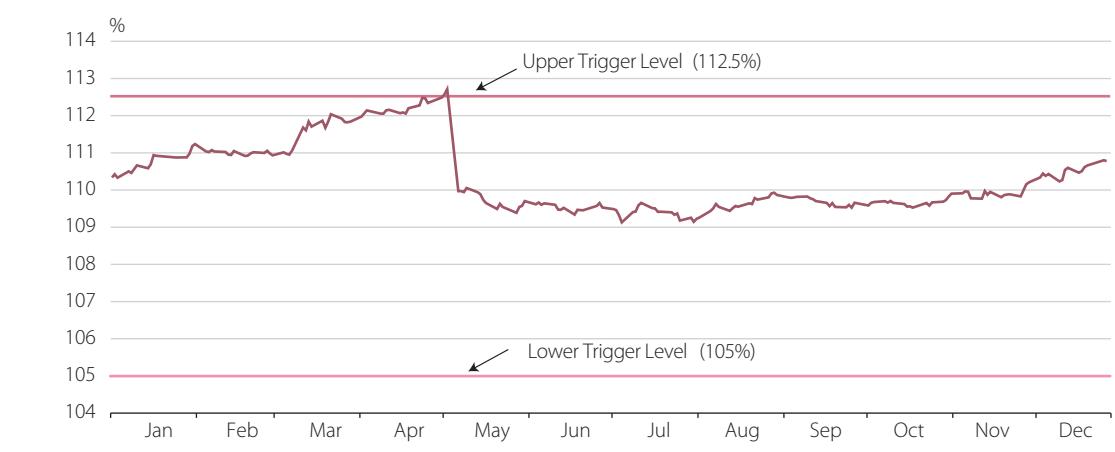
The Linked Exchange Rate System

The LERS has been a strong anchor of Hong Kong's financial system for four decades and has shown its strength and resilience to challenges. Despite lingering uncertainties surrounding the US interest rate path and global economic recovery, the Hong Kong dollar exchange and money markets continued to function in an orderly manner, reflecting the robustness of the LERS. The Government is firmly committed to the LERS. In its *2023 External Sector Report*, the International Monetary Fund (IMF) once again reiterated that the credibility of the LERS has been ensured by a transparent set of rules, large fiscal and foreign reserves, strong financial regulation and supervision, a flexible economy and a prudent fiscal framework.

A robust banking system is crucial to the normal functioning of the LERS. Hong Kong's banking sector continued to operate smoothly with liquidity positions and capitalisation faring very well by international standards. To ensure the resilience of the banking sector, the HKMA has been closely monitoring banks' management of credit, liquidity and interest rate risks and stress testing results, and has maintained its supervisory efforts on bank lending.

To improve the transparency of the Currency Board Account, a specific portion of the Exchange Fund assets has been allocated to back the Monetary Base since October 1998. The Backing Ratio (defined as the Backing Assets divided by the Monetary Base) rose from 110.12% at the end of 2022 to a high of 112.71% on 4 May 2023, surpassing the Upper Trigger Level of 112.5% (Chart 4). This largely reflected the contraction in the Aggregate Balance as a result of the triggering of the weak-side CU in the first half of the year². In accordance with the arrangement approved by the Exchange Fund Advisory Committee and as a result of the redemption of Certificates of Indebtedness, assets were transferred out of the Backing Portfolio to the Investment Portfolio to reduce the Backing Ratio to around 109.97% on 8 May. Thereafter, the Backing Ratio rose steadily to close at 110.73% on 31 December. Under the LERS, while specific Exchange Fund assets have been designated for the Backing Portfolio, all Exchange Fund assets are available to support the Hong Kong dollar exchange rate. The ample financial resources of the Exchange Fund, together with the sound banking system, provide a powerful backstop to Hong Kong's monetary and financial stability.

Chart 4 Daily movement of the Backing Ratio in 2023



² While the Backing Assets decreased by the same magnitude as the Monetary Base, the fractional decrease was smaller in the former because of its larger size, thus increasing the Backing Ratio.

Monetary Stability

Currency Board Sub-Committee

The Currency Board Sub-Committee (CBC) of the Exchange Fund Advisory Committee monitors and reviews issues relevant to monetary and financial stability in Hong Kong. In 2023, the CBC considered issues including the May 2022 stablecoin market crash, the transmission of Federal Reserve's dollar liquidity backstop measures to banks in Hong Kong, and the recent movements in the Hong Kong dollar interest rates. Records of the CBC's discussions on these issues and reports on Currency Board operations submitted to the CBC are published on the HKMA website.



Notes and coins

The below table summarises the value of the notes and coins in circulation at the end of 2023:

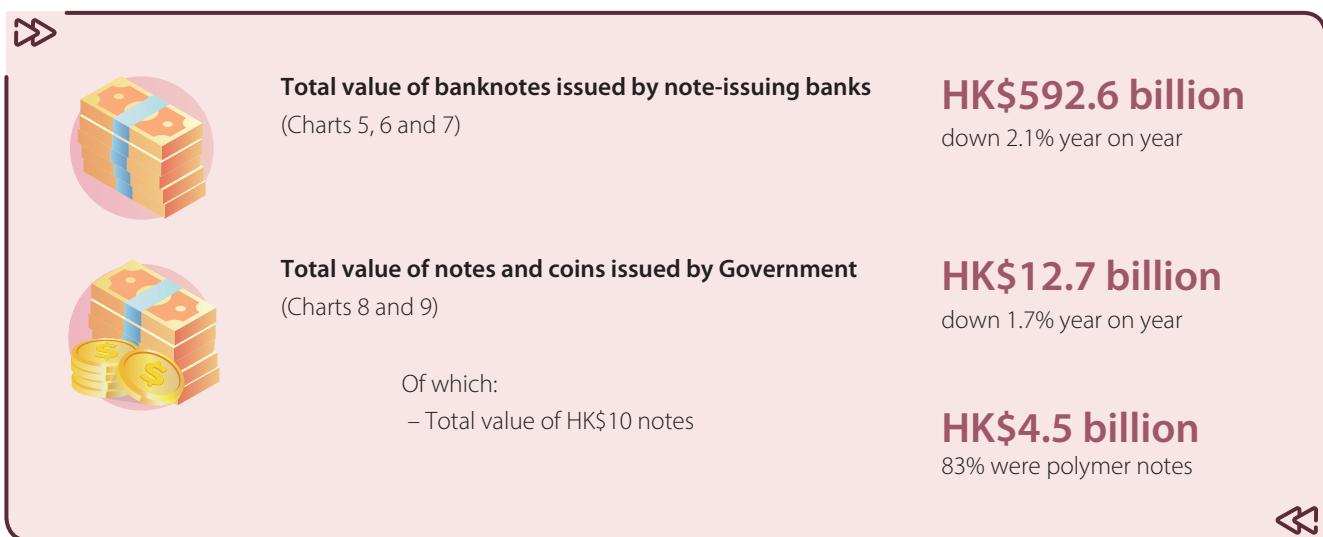
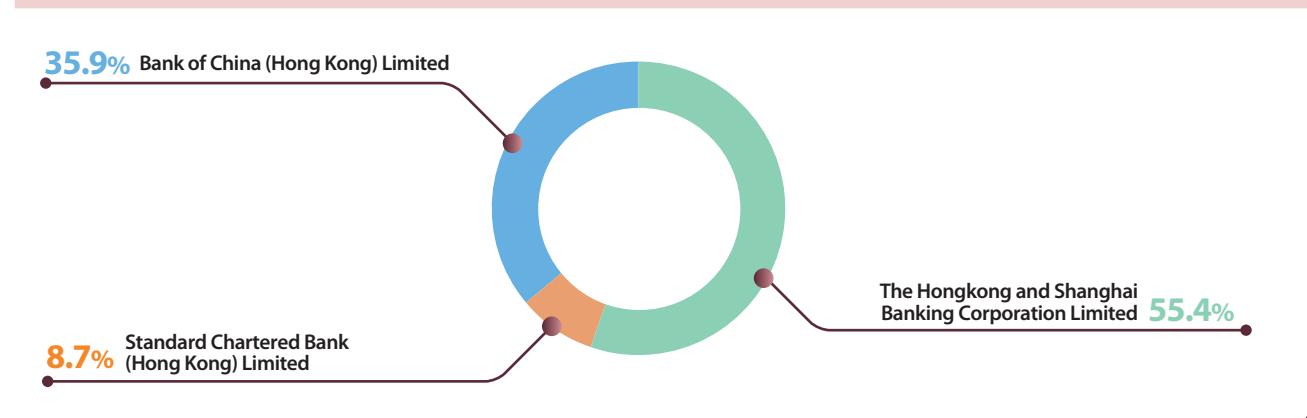


Chart 5 Banknotes in circulation by note-issuing banks at the end of 2023



Monetary Stability

Chart 6

Distribution of banknotes in circulation at the end of 2023

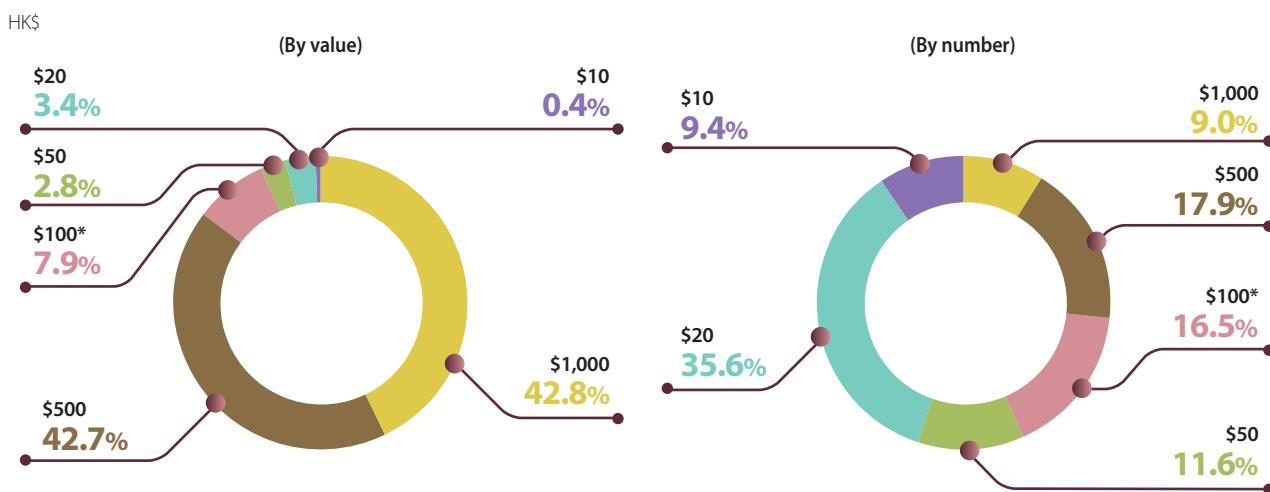


Chart 7

Banknotes in circulation at the end of 2023

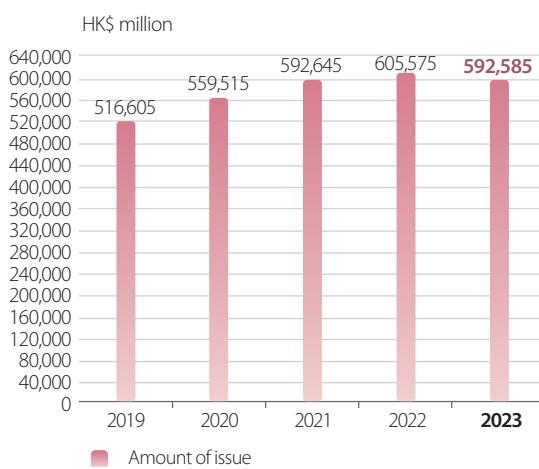
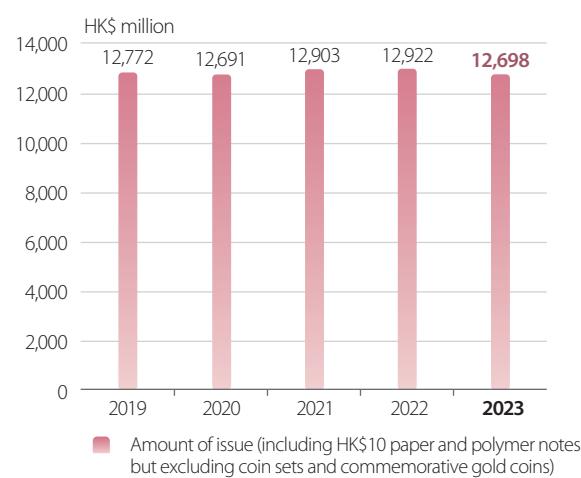


Chart 8

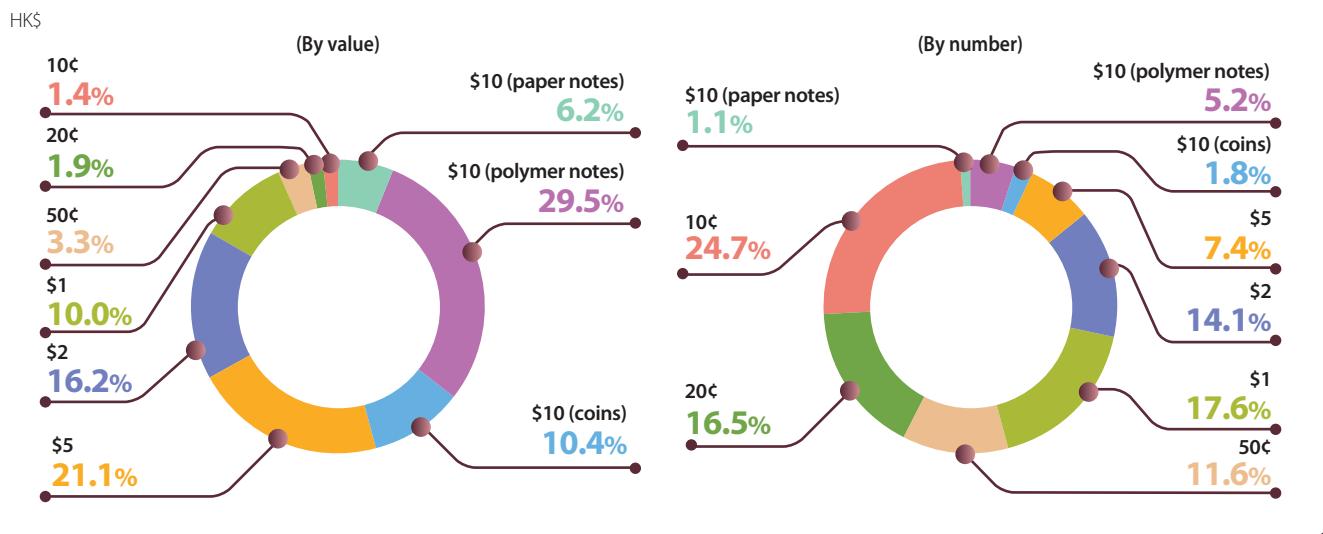
Government-issued currency notes and coins in circulation at the end of 2023



Monetary Stability

Chart 9

Breakdown of Government-issued currency notes and coins in circulation at the end of 2023



Hong Kong banknotes

During the year, the HKMA continued to organise seminars on the design and security features of Hong Kong banknotes for bank tellers, cashiers from retail establishments and students to help enhance their knowledge and skills in authenticating banknotes. During 2023, 15 seminars were arranged for around 3,000 participants.

Coin Collection Programme

The Coin Collection Programme continued to be well received by the public. More information about the Programme can be found in the *Sustainable HKMA* chapter of the *Sustainability Report 2023*.

Exchange Fund Bills and Notes

The EFBN Programme operated smoothly. At the end of 2023, the nominal amount of outstanding Exchange Fund papers stood at around HK\$1,255.4 billion (Table 2).

Table 2 Outstanding issues of EFBNs

| HK\$ million | 2023 | 2022 |
|---|------------------|-----------|
| Exchange Fund Bills (by original maturity) | | |
| 28 days | 2,800 | 0 |
| 91 days | 775,680 | 769,798 |
| 182 days | 405,800 | 364,800 |
| 364 days | 52,700 | 51,700 |
| Subtotal | 1,236,980 | 1,186,298 |
| Exchange Fund Notes (by remaining tenor) | | |
| 1 year or less | 7,600 | 7,600 |
| More than 1 year and up to 3 years | 7,200 | 8,800 |
| More than 3 years and up to 5 years | 2,400 | 2,400 |
| More than 5 years and up to 10 years | 1,200 | 2,400 |
| Subtotal | 18,400 | 21,200 |
| Total | 1,255,380 | 1,207,498 |

Monetary Stability

Monetary research

The Hong Kong Institute for Monetary and Financial Research (HKIMR)³, the research arm of the Hong Kong Academy of Finance, published 20 working papers and held 17 seminars/webinars on monetary and financial research topics that are of strategic importance to Hong Kong and the region. The HKIMR also published six *eJournals* on the Social Science Research Network (SSRN) to disseminate research outputs to SSRN's global research community. Moreover, to provide

the public with a high-level, non-technical summary of the recently published working papers, the HKIMR published two issues of *Insights from Monetary Research*.

Apart from its research activities, the HKIMR organised four international events, one roundtable and four seminars/webinars with academia, global central banks and international financial institutions to promote dialogue and exchange on economic and financial issues:

9
Mar

A seminar on *China's Rebound: Recent Developments and Outlook* by Dr Steven Alan Barnett, Senior Resident Representative in China of the IMF, and Dr Phakawa Jeasakul, Resident Representative for People's Republic of China – Hong Kong Special Administrative Region (HKSAR) of the IMF, was held. Dr Barnett shared his views on the latest developments in the Chinese economy, as well as short- and medium-term issues that need to be addressed. More than 100 participants attended the seminar.



17
Apr

A seminar on *Navigating Through a Challenging World* was held. Four experts from the IMF shared their views on the analytical chapters of the most recent issues of *World Economic Outlook and Global Financial Stability Report* by the IMF. Over 50 participants attended the seminar.



25
Apr

A seminar with the presentation of the IMF's April 2023 *Global Financial Stability Report* titled *Safeguarding Global Financial Stability amid High Inflation and Interest Rates* by Dr Jason Wu, Assistant Director, and Mr Thomas Pointek, Senior Financial Sector Expert, of the IMF's Monetary and Capital Markets Department was held. More than 80 participants attended the seminar.



³ The HKIMR is a subsidiary of the Hong Kong Academy of Finance.

Monetary Stability

2
May

A fireside chat on *Asia in a Challenging World* was hosted between Mr Krishna Srinivasan, Director of the Asia and Pacific Department of the IMF, and Mr Eddie Yue, Chief Executive of the HKMA. Mr Srinivasan outlined the key messages of the recent IMF *Regional Economic Outlook* report for Asia and shared his views on the key drivers and risks of the global and regional economy. In addition, the dialogue covered many important issues concerning the regional economy and the evolution of the international monetary system. Around 120 participants attended the event.



10
July

The international conference on *Fintech and Financial Stability* was jointly organised by the HKIMR, the University of Hong Kong and the Bank for International Settlements and included leading experts from around the world who shared their views and analyses on the latest developments in this area. Professor Bengt Holmström, 2016 Nobel Prize Laureate in Economics from the Massachusetts Institute of Technology, joined a virtual panel discussion during the conference, with about 70 participants.



24-25
Aug

A workshop on *Recent Developments and Future Prospects of the International Monetary System* was jointly organised by the HKIMR, ASEAN+3 Macroeconomic Research Office (AMRO), European Central Bank, European Stability Mechanism and Bank of Finland Institute for Emerging Economies. Dr Kouqing Li, Director of AMRO, presented his view in the panel discussion on *Policy Initiatives in a Changing International Monetary System*. More than 100 participants from global central banks, the private sector, academia and international financial institutions attended the workshop.



29
Aug

A roundtable on the Hong Kong Economy was co-organised by the HKIMR and AMRO. Director Kouqing Li and delegates from AMRO had extensive discussions with economists from major investment banks and academia. Topics included the macroeconomic outlook, opportunities and challenges of the Hong Kong economy, as well as the role of Hong Kong in connecting Mainland China with the rest of the world.



Monetary Stability

8
Sep

A webinar on *External Rebalancing in Turbulent Times* on the IMF's 2023 *External Sector Report* was held. Mr Enoch Fung, Chief Executive Officer of the Hong Kong Academy of Finance and Executive Director of the HKIMR, gave the opening remarks. Mr Jiaqian Chen, Deputy Division Chief and Mr Lukas Boer, Economist, of the IMF's Research Department shared their analysis on the external rebalancing in turbulent times and the external sector implications of the global dollar cycle. Dr Phakawa Jeasakul, the IMF's Resident Representative for People's Republic of China – HKSAR, moderated the question-and-answer session. Around 50 participants joined the webinar.



27
Oct

The 13th Annual International Conference on the Chinese Economy, titled *China's Economic Development in a Changing Global Environment*, was held and featured a keynote speech on Economic Outlook of China by Professor Yiping Huang, Sinar Mas Chair Professor of Finance and Economics and Deputy Dean of the National School of Development of Peking University. Five experts shared their views in the panel discussion on *Recent Developments and Outlook of the Chinese Economy*. About 120 participants from central banks, private sector, academia and international financial institutions attended the conference.



Banking Stability



The banking sector in Hong Kong remained strong and resilient in 2023 despite multiple headwinds, including the March banking turmoil in the US and Europe, a high interest rate environment and geopolitical tensions. The HKMA responded swiftly to the March banking turmoil — from managing the ripple effects to completing an internal review (covering such areas as the supervisory processes and resolution framework) drawing lessons for the local banking sector, while maintaining its focus on the credit, liquidity and market risk management of authorized institutions. In light of escalating cyber threats and the increasing use of technology services provided by third parties, the HKMA also worked closely with authorized institutions to enhance their operational and cyber resilience.

The HKMA enhanced consumer protection in respect of payment cards, and through further revision of the Code of Banking Practice as well as the launch of the Anti-Scam Consumer Protection Charter. The HKMA worked with fellow regulators on a balanced regulatory regime for virtual asset-related activities, streamlined the selling process for sophisticated professional investors, introduced enhancements to the Cross-boundary Wealth Management Connect Pilot Scheme, and commenced supervision of trust business. A pilot programme was launched to prepare for provision of consumer credit reference services under "Credit Data Smart".

The HKMA's efforts in anti-money laundering and counter-financing of terrorism (AML/CFT) reflect a commitment to targeting the highest threats under a risk-based approach. To address increasing digital fraud, the HKMA has strengthened ecosystem collaboration through the launch of real-time fraud monitoring and expanding the scope of public-private information-sharing partnerships, including the Fraud and Money Laundering Intelligence Taskforce. The launch of a ground-breaking platform to facilitate bank-to-bank information sharing will help address the risk of mule account networks, while the HKMA also worked closely with the industry to take concerted action to handle increasing fraud-related banking complaints and raise public awareness about different scams, including a pre-transaction alert mechanism when using the Faster Payment System. In parallel, supervisory technology capabilities were also advanced through the Macro Analytics pilot scheme.

Good progress was made on implementing international supervisory standards locally, including those on capital adequacy and disclosure. Notable efforts were also made in enhancing capacity building in the banking sector, attracting and nurturing future talents and upskilling existing practitioners. In addition, the Hong Kong Deposit Protection Board completed a public consultation on proposed enhancements to the Deposit Protection Scheme.

The HKMA continued to advance its work to ensure a credible resolution regime. A new resolution standard related to accessing critical financial market infrastructures was developed and a review on experiences of implementing loss-absorbing capacity policy standards was completed. Significant progress was made in resolution planning with banks to address early termination risk and operational continuity in resolution. The HKMA also continued to be active in international policy initiatives and regional co-operation on resolution.

Banking Stability

Objectives

The HKMA has a general objective to promote the safety and stability of the banking system. Achieving this objective is contingent upon a highly resilient financial system that is capable of providing the critical financial services the Hong Kong economy needs.

Banks can affect the stability of the system through the way they carry out their businesses and, in extreme cases, by failing in a disorderly manner. The Monetary Authority, as a supervisory authority, plays a key role in safeguarding financial stability by ensuring that banks are resilient to shocks and able to recover their positions in response to crises, ultimately helping to prevent failures. The Monetary Authority is responsible for the prudential supervision of banks and is tasked with the authorization of licensed banks, restricted licence banks and deposit-taking companies in Hong Kong, which are collectively known as authorized institutions (AIs).

The Hong Kong prudential regulatory framework is not designed to ensure a zero-risk financial system. Instead, the Monetary Authority, as a resolution authority, seeks to ensure that, in the event of an AI becoming non-viable, its failure can be managed in an orderly manner. To this end, a resolution regime for financial institutions in Hong Kong has been established, under which the Monetary Authority is the resolution authority for AIs, among other types of institutions. To operationalise the resolution regime in Hong Kong, it is important to lay down resolution rules and policy standards, undertake resolution planning to remove impediments to AIs' resolvability and develop the HKMA's operational capability to resolve a failing AI. In order to carry out these tasks effectively, the HKMA adopts an internationally harmonised and co-ordinated approach.

The Monetary Authority is also responsible for the designation and oversight of certain financial market infrastructures (FMIs). In overseeing FMIs, the HKMA aims to promote their general safety and efficiency, limit systemic risk and foster transparency. Making FMIs more resilient to financial crises protects the monetary and financial systems in Hong Kong from possible destabilising effects arising from disruption to the FMIs.

Review of 2023

Licensing

At the end of 2023, Hong Kong had:



During the year, the HKMA granted one banking licence and one restricted bank licence to two banks incorporated outside Hong Kong. The HKMA also granted money broker approval to four foreign trading platform operators and revoked another approval granted to one money broker. The HKMA revoked authorizations of five licensed banks during the year.

More information about the AIs and local representative offices in Hong Kong can be found in the Annex and Tables D to F on pages 313 to 316 and 322 to 325 respectively.

Banking Stability

Review of three-tier banking system

In 2023, the HKMA conducted a comprehensive review on the three-tier banking system in order to simplify the structure of Hong Kong's banking system. The review found that the three-tier system has become more complex than necessary to achieve the original aim to strike a balance between flexibility of entry into the banking system and protection of small depositors. Subsequently, the HKMA commenced a three-month consultation in June on a proposal to simplify the three-tier banking system into two tiers by merging deposit-taking companies into the restricted licence bank sector, thereby forming a new second tier of Hong Kong's banking system. Respondents were generally supportive of the proposal.

Overview of supervisory activities

In 2023, the HKMA conducted 177 off-site reviews covering a broad range of issues, including CAMEL rating assessment¹, corporate governance and risk management. As part of the HKMA's continued efforts to promote stronger risk governance, 38 meetings were held with the boards of directors, independent non-executive directors or board-level committees of AIs. Furthermore, 38 tripartite meetings were held among the HKMA, AIs and their external auditors.

Apart from off-site activities, the HKMA conducted regular on-site examinations on a wide range of AIs' activities. Credit risk management was a key focus given the challenging credit risk landscape amid a high interest rate environment and debt defaults by some Mainland property developers. The management of operational risk and technology risk was another major focus as the adoption of technology by AIs gathered further momentum. The HKMA also stepped up its supervisory work on climate risk management and rolled out a new round of thematic examinations focused on climate-related risk governance, and a series of consultative sessions to provide supervisory guidance to AIs.

The banking turmoil in the US and Europe that started in March 2023 was the most significant system-wide banking stress since the Great Financial Crisis of 2008 in terms of scale and scope. The HKMA stayed on high alert as the turmoil unfolded and took a number of precautionary actions to ensure that any potential fallout would not undermine confidence in the local banking and financial system. After the episode, the HKMA conducted an internal review exercise having regard to the observations and experience gained from the turmoil. Based on this exercise, the HKMA developed a detailed action plan to incorporate lessons learnt with a view to strengthening its supervisory effectiveness and augmenting its ability to handle a banking crisis if one did occur. See *Liquidity and market risks* on page 95 for more details on the HKMA's work in this respect.

On conduct supervision, the HKMA carried out on-site examinations in securities, investment products, insurance and Mandatory Provident Fund (MPF)-related businesses as well as consumer protection matters, supplemented with thematic reviews on areas assessed to be of higher risk or new initiatives.

¹ Comprising the Capital adequacy, Asset quality, Management, Earnings and Liquidity components.

Banking Stability

Table 1 contains a summary of the HKMA's supervisory activities in 2023.

Table 1 Summary of supervisory activities

| | 2023 | 2022 |
|--|--------------|-------|
| 1 Off-site reviews and prudential interviews | 177 | 183 |
| 2 Meetings with boards of directors, independent non-executive directors or board-level committees of AIs | 38 | 36 |
| 3 Tripartite meetings | 38 | 38 |
| 4 Culture dialogues | 7 | 7 |
| 5 On-site examinations | 125 | 112 |
| Operational risk and technology risk management | 37 | 32 |
| AML/CFT controls | 15 | 13 |
| Liquidity risk management | 9 | 8 |
| Implementation of Basel capital adequacy framework | 6 | 3 |
| Capital planning | 6 | 6 |
| Market risk, counterparty credit risk and treasury activities | 11 | 19 |
| Securities, investment products, insurance and MPF-related businesses | 20 | 17 |
| Consumer protection | 3 | 2 |
| Deposit Protection Scheme-related representation | 12 | 12 |
| Overseas examinations | 6 | 0 |
| 6 Thematic reviews | 694 | 637 |
| Credit risk management and controls | 43 | 43 |
| Operational risk and technology risk management | 76 | 69 |
| AML/CFT controls | 64 | 82 |
| Model risk management | 0 | 7 |
| Investment products, insurance and MPF-related businesses | 168 | 115 |
| Consumer protection | 216 | 225 |
| Sharing and use of credit data | 63 | 58 |
| Liquidity risk | 20 | 21 |
| Market risk | 20 | 8 |
| Green and sustainable banking ^a | 24 | 9 |
| Total | 1,079 | 1,013 |

a. Including consultative sessions with AIs to review their implementation of the HKMA's Supervisory Policy Manual module GS-1 on "Climate Risk Management".

Banking Stability

Credit risk

Credit growth and asset quality

Total loans decreased by 3.6% in 2023, compared with a decline of 3.0% in 2022. Table 2 shows the breakdown of growth in loans and advances. Mainland-related lending decreased by 6.6% to HK\$4,226 billion in 2023 (Table 3).

Table 2 Growth in loans and advances

| % change | 2023 | 2022 |
|---------------------------------|--------------|-------|
| Total loans and advances | -3.6 | -3.0 |
| Of which: | | |
| – for use in Hong Kong | -0.4 | 0.9 |
| – trade finance | -13.1 | -13.5 |
| – for use outside Hong Kong | -10.4 | -10.1 |

Table 3 Growth in Mainland-related lending

| % change | 2023 | 2022 |
|--|-------------|-------|
| Total Mainland-related lending | -6.6 | -4.3 |
| Of which: | | |
| – Mainland-related lending (excluding trade finance) | -6.5 | -3.6 |
| – trade finance | -7.8 | -14.8 |

In 2023, the HKMA intensified supervisory efforts in monitoring AIs' asset quality and assessing their credit risk management practices given the high interest rate environment and continued weakness in the Mainland property market. The asset quality of the banking sector deteriorated during the year but remained manageable. The classified loan ratio of the banking sector was 1.56% at the end of 2023, up from 1.40% at the end of 2022. The classified loan ratio for Mainland-related lending increased to 2.58% from 2.26% at the end of 2022.

During the year, the HKMA conducted targeted and thematic examinations to evaluate AIs' credit risk management focusing on exposures to vulnerable sectors, premium financing, oversight of credit risks at operations outside Hong Kong and exposures to non-bank financial institutions.

Alleviating cash flow pressure faced by bank customers

The HKMA and the Banking Sector Small and Medium-sized Enterprise (SME) Lending Coordination Mechanism announced in July the commencement of an orderly exit from the Pre-approved Principal Payment Holiday Scheme. The Scheme was introduced in May 2020 to tide eligible corporates over the pandemic. Taking into account the views of the commercial sectors, the partial principal repayment options were enhanced to assist corporates' gradual return to normal repayment. Where sectors or individual borrowers were still facing challenges despite the end of the pandemic, banks continued to offer principal moratorium or other suitable credit relief measures on a case-by-case basis.

The HKMA also encouraged banks to be sympathetic in handling the funding needs of corporates which had not participated in the Scheme but were facing cash flow pressures due to individual circumstances. The HKMA reminded banks to follow the *"Hong Kong Approach to Corporate Difficulties"* guidelines in dealing with corporates encountering repayment problems, so that individual banks would act collaboratively in the common interest of the lenders involved.

Banking Stability

Property mortgage lending

The successive rounds of countercyclical macroprudential measures introduced by the HKMA since 2009 have strengthened banks' risk management of their property mortgage lending business and the banking sector's capacity to cope with challenges arising from a sharp correction in property prices. The average loan-to-value (LTV) ratio of new residential mortgage loans approved in 2023 stood at 57%, compared with 64% in September 2009 before the countercyclical measures were first introduced (Chart 1). The average debt servicing ratio (DSR) of new mortgages stayed low at 40% in 2023, compared with 41% in August 2010 when a cap on DSR was first applied.

On 7 July, the HKMA adjusted the countercyclical macroprudential measures after taking into account factors such as property prices, transaction volumes and the local and external economic environment. This was the first time the countercyclical macroprudential measures for residential properties were relaxed since their introduction in 2009. The adjustments included increasing the maximum LTV ratios for residential properties and commercial properties, as well as for mortgage loans assessed based on the net worth of mortgage applicants. In addition, the requirements to lower the applicable maximum LTV ratio and DSR limit by ten percentage points for mortgage applicants with incomes derived mainly from places outside of Hong Kong were lifted. The HKMA also removed the requirement to apply a five-percentage-point reduction on applicable DSR limits when mortgage applicants' total mortgage finance exceeded the HKMA's normal permissible LTV ceilings by 20 percentage points.

Chart 1 Average LTV ratio and DSR of new residential mortgage loans approved



* Before the first round of countercyclical measures was introduced by the HKMA

When the tighter requirement on DSR was introduced by the HKMA

Banking Stability

Operational and technology risk

Following the issuance of the Supervisory Policy Manual (SPM) module OR-2 on “*Operational Resilience*” in 2022, the HKMA monitored the industry’s implementation progress closely. Based on an industry survey completed in the third quarter of 2023, most banks had developed their operational resilience frameworks and were on track to fully implement those frameworks by May 2026 in accordance with the timeline specified by the HKMA.

In light of escalating cyber threats, the HKMA further stepped up the supervision of banks’ cyber resilience. Since the launch of the Cyber Resilience Assessment Framework in 2016, AIs had completed two rounds of cyber defence maturity assessments and intelligence-led cyber simulation tests by the end of 2023. Where these assessments and tests revealed possible rooms for improvement, AIs had taken prompt actions to strengthen their cybersecurity controls. Separately, major banks had taken on board the HKMA’s recommendation to maintain a secure tertiary data backup, an air-gapped data vault designed to be separate from the primary and secondary data centres. The implementation of the backup would substantially enhance these banks’ capability to respond to and recover from destructive ransomware attacks. In response to an increasing number and the growing sophistication of supply chain attacks that impacted a multitude of global institutions, the HKMA issued a circular to share with the industry a set of sound practices for managing cyber risk associated with the use of third-party service providers. To further strengthen the industry’s collective preparedness against potential cyberattacks, the HKMA facilitated and actively participated in the Whole Industry Simulation Exercise 2023, a cross-sectoral crisis simulation exercise spanning the banking, securities and insurance sectors. The key theme of 2023 exercise was supply chain attacks.



The kick-off session of the Whole Industry Simulation Exercise 2023 is convened in the HKMA office in July

Banking Stability

With digital fraud on the rise, the HKMA further stepped up its efforts in countering new fraud tactics and introduced a number of measures to protect bank customers. In April, the HKMA required card-issuing banks to tighten authentication controls for the binding of payment cards with contactless mobile payment services. In October, the HKMA unveiled ten new measures to fortify the security of e-banking services. These measures required AIs to enhance their fraud monitoring mechanisms, implement ambush customer authentication and provide a mechanism for immediate suspension of bank accounts. In response to the emergence of malware scams in neighbouring economies, the HKMA swiftly provided the industry with guidance on effective protective measures to counter these scams. The number of bank customers affected by malware scams has since been kept at a very low level. Two workshops were jointly organised by the HKMA and the Hong Kong Police Force (HKPF) in July and December respectively to keep the banking industry abreast of the latest fraud trends. The HKMA also launched a new public awareness campaign featuring the slogan "Protect your Personal Digital Keys; Beware of Fraudulent Links!" to increase public alertness about digital fraud.



Display for the public awareness campaign featuring the slogan "Protect your Personal Digital Keys; Beware of Fraudulent Links!"

Liquidity and market risks

The HKMA stepped up the supervision of AIs' liquidity and market risk management, particularly after the outbreak of the US and Europe banking turmoil in March, to ensure that AIs continued to manage these risks prudently. The results of the HKMA's solvency and liquidity stress tests continued to indicate that the banking sector maintained sufficient capital and liquidity buffers to withstand possible stress and liquidity outflows.

The liquidity risk supervision team enhanced its surveillance of AIs' liquidity risk profiles, and assessed their risk management and controls with respect to deposit concentration, social media surveillance and contingency funding management. The market risk supervision team examined AIs' use of behavioural models in measuring interest rate risk in the banking book (IRRBB) and evaluated their controls over investments classified as held-to-maturity (HTM) securities. The findings arising from these supervisory activities were incorporated into the HKMA's circular letter issued to AIs in December to share its supervisory expectations with respect to liquidity and market risk management.

The Hong Kong banking sector transitioned smoothly away from the remaining US dollar London Interbank Offered Rate (LIBOR) settings, which ceased to be compiled after June. During the process, the HKMA closely monitored AIs' progress of preparation and assisted them in raising the corporate sector's readiness for the transition. The Hong Kong Interbank Offered Rate (HIBOR) was widely recognised by market participants as a credible and reliable benchmark, and would be maintained notwithstanding the introduction of the Hong Kong Dollar Overnight Index Average (HONIA). Given the multi-rate approach adopted by Hong Kong, the market risk supervision team undertook a round of reviews to ensure the robustness of AIs' control frameworks for the submission of rates as inputs to the compilation of HIBOR fixings.

Banking Stability

Internal review following the banking turmoil in the US and Europe – Key lessons learnt

Notwithstanding the strength and resilience demonstrated by the Hong Kong banking sector during the March banking turmoil, the HKMA noted that lessons could be drawn from the episode to enhance its supervisory effectiveness and agility to handle a banking crisis if one did occur. It therefore completed an internal review exercise covering the supervisory processes, resolution framework, and the interface between supervision, deposit protection and resolution.

The internal review concluded that the HKMA's relevant frameworks and processes remained generally appropriate and fit-for-purpose. Nevertheless, the review also identified several areas where improvements could be made. Based on these findings, the HKMA is taking follow-up actions focused on the below areas:

- **Strengthening the supervision of AIs' management of interest rate risk in the banking book and debt securities investment.** The HKMA is stepping up its scrutiny of the behavioural models and surrounding controls adopted by AIs in managing IRRBB. It is also in the process of enhancing the sensitivity of the capital framework to capture AIs' exposure to IRRBB. As for debt securities investment, supervisory teams are paying increased attention to how AIs manage their HTM securities, including their arrangements for (i) designating HTM securities for liquidity purposes, (ii) incorporating the potential impact of valuation losses on these securities into their internal processes (e.g. stress testing), and (iii) making disclosures on the impact of such losses on their capital position.

- **Ensuring AIs' liquidity risk management practices remain adequate against the backdrop of continued digitalisation of banking services and growing social media influence.** These developments have increased the speed at which bank runs can unfold and compressed the time available for banks to respond. The HKMA will place greater emphasis on AIs' related risk mitigation measures, including their contingency funding arrangements, controls for managing the risks associated with deposit concentration and social media monitoring mechanisms.

- **Enhancing the HKMA's capability to respond to banking crises within shorter timeframes.** The internal review reaffirmed the importance for the HKMA – like banks – to be prepared and able to nimbly respond to a variety of crisis scenarios. With this in mind, the HKMA is progressing work to streamline its crisis management processes, and enhance the resolution framework and its readiness to operationalise a range of resolution options. It is also strengthening inter-agency and cross-border supervisory co-ordination to bolster its ability to address incidents that may span across sectors and borders.

Banking Stability

Anti-money laundering and counter-financing of terrorism

Financial crime continued to be a significant global challenge in 2023 and in response, the HKMA improved measures to protect customers of Hong Kong banks from digital fraud, and reduced the harm caused by mule account networks. The HKMA worked alongside partners in Hong Kong's AML/CFT ecosystem to strengthen the banking and stored value facility (SVF) sectors' ability to detect fraud, alert potential victims and provide more actionable financial intelligence. The HKMA strengthened collaboration with the 28 member banks of the Fraud and Money Laundering Intelligence Taskforce (FMLIT)², thereby enhancing their capacity to detect and prevent illicit activity, leading to the identification of about 6,400 new suspicious accounts associated with crimes under investigation by law enforcement agencies and the restraint or confiscation of about HK\$400 million in criminal proceeds in 2023. The work of the Anti-Deception Coordination Centre (ADCC)³ and 28 retail banks also saw further enhancement, resulting in about HK\$1.3 billion in suspected fraudulent payments being intercepted in 2023.

During the year, the HKMA continued to work with the banking industry and the HKPF to make changes to Hong Kong's AML/CFT ecosystem in areas where the HKMA sees the greatest value. In 2023, a number of joint initiatives were launched, including the Financial Intelligence Evaluation Sharing Tool, a bank-to-bank information-sharing platform which is already improving the detection and disruption of fraud and mule account networks; the launch of real-time fraud monitoring, which enhances banks' early detection of fraud and mule accounts to alert potential victims; the Anti-Deception Alliance, which strengthens the effectiveness of the existing 24/7 stop-payment mechanism operated by

the ADCC by bringing together ADCC officers and bank staff, and a new alert based on the "Scameter" anti-fraud search engine, which warns customers using the Faster Payment System (FPS) whenever a higher-risk transaction is spotted. To enhance public awareness of fraud and mule accounts, the HKMA and banks have stepped up joint efforts with various stakeholders through publicity initiatives on "Don't Lend/Sell Your Account" and a new protocol to expedite alerts to the public of new trends and types of fraud.

The HKMA engaged the banking and SVF industries in amending the *Guidelines on Anti-Money Laundering and Counter-Financing of Terrorism (For Authorized Institutions and Stored Value Facility Licensees respectively)*(AML/CFT Guidelines) in response to changes in the global risk landscape, supporting legislative amendments which came into effect in June. These included changes to support a risk-based approach in determining the degree of customer due diligence (CDD) for "politically exposed persons" and supporting the use of technology for CDD where a customer is not physically present.

² FMLIT is a public-private partnership for information sharing among the HKMA, the HKPF and banks. Established in 2017, FMLIT expanded membership from ten banks initially to 28 in 2023.

³ The ADCC was established in July 2017 by the HKPF to combat against deception and enhance public awareness of various kinds of scams.

Banking Stability



Senior representatives from the HKMA, HKPF and major retail banks at a sharing session on anti-fraud efforts



The HKMA collaborates with The Hong Kong Association of Banks and HKPF to launch the Financial Intelligence Evaluation Sharing Tool



Senior representatives from the HKMA, HKPF and 10 participating banks officiate at the inauguration of the Anti-Deception Alliance



Poster on real-time fraud monitoring systems launched by 28 retail banks with support from the HKMA



Educational messages on social media and public event around the theme "Don't Lend/Sell Your Account" for money or a job



Banking Stability

Under the “Fintech 2025” strategy, the HKMA continued to support the adoption of AML regulatory technology (Regtech) to enhance the use of data and technology by banks. The fourth AML Regtech Lab (AMLab 4) was co-hosted with Cyberport in June to bring together retail banks, SVF licensees, technology companies and industry experts to innovate and develop a sector-wide approach to real-time fraud monitoring, and help customers identify and take action to prevent fraud. Two reports, *AML Regtech: Network Analytics* and *AML/CFT Regtech: Case Studies and Insights Volume 2*, were published in May and September respectively to highlight how Regtech tools can enhance the effectiveness and efficiency of anti-deception efforts (Figure 1). The reports also share actual use cases from banks adopting more sophisticated AML Regtech solutions to enhance the effectiveness and efficiency of AML efforts.

Figure 1 Regtech reports published in 2023

May

AML Regtech: Network Analytics

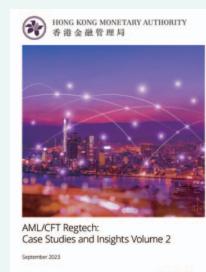
To promote the adoption of network analytics capability to strengthen the response of banks' AML systems to deception and other financial crimes



Sept

AML/CFT Regtech: Case Studies and Insights Volume 2

To share real-life use cases from banks in their Regtech adoption to make their AML efforts effective and efficient; this volume covers sophisticated AML Regtech solutions, building on the first volume of January 2021



Ms Carmen Chu, the then Executive Director (Enforcement and AML), delivers remarks at AMLab 4, during which representatives from the HKMA, banks and technology firms share insights and views on how Regtech solutions can detect and disrupt fraud as well as how banks can enhance their anti-fraud capabilities



Technology companies, including Cyberport start-ups, demonstrate relevant Regtech tools and solutions to participating banks and SVF licensees at Regtech Connect

Banking Stability

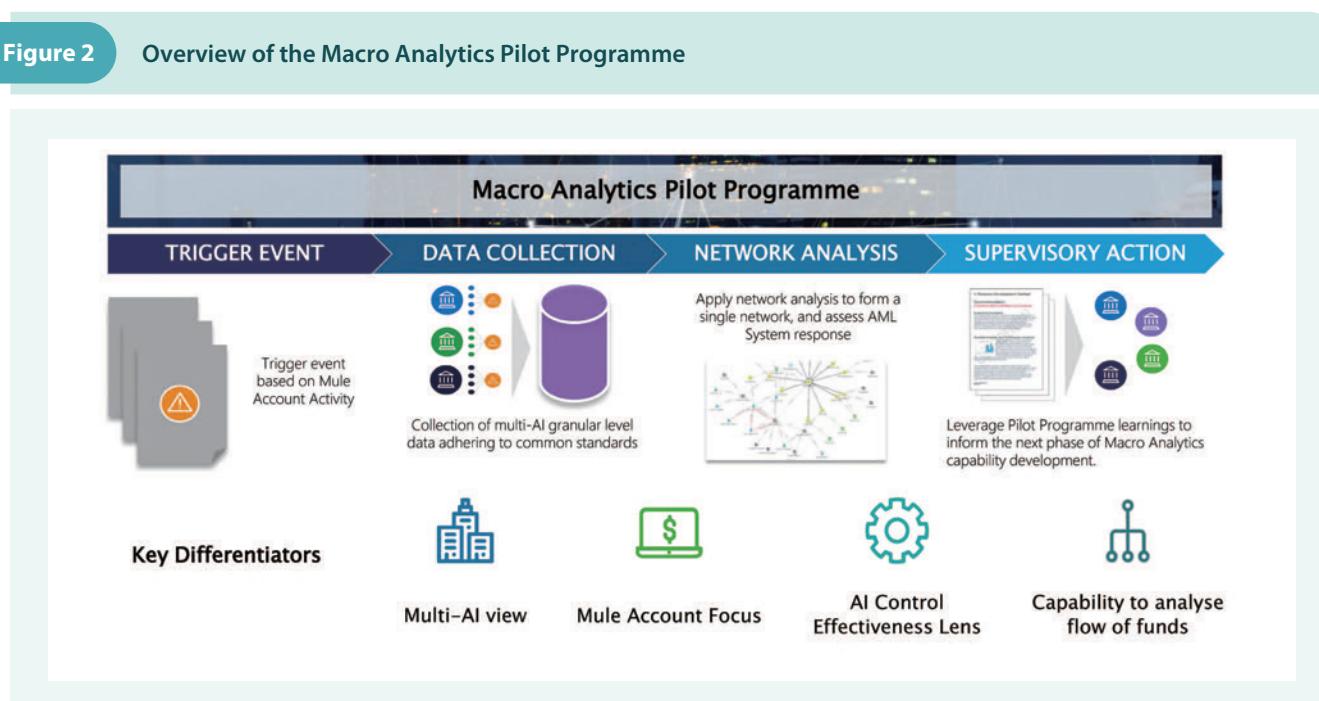
To remain responsive to changes in money laundering and terrorist financing (ML/TF) risks globally and domestically, the HKMA continued to improve its data and technology capabilities. A prototype Intelligent Risk and Incident Scanning tool was developed using natural language processing technology to automate and prioritise media and public source information with ML/TF implications to support risk-based supervision. AML/CFT supervisory data collection, validation and analysis were enhanced and streamlined through a secure, user-friendly interface with banks using a web-based Common Submission Platform.

In parallel with these developments, the HKMA implemented a pilot applying analytics to granular financial crime data across multiple banks (Figure 2). Eight retail and virtual banks participated in the pilot, which generated new supervisory insights targeting high risk areas, including mule account networks.

The HKMA carries out risk-based supervision of AIs' and SVF licensees' AML/CFT systems. During the year, 15 risk-focused on-site examinations were completed, including thematic work on transaction monitoring, high-end ML/TF screening systems. In addition, 64 desk-based reviews and assessments were undertaken covering topics including the effectiveness of AIs' controls and incident-triggered reviews. The HKMA provided training and knowledge sharing on AML/CFT in 23 engagements with local and international partners, including financial crime seminars in Hong Kong and Singapore on data analytics and financial investigation training courses for local law enforcement agencies.

In November, the HKMA provided guidance and training during its AML seminar for the banking and SVF sectors, including on amendments to the AML/CFT Guidelines, as well as feedback from the thematic review on the transaction monitoring system.

Figure 2 Overview of the Macro Analytics Pilot Programme



Banking Stability

Wealth management and MPF-related businesses

The HKMA co-operates closely with other financial regulators in Hong Kong to provide guidance on and supervise AIs' practices in the sale of securities, investment, insurance and MPF products. The HKMA maintains regular dialogue with fellow regulators through bilateral and multilateral meetings, as well as under the auspices of the Council of Financial Regulators, to ensure co-ordinated and effective supervisory actions.

The HKMA conducted 20 on-site examinations, 168 thematic reviews and 28 analyses of surveys and returns of AIs, covering the sale of investment products, and insurance and MPF-related businesses, focusing in particular on high-risk investment products, green and sustainable investment products, virtual asset (VA)-related investment products, non-investment-linked long term insurance products, premium financing activities and Cross-boundary Wealth Management Connect (Cross-boundary WMC) business. The HKMA and the Securities and Futures Commission (SFC) completed a concurrent thematic review on intermediaries' distribution of non-exchange traded investment products. In addition, the HKMA and the SFC announced the findings of the third annual joint survey on the sale of non-exchange traded investment products, which provide useful information on the industry landscape and market trends. Moreover, the HKMA and the Insurance Authority (IA) commenced a new round of joint inspection on selected insurers and insurance intermediaries (including AIs) regarding their premium financing activities, with a view to assessing the industry's compliance with the relevant regulatory requirements. Apart from the above, the HKMA also conducted analyses of attestation services for Hong Kong customers by pilot banks to open Mainland bank accounts.

To facilitate the development of the VA sector in a sustainable and responsible manner, the HKMA made specific efforts in enhancing consumer protection on AIs' VA-related activities, having regard to local and international market trends and regulatory developments. The HKMA, jointly with the SFC, updated guidance to intermediaries concerning VA-related activities in October and December to expand retail access to VA dealing, advising and asset management services and more types of VA-related investment products, with appropriate safeguards. In view of growing interest of AIs in custody services of digital assets and sale and distribution of tokenised products, the HKMA consulted the industry on new guidance. As part of anti-fraud efforts, the HKMA stepped up surveillance work with alerts issued to the public about suspected breaches of the Banking Ordinance (BO) by some firms claiming to be offering VA products and services, and strengthened public education through social media and mass media to alert the public to misrepresentation by such firms and common tactics used in VA scams.

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To bring growth opportunities to the wealth management industries in Hong Kong, financial regulators in the Mainland, Hong Kong and Macao jointly announced in September enhancements to the Cross-boundary WMC, including refining the eligibility criteria of investors; expanding the scope of participating institutions to include eligible securities firms; expanding the scope of Southbound and Northbound eligible products; increasing the individual investor quota; and further enhancing promotion and sale arrangements. The HKMA consulted the industry on the updated implementation guidance, and handled applications from a number of banks for additional partnerships and/or expansion of service scope during the year. The HKMA has been monitoring the participating banks to ensure smooth implementation of the scheme. In addition, in view of increasing cross-boundary business activities, the HKMA consulted the banking industry on a new arrangement to allow registered institutions (RIs) to engage individuals who repeatedly visit Hong Kong for a short period each time to perform regulated activities as itinerant professionals.

The HKMA continued engagement with the industry on the selling process of investment products. While safeguarding investor protection, the HKMA also attaches importance to enhancing customer experience. In February, the HKMA shared observations of steps taken by some banks that could have made their selling processes unnecessarily long (as identified from a special thematic review), and clarified the relevant regulatory standards to encourage banks to streamline their selling processes. In light of the industry's feedback and to strengthen Hong Kong's position as a premier private wealth management centre, the HKMA and the SFC jointly introduced a streamlined approach on suitability assessment and product disclosure processes when dealing with sophisticated professional investors in July, and participated in an industry briefing in August. The HKMA also engaged the industry on updating guidance on a portfolio-based approach to suitability assessment with a view to facilitating adoption by banks. In November, in view of the growing demand of green and sustainable investment products, the HKMA issued a circular to share good practices noted and standards expected of banks in the sale and distribution of green and sustainable investment products to facilitate such business whilst addressing greenwashing risks.



Mr Alan Au (middle of two photos), Executive Director (Banking Conduct), shares to the industry at the Private Wealth Management Association's events

Banking Stability

Furthermore, with a view to enhancing confidence in Hong Kong's private wealth management business, the HKMA commenced the supervision of AIs' trust business, including introducing a list of trustees on the HKMA website, rolling out a new half-yearly survey and commissioning self-assessments under the SPM module TB-1 on *"Regulation and Supervision of Trust Business"* and the Code of Practice for Trust Business which came into effect on 1 June.



Mr Alan Au (second from right), Executive Director (Banking Conduct), speaks at the Hong Kong Trustees' Association Conference 2023 on the HKMA's supervisory regime on banks' trust business

To improve access by banks to the HKMA's regulatory requirements, the HKMA consulted the industry on an enhanced SPM module SB-1 on *"Supervision of Regulated Activities of SFC – Registered Authorized Institutions"*, which serves as a single document providing a comprehensive overview of the regulatory framework, supervisory approach, as well as major requirements in respect of RIs' securities business. Furthermore, the HKMA launched a compendium of circulars related to the sale and distribution of securities and investment products to facilitate easy access by banks for compliance work.

In light of market developments and to enhance the customer experience while according protection to customers, the HKMA issued a circular in August to provide AIs with the flexibility to adopt an alternative arrangement for meeting the audio recording requirement in selling protection linked plans to non-vulnerable customers. In October, the HKMA issued a circular to remind AIs of the need for proper disclosure of interest rates in respect of premium financing and to clarify the relevant disclosure requirements, both with the aim of strengthening customer protection.

During the year, the HKMA processed two applications, both of which were from virtual banks for registration as RIs; one application for the addition of a regulated activity under the Securities and Futures Ordinance; and one application to become a licensed insurance intermediary under the Insurance Ordinance. The HKMA also granted consent to 130 executive officers responsible for supervising the securities activities of RIs and conducted background checks on 7,063 individuals whose information was submitted by RIs for inclusion in the Register of Securities Staff of AIs maintained by the HKMA.

Other supervisory activities

The Banking Supervision Review Committee⁴ considered seven cases in 2023. Six of them concerned the authorization of AIs and the approval of money brokers. The remaining one was related to the review of the three-tier banking system (Table 4).

During the year, the HKMA commissioned five reports under section 59(2) of the BO, requiring AIs to appoint external professional firms to report on the effectiveness of their controls in specified areas of operation. These reports covered various aspects of risk management including controls in AML/CFT and in securities related activities.

In 2023, there were no incidents reported by AIs involving breaches of the requirements of the BO relating to capital adequacy or liquidity ratio. There were 75 instances of breach of other provisions of the BO, mostly related to AIs' reporting obligations under the law. These breaches did not affect the interests of depositors and were promptly rectified by the relevant AIs.

⁴ A senior management committee set up within the HKMA to consider, advise and make recommendations to the Monetary Authority on major authorization matters under the BO, with a view to ensuring that decisions on authorization matters are taken in a fair and reasonable manner.

Banking Stability

The CAMEL Approval Committee⁵ completed a review of the CAMEL ratings of all the 178 AIs. No AIs appealed against the Committee's decisions.

Table 4 Summary of other supervisory activities

| | 2023 | 2022 |
|--|------|------|
| 1 Cases considered by the Banking Supervision Review Committee | 7 | 7 |
| 2 Reports commissioned under section 59(2) of the BO | 5 | 8 |
| 3 Approval of applications to become controllers, directors, chief executives or alternate chief executives of AIs | 192 | 175 |

Promoting fintech adoption

As part of the "All banks go Fintech" initiative under the "Fintech 2025" strategy, the HKMA, in collaboration with the SFC and the IA, published a new Fintech Promotion Roadmap in August to promote further developments in the focus areas of Wealthtech, Insurtech, Greentech, artificial intelligence and distributed ledger technology. The new Fintech Promotion Roadmap was informed by a market study which highlighted that awareness was no longer a hurdle in fintech adoption, and the focus of the promotion efforts should be placed on addressing practical challenges and nurturing a balanced and sustainable fintech ecosystem. Accordingly, the new Roadmap put forth a series of initiatives with the aim of enhancing the accessibility of resources, establishing more in-depth communication and encouraging the exchange of practical knowledge amongst financial institutions and fintech firms.

Adoption of supervisory technology

During the year, the HKMA successfully implemented an end-to-end digital supervisory platform, which provided one-stop access to critical information and risk metrics about supervised institutions and empowered supervisors to manage workflows more effectively. The HKMA also enhanced operational efficiency by automating and streamlining multiple supervisory operations through the implementation of a robotic process automation tool and a speech-to-text engine. The latter supports automatic transcription and analysis of audio recordings to assist on-site examinations in identifying potential non-compliance issues in banks' selling processes of investment and insurance products. Having completed additional proof-of-concept exercises, the HKMA began implementing a number of advanced analytics solutions that had the ability to convert data into valuable supervisory insights, thereby paving the way for more forward-looking supervisory processes.

International co-operation

Co-operation with overseas authorities

In 2023, the HKMA participated in 34 college-of-supervisors meetings organised by the home supervisors of 25 banking groups with significant operations in Hong Kong. A broad range of issues were discussed, covering areas such as financial soundness, risk management controls and operational resilience.

The HKMA participated in the cross-border resolution planning of 14 global systemically important banks (G-SIBs) through Crisis Management Groups (CMGs) and Resolution Colleges to enhance the resolvability of these banks and the crisis preparedness of the relevant home and host authorities. The HKMA also led the regional resolution planning and hosted the Asia CMG meeting for a G-SIB's Asia resolution group in May with participation from 18 supervisory/resolution authorities and deposit insurers. At this meeting, progress made in enhancing resolvability was reviewed and forward priorities were set.

⁵ The CAMEL Approval Committee was established to review the CAMEL assessments conducted on individual AIs. The Committee is chaired by an Executive Director, and includes at least two senior staff members within the banking departments of the HKMA who have not been involved in conducting the CAMEL assessments in question.

Banking Stability

Bilateral meetings were held during the year with overseas banking supervisors and resolution authorities. There were also regular exchanges with overseas authorities on institution-specific issues and developments in financial markets.

Participation in international and regional forums

The HKMA participates as a member in a number of international forums for banking supervisors:

- The Group of Central Bank Governors and Heads of Supervision;
- The Basel Committee on Banking Supervision (Basel Committee);
- The Basel Committee's Risks and Vulnerabilities Assessment Group;
- The Basel Committee's Supervisory Cooperation Group; and
- The Basel Committee's Policy and Standards Group.

Under the structure of the Basel Committee, the HKMA served as a co-chair of the Policy and Standards Group and the chair of the Pillar 2 Expert Group⁶. It is also represented in the Task Force on Climate-related Financial Risks, the Basel Core Principles Task Force and the following Expert Groups:

- Accounting and Audit;
- Anti-money Laundering and Counter-financing of Terrorism;
- Capital and Leverage Ratio;
- Credit Risk and Large Exposures;
- Disclosure;
- Financial Technology;
- Liquidity;
- Margin Requirements;
- Market Risk;
- Operational Resilience;
- Pillar 2; and
- Stress Testing.

The HKMA is a member of the Central Banks and Supervisors Network for Greening the Financial System and, jointly with the SFC, represents Hong Kong in the International Platform on Sustainable Finance.

At the regional level, the HKMA is a member of the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)⁷; and the South East Asian Central Banks (SEACEN) Research and Training Centre.

As part of its work in the EMEAP Working Group on Banking Supervision, the HKMA is the champion of the Interest Group on Liquidity. The HKMA is also the champion of the Interest Group on Sustainable Finance, which aims to promote information sharing on the management of climate-related risks faced by banks in the region.

The HKMA participates actively in the work of the G20/OECD⁸ Task Force on Financial Consumer Protection, which supports the ongoing implementation of the *G20/OECD High-level Principles on Financial Consumer Protection* last updated in 2022, taking into account the importance of advancements, such as financial innovation and operations in an increasingly digital environment.

The HKMA also participates actively in the International Financial Consumer Protection Organisation (FinCoNet) as a member institution. In particular, the HKMA participates in the workstream of FinCoNet Standing Committee 2 and contributes towards the exploration of supervisory approaches and suitability assessment in respect of "Buy Now, Pay Later" products. The HKMA is also a member of the Supervisors Roundtable on Governance Effectiveness chaired by the Federal Reserve Bank of New York, which aims to advance innovation in influencing culture reform in the financial sector.

⁶ Pillar 2 is a framework for determining any additional capital that a bank should hold principally to cover risks either not captured, or not adequately captured, under the minimum capital requirement (i.e. Pillar 1) of the Basel capital standard. The HKMA chaired the Pillar 2 Expert Group up to November.

⁷ The EMEAP is a co-operative organisation of central banks and monetary authorities in the East Asia and Pacific region.

⁸ OECD refers to the Organisation for Economic Co-operation and Development.

Banking Stability



At the FinCoNet Annual General Meeting 2023 in Port Louis, Mauritius, the HKMA celebrates the tenth anniversary of the establishment of the organisation with fellow member institutions

On invitation from the International Committee on Credit Reporting (ICCR), the HKMA joined ICCR's newly established Asia Pacific Regional Consultative Group (RCG). The HKMA attended the inaugural meeting of the RCG and shared experiences and exchanged views on credit referencing with other stakeholders.



The HKMA attends the inaugural meeting of the Asia Pacific RCG of ICCR in Bali, Indonesia

The HKMA continued its engagement with international standard setters by co-chairing the Evaluations and Compliance Working Group of the Financial Action Task Force, leading work to prepare for the fifth round of mutual evaluations that will commence in 2024, and participating in the working group on Cross-border Payments Data and Identifiers established under the Financial Stability Board (FSB).



Mr Stewart McGlynn (middle), Head (AML and Financial Crime Risk), chairs a Financial Action Task Force Evaluations and Compliance Working Group meeting in Paris, France

In the area of resolution reforms, the HKMA is a member of the FSB Resolution Steering Group (ReSG) and its Expanded Group on alternative financial resources for the resolution of central counterparties (CCP Expanded Group), as well as the Cross-Border Crisis Management Group for banks (bankCBCM), which is the primary global forum for the development and implementation monitoring of standards and guidance for resolution regimes, and planning and execution for systemically important financial institutions. During the year, the HKMA also chaired the 2023 FSB Country Peer Review of Switzerland, examining Switzerland's implementation of too-big-to-fail reforms. At the regional level, the HKMA chairs the EMEAP's Study Group on Resolution (SGR), which supports knowledge sharing among authorities in relation to resolution. See *International and cross-border co-operation* on page 116 for more details.

Basel Committee Regulatory Consistency Assessment Programme

Through its Regulatory Consistency Assessment Programme, the Basel Committee monitors, assesses and evaluates its members' implementation of the Basel standards. The HKMA participated in the assessment of Switzerland's net stable funding ratio standard; the related report was published in December. The HKMA also participated as a member of the review team for the assessment of the net stable funding ratio and large exposures framework of the US; the related reports were published in July.

Banking Stability

Implementation of Basel Standards in Hong Kong

Capital standards

In October, the Banking (Capital) (Amendment) Rules 2023 (BCAR) were issued for statutory consultation as required under the BO to implement the Basel III final reform package (Final Package). Taking this opportunity, the BCAR also incorporated other updates, such as those for introducing the option of a positive neutral countercyclical capital buffer (CCyB) to strengthen the protection of the banking sector against possible system-wide shocks and for aligning the capital treatment of sovereign concentration risk consequential to the amendments of the Banking (Exposure Limits) Rules (BELR). Further to the consultation, the BCAR were revised, gazetted on 29 December, and introduced into the Legislative Council for negative vetting in January 2024. Having regard to comments received from the industry as well as the implementation timelines of other jurisdictions, the BCAR are intended to take effect according to the following schedule:

1 Apr
2024

For provisions (including those on CCyB) that are not related to the Final Package

1 Jan
2025

For provisions related to the Final Package (with the implementation of those on market risk and credit valuation adjustment (CVA) risk preceded by a reporting-only requirement from 1 July 2024)

To support the application of the BCAR, the HKMA also worked closely with the industry in developing and updating the associated regulatory reporting package and supervisory guidance. In this regard, industry consultations were conducted on the revised banking returns of the capital adequacy ratio and leverage ratio. The two new SPM modules, MR-1 on “Market Risk Capital Charge” and MR-2 on “CVA Risk Capital Charge”, were gazetted in March 2024. In relation to CCyB, the HKMA also finalised and published in March 2024 the corresponding revisions to the SPM module CA-B-1 on “Countercyclical Capital Buffer – Approach to its implementation”.

In line with the Basel Committee’s framework for dealing with domestic systemically important banks (D-SIBs), the HKMA announced in December an updated list of D-SIBs for 2024 and their corresponding higher loss-absorbency capital requirements.

In February 2024, the HKMA launched a consultation on the local implementation of the Basel Committee’s prudential treatment of crypto-asset exposures of banks.

Exposure limits

Proposed amendments to the BELR consequential to the implementation of the Final Package in Hong Kong were finalised during the year further to statutory consultation in October. The amended parts of the BELR will be implemented in tandem with the related parts of the BCAR. The industry was also consulted on the associated updates to the prudential reporting requirements of AIs on risk concentration and exposure limits. Meanwhile, the related Code of Practice and SPM modules, e.g. CR-G-8 on “Large Exposures and Risk Concentrations” and CR-G-9 on “Exposures to Connected Parties”, are being updated for consultation with the industry in 2024.

Disclosure standards

Implementation of the Final Package also requires corresponding updates to the disclosure framework. To this end, the Banking (Disclosure) (Amendment) Rules 2023 (BDAR) underwent statutory consultation in October and will be implemented when the Final Package takes effect under the BCAR. The HKMA consulted the industry on and is working towards finalising a revised set of standard templates and tables for AIs to fulfil the disclosure requirements under the BDAR.

Liquidity standards

During the year, the HKMA consulted the industry on proposed amendments to the Banking (Liquidity) Rules consequential to the implementation of the Final Package in Hong Kong.

Banking Stability

Regulatory regime for over-the-counter derivatives market

The HKMA oversees compliance of AIs and approved money brokers (AMBs) with the mandatory reporting, clearing and related record-keeping requirements on over-the-counter (OTC) derivatives transactions under the Securities and Futures Ordinance. Close dialogue is maintained with AIs, AMBs and other industry participants on various reporting issues arising from OTC derivatives market developments and evolving international standards to ensure compliance with the relevant requirements by AIs and AMBs.

Enhancing the supervisory policy framework

Regulation of over-the-counter derivatives transactions

With the completion of the final implementation phase of the initial margin requirements for non-centrally cleared OTC derivatives transactions, the HKMA continued to engage with the industry to assess the implications of market developments on the exchange of margin, and to co-ordinate with other member jurisdictions of the Basel Committee and International Organization of Securities Commissions (IOSCO) Working Group on Margin Requirements on implementation-related matters.

Other supervisory policies and risk management guidelines

In 2023, the HKMA progressed with its work on various policies and guidelines, including the release in November of the revised SPM module CR-S-4 on “New Share Subscription and Share Margin Financing” to reflect changes consequential to the initial public offering settlement reform by Hong Kong Exchanges and Clearing Limited through the launch of Fast Interface for New Issuance. The opportunity was also taken to provide further guidance on a holistic approach to risk management of share margin financing, taking into account the latest incidents in the market.

Review of the Banking Ordinance

The HKMA embarked on a review of the BO in 2023 that seeks to reflect developments in banking industry practices and supervisory approaches, address specific issues identified from the HKMA's supervisory experience and continue the process of aligning Hong Kong's system of regulation with that of other major financial centres. The intention of the review is to focus on the priority areas for enhancement in the BO where amendments are necessary and timely.

The HKMA is preparing necessary amendments to the BO as a result of the review. The priority areas for enhancement include, among others, simplification of the three-tier banking system, establishment of a statutory regime for the regulation and supervision of bank holding companies and extension of the Monetary Authority's enforcement powers. A number of technical amendments to the BO are also proposed to be included as part of this package, to help streamline the regulatory and supervisory processes, and thereby reduce the compliance burdens faced by AIs.

Banking Stability

Balanced and responsive supervision

As part of the ongoing communication with the banking industry, the HKMA held a roundtable with major retail banks to share the observations identified on bank account opening and maintenance, as well as provide further guidance to assist banks in achieving effective outcomes and enhancing customer experience in opening bank accounts. The HKMA also clarified its supervisory expectations on due diligence requirements for corporate on-boarding. Noting the increasing demand for green and sustainable investment products by the public and the growing adoption of technology by banks, the HKMA provided guidance to banks on the sale and distribution of green and sustainable investment products and shared views and use cases in relation to the use of advanced artificial intelligence and machine learning tools. The HKMA also clarified its regulatory stance on RIs' VA-related activities and discussed the proposed streamlined approach for negative disclosure requirements on non-protected deposit transactions for private banking customers. Separately, taking into account the views from virtual banks in relation to the introduction of new products/services, the HKMA streamlined the relevant supervisory requirements and communication arrangements to facilitate virtual banks' use of the Fintech Supervisory Sandbox and speed up the processes for launch of new products/services.

Accounting standards

Regular dialogues were held between the HKMA and the Banking Regulatory Advisory Panel of the Hong Kong Institute of Certified Public Accountants on topics of common interest. These included updates on accounting, auditing and financial reporting standards and their implications for banks, as well as major international and domestic banking regulatory developments. The HKMA worked with other authorities on issues related to the new or revised standards proposed by the international accounting and auditing standard-setting bodies.

Green and sustainable banking

The HKMA incorporated climate-related considerations into its supervisory framework, taking into account the Basel Committee's principles for the effective management and supervision of climate-related financial risks. A series of consultative sessions was undertaken to provide targeted feedback to support AIs' efforts in strengthening their climate risk management capabilities. A round of thematic examinations to review AIs' progress of implementing the HKMA's supervisory expectations on climate risk management was also completed during the year.

The HKMA continued its efforts to strengthen the banking sector's resilience against climate risks and enhance the green finance ecosystem, including completing the consultation on a prototype of a green classification framework for Hong Kong and issuing high-level principles to assist banks in maintaining safety and soundness in the net-zero transition. To accelerate the banking sector's progress in managing climate risks, the HKMA worked to promote the application of technology to green and sustainable banking. More details about the HKMA's policy and supervisory work on green and sustainable banking are given in the *Building a Climate-resilient Financial System* chapter of the *Sustainability Report 2023*.

Banking Stability

Resolution

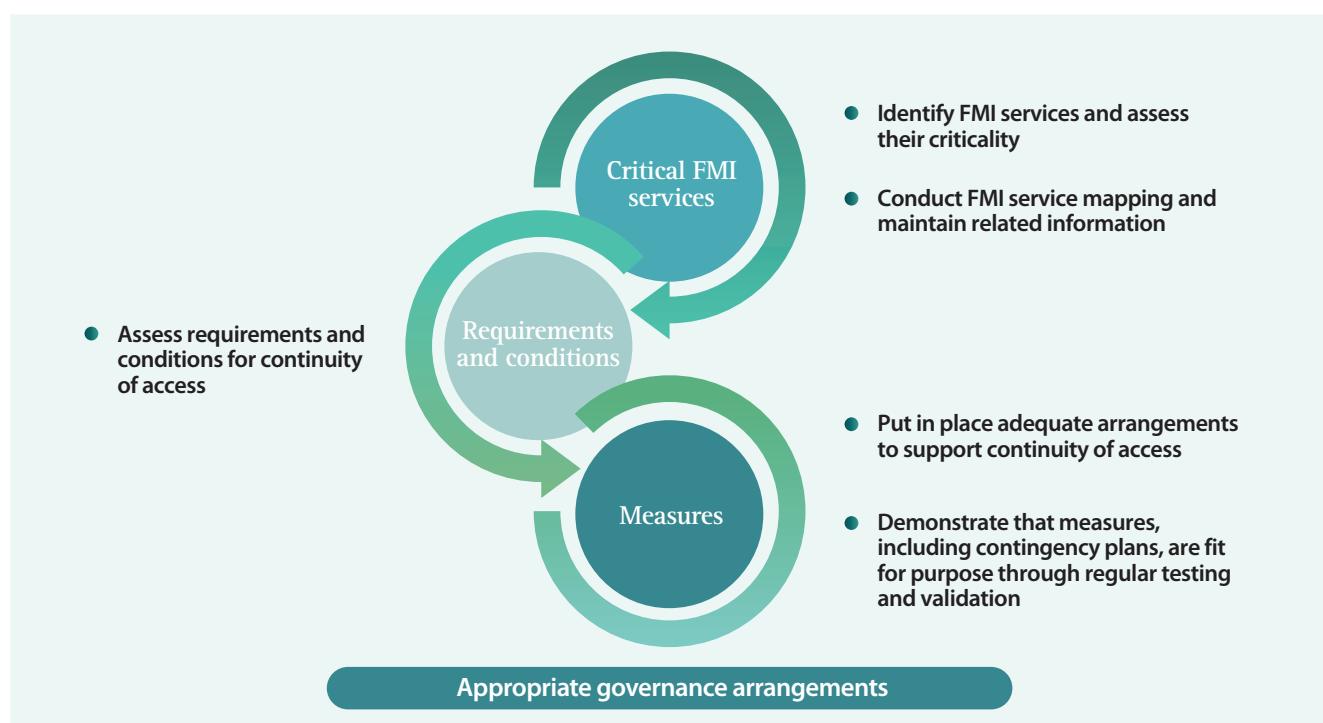
In 2023, the HKMA responded swiftly to the banking turmoil in the US and Europe in March. Effective cross-sectoral and cross-border co-ordination by the HKMA as the lead resolution authority facilitated the safeguarding of Hong Kong's financial stability amid fast-unfolding events. At the same time, progress was made in establishing resolution standards, undertaking resolution planning and developing resolution execution capability to operationalise the Hong Kong resolution regime for banks. In addition, the HKMA actively participated in cross-border co-operation on resolution through both institution-specific engagements such as the CMGs for G-SIBs, as well as international and regional fora, including the FSB ReSG and the EMEAP SGR.

Resolution standards

The HKMA continued to formulate policy standards with which AIs need to comply in order to enhance their resilience and resolvability. Further to an industry consultation in 2023, the HKMA issued on 15 February 2024 the Financial Institutions (Resolution) Ordinance (FIRO) Code of Practice chapter on *Resolution Planning – Continuity of Access to Financial Market Infrastructure Services*, which sets out the Monetary Authority's expectations, in line with relevant FSB guidance⁹, in relation to the ex-ante capabilities and arrangements that an AI should put in place to maintain, in a resolution scenario, the continuity of access to critical FMI services. The key expectations are summarised in Figure 3 below. Work to be done by the AIs towards satisfying the expectations outlined in the chapter will be an integral part of the HKMA's bilateral resolution planning programmes with the AIs.

Figure 3

Key expectations on an AI's capabilities and arrangements for maintaining continuity of access to critical FMI services in a resolution scenario



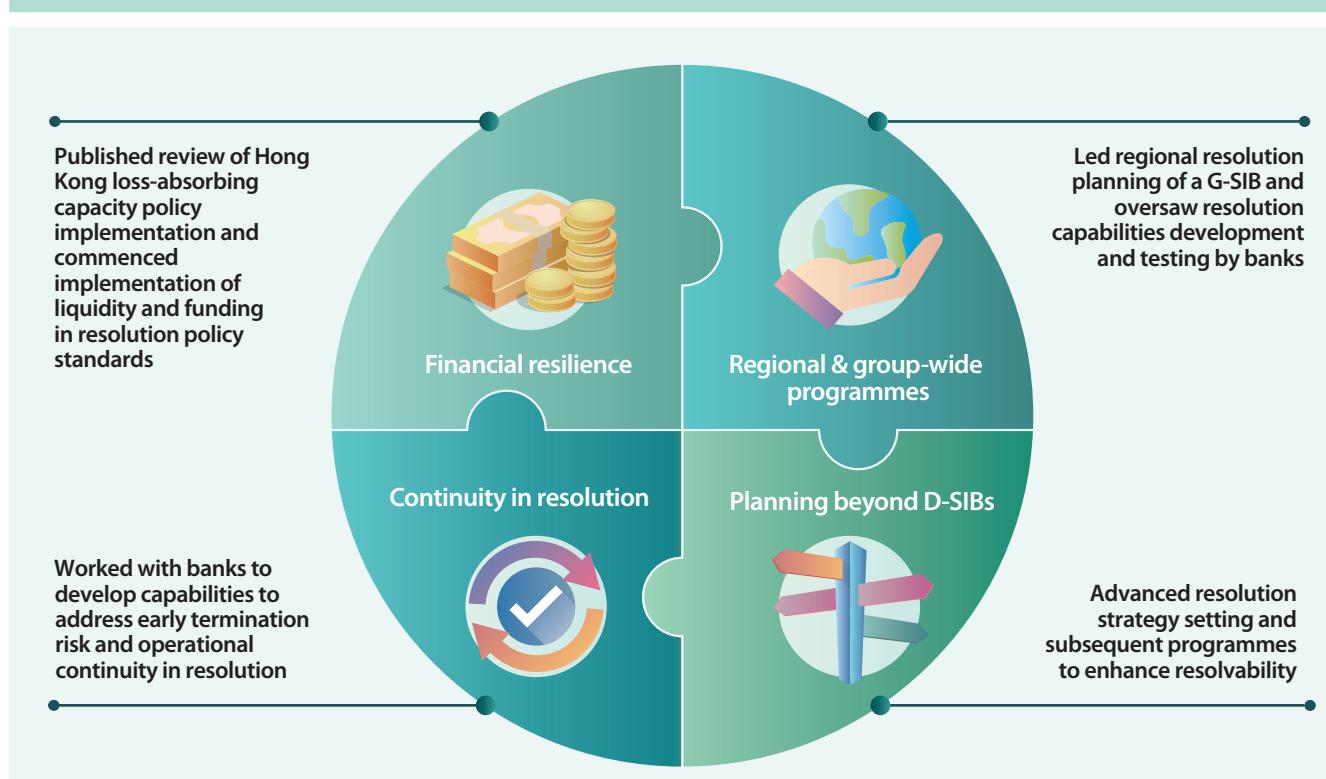
⁹ The FSB has identified continuity of access to critical FMI services as an important element to resolvability and issued related guidance in July 2017, *Guidance on Continuity of Access to Financial Market Infrastructures ("FMIs") for a Firm in Resolution* (<https://www.fsb.org/wp-content/uploads/P060717-2.pdf>), on arrangements to support continuity of access to FMIs for a firm in resolution, complementing the *Key Attributes of Effective Resolution Regimes for Financial Institutions* (https://www.fsb.org/wp-content/uploads/r_141015.pdf) (Key Attributes).

Banking Stability

Resolution planning

The HKMA continued to advance resolution planning for each of the D-SIBs and other locally incorporated AIs with total consolidated assets above HK\$300 billion in co-ordination with the home and host authorities to enhance the resolvability of these banks (Figure 4).

Figure 4 Highlights of 2023 progress made in resolution planning programmes



Through resolution planning programmes, the HKMA works with AIs to implement the changes needed to address identified impediments to their orderly resolution. In particular, the HKMA drove the build-up and maintenance of loss-absorbing capacity (LAC) resources at all D-SIBs and other relevant AIs, including engaging in discussions on issuance strategy and working with AIs on implementing the issuance plans. At the end of 2023, the LAC resources¹⁰ of all D-SIBs stood at 26.3% of risk-weighted amounts (RWAs). The implementation of LAC requirements has significantly enhanced the resolvability of relevant AIs and the resilience of the banking system.

During 2023, the HKMA conducted a review of LAC implementation from December 2018 to June 2023, the observations from which were set out in a report titled *Report on Loss-Absorbing Capacity Requirements Implementation in Hong Kong*¹¹ published on 8 February 2024 (see *Loss-absorbing capacity requirements implementation in Hong Kong* on page 113 for the key highlights of the report).

¹⁰ Including capital and non-capital LAC resources.

¹¹ The report is available on the HKMA website (https://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/resolution/Report_on_Loss_Absorbing_Capacity_Requirements_Implementation_in_Hong_Kong.pdf).

Banking Stability

The HKMA has commenced the implementation of policy standards on liquidity and funding in resolution in order to strengthen the AIs' capabilities to project liquidity needs and positions, as well as to identify and mobilise collateral for meeting liquidity needs in resolution. Initial scoping and self-assessments of existing capabilities by AIs against the expectations set out by the HKMA were conducted and workplans to address the gaps identified were developed.

In addition, the HKMA has continued to advance the implementation of policy standards on operational continuity in resolution. Further to the review of self-assessments of existing capabilities conducted by AIs, the HKMA monitored and reviewed the AIs' progress of developing arrangements and capabilities, such as service mapping, service catalogue, contracts remediation and resolution manuals, for securing the continuity of services that are essential to the performance of critical financial functions and to support orderly resolution.

To address the risk of disorderly early termination of financial contracts in resolution, AIs have been progressing work for meeting the HKMA requirements set out under the Financial Institutions (Resolution)(Contractual Recognition of Suspension of Termination Rights – Banking Sector) Rules (Stay Rules). The HKMA worked closely with relevant AIs to address early termination risks in resolution. The AIs' efforts included developing an effective approach to cross-border client outreach, putting in place systems of control, as well as updating the relevant securities, commodities and derivatives contracts. The first initial period for compliance under the Stay Rules concluded on 27 August 2023, by which time the contractual recognition requirements for covered contracts entered into by a covered entity with an AI or a G-SIB should have been met. The requirements for any other covered contracts should be met by the end of 27 February 2024.

In terms of home-host co-ordination, the HKMA led the regional resolution planning for the Asia resolution group of a G-SIB and hosted the Asia CMG meeting in Hong Kong in May with participation from 18 supervisory/resolution authorities and deposit insurers. During this meeting, progress of enhancing resolvability was reviewed and forward priorities were set, with a view to driving the work to enhance resolvability of the G-SIB's Asia resolution group. In addition, banks continued to build up and test resolution capabilities as part of their group-wide programmes. This involved a wide spectrum of actions, such as enhancement of processes for valuations in resolution, demonstration of restructuring planning capabilities, as well as cross-border drills of contingency arrangements for access to payment clearing. The HKMA also continued discussions among authorities on the management and deployment of unallocated total loss-absorbing capacity (uTLAC) resources within resolution groups, and the enhancement of home-host co-ordination arrangements, including authorities' playbooks on resolution execution.



The HKMA hosts the Asia CMG meeting for a G-SIB's Asia resolution group with participation from 18 supervisory/ resolution authorities and deposit insurers

Banking Stability

Loss-absorbing capacity requirements implementation in Hong Kong

The HKMA conducted a review of the implementation of LAC requirements in Hong Kong over the past five years, from the commencement of the Financial Institutions (Resolution)(Loss-absorbing Capacity Requirements — Banking Sector) Rules (LAC Rules) in December 2018 to June 2023.

Implementation programme and progress

LAC implementation is a key aspect of the bilateral resolution planning programmes between the HKMA Resolution Office and AIs. Since the commencement of the LAC Rules, the HKMA has been working closely with each D-SIB to drive the build-up of its LAC resources.

All D-SIBs have met their respective LAC requirements from 1 January, representing a milestone in enhancing the resolvability of these banks and the resilience of the banking system in Hong Kong.

Furthermore, the HKMA has been extending the implementation of LAC requirements beyond D-SIBs to other locally incorporated AIs with total consolidated assets above HK\$300 billion. One of these AIs issued the first non-capital LAC debt instrument to market investors in the Asia ex-Japan bond markets.

This HK\$300 billion threshold for LAC implementation remains appropriate in the view of the HKMA, having regard to a range of factors, including international experiences and the approaches adopted by other jurisdictions, lessons learnt from the 2023 overseas banking turmoil, the size of Hong Kong's economy, the landscape of the banking sector, the LAC implementation experience and resolvability of AIs, as well as the HKMA's approach to ex-ante resolution planning.

It should be noted that the HK\$300 billion threshold is a planning assumption, which acts as an indicative benchmark rather than an automatic trigger point for the implementation of LAC requirements. Hence, it does not imply that an AI with HK\$300 billion or more in total consolidated assets will automatically be required to comply with LAC requirements.

The HKMA has been applying a proportionate, risk-based approach to commencing and advancing resolution planning programmes with relevant AIs, including identifying preferred resolution strategies and implementing LAC requirements. In addition to total consolidated assets, the HKMA takes into account other factors, such as the potential risks to financial stability in Hong Kong in the event of the failure of relevant AIs and other institution-specific factors, in determining the need for setting preferred resolution strategies and imposing LAC requirements.

The HKMA will keep the indicative threshold for LAC requirements implementation under review.

Banking Stability

Observations and related policy expectations

LAC position The implementation of LAC requirements has driven the build-up of a significant layer of non-capital LAC resources at D-SIBs, amounting to HK\$352 billion or 5.9% of RWAs. As at end-June, the total LAC resources (including capital and non-capital LAC resources) of D-SIBs stood at HK\$1,575 billion or 26.3% of RWAs, above the international minimum requirement of 18%.

Chart A

Total LAC resources of D-SIBs



Notes:

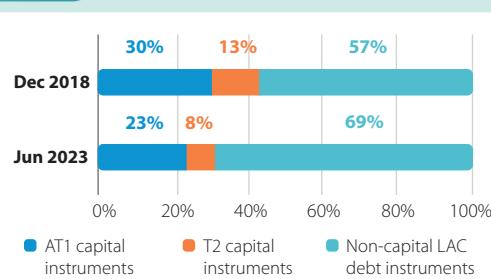
- (1) The chart shows the total amount of LAC resources at period ends from end-December 2018 to end-June 2023, which is the sum of LAC-eligible regulatory capital and non-capital LAC resources, of all currently designated D-SIBs. Adjustments are made in arriving at the total amount of LAC resources of D-SIBs, taking into account their issuance structures and preferred resolution strategies.
- (2) LAC-eligible regulatory capital refers to regulatory capital (i.e. Common Equity Tier 1 capital, Additional Tier 1 (AT1) capital and Tier 2 (T2) capital) eligible for meeting LAC requirements.
- (3) The amount of non-capital LAC resources as at end-December 2018 (i.e. HK\$166 billion) represented non-capital financial resources already put in place by D-SIBs before the introduction of the LAC Rules in preparation of the implementation of LAC requirements.
- (4) Changes in total LAC resources were mainly driven by issuance/redemption of LAC debt instruments, changes in retained earnings as well as movements in other reserves during the period.

Composition and currency mix

In terms of instrument class and currency mix, non-capital LAC debt instruments (69%) and US dollar (79%) contributed the largest proportions respectively based on the outstanding LAC debt instruments as at the end of June 2023.

Chart B

Composition of LAC debt instruments issued by relevant AIs

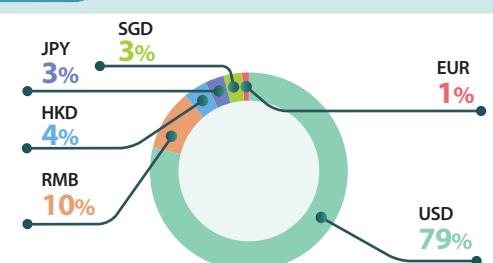


Notes:

- (1) The chart comprises data of AIs which have been classified as resolution entities or material subsidiaries under the LAC Rules, including D-SIBs and non-D-SIBs.
- (2) Data is based on the accounting value of outstanding LAC debt instruments as at end-December 2018 and end-June 2023.

Chart C

Currency mix of outstanding LAC debt instruments issued by relevant AIs



Notes:

- (1) The chart comprises data of AIs which have been classified as resolution entities or material subsidiaries under the LAC Rules, including D-SIBs and non-D-SIBs.
- (2) Data is based on the accounting value of outstanding LAC debt instruments as at end-June 2023.

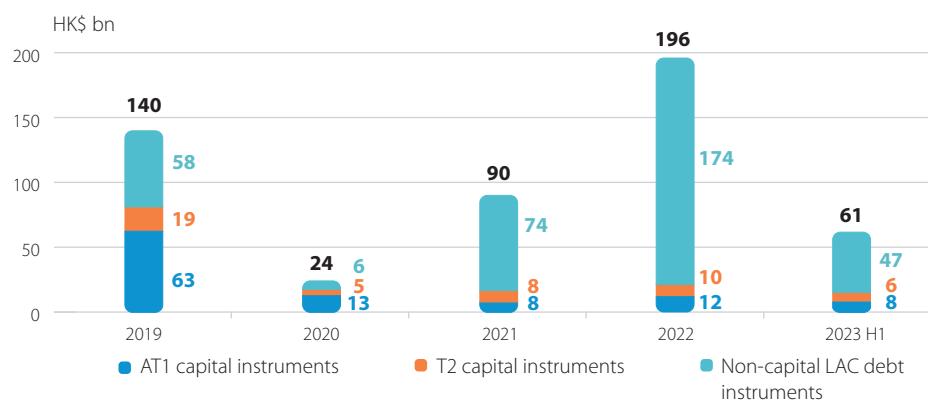
Banking Stability

Issuance volume and structure

From January 2019 to June 2023, relevant AIs issued a gross total of HK\$511 billion of LAC debt instruments. The issuance structure follows their group structures and preferred resolution strategies. AIs that are part of a G-SIB banking group typically issue on an intragroup basis and adopt a back-to-back model. The issuance activities generally coincide with those of their parent companies to a considerable extent, as demonstrated by changes in issuance volume during the COVID-19 pandemic and in the aftermath of the full write-down of all Credit Suisse's Additional Tier 1 capital instruments.

Chart D

Gross issuance volume of LAC debt instruments by relevant AIs



Note: The chart shows the total gross notional amount of LAC debt instruments issued by resolution entities and material subsidiaries since their classification under the LAC Rules.

Other observations and related policy expectations

Observations and policy expectations, where applicable, relating to other matters pertinent to the implementation were discussed, such as pricing, maturity, documentation, subordination, loss-absorption trigger, governing law, accounting treatment, self-assessment, disclosures and reporting, cross-holding, cross-bank comparison, interaction between LAC requirements and the capital regime, and non-pre-positioned LAC.

Next steps

Resolution planning, including actions to enhance resolvability, is an ongoing process. The HKMA will continue to work closely with relevant AIs on their build-up and maintenance of LAC resources in a prudent and proportionate manner.

Banking Stability

Resolution execution capability

Reflecting on the lessons learnt from the overseas banking turmoil and taking into account the developments and implementation experiences since the FIRO commenced operations, the HKMA conducted a comprehensive review of its frameworks and approaches related to crisis management and resolution execution in 2023. Enhancements were made with a view to strengthening cross-departmental and cross-sectoral co-ordination. In addition, the HKMA has advanced work on operationalisation of resolution stabilization options, including engaging an external legal advisor under the Resolution Advisory Framework to facilitate the analysis of the legal and practical issues involved.

On 4 December, the Monetary Authority entered into a Memorandum of Understanding (MoU) with the IA and the SFC, which establishes a framework to strengthen and support effective co-operation and co-ordination among the resolution authorities in relation to within scope financial institutions under the FIRO.

International and cross-border co-operation

The 2023 bank failures constituted the first larger-scale real test of the international resolution framework established by the FSB's *Key Attributes*. The HKMA was actively engaged in the international review at the FSB of lessons learnt and formulation of the follow-up policy initiatives, the resulting report was published on 10 October¹². The FSB states that the review of the 2023 bank failures underscored the strengths of the international resolution framework and the work carried out by banks and authorities to increase resilience and crisis preparedness, while also identifying areas for further work.

Additionally, the HKMA continued to contribute actively to various international resolution initiatives via its membership in the primary global resolution forum of the FSB ReSG, its CCP Expanded Group, the bankCBCM, as well as the workstreams on total loss-absorbing capacity standard, funding in resolution, bail-in execution, digital innovation and resolution, and continuity of access to FMI services. See *International resolution policy* on page 118 for details.

Moreover, the HKMA chaired the 2023 FSB Country Peer Review of Switzerland, examining Switzerland's implementation of too-big-to-fail reforms, which is particularly important after the merger of the two Swiss G-SIBs into a bigger G-SIB whose failure could have severe impact on the global financial system. The review provided recommendations to further strengthen the supervisory and resolution frameworks. The report was published on 29 February 2024¹³.

¹² The report is available on FSB website (<https://www.fsb.org/wp-content/uploads/P101023.pdf>).

¹³ The report is available on FSB website (<https://www.fsb.org/wp-content/uploads/P290224.pdf>).

Banking Stability

At the regional level, the HKMA chaired and served as the secretariat of the EMEAP SGR, which facilitated discussions and studies on resolution by central banks, supervisory/resolution authorities and deposit insurers in the region. The HKMA organised in-person SGR meetings in April and September, and hosted a resolution workshop at the HKMA office in June, covering topics such as a reflection on the 2023 US and Europe banking turmoil, co-ordination and communication between supervisory and resolution authorities, a critical financial functions assessment and operational continuity in resolution. The HKMA also continued to engage with relevant stakeholders and contribute to resolution-related events, for example those organised by the FSB, the Financial Stability Institute of the Bank for International Settlements as well as the SEACEN Research and Training Centre.



The HKMA hosts a resolution workshop for EMEAP SGR members, with guest speakers sharing thematic resolution topics and crisis management experience

As the 2023 overseas bank failure cases illustrated, cross-border co-operation is an important component of resolution planning and execution for G-SIBs given the international nature of their operations. During the year, the HKMA continued to participate in the cross-border resolution planning of 14 G-SIBs through CMGs and Resolution Colleges. As part of this work, the HKMA shared updates on resolution policy and planning development, contributed to the FSB's ninth resolvability assessment process for these G-SIBs and worked with the relevant authorities to enhance cross-border crisis preparedness.

Banking Stability

International resolution policy

Effective resolution requires internationally harmonised resolution policies setting and implementation, given the cross-border nature of many large financial institutions. This is pertinent to Hong Kong as a host of the operations of all G-SIBs¹⁴ as well as a regional home for the resolution entities of some of these internationally active banking groups. The HKMA takes an active part in formulating and implementing international resolution policy standards through its membership in the FSB ReSG and its CCP Expanded Group as well as the bankCBCM.

In particular, the HKMA contributed to a wide range of work in 2023 as a member of the following workstreams of the bankCBCM:

| | |
|--|--|
| The Unallocated TLAC Technical Expert Group | Led the development of the FSB report on Deployment of Unallocated Total Loss-Absorbing Capacity: Considerations for CMGs published in July. The report aims to assist home and host authorities on the form, location and deployment approaches of uTLAC resources both in resolution planning as well as in the run-up to and during resolution ¹⁵ . |
| The Funding in Resolution workstream | Organised deep dive sessions for authorities to share practices and views pertaining to cross-border funding in resolution, analysed obstacles to mobilising collateral or liquidity across borders and identified practical ways for G-SIBs and authorities to mitigate those obstacles ¹⁶ . |
| The Bail-in Execution workstream | Organised a technical roundtable for authorities and legal experts to share knowledge and practices on cross-border recognition of bail-in, as well as the related preparatory steps and legal and operational requirements, with a view to enhancing mutual understanding of available options to achieve cross-border recognition of bail-in decisions ¹⁷ . |
| The Digital Innovation and Resolution workstream | Conducted a review of the FSB 2016 Guidance on Arrangements to Support Operational Continuity in Resolution in light of the changes to the technological landscape ¹⁸ . The workstream also continued to explore how resolution authorities can be better prepared for situations involving accelerated deposit runs in light of fast payment technology and the wide use of social media ¹⁹ . |
| The Continuity of Access (CoA) to FMIs workstream | Supported the FSB's work to promote cross-border co-operation for its Guidance on CoA to FMIs for a firm in Resolution ²⁰ . |

¹⁴ See 2023 List of Global Systemically Important Banks (G-SIBs), FSB (2023) (<https://www.fsb.org/wp-content/uploads/P271123.pdf>).

¹⁵ The report is available on FSB website (<https://www.fsb.org/wp-content/uploads/P260723-1.pdf>).

¹⁶ For more detail on the FSB's latest progress on analysing obstacles to funding in resolution, see Section 2.3 of *2023 Resolution Report: "Applying lessons learnt"*, FSB (2023) (<https://www.fsb.org/wp-content/uploads/P151223.pdf>).

¹⁷ For more detail on the FSB's latest progress on operationalising bail-in execution, see Section 2.5 of *2023 Resolution Report: "Applying lessons learnt"*, FSB (2023).

¹⁸ The revised version of the guidance including a supplementary note on the digitalisation of critical shared services as an addendum is available on FSB website (<https://www.fsb.org/wp-content/uploads/P180324.pdf>).

¹⁹ For more detail on the FSB's latest progress on digital innovation issues and implications for resolution, see Section 2.4 of *2023 Resolution Report: "Applying lessons learnt"*, FSB (2023).

²⁰ For more detail on the FSB's latest progress on CoA to FMIs, see Section 2.7 of *2023 Resolution Report: "Applying lessons learnt"*, FSB (2023).

Banking Stability

Bank consumer protection

Code of Banking Practice

Following the second phase of a comprehensive review by the Code of Banking Practice Committee, with the active participation of the HKMA, the Code was further revised in December to ensure proper safeguards to consumers in digital banking environment and further customer empowerment for better control over their financial matters. AIs are expected to achieve full compliance with

the new provisions as quickly as possible within six months of the effective date, with an extension of up to 12 months for provisions requiring more extensive system enhancements.

In respect of the revised Code of Banking Practice effective since 2021, the HKMA conducted a progress survey in the fourth quarter of 2023 to monitor AIs' implementation of the revised Code and noted no significant delay in the implementation. The HKMA will continue to monitor AIs' compliance as part of its supervision of AIs.

Updating the Code of Banking Practice

Further enhancing consumer protection in digital banking services

- Ensure customers receive important information on loans and general banking products and services upon application and conducting transactions on Internet banking platforms
- Provide security advice on new authentication technologies adopted in banking services, and update other relevant advice to enhance customers' understanding of digital security risks and the related protection measures
- Properly retain records of marketing and promotional materials used in digital channels for reference when needed

Empowering customers on financial management

- Enrich disclosure of risk and potential repayment obligations in Key Facts Statements of lending products
- Provide loan calculators on Internet banking platforms for customers to assess costs of borrowing and expected repayment requirements
- Extend advance notice period to customers from the existing 30 days to at least 60 days for significant changes to the terms and conditions of lending products
- Advise customers with potential financial difficulties of possible options to avoid further worsening of financial conditions, and notify customers of loan set-off in advance, where practicable

Ensuring fair treatment of customers

- Enhance transparency of opening, maintenance and closure of bank accounts, and provide channels for customers to request a review of the related decisions
- Enhance the customer complaint handling process, provide customers with an audio or video recording of the sales process of wealth management products, and offer support to customers in dispute with third-party service providers of products and services
- Enhance transparency of promotional benefits of banking products
- Strengthen controls over debt collection activities of banks and third-party debt collection agencies

Continuous promotion of international good banking practices in Hong Kong

- Introduce recent updates of the *G20/OECD High-Level Principles on Financial Consumer Protection* to ensure consistency with the latest international banking consumer protection practices

Banking Stability

Payment arrangement for property transactions

Since the rollout of the additional payment arrangement for property transactions (PAPT) to enable direct bank-to-bank transfer of funds in respect of mortgage refinancing transactions in November 2022, the banking industry has been actively encouraging bank customers to use this new payment means, and the operational processes of the PAPT have run smoothly and effectively. Given the benefits offered by the PAPT to enhance payment efficiency and minimise the risks associated with funds transfer faced by AIs and their customers, the HKMA will continue to engage the banking industry to promote wider adoption of the PAPT.

Enhanced protection of payment card customers

In view of the changing patterns of payment card usage by customers and the growing number of related unauthorised transactions involving frauds and scams, the HKMA collaborated with a dedicated industry taskforce set up in early 2023 and issued a set of comprehensive guidance with 33 measures in April and June to enhance protection of payment card customers. The new guidance strengthened protection in four areas: customer empowerment; customer support, communication and education; unauthorised transactions handling and security; and responsible borrowing.



Educational messages on social media – Key enhanced measures on protection of credit cards

Banking Stability

Enhancing protection of payment card customers across multiple facets



Card Limit

- Customers to choose whether to undertake card-not-present transactions and the related limits
- Customers to agree on credit limits of newly approved cards and subsequent increases, with convenient limit reduction channels
- Customers to agree on over-the-limit facilities



Card Transactions

Transaction Notification

- Customers to receive notifications for card-present transactions with higher risk
- Enhance clarity on transaction notifications to facilitate identification of suspicious transactions and prompt actions by customers

Authentication and Security

- Encourage merchants to use mobile point-of-sale terminals so that the cards remain in cardholders' possession throughout transactions
- Offer alternative authentication factors, apart from one-time passwords through SMS, for customers to choose
- Utilise rich data from 3D Secure 2.0 to enhance fraud monitoring
- Industry to share fraud- and scam-related intelligence and good practices on fraud detection
- Encourage the use of fraud detection tools of card scheme operators
- Obtain additional confirmation from customers on suspicious transactions
- Conduct additional authentication for binding cards with new contactless mobile payment services
- Promote tokenisation of card data to minimise the impact of data breaches
- Encourage retrieval of card information via Internet banking platforms instead of showing the information on physical cards

Responsible Borrowing

- Allow customers to better understand the financial implications of different card repayment practices to make appropriate repayment arrangements

- Remind customers when card spending approaches credit limits and that further spending may result in over-the-limit fees and charges
- Encourage customers with potential persistent card borrowing to improve repayment conditions and provide options for consideration
- Provide clearer disclosure on the billing of interest on cash advance transactions to help cardholders make repayment arrangements



Unauthorised Transactions

- Customers to suspend cards instantly via Internet banking platforms
- Customers to report unauthorised transactions through more convenient channels
- Follow up on not-yet-posted unauthorised transactions
- Specialised teams to handle unauthorised transactions
- Customers to receive clearer information and advice upon reporting unauthorised transactions
- Adopt a pragmatic and sensitive approach throughout the handling and investigation process
- Give due regard to the circumstances of individual cases
- Duly consider the respective roles of banks and cardholders when considering liability for losses
- Industry to share common practices on handling of unauthorised transactions
- Ensure transparency of investigation process and results
- Put in place an appeal mechanism



Consumer Education

- Provide security advice on cards to customers from time to time
- Provide information on the latest large-scale modus operandi of card frauds and scams and related precautionary measures
- Industry to collaborate to raise public awareness of card security and anti-deception



Engage other stakeholders to explore enhancing protection of card consumers

Banking Stability

Anti-Scam Consumer Protection Charter

To raise public awareness on safeguarding credit card and personal information, the HKMA, in collaboration with The Hong Kong Association of Banks (HKAB), launched the Anti-Scam Consumer Protection Charter in June. Under the Charter, all 23 card-issuing banks and 15 major merchants institutions across different sectors (including retail, telecommunications, food and beverage, transport and logistics) in Hong Kong committed not to send instant electronic messages to customers with embedded hyperlinks to ask for personal and credit card information online, and committed to convey the message of "Beware of scams" to the public through various channels. The Charter also received the full support of the HKPF and the Consumer Council.



Representatives from card-issuing banks in Hong Kong and merchant institutions across different sectors attend the launch of the Anti-Scam Consumer Protection Charter



Mr Eddie Yue, Chief Executive, gives opening remarks at the Anti-Scam Consumer Protection Charter launch



Publicity campaigns on "Beware of Fraudulent Links!" in relation to the Anti-Scam Consumer Protection Charter to raise public awareness of safeguarding credit card and personal information

Banking Stability

Cross-Boundary Credit Referencing

To enable the cross-boundary transfer of credit data in the Greater Bay Area to facilitate credit assessment by banks and support lending to SMEs so they can better serve the real economy, the HKMA worked closely with relevant Mainland authorities on the Cross-Boundary Credit Referencing initiative. Following the announcement by the Hong Kong's Innovation, Technology and Industry Bureau and the Cyberspace Administration of China in December of facilitation measures and pilot implementation arrangements, of which credit referencing is one of the areas covered, the HKMA continued to engage with Hong Kong banks and credit referencing agencies and to work with relevant authorities on cross-boundary transfer of credit data in support of banks' credit risk management in SME lending.

Culture dialogues

Since its commencement in 2019, the culture dialogue initiative has enhanced the HKMA's engagement with leadership of AIs to discuss the effectiveness of AIs' culture enhancement efforts and provide supervisory feedback, including observations from the HKMA's ongoing supervision. During 2023, the HKMA conducted seven culture dialogue meetings with senior management of AIs.

Addressing the risks of hiring of individuals with misconduct

The Mandatory Reference Checking (MRC) Scheme, which is an industry-led initiative endorsed by the HKMA and an important component for enhancing bank culture in Hong Kong, was launched successfully in May to tackle the "rolling bad apples"²¹ phenomenon in the local banking sector. Under the MRC Scheme, all AIs share and obtain conduct-specific reference information about prospective employees using a common protocol that covers seven years prior to the application for the position, so that the recruiting AIs can make more informed employment decisions.

In March, at the invitation of the Independent Commission Against Corruption (ICAC), the HKMA gave a presentation at the Professional Anti-Corruption Training in Banking Management attended by more than 30 senior managerial staff from the sector to discuss sound bank culture and its strong relevance to conduct supervision and anti-corruption in banks, as well as the new MRC Scheme to address the "rolling bad apples" phenomenon in the banking sector.



The HKMA presentation at the ICAC's Professional Anti-Corruption Training in Banking Management for senior managerial staff from the banking sector

²¹ "Rolling bad apples" refers to the situation where individuals have engaged in misconduct behaviour in one institution but can obtain employment elsewhere without disclosing their earlier misconduct to the new employer.

Banking Stability

Engagement of intermediaries by authorized institutions

Measures were introduced to further protect bank customers and reduce potential risks to the reputation of the banking industry from possible malpractices by fraudulent lending intermediaries. In particular, the HKMA reminded the public to stay alert to bogus phone calls. Retail banks' hotlines have been widely and effectively used by the public to verify callers' identities, with a total of over 24,000 enquiries received during 2023.

Customer complaints relating to debt collection agents employed by authorized institutions

The number of complaints received by AIs about their debt collection agents decreased to 32 from 39²² in 2022 (Chart 2). The HKMA will continue to monitor AIs' engagement with debt collection agents.

Chart 2

Complaints received by AIs about their debt collection agents



Credit Data Smart

The HKMA continued to work closely with industry associations, including HKAB, the Hong Kong Association of Restricted Licence Banks and Deposit-taking Companies, and the Hong Kong S.A.R. Licensed Money Lenders Association Limited, to introduce more than one consumer credit reference agency (CRA) in Hong Kong through the Credit Reference Platform, with a view to enhancing the service quality of consumer CRAs and reducing the operational risk of having only one commercially run service provider in the market, particularly the risk of single point of failure.

This project was officially named "Credit Data Smart" in 2023.

A pilot programme under "Credit Data Smart" was launched in November as an important step in the implementation of the project. Under the pilot programme, individual participants obtained their consumer credit reports from the selected CRAs to review the data accuracy and assess the overall service performance of the CRAs. The pilot programme paved way for the official launch of consumer credit reference services by the selected CRAs.

²² The figure for 2022 has been revised to reflect the updated figure reported by AIs.

Banking Stability

Financial inclusion

Branch network

The HKMA is committed to promoting financial inclusion in Hong Kong, and has been encouraging the banking industry to enhance the coverage of the branch network through conventional and innovative channels. Continuous efforts were made by banks to support the banking needs of the local community. During the year, an additional mobile bank branch was launched by a retail bank, covering five public housing estates in different districts in Hong Kong. To date, the total number of mobile bank branches in Hong Kong has increased to seven, covering a total of 33 public housing estates.

Physical banking facilities inventory

In September, the HKMA launched two additional spatial datasets, providing information on physical branches and Automated Teller Machines (ATMs) of retail banks in Hong Kong respectively, for public use through Open Application Programming Interface (Open API). These datasets are made available on the HKMA's Open API portal to enable app developers, technology service providers as well as the public at large to make use of the open information for any potential applications development. To make available the relevant information in a user-friendly way, the HKMA has also collaborated with the Office of the Government Chief Information Officer (OCGIO) to show the locations of physical branches and ATMs of the 20 retail banks on a digital map on the OCGIO's Open Data Portal through the adoption of the spatial datasets.

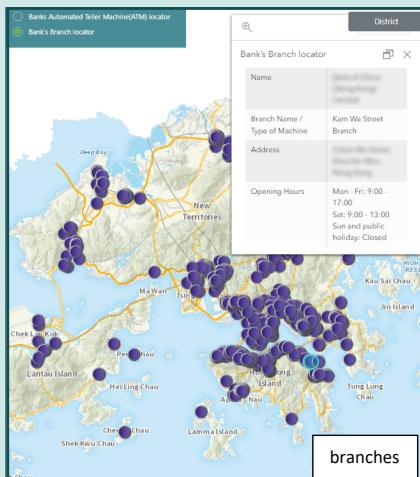
More details on financial inclusion can be found in the Sustainable HKMA chapter of the *Sustainability Report 2023*.



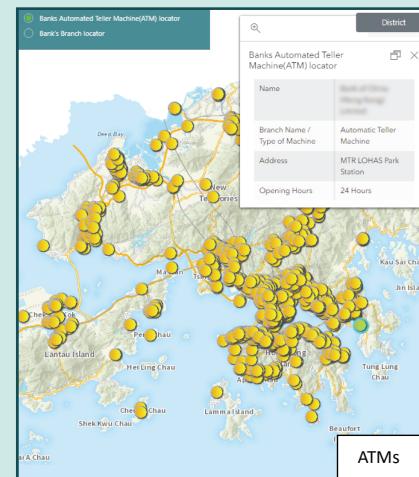
The HKMA's Open API portal:



Information of branches of retail banks



Information of ATMs of retail banks



The locations and information of branches and ATMs are showcased on a digital map on the OCGIO's Open Data Portal



Banking Stability

The HKMA has sustained its dedicated efforts in promoting access to banking services and has been closely engaging with the business community on bank account opening and maintenance matters. The HKMA's dedicated Account Opening and Maintenance Team handles and follows up on enquiries received from the public as well as business communities through a dedicated email account and a hotline. Feedback collected was also communicated to the banking industry for improved understanding on issues of common interest.

The HKMA convened a roundtable with the senior management of major retail banks to share the observations identified and clarify the expectations in relation to bank account opening and maintenance. The HKMA also issued a circular in April providing further guidance to AIs on corporates' access to banking services, to assist AIs in conducting effective and appropriate CDD measures for achieving effective outcomes and enhancing customer experience. In light of market development, the HKMA published an *inSight*²³ article titled *Embracing new opportunities and accessing banking services* to clearly set out its stance on providing inclusive access to banking services and the responses in support of the development of the VA sector as well as markets with promising potential and opportunities.

In support of the Government's initiatives in exploring new markets of opportunities, including in particular economies in the Middle East and Southeast Asia, and to follow up on the visits of the Chief Executive of the Hong Kong Special Administrative Region (HKSAR) to various Middle Eastern countries in February, the HKMA has taken proactive steps to reach out to the relevant business communities, including the Arab Chamber of Commerce & Industry (ACCI). The HKMA arranged two meetings with the ACCI in March and June to discuss access to banking services in Hong Kong, and also hosted a roundtable session in July with the ACCI and representatives from both HKAB and the major banks, with a view to further promoting direct dialogue among the relevant key stakeholders.



Meeting between the HKMA and ACCI in March



Roundtable session with the ACCI and representatives from HKAB and major banks in July

²³ *inSight* is the HKMA's official column, featuring articles written by senior executives on the major new policies and initiatives of the HKMA, or other topical issues of interest to the public.

Banking Stability

The HKMA, in collaboration with the SFC, hosted two roundtable sessions in April and June respectively with a view to promoting interactive exchanges between the banking industry and the VA sector on banking services in support of general company operations and SFC licensees looking to carry out VA-related regulated activities. About 100 representatives from more than 80 VA-related companies, professional services firms and banks attended the sessions.



First roundtable session with the SFC in April



Second roundtable session with the SFC in June

Banks have responded positively to the call for the provision of Simple Bank Account (SBA) services to meet the needs of SMEs and start-ups that only require basic banking services. Following the launch of SBA services by four banks during 2023, there are now eight banks offering SBA services. In 2023, about 8,300 such accounts were opened by banks, with the cumulative total number of such accounts increasing to over 21,000 since the service was introduced in 2019.

The average unsuccessful rate of account opening applications was below 4% in 2023, representing a significant improvement from around 10% in early 2016. The HKMA will continue its close dialogue with the banking industry and relevant stakeholders to ensure banks implement appropriate measures and do not undermine access to banking services by legitimate businesses and ordinary residents.

Banking Stability

Deposit protection

With the primary objective of protecting small depositors and hence contributing to banking stability, the Deposit Protection Scheme (DPS) is reviewed by the Hong Kong Deposit Protection Board (HKDPB) regularly to ensure that it remains effective in contributing to banking stability and keeps up with international best practice. The HKDPB completed its latest round of comprehensive review of the DPS and launched a three-month public consultation during July to October, inviting the public and other stakeholders to provide their views on a number of policy recommendations aimed at enhancing the DPS.

In addition to ensuring that the DPS provides adequate protection to depositors, the HKDPB also seeks to compensate depositors as quickly as possible should a payout be triggered. As such, the HKDPB conducts payout drills and rehearsals regularly to ensure the payout readiness of the DPS. Specifically, the HKDPB conducted a payout rehearsal together with its payout agents in November to test out the payout operations under the contingency arrangement. The rehearsal was successfully completed without identifying any major issues. Moreover, the HKDPB continued with its programme to monitor and ensure DPS member banks' readiness in submitting information in compliance with the Information System Guideline.

Promoting the public's awareness and understanding of the DPS is key to maintaining the effectiveness of the DPS. With this in mind, the HKDPB continued its efforts in reinforcing the image of the DPS as the "Guardian of Deposits" with the re-run of the TV commercial themed "Keep Calm and Deposit Safely On". Apart from the implementation of multi-media advertising campaigns, the HKDPB also extended its reach to the younger generation by launching an Instagram fanpage, thereby enriching its social media presence. Furthermore, the HKDPB launched a "Money-Saving Challenge for Athletes" consumer campaign with a series of videos (with DPS messages incorporated) featuring well-known athletes sharing their saving habits and perseverance in achieving their saving goals. The HKDPB also conducted the sixth "Hongkongers' Sense of Security on Savings" survey to monitor the public's saving behaviour.

Banking complaints

The HKMA received 3,102 banking complaints against AIs or their staff, and 9,014 enforcement-related enquiries, in 2023. The HKMA completed the handling of 3,287 complaint cases (Table 5) and responded to the enquiries. The HKMA's performance pledges on the response time to complaints and related enquiries were met (Table 6).

Table 5 Banking complaints received by the HKMA

| | Conduct-related issues | General banking services | Total | 2022 Total |
|----------------------------------|------------------------|--------------------------|-------|------------|
| Received during the year | 303 | 2,799 | 3,102 | 3,459 |
| Completed during the year | 382 | 2,905 | 3,287 | 3,202 |

Table 6 Performance Pledges of the HKMA in Handling Banking Complaints

| Items | Performance Pledge | Achievement Rate |
|--------------------------------------|--------------------|------------------|
| Preliminary response to complaints | 10 working days | 100% |
| Reply to complaint-related enquiries | 15 working days | 100% |

The number of fraud-related banking complaints increased by 116% to 1,201 in 2023. Among these cases, 67% were related to credit card transactions while about 33% were related to remittance transactions, payment transactions and bank loans. In view of the ever-changing modus operandi of fraudsters, apart from the *Complaints Watch*²⁴ publications, the HKMA also raised public awareness by delivering educational messages through social media platforms, including educating the public through a series of "Beware of Fraudulent Link" messages and alerting people about WhatsApp scams.

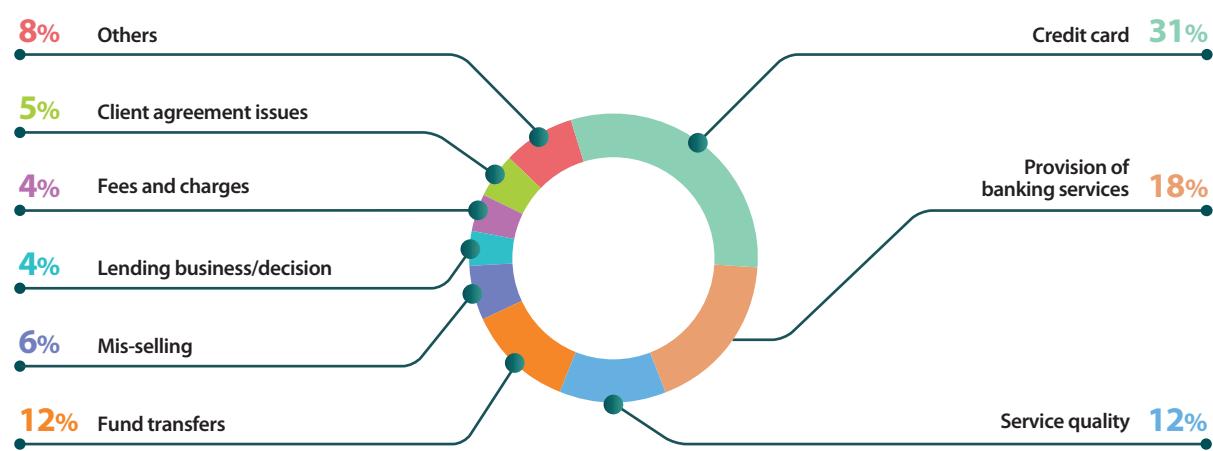
²⁴ *Complaints Watch* is a periodic newsletter issued by the HKMA to highlight the latest banking complaint trends, emerging topical issues, and areas that AIs and members of the public should be alert to. It aims at promoting proper standards of conduct and prudent business practices among AIs as well as fostering financial consumer education.

Banking Stability

Another common category of complaints concerned the provision of banking services, including the opening and maintenance of bank accounts. This category of complaints accounted for 18% of the total number of complaints received in 2023. The majority of complaints in this category concerned the relevant AIs' account review process effectiveness. In response to issues identified from complaints, the HKMA followed up with the AIs concerned to improve the effectiveness of their account review process to be "fit-for-purpose" and enhance their complaint handling process to address customer grievances (Chart 3).

Apart from complaints, the HKMA handled 163 informant reports, which mainly concerned fund transfers in potential fraud cases and use of personal accounts for commercial purposes. For complaints or informer reports with supervisory concerns and/or staff conduct issues identified, follow-up actions, such as sharing of intelligence with law enforcement agencies and banks, were taken as appropriate.

Chart 3 Types of services or products concerned in banking complaints received by the HKMA



Enforcement

The HKMA exercised its enforcement power over AIs' CDD and record-keeping obligations as stipulated in the Anti-Money Laundering and Counter-Terrorist Financing Ordinance to safeguard the stability and integrity of the banking system. The disciplinary cases in 2023 involved control lapses in conducting onboarding and on-going CDD, and transaction monitoring. The HKMA also exercised the power under the Payment Systems and Stored Value Facilities Ordinance (PSSVFO) on an SVF licensee for deficiencies in transaction monitoring controls, governance arrangement and risk management framework (Table 7).

The HKMA adopted technology tools in the complaint handling process, such as robotic process automation and speech-to-text technology, to enhance the analysis of data and audio recordings for identifying patterns, sentiments and key themes. This resulted in better effectiveness and efficiency of complaint handling and investigatory work.

Banking Stability

Table 7 Enforcement actions taken by the HKMA under different ordinances in 2023

| Ordinance | Actions |
|--|---|
| Anti-Money Laundering and Counter-Terrorist Financing Ordinance | <ul style="list-style-type: none"> Imposed penalties totalling HK\$23.5 million against three banks for failures in CDD and transaction monitoring. |
| Payment Systems and Stored Value Facilities Ordinance | <ul style="list-style-type: none"> Imposed a penalty of HK\$1.575 million against an SVF licensee for failures in transaction monitoring, governance and risk management. |
| Securities and Futures Ordinance | <ul style="list-style-type: none"> Referred 18 cases to the SFC after the HKMA's assessment/investigation. The SFC, based on enforcement collaboration with the HKMA, banned two former relevant individuals from re-entering the industry for life^a. |
| Insurance Ordinance | <ul style="list-style-type: none"> Received 156 insurance-related cases of AIs, of which 29 cases were referred by the IA. Completed the handling of 186 insurance-related cases of AIs. Following investigation and subsequent referral by the HKMA, the IA banned a former technical representative of a bank from applying to be licensed for six months^b. A joint press release was issued to convey a clear message to the financial services industry to deter improper behaviour. |
| Banking Ordinance and other relevant ordinances | <ul style="list-style-type: none"> Issued 37 compliance advice letters to AIs and their staff members to remind them of the importance of regulatory compliance. |

- a. The ban was over concerns about the fitness and properness of the former relevant individuals, and were related to misappropriation of a client's funds and a conviction of a bribery offence.
 b. The ban was over a concern about the fitness and properness of a former technical representative, and was related to fabrication of a client's direct debit authorisation form for payment of insurance premium.

Sharing insights and good practices with the banking industry

As an ongoing initiative to promote proper standards of conduct and prudent business practices among AIs, *Complaints Watch* newsletters were published in 2023 to highlight matters identified from complaints that AIs should take note of and to share good practices for AIs' appropriate actions, including (i) consumer protection against online shopping and phishing scams, (ii) disclosure regarding investment products, (iii) premium financing for purchase of insurance plans, and (iv) safeguards regarding the use of instant messaging communications on financial services. Tips were also shared with banks' complaint handling officers on the "do's and don'ts" of day-to-day interface with customers, including proactively clarifying information discrepancies and avoiding being rigid or bureaucratic.

The HKMA also encouraged the industry to engage in collective educational initiatives, utilising social media and other channels, to raise customers' awareness regarding different scams prevalent in complaints, including WhatsApp and malware scams.



Social media posts alerting the public to various types of scams and encouraging the careful use of instant messaging communications with bank staff

Banking Stability

The Ombudsman's Awards for Officers of Public Organisations

Two HKMA staff, Mr Gabriel Au, Manager of the Enforcement Division, and Ms Grace Hui, Manager of the Banking Conduct Department, received Ombudsman's Awards for Officers of Public Organisations 2023 in recognition of their efforts in fostering a positive culture of service and promoting professionalism in handling complaints and enquiries.

“
Mr Au handles banking complaints with passion and professionalism, helping enhance public confidence in banking services.”

“
Ms Hui has been empathetic to the needs of the public and provided useful assistance to enquirers to solve their problems proactively and responsibly, and has received commendations from members of the public many times.”



Dual awards for public service: Ms Carmen Chu (second from left), the then Executive Director (Enforcement and AML); Mr Alan Au (second from right), Executive Director (Banking Conduct); Mr Gabriel Au (third from left), Manager (Enforcement); Ms Grace Hui (third from right), Manager (Banking Conduct); Ms Cathy Chan (first from left), Senior Manager (Enforcement); and Ms Candy Leung (first from right), Senior Manager (Banking Conduct), at the awards ceremony with Ms Winnie Chiu, The Ombudsman (middle)

The HKMA remains committed to diligently handling customer complaints and enquiries on banks, aiming to strengthen consumer protection and set a commendable standard for the industry on treating customers fairly.

Capacity building in the banking sector

In collaboration with the Government, the Hong Kong Institute of Bankers (HKIB) and other industry stakeholders, the HKMA organised a series of initiatives with the aim of enhancing capacity building in the banking sector. The HKMA's efforts focused on two fronts: (i) attracting students to the banking industry and better equipping them to build a sustainable pipeline of future talent, and (ii) upskilling and reskilling existing practitioners to ensure they stay relevant in the modern banking era.

Banking Stability

Attracting and nurturing future talent

Future Banking Bridging Programme

In view of the good response from university students in the previous two years, the HKMA conducted the third round of the Future Banking Bridging Programme in November. Around 300 students who aspire to pursue a career in banking took part in the Programme, during which they received professional training from industry experts; worked with their peers from other universities on group projects; and interacted with mentors from the banking industry, hearing first-hand advice and guidance on developing a banking career.



Participants of the Future Banking Bridging Programme work in group projects and win different awards

Apprenticeship Programme for Private Wealth Management

Building on its success in previous years, the HKMA co-organised a new round of the Apprenticeship Programme for Private Wealth Management with the Private Wealth Management Association to equip university students with practical skills and work experience for a career in the private wealth management industry. The Recruitment Day for a new batch of apprentices for 2024–2025 was conducted in November with more than 700 students in attendance. In addition to the recruitment booths of individual firms, a new Career Clinic was set up during the Recruitment Day to provide advice and assistance to participating students on job searching, resume writing and job interviews. Since its inception in 2017, the Programme has offered a total of almost 400 apprenticeship opportunities to university students.



More than 700 university students attend the Recruitment Day of the Apprenticeship Programme for Private Wealth Management

Banking Stability

Banking Career Talk Series

Together with the banking industry and the HKIB, the HKMA organised the Banking Career Talk Series at universities in Hong Kong to introduce the latest developments and trending job roles in the banking industry to university students. During academic year 2022–2023, the career talks attracted about 550 students from different universities and disciplines. During the talks, bankers were invited to share their banking knowledge and valuable experience to shed light on how students can better prepare themselves for a job in the banking industry.

Career guidance for secondary school students

To foster the next generation's interest in the banking industry at an early stage of their life planning, the HKMA actively engaged with secondary school students and

teachers through a range of activities. For instance, the HKMA organised a workshop and a poster drawing competition titled "Future Banker – Planning for Future Career" in collaboration with the Education Bureau in July as well as a talk on pursuing a career in banking in December for nearly 1,300 secondary school students and teachers.

The HKMA also partnered with the Education Bureau and the Chinese Banking Association of Hong Kong in organising the Young Bankers' Summer Programme in July for about 30 students and teachers, where the HKMA provided an introduction on the evolution of the banking and financial system in Hong Kong and the HKMA's work on banking supervision to the participants. The Programme also included a cross-boundary visit to deepen students' understanding of the latest developments on the Mainland.



Winning posters designed by high school students as part of "Future Banker – Planning for Future Career"



30 young bankers and their teachers attend the Young Bankers' Summer Programme

Banking Stability

Upskilling and reskilling banking workforce

Skills Transformation and Empowerment Programme

To drive the momentum of upskilling and reskilling in the banking sector, the HKMA conducted a focused review of talent development practices adopted by major retail banks. In September, the HKMA shared with the industry its key observations and supervisory expectations in four key areas, covering (i) manpower planning, (ii) upskilling the workforce, (iii) reskilling the workforce, and (iv) recruiting talent in the banking sector. A new Survey on Talent Development was also rolled out to track AIs' efforts in this area starting from 2024.

As a further step, the HKMA updated the SPM module CG-6 on "Competence and Ethical Behaviour" to provide additional guidance on talent management to the industry. The updated module was issued for industry consultation in December and is expected to be implemented in 2024.

Enhanced Competency Framework

The HKMA developed the Enhanced Competency Framework (ECF) for Banking Practitioners in collaboration with the banking industry and relevant professional bodies, with the aim of facilitating talent development and enhancing the overall level of professional competence of banking practitioners. During the year, the Core Level of the ECF module on Green and Sustainable Finance was launched; the Professional Level is being developed to meet the rapidly growing demand for Green and Sustainable Finance practitioners. Up to the end of 2023, more than 18,000 banking practitioners had obtained certifications in various professional areas under the ECF.

Pilot Scheme on Training Subsidy for Fintech Practitioners

The Pilot Scheme on Training Subsidy for Fintech Practitioners aims to promote the professional development of fintech talent in Hong Kong by offering subsidies of up to 80% of training costs to practitioners who have attained eligible fintech professional qualifications, subject to a cap of HK\$25,000. As the ECF module on Fintech became the first set of eligible fintech professional qualifications under the Scheme, the HKMA is supporting the Government in administering the Scheme for the banking industry.

Regulator's Dialogue

The HKMA worked with the industry in supporting the development of the Corruption Prevention Guide for Banks by the ICAC, which offers practical guidance on anti-bribery legislation as well as effective corporate governance and internal controls to mitigate corruption risks in business operations of AIs. The HKMA took the opportunity of the publication of the updated Guide to resume organisation of the Regulator's Dialogue for banking practitioners in May after a brief pause during the pandemic. About 450 practitioners attended the Dialogue to discuss the updated Guide and the relevant supervisory requirements as outlined in the SPM module CG-3 on "Code of Conduct".



About 450 banking practitioners attend the Regulator's Dialogue

Banking Stability

Cross-boundary flows of banking talents

In view of the importance of the Mainland opportunities, especially those in the Greater Bay Area, for further development of banking business, the HKMA and the HKIB co-organised a cross-boundary study tour to Shenzhen and Qianhai in June for about 100 banking practitioners to enhance their knowledge on fintech and the latest developments in the Mainland.



Around 100 bankers take part in the cross-boundary study tour

With the support of the HKMA, the HKIB and the China Banking Association entered into an MoU in September on mutual recognition of the qualification of ECF module on Retail Wealth Management in Hong Kong and the Qualification Certificate of Banking Professional in the Mainland in an effort to promote cross-boundary flows of banking talent.



Mr Michael Wong (middle), Deputy Financial Secretary of the Government of HKSAR, witnesses the signing of the MoU by Ms Carrie Leung (right), Chief Executive Officer of HKIB, and Mr Xing Wei (left), Deputy Chairman of China Banking Association

Talent retention

In addition to upskilling and reskilling efforts, the HKMA is also mindful of the importance of talent retention in the banking sector. In October, the HKMA co-organised the *Fulfilling Career for Young Bankers* seminar with HKAB to provide career guidance to about 170 young bankers, with a view to supporting them to develop a long-term career in the banking industry.



Mr Arthur Yuen (middle), Deputy Chief Executive; Mr Stephen Chan (third from right), representative of the Chairman of HKAB; and other guests at the Fulfilling Career for Young Bankers seminar

Banking Stability

Financial market infrastructures oversight

The PSSVFO empowers the Monetary Authority to designate and oversee clearing and settlement systems (CSSs) that are material to the monetary and financial stability of Hong Kong, and to the functioning of Hong Kong as an international financial centre.

The purposes of the PSSVFO include promoting the general safety and efficiency of the designated CSSs:

- the Central Moneymarkets Unit;
- the Hong Kong dollar Clearing House Automated Transfer System (CHATS), including the Hong Kong dollar FPS;
- the US dollar CHATS;
- the euro CHATS;
- the renminbi CHATS, including the renminbi FPS; and
- the Continuous Linked Settlement (CLS) System.

The PSSVFO also provides statutory backing to the finality of settlement for transactions made through the designated CSSs by protecting the settlement finality from insolvency laws and any other laws.

The HKMA is also responsible for overseeing the Hong Kong Trade Repository (HKTR), the OTC derivatives trade repository in Hong Kong. While the HKTR is not a clearing or settlement system and is thus not designated as such under the PSSVFO, the Monetary Authority ensures that the HKTR is operated in a safe and efficient manner, which is in line with one of the functions of the Monetary Authority to maintain the stability and integrity of the monetary and financial systems of Hong Kong.

Monitoring and assessment

The HKMA oversees local FMIs under its purview through off-site reviews, continuous monitoring, on-site examinations and meetings with FMIs' management. In doing so, the HKMA adopts international standards in its oversight framework. In particular, the requirements under the Principles for Financial Market Infrastructures (PFMI)²⁵ are incorporated in the HKMA's guidelines for designated CSSs and the HKTR.

The HKMA has completed the PFMI assessments on the FMIs under its oversight. All the FMIs have published Disclosure Frameworks, which is a key requirement under the PFMI to improve transparency by disclosing system arrangements principle by principle. The PFMI assessment results and Disclosure Frameworks are available on the HKMA website.

The HKMA has been closely monitoring the operations of the FMIs and the sufficiency and appropriateness of their contingency arrangements. The FMIs have also continued to strengthen their endpoint security and cyber resilience under the close monitoring of the HKMA.

Technological innovation

In view of the growing innovation efforts in FMI, the HKMA has been monitoring the implementation of new FMI-related initiatives, including, for example, the tokenised government green bond, mBridge²⁶ and e-HKD²⁷ initiatives, with a view to assessing the implications of these initiatives from an oversight perspective under the statutory regime as these initiatives develop.

²⁵ In April 2012, the Committee on Payments and Market Infrastructures and IOSCO published the PFMI, which constitute the international standards for the oversight of FMIs, including systemically important payment systems, central securities depositories, securities settlement systems, central counterparties and trade repositories.

²⁶ mBridge refers to Multiple Central Bank Digital Currency Bridge.

²⁷ e-HKD refers to a retail Central Bank Digital Currency in Hong Kong.

Banking Stability

International participation and co-operative oversight

The HKMA is a member of the Bank for International Settlements' Committee on Payments and Market Infrastructures (CPMI) and participates in meetings, working groups and forums on FMI oversight matters. Throughout the year, the HKMA participated in CPMI meetings that, among other things, discusses issues related to digital innovations in payments, cross-border payments as well as FMI risk management. The HKMA also joined various newly formed working groups and task forces under the CPMI and FSB, and contributed to their work in enhancing cross-border payments from an oversight perspective. It also participates in the CPMI-IOSCO Implementation Monitoring Standing Group, which is responsible for monitoring and assessing the implementation of the PFMI by different jurisdictions.

The HKMA is a member of the Oversight Forum of the financial messaging services provider Swift; the forum discusses relevant oversight matters and shares Swift-related information. Hong Kong's AIs and FMIs, which commonly use Swift's services, may be exposed to risks in the event of any disruption to Swift's operations. During the year, the HKMA attended meetings and teleconferences to discuss matters of interest, in particular Swift's customer security framework and cybersecurity issues.

In addition, the HKMA has established co-operative oversight arrangements with other relevant authorities to foster efficient and effective communication and consultation. This enables the HKMA and these other authorities to support one another in fulfilling their respective mandates with respect to FMIs. The HKMA participates in the international co-operative oversight of the CLS System²⁸ through the CLS Oversight Committee. During the year, the HKMA attended various meetings of the CLS Oversight Committee to discuss, among others, oversight matters of CLS.

Independent tribunal and committee

An independent Process Review Committee, whose members are appointed by the Chief Executive of the HKSAR, reviews processes and procedures adopted by the HKMA in applying standards under the PSSVFO to systems in which the HKMA has a legal or beneficial interest. The Committee assesses whether the HKMA has applied the same procedures to all designated CSSs. The Committee held two meetings and reviewed four regular reports and 36 accompanying oversight activities management reports in 2023. The Committee concluded that it was not aware of any case where the HKMA had not duly followed internal operational procedures, or where the HKMA had not been procedurally fair in carrying out its oversight activities. Under its terms of reference, the Committee submitted its annual report to the Financial Secretary, and the report is available on the HKMA website.

An independent Payment Systems and Stored Value Facilities Appeals Tribunal hears appeals against decisions of the Monetary Authority on licensing and designation matters under the PSSVFO. There have been no appeals since the establishment of the Tribunal.

²⁸ The CLS System is a global clearing and settlement system operated by the CLS Bank to handle cross-border foreign exchange transactions. It enables foreign exchange transactions involving CLS-eligible currencies, including the Hong Kong dollar, to be settled on a payment-versus-payment basis.

International Financial Centre



In 2023, the HKMA utilised a multi-pronged approach to achieve notable progress in consolidating Hong Kong's status as a globally competitive international financial centre.

The success of two major events, namely the Global Financial Leaders' Investment Summit and the HKMA-BIS High-Level Conference, had reinforced Hong Kong's status as an international financial centre and created positive ripple effects.

The HKMA, together with its Mainland and Hong Kong counterparts, made concerted efforts to deepen and widen the mutual access between the financial markets of Hong Kong and the Mainland. This included enhancements to the Cross-boundary Wealth Management Connect Scheme in the Guangdong-Hong Kong-Macao Greater Bay Area, the designation of additional market makers for Southbound Trading under Bond Connect, the successful launch of Northbound Trading of Swap Connect, and the roll-out of the HKD-RMB Dual Counter Model and the Dual Counter Market Making Programme. These initiatives were effective in strengthening Hong Kong's gateway position and reinforcing the city's status as a global hub for offshore renminbi business.

The HKMA also made good progress in strengthening the competitiveness of Hong Kong's financial platform, in areas including bond issuance, asset and wealth management, green and sustainable finance, and corporate treasury centres. To promote Hong Kong's financial services, the HKMA stepped up its market outreach activities to overseas and Mainland stakeholders to keep them well informed about the opportunities in Hong Kong's financial market and its resilience.

Significant progress has been made on all fronts of the HKMA's "Fintech 2025" strategy, including in areas such as promoting fintech adoption, Central Bank Digital Currency, data infrastructure, talent development, and policies and funding support.

The Faster Payment System (FPS) marked its fifth anniversary in September. The number of registrations has grown steadily, and had reached 13.6 million at the end of 2023. The average daily turnover for the year rose to 1.25 million real-time transactions. FPS x PromptPay link for cross-border QR payment between Hong Kong and Thailand was jointly launched with the Bank of Thailand in December, providing a fast, secure and easily accessible cross-border retail payment service for people travelling between the two places.

As an active member of many international and regional central banking and regulatory forums, the HKMA continued to contribute to global efforts to maintain financial stability and promote financial market developments.

International Financial Centre

Overview

Throughout the year, the HKMA continued making proactive efforts to strengthen Hong Kong's competitiveness as an international financial centre. In November, it organised the Global Financial Leaders' Investment Summit for the second year. This three-day event brought together prominent financial leaders from around the world to share their unique perspectives under the theme of "Living with Complexity". With over 350 participants from 160 international financial institutions attending, the summit clearly showed the global financial sector's commitment to and confidence in Hong Kong. In the same month, the HKMA and the Bank for International Settlements (BIS) co-hosted the HKMA-BIS High Level Conference, which attracted more than 300 participants, including over 20 current and former central bank governors. The conference highlighted the HKMA's close collaboration with the BIS as well as with the international central banking community.

The expansion of and enhancements made to the Mainland-Hong Kong Connect schemes have reinforced Hong Kong's role as the bridge between the Mainland and international financial markets. A series of enhancements to the Cross-boundary Wealth Management Connect (Cross-boundary WMC) scheme were introduced to facilitate cross-boundary retail investment in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA). Riding on the smooth operations of Southbound Bond Connect, the HKMA designated nine additional market makers to improve secondary liquidity and meet investor demand. Northbound Trading of Swap Connect was successfully launched in the year, enabling global investors to better manage the interest rate risks associated with their Mainland fixed income portfolio via Hong Kong.

Hong Kong's offshore renminbi businesses saw robust growth during the year. The HKMA collaborated with the Securities and Futures Commission (SFC) and Hong Kong Exchanges and Clearing Limited (HKEX) to launch the HKD-RMB Dual Counter Model and the Dual Counter Market Making Programme in June. This helped develop a more diverse range of renminbi-denominated products in Hong Kong by facilitating the issuance and trading of renminbi-denominated stocks in Hong Kong.

The HKMA continued to work on strengthening the competitiveness of Hong Kong's financial platform. In particular, to enhance Hong Kong's appeal as a preferred fund management centre, the HKMA worked closely with the Government and the financial industry to provide a more facilitative tax and regulatory environment. Significant progress was also made in promoting innovation in Hong Kong's bond market, and consolidating Hong Kong's position as a regional green and sustainable finance hub. At the same time, the HKMA stepped up its market outreach activities to promote Hong Kong's financial services to overseas and Mainland stakeholders.

Both the Fintech Facilitation Office (FFO) and the banking departments of the HKMA continued to implement the "Fintech 2025" strategy¹ to promote wide adoption of financial technology (fintech) and strengthen Hong Kong's position as a fintech hub in Asia. Key initiatives implemented during the year included:

- promoting further adoption in the tech focus areas of Wealthtech, Insurtech, Greentech, artificial intelligence and distributed ledger technology (DLT);
- advancing the work on wholesale Central Bank Digital Currency (CBDC) to improve cross-border payments;
- progressing further in the study on the prospect of introducing a retail CBDC in Hong Kong, i.e. an e-HKD;
- stepping up efforts to develop Commercial Data Interchange (CDI);
- enhancing talent development;
- nurturing the fintech ecosystem through funding and policies;
- strengthening cross-border collaboration in fintech; and
- expanding the adoption of the FPS.

¹ Unveiled in June 2021, the strategy aims to encourage the financial sector to adopt technology comprehensively by 2025, as well as to promote the provision of fair and efficient financial services for the benefit of Hong Kong citizens and the economy. The five focus areas of the strategy are: (1) all banks go fintech, (2) future-proofing Hong Kong for Central Bank Digital Currencies, (3) creating the next-generation data infrastructure, (4) expanding the fintech-savvy workforce, and (5) nurturing the ecosystem with funding and policies.

International Financial Centre

The safe and efficient operation of Hong Kong's financial infrastructure is vital for maintaining the city's position as a leading international financial centre. In 2023, the four interbank Real Time Gross Settlement (RTGS) systems, the Central Moneymarkets Unit (CMU) and the Hong Kong Trade Repository (HKTR) achieved 100%² system availability, outperforming the target of 99.95%. The debt securities settlement service, including the Northbound and Southbound Bond Connect linkage service, continued to operate smoothly.

Adoption of the FPS continued to increase in 2023, marking the significant milestone of the FPS reaching its fifth anniversary. The number of registrations for the FPS and the FPS turnover have grown steadily over the past five years, with the number of registrations growing to 13.6 million at the end of 2023 and the average daily turnover for the year rising by 33% from 2022. The increased use of the FPS for settling Government bills, making merchant payments, and topping up Stored Value Facility (SVF) e-wallets or bank accounts, were key drivers for the continued rise in the transaction volume, on top of steady growth in person-to-person and business payments.

To ensure the safety and efficiency of the local retail payment industry, the HKMA oversees six designated retail payment systems (RPSs) and supervises 17 licensed SVFs (four of which are SVFs issued by licensed banks) under the Payment Systems and Stored Value Facilities Ordinance (PSSVFO). During the year, the HKMA also continued to facilitate the smooth implementation of the Government's Consumption Voucher Scheme, helping to co-ordinate the relevant Government parties and the SVF licensees appointed for the scheme, and facilitate dialogue and co-operation between them.

On 27 December, the Financial Services and the Treasury Bureau and the HKMA jointly issued a public consultation paper on regulation for stablecoin issuers. The HKMA subsequently introduced a sandbox arrangement on 12 March 2024 for institutions planning to issue fiat-referenced stablecoins in Hong Kong. At the same time, the HKMA has been actively participating in the work of international bodies in relation to crypto-asset activities, and monitoring the development of the market closely.

Internationally, the HKMA has remained an active member of the central banking community and continued to play a leadership role in a number of regional and international committees. Currently, the HKMA co-chairs the Policy and Standards Group of the Basel Committee on Banking Supervision (Basel Committee), as well as the Regional Consultative Group for Asia, the Non-Bank Monitoring Experts Group (until June) and the Financial Innovation Network of the Financial Stability Board (FSB). The HKMA also chairs the BIS' Meeting of Governors from Major Emerging Market Economies (EMEs). Between 2018 and 2023, the HKMA served consecutive terms as the chair of the Working Group on Financial Markets established under the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)³.

The HKMA also held bilateral meetings with the Central Bank of the United Arab Emirates and the Saudi Central Bank in May and July respectively to promote investment and financial market connectivity between the Middle East and Asia. The sixth Hong Kong-Switzerland Financial Dialogue was held in Bern, Switzerland on 25 September, and the discussion covered topics on regional and domestic outlook and policy challenges, latest development, and potential collaboration in the areas of sustainable finance, fintech, and market connectivity.

² About 99.96% if including downtime caused by external factors.

³ The EMEAP is a co-operative organisation of central banks and monetary authorities in the East Asia and Pacific region.

International Financial Centre

A glance at the HKMA's initiatives in 2023 in strengthening Hong Kong's competitiveness as an international financial centre

Strengthen connections with the world

- Hosted series of international events: Global Financial Leaders' Investment Summit, HKMA-BIS High-Level Conference and HKMA-BIS Joint Conference and Basel Committee meeting
- Active participation in international central banking and regulatory forums
- Stepped up market outreach to overseas and Mainland stakeholders to promote Hong Kong's financial services and laid solid foundation for collaboration with Middle East

Enhance financial platform competitiveness

- Promoted bond market innovation by assisting the Government to issue the world's first tokenised government green bond
- Supported dim sum bond issuances by Shenzhen and Hainan governments in Hong Kong
- Signed Memorandum of Understanding (MoU) with the National Development and Reform Commission to support cross-border financing by Chinese enterprises in Hong Kong
- Enhanced tax concession regimes for family offices and asset and wealth management industries
- Continued raising Hong Kong's value proposition as a Corporate Treasury Centre (CTC) hub and financing hub for infrastructure investments
- Continued the development of Hong Kong's treasury market and over-the-counter (OTC) derivatives market
- Consolidation of Hong Kong's position as a regional green and sustainable finance hub

Ensure the reliability and efficiency of Hong Kong's critical financial infrastructure

- Continued to ensure the safe and efficient operation of the RTGS systems, CMU and the HKTR
- Progressed with the upgrade of the CMU's operational capacity and product offerings to develop the system into a major international central securities depository

Nurture future finance leaders and strengthen applied research capabilities

- Continued the leadership development and research efforts by the Hong Kong Academy of Finance (AoF)

Deepen connectivity between the financial markets of Hong Kong and the Mainland and enhance Hong Kong's role as an offshore renminbi business hub

- Successful launch of Northbound Trading of Swap Connect
- Enhancements to Cross-Boundary WMC
- Designation of additional market makers for Southbound Trading under Bond Connect
- Rollout of HKD-RMB Dual Counter Model and Dual Counter Market Making Programme
- Good progress on initiatives to support corporates' business operations and the livelihoods of residents in the GBA, e.g. enhanced cross-boundary fund flow management for GBA corporates, facilitative measures for Hong Kong residents on property purchases in GBA's Mainland cities
- Deepened exchanges between Mainland agencies and financial industry in Hong Kong to identify business opportunities

Reinforce Hong Kong's position as a fintech hub in Asia

- Continued implementation of the "Fintech 2025" Strategy:
 - Announced a new Fintech Promotion Roadmap to develop Wealthtech, Insurtech, Greentech, artificial intelligence and DLT in the banking sector
 - Progression of the Multiple CBDC Bridge (mBridge) project towards Minimum Viable Product development phase
 - Completed Phase 1 of e-HKD Pilot Programme with 14 potential use cases
 - Continued to expand the scope of cross-boundary digital renminbi (e-CNY) pilot in Hong Kong
 - Successfully established linkage between CDI and the Government's Consented Data Exchange Gateway to facilitate consented data sharing between Government departments and financial institutions
- Launched FPS x PromptPay link between Hong Kong and Thailand to provide secure and easily accessible cross-border retail payment service

Ensure the safety and soundness of the local retail payment industry

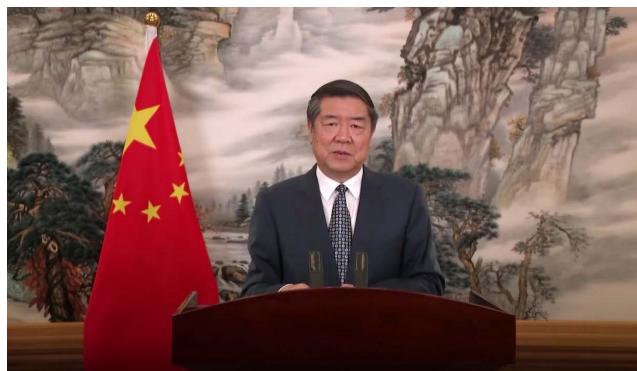
- Continued to promote the safety and efficiency of the local retail payment players including the licensed SVFs and the designated RPSs
- Issuance of a public consultation paper on regulation for stablecoin issuers and strive for early implementation of the regulatory regime for stablecoin issuers

International Financial Centre

Review of 2023

Global Financial Leaders' Investment Summit

In November, the HKMA organised the Global Financial Leaders' Investment Summit for the second year and on an expanded scale. Coinciding with the 30th anniversary of the establishment of the HKMA, the three-day event was a resounding success. It featured around 50 prominent financial leaders, who shared their investment insights and discussed the latest approaches for navigating a challenging



Mr He Lifeng, Vice-premier, the State Council of the People's Republic of China, delivers opening keynote (pre-recorded)



Mr Paul Chan, Financial Secretary of the Government of HKSAR and Honorary President of AoF, delivers his keynote speech

landscape. The summit was attended by over 350 participants from 160 international financial institutions, including some of the world's largest banks, securities firms, asset owners and managers, private equity and venture capital firms, hedge funds and insurers. More than 90 of these institutions were represented by their group chairpersons or chief executive officers.

By bringing senior global financial leaders to Hong Kong, the Summit enabled these influencers to see for themselves the city's vibrancy and its many opportunities.



Mr John KC Lee, Chief Executive of the Hong Kong Special Administrative Region (HKSAR), delivers his keynote speech



(From left) Mr Eddie Yue, Chief Executive; Mr Joseph Yam, Former Chief Executive of HKMA, Non-official Member of the Executive Council of the Government of HKSAR; Mr Norman Chan, Former Chief Executive of HKMA, Founding Chairman of the Institute of Web 3.0 Hong Kong at the special fireside chat

International Financial Centre

HKMA-BIS High-Level Conference

The HKMA and the BIS co-organised the High-Level Conference in November to commemorate the 30th anniversary of the HKMA and the 25th anniversary of the BIS Representative Office for Asia and the Pacific. The event welcomed more than 300 participants, including over 20 current and former central bank governors, regional and local Chief Executive Officers of financial institutions, and leading experts from Hong Kong and other parts of Asia. This was the first large-scale gathering of central bank governors in Hong Kong since the pandemic.



(From left) Mr Eddie Yue, Chief Executive; Mr Ravi Menon, the then Managing Director, the Monetary Authority of Singapore; Mr M. Rajeshwar Rao, Deputy Governor, the Reserve Bank of India; and Mr Erik Thedéen, Governor, Sveriges Riksbank at the panel "The Future of Monetary System"

At the Conference, speakers shared their insights into some of the key challenges faced by central banks and policymakers, including persistent inflationary pressures and the "high for longer" interest rate environment, the future of the monetary system in the face of financial innovation, lessons learned from past financial crises, and structural changes that are shaping the economic landscape. Leaders of financial institutions also shared their perspectives on the future of finance in Asia.



(From left) Mr Agustín Carstens, General Manager, the Bank for International Settlements; Ms Michele Bullock, Governor, the Reserve Bank of Australia; Mr Pablo Hernandez de Cos, Governor, the Bank of Spain; Mr Dave Ramsden, Deputy Governor, the Bank of England; and Mr Sethaput Suthiwartnarueput, Governor, the Bank of Thailand at the panel "Inflation, Financial Stability and Employment"



Mr Pan Gongsheng (right), Governor of People's Bank of China (PBoC) delivers a keynote speech followed by a Q&A session moderated by Mr Norman Chan (left), Senior Adviser of the Hong Kong Academy of Finance and Former Chief Executive of HKMA



Mr Zhou Xiaochuan, Former Governor of PBoC, delivers keynote remarks at the Welcome Dinner

International Financial Centre

Hong Kong as the dominant gateway to the Mainland and a global offshore renminbi business hub

Hong Kong has maintained its position as the leading offshore renminbi business hub, underpinned by strong and continuously improving liquidity, product diversity and infrastructure offerings. Offshore renminbi businesses extended their growth of the previous year to record broad-based expansion in 2023, particularly in offshore bond issuances and bank lending.



- **RMB1,045.3 billion**

RMB deposits, including outstanding certificates of deposit, **+6%**

- **RMB2.06 trillion**

average daily turnover of RMB RTGS system, **+25%**

- **RMB11.7 trillion**

RMB trade settlement handled by banks in Hong Kong, **+25%**

- **RMB441.2 billion**

RMB loans, **+130%**

- **RMB545.1 billion**

offshore RMB bond issuance, including certificates of deposit, **+65%**

- **70%+**

of global RMB Swift payments



Northbound Bond Connect continued to serve as a major channel for international investors to invest in the Mainland bond market using market infrastructures and financial services in Hong Kong. Daily turnover under Northbound Bond Connect averaged RMB40.1 billion in 2023 (a 24% increase from 2022) and accounted for 66% of overall trading turnover by foreign investors in the China Interbank Bond Market.

More market-oriented technical enhancements were introduced to further facilitate Northbound trading, including an online one-stop settlement failure reporting service and a new basket trading function. These enhancements were effective in improving operational efficiency for investors under Northbound Bond Connect.

Northbound Trading of Swap Connect was launched in May, providing global investors with a convenient and secure channel for trading interest rate swap products in the Mainland.

Southbound Bond Connect continued to buttress the growth of Hong Kong's bond market, including dim sum bonds. In September, the HKMA designated nine additional market makers to provide secondary liquidity and support the smooth operation of the scheme.

The HKMA is working closely with relevant Mainland authorities to explore further possible enhancements under Bond Connect, including provision of more diversified risk management and liquidity management tools.

The Cross-boundary WMC has been operating smoothly since its launch in 2021. Up to the end of 2023, 24 eligible Hong Kong banks had launched Cross-boundary WMC services together with their Mainland partner banks. Around 69,200 individual investors (including Guangdong, Hong Kong and Macao) had participated in the scheme and 43,300 cross-boundary remittances (including Guangdong, Hong Kong and Macao) totalling more than RMB12.8 billion had been completed. In September, the HKMA and other relevant authorities jointly announced enhancements to the Cross-boundary WMC. These included measures to refine the eligibility criteria of investors, expand the scope of participating institutions to include securities firms, expand the scope of eligible products, increase the individual investor quota, and further enhance the promotion and sales arrangements.

International Financial Centre

In a move to further expand the channels for the two-way flow of cross-boundary renminbi funds and to develop offshore renminbi products in Hong Kong, the HKMA collaborated with the SFC and HKEX to launch the HKD-RMB Dual Counter Model and the Dual Counter Market Making Programme in June, which facilitated the issuance and trading of renminbi-denominated equity securities in Hong Kong and enriched the diversity of offshore renminbi products in Hong Kong. In the initial stage, the programme had 24 securities and nine market makers.

The offshore renminbi bond market saw solid growth. Amongst the issuance, the Ministry of Finance of the People's Republic of China (CMOF) expanded its issuance in Hong Kong to RMB50 billion in the year. In September, the People's Government of Hainan Province and the Shenzhen Municipal People's Government issued offshore renminbi local government bonds in Hong Kong, for the second and third consecutive year respectively. These issuances, which included blue bonds, green bonds, social bonds and sustainability bonds, further enriched the range of renminbi financial products available in the Hong Kong market.

The HKMA continued to work on initiatives to support corporates' business operations and the livelihoods of residents in the GBA. During the year, taking into account suggestions raised by the HKMA and the Hong Kong banking industry, the Mainland authorities introduced a refined cash pooling arrangement for multinational corporates, with pilot areas covering GBA cities. The arrangement provides more flexibility for the business operation fund flow management of corporates with a GBA presence, and is also conducive to Hong Kong's corporate treasury business. The HKMA also actively discussed measures with Mainland authorities to facilitate Hong Kong residents to purchase properties in GBA's Mainland cities. Relevant measures became effective on 26 February 2024, providing Hong Kong residents with a clear, safe and proper channel to remit related funds to the Mainland.

Facilitating communication between Mainland agencies and the financial industry in Hong Kong

The HKMA organised a variety of industry seminars and roundtable discussions involving Mainland regulatory bodies and industry associations, designed to promote financial co-operation with the Mainland and deepen exchanges between the financial industry and Mainland policymakers and industry players. In July, the Chief Executive of the HKMA led a delegation of The Hong Kong Association of Banks on its annual visit to Mainland financial regulators in Beijing. The HKMA also arranged series of seminars for senior representatives from the China Banking Association and received delegations of provincial government representatives, local regulators, and academic groups during the year.

International Financial Centre

Enhancing financial platform competitiveness

Hong Kong's bond market development

Hong Kong as an international bond issuance hub

Hong Kong is a major hub for arranging international bond issuance in Asia. According to the International Capital Market Association, close to US\$90 billion of international bond issuances from the region were arranged in Hong Kong in 2023, equivalent to around a quarter of the market.

Despite an overall slowdown in the Mainland bond market, Hong Kong remained the top arranging hub for debut issuances as well as green and sustainable issuances, which had market shares of 78% and 37% respectively.

For years, Hong Kong's unique connectivity with the international and Mainland capital markets has entrenched its role as the premier offshore financing platform for Mainland issuers. In 2023, around two-thirds of offshore bond issuances by Mainland entities were arranged in Hong Kong. To further support cross-border financing by Chinese enterprises in Hong Kong and to promote the diversified development of the local bond market, the HKMA signed an MoU with the National Development and Reform Commission in October.

Promoting innovation in Hong Kong's bond market

The HKMA has made significant progress in exploring the potential and promoting the adoption of new technologies designed to enhance efficiency, transparency and investor participation in the bond market, including assisting the Government to issue two batches of tokenised green bonds in 2023 and 2024.



Major areas of co-operation under the MoU with the National Development and Reform Commission



Supporting bond issuances by Chinese enterprises in Hong Kong through policy facilitation and support measures



Organising joint promotional activities to enhance market participants' understanding of relevant policies



Promoting the diversified development of the Hong Kong bond market, particularly the green and sustainable finance market and the dim sum bond market



International Financial Centre

HKMA efforts to promote bond market innovation



2021 November Proof-of-concept (Project Genesis)

- Concept-tested the issuance of tokenised green bonds in Hong Kong, in collaboration with the BIS Innovation Hub Centre in Hong Kong



2023 February The world's first tokenised government green bond

- Conducted a ground-breaking real capital markets transaction of HK\$800 million to demonstrate Hong Kong's flexible and conducive environment for innovative forms of bond issuances
- Successfully completed the full set of bond lifecycle events using DLT, from primary issuance to secondary trading settlement, coupon payment and maturity redemption



2023 August Report on Bond Tokenisation in Hong Kong



- Published a report detailing lessons learnt in the inaugural tokenised green bond issuance and discussing possible next steps for promoting wider adoption of the technology
- The report set out the technology and platform design, deal structuring, as well as legal and regulatory considerations of a tokenised bond transaction, offering a blueprint to market participants interested in conducting similar issuances in Hong Kong



2024 February The world's first multi-currency digital bond

- Completed a second tokenised government green bond offering at a larger issuance size and with wider investor participation, bringing tokenised bond further beyond proof-of-concept
- Aggregate issuance size at around HK\$6 billion in four major currencies (Hong Kong dollar, renminbi, US dollar and euro), matching the sizes of many conventional issuances
- Attracted subscription from a wide spectrum of global investors, ranging from asset managers, banks, insurance companies, private banks, to non-financial institutions

The second tokenised green bond offering achieved new breakthroughs in:

- broadening investor participation** via existing market infrastructure, giving investors the option to access the bond via the CMU and its external linkages
- streamlining processes** by issuing in digitally native format
- adopting standardised and machine-readable language** for promoting market efficiency and cross-system interoperability
- enhancing transparency and accessibility of information** by integrating green bond disclosures with the digital assets platform

International Financial Centre

Issuance of Government Bonds

The HKMA, as representative of the Government, arranges issuance of bonds under the Government Bond Programme and Government Green Bond Programme. The primary objective of the Government Bond Programme is to promote further and sustainable development of the local bond market, whereas the Government Green Bond Programme is to promote the development of green finance in Hong Kong, in particular the green bond market.

Government Bond Programme

During the year, the HKMA arranged 16 tenders of institutional government bonds with a total nominal value of HK\$30.5 billion. As at the end of 2023, the total nominal amount of outstanding institutional bonds was HK\$98.5 billion.

On the retail front, the HKMA arranged the issuance of Silver Bonds in August in the amount of HK\$55 billion to Hong Kong residents aged 60 or above, with a tenor of three years. The Silver Bond issuance attracted more than 323,700 applications, with subscription amounts exceeding HK\$71.7 billion. The total nominal amount of retail bonds outstanding as at the end of 2023 was HK\$145.3 billion.



Government Green Bond Programme

Since the launch of the Government Green Bond Programme in 2018, a total of around US\$25 billion equivalent of green bonds, comprising institutional and retail bonds, have been issued. In the 2023–24 financial year, the HKMA assisted the Government to issue a second batch of retail green bond amounting to HK\$20 billion, as well as close to US\$6 billion equivalent of institutional green bonds. More details can be found in the *Enhancing the Green and Sustainable Finance Ecosystem* chapter of the *Sustainability Report 2023*.

Hong Kong as a green and sustainable finance hub

In recent years, the HKMA has continued to push forward various initiatives to further enhance Hong Kong's position as a regional green and sustainable finance hub. See the *Enhancing the Green and Sustainable Finance Ecosystem* chapter of the *Sustainability Report 2023* for more details.



Asset and wealth management

Hong Kong is Asia's largest private equity hub outside the Mainland, with around US\$221 billion in capital under management and around 650 private equity firms as of the end of 2023. The HKMA has continued to work with stakeholders to enhance Hong Kong's private equity platform. By the end of December, 765 Limited Partnership Funds⁴ had been established. The HKMA is currently working with other Government agencies to review the existing tax concession measures applicable to funds and carried interest.

With its unique advantage as the dominant gateway to the Mainland and its unparalleled access to investment opportunities, Hong Kong is well positioned as a private wealth management hub for the region. The HKMA has been partnering with other Government agencies, financial regulators and the financial industry to create a conducive environment for private wealth managers and family offices to set up and operate in Hong Kong. Legislative amendments to provide a more facilitative tax arrangement for family offices operating in Hong Kong were passed by the Legislative Council in May, while the details of a new Capital Investment Entrant Scheme were announced in December. Furthermore, the HKMA and the SFC jointly introduced in July a streamlined approach to improve client experience of sophisticated professional investors while maintaining investor protection.



Mr Darryl Chan, Deputy Chief Executive, hosts the press conference on Silver Bond

⁴ The Limited Partnership Fund regime and the associated re-domiciliation mechanism were introduced in August 2020 and November 2021 respectively.

International Financial Centre

Hong Kong as a hub for corporate treasury centres

Given its role as a gateway to the Mainland and its wide-ranging strengths as an international financial centre, Hong Kong provides corporates with unparalleled access to talent as well as financial and professional services. Since the introduction of the CTC tax regime in June 2016, the HKMA has been actively engaging with the industry to raise awareness of Hong Kong's value proposition as a CTC hub, resulting in a growing number of multinational and Mainland corporates setting up CTCs in Hong Kong.

Hong Kong as a financing hub for infrastructure investments

The HKMA Infrastructure Financing Facilitation Office (IFFO) serves as an important platform that facilitates infrastructure investments by leveraging Hong Kong's status as an international financial centre. The office has around 100 international partners⁵, including key industry stakeholders such as multilateral financial agencies and development banks, project developers and operators, public sector entities and professional service firms. In 2023, IFFO joined the Green Investment and Finance Partnership as well as the Capacity-building Alliance of Sustainable Investment, in order to support the sustainable development of infrastructure projects in the Asia region and Belt and Road countries. In August 2023, the HKMA and IFFO held the first Blended Finance Roundtable which brought together a diverse range of stakeholders to discuss ways of harnessing the power of blended finance to tackle global climate change challenges.

Outreach initiatives

Throughout the year, the HKMA proactively engaged with industry stakeholders to reach out to the broader financial community locally and overseas, helping to better inform decision makers about the resilience of Hong Kong's financial system and the growth opportunities that the city presents.

In 2023, the HKMA conducted 64 seminars, speaking engagements and individual engagements through which it reached out to local and international audiences, including over 25,000 senior executives and professionals from central banks, institutional investors, pension funds, insurance companies, corporates, and ultra-high-net-worth individuals.

Market outreach analysis



Events participated

64

Including:

- Summit and dialogues
- Conferences and forums
- Roundtables and meetings
- Webinars



Audience reached

over 25,000

Channelled through:

- Institutional banks
- Industry associations
- Chambers of commerce
- Individual engagements



Sectors covered

15

Including:

- Banks
- Asset managers/Hedge funds/ Private equity funds
- Asset owners
- Professional service providers
- Corporates

⁵ A full list of IFFO partners is available on the HKMA website (<https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/hkma-infrastructure-financing-facilitation-office/iffo-partners/>)

International Financial Centre

Hong Kong's treasury markets

The HKMA participates actively in international and local discussions in support of the continuing enhancement of the professionalism and competitiveness of Hong Kong's treasury market, and works closely with the Treasury Markets Association (TMA) to this end.

In the year, the HKMA participated in the Global Foreign Exchange Committee and collaborated with the TMA to promote industry adherence to the Foreign Exchange Global Code. The HKMA, the TMA and other industry associations joined hands to raise market awareness of the discontinuation of the London Interbank Offered Rate (LIBOR), and to help the banking and corporate sectors transition away from LIBOR into the respective alternative reference rates. The HKMA also worked with the TMA in engaging local market participants in support of the development of the Hong Kong Dollar Overnight Index Average (HONIA)-linked market, including the continual issuance of HONIA-indexed floating rate notes under the Government Bond Programme.

Over-the-counter derivatives market

The HKMA works closely with the SFC to develop detailed rules for implementing the regulatory regime for the OTC derivatives market in Hong Kong, and to monitor systemic risk and enhance transparency in the OTC derivatives market. Different aspects of the regulatory regime have been introduced in phases⁶. Following public consultations in 2023 on further enhancements to the regime, updated lists of financial service providers and new types of transactions under the mandatory clearing regime were scheduled for implementation in January and July 2024 respectively.

The HKMA participated in several international forums and in the OTC derivatives working groups established under the FSB, contributing to relevant international initiatives and monitoring international regulatory developments closely.

Hong Kong's credit ratings

The HKMA maintains close dialogue with international credit rating agencies to facilitate a balanced and objective assessment of Hong Kong's credit strength and discuss with these agencies concerns about the rating outlook. During the year, S&P Global Ratings and Fitch Ratings maintained Hong Kong's rating at AA+ and AA- respectively. Moody's also maintained Hong Kong's rating at Aa3, but changed the rating outlook to "negative" from "stable".

⁶ The first phase of mandatory clearing and the second phase of mandatory reporting took effect in September 2016 and July 2017 respectively.

International Financial Centre

Hong Kong as a Fintech Hub in Asia

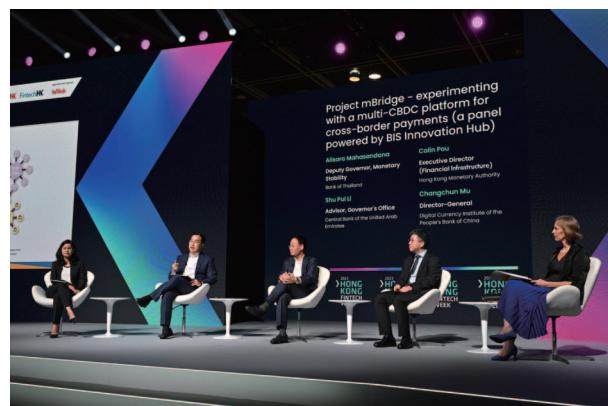
Fintech Adoption in the Banking Sector

With reference to the results of the Tech Baseline Assessment completed in 2022, the HKMA, the SFC and the Insurance Authority (IA) jointly announced a new Fintech Promotion Roadmap in August 2023 to steer further development in the fintech business areas of Wealthtech, Insurtech and Greentech and the technology types of artificial intelligence and DLT. The three regulators are rolling out a series of initiatives to give further impetus to fintech adoption in the financial services sector. These include the Fintech Knowledge Hub, fintech showcase events, roundtables, seminars, training sessions, and the development of practical guidelines and promotional videos.

See page 104 of the *Banking Stability* chapter for more details.

Wholesale Central Bank Digital Currency

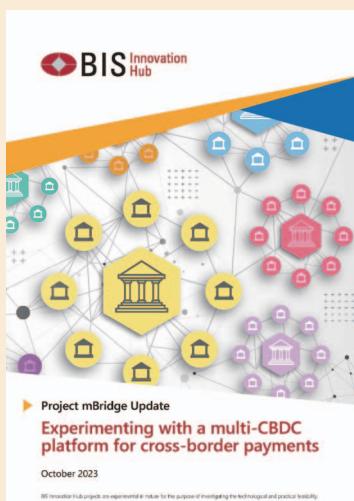
The mBridge project is a collaborative effort between the HKMA, the Bank of Thailand, the Digital Currency Institute of the People's Bank of China (PBoC), the Central Bank of the United Arab Emirates, and the BIS Innovation Hub Centre in Hong Kong. mBridge has now progressed to the Minimum Viable Product (MVP) development phase, and the HKMA aims to launch the MVP in 2024 to pave the way for a production-ready system. A brochure was published in October to provide an update on Project mBridge and outline the next steps (Figure 1).



Panel session on mBridge at Hong Kong FinTech Week 2023

Figure 1

Joint brochure, Project mBridge Update: Experimenting with a multi-CBDC platform for cross-border payments



Published by the HKMA, together with the participating authorities and the BIS Innovation Hub Centre in Hong Kong

The platform developed for Project mBridge is underpinned by custom-built DLT, a set of comprehensive legal rulebook documents and a fit-for-purpose governance structure.



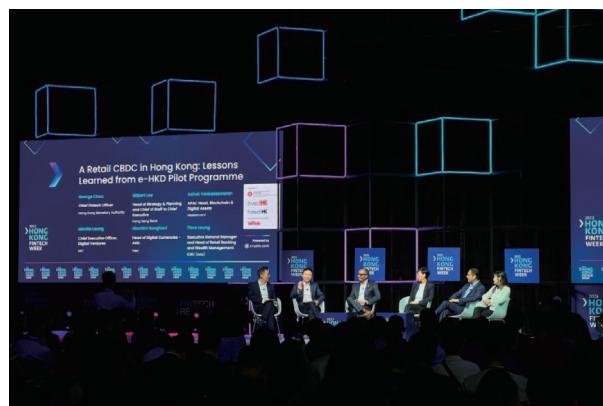
International Financial Centre

Retail Central Bank Digital Currency

To strengthen its research work on CBDC, the HKMA continued its study on the prospect of introducing a retail CBDC in Hong Kong, i.e. an e-HKD, covering both technical and policy considerations. Under the three-rail approach adopted for preparing for the possible implementation of an e-HKD, the HKMA commenced the e-HKD Pilot Programme in May. The first round of pilots under Phase 1 of the programme, involving 16 firms from the financial, payment and technology sectors, took deep dives into 14 potential domestic and retail use cases across six categories⁷.

A report was published in October that covered key learnings from the pilots and the way forward. The pilots under Phase 1 uncovered three areas where an e-HKD could potentially add unique value to the current retail payment ecosystem, namely programmability, tokenisation and atomic settlement (Figure 2).

In November, the HKMA announced its intention to commence Phase 2 of the programme in 2024, in which it will explore new use cases for an e-HKD and delve deeper into select pilots from Phase 1.



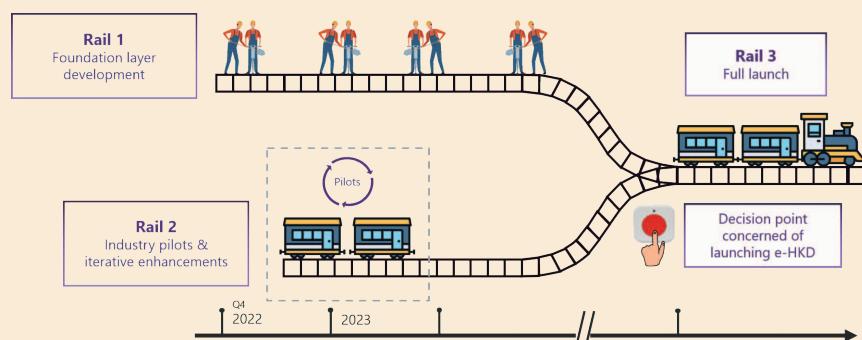
Panel session on the e-HKD Pilot Programme at Hong Kong FinTech Week 2023

Figure 2 Report, e-HKD Pilot Programme Phase 1 Report

The report discussed the key findings, learnings, and the HKMA's assessment of the conducted pilots.



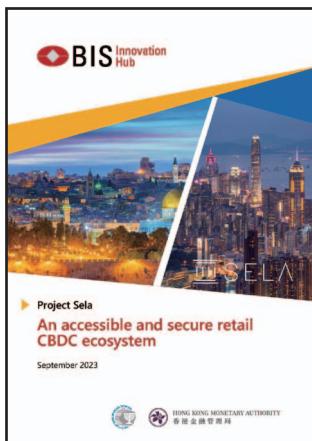
The HKMA has adopted a three-rail approach to pave the way for possible implementation of an e-HKD in the future.



⁷ The six categories of potential domestic and retail use cases include full-fledged payments, programmable payments, offline payments, tokenised deposits, settlement of Web3 transactions and settlement of tokenised assets.

International Financial Centre

Separately, the HKMA successfully completed Project Sela with the Bank of Israel and the BIS Innovation Hub Centre in Hong Kong, and issued a joint report in September. The project provided valuable practical insights into the cybersecurity, technical and policy aspects of a retail CBDC implementation.



*Joint report titled Project Sela:
An accessible and secure
retail CBDC ecosystem*

The HKMA established the CBDC Expert Group in October to facilitate collaboration on CBDC research between the Government and academia. The group is supporting the HKMA's efforts to explore key policy and technical issues surrounding CBDC, and offering advice, training sessions, and workshops pertaining to CBDC and related fintech topics to the HKMA.



The HKMA signs MoUs with five local universities whose faculty members are participants of the CBDC Expert Group

The HKMA has also continued to work with the Digital Currency Institute of the PBoC to expand the scope and scale of testing the use of e-CNY for cross-boundary payments in Hong Kong, including the use of the FPS to top up e-CNY wallets, and with more Hong Kong banks participating. This helps to promote interconnections in the GBA and brings greater convenience to Hong Kong and Mainland tourists by further improving the efficiency and user experience of cross-boundary payments. In addition, an e-CNY pilot project was launched at the Hangzhou Asian Games to support the use of e-CNY by the Hong Kong delegation in the Mainland during that period. Participants were able to top up their e-CNY wallets via the FPS, and experience the cross-boundary use of e-CNY.

International Financial Centre

Commercial Data Interchange

Officially launched in October 2022 by the HKMA, CDI is a consent-based financial data infrastructure that aims to enhance data sharing and promote the development of a data-driven economy. Good progress was made both in its development and adoption during the year, successfully attracting the participation of 26 banks and 13 data providers. Since its official launch, CDI has facilitated more than 13,000 loan applications and reviews, with estimated credit approvals exceeding HK\$11.7 billion as at the end of December.



SME owners share how CDI helps reduce the time and paperwork involved in the loan application process⁸

The HKMA continued to promote the development and active use of CDI during the year. An inaugural Data Summit was held in May to encourage the use of alternative data in banks, with the aim of facilitating experience sharing and exchange of ideas. Newsletters were also published during the year to keep stakeholders informed of key updates and future developments of CDI.



The first Data Summit is attended by over 260 senior representatives from more than 60 banks, data analytics service providers and data providers



Mr Howard Lee (left), Deputy Chief Executive, visits booths set up by various data analytics service providers and data providers at the Summit



Mr Raymond Chan (second from right), the then Executive Director (Banking Supervision), shares his views on how the financial services industry can strengthen its digital capabilities in a panel discussion

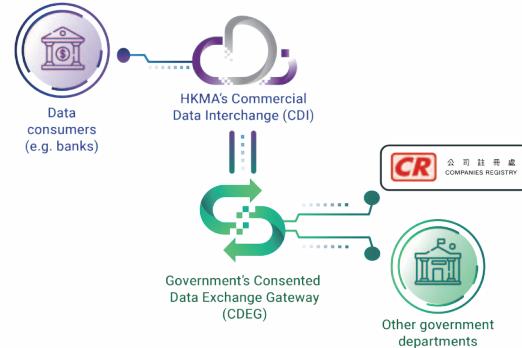
⁸ For more details, see the SME Stories on the CDI website (<https://cdi.hkma.gov.hk/sme-stories/>).

International Financial Centre

The inaugural issue of the CDI newsletter

To fully unlock the potential of data across the financial services industry, a partnership was formed between the HKMA and the IA to enable cross-sectoral data sharing.

The HKMA continued to explore ways to further digitalise and streamline various banking processes, such as Know Your Customer, through CDI. A linkage was successfully established between CDI and the Government's Consented Data Exchange Gateway (CDEG) at the end of December to facilitate consented data sharing between Government departments and financial institutions. Through it, the Companies Registry became the first government data source for CDI, enabling banks to obtain company particulars in a straight-through manner. This established linkage will enable CDI to further contribute to the advancement of Hong Kong's digital economy.



The HKMA works closely with other Government departments to explore data sharing opportunities via the CDI-CDEG linkage

Separately, in a move to explore CDI's potential for enabling cross-border trade-related data exchange, in November, the HKMA and the Financial Services Regulatory Authority (FSRA) of the Abu Dhabi Global Market jointly announced the signing of an MoU to strengthen fintech co-operation between the two authorities.



The MoU signing ceremony is attended by (from left) Mr Nelson Chow, Head (Financial Market Infrastructure Service); Mr Colin Pou, Executive Director (Financial Infrastructure); Mr Wai Lum Kwok, Senior Executive Director – Authorisation & Fintech of the FSRA; and H.E. Shaikh Saoud Al Mualla, Consul General of the United Arab Emirates in the Hong Kong Special Administrative Region

International Financial Centre

Talent development

To expand the fintech talent pool, the HKMA continued to run the Fintech Career Accelerator Scheme in collaboration with its strategic partners to nurture young fintech talent to meet the growing demands in Hong Kong. Over 70 students were recruited by the HKMA and 30 other participating institutions in 2023. Separately, the Industry Project Masters Network (IPMN) scheme launched in 2022, aims to groom fintech talent by giving postgraduate students opportunities to work on real-life fintech projects and gain hands-on experience and skills. The first edition of IPMN was successfully concluded in the year, with over 130 students, 30 industry mentors, and over 30 banks and SVF operators having taken part in fintech industry projects.



Interns of the Fintech Career Accelerator Scheme at Hong Kong FinTech Week 2023

Fintech Sandbox

The Fintech Supervisory Sandbox (FSS) continued to be extensively used by authorized institutions during the year. Up to the end of 2023, a total of 323 pilot trials of fintech initiatives had been allowed in the FSS since its launch in 2016, compared with 274 as at the end of 2022. The HKMA had also received a total of 833 requests to access the FSS Chatroom, with more than 60% of the requests made by technology firms. Since its introduction in 2017, the Chatroom has provided useful supervisory feedback at the early stages of fintech projects.

In collaboration with Cyberport, the HKMA launched the FSS 3.1 Pilot in 2022 to provide development-stage funding support to successful projects under the Government's FinTech Proof-of-Concept Subsidy Scheme, with a view to promoting their commercialisation and wider adoption. As at the end of December 2023, five projects providing regtech and risk management solutions had been approved under the FSS 3.1 Pilot.

Greater Bay Area fintech pilot trial facility

The HKMA, the PBoC and the Monetary Authority of Macao signed an "MoU on Deepening Fintech Innovation Supervisory Cooperation in the Guangdong-Hong Kong-Macao Greater Bay Area" in November, expanding the one-stop fintech pilot trial platform so that pilot trials of cross-boundary fintech initiatives would also cover Macao.



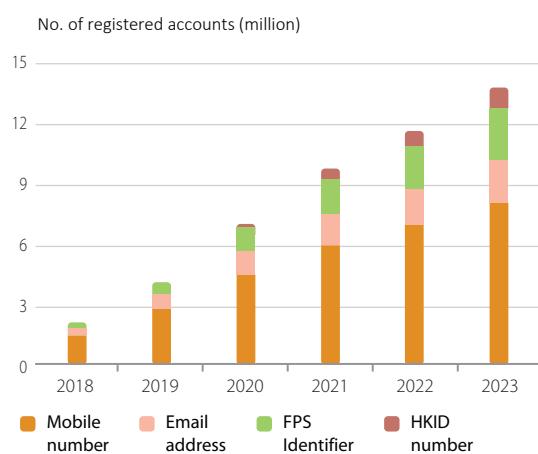
Mr Zhang Qingsong (centre), Deputy Governor of PBoC; Mr Raymond Chan (right), the then Executive Director (Banking Supervision); and Ms Henrietta Lau Hang-kun (left), Executive Director of the Monetary Authority of Macao, sign the MoU at the ChengFang Fintech Forum in Beijing

International Financial Centre

Faster Payment System

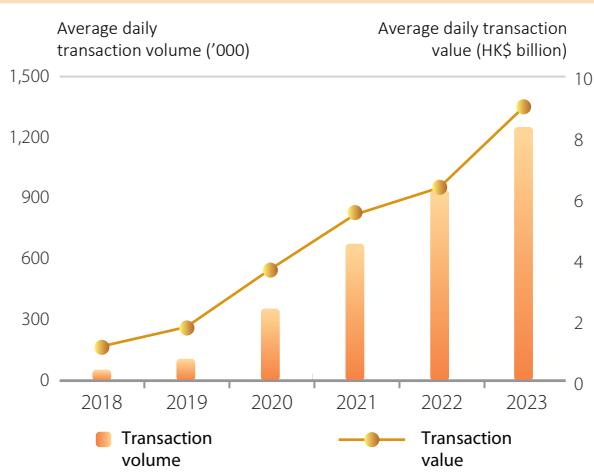
The FPS marked its fifth anniversary in September. The number of registrations has grown steadily since its launch. As of 31 December, the FPS had 13.6 million registrations (Chart 1), up by 19% from a year earlier.

Chart 1 Registrations of FPS proxy identifiers



The adoption of the FPS and FPS turnover continued to grow alongside the increased use of electronic payments. The average daily turnover reached 1.25 million real-time transactions (worth HK\$9.0 billion and RMB355 million) in 2023, 33% higher than in 2022 (Chart 2). The increased use of the FPS has also been spurred by a steady rise in its adoption and a gradual extension of its scope of usage, from primarily person-to-person payments to bill, retail and business payments.

Chart 2 Average daily turnover of Hong Kong dollar real-time payments



The HKMA has been working closely with various Government departments and the banking industry to expand the acceptance of FPS payments from Government bills, designated Government counters and self-help kiosks, to other online Government payments, adopting App-to-App and Web-to-App FPS payment functions in 2023. Users can easily scan the FPS QR codes displayed on webpages, or use the FPS Web-to-App or App-to-App payment function on mobile applications. More public services, such as tunnels, leisure facilities and government carparks, now accept the FPS for payments of fees and charges. Currently, over 90% of Government departments have adopted the FPS as a means for accepting payments. The HKMA will continue to assist the Government to broaden its adoption of the FPS for other use cases.

In another positive development, an increasing number of merchants have embraced the FPS to support their business operations. Merchant payments surged to an average of 186,000 transactions⁹ per day in 2023, representing an increase of 27% over 2022. The FPS is commonly used to pay bills, make in-app direct debits, and complete App-to-App or Web-to-App and other online purchases. The increasing popularity of SVF e-wallets also contributed to more account top-up transactions being made via the FPS. The average daily number of top-up transactions rose in 2023 by 64% over 2022.

In order to provide a better customer experience, the system functionality of the FPS has been enhanced to support cross-border credit transfer payments for both Hong Kong dollar and renminbi on a 24/7 basis. Banks will be able to use the FPS to provide more efficient correspondent banking payment services to their customers.

⁹ The figure includes payments to the Government via the FPS.

International Financial Centre

Launch of the Suspicious Proxy ID Alert

An alert mechanism has been introduced to warn users of associated fraud risks before conducting transactions using the FPS. Following collaboration between the HKMA, the Hong Kong Police Force (HKPF), Hong Kong Interbank Clearing Limited (HKICL) and members of the industry including banks and SVF operators, an alert mechanism was launched on 26 November based on information available from the Scameter, an anti-fraud search engine developed by the HKPF. Under this mechanism, users are alerted of the high risk of fraud if the payee's account proxy identifier (proxy ID), including mobile phone number, email address and FPS Identifier, is in the list of proxy IDs labelled as "High Risk" on the Scameter. An alert message will be displayed to users, reminding them to think twice before deciding whether to cancel the transaction or continue with the payment.

FPS payment link with Thailand

The HKMA and the Bank of Thailand jointly launched FPS x PromptPay link for cross-border QR payments between Hong Kong and Thailand on 4 December. This enables travellers from the two jurisdictions to make retail payments by using their mobile payment applications to scan the Hong Kong FPS QR code or the Thai PromptPay QR code displayed by merchants. It provides a safe, efficient, convenient and cost-attractive alternative for retail payments for the general public and travellers, which in turn helps support tourism and economic activities in Hong Kong and Thailand. FPS x PromptPay will also serve as a catalyst for more collaboration on financial innovations in this dynamic region in the coming years.



Mr Eddie Yue (left), Chief Executive, and Dr Sethaput Suthiwartnarueput (right), Governor of the Bank of Thailand, at the launching ceremony of FPS x PromptPay

International Financial Centre

The HKMA continued to promote the use of the FPS in a number of other areas described below.

- To drive the adoption of the FPS by small and medium-sized enterprises (SMEs) and merchants in their business operations, the HKMA encouraged the banking industry to offer simple, easy-to-use and affordable FPS payment solutions to microbusinesses and SMEs to facilitate small merchants to embrace the era of e-payment, which is also one of the HKMA's goals of promoting financial inclusion. To better promote awareness of these FPS payment solutions, the HKMA organised a "FPS x SME" seminar in September, which brought together over 130 representatives from SMEs and the industry. In addition, the HKMA has joined hands with 21 banks and SVF operators in introducing various promotional offers to encourage use of the FPS by corporate and personal users. The HKICL, the operator of the FPS, exempted banks and SVF operators from settlement fees when processing real-time payments from corporates and merchants through the FPS in October. The aim was to encourage banks and SVF operators to pass on the benefit to SMEs and merchants, further driving their use of the FPS.
- Outreach activities to promote the FPS to various SME industry associations were organised. Advertisements were placed in various SME associations' publications and websites to further promote the benefits of adopting the FPS. The HKMA also supported industry events by participating in their seminars for SMEs, charity, education and non-governmental organisations to promote the adoption of the FPS.
- Promotional and customer education videos were launched for FPS x PromptPay to promote the new service and show users how to make cross-border payments to merchants in Thailand and Hong Kong.
- Efforts continued with the industry to promote the giving of electronic lai sees (e-laisees) via the FPS to support environmental protection. Banks and SVFs also developed innovative user interfaces to facilitate the giving of e-laisees, and offered incentives to encourage their customers to do so.



Mr Howard Lee (third from left, front row), Deputy Chief Executive; Mr Colin Pou (second from left, front row), Executive Director (Financial Infrastructure); and Ms Haster Tang (second from right, front row), Chief Executive Officer of HKICL, together with representatives from banks and SVF operators at the "FPS x SME" seminar



Banks and SVF operators set up exhibition booths at the seminar, explaining various FPS payment solutions and offering on-the-spot discounts to SME customers



Online videos are produced to demonstrate the use of FPS x PromptPay and offer smart tips for using this new service

International Financial Centre

Open Application Programming Interface

The HKMA successfully launched all four phases of the implementation set out in the Open Application Programming Interface (Open API) Framework for the Hong Kong Banking Sector, published in 2018. The aim is to facilitate collaboration between the banking sector and third-party service providers (TSPs) in a secure and controllable environment, thereby promoting the development of innovative banking products and enhancing customer experience. Throughout the year, the HKMA continued to facilitate the development and adoption of Open API. A total of 28 participating retail banks progressively offered various Open API functions, covering product information, customer acquisition, account information and transactions.

The number of registered TSPs using banks' Open API grew steadily. As at December, more than 1,500 registrations from these TSPs for using Open API had been recorded, representing year-on-year growth of about 16%, with over 1.4 million banking product applications, account enquiries and payment transactions completed via Open API in the same month, a rise of about 109% over the same period in 2022.

Outreach and collaboration

Since its establishment in March 2016, the FFO has reached out to and liaised with fintech market players in order to facilitate the exchange of ideas among stakeholders. During the year, the FFO organised six events, including panel discussions during Hong Kong FinTech Week 2023. Together, these attracted over 35,000 attendees and more than 5.5 million online views. FFO representatives also spoke at 18 fintech-related events and held over 1,000 meetings with other regulatory authorities, industry organisations, financial institutions, technology firms and startups, as well as handling over 180 enquiries from market participants.

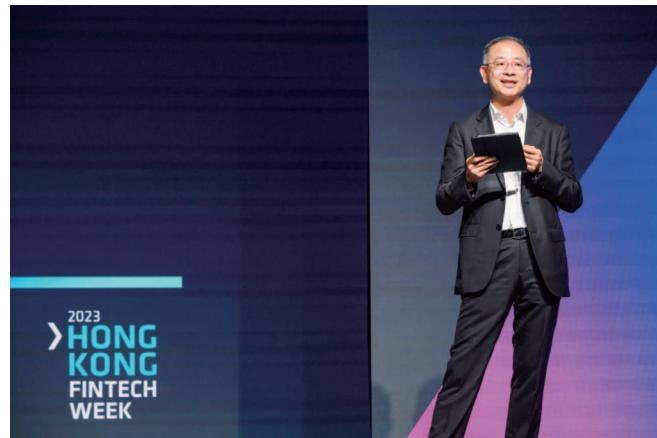
Throughout the year, the HKMA also made considerable efforts to further strengthen cross-border fintech collaboration, including by attending summits and conferences hosted by other jurisdictions regularly.



Mr Paul Chan, Financial Secretary of the Government of HKSAR, speaks at Hong Kong FinTech Week 2023



Mr Eddie Yue, Chief Executive, delivers the opening keynote at Hong Kong FinTech Week 2023, first appearing as an avatar before meeting the audience on stage

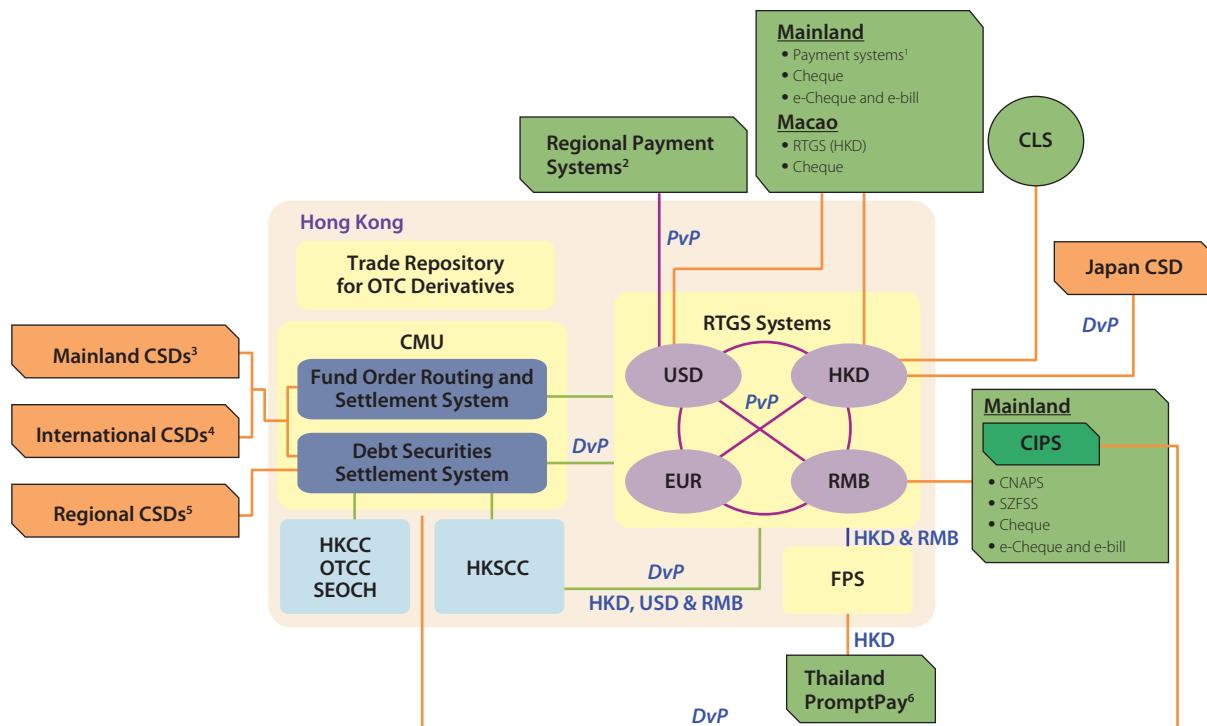


International Financial Centre

Hong Kong's financial infrastructure

The HKMA's multi-currency, multi-dimensional payment and settlement platform, with its extensive domestic and overseas system linkages, continued to operate smoothly and efficiently during the year, helping to maintain Hong Kong's role as a regional hub for the payment and settlement of funds and securities (Chart 3).

Chart 3 Hong Kong's multi-currency financial infrastructure



Note 1: CDFCPS, RTGS links with Shenzhen and Guangdong

Note 2: PvP links with Malaysia, Thailand and Indonesia

Note 3: Cross-boundary links with CCDC and SHCH (Bond Connect) and CSDC (Mutual Recognition of Funds)

Note 4: Cross-border links with Clearstream and Euroclear

Note 5: Cross-border links with Austraclear (Australia), KSD (South Korea) and TDCC (Taiwan)

Note 6: "FPS x PromptPay" link between Hong Kong and Thailand for cross-border QR payment

CCDC – China Central Depository & Clearing Co., Ltd. (settlement system for fixed income securities in the Mainland)

CDFCPS – China's Domestic Foreign Currency Payment System (RTGS system for foreign currency payment in the Mainland)

CIPS – Cross-Border Interbank Payment System

CLS – Continuous Linked Settlement (global multicurrency cash settlement system)

CMU – Central Moneymarkets Unit (settlement system for debt securities)

CNAPS – China National Advanced Payment System (RMB RTGS system in the Mainland)

CSDC – China Securities Depository and Clearing Corporation Limited

FPS – Faster Payment System

HKCC – HKFE Clearing Corp Ltd (central counterparty providing clearing and settlement for futures)

HKSCC – HK Securities Clearing Co Ltd (central counterparty providing clearing and settlement for securities)

Japan CSD (BOJ-NET) – Bank of Japan Financial Network System for Japanese Government Bond Services

KSD – Korean Securities Depository (Korea's central securities depository)

OTCC – OTC Clearing Hong Kong Limited (central counterparty providing clearing and settlement for OTC derivatives)

RTGS – Real Time Gross Settlement

SEOC – SEHK Options Clearing House Ltd (central counterparty providing clearing and settlement for options)

SHCH – Shanghai Clearing House (settlement system for fixed income securities in the Mainland)

SZFSS – Shenzhen Financial Settlement System

TDCC – Taiwan Depository and Clearing Corporation (Taiwan's securities settlement system)

DvP – Delivery-versus-payment

PvP – Payment-versus-payment

International Financial Centre

Hong Kong dollar RTGS system

The Hong Kong dollar Clearing House Automated Transfer System (CHATS), which operates on an RTGS basis, is responsible for clearing Hong Kong dollar interbank payments. It continued to run smoothly and efficiently in 2023, with the daily average turnover reaching a record high transaction value of HK\$1,106.1 billion (30,436 items), compared with HK\$928.1 billion (28,529 items) in 2022.

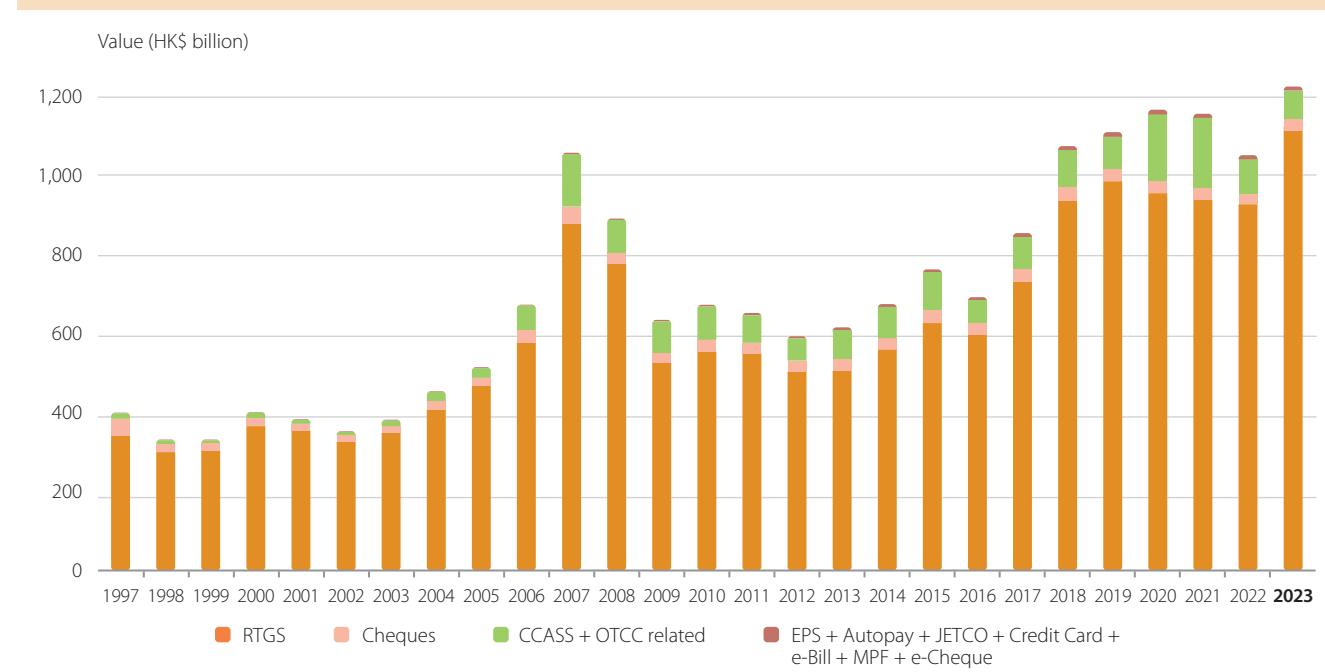
In addition to settling large-value payments, CHATS handles daily bulk clearings and settlement of stock market transactions, Mandatory Provident Fund schemes' switching transactions, credit card transactions, cheques, small-value bulk electronic payment items (EPS, auto-credit and auto-debit transactions) and automated teller machine transfers (Chart 4). HKEX's Fast Interface for New Issuance (FINI) was launched on 22 November. This is a new digital platform

that modernises the initial public offering (IPO) settlement process and shortens the time gap between IPO pricing (on Day T) and trading, from T+5 to T+2. Under FINI, only the IPO allotment money will be settled across the banks via RTGS payments from noon to 5:30 p.m. on Day T, rather than the subscription and refund of over-subscription money via bulk settlement runs which was the case before the launch of FINI.

The FPS serves as an extension of the Hong Kong dollar CHATS, enabling the public to make instant retail fund transfers and payments across different banks and SVFs on a round-the-clock basis. It has been operating smoothly since its inception in September 2018, and had a daily average real-time payment transaction value of HK\$9.0 billion (1,247,564 items) in 2023.

Chart 4

Hong Kong dollar RTGS system average daily turnover



International Financial Centre

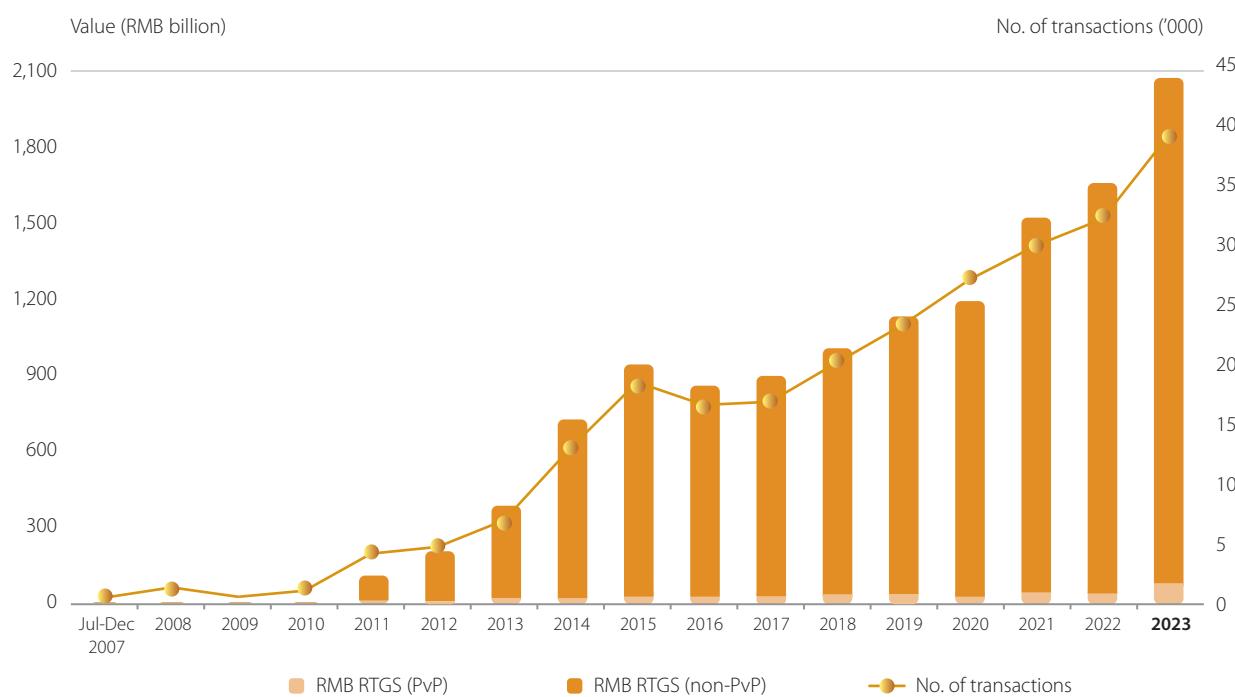
RTGS systems for other currencies in Hong Kong

The renminbi, US dollar and euro RTGS systems all operated smoothly during 2023. The cut-off time of the renminbi RTGS system has been extended in phases since June 2012 from 6:30 p.m. to 5:00 a.m. the next day (Hong Kong time), providing a total of 20.5 hours for same-day value payments. The extension gives financial institutions around the world a much longer operating window to settle offshore and cross-boundary renminbi payments through Hong Kong's

infrastructure. The average daily value of Mainland-Hong Kong cross-boundary renminbi payments amounted to around RMB506 billion in 2023, accounting for 25% of the total turnover.

The average daily turnover and other details of the RTGS systems for other currencies are set out in Charts 5–7 and Table 1.

Chart 5 Renminbi RTGS system average daily turnover



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Chart 6

US dollar RTGS system average daily turnover

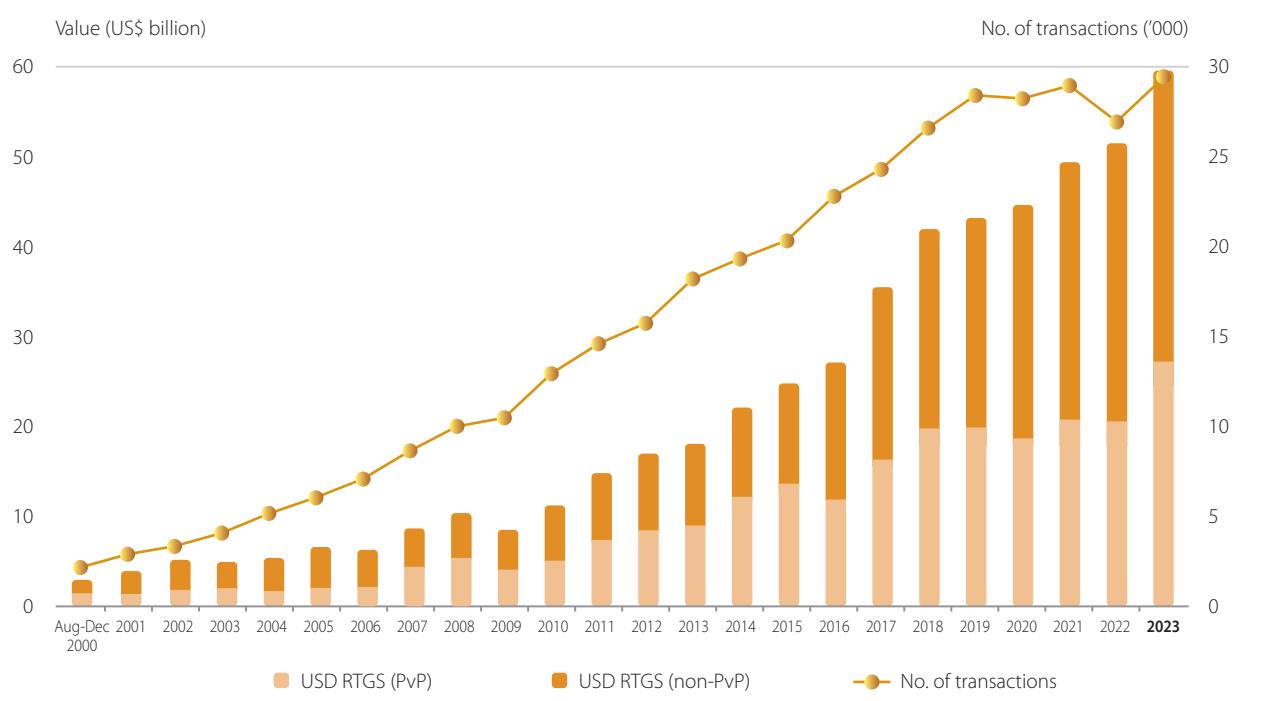
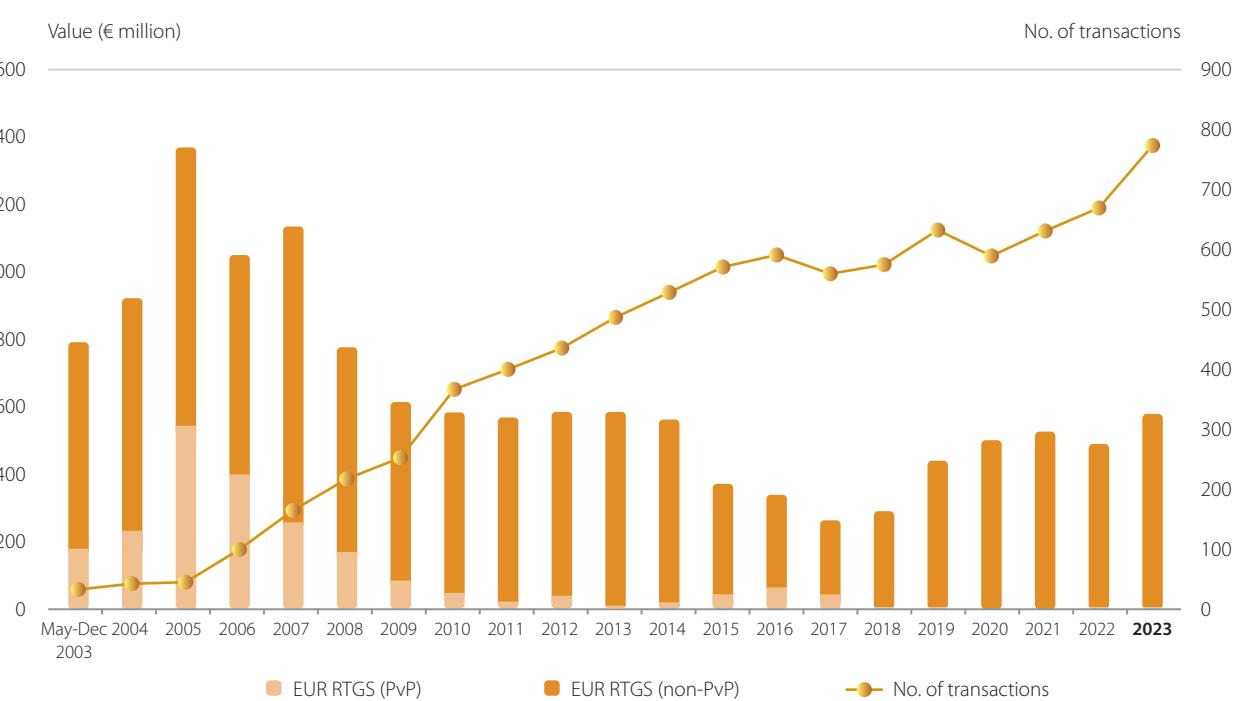


Chart 7

Euro RTGS system average daily turnover



International Financial Centre

Table 1 RTGS systems for other currencies

| RTGS system | Launch date | Settlement institution or Clearing Bank | Number of participants at the end of 2023 | Average daily turnover in 2023 | Average daily transactions in 2023 |
|-----------------------|-------------|---|---|---------------------------------|------------------------------------|
| Renminbi RTGS system | June 2007 | Bank of China (Hong Kong) Limited | Direct: 208 | RMB2,063.6 billion ^a | 38,397 |
| US dollar RTGS system | August 2000 | The Hongkong and Shanghai Banking Corporation Limited | Direct: 114 Indirect: 94 | US\$59.8 billion ^a | 29,471 |
| Euro RTGS system | April 2003 | Standard Chartered Bank (Hong Kong) Limited | Direct: 37 Indirect: 18 | €577 million | 775 |

a. Average daily turnover represented a record high in 2023.

Like the Hong Kong dollar FPS, the renminbi FPS (an extension of renminbi CHATS) has been operating smoothly since its inception in September 2018. It had a daily average real-time payment transaction value of RMB355 million (1,824 items) in 2023.

Payment-versus-payment

Payment-versus-payment (PvP) is a settlement mechanism for foreign exchange transactions which ensures that payments involving two currencies are settled simultaneously. In Hong Kong, six cross-currency PvP links have been established among the Hong Kong dollar, renminbi, US dollar, and euro RTGS systems.

Hong Kong's US dollar RTGS system has also established three cross-border PvP links, with Malaysia's ringgit RTGS system in 2006, Indonesia's rupiah RTGS system in 2010, and Thailand's baht RTGS system in 2014. PvP greatly improves settlement efficiency and eliminates the settlement risk arising from time lags in settlements and time zone differences, known as Herstatt risk. In 2023, the transaction values of Hong Kong dollar, renminbi, US dollar and euro-related PvP transactions amounted to approximately HK\$15,177 billion, RMB20,519 billion, US\$6,387 billion, and €129 million respectively.

To further encourage adoption of PvP, the PvP settlement mechanism has been enhanced to enable US dollar-renminbi foreign exchange transactions to be settled on a multilateral netting basis as scheduled on CHATS, in addition to the current gross mode. This enhancement, launched in February, provides CHATS members with a means to net their funding obligations for these kinds of PvP transactions, thus enabling them to more easily manage their liquidity and foreign exchange settlement risk.

Payment links with the Mainland

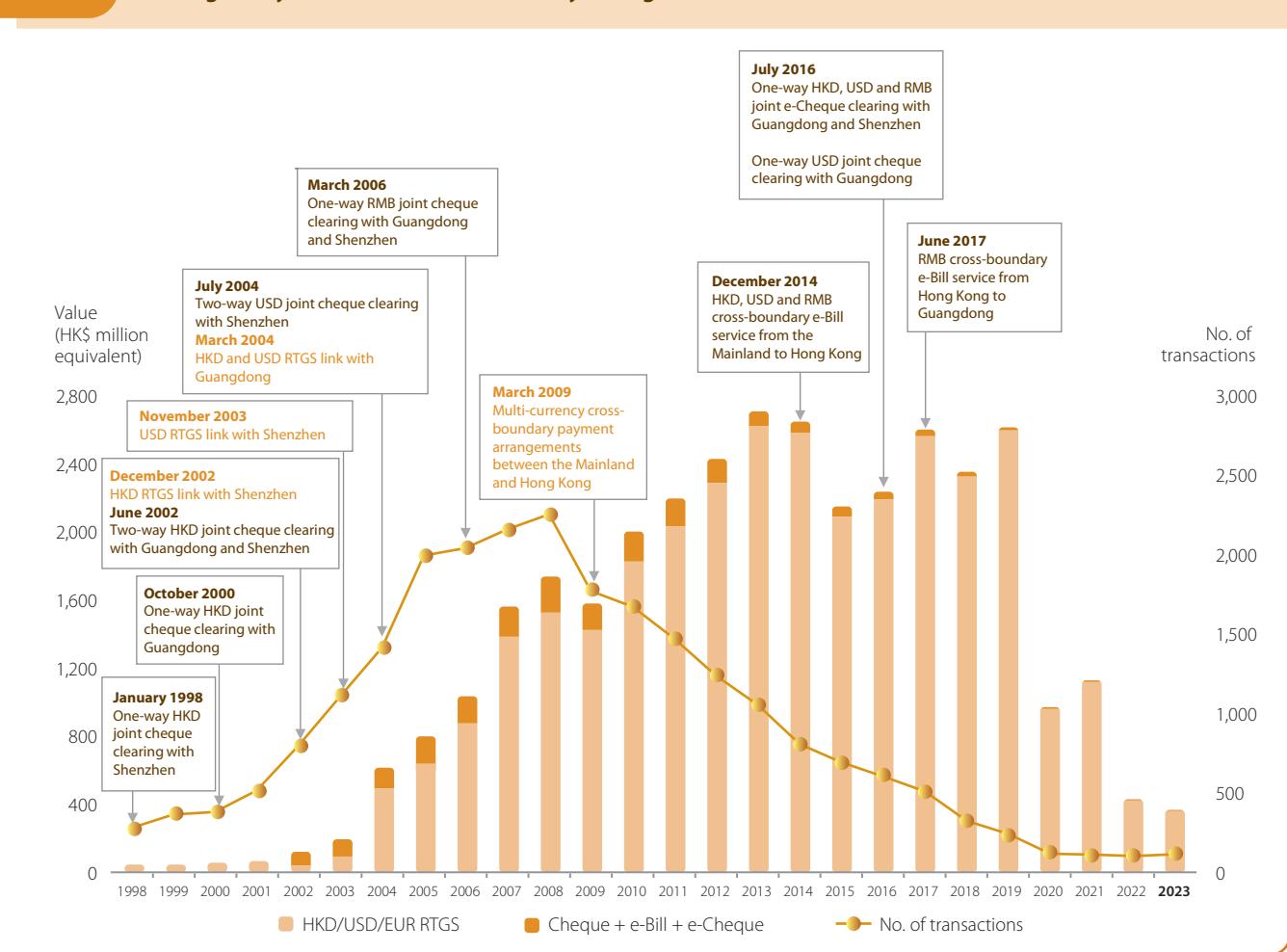
The HKMA works closely with Mainland authorities to provide efficient cross-boundary payment links. In 2023, the average daily turnover of various system links, including RTGS cross-boundary links with Mainland's Domestic Foreign Currency Payment Systems, recorded a total value equivalent to around HK\$0.4 billion (Chart 8). The Hong Kong dollar and US dollar RTGS system links with Shenzhen and Guangdong handled more than 6,500 transactions, with a total value equivalent to HK\$59.2 billion.

The joint cheque-clearing facilities provide clearing service for cheques drawn on banks in Hong Kong and presented in Shenzhen and Guangdong. In 2023, these facilities processed about 11,000 Hong Kong dollar, renminbi and US dollar cheques, with a total value equivalent to around HK\$0.6 billion.

International Financial Centre

Chart 8

Average daily turnover in cross-boundary arrangements with the Mainland



Payment links with Macao

The one-way joint clearing facility between Hong Kong and Macao was launched in 2007 for Hong Kong dollar cheques, and in 2008 for US dollar cheques. In 2023, Hong Kong dollar cheques and US dollar cheques amounting to about HK\$7 billion and about US\$35 million respectively were cleared. To foster financial co-operation between Hong Kong and Macao and facilitate Hong Kong dollar payment flow, a service called the “HKD RTGS linkage between Hong Kong and Macao”, which links the Hong Kong dollar CHATS in Hong Kong and the Hong Kong dollar RTGS system in Macao, was launched on 31 October 2022.

International Financial Centre

Debt securities settlement system

From its initial role providing services in support of the issuance, clearing and settlement of Exchange Fund Bills and Notes and Hong Kong Government bonds, the CMU has evolved to provide multi-currency settlement, clearing and custodian services to debt securities that are denominated in Hong Kong dollar or other currencies. The CMU's linkages with international and regional central securities depositories (CSDs) enable investors outside Hong Kong to hold and settle securities lodged with the CMU, while Hong Kong investors can hold and settle foreign securities held with CSDs outside Hong Kong. By the end of December, the total outstanding amount of debt securities lodged with the CMU had reached the equivalent of around HK\$3 trillion.

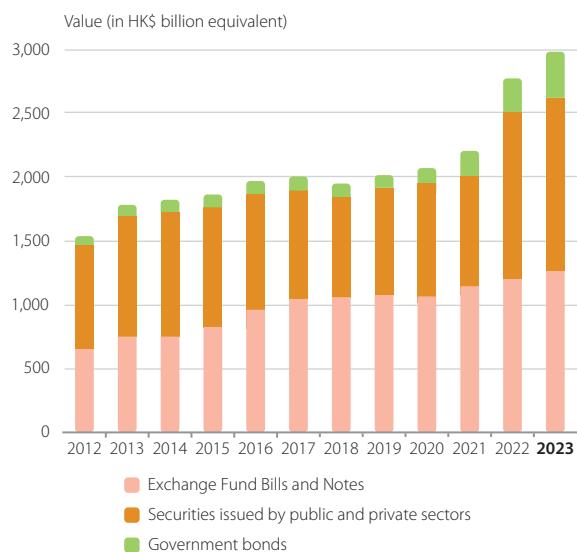
In 2023, the CMU processed an average daily value of HK\$23.0 billion in 241 secondary market transactions (Chart 9). By the end of the year, the outstanding amount of Exchange Fund Bills and Notes, Government bonds and debt securities issued by the public and private sectors stood at HK\$1,255.4 billion, HK\$364.2 billion, and HK\$1,363.9 billion equivalent respectively (Chart 10).

Chart 9 CMU average daily turnover



Chart 10

Outstanding amount of CMU issues

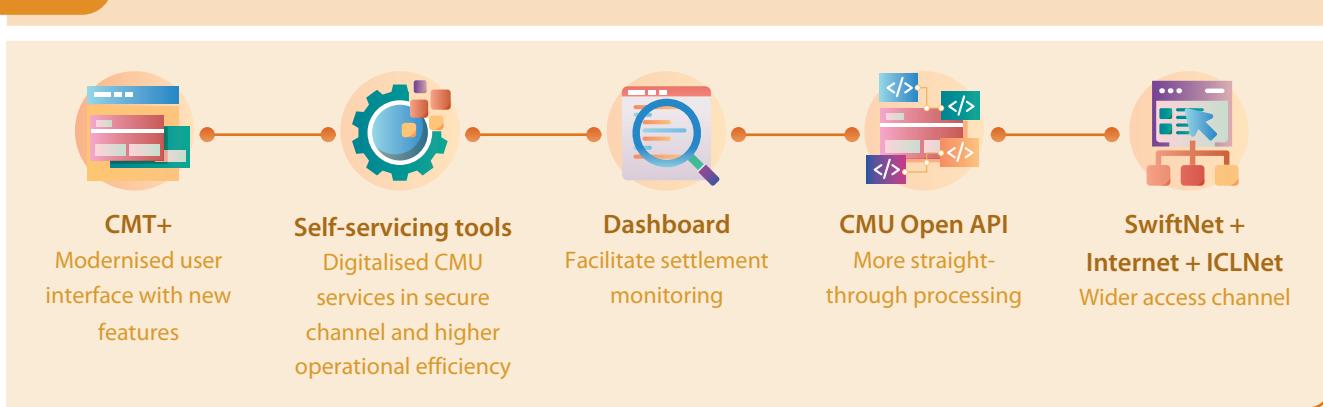


During the year, the CMOF, the PBoC, Mainland municipal governments and corporates also issued renminbi-denominated bonds/bills in Hong Kong through the CMU platform. A total of 12 rounds of bonds/bills issuance were issued for CMOF/PBoC in 2023 with an aggregated issue size of RMB210 billion, compared with RMB143 billion in 2022.

To help Hong Kong capitalise on the further opening up of the Mainland debt market and to support new business initiatives, the HKMA commenced enhancements on the system front by introducing the CMU New Platform in a phased approach. The first phase, successfully launched in July, saw the implementation of a modernised user interface to support various electronic services, including e-lodgement and securities account management (Figure 3). The CMU Open API service was also made available to CMU members to facilitate straight-through processing, increasing automation and operational efficiency. The second phase of the development of the CMU New Platform is underway, which involves enhancing system capability and functionality in order to increase the settlement and operational efficiency of the CMU.

International Financial Centre

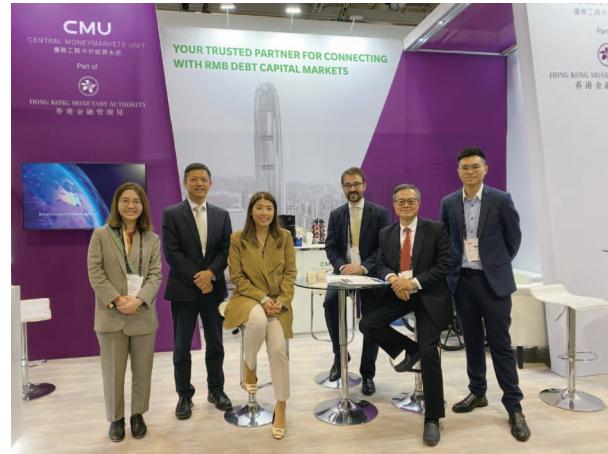
Figure 3 CMU New Platform - Phase 1



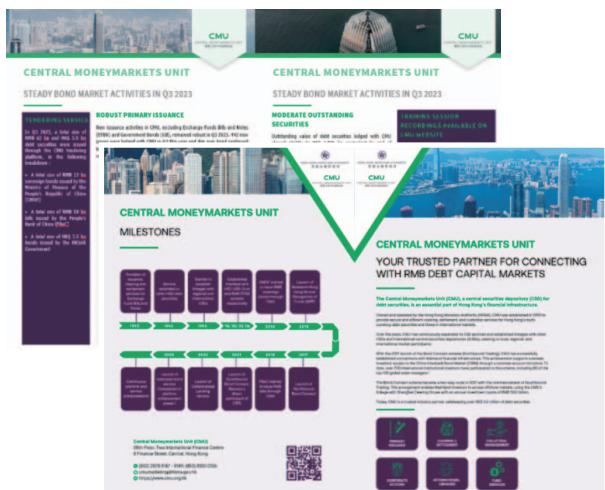
Various marketing and outreach activities have been undertaken to raise the profile and increase recognition of the CMU in the financial community, and to communicate our plans for developing the CMU into a major international CSD. These included participation in conferences and seminars organised by international and local bodies, and the publication of CMU newsletters and online videos. During the year, the CMU exhibited at the Sibos¹⁰ event for the first time. Training sessions on both new and core CMU services were also organised for CMU members to enhance their understanding of the services.



Members of the CMU delegation interact with industry participants and regional/international CSDs at the Sibos event



The CMU delegation at Sibos 2023 organised by Swift in Toronto, Canada



CMU Brochure

¹⁰ Sibos is the annual conference, exhibition and networking event organised by Swift for the financial industry.

International Financial Centre

Over-the-counter derivatives trade repository

By the end of 2023, the HKTR system had recorded 5,017,584 outstanding transactions, compared with 3,956,374 in 2022. The HKMA participated in a number of international discussions and working groups on reporting standards for trade repositories, keeping itself abreast of developments and helping ensure the HKTR continues to meet international standards and best practices.

Hong Kong's retail payment industry

The HKMA promotes the safety and efficiency of the retail payment industry by implementing the regulatory regime for SVFs and RPSs in accordance with the PSSVFO. Under the PSSVFO, the HKMA is empowered to license SVF issuers, designate important RPSs, and discharge supervisory and enforcement functions.

Stored value facilities (including e-wallets and prepaid cards)

The HKMA regulates the SVF licensees (Table 2) under a risk-based approach, drawing on the supervisory experience it has accumulated since the inception of the SVF licensing regime as well as relevant market developments.

During the year, the HKMA followed up with SVF licensees about their progress in implementing enhancements to their account structure and account opening requirements, and provided supervisory guidance to the industry on key issues such as the rolling out of new functions and services. Alongside this, the HKMA proactively engaged with different market participants to raise awareness of issues related to the usage and regulation of SVFs. Over the year, 32 licensing enquiries were received by the HKMA.

The HKMA also provided necessary supervisory guidance to the SVF industry. This included, among other things, guidance to help SVF licensees improve the efficiency and effectiveness of their control systems in the areas of corporate governance, float protection, payment security, and anti-money laundering and counter-financing of terrorism controls.

Table 2

Register of SVF licensees

(in alphabetical order) (as at 31 December 2023)

SVF Licensees

33 Financial Services Limited
Alipay Financial Services (HK) Limited
Autotoll Limited
ePaylinks Technology Co., Limited
HKT Payment Limited
Octopus Cards Limited
PayPal Hong Kong Limited
RD Wallet Technologies Limited
TNG (Asia) Limited
Transforex (Hong Kong) Investment Consulting Co., Limited
UniCard Solution Limited
WeChat Pay Hong Kong Limited
Yintran Group Holdings Limited

Licensed Banks

(currently issuing or facilitating the issue of, or with no objection from the HKMA for issuing or facilitating the issue of, SVFs)^a

Bank of China (Hong Kong) Limited
Bank of Communications (Hong Kong) Limited
Dah Sing Bank, Limited
Hongkong and Shanghai Banking Corporation Limited (The)

a. Pursuant to Section 8G of the PSSVFO (with reference to Section 2 of the PSSVFO and also Section 2(1) of the Banking Ordinance), a licensed bank is regarded as being granted a licence.

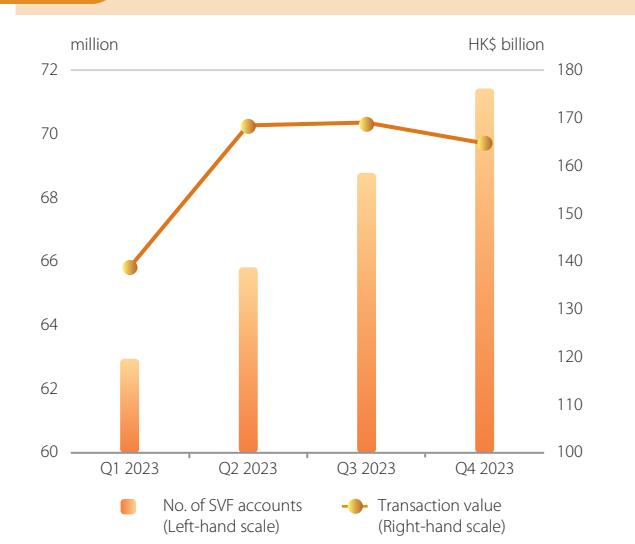
International Financial Centre

As major e-wallet and retail payment operators in Hong Kong have begun providing cross-border retail payment services to users in response to emerging cross-border payment needs, merchants are increasingly accepting SVF in both the Mainland and Hong Kong. The HKMA will continue to work with SVF licensees to ensure that efficient, secure and convenient cross-border payment solutions are being made available to users.

In support of the new round of the Consumption Voucher Scheme announced in the Financial Secretary's 2023–24 Budget, the HKMA actively co-ordinated with the relevant Government agencies and the SVF licensees appointed for the scheme, and promoted dialogue and co-operation between them. In the three-year period that the Consumption Voucher Scheme was in operation, a total of more than 13 million individual SVF accounts and over 220,000 corporate SVF accounts were opened.

The number of SVF accounts stood at 71.4 million as at the end of 2023, or around 9.5 accounts per resident. In the fourth quarter, 2.0 billion transactions totalling HK\$164.5 billion were recorded (Chart 11).

Chart 11 Growth trend of the SVF industry in 2023



Retail payment systems

In accordance with the PSSVFO, six RPSs, which process payment transactions involving participants in Hong Kong, have been designated by the Monetary Authority on the grounds that the proper functioning of these systems is of significant public interest (Table 3). The HKMA adopts a risk-based approach in its oversight of the designated RPSs, which are required under the PSSVFO to operate in a safe and efficient manner. During the year, designated RPSs implemented the additional guidance issued by the HKMA to better manage risk of data breaches arising from system participants' third-party service providers.

**Table 3 System operators of designated RPSs
(in alphabetical order) (as at 31 December 2023)**

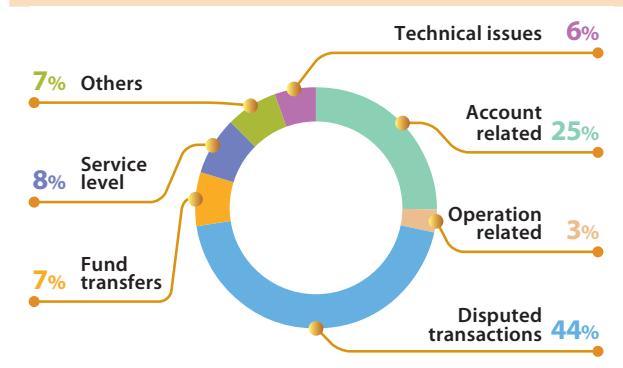
| |
|--|
| American Express |
| EPS Company (Hong Kong) Limited (EPSCO) |
| Joint Electronic Teller Services Limited (JETCO) |
| Mastercard |
| UnionPay International |
| Visa |

International Financial Centre

Complaints and enquiries on stored value facilities and retail payment systems

The HKMA received a total of 645 complaints and enquiries regarding SVF licensees and RPS operators in 2023. Account-related and disputed transactions continued to be the most common types of the 382 SVF complaints received during the year (Chart 12). SVF licensees and RPS operators are required to regularly review their capacity and efficiency in responding to public complaints, and the HKMA monitors the handling of complaints by the SVF licensees and RPS operators to ensure that they are being processed in a fair and timely manner. The HKMA also reviews all the complaints and enquiries it received, following up with relevant SVF licensees and RPS operators if potential supervisory issues are identified.

Chart 12 SVF complaints received in 2023



Since the inception of the Retail Payment Oversight Division in December 2015, it has received around 3,100 complaints and enquiries. The HKMA handled some cases referred to the Ombudsman, but none of which was upheld. In the year of 2023, no cases were referred to the Ombudsman.

Enhancement of the process for handling complaints against SVF licensees and RPS operators

To enhance the efficiency and effectiveness of complaints handling work, and as part of its digitalisation programme, the HKMA is committed to upgrading its system for handling complaints regarding SVF licensees and RPS operators and enhancing the support available to the public. Its goals are to achieve the following outcomes:

- Meeting performance pledge
- Producing accurate and detailed data analysis
- Providing online complaint form
- Deploying speech-to-text technology
- Enhancing communication with SVF licensees, RPS operators, and the public

Under its digitalisation programme, the HKMA has deployed visualisation tools to help understand emerging trends and facilitate more data-driven perspectives. The HKMA has continued to enhance existing technology tools and adopt new ones, for instance by utilising robotic process automation in its investigative processes as well as speech-to-text technology to support the automatic transcription and analysis of audio recordings. Benefits include freeing up staff from repetitive duties and enabling them to focus on higher value-added tasks.

Regulation of stablecoin issuers and crypto-asset-related work

On 27 December, the Financial Services and the Treasury Bureau and the HKMA issued a public consultation paper on the legislative proposal to implement a regulatory regime for stablecoin issuers. In finalising the proposed regime, the HKMA will consider the feedback received from the public consultation, while continuing to engage with different stakeholders, monitor market developments and participate in international discussions. With a view to facilitating the subsequent implementation of the regulatory regime, the HKMA introduced a sandbox arrangement on 12 March 2024 which serves as a channel for the HKMA to communicate its supervisory expectations to institutions planning to issue fiat-referenced stablecoins in Hong Kong, and obtain feedback from them.

In the meantime, the HKMA actively participated in international discussions and co-ordination work on the regulation of crypto-asset activities. In particular, it has been contributing to the work of the FSB in assessing and addressing the financial stability risks and vulnerabilities associated with multi-function crypto-asset intermediaries, stablecoins, decentralised finance and tokenisation, among others.

International Financial Centre

Hong Kong Academy of Finance

The AoF was set up in June 2019 to serve as a centre of excellence for the development of financial leadership, and as a repository of knowledge for monetary and financial research, including applied research. In 2023, the AoF's leadership development and research efforts focused on key contemporary developments in the financial sector, including fintech and digitalisation, green finance and environmental, social and governance (ESG) issues, and the GBA and the Mainland.

The AoF's Leadership Development Programme included a diverse range of activities. Seminars in physical and hybrid formats were held, including six sessions of the Distinguished Speakers Series featuring world-renowned speakers (Table 4). The discussions covered global economic and geopolitical developments and financial market issues, as well as the speakers' personal success stories. A roundtable on *Antitrust, Privacy, Cybersecurity, Sanctions, and FDI* was also held. The AoF also co-organised a number of events with other organisations, including the Government's Civil Service College, the IA, the International Finance Forum, the Hong Kong Green Finance Association and The Hong Kong University of Science and Technology. In particular, the AoF co-organised the high profile *Conversations with Global Investors* seminar on 8 November in collaboration with the HKMA and the SFC, as part of the Global Financial Leaders' Investment Summit.



Mr Paul Chan, Financial Secretary of the Government of HKSAR and Honorary President of AoF, gives opening remarks at the International Finance Forum co-organised by AoF



Mr Zhou Xiaochuan (middle), former Governor of PBoC, shares insights on the economic system and monetary policy tools in an AoF seminar moderated by Mr Arthur Yuen (right), Deputy Chief Executive of HKMA and Deputy Chairman of AoF. Mr Eddie Yue (left), Chief Executive of HKMA and Chairman of AoF, attends the seminar



Mr Jamie Dimon, Chairman and Chief Executive Officer of JPMorgan Chase & Co., discusses a range of geopolitical, banking and financial issues pertinent to the US, Hong Kong, and international finance in an AoF seminar



The "Conversations with Global Investors" seminar at the Global Financial Leaders' Investment Summit

International Financial Centre

Table 4 Distinguished Speakers Series in 2023

| | |
|--|--|
|  16 Feb | Mr Jonathan Gray President and Chief Operating Officer, Blackstone |
|  30 May | Ms Julia Leung Chief Executive Officer, Securities and Futures Commission |
|  2 June | Mr Jamie Dimon Chairman and Chief Executive Officer, JPMorgan Chase & Co. |
|  12 July | Dr Richard Clarida Global Economic Advisor, PIMCO and former Vice Chairman of the US Federal Reserve |
|  29 Nov | Mr Zhou Xiaochuan Vice Chairman, Boao Forum for Asia and former Governor of People's Bank of China |
|  11 Dec | Mr Al Gore Chairman, Generation Investment Management and former US Vice President |

Building on the success of the inaugural Financial Leaders Programme in 2022, the AoF continued the Programme in 2023 with the aim of inspiring financial talents, equipping them with a leadership mind-set and the ability to look at issues from a macro perspective, and expanding their networks. The 2023 cohort comprised 23 promising financial talents. During the nine-month programme, the graduates took part in in-depth discussion sessions with over 30 distinguished leaders from regulatory bodies and many other industry sectors, and went on an inaugural four-day field trip to Shenzhen in September 2023. The 2024 Programme will begin in April 2024.

During the year, the AoF expanded its membership and recruited more up-and-coming talents to help create a pipeline of future leaders. Members of the AoF are senior management and promising talents from financial institutions, regulators, professional firms and academia in the field of finance.

Many of the AoF's events were made available online, with some broadcast to online financial platforms in the Mainland. This not only attracted a much larger audience from within and outside Hong Kong, but also improved the recognition of the AoF and enhanced the reputation of Hong Kong as an international financial centre. The AoF continued to publicise its activities digitally through its YouTube channel, website, quarterly newsletters and social media channels, further establishing itself as a reputable platform for knowledge exchange and insights into economic and financial issues, particularly those related to Hong Kong and the Mainland.

International Financial Centre

The research arm of the AoF, the Hong Kong Institute for Monetary and Financial Research (HKIMR), published three applied research reports in 2023 on cross-boundary payment and settlement systems in the GBA, the digitalisation of financial services in Hong Kong, and advancing talent development in financial services. The HKIMR also published four applied research papers covering topics on ESG, market microstructure, and connectivity between financial markets. These research outputs were widely disseminated to local and international market participants, regulators and academics, and received positive responses from the financial community. In September, the HKIMR became a founding member institution of the ASEAN+3¹¹ Finance Think-tank Network (AFTN), which aims to strengthen co-operation and collaboration among economic and financial think tanks and research organisations across the region. A signing ceremony was held on 29 September to formalise the establishment of the AFTN.



The HKIMR signs a Memorandum of Co-operation to join the ASEAN+3 AFTN as a founding member institution

Cross-boundary Payment and Settlement Systems in the Greater Bay Area
Current Practices and Recent Developments
March 2023

Hong Kong Institute for Monetary and Financial Research
HKIMR Applied Research Report No.1/2023

HKIMR HONG KONG INSTITUTE OF FINANCE

The Digitalisation of Financial Services in Hong Kong
Recent experience, regulatory developments and considerations for sustainable innovation and growth
July 2023

Hong Kong Institute for Monetary and Financial Research
HKIMR Applied Research Report No.2/2023

HKIMR HONG KONG INSTITUTE OF FINANCE

Advancing Talent Development in Financial Services
Emerging Global Trends and Their Impact on Hong Kong
December 2023

Hong Kong Institute for Monetary and Financial Research
HKIMR Applied Research Report No.3/2023

HKIMR HONG KONG INSTITUTE OF FINANCE

Applied research reports released by the HKIMR during the year

¹¹ ASEAN+3 comprises the ten Association of Southeast Asian Nations (ASEAN) member countries (Brunei, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam), together with China, Japan and South Korea.

International Financial Centre

International and regional co-operation

Participation in the international financial community

The HKMA participates actively in central banking and regulatory forums to contribute to global financial stability.

The HKMA is a member of the FSB Plenary, the FSB Standing Committee on Assessment of Vulnerabilities and the FSB Standing Committee on Supervisory and Regulatory Cooperation. Under the FSB, the HKMA actively contributes to the work on non-bank financial intermediation (NBFI), crypto-assets and financial innovation, and cross-border payments, among other topics. It was a member of the FSB Steering Committee group on NBFI, which, until its termination in late-2023, was charged with organising and providing strategic direction on NBFI-related initiatives within the FSB, as well as ensuring effective co-ordination with standard-setting bodies in this area. The HKMA also co-chaired the FSB's Non-bank Monitoring Experts Group until June, which publishes the annual Global Monitoring Report on NBFI. The report assesses global trends and risks from NBFI and is part of the FSB's policy work to enhance the resilience of the NBFI sector. In addition, the HKMA co-chairs the FSB Regional Consultative Group for Asia starting July for a two-year term, with the aim of promoting interaction between FSB members and non-FSB members in the region on policy initiatives and facilitating exchange of views on financial stability issues.

In other areas, the HKMA co-chairs the Financial Innovation Network under the FSB Standing Committee on Assessment of Vulnerabilities, which monitors and assesses financial innovations from a financial stability perspective. The HKMA also led a team that assessed Switzerland's implementation of Too-Big-To-Fail reforms for global systemically important banks.

As a member of the FSB Cross-border Payments Coordination Group and the Task Force on Cross-border Payments set up by the Committee on Payments and Market Infrastructures under the BIS, the HKMA contributed to the development of priority actions and a G20 roadmap to address the challenges of the existing arrangements for cross-border payments.

The HKMA is a member of the BIS, which aims to provide central banks with a forum for dialogue and broad international co-operation. The HKMA participates in BIS bimonthly meetings and various BIS committees, including the Asian Consultative Council, the Markets Committee, the Committee on the Global Financial System, the Basel Committee and the Committee on Payments and Market Infrastructures. Since September, the HKMA has been chairing the Meeting of Governors from Major EMEs.

The Meeting convenes three times a year to discuss issues of importance to EMEs, including macroeconomic and financial developments and risks, structural changes in the global economy, policy considerations of central banks, and other topical matters.

The BIS opened its Representative Office for Asia and the Pacific, their first overseas office, in Hong Kong in 1998 to serve as a regional centre for the activities of the BIS in Asia. The HKMA maintains a close working relationship with the BIS regional office to promote international standards and best practices among the central banking community in Asia.

In 2019, the BIS Innovation Hub established one of the first BIS Innovation Hub Centres in Hong Kong. The Centre collaborates closely with the HKMA, with its current project focus areas being CBDC, open finance and green finance. As part of Innovation BIS 2025, the medium-term strategy of the BIS, the re-orientation of the BIS Asian Office since 2019 has brought deeper engagement and closer collaboration with Asian central banks.

Separately, since 2021 the HKMA has been co-chairing the Policy and Standards Group, which leads the Basel Committee's work on the development and implementation of common prudential standards. For details about the HKMA's participation in the Basel Committee, see the *Banking Stability* chapter on page 105.

International Financial Centre

HKMA-BIS Joint Conference

The HKMA and the BIS co-organised an international financial regulatory conference in March in Hong Kong, which brought together over 100 senior officials from central banks and regulatory authorities as well as top executives of financial institutions from more than 25 economies. The event marked Hong Kong's first large-scale conference for the international financial regulatory community following the reopening of the boundary between Hong Kong and the Mainland in January and the lifting of all social distancing measures in the city in early March.



Mr Pablo Hernández de Cos, Governor of the Bank of Spain and Chair of the Basel Committee on Banking Supervision, delivers the keynote speech

The Conference followed a two-day meeting of the Basel Committee held in Hong Kong, the first physical meeting of the Committee held outside of Basel since the outbreak of the pandemic in 2020. It featured discussions on the latest banking regulatory and supervisory policies to help maintain global financial stability.



(From left) Mr Norman Chan, Senior Advisor of AoF and Former Chief Executive of HKMA; Ms Victoria Saporta, Executive Director of the Bank of England; Mr Makoto Minegishi, Deputy Director-General of the Bank of Japan; Mr Wayne Byres, Former Chair of the Australian Prudential Regulation Authority; and Mr Bill Winters, Group Chief Executive of the Standard Chartered Bank PLC at the panel "How regulatory authorities and banks cope with an ever-changing financial world"

International Financial Centre

Regional co-operation

The HKMA is committed to regional co-operative initiatives to promote financial stability in Asia and harness the region's collective voice in international financial affairs.

The HKMA continued to chair the EMEAP Working Group on Financial Markets in 2023. The Working Group is responsible for making policy recommendations on central bank services and developments in the foreign exchange, money and bond markets. Under the HKMA's chairmanship, the Working Group introduced new enhancements to the Asian Bond Fund initiative to further increase its accessibility for investors and to grow the fund assets.

The HKMA continued to chair the EMEAP Study Group on Resolution, which supports knowledge sharing among authorities in the region in relation to resolution. The HKMA also continued to lead the Monetary and Financial Stability Committee's half-yearly Macro-Monitoring Report, which enables the central banking community to assess the region's risks and vulnerabilities and understand the policy implications.

On the regional front, as part of its ongoing efforts to strengthen Hong Kong's connections with other Asian economies and support their development, the HKMA co-organised the inaugural Financial Leadership Training Programme with the ASEAN+3 Macroeconomic Research Office and the Asian Development Bank Institute for senior representatives from central banks, ministries of finance and related government agencies of the ASEAN+3 economies.

Supporting the Global Financial Safety Net

The pandemic and macroeconomic environment have together highlighted the importance of the Global Financial Safety Net in safeguarding financial stability. As a member of the global financial community, Hong Kong has maintained its commitment to strengthening the Global Financial Safety Net through its participation in the International Monetary Fund (IMF) New Arrangements to Borrow (NAB)¹², ASEAN+3, and the Chiang Mai Initiative Multilateralisation (CMIM)¹³.

Collaboration with the Middle East

The HKMA visited the Middle East to bolster ties with key financial stakeholders, and to lay a solid foundation for long-term financial co-operation between Hong Kong and Middle Eastern countries.

The HKMA held bilateral meetings with the Central Bank of the United Arab Emirates and the Saudi Central Bank in May and July respectively. The meetings explored the potential for joint collaborations in areas including financial infrastructure development, open market operations, financial market connectivity between the two jurisdictions, virtual asset regulations and developments, and sustainable development. The HKMA will continue to deepen its collaboration with the two central banks with the aim of promoting investment and financial market connectivity between the Middle East and Asia.

During the visits, the HKMA also held meetings with the local financial regulators, tech companies, and institutional investors including sovereign wealth funds and family offices to exchange views on a host of topics that aim to extend financial collaboration.

In December, the HKMA and the Dubai Financial Services Authority announced a partnership aimed at exploring the further development of policies to support and enable climate finance in the Middle East and Asia. The flagship initiative of this partnership will be a Joint Climate Finance Conference to be held in Hong Kong in 2024.

¹² The NAB is a stand-by loan facility set up in 1998 to provide supplementary resources to the IMF for lending purposes. Under the NAB, Hong Kong is prepared to extend loans to the IMF when additional resources are needed to deal with exceptional situations that pose a threat to the stability of international financial systems.

¹³ Effective March 2010, the CMIM became a regional financing mechanism that provides short-term US dollar support to member economies facing liquidity shortages. It has 27 participating parties, including the ministries of finance and central banks of the 13 ASEAN+3 countries plus the HKMA. The total access fund stands at US\$240 billion. Further enhancements have been made to optimise the operation of the CMIM. In March 2021, the CMIM agreement was amended to increase the IMF de-linked portion from 30% to 40% of each member's maximum arrangement amount, and to institutionalise the use of local currencies, in addition to the US dollar, for CMIM financing on a voluntary and demand-driven basis.

Reserves Management



The investment environment in 2023 was volatile and challenging. Although some banks in the US and Europe experienced liquidity issues at the beginning of the year, the associated risks did not spread across the financial markets. While levels of inflation in major developed economies have declined from their peak in 2023, they have remained above the targets set by major central banks. Following an aggressive rate hike cycle, the US Federal Reserve has paused hiking rate since the third quarter, and indicated that the policy rate was likely at or near its peak. This, coupled with a resilient US economy, has made investor sentiment more optimistic. However, ongoing geopolitical tensions, such as the Russia-Ukraine war and the outbreak of conflict in the Middle East during the year, added turbulence and uncertainties to the investment market. In this complicated and dynamic investment environment, the investment performance of the Exchange Fund experienced some ups and downs. Despite this, the Exchange Fund managed to achieve a decent investment return. In 2023, the Exchange Fund recorded an investment income of HK\$226.0 billion, representing an investment return of 5.5%.

Reserves Management

The Exchange Fund

The Exchange Fund's primary objective, as laid down in the Exchange Fund Ordinance, is to affect, either directly or indirectly, the exchange value of the currency of Hong Kong. The Fund may also be used to maintain the stability and integrity of Hong Kong's monetary and financial systems in order to help maintain Hong Kong as an international financial centre. The HKMA, under the delegated authority of the Financial Secretary and within the terms of the delegation, is responsible to the Financial Secretary for the use and investment management of the Exchange Fund.

Management of the Exchange Fund

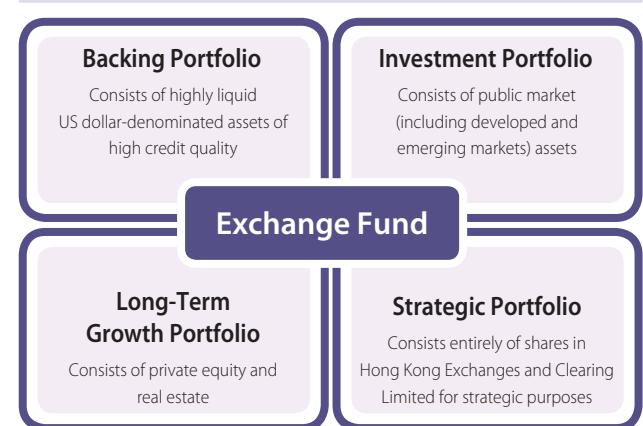
Investment objectives and portfolio structure

The Exchange Fund Advisory Committee (EFAC) has set the following investment objectives for the Exchange Fund:

- (i) To preserve capital;
- (ii) To ensure that the entire Monetary Base, at all times, is fully backed by highly liquid US dollar-denominated assets;
- (iii) To ensure that sufficient liquidity is available for the purposes of maintaining monetary and financial stability; and
- (iv) Subject to (i)–(iii), to achieve an investment return that will help preserve the long-term purchasing power of the Exchange Fund.

These objectives take full account of the statutory purposes of the Exchange Fund, and are incorporated into the portfolio structure and the target asset mix of the Fund (Figure 1).

Figure 1 Portfolio segregation of the Exchange Fund



Broadly speaking, the Exchange Fund has two major portfolios: the Backing Portfolio (BP) and the Investment Portfolio (IP). The BP holds highly liquid US dollar-denominated assets to provide full backing to the Monetary Base, as required under the Currency Board arrangements. The IP invests primarily in the bond and equity markets of the member economies of the Organisation for Economic Co-operation and Development, with a view to preserving the value and long-term purchasing power of its assets.

To better manage risks and enhance returns in the medium and long term, the HKMA diversifies part of the Exchange Fund's investments in a prudent and incremental manner into a wider variety of asset classes. These include emerging market and Mainland bonds and equities, private equity (including infrastructure), and real estate. Emerging market and Mainland bonds and equities are held under the IP, while private equity and real estate investments are held under the Long-Term Growth Portfolio (LTGP). The target asset allocation of the LTGP is determined concurrently with that of other asset classes, subject to prudent risk management principles and portfolio diversification strategy.

The Strategic Portfolio, established in 2007, holds shares in Hong Kong Exchanges and Clearing Limited that have been acquired by the Government for the account of the Exchange Fund for strategic purposes. Due to its unique nature, the Strategic Portfolio is not included in the assessment of the Fund's investment performance.

Reserves Management

Placements with the Exchange Fund

The Exchange Fund, from time to time, accepts placements by the Fiscal Reserves, Government funds and statutory bodies. The interest rate is generally linked to the performance of the IP¹. A major exception is the Future Fund², which links its interest rate to the return of both the IP and the LTGP in accordance with the portfolio mix. The portfolio mix of the Future Fund between the IP and the LTGP was about 35:65 in 2023.

The investment process

The investment process of the Exchange Fund is underpinned by decisions on two types of asset allocation: strategic asset allocation and tactical asset allocation. Strategic asset allocation, reflected in the investment benchmark, represents long-term asset allocation based on the investment objectives of the Exchange Fund. Guided by the strategic allocation, assets are tactically allocated in an attempt to achieve an excess return over the benchmark. This means the actual allocation is often different from the benchmark (or strategic) allocation. The differences between the actual and benchmark allocations are known as "tactical deviations". While the benchmark and tracking error³ limit are determined by the Financial Secretary in consultation with the EFAC, tactical decisions and allowable ranges for tactical deviations are made and set by the HKMA under delegated authority. Within the ranges allowed for tactical deviations, portfolio managers may assume positions to take advantage of short-term market movements.

Investment management

Direct investment

The HKMA's Exchange Fund Investment Office houses the Exchange Fund's investment and related risk management functions. Exchange Fund Investment Office staff members directly manage about 71% of the investments of the Exchange Fund, comprising the entire BP and part of the IP. The part of the IP managed internally includes a set of portfolios invested in global fixed-income markets and various derivative overlay portfolios implementing macro risk management strategies for the Fund.

Use of external managers

In addition to managing assets internally, the HKMA employs external fund managers to manage about 29% of the Exchange Fund's assets, including all of its listed equity portfolios and other specialised asset classes. The purpose of engaging external managers is to tap the best investment expertise available in the market to realise sustainable returns, while also drawing on diverse and complementary investment styles and taking advantage of external market insights and technical expertise in investment.

Expenditure relating to the use of external managers includes fund management and custodian fees, transaction costs, and withholding and other taxes. The expenditure is determined primarily by market factors and may fluctuate from year to year.

Risk management and compliance

As the investment environment becomes more complex, good risk management is increasingly important. The HKMA sets stringent controls and investment guidelines for both its internally and externally managed portfolios, and ensures that a proper risk monitoring and compliance system is in place. Three lines of defence are in place to implement effective risk management and governance of investment-related activities. Key risk categories (including credit, market, liquidity and operational risks) are regularly monitored. The risk management process provides a robust framework that supports the HKMA's strategic planning and investment diversification efforts.

Responsible investment

The HKMA believes that an appropriate emphasis on responsible investment and sustainable long-term economic performance can help better achieve the investment objectives of the Exchange Fund, as well as reduce risks associated with environmental, social and governance (ESG)-related matters of its underlying investments. To embrace responsible investment practices, the HKMA has integrated ESG factors into the investment processes of the Exchange Fund, with the guiding principle that priority will generally be given to ESG investments if their long-term risk-adjusted returns are comparable with other investments. For more details about the HKMA's responsible investment work, see the *Responsible Investment* chapter of the *Sustainability Report 2023*.

¹ The rate is the average annual investment return of the IP for the past six years, or the average annual yield of three-year Government Bond for the previous year, subject to a minimum of 0% (whichever is higher).

² The Future Fund was established by the Government in 2016 with a view to securing higher investment returns for the Fiscal Reserves to support increasing needs in the future.

³ "Tracking error" measures how closely a portfolio follows its benchmark.

Reserves Management

Performance of the Exchange Fund

The financial markets in 2023

The investment environment in 2023 was volatile and challenging.

Global equities were generally on an upward trend in 2023. The Standard & Poor's 500 Index rose by 24% during the year, especially in the fourth quarter as markets began to anticipate sooner-than-expected rate cuts.

In the bond markets, yields remained high, with the 10-year US Treasury yield surging above 5% at one point to reach its highest level since 2007. However, as market expectations of central banks' monetary policies shifted, bond yields retreated towards the end of the year alongside a gradual increase in bond prices.

In the currency markets, the US dollar recorded a mixed performance against major currencies. Among these, the pound sterling and the euro appreciated against the US dollar, while the yen and the renminbi depreciated.

The performance of major currency, bond and equity markets in 2023 is shown in Table 1.

Table 1 2023 market returns

| Currencies | |
|---|---------|
| Appreciation (+)/depreciation (-) against US dollar | |
| Euro | + 3.1% |
| Pound sterling | + 5.4% |
| Renminbi | - 2.8% |
| Yen | - 7.0% |
| Bond markets | |
| Relevant US Government Bond (1–30 years) Index | + 4.0% |
| Equity markets^a | |
| Standard & Poor's 500 Index | + 24.2% |
| DAX Index | + 20.3% |
| FTSE 100 Index | + 3.8% |
| TOPIX Index | + 25.1% |
| MSCI Emerging Markets Index | + 7.0% |
| Hang Seng Index | - 13.8% |

a. Market performance of equities is based on index price change during the year.

Reserves Management

Performance of the Exchange Fund

The Exchange Fund recorded an investment income of HK\$226.0 billion in 2023. This comprised gains on bonds of HK\$144.7 billion, gains on equities of HK\$58.1 billion (with gains of HK\$73.6 billion from foreign equities, and losses of HK\$15.5 billion from Hong Kong equities), a negative currency translation effect of HK\$0.5 billion on non-Hong Kong dollar assets, and gains of HK\$23.7 billion on other investments held by the investment-holding subsidiaries of the Fund.

Separately, the Strategic Portfolio recorded a valuation loss of HK\$4.8 billion.

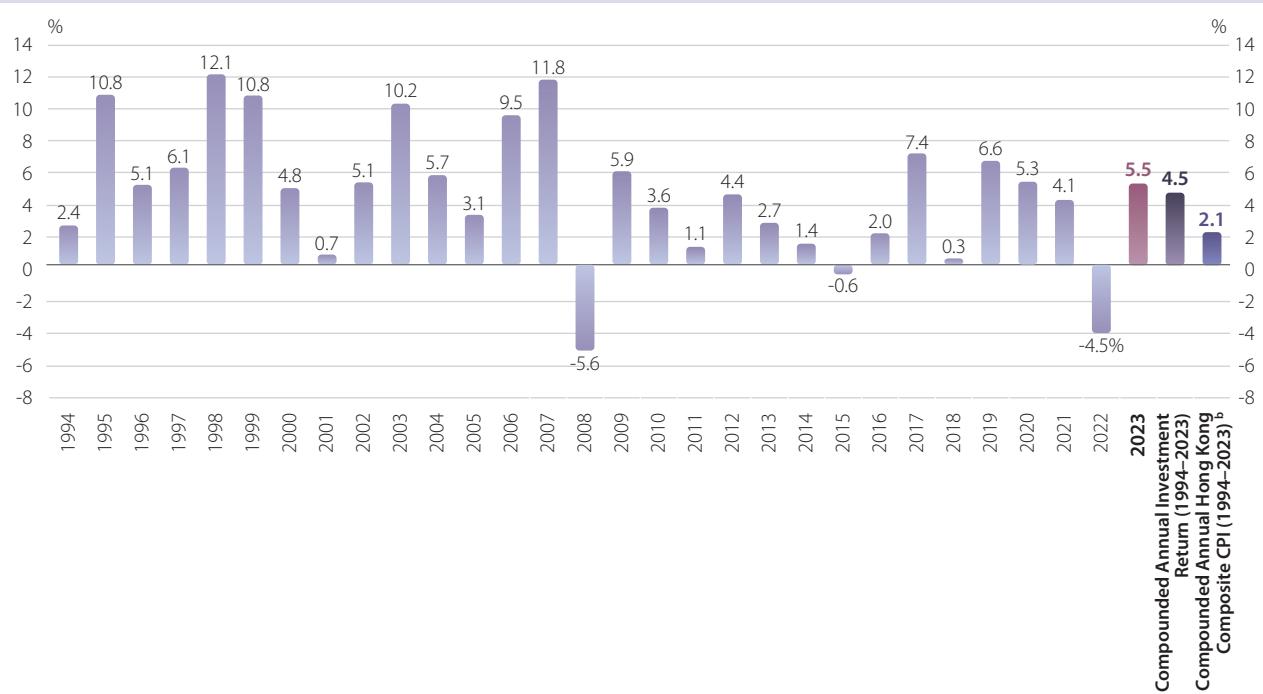
Total assets of the Exchange Fund reached HK\$4,016.5 billion at the end of the year. The market value of investments under the LTGP totalled HK\$517.3 billion, with private equity amounting to HK\$411.9 billion and real estate HK\$105.4 billion. Outstanding investment commitments of the LTGP amounted to HK\$291.1 billion.

The investment return of the Exchange Fund in 2023, excluding the Strategic Portfolio, was 5.5%. The returns of the IP and the BP were 6.4% and 5.0% respectively. The LTGP has recorded an annualised internal rate of return of 11.8% since its inception in 2009.

The annual returns of the Exchange Fund from 1994 to 2023 are set out in Chart 1. Table 2 shows the 2023 investment return and the average investment returns of the Fund over several different time horizons. The average return was 1.6% during 2021–2023, 3.3% during 2019–2023, 2.7% during 2014–2023 and 4.5% since 1994. Table 3 shows the currency mix of the Fund's assets on 31 December 2023.

See pages 205 to 311 for the audited 2023 financial statements of the Exchange Fund.

Chart 1 Investment return of the Exchange Fund (1994–2023)^a



a. Investment return calculation excludes the holdings in the Strategic Portfolio.

b. The Composite Consumer Price Index (CPI) is calculated based on the 2019/2020-based series.

Reserves Management

Table 2 Investment return of the Exchange Fund in Hong Kong dollar terms^a

| | Investment return ^{b,c} |
|-----------------------------|-------------------------------------|
| 2023 | 5.5% |
| 3-year average (2021–2023) | 1.6% |
| 5-year average (2019–2023) | 3.3% |
| 10-year average (2014–2023) | 2.7% |
| Average since 1994 | 4.5% |

a. The investment returns for 2001 to 2003 are in US dollar terms.

b. Investment return calculation excludes the holdings in the Strategic Portfolio.

c. Averages over different time horizons are calculated on an annually compounded basis.

Table 3 Currency mix of the Exchange Fund's assets on 31 December 2023 (including forward transactions)

| | HK\$ million | % |
|---------------------|------------------|-------|
| US dollar | 3,296,713 | 82.1 |
| Hong Kong dollar | 151,193 | 3.8 |
| Others ^a | 568,585 | 14.1 |
| Total | 4,016,491 | 100.0 |

a. Other currencies consisted mainly of the euro, renminbi, pound sterling and yen.

Corporate Functions



Corporate functions support the operations of the HKMA with a high level of transparency, accountability, efficiency and professionalism. To promote public understanding of its policies and operations, the HKMA communicates actively with the community and market participants through traditional and social media, the HKMA website, the Information Centre and other channels.

Internally, the HKMA is striving to build an agile and professional workforce, maintain rigorous financial discipline, and upgrade its digital capabilities in order to adapt to changes and ensure its policies and initiatives are effectively implemented.

Corporate Functions

Transparency

Media relations and use of social media

The HKMA works closely with the media to enhance transparency and promote public understanding of its policies and operations. In 2023, the HKMA held or participated in 188 open press events, comprising 11 press conferences, six media briefings, 15 stand-up interviews and 156 other public functions. Over the course of the year, it also arranged a further 25 media interviews, issued 583 bilingual press releases and handled a large number of media enquiries on a daily basis.

Press conferences and media briefings to raise awareness of the HKMA's key functions were organised for local, Mainland and foreign media. Topics included anti-scam initiatives, Central Bank Digital Currency (CBDC), and stablecoins.

Media representatives were active participants in events organised by the HKMA in 2023, in particular the second Global Financial Leaders' Investment Summit. The three-day event generated over 2,000 pieces of positive, factual news coverage in local, Mainland and international media.



Mr Eddie Yue, Chief Executive, speaks at a media stand-up at the Hong Kong FinTech Week 2023



Mr Eddie Yue, Chief Executive, conducts a media stand-up at the Global Financial Leaders' Investment Summit

Corporate Functions



Mr Arthur Yuen (first from right), Deputy Chief Executive, hosts a sharing session at the Anti-Scam Consumer Protection Charter event



Mr Howard Lee (centre), Deputy Chief Executive, hosts a media briefing on the e-HKD Pilot Programme Phase 1 Report



Mr Darryl Chan (first from left), Deputy Chief Executive, moderates a panel discussion at the Treasury Markets Summit 2023

To engage with the public more effectively, the HKMA operates six social media channels (Facebook, Instagram, LinkedIn, WeChat, X (formerly Twitter), and YouTube), which collectively have over 150,000 followers. The HKMA's major summit and conferences, including the Global Financial Leaders' Investment Summit, are livestreamed on its social media channels to enhance participation by the public and the industry. The HKMA also develops creative social media content to raise public awareness on a range of topics and initiatives. Recent content covered topics such as consumer protection and scam prevention, the Faster Payment System, fintech, green and sustainable finance, and major events of the HKMA.



Creative social media content helps to raise public awareness on the HKMA initiatives and a range of other topics

Corporate Functions

Public enquiries

The HKMA's Public Enquiry Service provides an effective channel for the public looking to better understand key HKMA functions and operations.

In 2023, the Public Enquiry Service handled 9,565 enquiries. About half of these were related to consumer banking issues, banking policies and regulations, financial infrastructure and debt market development, and notes and coins. Some of the common subjects of enquiries concerned banking products and services, the Coin Collection Programme, the Retail Bond Issuance Programme, banking-related guidelines and circulars, and the Faster Payment System.

Chart 1 shows the number of public enquiries received by the Public Enquiry Service since 2020, and Chart 2 provides a breakdown of the nature of enquiries received in 2023.

Chart 1

Total number of public enquiries

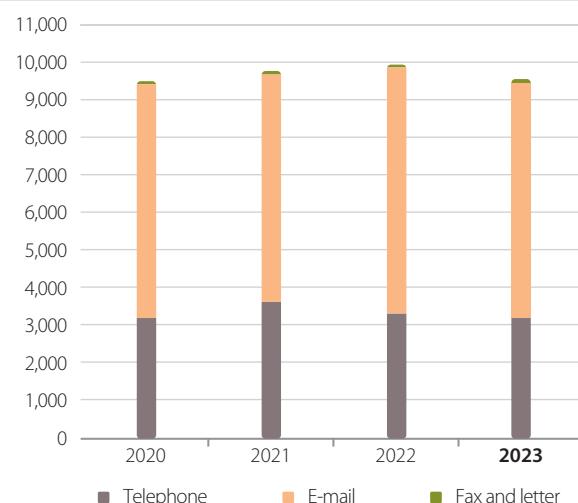
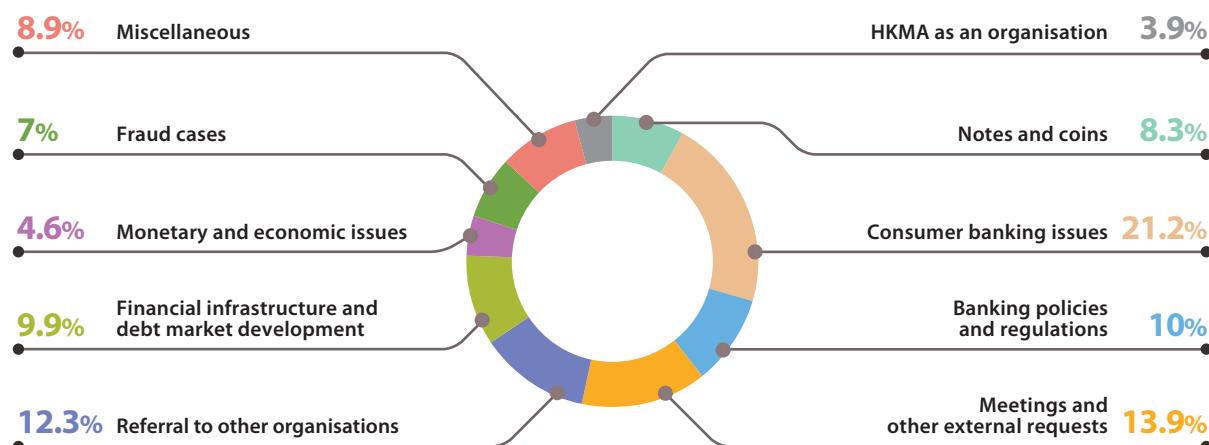


Chart 2

Nature of enquiries received in 2023



Public Enquiry Service Performance Pledge and Achievement Rate



Service

Reply to enquiries



Performance Pledge

Answer or issue an interim reply within seven working days after the day an enquiry is received



Achievement Rate (2023)

100%

Corporate Functions

Publications

During the year, the HKMA published its *Annual Report 2022* along with its first standalone *Sustainability Report 2022*. The *Annual Report 2022* received a Gold Award in the “Non-profit Making and Charitable Organizations” category, the highest ranking within the category, at the Hong Kong Management Association’s 2023 Best Annual Reports Awards. Meanwhile, the *Sustainability Report 2022* won the ESG Award in the Public Sector/Not-for-profit (Large) Category of the Hong Kong Institute of Certified Public Accountants’ Best Corporate Governance and ESG Awards 2023.

In 2023, the HKMA published two issues of its *Half-Yearly Monetary and Financial Stability Report* and four issues of its *Quarterly Bulletin*, and regularly updated its *Monthly Statistical Bulletin* to provide up-to-date and thematic information on and analyses of monetary, banking and economic issues in Hong Kong. The HKMA also published 14 *inSight*¹ articles in which it introduced major new policies and initiatives and discussed topical issues.

Corporate website

The corporate website (www.hkma.gov.hk), with nearly 60,000 pages of content in English and traditional and simplified Chinese, is the public gateway to up-to-date information about the HKMA. It contains the register of authorized institutions (AIs) and local representative offices and the register of securities staff of AIs, both maintained under section 20 of the Banking Ordinance (BO), as well as the register of stored value facility licensees under the Payment Systems and Stored Value Facilities Ordinance.

The HKMA has been releasing financial data and important information on its website via an Open Application Programming Interface (Open API) in phases since 2018. By the end of 2023, the HKMA had opened up 175 sets of Open APIs on its website, in line with its target schedule.

The HKMA’s Open API portal:



Information Centre

Located on the 55th floor of Two International Finance Centre, the HKMA Information Centre consists of an exhibition area and a library designed to introduce the work of the HKMA to the community and enhance public awareness of monetary and banking matters. The interactive exhibition area presents an overview of the HKMA’s work, and of the development of money and banking in Hong Kong, along with information and exhibits useful for the study of Hong Kong’s monetary, banking and financial affairs.

During the year, the Information Centre welcomed more than 31,000 visitors and hosted over 480 guided tours for schools and other groups.

The library, next to the exhibition area, houses over 26,000 books, journals and other publications on Hong Kong’s monetary, banking and financial affairs as well as central banking topics. It also maintains the register of AIs and local representative offices, as well as the register of securities staff of AIs, for public access as required by section 20 of the BO.



Young visitors learn about the design of banknotes in Hong Kong during a guided tour of the Information Centre

¹ *inSight* is the HKMA’s official column, featuring articles written by senior executives.

Corporate Functions



Guided tour of the Information Centre for kindergarten students

Community engagement and public education

Since 1998, the HKMA has been running a public education programme that reaches out to the community to raise public awareness of its work. To date, more than 66,000 people have participated in the public education programme. In 2023, a webinar was organised for over 1,200 students and teachers from 58 secondary schools. The webinar topics included an overview of the HKMA's work, the Linked Exchange Rate System, Hong Kong banknotes, protection of personal digital keys, the Deposit Protection Scheme, green finance, and career opportunities in the banking industry.

The HKMA educates and engages the public on how to be smart and responsible financial consumers. In light of the rise in phishing scams and credit card fraud, the HKMA continued its efforts across different media to remind the public to stay vigilant. A brand new awareness campaign was rolled out following the launch of the Anti-Scam Consumer Protection Charter, emphasising that banks and major merchants have committed not to send hyperlinks via instant electronic messages soliciting personal and credit card information. The HKMA also passed on smart tips on credit cards, personal loans, online shopping, banking services and different payment options (including "Buy Now, Pay Later" products) via radio and social media channels.



A new video and animations with cannibal plant and animal trap are produced with the theme "Protect your Personal Digital Keys; Beware of Fraudulent Links!"

Corporate Functions



Cross-media publicity is produced reminding members of the public not to click on suspicious links

In support of the environment, and drawing on technological advances in financial services, the HKMA encouraged members of the public to give out electronic lai sees (e-laisees) and to consider using good-as-new banknotes for physical lai sees over the Chinese New Year through social media and radio promotions.



Animated video to promote e-laisees

The HKMA also seeks to enhance public understanding of the financial industry and raise young people's interest in pursuing a career in the industry, thus enlarging Hong Kong's talent pool for the financial industry. Following positive feedback for its earlier video series "Four Faces of Talents in Central", the HKMA launched a new video series titled "Financial Special Forces: Unleashing New Horizons" that featured four growth areas in the financial industry: data science, fintech, green and sustainable finance, and wealth management. The video series utilised computer graphics and animation to show seasoned market practitioners supervising young talents as they managed daily work challenges, providing a light-touch introduction to career opportunities and prospects within the industry.

Corporate Functions



A video series "Financial Special Forces: Unleashing New Horizons" is produced to keep the younger generation abreast of career opportunities in finance

To enhance financial literacy among secondary school students, the HKMA worked with other stakeholders to co-organise the "Hong Kong Financial Literacy Championship" for the ninth consecutive year. Under the theme of digital and sustainable economy, the event helped students learn more about money management, green and sustainability, the current state of the financial market and career opportunities. It also included an online quiz that received around 20,000 submissions, mentoring by experienced practitioners from diverse areas, and design thinking challenge.



Mentors from different areas sharing their expertise and experience with students

Corporate Functions

\$mart Money Management 321



The HKMA launched its first financial education board game called “\$mart Money Management 321”, which is jointly designed and developed with a social enterprise specialising in board game production. The board game was designed to help primary school students learn about different payment methods, money management concepts, fintech and cybersecurity in a simulated setting.

The HKMA took a booth at the Hong Kong Book Fair 2023 to promote the board game, which was one of the best-selling items at the Fair. In addition, the HKMA organised a series of free promotional activities, which included workshops in community centres, trials for students in primary schools, and train-the-trainer workshops for primary school teachers and social workers at non-governmental organisations, as well as running a “\$mart Money Management Experiential Centre” at PMQ during the festive season.



The HKMA's first financial education board game, “\$mart Money Management 321”, and the “\$mart Money Management Experiential Centre” receive several international design awards



Following its launch at the Hong Kong Book Fair, the board game is promoted through train-the-trainer workshops, student trial sessions and an experiential centre at PMQ

Corporate Functions

The HKMA also collaborated with different stakeholders in a number of community engagement programmes. One of these was the second phase of a cross-generation outreach educational programme, organised jointly with an educational institution. It included a bank simulation game along with talks targeting kindergarten students, their parents and teachers, and young adults.

The HKMA continued to support the work of the Investor and Financial Education Council in promoting financial literacy and financial capacity in Hong Kong. It will explore further collaboration with different stakeholders to maximise the impact of its community engagement work.

Financial disclosure

To maintain a high level of transparency, the HKMA adopts international standards in financial disclosure insofar as they are applicable to central banking operations. These include the Hong Kong Financial Reporting Standards and other applicable reporting requirements, such as the International Monetary Fund's Special Data Dissemination Standard.

The Finance Division works with external auditors and other accounting professionals to prepare and present the Exchange Fund's financial statements in accordance with the Hong Kong Financial Reporting Standards. The HKMA also provides detailed disclosures and thorough analyses of a wide range of expense items and budgetary information in its *Annual Report*.

Accountability and controls

Risk management

One of the HKMA's most important tasks is to manage risks to the monetary and banking systems. Risk management is undertaken both at a working level in its day-to-day operations, and at a higher level through strategic planning. Two high-level committees, the Macro Surveillance Committee and the Risk Committee, operate under the HKMA's risk management framework. Both are chaired by the Chief Executive of the HKMA.

The terms of reference of the Macro Surveillance Committee are to:

- identify potential risks and threats to the monetary and financial system in Hong Kong and discuss possible measures to address such risks;
- review existing measures for managing risks in the monetary and financial system to identify possible gaps and ensure the adequacy of these measures; and
- encourage cross-departmental sharing of relevant information on macro surveillance with a view to enhancing the macro surveillance capability of the HKMA.

The terms of reference of the Risk Committee are to:

- identify potential risks and threats to the organisation and devise strategies to reduce the impact of such events;
- review the existing system for managing risks across different departments to identify possible gaps and significant risks and ensure the adequacy of measures to address them;
- harmonise the criteria and methods of risk measurement and prioritise the resources management of risks identified; and
- encourage a stronger risk management culture institutionally which promotes the proper levels of authorisation and controls.

The HKMA has a robust operational risk management framework in place that covers its organisational risks at two levels: the entity level and the department level. Entity-level risks refer mainly to those which concern the entire organisation in the medium term, or which might require a cross-departmental response. Any potential or emerging risks identified by business units, and the adequacy of the control measures and mitigating strategies they devise, are reviewed and reported every quarter. This is supplemented by a top-down approach to manage entity-level risks, in which senior colleagues heading different business units actively identify risks of wider impact and propose mitigating measures. The Risk Committee discusses these assessments and decides on appropriate follow-up actions.

Corporate Functions

Internal audit

The Internal Audit Division (IAD) provides independent and objective assessment of the adequacy and effectiveness of the HKMA's governance, risk management and control processes. The IAD reports functionally to the Audit Sub-Committee of the Exchange Fund Advisory Committee (EFAC), and administratively to the Chief Executive of the HKMA. Adopting a risk-based approach, the IAD conducts operational and information system audits to review areas of significant risk. In 2023, the IAD conducted 30 audits on reserves management, banking supervisory activities, monetary and financial development, information technology and other corporate functions of the HKMA. These audits confirmed that adequate and effective control systems were in place to manage potential risks arising from the HKMA's business operations. The IAD also advises on internal controls for major digitalisation projects and new business initiatives. It provides regular risk updates to the Risk Committee, and reports the progress of audits and key internal control matters to the Audit Sub-Committee and senior executives every quarter.

Budgeting and financial controls

In drawing up the annual budget, the HKMA follows a disciplined approach that takes into account its ongoing operations and its strategic development, as set out in its Three-Year Plan approved by the Financial Secretary on the advice of EFAC. The budget process requires departments to assess their needs for the coming year and to review the possibility of making savings in staffing and expenditure by critically assessing the value and cost-effectiveness of their existing services and delivery methods. The Finance Division scrutinises all budget requests in communication with individual departments before submitting a consolidated draft budget, which includes a headcount proposal, for further review by senior management. The Governance Sub-Committee (GSC) of EFAC then deliberates on the proposed budget and recommends any changes it considers necessary, before sending it through EFAC to the Financial Secretary for approval.

All expenditure items are subject to stringent financial controls that are governed by detailed procurement rules and guidelines. Compliance with these guidelines is subject to internal audit, and is also reviewed by independent auditors during the annual audit of the Exchange Fund. Expenses are analysed and reported to senior management every month.

The administrative expenditure in 2023 and the budgeted expenditure for core activities in 2023 and 2024 are shown in Table 1. The difference between the actual 2023 expenditure and the 2024 budget arises mainly from an increase in staff costs, as additional headcounts have been allocated to cope with new initiatives and increased workload, and increases in provisions for maintenance of IT equipment.

Table 2 shows other expenses that are not related directly to the HKMA's own operations. During the year, the HKMA provided financial support (including support for premises and administrative costs) to international organisations whose presence in Hong Kong enhances the city's status as an international financial centre, as well as to certain regional bodies dedicated to setting global standards and promoting regulatory co-operation. Funding to promote the development of Hong Kong's capital markets, including through supporting adoption of green and sustainable finance and fintech, would contribute to the healthy growth and diversification of the market. Spending on financial infrastructure (including spending to support the operation and continued development of payment and settlement systems) enables Hong Kong's financial markets to function efficiently and securely. The HKMA also provides operational support to the Hong Kong Deposit Protection Board on a cost-recovery basis, as endorsed by the Financial Secretary under section 6 of the Deposit Protection Scheme Ordinance.

Corporate Functions

Table 1 Administrative expenditure

| HK\$ million | 2023 Budget | 2023 Actual | 2024 Budget |
|--|----------------|----------------|----------------|
| Staff costs | | | |
| Salaries and other staff costs | 1,881 | 1,568 | 2,024 |
| Retirement benefit costs | | 132 | |
| Premises expenses | | | |
| Rental expenses | 54 | 49 | 62 |
| Other premises expenses (including management fees and utility charges) | 91 | 81 | 100 |
| General operating costs | | | |
| Maintenance of office and computer equipment | 227 | 194 | 250 |
| Financial information and communication services (including trading, dealing terminals and data link charges) | 100 | 82 | 112 |
| External relations (including international meetings) | 91 | 51 | 95 |
| Public education and publicity | 85 | 36 | 68 |
| Professional, consulting and other services | 208 | 118 | 198 |
| Training | 28 | 6 | 30 |
| Others | 18 | 15 | 25 |
| Total administrative expenditure | 2,783 | 2,332 | 2,964 |

Table 2 Additional expenses

| HK\$ million | 2023 Budget | 2023 Actual | 2024 Budget |
|--|----------------|----------------|----------------|
| Financial support to international financial organisations | 57 | 51 | 62 |
| Financial support to the Hong Kong Academy of Finance and the Hong Kong Institute for Monetary and Financial Research | 103 | 70 | 111 |
| Funding to promote the development of Hong Kong's capital markets | – | – | 70 |
| Service fees for financial infrastructure | 175 | 82 | 153 |

Corporate Functions

Staff conduct and discipline

The HKMA places great importance on the integrity and conduct of its staff, expecting them to observe exemplary standards of personal conduct and integrity and to act in the best interests of the organisation. The HKMA Code of Conduct provides guidance to staff on their ethical and legal responsibilities.

The HKMA makes dedicated efforts to remind staff of its conduct-related rules and regulations, including issuing email alerts to raise staff awareness of important conduct issues in areas such as the avoidance of conflicts of interest, prevention of corruption, personal data protection, and anti-discrimination practices. Staff are required to take regular online tests to deepen their understanding of relevant policies, rules and regulations.

Efficiency

Information technology

The Information Technology (IT) Division supports the smooth and efficient operation of the HKMA by maintaining a reliable, secure and resilient IT operational environment. In 2023, all of the HKMA's critical systems registered full operational uptime, enabling the continuous functioning of all essential business processes.

Cybersecurity continues to be a top priority within the HKMA's overall IT strategy. In addition to monitoring emerging cyber threats, the HKMA has enhanced its overall cybersecurity strategy with a view to safeguarding its IT services, data and assets. The enhanced strategy has involved strengthening the HKMA's operating model, making its endpoints more secure, and implementing zero trust design principles. The HKMA has also continued to reinforce its security governance and protection layers in order to enhance resilience and ensure business continuity for all critical systems. The IT Division puts efforts in enhancing the enterprise architecture governance process to ensure that technology investment aligns with the HKMA's overall business strategies.

In 2023, the HKMA has made notable progress in implementing overarching foundational services to enable application modernisation and enhance service observability. The IT Division is exploring the use of public cloud, with the aim of migrating non-sensitive workloads to the public cloud. This move will reduce the total cost of ownership while enabling a more agile IT infrastructure and service environment.

In creating a digital workplace, the HKMA aims to provide staff with modern tools and streamlined processes that will foster collaboration and drive productivity. While the migration of the email system has been progressing according to plan, legacy applications and business processes have been revamped or optimised to enhance efficiency in the workplace.

Digitalisation

Since its inception in 2019, the Digitalisation Programme has been optimising the efficiency of the HKMA's work. It has involved embracing the latest technological advances and innovative solutions in five key areas: banking supervision, anti-money laundering supervision, financial stability surveillance, economic research, and reserves management.

The launches in 2023 of the Common Submission Platform (CSP) for the banking industry and of Data Marketplace were significant steps forward for the HKMA in its digitalisation journey. The CSP is the HKMA's next generation data submission platform, and features a range of submission channels to accommodate the latest technology trends and varying needs across the banking industry. Its user-centric functionalities enable AIs to submit certain data to regulators more easily than before and with enhanced security. Meanwhile, the Data Marketplace is providing data users with a single gateway to all their data needs within the HKMA. It allows them to find and use data conveniently while complying with best practices in data governance and management.

Corporate Functions

These platforms, together with other digitalisation projects, have laid a solid foundation for future developments and expansion. The HKMA has undergone several stages of technical development and process re-engineering in the past few years. In 2024, the Digitalisation Programme will focus on enabling a wider adoption of technologies and data capabilities, fostering a more data-driven culture across the HKMA.

Administration

The HKMA regularly reviews its corporate resources, including the space it has available, to ensure that it can meet its operational needs. For a more efficient use of space and greater seating capacity, the HKMA's offices adopt an open-plan layout with breakout areas for team discussions. Conference rooms and multi-function rooms for meetings and interviews are equipped with audio-visual systems that offer a user-friendly setup for the hosting of web conferences and webinars. Comprehensive office security measures, including access controls, surveillance systems and security personnel, are in place to ensure that office premises, staff and assets remain safe. The HKMA is currently part-way through a multi-year project to implement an electronic record-keeping system, which will enhance its operational efficiency and facilitate further digitalisation. The HKMA also promotes a green and caring workplace; more information can be found in the *Sustainable HKMA* chapter of the *Sustainability Report 2023*.

Legal support

The Office of the General Counsel (OGC) provides legal advice to the HKMA on all aspects of its functions. In 2023, the OGC worked alongside other HKMA departments on matters that included the proposed regulatory regime for stablecoin issuers, the proposed amendments to the BO and its Rules, the issuance of tokenised bonds, the exploration of the legal aspects of CBDCs in the context of the Multiple CBDC Bridge (mBridge) and e-HKD² projects, and the development of Commercial Data Interchange and other data-sharing initiatives.

OGC lawyers also provide legal support relating to the HKMA's participation in international working groups, and respond to consultations on legislative proposals and other matters which may affect the functions and operations of the HKMA.

Settlement services

The Settlement Section provides reliable and efficient settlement services as well as operational support for the HKMA's reserves management, monetary operations and other initiatives. In 2023, the Settlement Section continued to enhance its systems and procedures in order to maintain a high level of operational resilience and efficiency in meeting ongoing and new settlement service demands. Supported by effective and robust operation and system controls, it accurately and securely transferred the funds and assets of the Exchange Fund. The Settlement Section will stay agile in the face of changes arising from the rapid development of the financial industry.

² e-HKD refers to a retail CBDC in Hong Kong.

Corporate Functions

Professional workforce

Establishment and strength

The HKMA recruits, develops and maintains a highly professional workforce to support its policy objectives and respond in an agile manner to changing work priorities.

The establishment of the HKMA in 2023 was 1,056. The HKMA made continuous efforts to support new initiatives as well as the voluminous and complex work through flexible redeployment of existing resources, efficiency enhancement and streamlining of work processes. In 2024, the HKMA will increase its establishment to 1,112 by creating 33 new posts (partly offset by the deletion of three posts) and converting 26 contract posts to permanent posts, in order to cope with its longer-term manpower needs in various areas of work.



HKMA's Core Values

The HKMA is committed to promoting a sound corporate culture which underpins the effective delivery of the important missions of safeguarding financial and monetary stability, as well as strengthening Hong Kong's status as an international financial centre. The core values of the HKMA are:



Integrity

We act with honesty, probity, and impartiality



Professionalism

We pursue professional excellence, intelligent enquiry, innovation, and continuous improvements



Collaboration

We respect and value our people; and promote diversity of views and teamwork



Corporate Functions

Table 3 gives a breakdown of the establishment and strength of the HKMA.

Table 3 Establishment and strength of the HKMA on 1 January 2024

| Department | Functions | Senior staff | | Others | |
|---------------------------------------|---|---------------|-----------|---------------|------------|
| | | Establishment | Strength | Establishment | Strength |
| Senior Executives' Office | Top management of the HKMA | 4 | 4 | 11 | 11 |
| Banking Conduct | To take charge of payment systems oversight, licensing, and all supervisory and development functions relating to the business conduct of AIs | 1 | 1 | 98 | 93 |
| Banking Policy | To formulate supervisory policies for promoting the safety and soundness of the banking sector, enhance the capacity building of industry practitioners, and take charge of the deposit protection function | 1 | 1 | 49 | 46 |
| Banking Supervision | To supervise operations of AIs | 1 | 1 | 198 | 180 |
| Enforcement and Anti-Money Laundering | To investigate and, where appropriate, take enforcement action under relevant ordinances, supervise anti-money laundering and counter-terrorist financing systems, and handle complaints | 1 | 1 | 108 | 99 |
| Exchange Fund Investment Office | To manage reserves in line with established guidelines to achieve investment returns and enhance the quality of returns by diversifying investments into different markets and asset types | 1 | 0 | 117 | 98 |
| Risk and Compliance* | To oversee all risk-generating activities, including investment risks and non-investment-related corporate risks of the HKMA | 1 | 1 | 44 | 42 |
| External | To develop and promote Hong Kong as an international financial centre, foster regional monetary co-operation through participation in the international central banking and financial community, and promote the development of financial markets | 1 | 1 | 68 | 56 |
| Financial Infrastructure | To develop and enhance financial market infrastructure for maintaining and strengthening Hong Kong's status as an international financial centre | 1 | 1 | 21 | 20 |
| Monetary Management | To maintain financial and monetary stability through macro-financial surveillance and monitoring of market operations, license and supervise stored value facilities, designate and oversee important retail payment systems, develop thought leadership and implement policies in digital finance including regulatory regime for stablecoin issuers, take charge of the settlement function, and ensure an adequate supply of banknotes and coins | 1 | 1 | 98 | 88 |
| Research | To conduct research and analyses on economic and financial market developments in Hong Kong and other economies | 1 | 1 | 43 | 40 |
| Office of the General Counsel | To provide in-house legal support and advice | 1 | 1 | 30 | 28 |
| Corporate Services | To provide support in the form of administration, finance, human resources, information technology and secretariat services; handle media and community relations; and provide consumer education | 1 | 0 | 185 | 169 |
| Internal Audit Division | To evaluate and advise on the adequacy and effectiveness of the HKMA's governance, risk management and control processes | 0 | 0 | 10 | 10 |
| Resolution Office | To establish resolution standards, contribute to international resolution policy development, undertake local and cross-border resolution planning, develop operational capabilities to implement resolution, and execute the orderly resolution of a failing AI or a cross-sectoral group if needed | 0 | 0 | 16 | 11 |
| Total | | 16 | 14 | 1,096 | 991 |

* Staff members overseeing investment risks are part of the Exchange Fund Investment Office set-up. For presentational reasons, they are grouped under the Risk and Compliance Department.

Corporate Functions

Remuneration policies

The Financial Secretary determines the pay and conditions of service for HKMA staff on the advice of the GSC through EFAC, taking into account prevailing market rates and practices.

Remuneration comprises a total cash package and a provident fund scheme, with minimal benefits in kind.

The cash package consists of monthly fixed pay (or basic pay) and variable pay that may be awarded to individual staff members as a lump sum once a year, depending on performance.

Pay for HKMA staff is reviewed annually by the Financial Secretary in light of recommendations made to him by the GSC, taking into account the GSC's assessment of the performance of the HKMA in the preceding year, findings of the pay surveys of the financial sector conducted by independent human resources consultants, and any other relevant factors. Special pay adjustments may be made from time to time to reward individual meritorious staff members and to maintain the competitiveness of their pay.

Any approved annual adjustments to the fixed pay and any variable pay are awarded to individual staff members based on their performance. Investment staff members are subject to a variable pay system that seeks to strengthen the link between their investment performance and remuneration award. The pay adjustments and awards for individual staff members at the ranks of Executive Director and above are separately discussed and approved by the Financial Secretary on the advice of the GSC. The staff members concerned are not present at the meetings when their pay is discussed. Pay adjustments and awards for individual staff members at the ranks of Division Head and below are determined by the Chief Executive of the HKMA under delegated authority from the Financial Secretary.

Remuneration of senior staff members

The remuneration packages of senior staff members in 2023 are shown in Table 4.

Table 4

Remuneration packages of senior staff members in 2023^a

| | Deputy Chief Executive/ Senior Executive Chief Executive | Executive Director (average) | Executive Director (average) |
|--|---|------------------------------------|------------------------------------|
| Number of staff members ^b (HK\$'000) | 1 | 4 | 13 |
| Annualised pay | | | |
| Fixed pay | 7,213 | 6,134 | 4,453 |
| Variable pay | 2,172 | 1,834 | 1,135 |
| Other benefits ^c | 826 | 835 | 585 |

a. Except for annual leave accrued, the actual remuneration received by staff members who did not serve out a full year is annualised for the purpose of calculating the average annual package for the rank.

b. The number of staff members in this table includes those who did not serve out a full year. The senior staff members include the Chief Executive Officer of The Hong Kong Mortgage Corporation Limited, the Special Adviser to the Chief Executive of the HKMA, and the Deputy Chief Executive Officer of the Exchange Fund Investment Office.

c. Other benefits include provident funds or gratuity as the case may be, medical and life insurance, and annual leave accrued during the year. The provision of these benefits varies among senior staff members, depending on individual terms of service.

Corporate Functions

Staff development

The HKMA places a high priority on developing its staff's capabilities to cater for its operational needs and staff's career development, which in turn enhances their ability to adapt to new challenges. Considerable efforts are devoted to training each staff member's vertical (job-specific) and horizontal (general) skills according to identified individual and organisational needs. In 2023, the HKMA continued to enhance the professional development of staff with respect to their work and ranks under its structured training curriculum. It organised thematic talks on its work and emerging trends for staff, including topics such as financial reform in the Mainland, Guangdong-Hong Kong-Macao Greater Bay Area development and virtual assets, to keep staff abreast of the latest financial developments and support various functional areas. Leadership training for senior staff was organised to equip them with skills and insights for leading the organisation effectively.



A workshop on *Professional English Writing for general staff*



A leadership training for division heads

Corporate Functions



A workshop on Collaborative Communication Skills for general staff



A course on Basic Management Skills for supervisors



The HKMA's Continuous Capacity Development Programme aims to encourage a culture of continuous learning and strengthen the competencies of the HKMA staff. The HKMA operates a training sponsorship scheme that supports staff members pursuing studies relevant to the work of the HKMA, and also reimburses membership fees paid by staff to relevant professional bodies that support their work in the HKMA and professional development.

To enhance their work exposure and promote the cross-fertilisation of skills and experience, the HKMA encourages staff members to rotate across different job areas, for example by accepting postings to the HKMA's New York Office, or secondments to HKMA-related organisations, other regulatory authorities or the Government. Secondments to international organisations such as the International Monetary Fund and the Bank for International Settlements are also arranged so that staff members can participate in activities and policy initiatives in which Hong Kong or the HKMA plays a key role. In addition, some staff members are deployed to provide support to related organisations, like the Hong Kong Deposit Protection Board, as well as to subsidiaries wholly owned by the Exchange Fund, such as Hong Kong FMI Services Limited and Hong Kong Academy of Finance Limited.

Corporate Functions

Opportunities for graduates and students to join the HKMA

Manager Trainee and Graduate Economist Programmes

The HKMA runs two trainee programmes designed to create a pool of young talents with sharp analytical minds, strong communication skills, high leadership potential and good team spirit who wish to pursue long-term careers in central banking: the Manager Trainee (MT) Programme and the Graduate Economist (GE) Programme. Each programme lasts for two years.

The MT Programme prepares young talents interested in central banking work for future key management roles within the HKMA, contributing to the financial stability and prosperity of Hong Kong. Each MT undergoes on-the-job training in two or three departments where they acquire hands-on experience in some of the HKMA's most important functions. The GE Programme, on the other hand, offers young graduates interested in economic research the opportunity to apply their research skills and contribute to the process of policy formulation in two or three departments.

Both programmes provide an all-round career development environment for trainees. Apart from receiving on-the-job training, the MTs and GEs also attend courses or briefings related to central banking, and participate in mentorship and buddy programmes, international events, special research projects and internal staff events. Upon the successful completion of their programmes, MTs are offered appointments as Managers and GEs as Economists within the HKMA.

Assistant Managers

Assistant Managers (AMs) are an important backbone of the HKMA's body of professional staff. Most AMs work in the banking departments, helping to preserve the safety and stability of Hong Kong's banking system. A small number of AMs work in other functional areas, where they provide analytical support and other forms of assistance. The AM position is a good career starting point for young graduates with a keen interest in banking supervision and regulatory work.



Corporate Functions



MTs and GEs chatting with Senior Executives



Digital Bootcamp for MTs and GEs



Central Banking Course for MTs and GEs



MTs and GEs visiting Hong Kong Note Printing Limited

Internship programmes

The HKMA runs summer and winter internship programmes for undergraduates, designed to equip them with practical work experience of and insights into the roles of a central bank. The programmes include talks and visits that provide interns with an in-depth understanding of the functions and work of the HKMA.

The Exchange Fund

- Report of the Director of Audit
- Exchange Fund Financial Statements

Report of the Director of Audit



Audit Commission
The Government of the Hong Kong Special Administrative Region

Independent Auditor's Report To the Financial Secretary

Opinion

I certify that I have audited the financial statements of the Exchange Fund and its subsidiaries ("the Group") set out on pages 211 to 311, which comprise the balance sheets of the Exchange Fund and of the Group as at 31 December 2023, and their income and expenditure accounts, statements of comprehensive income, statements of changes in equity and statements of cash flows for the year then ended, and notes to the financial statements, including material accounting policy information.

In my opinion, the financial statements give a true and fair view of the financial position of the Fund and of the Group as at 31 December 2023, and of their financial performance and 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 accordance with the directive of the Chief Executive made under section 7 of the Exchange Fund Ordinance (Cap. 66).

Basis for opinion

I conducted my audit in accordance with the directive of the Chief Executive made under section 7 of the Exchange Fund Ordinance and the Audit Commission auditing standards. My responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of my report. I am independent of the Group in accordance with those standards, and I have fulfilled my other ethical responsibilities in accordance with those standards. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Key audit matters

Key audit matters are those matters that, in my professional judgment, were of most significance in my audit of the financial statements for the year ended 31 December 2023. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

Report of the Director of Audit (continued)

| Key audit matter | How the matter was addressed in my audit |
|---|--|
| <p>Valuation of financial assets and financial liabilities at fair value</p> <p>Refer to notes 2.5, 2.6 and 37.1 to the financial statements.</p> <p>As at 31 December 2023, the Group had financial assets totalling HK\$3,893,919 million and financial liabilities totalling HK\$1,250,121 million valued at fair value.</p> <p>For 86% of these financial assets and all these financial liabilities, their fair values were quoted prices in active markets for identical assets or liabilities (Level 1 inputs) or were estimated using valuation techniques with inputs based on observable market data (Level 2 inputs).</p> <p>For the remaining 14% of these financial assets, their fair values were estimated using valuation techniques with inputs not based on observable market data (Level 3 inputs). Such financial assets totalled HK\$529,563 million, including mainly unlisted investment funds.</p> <p>Given the substantial amount and the estimations involved, valuation of financial assets and financial liabilities at fair value was a key audit matter.</p> | <p>The audit procedures on valuation of financial assets and financial liabilities at fair value included:</p> <ul style="list-style-type: none"> – obtaining an understanding of the procedures, including relevant controls, for valuing different categories of financial assets and financial liabilities; – evaluating and testing the controls, including relevant application controls of the computer systems; – obtaining external confirmations on the valuation, existence, rights and obligations and completeness of the financial assets and financial liabilities; – where quoted market prices were used, verifying the prices to independent sources; – where valuation techniques with inputs based on observable market data were used, evaluating the appropriateness of the valuation methodologies and the reasonableness of the assumptions, and verifying the inputs to independent sources; and – where valuation techniques with inputs not based on observable market data were used, evaluating the appropriateness of the valuation methodologies and the reasonableness of the assumptions and inputs. |
| <p>Valuation of investment properties at fair value</p> <p>Refer to notes 2.11, 17 and 18 to the financial statements.</p> <p>The Group's investment properties were stated at their fair values, totalling HK\$22,449 million as at 31 December 2023. The Group also had interests in associates and joint ventures whose principal activities were holding overseas investment properties. The fair values of these investment properties, whether held by the Group directly or by associates or joint ventures, were mainly determined based on valuations by independent professional valuers. Such valuations involved significant judgments and estimates, including the valuation methodologies and the assumptions used.</p> | <p>The audit procedures on valuation of investment properties at fair value included:</p> <ul style="list-style-type: none"> – obtaining and reviewing the valuation reports of investment properties held by the Group directly or by associates or joint ventures, and verifying that the fair values were based on the valuations stated in the valuation reports; – assessing the independence and qualifications of the valuers; and – evaluating the appropriateness of the valuation methodologies and the reasonableness of the assumptions and inputs. |

Report of the Director of Audit (continued)

Other information

The Monetary Authority is responsible for the other information. The other information comprises all the information included in the 2023 Annual Report of the Hong Kong Monetary Authority, other than the financial statements and my auditor's report thereon.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have nothing to report in this regard.

Responsibilities of the Monetary Authority and the Audit Sub-Committee of the Exchange Fund Advisory Committee for the financial statements

The Monetary Authority is responsible for the preparation of the financial statements that give a true and fair view in accordance with HKFRSs issued by the HKICPA and the directive of the Chief Executive made under section 7 of the Exchange Fund Ordinance, and for such internal control as the Monetary Authority determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Monetary Authority is 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.

The Audit Sub-Committee of the Exchange Fund Advisory Committee is responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

My objectives are to obtain reasonable assurance about whether the 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 my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Audit Commission auditing standards 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 financial statements.

As part of an audit in accordance with the Audit Commission auditing standards, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the 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 my 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;

Report of the Director of Audit (continued)

- 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 Monetary Authority;
- conclude on the appropriateness of the Monetary Authority's 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 I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my 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 financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation; and
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with the Audit Sub-Committee of the Exchange Fund Advisory 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 I identify during my audit.

I also provide the Audit Sub-Committee of the Exchange Fund Advisory Committee with a statement that I 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 my independence, and where applicable, related safeguards.

From the matters communicated with the Audit Sub-Committee of the Exchange Fund Advisory Committee, I determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Prof. LAM Chi Yuen Nelson

Director of Audit

8 April 2024

Audit Commission

6th Floor, High Block

Queensway Government Offices

66 Queensway

Hong Kong

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Exchange Fund – Income and Expenditure Account

for the year ended 31 December 2023

| | Note | Group | | Fund | |
|--|------|------------------|--------------------|------------------|-----------|
| | | 2023 | 2022 (restated) | 2023 | 2022 |
| (Expressed in millions of Hong Kong dollars) | | | | | |
| INCOME | | | | | |
| Interest income | | 127,293 | 53,419 | 117,659 | 49,890 |
| Dividend income | | 16,671 | 17,439 | 12,880 | 13,367 |
| Loss from investment properties | | (1,672) | (733) | – | – |
| Net realised and unrealised gains/(losses) | | 94,438 | (230,566) | 67,491 | (205,195) |
| Net exchange gain/(loss) | | 359 | (42,479) | (513) | (40,045) |
| Investment income/(losses) | 4(a) | 237,089 | (202,920) | 197,517 | (181,983) |
| Bank licence fees | | 118 | 119 | 118 | 119 |
| Other income | | 735 | 614 | 100 | 87 |
| TOTAL INCOME | | 237,942 | (202,187) | 197,735 | (181,777) |
| EXPENDITURE | | | | | |
| Interest expense on placements by Fiscal Reserves, | | | | | |
| HKSAR Government funds and statutory bodies | 4(b) | (52,082) | (48,109) | (52,082) | (48,109) |
| Other interest expense | 4(c) | (57,652) | (16,601) | (50,719) | (14,318) |
| Operating expenses | 4(d) | (8,119) | (4,359) | (5,083) | (5,055) |
| Note and coin expenses | 4(e) | (212) | (212) | (212) | (212) |
| (Charge for)/Reversal of impairment allowances | 4(f) | (65) | (5) | 2 | 1 |
| TOTAL EXPENDITURE | | (118,130) | (69,286) | (108,094) | (67,693) |
| SURPLUS/(DEFICIT) BEFORE SHARE OF LOSS OF ASSOCIATES AND JOINT VENTURES | | | | | |
| Share of loss of associates and joint ventures, net of tax | | 119,812 | (271,473) | 89,641 | (249,470) |
| (7,976) | | (7,976) | (4,706) | – | – |
| SURPLUS/(DEFICIT) BEFORE TAXATION | | | | | |
| Income tax | 5 | 356 | (687) | – | – |
| SURPLUS/(DEFICIT) FOR THE YEAR | | 112,192 | (276,866) | 89,641 | (249,470) |
| SURPLUS/(DEFICIT) FOR THE YEAR ATTRIBUTABLE TO: | | | | | |
| Owner of the Fund | | 112,525 | (276,407) | 89,641 | (249,470) |
| Non-controlling interests | | (333) | (459) | – | – |
| 112,192 | | 112,192 | (276,866) | 89,641 | (249,470) |

The notes on pages 219 to 311 form part of these financial statements.

Exchange Fund – Statement of Comprehensive Income

for the year ended 31 December 2023

| | Group | | Fund | |
|--|----------------|--------------------|---------------|-----------|
| | 2023 | 2022 (restated) | 2023 | 2022 |
| (Expressed in millions of Hong Kong dollars) | | | | |
| SURPLUS/(DEFICIT) FOR THE YEAR | | | | |
| | 112,192 | (276,866) | 89,641 | (249,470) |
| OTHER COMPREHENSIVE INCOME/(LOSS) | | | | |
| Items that will not be reclassified to income and expenditure account | | | | |
| Equity securities measured at fair value through other comprehensive income | | | | |
| – fair value changes | 100 | (72) | 100 | (72) |
| Items that are or may be reclassified subsequently to income and expenditure account | | | | |
| Debt securities measured at fair value through other comprehensive income | | | | |
| – fair value changes | 9 | (18) | – | – |
| Cash flow hedges | | | | |
| – fair value changes | (120) | 139 | – | – |
| Net insurance finance income | 26 | 271 | – | – |
| Deferred tax | (14) | (41) | – | – |
| Exchange difference on translation of financial statements of overseas subsidiaries, associates and joint ventures | 1,171 | (2,766) | – | – |
| OTHER COMPREHENSIVE INCOME/(LOSS) FOR THE YEAR, NET OF TAX | 1,172 | (2,487) | 100 | (72) |
| TOTAL COMPREHENSIVE INCOME/(LOSS) FOR THE YEAR | 113,364 | (279,353) | 89,741 | (249,542) |
| TOTAL COMPREHENSIVE INCOME/(LOSS) FOR THE YEAR ATTRIBUTABLE TO: | | | | |
| Owner of the Fund | 113,684 | (278,868) | 89,741 | (249,542) |
| Non-controlling interests | (320) | (485) | – | – |
| | 113,364 | (279,353) | 89,741 | (249,542) |

The notes on pages 219 to 311 form part of these financial statements.

Exchange Fund – Balance Sheet

as at 31 December 2023

| (Expressed in millions of Hong Kong dollars) | Note | Group | | Fund | |
|--|-------|------------------|--------------------|------------------|-----------|
| | | 2023 | 2022 (restated) | 2023 | 2022 |
| ASSETS | | | | | |
| Cash and money at call | 7 | 195,831 | 209,717 | 190,478 | 203,850 |
| Placements with banks and other financial institutions | 8 | 206,133 | 197,416 | 155,125 | 164,908 |
| Financial assets measured at fair value through income and expenditure account | 9 | 3,885,297 | 3,830,723 | 3,408,917 | 3,396,187 |
| Financial assets measured at fair value through other comprehensive income | 10 | 3,873 | 2,508 | 1,364 | 1,264 |
| Derivative financial instruments | 11(a) | 2,842 | 2,951 | 1,465 | 1,534 |
| Debt securities measured at amortised cost | 12 | 14,574 | 13,143 | – | – |
| Loan portfolio | 13 | 120,158 | 109,960 | – | – |
| Gold | 14 | 1,076 | 945 | 1,076 | 945 |
| Other assets | 15 | 42,528 | 39,321 | 35,808 | 31,947 |
| Interests in subsidiaries | 16 | – | – | 218,893 | 204,156 |
| Interests in associates and joint ventures | 17 | 34,034 | 41,638 | 159 | 116 |
| Investment properties | 18 | 22,449 | 23,394 | – | – |
| Property, plant and equipment | 19 | 3,639 | 3,453 | 3,206 | 3,131 |
| TOTAL ASSETS | | 4,532,434 | 4,475,169 | 4,016,491 | 4,008,038 |
| LIABILITIES AND EQUITY | | | | | |
| Certificates of Indebtedness | 20 | 593,235 | 605,959 | 593,235 | 605,959 |
| Government-issued currency notes and coins in circulation | 20 | 12,941 | 13,160 | 12,941 | 13,160 |
| Balance of the banking system | 21 | 44,950 | 96,251 | 44,950 | 96,251 |
| Placements by banks and other financial institutions | 22 | 99,120 | 99,455 | 99,120 | 99,455 |
| Placements by Fiscal Reserves | 23 | 695,426 | 765,189 | 695,426 | 765,189 |
| Placements by HKSAR Government funds and statutory bodies | 24 | 468,656 | 449,041 | 468,656 | 449,041 |
| Placements by subsidiaries | 25 | – | – | 31,186 | 30,588 |
| Exchange Fund Bills and Notes issued | 26 | 1,244,462 | 1,200,323 | 1,244,462 | 1,200,323 |
| Derivative financial instruments | 11(a) | 5,659 | 7,175 | 2,559 | 2,833 |
| Bank loans | 27 | 15,359 | 14,714 | – | – |
| Other debt securities issued | 28 | 162,363 | 131,683 | – | – |
| Other liabilities | 29 | 202,822 | 218,095 | 176,974 | 187,998 |
| Total liabilities | | 3,544,993 | 3,601,045 | 3,369,509 | 3,450,797 |

Exchange Fund – Balance Sheet (continued)
as at 31 December 2023

| | Group | | Fund | |
|--|------------------|--------------------|------------------|-----------|
| | 2023 | 2022 (restated) | 2023 | 2022 |
| (Expressed in millions of Hong Kong dollars) | | | | |
| Accumulated surplus | 987,935 | 875,410 | 646,111 | 556,470 |
| Revaluation reserve | 879 | 770 | 871 | 771 |
| Hedging reserve | 19 | 139 | – | – |
| Insurance finance reserve | 242 | 230 | – | – |
| Translation reserve | (2,884) | (4,042) | – | – |
| Total equity attributable to owner of the Fund | 986,191 | 872,507 | 646,982 | 557,241 |
| Non-controlling interests | 1,250 | 1,617 | – | – |
| Total equity | 987,441 | 874,124 | 646,982 | 557,241 |
| TOTAL LIABILITIES AND EQUITY | 4,532,434 | 4,475,169 | 4,016,491 | 4,008,038 |

Eddie Yue

Monetary Authority
8 April 2024

The notes on pages 219 to 311 form part of these financial statements.

Exchange Fund – Statement of Changes in Equity

for the year ended 31 December 2023

| (Expressed in millions of Hong Kong dollars) | Attributable to owner of the Fund | | | | | | | | Total | |
|---|-----------------------------------|---------------------|-----------------|---------------------------|----------------|---------------------|-----------------------------------|---------------------------|--------------|--|
| | Accumulated surplus | Revaluation reserve | Hedging reserve | Insurance finance reserve | | Translation reserve | attributable to owner of the Fund | Non-controlling interests | | |
| | | | | | | | | | | |
| Group | | | | | | | | | | |
| At 1 January 2022 (as previously reported) | 1,150,025 | 860 | – | – | – | (1,302) | 1,149,583 | 2,137 | 1,151,720 | |
| Adjustments on initial application of HKFRS 17 (note 3.1.1) | 1,792 | – | – | – | – | – | 1,792 | – | 1,792 | |
| At 1 January 2022 (restated) | 1,151,817 | 860 | – | – | – | (1,302) | 1,151,375 | 2,137 | 1,153,512 | |
| Deficit for the year | (276,407) | – | – | – | – | (276,407) | (2,461) | (459) | (276,866) | |
| Other comprehensive loss for the year | – | (90) | 139 | 230 | – | (2,740) | (278,868) | (26) | (2,487) | |
| Total comprehensive loss for the year | (276,407) | (90) | 139 | 230 | – | (2,740) | (278,868) | (485) | (279,353) | |
| Capital distribution to non-controlling interests | – | – | – | – | – | – | – | (32) | (32) | |
| Dividends paid to non-controlling interests | – | – | – | – | – | – | – | (3) | (3) | |
| At 31 December 2022 (restated) | 875,410 | 770 | 139 | 230 | (4,042) | 872,507 | 1,617 | 874,124 | | |
| At 1 January 2023 (as previously reported) | 871,136 | 770 | 139 | – | (4,042) | 868,003 | 1,617 | 869,620 | | |
| Adjustments on initial application of HKFRS 17 (note 3.1.1) | 4,274 | – | – | 230 | – | 4,504 | – | – | 4,504 | |
| At 1 January 2023 (restated) | 875,410 | 770 | 139 | 230 | (4,042) | 872,507 | 1,617 | 874,124 | | |
| Surplus for the year | 112,525 | – | – | – | – | 112,525 | (333) | 112,192 | | |
| Other comprehensive income for the year | – | 109 | (120) | 12 | 1,158 | 1,159 | 13 | 1,172 | | |
| Total comprehensive income for the year | 112,525 | 109 | (120) | 12 | 1,158 | 113,684 | (320) | 113,364 | | |
| Capital distribution to non-controlling interests | – | – | – | – | – | – | (41) | (41) | | |
| Dividends paid to non-controlling interests | – | – | – | – | – | – | (6) | (6) | | |
| At 31 December 2023 | 987,935 | 879 | 19 | 242 | (2,884) | 986,191 | 1,250 | 987,441 | | |

Exchange Fund – Statement of Changes in Equity (continued)
for the year ended 31 December 2023

| | Accumulated surplus | Revaluation reserve | Total attributable to owner of the Fund |
|--|------------------------|------------------------|--|
| (Expressed in millions of Hong Kong dollars) | | | |
| Fund | | | |
| At 1 January 2022 | 805,940 | 843 | 806,783 |
| Deficit for the year | (249,470) | – | (249,470) |
| Other comprehensive loss for the year | – | (72) | (72) |
| Total comprehensive loss for the year | (249,470) | (72) | (249,542) |
| At 31 December 2022 | 556,470 | 771 | 557,241 |
| At 1 January 2023 | 556,470 | 771 | 557,241 |
| Surplus for the year | 89,641 | – | 89,641 |
| Other comprehensive income for the year | – | 100 | 100 |
| Total comprehensive income for the year | 89,641 | 100 | 89,741 |
| At 31 December 2023 | 646,111 | 871 | 646,982 |

The notes on pages 219 to 311 form part of these financial statements.

Exchange Fund – Statement of Cash Flows

for the year ended 31 December 2023

| (Expressed in millions of Hong Kong dollars) | Note | Group | | Fund | |
|---|-------------|------------------|--------------------|------------------|-----------|
| | | 2023 | 2022 (restated) | 2023 | 2022 |
| Cash flows from operating activities | | | | | |
| Surplus/(Deficit) before taxation | | 111,836 | (276,179) | 89,641 | (249,470) |
| Adjustments for: | | | | | |
| Interest income | 4(a) | (127,293) | (53,419) | (117,659) | (49,890) |
| Dividend income | 4(a) | (16,671) | (17,439) | (12,880) | (13,367) |
| Change in fair value of investment properties | 4(a) | 2,798 | 2,000 | – | – |
| Interest expense | 4(b) & 4(c) | 109,734 | 64,710 | 102,801 | 62,427 |
| Depreciation | 4(d) | 388 | 380 | 282 | 277 |
| Charge for/(Reversal of) impairment allowances | 4(f) | 65 | 5 | (2) | (1) |
| Share of loss of associates and joint ventures | | 7,976 | 4,706 | – | – |
| Exchange differences and other non-cash items | | (723) | 11,310 | 1,246 | 6,894 |
| Interest received | | 124,986 | 49,926 | 115,633 | 46,666 |
| Dividends received | | 16,286 | 17,623 | 11,904 | 12,807 |
| Interest paid | | (126,172) | (120,708) | (119,019) | (119,369) |
| Income tax paid | | (172) | (343) | – | – |
| | | 103,038 | (317,428) | 71,947 | (303,026) |
| Changes in fair value of derivatives and other debt securities issued | | 326 | 2,470 | (203) | 3,205 |
| Changes in: | | | | | |
| – placements with banks and other financial institutions | | (12,267) | 17,576 | (16,015) | (9,112) |
| – financial assets measured at fair value through income and expenditure account | | (72,779) | 655,953 | (33,123) | 636,968 |
| – loan portfolio | | (10,228) | (22,192) | – | – |
| – gold | | (131) | 3 | (131) | 3 |
| – other assets | | 1,240 | (3,934) | (1,496) | (3,650) |
| – Certificates of Indebtedness, government-issued currency notes and coins in circulation | | (12,943) | 13,629 | (12,943) | 13,629 |
| – balance of the banking system | | (51,301) | (281,265) | (51,301) | (281,265) |
| – placements by banks and other financial institutions | | (335) | 99,455 | (335) | 99,455 |
| – placements by Fiscal Reserves | | (69,763) | (208,114) | (69,763) | (208,114) |
| – placements by HKSAR Government funds and statutory bodies | | 19,615 | 54,792 | 19,615 | 54,792 |
| – placements by subsidiaries | | – | – | 598 | 4,351 |
| – Exchange Fund Bills and Notes issued | | 44,139 | 51,754 | 44,139 | 51,754 |
| – other liabilities | | (11) | (787) | 5,250 | 8,680 |
| Net cash (used in)/from operating activities | | (61,400) | 61,912 | (43,761) | 67,670 |

Exchange Fund – Statement of Cash Flows (continued)
for the year ended 31 December 2023

| (Expressed in millions of Hong Kong dollars) | Note | Group | | Fund | |
|--|-------|-----------------|----------------|-----------------|----------------|
| | | 2023 | 2022 | 2023 | 2022 |
| Cash flows from investing activities | | | | | |
| Proceeds from sale or redemption of financial assets measured at fair value through other comprehensive income | | 196 | 2,949 | – | – |
| Purchase of financial assets measured at fair value through other comprehensive income | | (1,441) | (660) | – | – |
| Proceeds from sale or redemption of debt securities measured at amortised cost | | 2,507 | 1,845 | – | – |
| Purchase of debt securities measured at amortised cost | | (3,945) | (3,993) | – | – |
| Investments in subsidiaries | | – | – | (2,500) | (2,500) |
| Increase in loans to subsidiaries | | – | – | (12,237) | (1,498) |
| Decrease/(Increase) in interests in associates and joint ventures | | 171 | (444) | (43) | (62) |
| Additions of investment properties | | (729) | (791) | – | – |
| Additions of property, plant and equipment | | (402) | (451) | (321) | (413) |
| Dividends received from subsidiaries | | – | – | 637 | 744 |
| Net cash used in investing activities | | (3,643) | (1,545) | (14,464) | (3,729) |
| Cash flows from financing activities | | | | | |
| Repayment of bank loans | 30(c) | (46) | (22) | – | – |
| Proceeds from issue of other debt securities | 30(c) | 98,147 | 97,470 | – | – |
| Redemption of other debt securities issued | 30(c) | (69,456) | (77,622) | – | – |
| Principal portion of lease payments | 30(c) | (130) | (121) | (94) | (83) |
| Capital distribution to non-controlling interests | | (41) | (32) | – | – |
| Dividends paid to non-controlling interests | | (6) | (3) | – | – |
| Net cash from/(used in) financing activities | | 28,468 | 19,670 | (94) | (83) |
| Net (decrease)/increase in cash and cash equivalents | | (36,575) | 80,037 | (58,319) | 63,858 |
| Cash and cash equivalents at 1 January | | 444,068 | 370,953 | 410,450 | 353,486 |
| Effect of foreign exchange rate changes | | (1,255) | (6,922) | (1,246) | (6,894) |
| Cash and cash equivalents at 31 December | 30(a) | 406,238 | 444,068 | 350,885 | 410,450 |

The notes on pages 219 to 311 form part of these financial statements.

Exchange Fund – Notes to the Financial Statements

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

1 PRINCIPAL ACTIVITIES

The Monetary Authority, under delegated authority from the Financial Secretary as Controller of the Exchange Fund (the Fund), manages the Fund in accordance with the provisions of the Exchange Fund Ordinance (Cap. 66). The principal activities of the Fund are safeguarding the exchange value of the currency of Hong Kong and maintaining the stability and integrity of Hong Kong's monetary and financial systems.

The assets of the Fund are managed as four portfolios: the Backing Portfolio, the Investment Portfolio, the Long-Term Growth Portfolio and the Strategic Portfolio. The assets of the Backing Portfolio fully match the Monetary Base, under Hong Kong's Currency Board system. The Investment Portfolio is invested primarily in the bond and equity markets of the member countries of the Organisation for Economic Co-operation and Development (OECD). The Long-Term Growth Portfolio holds private equity and real estate investments. The Strategic Portfolio holds shares in Hong Kong Exchanges and Clearing Limited acquired by the Hong Kong Special Administrative Region (HKSAR) Government for the account of the Fund for strategic purposes. Operating segment information is set out in note 31.

2 MATERIAL ACCOUNTING POLICIES

2.1 Statement of compliance

These financial statements have been prepared in accordance with Hong Kong Financial Reporting Standards (HKFRSs), which is a collective term that includes all applicable individual HKFRSs, Hong Kong Accounting Standards and Interpretations issued by the Hong Kong Institute of Certified Public Accountants (HKICPA), and accounting principles generally accepted in Hong Kong. Material accounting policies adopted by the Fund and its subsidiaries (together referred to as the Group) is set out below.

The HKICPA has issued certain new or revised HKFRSs that are first effective or available for early adoption for the current accounting period of the Group. Note 3 provides information on the changes, if any, in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Group for the current and prior accounting periods reflected in these financial statements.

2.2 Basis of preparation of the financial statements

The Group financial statements include the financial statements of the Group as well as the Group's interests in associates and joint ventures. The principal activities of the principal subsidiaries, associates and joint ventures are shown in notes 16 and 17.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

The measurement basis used in the preparation of the financial statements is historical cost except for the following assets and liabilities that are measured at fair value:

- derivative financial instruments (note 2.6);
- financial assets and financial liabilities measured at fair value through income and expenditure account (note 2.6);
- financial assets measured at fair value through other comprehensive income (note 2.6);
- gold (note 2.10); and
- investment properties (note 2.11).

The preparation of financial statements in conformity with HKFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and the reported amounts of assets, liabilities, income and expenditure. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Judgements made by management in the application of HKFRSs that have significant effect on the financial statements and major sources of estimation uncertainty are disclosed in note 2.18.

Certain comparative figures have been restated to conform to the current year presentation of the Group financial statements.

2.3 Subsidiaries and non-controlling interests

A subsidiary is an entity controlled by the Group. The Group controls 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. When assessing whether the Group has power, only substantive rights (held by the Group and other parties) are considered.

An investment in a subsidiary is consolidated into the Group financial statements from the date that control commences until the date that control ceases.

Intra-group balances, transactions and cash flows and any unrealised profits and losses arising from intra-group transactions are eliminated in full in preparing the Group financial statements.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

Non-controlling interests represent the equity in a subsidiary not attributable directly or indirectly to the Fund, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability. Non-controlling interests are presented in the Group balance sheet within equity, separately from equity attributable to the owner of the Fund. Non-controlling interests in the results of the Group are presented on the face of the Group income and expenditure account and statement of comprehensive income as an allocation of the surplus or deficit and total comprehensive income or loss for the year between non-controlling interests and the owner of the Fund.

In the balance sheet of the Fund, its investments in subsidiaries are stated at cost less impairment losses, if any (note 2.14).

In an acquisition of a subsidiary, when a group of assets acquired and liabilities assumed does not constitute a business, the overall acquisition cost is allocated to the individual identifiable assets and liabilities based on their relative fair values at the date of acquisition. Such acquisition does not give rise to any goodwill.

2.4 Associates and joint ventures

An associate is an entity in which the Group has significant influence, but not control or joint control, over its management, through its power to participate in the financial and operating policy decisions.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Joint control is the contractually agreed sharing of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

An interest in an associate or a joint venture is accounted for in the Group financial statements under the equity method and is initially recorded at cost, adjusted for any excess or deficit of the Group's share of the acquisition-date fair values of the investee's identifiable net assets over the cost of the investment, if any. Thereafter, the investment is adjusted for the post acquisition change in the Group's share of the net assets of the associate or the joint venture and any impairment loss relating to the investment.

The Group income and expenditure account and statement of comprehensive income include the Group's share of the post-tax results of the associates and the joint ventures for the year. When the Group's share of losses exceeds its interest in the associates or the joint ventures, the Group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associates or the joint ventures. For this purpose, the Group's interest is the carrying amount of the investment under the equity method together with the Group's long-term interests that in substance form part of the Group's net investment in the associates or the joint ventures.

Unrealised profits and losses resulting from transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interests in the associates or the joint ventures.

When the Group ceases to have significant influence over an associate or joint control over a joint venture, it is accounted for as a disposal of the entire interest in the associate or the joint venture, with a resulting gain or loss being recognised in the Group income and expenditure account. Any interest retained in the associate or the joint venture at the date when significant influence or joint control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (note 2.6).

In the balance sheet of the Fund, interests in associates and joint ventures are stated at cost less impairment losses, if any (note 2.14).

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

2.5 Fair value measurement

The Group measures certain financial instruments, all investment properties and gold at fair value at each reporting date. The fair values of financial instruments measured at amortised cost are disclosed in note 37.2.

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 measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- (a) in the principal market for the asset or liability; or
- (b) in the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

The Group measures fair values using the following fair value hierarchy that reflects the significance of inputs used in making the measurements:

- (a) Level 1 – fair values are quoted prices (unadjusted) in active markets for identical assets or liabilities;
- (b) Level 2 – fair values are determined involving inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices); and
- (c) Level 3 – fair values are determined with inputs that are not based on observable market data (unobservable inputs).

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the reporting date.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

2.6 Financial assets and financial liabilities

2.6.1 Initial recognition and measurement

The Group recognises financial assets and financial liabilities on the date it becomes a party to the contractual provisions of the instrument. Regular way purchases and sales of financial instruments are recognised on trade date, the date on which the Group commits to purchase or sell the instruments.

At initial recognition, financial assets and financial liabilities are measured at fair value plus or minus, in the case of a financial asset or financial liability not at fair value through income and expenditure account, transaction costs that are directly attributable to the acquisition of the financial assets or the issue of the financial liabilities. Transaction costs of financial assets and financial liabilities at fair value through income and expenditure account are expensed immediately.

2.6.2 Classification and subsequent measurement

The Group classifies its financial assets into three categories for determining the subsequent measurement methods, on the basis of both the Group's business model for managing the assets and the contractual cash flow characteristics of the assets. The three measurement categories are:

- fair value through income and expenditure account (which is equivalent to the term "fair value through profit or loss" under HKFRS 9 "Financial Instruments");
- fair value through other comprehensive income; and
- amortised cost.

The Group classifies its financial liabilities as subsequently measured at fair value through income and expenditure account, or other financial liabilities.

Financial liabilities measured at fair value through income and expenditure account include those that are irrevocably designated by the Group at initial recognition as at fair value through income and expenditure account when doing so results in more relevant information because either:

- (a) the designation eliminates or significantly reduces an accounting mismatch which would otherwise arise; or
- (b) a group of financial liabilities or financial assets and liabilities is managed and its performance is evaluated on a fair value basis in accordance with a documented risk management or investment strategy.

Financial liabilities measured at fair value through income and expenditure account also include contracts that contain embedded derivatives which significantly modify the cash flows otherwise required.

The Group reclassifies a financial asset when and only when it changes its business model for managing the asset, except for equity securities elected to be measured at fair value through other comprehensive income at initial recognition (note 2.6.2.2). A financial liability is not reclassified.

An analysis of the Group's financial assets and financial liabilities by category is set out in note 6.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

2.6.2.1 Debt securities

The Group classifies its debt securities as measured at: (a) amortised cost; (b) fair value through other comprehensive income; or (c) fair value through income and expenditure account, depending on the Group's business model in managing them and their contractual cash flow characteristics.

(a) Debt securities measured at amortised cost

Debt securities are measured at amortised cost if they are held within a business model whose objective is to hold them for collection of contractual cash flows and the contractual cash flows represent solely payments of principal and interest. Debt securities in this category are initially recognised at fair value plus directly attributable transaction costs and subsequently carried at amortised cost. Interest income on these debt securities is recognised in the income and expenditure account using the effective interest method.

The effective interest method is a method of calculating the amortised cost of a financial asset or a financial liability and of allocating and recognising the interest income or interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts or payments through the expected life of the financial asset or financial liability to the gross carrying amount of the financial asset or to the amortised cost of the financial liability. When calculating the effective interest rate, the Group estimates cash flows by considering all contractual terms of the financial instrument but does not consider the expected credit losses. The calculation includes all fees received or paid between parties to the contract that are an integral part of the effective interest rate, transaction costs and all other premiums or discounts.

The measurement of loss allowances for debt securities measured at amortised cost is based on the expected credit loss model as described in note 2.9.

(b) Debt securities measured at fair value through other comprehensive income

Debt securities are measured at fair value through other comprehensive income if they are held within a business model whose objective is achieved by both collecting contractual cash flows and selling them and the contractual cash flows represent solely payments of principal and interest. Debt securities in this category are initially recognised at fair value plus directly attributable transaction costs and subsequently carried at fair value. Movements in the carrying amount of these securities are recognised in other comprehensive income, except for interest income, foreign exchange gains or losses, and impairment losses or reversals which are recognised in the income and expenditure account. Upon derecognition, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to the income and expenditure account.

The measurement of loss allowances for debt securities measured at fair value through other comprehensive income is based on the expected credit loss model as described in note 2.9. The loss allowances are recognised in other comprehensive income and do not reduce the carrying amount of such debt securities in the balance sheet.

(c) Debt securities measured at fair value through income and expenditure account

Debt securities that do not meet the criteria for being measured at amortised cost or fair value through other comprehensive income are measured at fair value through income and expenditure account. Debt securities in this category are initially recognised at fair value with transaction costs immediately charged to the income and expenditure account, and subsequently carried at fair value. Changes in fair value of these securities are recognised in the income and expenditure account in the period in which they arise.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

2.6.2.2 Equity securities and investment funds

Equity securities are measured at fair value through income and expenditure account, unless an election is made to designate them at fair value through other comprehensive income upon initial recognition.

For equity securities measured at fair value through income and expenditure account, changes in fair value are recognised in the income and expenditure account in the period in which they arise.

The Group classifies certain equity securities, which are held for strategic or longer term investment purposes, as measured at fair value through other comprehensive income. The election of fair value through other comprehensive income is made upon initial recognition on an instrument-by-instrument basis and once made is irrevocable. Gains and losses on these equity securities are recognised in other comprehensive income, which are not reclassified subsequently to the income and expenditure account, including when they are derecognised. Dividends on such investments are recognised in the income and expenditure account unless the dividends clearly represent a recovery of part of the cost of the investment.

Investment funds are measured at fair value through income and expenditure account. Changes in fair value of these funds are recognised in the income and expenditure account in the period in which they arise.

2.6.2.3 Derivative financial instruments and hedge accounting

Derivatives are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently measured at their fair values. Fair values are obtained from market prices in active markets, including recent market transactions, and valuation techniques, including discounted cash flow models and options pricing models, as appropriate. Derivatives are carried as assets when their fair value is positive and as liabilities when their fair value is negative.

The best evidence of the fair value of a derivative at initial recognition is the transaction price (i.e. the fair value of the consideration given or received).

Certain derivatives embedded in other financial instruments are treated as separate derivatives when their economic characteristics and risks are not closely related to those of the host contract and the host contract is not carried at fair value through income and expenditure account. These embedded derivatives are measured at fair value through income and expenditure account.

The method of recognising the resulting fair value gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The Group designates certain derivatives as either (a) hedges of the fair value of recognised assets or liabilities or unrecognised firm commitments (fair value hedge) or (b) hedges of highly probable future cash flows attributable to a recognised asset or liability, or a forecast transaction (cash flow hedge). Hedge accounting is used for derivatives designated in this way provided that certain criteria are met.

The Group documents, at the inception of the transaction, the relationship between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

(a) Fair value hedge

Changes in the fair value of derivatives that are designated and qualified as fair value hedges are recorded in the income and expenditure account, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of a hedged item for which the effective interest method is used, is amortised to the income and expenditure account over the period to maturity.

(b) Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualified as cash flow hedges are recognised in other comprehensive income and accumulated in equity. The gain or loss relating to the ineffective portion is recognised immediately in the income and expenditure account.

Amounts accumulated in equity are recycled to the income and expenditure account in the periods in which the hedged item will affect the income and expenditure account.

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 in equity existing at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the income and expenditure account. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the income and expenditure account.

(c) Derivatives not qualified as hedges for accounting purposes

Derivative instruments entered into as economic hedges that do not qualify for hedge accounting are held at fair value through income and expenditure account. Changes in the fair value of such derivative instruments are recognised in the income and expenditure account.

2.6.2.4 Loan portfolio transferring significant insurance risk

There are contracts issued by the Group with a feature combining a loan component with an agreement to compensate the borrowers by waiving the borrowers' outstanding debt if a specified uncertain future event adversely affects the borrowers. These contracts, with both loan and insurance components in entirety, are measured at fair value through income and expenditure account. Changes in fair value of these contracts are recognised in the income and expenditure account in the period in which they arise.

2.6.2.5 Other financial assets

Other financial assets are measured at amortised cost. This category includes cash and money at call, placements with banks and other financial institutions, and remaining loan portfolio. The measurement of loss allowances for these financial assets is based on the expected credit loss model as described in note 2.9.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

2.6.2.6 Financial liabilities measured at fair value through income and expenditure account

The following financial liabilities are measured at fair value through income and expenditure account:

- Exchange Fund Bills and Notes (EFBN) issued which, on initial recognition, are irrevocably designated by the Group as at fair value through income and expenditure account; and
- other debt securities issued, which contain embedded derivatives that significantly modify the cash flows otherwise required.

Financial liabilities measured at fair value through income and expenditure account are initially recognised at fair value. Changes in fair value are recognised in the income and expenditure account, except for those changes arising from changes in the Group's own credit risk. Any changes in fair value of liabilities due to changes in the Group's own credit risk are recognised in other comprehensive income and the amount of such changes recognised in other comprehensive income is not reclassified subsequently to the income and expenditure account upon derecognition.

2.6.2.7 Other financial liabilities

Other financial liabilities are financial liabilities other than those measured at fair value through income and expenditure account.

Other financial liabilities repayable on demand are stated at the principal amount payable. These include Certificates of Indebtedness, government-issued currency notes and coins in circulation (note 2.6.2.8), balance of the banking system, placements by Fiscal Reserves (Operating and Capital Reserves), placements by the Bond Fund, placements by the Deposit Protection Scheme Fund and placements by The Hong Kong Mortgage Corporation Limited.

Other financial liabilities with a fixed maturity and a predetermined rate are carried at amortised cost using the effective interest method. These include placements by banks and other financial institutions, placements by HKSAR Government funds and statutory bodies (other than the Bond Fund and the Deposit Protection Scheme Fund), placements by subsidiaries (other than The Hong Kong Mortgage Corporation Limited), bank loans and other debt securities issued (other than those which contain embedded derivatives).

Placements by Fiscal Reserves (Future Fund) which are repayable on 31 December 2030 (unless otherwise directed by the Financial Secretary according to the terms of the placements) are stated at the principal amount payable. Interest payable on these placements is calculated at a composite rate determined annually (note 2.16.1) and compounded on an annual basis until maturity. If the composite rate is negative for a year, the negative return will first be offset against the balance of interest payable, with the excess portion (if any) written off against the principal amount payable. When the composite rate turns positive in subsequent years, the return will be used to recover fully or partially the amount written off.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

2.6.2.8 Certificates of Indebtedness and government-issued currency notes and coins in circulation

As backing for the banknote issues, each note-issuing bank is required to hold a non-interest-bearing Certificate of Indebtedness issued by the Financial Secretary, which is redeemable on demand. Payments for the issue and redemption of banknotes against these Certificates are made in US dollars at the fixed exchange rate of US\$1=HK\$7.80. Consistent with the requirement for backing banknote issues with US dollars, the issue and redemption of government-issued currency notes and coins are conducted with an agent bank against US dollars at the fixed exchange rate of US\$1=HK\$7.80.

The Group's liabilities in respect of Certificates of Indebtedness represent the US dollars payable to the note-issuing banks on redemption of the Certificates. The Group's liabilities in respect of government-issued currency notes and coins represent the US dollars payable to the agent bank when they are redeemed. Certificates of Indebtedness in issue and government-issued currency notes and coins in circulation are stated in the financial statements at the Hong Kong dollar equivalent of the US dollars required for their redemption using the closing exchange rate at the reporting date.

2.6.3 Derecognition

A financial asset is derecognised when the contractual rights to receive the cash flows from the financial asset expire, or where the financial asset together with substantially all the risks and rewards of ownership have been transferred.

A financial liability is derecognised when the obligation specified in the contract is discharged, is cancelled or expires.

Liabilities for EFBN in issue are derecognised when they are repurchased as a result of market making activities. The repurchase is considered as redemption of the debt.

2.6.4 Offsetting

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet where 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 assets and settle the liabilities simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Group or the counterparty.

2.7 Repurchase and reverse repurchase transactions

Securities sold subject to a simultaneous agreement to repurchase these securities at a certain later date at a fixed price (repurchase agreements) are retained on the balance sheet without changes in their measurement. The proceeds from the sale are reported as liabilities in "placements by banks and other financial institutions" and are carried at amortised cost.

Conversely, securities purchased under agreements to resell (reverse repurchase agreements) are reported as receivables in "placements with banks and other financial institutions" and are carried at amortised cost.

Interest earned on reverse repurchase agreements and interest incurred on repurchase agreements are recognised as interest income and interest expense respectively, over the life of each agreement using the effective interest method.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

2.8 Securities lending agreements

Where securities are loaned with the receipt of cash or other securities as collateral, they are retained on the balance sheet without changes in their measurement. Where cash collateral is received, a liability is recorded in respect of the cash received in “placements by banks and other financial institutions”. Securities received as collateral are not recognised in the financial statements.

2.9 Impairment of financial instruments

The Group applies a three-stage approach to measure expected credit losses and to recognise the corresponding loss allowances (provision in the case of loan commitments and financial guarantee contracts) and impairment losses or reversals, for financial instruments that are not measured at fair value through income and expenditure account, including mainly the following types of financial instruments:

- cash and money at call;
- placements with banks and other financial institutions;
- debt securities measured at amortised cost or fair value through other comprehensive income;
- loan portfolio measured at amortised cost;
- loan commitments; and
- financial guarantee contracts.

The change in credit risk since initial recognition determines the measurement bases for expected credit losses:

Stage 1: 12-month expected credit losses

For financial instruments for which there has not been a significant increase in credit risk since initial recognition, the portion of the lifetime expected credit losses that represent the expected credit losses that result from default events that are possible within the 12 months after the reporting date are recognised.

Stage 2: Lifetime expected credit losses – not credit impaired

For financial instruments for which there has been a significant increase in credit risk since initial recognition but that are not credit impaired, lifetime expected credit losses representing the expected credit losses that result from all possible default events over the expected life of the financial instruments are recognised.

Stage 3: Lifetime expected credit losses – credit impaired

For financial instruments that have become credit impaired, lifetime expected credit losses are recognised and interest income is calculated by applying the effective interest rate to the amortised cost rather than the gross carrying amount.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

2.9.1 Determining significant increases in credit risk

At each reporting date, the Group assesses whether there has been a significant increase in credit risk for financial instruments since initial recognition by comparing the risk of default occurring over the remaining expected life as at the reporting date with that as at the date of initial recognition. For this purpose, the date of initial recognition of loan commitments and financial guarantee contracts is the date that the Group becomes a party to the irrevocable commitment. The assessment considers quantitative and qualitative historical information as well as forward-looking information. A financial asset is assessed to be credit impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred.

The Group assesses whether there has been a significant increase in credit risk since initial recognition on an individual or collective basis. For collective assessment, financial instruments are grouped on the basis of shared credit risk characteristics, taking into account investment type, credit risk ratings, date of initial recognition, remaining term to maturity, industry, geographical location of the counterparty or borrower and other relevant factors.

Debt securities with an external credit rating of investment grade are considered to have a low credit risk. Other financial instruments are considered to have a low credit risk if they have a low risk of default and the counterparty or borrower has a strong capacity to meet its contractual cash flow obligations in the near term. The credit risk on these financial instruments is assessed as not having increased significantly since initial recognition.

For a financial asset with lifetime expected credit losses recognised in the previous reporting period, if its credit quality improves and reverses the previously assessed significant increase in credit risk, then the loss allowance reverts from lifetime expected credit losses to 12-month expected credit losses.

When a financial asset is uncollectible, it is written off against the related loss allowance. Such assets are written off after all the necessary procedures have been completed and the amount of the loss has been determined. Subsequent recoveries of amounts previously written off are recognised in the income and expenditure account.

2.9.2 Measurement of expected credit losses

Expected credit losses of a financial instrument are an unbiased and probability-weighted estimate of credit losses (i.e. the present value of all cash shortfalls) over the expected life of the financial instrument:

- for financial assets, a credit loss is the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive, discounted at the effective interest rate. For a financial asset that is credit impaired at the reporting date, the Group measures the expected credit losses as the difference between the asset's gross carrying amount and the present value of estimated future cash flows discounted at the asset's original effective interest rate;
- for undrawn loan commitments, a credit loss is the present value of the difference between the contractual cash flows that are due to the Group if the commitment is drawn down and the cash flows that the Group expects to receive; and
- for financial guarantee contracts, a credit loss is the present value of expected payments to reimburse the holder less any amounts that the Group expects to recover.

Further details on the expected credit losses calculation are set out in note 36.3.3.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

2.10 Gold

Gold is carried at fair value. Changes in the fair value of gold are recognised in the income and expenditure account in the period in which they arise.

2.11 Investment properties

Properties that are held for long-term rental yields, capital appreciation or both, and that are not occupied by the Group, are classified as investment properties.

Investment properties are recognised initially at cost, including related transaction costs. After initial recognition, investment properties are measured at fair value as assessed by independent professional valuers, or by the management based on the latest valuation made by the independent professional valuers. Fair value of the investment properties is measured based on the market or income approach. Under the market approach, the value is determined based on comparable transactions. For the income approach, the fair value is determined using valuation techniques including discounted cash flow and income capitalisation methods.

Any gain or loss arising from a change in fair value or the disposal of an investment property is recognised directly in the income and expenditure account. Rental income from investment properties is recognised in accordance with the accounting policies as set out in note 2.13.2.

2.12 Property, plant and equipment

The following items of property, plant and equipment are stated in the balance sheet at cost less accumulated depreciation and any impairment losses (note 2.14):

- buildings held for own use situated on freehold land;
- leasehold land and buildings held for own use;
- plant and equipment, including plant, machinery, furniture, fixtures, equipment, motor vehicles and personal computers; and
- right-of-use assets arising from leases of premises (note 2.13.1).

Intangible assets including computer software licences and system development costs are included in property, plant and equipment.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

Freehold land is not depreciated. For other items of property, plant and equipment, depreciation is calculated to write off their cost less their estimated residual value, if any, on a straight-line basis over their estimated useful lives as follows:

- leasehold land over the unexpired term of lease
- buildings situated on freehold land 39 years
- buildings situated on leasehold land over the shorter of the unexpired term of lease and their estimated useful lives
- right-of-use assets over the shorter of the lease terms and their estimated useful lives
- plant and equipment 3 to 15 years
- computer software licences and system development costs 3 to 5 years

A gain or loss arising from the disposal of an item of property, plant and equipment is determined as the difference between the net disposal proceeds and the carrying amount of the asset and is recognised in the income and expenditure account on the date of disposal.

2.13 Leases

2.13.1 As a lessee

A lease is recognised in the balance sheet as a right-of-use asset with a corresponding lease liability at the lease commencement date, except that payments associated with short-term leases having a lease term of 12 months or less and leases of low-value assets are charged to the income and expenditure account on a straight-line basis over the lease term.

A right-of-use asset, except that meeting the definition of investment property (note 2.11), is recognised as property, plant and equipment and measured at cost less accumulated depreciation and any impairment losses (note 2.12). The right-of-use asset is depreciated on a straight-line basis over the shorter of the lease term and the asset's estimated useful life. A right-of-use asset that meets the definition of investment property is presented in the balance sheet as an investment property.

The lease liability is recognised as other liabilities and is measured at the present value of the lease payments payable over the lease term, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. Variable lease payments that do not depend on an index or a rate are not included in the measurement of the lease liability and hence are charged to the income and expenditure account in the accounting period in which they are incurred. The lease liability is subsequently adjusted by the effect of the interest on and the settlement of the lease liability, and the remeasurement arising from any reassessment of lease liability or lease modification.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

Lease payments included in the measurement of the Group's lease liability mainly comprise:

- fixed payments, less any lease incentives receivable;
- lease payments in an optional renewal period if the Group is reasonably certain to exercise an extension option; and
- penalties for early termination of a lease unless the Group is reasonably certain not to terminate early.

2.13.2 *As a lessor*

The Group enters into contracts as a lessor with respect to some of its properties. These contracts are classified as operating leases because the Group does not transfer substantially all the risks and rewards incidental to ownership of assets to the lessees. Rental income from operating leases is recognised in the income and expenditure account as other income (note 2.16.5) on a straight-line basis over the lease term.

2.14 Impairment of other assets

The carrying amounts of other assets, including interests in subsidiaries, interests in associates and joint ventures, and property, plant and equipment, are reviewed at each reporting date to identify any indication of impairment.

If any such indication exists, an impairment loss is recognised in the income and expenditure account whenever the carrying amount of an asset exceeds its recoverable amount. The recoverable amount of an asset is the higher of its fair value less costs of disposal and value in use.

2.15 Cash and cash equivalents

Cash and cash equivalents comprise cash and money at call, placements with banks and other financial institutions, and short-term highly liquid investments that are readily convertible to known amounts of cash and subject to an insignificant risk of changes in value, having been within three months of maturity when placed or acquired.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

2.16 Revenue and expenditure recognition

2.16.1 Interest income and expense

Interest on the majority of the placements by Fiscal Reserves (Operating and Capital Reserves) and placements by HKSAR Government funds and statutory bodies is payable at a fixed rate determined annually (notes 23 and 24). Interest on these placements is recognised in the income and expenditure account on an accrual basis, using the effective interest method.

Interest on the placements by Fiscal Reserves (Future Fund) is payable at a composite rate which is determined annually and linked with the performance of certain portfolios of assets under the Fund (note 23). Interest on these placements is recognised in the income and expenditure account on an accrual basis, based on the performance of those portfolios.

Interest income and expense for all other interest-bearing financial assets and financial liabilities are recognised in the income and expenditure account on an accrual basis, using the effective interest method.

Once a financial asset or a group of similar financial assets has been written down as a result of an impairment loss, interest income is thereafter recognised using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss.

2.16.2 Dividend income

Dividend income from listed equity securities is recognised in the income and expenditure account when the share price is quoted ex-dividend. Dividend income from unlisted equity securities is recognised when the shareholder's right to receive payment is unconditionally established.

Dividends on equity securities measured at fair value through other comprehensive income that clearly represent a recovery of part of the cost of the investment are presented in other comprehensive income.

2.16.3 Net realised and unrealised gains/(losses)

Realised gains or losses on financial instruments other than equity securities measured at fair value through other comprehensive income are recognised in the income and expenditure account when the financial instruments are derecognised.

Changes in fair value of financial instruments measured at fair value through income and expenditure account are recognised as unrealised gains or losses in the income and expenditure account in the period in which they arise.

2.16.4 Bank licence fees

Bank licence fees are fees receivable from authorized institutions under the Banking Ordinance and are accounted for in the period when the fees become receivable.

2.16.5 Other income

Other income includes rental income and fee income from the provision of financial market infrastructure services. Rental income is recognised in accordance with the accounting policies as set out in note 2.13.2. Other income is accounted for in the period when it becomes receivable.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

2.16.6 Contributions to staff retirement schemes

The Group operates several defined contribution schemes, including the Mandatory Provident Fund Scheme. Under these schemes, contributions payable each year are charged to the income and expenditure account. The assets of the staff retirement schemes are held separately from those of the Group.

2.16.7 Income tax

The Fund is not subject to Hong Kong profits tax as it is an integral part of the government. Income tax payable on profits of subsidiaries is recognised as an expense in the period in which profits arise.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes. Deferred tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the assets can be utilised. Deferred tax liabilities are provided in full. For investment properties that are measured at fair value, the amount of deferred tax recognised is measured using the tax rates that would apply on sale of those assets at their carrying value at the reporting date on the presumption that their carrying amounts are recovered entirely through sale. In all other cases, the amount of deferred tax recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the reporting date. Deferred tax assets and liabilities are not discounted.

2.17 Foreign currency translation

The financial statements are presented in Hong Kong dollars, which is the Group's and the Fund's functional currency.

Foreign currency transactions during the year are translated into Hong Kong dollars using the spot exchange rates at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated into Hong Kong dollars using the closing exchange rate at the reporting date. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated into Hong Kong dollars using the spot exchange rates at the transaction dates. Non-monetary assets and liabilities that are measured at fair value in a foreign currency are translated into Hong Kong dollars using the closing exchange rates at the dates when the fair value is determined.

All foreign currency translation differences are presented in aggregate as "net exchange gain/(loss)" in the income and expenditure account. Although it is not practicable to disclose separately the net exchange gain/(loss) on financial assets and financial liabilities measured at fair value through income and expenditure account or on derivative financial instruments, the majority of the exchange gains/(losses) relate to these two categories of financial instruments.

The results of foreign operations are translated into Hong Kong dollars at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions. Balance sheet items are translated into Hong Kong dollars at the closing foreign exchange rates at the reporting date. The resulting exchange differences are recognised in other comprehensive income and accumulated separately in equity in the translation reserve.

On disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation is reclassified from equity to the income and expenditure account when the gain or loss on disposal is recognised.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

2.18 Critical accounting estimates and assumptions

The Group makes estimates and assumptions that affect the reported amounts of assets and liabilities. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

(a) *Fair value of investment properties*

The fair value of investment properties is revalued by independent professional valuers using property valuation techniques which involve certain assumptions of market conditions. Details of the fair value measurement of investment properties are set out in note 18.1.

(b) *Fair value of financial instruments*

The majority of valuation techniques employ only observable market data. However, certain financial instruments are valued on the basis of valuation techniques that feature one or more significant market inputs that are unobservable, where the measurement of fair value is more judgemental. Details of the fair value measurement of financial instruments are set out in note 37.

(c) *Impairment allowances on loan portfolio measured at amortised cost*

The Group reviews its loan portfolio to assess expected credit losses on a regular basis. In determining expected credit losses, the Group makes judgements as to whether there is any significant increase in credit risk since initial recognition. It is required to exercise judgements in making assumptions and estimates to incorporate relevant information about external credit ratings, past events, current conditions and forecast of economic conditions. The methodology and assumptions used for estimating both the amount and timing of future cash flows are reviewed regularly to reduce any differences between loss estimates and actual loss experience. Information about the assumptions relating to measurement of expected credit losses is set out in note 36.3.3.

2.19 Related parties

For the purposes of these financial statements, a person or an entity is considered to be related to the Group if:

- (a) the person, or a close member of that person's family:
 - (i) has control or joint control over the Group;
 - (ii) has significant influence over the Group; or
 - (iii) is a member of the key management personnel of the Group.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

- (b) any of the following conditions applies to the entity:
- (i) the entity and the Group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others);
 - (ii) the entity is an associate or joint venture of the Group (or an associate or joint venture of a member of a group of which the Group is a member);
 - (iii) the entity and the Group are joint ventures of the same third party;
 - (iv) the entity is a joint venture of another entity and the Group is an associate of that entity;
 - (v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group;
 - (vi) the entity is controlled or jointly controlled by a person identified in (a);
 - (vii) a person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); or
 - (viii) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group.

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

2.20 Operating segments

Operating segments are reported in a manner consistent with the internal management reports provided to the chief operating decision maker. The Group comprises the following operating segments:

- management of funds under the Currency Board Operations, including the Backing Portfolio;
- management of funds representing the general reserve assets of the Fund, including the Investment Portfolio, the Long-Term Growth Portfolio and the Strategic Portfolio; and
- maintaining the stability and integrity of Hong Kong's monetary and financial systems, which includes banking supervision and monetary management, and the activities of Hong Kong FMI Services Limited, The Hong Kong Mortgage Corporation Limited and Hong Kong Note Printing Limited.

Details of the operating segments of the Group are set out in note 31.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

3 CHANGES IN ACCOUNTING POLICIES

The HKICPA has issued certain new or revised HKFRSs that are first effective for the current accounting period of the Group. None of them has impact on the accounting policies of the Group except for the adoption of HKFRS 17 as set out below.

The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period (note 38).

3.1 HKFRS 17 “Insurance Contracts”

HKFRS 17, which replaces HKFRS 4 “Insurance Contracts”, sets out the accounting principles that the Group should apply in accounting for insurance contracts it issues and reinsurance contracts it holds. On 1 January 2023, the Group adopted HKFRS 17 retrospectively. As the Group does not have significant insurance operations, the adoption did not have a significant impact on the financial position or performance of the Group.

With the adoption of HKFRS 17, balances based on HKFRS 4 were derecognised. Insurance contract liabilities have been remeasured by the general measurement model under HKFRS 17 based on groups of insurance contracts, which include the fulfilment cash flows comprising the best estimate of the present value of the future cash flows (such as premiums and payouts for claims, benefits, and expenses), together with a risk adjustment for non-financial risk, as well as the contractual service margin. The contractual service margin represents the unearned profits that will be released and systematically recognised in insurance revenue as services are provided over the expected coverage period. Losses resulting from the recognition of onerous contracts are not deferred but recognised in the income and expenditure account as they arise. Comparative figures restated from the transition date, 1 January 2022, include those presented in these financial statements, notes 3.1.1, 4(a), 4(d), 5(a), 5(c), 6, 13, 15, 29, 31, 36.3.2, 36.3.3(c), 36.3.4, 36.4.3(a), 36.4.3(b), 36.5.2, 37.1.1 and 37.1.2.

3.1.1 Impact of initial application of HKFRS 17

On transition to HKFRS 17, the Group applied the fair value approach for insurance contracts resulting in an increase in the Group’s total equity as at 1 January 2022, as summarised below:

| | Group |
|--|-------|
| Increase/(reduction) in the Group’s total equity | |
| Adjustments due to adoption of HKFRS 17 | 2,086 |
| Deferred tax impacts | (294) |
| Impact of adoption of HKFRS 17 after tax | 1,792 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

4 INCOME AND EXPENDITURE

(a) Investment income/(losses)

| | Group | | Fund | |
|---|----------------|--------------------|----------------|-----------|
| | 2023 | 2022 (restated) | 2023 | 2022 |
| Interest income: | | | | |
| – from financial assets measured at fair value through income and expenditure account | 104,325 | 45,232 | 103,711 | 44,792 |
| – from financial assets measured at fair value through other comprehensive income | 60 | 49 | – | – |
| – from derivative financial instruments | 279 | 279 | 38 | 231 |
| – from financial assets measured at amortised cost | 22,629 | 7,859 | 13,910 | 4,867 |
| | 127,293 | 53,419 | 117,659 | 49,890 |
| Dividend income: | | | | |
| – from financial assets measured at fair value through income and expenditure account | 16,658 | 17,427 | 12,230 | 12,611 |
| – from financial assets measured at fair value through other comprehensive income | 13 | 12 | 13 | 12 |
| – from subsidiaries | – | – | 637 | 744 |
| | 16,671 | 17,439 | 12,880 | 13,367 |
| Loss from investment properties: | | | | |
| – rental income | 1,126 | 1,267 | – | – |
| – change in fair value on revaluation | (2,798) | (2,000) | – | – |
| | (1,672) | (733) | – | – |
| Net realised and unrealised gains/(losses): | | | | |
| – on financial assets and financial liabilities measured at fair value through income and expenditure account | 99,116 | (237,177) | 73,694 | (214,883) |
| – on derivative financial instruments | (4,860) | 6,419 | (6,334) | 9,691 |
| – on loan portfolio measured at fair value through income and expenditure account | 51 | 195 | – | – |
| – on gold | 131 | (3) | 131 | (3) |
| | 94,438 | (230,566) | 67,491 | (205,195) |
| Net exchange gain/(loss) | 359 | (42,479) | (513) | (40,045) |
| TOTAL | 237,089 | (202,920) | 197,517 | (181,983) |

Net realised and unrealised gains/(losses) included a gain of HK\$1,996 million (2022: HK\$4,235 million loss) on hedging instruments designated as fair value hedge and a loss of HK\$1,851 million (2022: HK\$4,268 million gain) on hedged items.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

(b) Interest expense on placements by Fiscal Reserves, HKSAR Government funds and statutory bodies

| | Group and Fund | |
|--|-----------------------|-------------|
| | 2023 | 2022 |
| Interest expense on placements by Fiscal Reserves: | | |
| – at a fixed rate determined annually ¹ | 17,526 | 35,027 |
| – at market-based rates | 1 | – |
| – at a composite rate determined annually ² | 17,995 | (9,020) |
| | 35,522 | 26,007 |
| Interest expense on placements by HKSAR Government funds and statutory bodies: | | |
| – at a fixed rate determined annually ¹ | 16,504 | 22,076 |
| – at market-based rates | 56 | 26 |
| | 16,560 | 22,102 |
| TOTAL | 52,082 | 48,109 |

¹ This rate was fixed at 3.7% per annum for 2023 (2022: 5.6%) – notes 23, 24 and 29.

² The composite rate was 4.8% per annum for 2023 (2022: -3.0%) – notes 23 and 29.

(c) Other interest expense

| | Group | | Fund | |
|--|---------------|-------------|---------------|-------------|
| | 2023 | 2022 | 2023 | 2022 |
| Interest expense on Exchange Fund Bills and Notes issued | 45,512 | 11,999 | 45,512 | 11,999 |
| Interest expense on placements by subsidiaries | – | – | 1,326 | 759 |
| Interest expense on derivative financial instruments | 210 | 45 | 210 | 45 |
| Interest expense on lease liabilities | 14 | 14 | 3 | 4 |
| Interest expense on other financial instruments | 11,916 | 4,543 | 3,668 | 1,511 |
| TOTAL | 57,652 | 16,601 | 50,719 | 14,318 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

(d) Operating expenses

| | Group | | Fund | |
|--|--------------|--------------------|--------------|-------|
| | 2023 | 2022 (restated) | 2023 | 2022 |
| Staff costs | | | | |
| Salaries and other staff costs | 1,986 | 1,858 | 1,568 | 1,498 |
| Retirement benefit costs | 157 | 149 | 132 | 127 |
| Premises and equipment expenses | | | | |
| Depreciation | 388 | 380 | 282 | 277 |
| Other premises expenses | 103 | 97 | 84 | 81 |
| General operating costs | | | | |
| Maintenance of office and computer equipment | 221 | 180 | 194 | 158 |
| Financial infrastructure operation | 176 | 214 | 82 | 103 |
| Professional, consulting and other services | 195 | 142 | 118 | 94 |
| Financial information and communication services | 95 | 87 | 82 | 75 |
| Public education and publicity | 65 | 65 | 36 | 39 |
| External relations | 58 | 25 | 51 | 22 |
| Training | 8 | 7 | 6 | 5 |
| Expenses relating to investment properties | | | | |
| – Operating expenses | 275 | 237 | – | – |
| – Variable lease payment expenses | 11 | 11 | – | – |
| Others | 58 | 52 | 110 | 97 |
| Recovery of operating expenses for loans with full guarantee from the HKSAR Government (note 13) | (162) | (128) | – | – |
| Operating result of insurance business | 1,781 | (1,831) | – | – |
| Investment management and custodian fees | | | | |
| Management and custodian fees | 1,453 | 1,628 | 1,236 | 1,425 |
| Transaction costs | 243 | 215 | 241 | 214 |
| Withholding tax | 717 | 732 | 717 | 732 |
| Professional fees and others | 291 | 239 | 144 | 108 |
| TOTAL | 8,119 | 4,359 | 5,083 | 5,055 |

The aggregate emoluments of senior staff members (Executive Directors and above) of the Group are as follows:

| | Group | |
|----------------|--------------|-------|
| | 2023 | 2022 |
| Fixed pay | 83.1 | 87.4 |
| Variable pay | 22.1 | 22.4 |
| Other benefits | 10.9 | 13.7 |
| | 116.1 | 123.5 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

Other benefits shown above included provident funds, medical and life insurance, gratuity and annual leave accrued during the year. There were no other allowances or benefits-in-kind.

The numbers of senior staff members (Executive Directors and above) of the Group whose emoluments including other benefits fell within the following bands were shown in the table below. The number of senior staff posts was 18 (2022: 18).

| HK\$ | Group | |
|--------------------------|-----------|------|
| | 2023 | 2022 |
| 2,000,001 to 2,500,000 | 2 | – |
| 4,500,001 to 5,000,000 | – | 1 |
| 5,000,001 to 5,500,000 | 2 | 3 |
| 5,500,001 to 6,000,000 | 3 | 1 |
| 6,000,001 to 6,500,000 | 4 | 4 |
| 6,500,001 to 7,000,000 | 2 | 3 |
| 7,000,001 to 7,500,000 | – | 2 |
| 7,500,001 to 8,000,000 | 1 | 1 |
| 8,000,001 to 8,500,000 | 1 | – |
| 8,500,001 to 9,000,000 | – | 1 |
| 9,000,001 to 9,500,000 | 1 | – |
| 9,500,001 to 10,000,000 | 1 | 1 |
| 10,000,001 to 10,500,000 | 1 | 1 |
| | 18 | 18 |

Details of the operating result of insurance business are as follows:

| | Group | |
|---|--------------|---------|
| | 2023 | 2022 |
| Insurance revenue | (1,133) | (878) |
| Insurance service expenses | 1,257 | 2,088 |
| Net insurance finance expenses/(income) | 1,657 | (3,041) |
| | 1,781 | (1,831) |

(e) Note and coin expenses

These represent reimbursements to the note-issuing banks in respect of note-issuing expenses and expenses incurred directly by the Fund in issuing government-issued currency notes and coins.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

(f) Charge for/(Reversal of) impairment allowances

| | Group | | Fund | |
|---|-----------|------|------------|------|
| | 2023 | 2022 | 2023 | 2022 |
| Charge for/(Reversal of) impairment allowances | | | | |
| Placements with banks and other financial institutions | | | | |
| (note 36.3.3(a)) | (1) | (3) | (2) | (1) |
| Debt securities measured at amortised cost (note 36.3.3(b)(ii)) | – | 1 | – | – |
| Loan portfolio measured at amortised cost (note 36.3.3(c)) | 57 | 9 | – | – |
| Provision on loan commitments (note 36.3.3(d)) | 9 | (2) | – | – |
| TOTAL | 65 | 5 | (2) | (1) |

5 INCOME TAX

(a) Income tax (credited)/charged to the income and expenditure account

| | Group | |
|---|--------------|--------------------|
| | 2023 | 2022 (restated) |
| Current tax | | |
| Hong Kong profits tax: | | |
| – current year | 178 | 46 |
| – over-provision in prior years | (2) | (22) |
| Taxation outside Hong Kong: | | |
| – current year | 87 | 118 |
| – (over-provision)/under-provision in prior years | (13) | 23 |
| Deferred tax | | |
| (Credit)/charge for current year | (606) | 522 |
| TOTAL | (356) | 687 |

No provision for Hong Kong profits tax has been made for the Fund as it is not subject to Hong Kong tax. The provision for Hong Kong profits tax relates to the tax liabilities of the Fund's subsidiaries. For 2023, it is calculated at 16.5% (2022: 16.5%) of the estimated assessable profits for the year. Tax for overseas subsidiaries is charged at the appropriate current rates of taxation ruling in the relevant countries, which ranged from 15.0% to 23.5% (2022: 15.0% to 19.0%).

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

Reconciliation between tax expense and accounting profit at applicable tax rates:

| | Group | |
|--|-----------------|---------------------------|
| | 2023 | 2022 (restated) |
| Surplus/(Deficit) before taxation | 111,836 | (276,179) |
| Less: (Surplus)/Deficit not subject to Hong Kong tax | (89,641) | 249,470 |
| Surplus/(Deficit) subject to tax | 22,195 | (26,709) |
| Tax calculated at domestic tax rates in the respective countries | 3,616 | (4,363) |
| Tax effect of: | | |
| – non-deductible expenses | 3,206 | 6,816 |
| – non-taxable income | (7,120) | (1,876) |
| – tax losses not recognised | 97 | 62 |
| – (over-provision)/under-provision in prior years | (15) | 1 |
| – effect on deferred tax balances arising from change in tax rates | – | 5 |
| – others | (140) | 42 |
| Income tax (credit)/charge | (356) | 687 |

(b) Tax (recoverable)/payable

| | Group | | |
|-----------------|--------------|-------------|-------------|
| | Note | 2023 | 2022 |
| Tax recoverable | 15 | (36) | (44) |
| Tax payable | 29 | 605 | 535 |
| | | 569 | 491 |

(c) Deferred tax

| | Group | | |
|--------------------------|--------------|-------------|-------------|
| | Note | 2023 | 2022 |
| Deferred tax assets | 15 | (6) | – |
| Deferred tax liabilities | 29 | 810 | 1,384 |
| | | 804 | 1,384 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

The major components of net deferred tax liabilities and the movements during the year are as follows:

| | Group | | | | | |
|--|--|------------------------------------|--------------|--------------------------------------|------------|---------------------------------|
| | Fair value changes on investment properties and financial instruments | Accelerated tax depreciation | Tax losses | Insurance contract liabilities | Others | Net deferred tax liabilities |
| At 1 January 2022 | | | | | | |
| (as previously reported) | 705 | 32 | (115) | – | (48) | 574 |
| Adjustments on initial application of HKFRS 17 (note 3.1.1) and reclassification | (32) | – | – | 281 | 45 | 294 |
| At 1 January 2022 (restated) | 673 | 32 | (115) | 281 | (3) | 868 |
| Charged/(Credited) to the income and expenditure account | 153 | (4) | (34) | 408 | (1) | 522 |
| Charged to other comprehensive income | – | – | – | 41 | – | 41 |
| Exchange differences | (47) | – | – | – | – | (47) |
| At 31 December 2022 (restated) | 779 | 28 | (149) | 730 | (4) | 1,384 |
| At 1 January 2023 | 779 | 28 | (149) | 730 | (4) | 1,384 |
| (Credited)/Charged to the income and expenditure account | (313) | 4 | – | (294) | (3) | (606) |
| Charged to other comprehensive income | – | – | – | 14 | – | 14 |
| Exchange differences | 12 | – | – | – | – | 12 |
| At 31 December 2023 | 478 | 32 | (149) | 450 | (7) | 804 |

There was no significant unprovided deferred tax as at 31 December 2023 and 2022.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

6 CATEGORIES OF FINANCIAL ASSETS AND FINANCIAL LIABILITIES

| | Group – 2023 | | | | | | |
|--|------------------|----------------------------------|--|--------------|--|----------------------------|-----------------------------|
| | | | Financial assets and financial liabilities measured at fair value through income and expenditure account | | Financial assets measured at fair value through other comprehensive income | | |
| | Total | Derivative financial instruments | income and expenditure account | other | comprehensive income | measured at amortised cost | Other financial liabilities |
| Cash and money at call | 195,831 | – | – | – | – | 195,831 | – |
| Placements with banks and other financial institutions | 206,133 | – | – | – | – | 206,133 | – |
| Financial assets measured at fair value through income and expenditure account | 3,885,297 | – | 3,885,297 | – | – | – | – |
| Financial assets measured at fair value through other comprehensive income | 3,873 | – | – | 3,873 | – | – | – |
| Derivative financial instruments | 2,842 | 2,842 | – | – | – | – | – |
| Debt securities measured at amortised cost | 14,574 | – | – | – | – | 14,574 | – |
| Loan portfolio | 120,158 | – | 1,907 | – | – | 118,251 | – |
| Others | 41,492 | – | – | – | – | 41,492 | – |
| FINANCIAL ASSETS | 4,470,200 | 2,842 | 3,887,204 | 3,873 | 576,281 | – | – |
| Certificates of Indebtedness | 593,235 | – | – | – | – | – | 593,235 |
| Government-issued currency notes and coins in circulation | 12,941 | – | – | – | – | – | 12,941 |
| Balance of the banking system | 44,950 | – | – | – | – | – | 44,950 |
| Placements by banks and other financial institutions | 99,120 | – | – | – | – | – | 99,120 |
| Placements by Fiscal Reserves | 695,426 | – | – | – | – | – | 695,426 |
| Placements by HKSAR Government funds and statutory bodies | 468,656 | – | – | – | – | – | 468,656 |
| Exchange Fund Bills and Notes issued | 1,244,462 | – | 1,244,462 | – | – | – | – |
| Derivative financial instruments | 5,659 | 5,659 | – | – | – | – | – |
| Bank loans | 15,359 | – | – | – | – | – | 15,359 |
| Other debt securities issued | 162,363 | – | – | – | – | – | 162,363 |
| Others | 181,629 | – | – | – | – | – | 181,629 |
| FINANCIAL LIABILITIES | 3,523,800 | 5,659 | 1,244,462 | – | – | 2,273,679 | – |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Group – 2022 (restated) | | | | | |
|--|-------------------------|----------------------------------|--|--|---|-----------------------------|
| | Total | Derivative financial instruments | Financial assets and financial liabilities measured at fair value through income and expenditure account | Financial assets measured at fair value through other comprehensive income | Financial assets measured at amortised cost | Other financial liabilities |
| Cash and money at call | 209,717 | – | – | – | 209,717 | – |
| Placements with banks and other financial institutions | 197,416 | – | – | – | 197,416 | – |
| Financial assets measured at fair value through income and expenditure account | 3,830,723 | – | 3,830,723 | – | – | – |
| Financial assets measured at fair value through other comprehensive income | 2,508 | – | – | 2,508 | – | – |
| Derivative financial instruments | 2,951 | 2,951 | – | – | – | – |
| Debt securities measured at amortised cost | 13,143 | – | – | – | 13,143 | – |
| Loan portfolio | 109,960 | – | 1,226 | – | 108,734 | – |
| Others | 38,704 | – | – | – | 38,704 | – |
| FINANCIAL ASSETS | 4,405,122 | 2,951 | 3,831,949 | 2,508 | 567,714 | – |
| Certificates of Indebtedness | 605,959 | – | – | – | – | 605,959 |
| Government-issued currency notes and coins in circulation | 13,160 | – | – | – | – | 13,160 |
| Balance of the banking system | 96,251 | – | – | – | – | 96,251 |
| Placements by banks and other financial institutions | 99,455 | – | – | – | – | 99,455 |
| Placements by Fiscal Reserves | 765,189 | – | – | – | – | 765,189 |
| Placements by HKSAR Government funds and statutory bodies | 449,041 | – | – | – | – | 449,041 |
| Exchange Fund Bills and Notes issued | 1,200,323 | – | 1,200,323 | – | – | – |
| Derivative financial instruments | 7,175 | 7,175 | – | – | – | – |
| Bank loans | 14,714 | – | – | – | – | 14,714 |
| Other debt securities issued | 131,683 | – | – | – | – | 131,683 |
| Others | 199,760 | – | – | – | – | 199,760 |
| FINANCIAL LIABILITIES | 3,582,710 | 7,175 | 1,200,323 | – | – | 2,375,212 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Fund – 2023 | | | | | |
|--|------------------|----------------------------------|--|--|---|-----------------------------|
| | | | Financial assets and financial liabilities measured at fair value through income and expenditure account | Financial assets measured at fair value through other comprehensive income | Financial assets measured at amortised cost | Other financial liabilities |
| | Total | Derivative financial instruments | | | | |
| Cash and money at call | 190,478 | – | – | – | 190,478 | – |
| Placements with banks and other financial institutions | 155,125 | – | – | – | 155,125 | – |
| Financial assets measured at fair value through income and expenditure account | 3,408,917 | – | 3,408,917 | – | – | – |
| Financial assets measured at fair value through other comprehensive income | 1,364 | – | – | 1,364 | – | – |
| Derivative financial instruments | 1,465 | 1,465 | – | – | – | – |
| Others | 35,731 | – | – | – | 35,731 | – |
| FINANCIAL ASSETS | 3,793,080 | 1,465 | 3,408,917 | 1,364 | 381,334 | – |
| Certificates of Indebtedness | 593,235 | – | – | – | – | 593,235 |
| Government-issued currency notes and coins in circulation | 12,941 | – | – | – | – | 12,941 |
| Balance of the banking system | 44,950 | – | – | – | – | 44,950 |
| Placements by banks and other financial institutions | 99,120 | – | – | – | – | 99,120 |
| Placements by Fiscal Reserves | 695,426 | – | – | – | – | 695,426 |
| Placements by HKSAR Government funds and statutory bodies | 468,656 | – | – | – | – | 468,656 |
| Placements by subsidiaries | 31,186 | – | – | – | – | 31,186 |
| Exchange Fund Bills and Notes issued | 1,244,462 | – | 1,244,462 | – | – | – |
| Derivative financial instruments | 2,559 | 2,559 | – | – | – | – |
| Others | 176,828 | – | – | – | – | 176,828 |
| FINANCIAL LIABILITIES | 3,369,363 | 2,559 | 1,244,462 | – | – | 2,122,342 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Fund – 2022 | | | | | |
|--|------------------|----------------------------------|--|--|---|-----------------------------|
| | Total | Derivative financial instruments | Financial assets and financial liabilities measured at fair value through income and expenditure account | Financial assets measured at fair value through other comprehensive income | Financial assets measured at amortised cost | Other financial liabilities |
| Cash and money at call | 203,850 | – | – | – | 203,850 | – |
| Placements with banks and other financial institutions | 164,908 | – | – | – | 164,908 | – |
| Financial assets measured at fair value through income and expenditure account | 3,396,187 | – | 3,396,187 | – | – | – |
| Financial assets measured at fair value through other comprehensive income | 1,264 | – | – | 1,264 | – | – |
| Derivative financial instruments | 1,534 | 1,534 | – | – | – | – |
| Others | 31,899 | – | – | – | 31,899 | – |
| FINANCIAL ASSETS | 3,799,642 | 1,534 | 3,396,187 | 1,264 | 400,657 | – |
| Certificates of Indebtedness | 605,959 | – | – | – | – | 605,959 |
| Government-issued currency notes and coins in circulation | 13,160 | – | – | – | – | 13,160 |
| Balance of the banking system | 96,251 | – | – | – | – | 96,251 |
| Placements by banks and other financial institutions | 99,455 | – | – | – | – | 99,455 |
| Placements by Fiscal Reserves | 765,189 | – | – | – | – | 765,189 |
| Placements by HKSAR Government funds and statutory bodies | 449,041 | – | – | – | – | 449,041 |
| Placements by subsidiaries | 30,588 | – | – | – | – | 30,588 |
| Exchange Fund Bills and Notes issued | 1,200,323 | – | 1,200,323 | – | – | – |
| Derivative financial instruments | 2,833 | 2,833 | – | – | – | – |
| Others | 187,856 | – | – | – | – | 187,856 |
| FINANCIAL LIABILITIES | 3,450,655 | 2,833 | 1,200,323 | – | – | 2,247,499 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

7 CASH AND MONEY AT CALL

| | Group | | Fund | |
|----------------------------|----------------|---------|----------------|---------|
| | 2023 | 2022 | 2023 | 2022 |
| At amortised cost | | | | |
| Balance with central banks | 2,106 | 3,943 | 2,106 | 3,943 |
| Balance with banks | 193,725 | 205,774 | 188,372 | 199,907 |
| TOTAL | 195,831 | 209,717 | 190,478 | 203,850 |

8 PLACEMENTS WITH BANKS AND OTHER FINANCIAL INSTITUTIONS

| | Group | | Fund | |
|---|----------------|---------|----------------|---------|
| | 2023 | 2022 | 2023 | 2022 |
| At amortised cost | | | | |
| Placements in respect of reverse repurchase agreements: | | | | |
| – with central banks | 20,851 | 68,454 | 20,851 | 68,454 |
| – with banks and other financial institutions | 22,942 | 1,115 | 22,942 | 1,115 |
| Other placements: | | | | |
| – with central banks | 23,816 | – | 23,816 | – |
| – with banks | 138,528 | 127,852 | 87,516 | 95,341 |
| | 206,137 | 197,421 | 155,125 | 164,910 |
| Less: allowances for expected credit losses | (4) | (5) | – | (2) |
| TOTAL | 206,133 | 197,416 | 155,125 | 164,908 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

9 FINANCIAL ASSETS MEASURED AT FAIR VALUE THROUGH INCOME AND EXPENDITURE ACCOUNT

| | Group | | Fund | |
|---|------------------|-----------|------------------|-----------|
| | 2023 | 2022 | 2023 | 2022 |
| At fair value | | | | |
| Debt securities | | | | |
| Treasury bills and commercial papers | | | | |
| Listed outside Hong Kong | 553 | – | 553 | – |
| Unlisted | 1,037,793 | 1,033,689 | 1,037,793 | 1,033,689 |
| Certificates of deposit | | | | |
| Unlisted | 209,496 | 141,029 | 209,496 | 141,029 |
| Other debt securities | | | | |
| Listed in Hong Kong | 11,554 | 13,307 | 11,544 | 13,297 |
| Listed outside Hong Kong | 1,469,653 | 1,522,330 | 1,469,653 | 1,522,330 |
| Unlisted | 69,588 | 63,012 | 69,588 | 63,012 |
| Total debt securities | 2,798,637 | 2,773,367 | 2,798,627 | 2,773,357 |
| Equity securities | | | | |
| Listed in Hong Kong | 125,005 | 150,413 | 125,005 | 150,413 |
| Listed outside Hong Kong | 352,130 | 344,843 | 350,508 | 342,961 |
| Unlisted | 149,637 | 137,230 | 134,777 | 129,456 |
| Total equity securities | 626,772 | 632,486 | 610,290 | 622,830 |
| Investment funds | | | | |
| Unlisted | 459,888 | 424,870 | – | – |
| TOTAL | 3,885,297 | 3,830,723 | 3,408,917 | 3,396,187 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

10 FINANCIAL ASSETS MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

| | Group | | Fund | |
|--------------------------|--------------|-------|--------------|-------|
| | 2023 | 2022 | 2023 | 2022 |
| At fair value | | | | |
| Debt securities | | | | |
| Listed in Hong Kong | 1,067 | 548 | – | – |
| Listed outside Hong Kong | 1,442 | 696 | – | – |
| | 2,509 | 1,244 | – | – |
| Equity securities | | | | |
| Unlisted | 1,364 | 1,264 | 1,364 | 1,264 |
| TOTAL | 3,873 | 2,508 | 1,364 | 1,264 |

The Group's investment in unlisted equity securities as at 31 December 2023 represents a holding of 4,285 shares (2022: 4,285 shares) in the Bank for International Settlements. As at 31 December 2023 and 2022, the nominal value of each share is 5,000 Special Drawing Rights (SDRs) and is 25% paid up (note 34(a)).

11 DERIVATIVE FINANCIAL INSTRUMENTS

Derivative financial instruments refer to financial contracts whose value depends on the value of one or more underlying assets or indices with settlement at a future date.

The Group uses derivative financial instruments to manage its exposures to market risk and facilitate the implementation of investment strategies. The principal derivative financial instruments used are interest rate and currency swap contracts, and forward foreign exchange contracts, which are primarily over-the-counter derivatives, as well as exchange-traded futures contracts.

Market risk arising from derivative financial instruments is included as part of the overall market risk exposure. The credit risk arising from these transactions is marked against the overall credit exposure to individual counterparties. The financial risk management approaches are outlined in note 36.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

(a) Fair values of derivative financial instruments

An analysis of the fair values of derivative financial instruments held by product type is set out below:

| | Group | | | | Fund | | | |
|---|--------------|--------------|--------|-------------|--------------|--------------|--------|-------------|
| | 2023 | | 2022 | | 2023 | | 2022 | |
| | Assets | Liabilities | Assets | Liabilities | Assets | Liabilities | Assets | Liabilities |
| Derivatives categorised as held for trading | | | | | | | | |
| Interest rate derivatives | | | | | | | | |
| Interest rate swap contracts | 1,878 | 398 | 1,494 | 954 | 1,276 | 393 | 549 | 954 |
| Interest rate futures contracts | 2 | 4 | 7 | – | 2 | 4 | 7 | – |
| Equity derivatives | | | | | | | | |
| Equity index futures contracts | 55 | 50 | 86 | 81 | 55 | 50 | 86 | 81 |
| Total return swap contracts | 2 | – | 17 | 50 | 2 | – | 17 | 50 |
| Currency derivatives | | | | | | | | |
| Forward foreign exchange contracts | 25 | 2,190 | 745 | 1,827 | 22 | 1,910 | 728 | 1,636 |
| Currency swap contracts | 34 | 40 | 55 | 38 | – | – | – | – |
| Bond derivatives | | | | | | | | |
| Bond futures contracts | 101 | 62 | 27 | 51 | 101 | 62 | 27 | 51 |
| Commodity derivatives | | | | | | | | |
| Commodity futures contracts | 7 | 140 | 120 | 61 | 7 | 140 | 120 | 61 |
| | 2,104 | 2,884 | 2,551 | 3,062 | 1,465 | 2,559 | 1,534 | 2,833 |
| Derivatives designated as hedging instruments in fair value hedges | | | | | | | | |
| Interest rate derivatives | | | | | | | | |
| Interest rate swap contracts | 284 | 737 | 30 | 1,961 | – | – | – | – |
| Currency derivatives | | | | | | | | |
| Currency swap contracts | 454 | 1,800 | 370 | 2,112 | – | – | – | – |
| | 738 | 2,537 | 400 | 4,073 | – | – | – | – |
| Derivatives designated as hedging instruments in cash flow hedges | | | | | | | | |
| Currency derivatives | | | | | | | | |
| Currency swap contracts | – | 238 | – | 40 | – | – | – | – |
| TOTAL | 2,842 | 5,659 | 2,951 | 7,175 | 1,465 | 2,559 | 1,534 | 2,833 |

The fair value hedges consist of currency and interest rate swap contracts that are used to protect against changes in the fair value of certain fixed-rate debt securities issued due to movements in market interest rates and foreign exchange rates. The currency swap contracts under cash flow hedges are used to hedge the portion of foreign exchange risks arising from variability of cash flows from foreign currency denominated debt securities issued.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

(b) Notional amounts of derivative financial instruments

An analysis of the notional amounts of derivative financial instruments held at the reporting date based on the remaining periods to settlement is set out below. The notional amounts of these instruments indicate the volume of outstanding transactions and do not represent the amounts at risk.

| | Group | | | | | | | | | |
|---|---|------------------|-------------------|-----------------|---------------|----------------|------------------|-------------------|-----------------|---------------|
| | Notional amounts with remaining life of | | | | | | | | | |
| | 2023 | | | | | 2022 | | | | |
| | 1 year or less | | | | | 1 year or less | | | | |
| | Total | 3 months or less | but over 3 months | but over 1 year | Over 5 years | Total | 3 months or less | but over 3 months | but over 1 year | Over 5 years |
| Derivatives categorised as held for trading | | | | | | | | | | |
| Interest rate derivatives | | | | | | | | | | |
| Interest rate swap contracts | 39,339 | 2,441 | 5,328 | 17,913 | 13,657 | 43,144 | 611 | 6,906 | 25,033 | 10,594 |
| Interest rate futures contracts | 14,300 | 356 | 6,517 | 7,427 | – | 21,129 | 3,761 | 17,368 | – | – |
| Equity derivatives | | | | | | | | | | |
| Equity index futures contracts | 53,566 | 53,566 | – | – | – | 35,147 | 35,147 | – | – | – |
| Total return swap contracts | 625 | – | 625 | – | – | 3,902 | – | 3,902 | – | – |
| Currency derivatives | | | | | | | | | | |
| Forward foreign exchange contracts | 164,359 | 158,523 | 1,946 | 3,890 | – | 154,972 | 151,726 | 888 | 2,241 | 117 |
| Currency swap contracts | 7,323 | 521 | 2,470 | 4,332 | – | 6,613 | 220 | 1,578 | 4,815 | – |
| Bond derivatives | | | | | | | | | | |
| Bond futures contracts | 188,235 | 188,235 | – | – | – | 67,977 | 67,977 | – | – | – |
| Commodity derivatives | | | | | | | | | | |
| Commodity futures contracts | 16,458 | 8,171 | 8,287 | – | – | 20,280 | 14,420 | 5,860 | – | – |
| | 484,205 | 411,813 | 25,173 | 33,562 | 13,657 | 353,164 | 273,862 | 36,502 | 32,089 | 10,711 |
| Derivatives designated as hedging instruments in fair value hedges | | | | | | | | | | |
| Interest rate derivatives | | | | | | | | | | |
| Interest rate swap contracts | 99,655 | 16,049 | 50,622 | 31,415 | 1,569 | 68,784 | 3,726 | 29,520 | 33,494 | 2,044 |
| Currency derivatives | | | | | | | | | | |
| Currency swap contracts | 61,159 | 26,017 | 6,067 | 26,353 | 2,722 | 44,325 | 8,368 | 9,658 | 23,584 | 2,715 |
| | 160,814 | 42,066 | 56,689 | 57,768 | 4,291 | 113,109 | 12,094 | 39,178 | 57,078 | 4,759 |
| Derivatives designated as hedging instruments in cash flow hedges | | | | | | | | | | |
| Currency derivatives | | | | | | | | | | |
| Currency swap contracts | 2,998 | 2,998 | – | – | – | 2,998 | – | – | 2,998 | – |
| TOTAL | 648,017 | 456,877 | 81,862 | 91,330 | 17,948 | 469,271 | 285,956 | 75,680 | 92,165 | 15,470 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Fund | | | | | | | | | |
|--|---|----------------|---------------|---------------|---------------|-------------------|----------------|---------------|---------------|--------------|
| | Notional amounts with remaining life of | | | | | | | | | |
| | 2023 | | | | | 2022 | | | | |
| | 1 year or less | | | | | 1 year or less | | | | |
| | 3 months | but over | but over | Over | Total | 3 months | but over | but over | Over | Total |
| | Total | or less | 3 months | 1 year | 5 years | Total | or less | 3 months | 1 year | 5 years |
| Derivatives categorised as held for trading | | | | | | | | | | |
| Interest rate derivatives | | | | | | | | | | |
| Interest rate swap contracts | 24,198 | 600 | 2,815 | 8,794 | 11,989 | 24,109 | 600 | 2,447 | 12,550 | 8,512 |
| Interest rate futures contracts | 14,300 | 356 | 6,517 | 7,427 | – | 21,129 | 3,761 | 17,368 | – | – |
| Equity derivatives | | | | | | | | | | |
| Equity index futures contracts | 53,566 | 53,566 | – | – | – | 35,147 | 35,147 | – | – | – |
| Total return swap contracts | 625 | – | 625 | – | – | 3,902 | – | 3,902 | – | – |
| Currency derivatives | | | | | | | | | | |
| Forward foreign exchange contracts | 157,738 | 157,355 | 383 | – | – | 147,119 | 146,890 | 229 | – | – |
| Bond derivatives | | | | | | | | | | |
| Bond futures contracts | 188,235 | 188,235 | – | – | – | 67,977 | 67,977 | – | – | – |
| Commodity derivatives | | | | | | | | | | |
| Commodity futures contracts | 16,458 | 8,171 | 8,287 | – | – | 20,280 | 14,420 | 5,860 | – | – |
| TOTAL | 455,120 | 408,283 | 18,627 | 16,221 | 11,989 | 319,663 | 268,795 | 29,806 | 12,550 | 8,512 |

12 DEBT SECURITIES MEASURED AT AMORTISED COST

| | Group | |
|---|---------------|--------|
| | 2023 | 2022 |
| At amortised cost | | |
| Debt securities | | |
| Listed in Hong Kong | 6,631 | 6,902 |
| Listed outside Hong Kong | 4,173 | 3,336 |
| Unlisted | 3,775 | 2,910 |
| | 14,579 | 13,148 |
| Less: allowances for expected credit losses | (5) | (5) |
| TOTAL | 14,574 | 13,143 |

Fair value information of the above debt securities is provided in note 37.2.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

13 LOAN PORTFOLIO

| | Group | |
|--|----------------|--------------------|
| | 2023 | 2022 (restated) |
| At fair value | | |
| Mortgage loans | 1,893 | 1,220 |
| Other loans | 14 | 6 |
| | 1,907 | 1,226 |
| At amortised cost | | |
| Loans with full guarantee from the HKSAR Government | | |
| – Special 100% guarantee under the SME Financing Guarantee Scheme ¹ | 97,172 | 90,162 |
| – Dedicated 100% Loan Guarantee Schemes ¹ | 190 | – |
| Mortgage loans | 2,805 | 3,125 |
| Other loans | 18,310 | 15,616 |
| | 118,477 | 108,903 |
| Less: allowances for expected credit losses | (226) | (169) |
| | 118,251 | 108,734 |
| TOTAL | 120,158 | 109,960 |

¹ The Hong Kong Mortgage Corporation Limited, a wholly-owned subsidiary of the Fund, launched the special 100% loan guarantee under the SME Financing Guarantee Scheme (100% SFGS) in April 2020 and the Dedicated 100% Loan Guarantee Schemes (DLGS) in April 2023 through a subsidiary, HKMC Insurance Limited. The loans, which are fully guaranteed by the HKSAR Government, are originated by the participating lenders and sold to The Hong Kong Mortgage Corporation Limited without recourse upon origination. Accordingly, the default losses of these loans are covered by the HKSAR Government's guarantee and no impairment allowance is recognised in view of the minimal default risk of the HKSAR Government.

14 GOLD

| | Group and Fund | |
|-------------------------------------|-----------------------|------|
| | 2023 | 2022 |
| At fair value | | |
| Gold | | |
| 66,798 ounces (2022: 66,798 ounces) | 1,076 | 945 |

The fair value of gold is based on quoted price in an active market. It is classified under Level 1 of the fair value hierarchy.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

15 OTHER ASSETS

| | Group | | Fund | |
|--|---------------|--------------------|---------------|--------|
| | 2023 | 2022 (restated) | 2023 | 2022 |
| Unsettled sales and redemption of securities | 16,870 | 14,826 | 15,870 | 13,841 |
| Interest and dividends receivable | 18,600 | 14,151 | 15,183 | 12,818 |
| Prepayments, receivables and other assets | 6,067 | 9,708 | 4,567 | 5,073 |
| Staff housing loans | 181 | 181 | 181 | 181 |
| Loan to the International Monetary Fund | 7 | 34 | 7 | 34 |
| Reinsurance contract assets | 761 | 377 | – | – |
| Tax recoverable | 36 | 44 | – | – |
| Deferred tax assets | 6 | – | – | – |
| TOTAL | 42,528 | 39,321 | 35,808 | 31,947 |

16 INTERESTS IN SUBSIDIARIES

| | Fund | |
|--------------------------|----------------|---------|
| | 2023 | 2022 |
| Unlisted shares, at cost | 14,962 | 12,462 |
| Loans to subsidiaries | 203,931 | 191,694 |
| TOTAL | 218,893 | 204,156 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

The following is a list of the principal subsidiaries which are wholly owned by the Fund (except for Hong Kong Note Printing Limited¹) as at 31 December 2023:

| Name of company | Principal activities | Issued equity capital |
|---|---|-----------------------|
| The Hong Kong Mortgage Corporation Limited | Investment in mortgages and loans | HK\$14,500,000,000 |
| HKMC Annuity Limited ² | Long term insurance | HK\$12,500,000,000 |
| HKMC Insurance Limited ² | General insurance | HK\$3,000,000,000 |
| HKMC Mortgage Management Limited ² | Loan purchase, origination and servicing | HK\$1,000,000 |
| Hong Kong Note Printing Limited | Banknote printing | HK\$255,000,000 |
| Hong Kong FMI Services Limited | Performance of financial market infrastructure related operations | HK\$167,000,000 |
| Hong Kong Academy of Finance Limited | Financial leadership development | HK\$150,000,000 |
| BNR Finance Company Limited | Investment holding | HK\$1 |
| BNR Investment Company Limited | Investment holding | HK\$1 |
| Catalyst Investment Company Limited | Investment holding | HK\$1 |
| Debt Capital Solutions Company Limited | Investment holding | HK\$1 |
| Drawbridge Investment Limited | Investment holding | HK\$1 |
| Eight Finance Investment Company Limited | Investment holding | HK\$1 |
| Green 2021 Investment Company Limited | Investment holding | HK\$1 |
| Pine Gate Investment Company Limited | Investment holding | HK\$1 |
| Stewardship Investment Company Limited | Investment holding | HK\$1 |
| Stratosphere Finance Company Limited | Investment holding | HK\$1 |
| Real Avenue Investment Company Limited | Investment properties holding | HK\$1 |
| Real Boulevard Investment Company Limited | Investment properties holding | HK\$1 |
| Real Gate Investment Company Limited | Investment properties holding | HK\$1 |
| Real Horizon Investment Company Limited | Investment properties holding | HK\$1 |
| Real Plaza Investment Company Limited | Investment properties holding | HK\$1 |
| Real Summit Investment Company Limited | Investment properties holding | HK\$1 |
| Real Zenith Investment Company Limited | Investment properties holding | HK\$1 |

¹ 55% equity interest held by the Fund.

² Subsidiaries indirectly held by the Fund through The Hong Kong Mortgage Corporation Limited.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

The place of incorporation and operation of the above subsidiaries are in Hong Kong.

The Fund has committed to inject additional funds up to HK\$20 billion (2022: HK\$20 billion) to The Hong Kong Mortgage Corporation Limited as equity for the purpose of financing The Hong Kong Mortgage Corporation Limited's additional capital injection to HKMC Annuity Limited for maintaining its margin of solvency above a certain level. During the year, capital injection of HK\$2.5 billion (2022: HK\$2.5 billion) to The Hong Kong Mortgage Corporation Limited was made under this arrangement and the outstanding commitment as at 31 December 2023 was HK\$12.5 billion (2022: HK\$15.0 billion).

The Fund has provided The Hong Kong Mortgage Corporation Limited with a revolving credit facility of HK\$80 billion (2022: HK\$80 billion) at prevailing market interest rates. As at 31 December 2023, there was no outstanding balance due from The Hong Kong Mortgage Corporation Limited under this facility (2022: Nil).

Loans to other subsidiaries are unsecured, interest-free and repayable on demand.

Placements by subsidiaries are disclosed in note 25.

The financial statements of the Fund's subsidiaries are audited by firms other than the Audit Commission. The aggregate assets and liabilities of these subsidiaries not audited by the Audit Commission amounted to approximately 16% (2022: 15%) and 6% (2022: 5%) of the Group's total assets and total liabilities, respectively.

17 INTERESTS IN ASSOCIATES AND JOINT VENTURES

| | Group | | Fund | |
|-----------------------------|---------------|--------|------------|------|
| | 2023 | 2022 | 2023 | 2022 |
| Associates ¹ | 3,669 | 3,620 | 159 | 116 |
| Joint ventures ² | 30,365 | 38,018 | – | – |
| TOTAL | 34,034 | 41,638 | 159 | 116 |

¹ Investment in an associate, comprising unlisted shares, is held directly by the Fund. In the Fund's balance sheet, the investment is stated at cost of HK\$5,000 (2022: HK\$5,000).

² The Fund does not directly hold investment in joint ventures.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

17.1 Interests in associates

The Group holds investments in six associates. One associate, incorporated in Hong Kong, provides interbank clearing services. The other five associates, incorporated outside Hong Kong, hold overseas investment properties and investment funds. The Group holds equity interests in these associates ranging from 16% to 50%.

Aggregate information of the Group's associates, which are not individually material, is summarised below:

| | Group | |
|--|--------------|-------------|
| | 2023 | 2022 |
| Share of loss for the year | (468) | (117) |
| Share of other comprehensive income/(loss) | 163 | (337) |
| Share of total comprehensive loss | (305) | (454) |
| Aggregate carrying amount of interests in associates | 3,669 | 3,620 |

As at 31 December 2023, the Group has no outstanding investment commitments to associates (2022: Nil).

The Fund has provided an associate with non-revolving credit facilities totalling HK\$50 million (2022: HK\$116 million) for developing financial infrastructure. The facilities are unsecured and interest-free. The facility of HK\$116 million which has expired in October 2023 is repayable by October 2033, the facility of HK\$27.9 million expiring in June 2024 is repayable by October 2037, and the facility of HK\$22.1 million expiring in June 2025 is repayable by October 2035. Loans totalling HK\$43 million (2022: HK\$62 million) were drawn during the year, the outstanding commitment of the facilities was HK\$7 million (2022: Nil) and the outstanding balance due from this associate under the facilities was HK\$159 million (2022: HK\$116 million) as at 31 December 2023.

17.2 Interests in joint ventures

The Group holds investments in 22 joint ventures, which are all incorporated outside Hong Kong. The principal activities of these joint ventures are holding overseas investment properties. The Group holds equity interests in these joint ventures ranging from 25% to 51%. Although the Group's equity interest in some of these joint ventures exceeds 50%, they are categorised as joint ventures because important business decisions relating to these joint ventures are required to be made with the consent of all parties. As at 31 December 2023, the aggregate interest in these joint ventures amounted to 0.67% (2022: 0.85%) of the Group's total assets.

Aggregate information of the Group's joint ventures, which are not individually material, is summarised below:

| | Group | |
|--|---------------|-------------|
| | 2023 | 2022 |
| Share of loss for the year | (7,508) | (4,589) |
| Share of other comprehensive income/(loss) | 328 | (1,161) |
| Share of total comprehensive loss | (7,180) | (5,750) |
| Aggregate carrying amount of interests in joint ventures | 30,365 | 38,018 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

The Group's share of outstanding investment commitments to joint ventures is shown below:

| | Group | |
|---------------------------------|--------------|-------------|
| | 2023 | 2022 |
| Commitments to contribute funds | 6,070 | 5,943 |

18 INVESTMENT PROPERTIES

| | Group | |
|-------------------------------------|----------------|-------------|
| | 2023 | 2022 |
| At fair value | | |
| At 1 January | 23,394 | 27,089 |
| Additions | 729 | 791 |
| Change in fair value on revaluation | (2,798) | (2,000) |
| Exchange differences | 1,124 | (2,486) |
| At 31 December | 22,449 | 23,394 |

The carrying amount of the Group's investment properties is analysed as follows:

| | Group | |
|------------------------------------|---------------|-------------|
| | 2023 | 2022 |
| Held outside Hong Kong | | |
| on freehold | 10,656 | 11,720 |
| on long-term lease (over 50 years) | 11,793 | 11,674 |
| TOTAL | 22,449 | 23,394 |

The Group's investment properties are leased to third parties under operating leases. The gross rental income received and receivable by the Group and the related expenses in respect of these investment properties are summarised as follows:

| | Group | |
|---------------------|--------------|-------------|
| | 2023 | 2022 |
| Gross rental income | 1,126 | 1,267 |
| Direct expenses | (286) | (248) |
| Net rental income | 840 | 1,019 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

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

| | Group | |
|--|--------------|-------------|
| | 2023 | 2022 |
| Within one year | 897 | 967 |
| After one year but not later than five years | 2,106 | 2,263 |
| After five years but not later than ten years | 2,061 | 414 |
| After ten years but not later than fifteen years | 922 | 59 |
| TOTAL | 5,986 | 3,703 |

As at 31 December 2023, investment properties with a fair value of HK\$22,038 million (2022: HK\$22,822 million) were pledged to secure general banking facilities granted to the Group (note 27).

18.1 Fair value measurement of investment properties

The Group's investment properties are revalued by independent professional valuers on an open market value basis at each reporting date. The valuers have valued the Group's investment properties based on income approach with reference to comparable market evidence. The market value which is considered as the fair value of each investment property reflects, among other things, rental income from current leases and assumptions about rental income from future leases in light of the current market conditions. The fair value also reflects, on a similar basis, any cash outflows that could be expected in respect of the property. For all properties, their current use equates to the highest and best use. There has been no change to the valuation technique during the year.

Under the income approach, fair value is estimated using assumptions regarding the benefits and liabilities of ownership over the asset's life including the terminal value. This method involves the projection of a series of cash flows on a real property interest. To this projected cash flow series, a market-derived discount rate is applied to establish the present value of the income stream associated with the asset. The significant unobservable inputs used in the income approach are the selection of discount rates which ranged from 5.00% to 7.90% (2022: 4.20% to 7.90%), equivalent yields which ranged from 3.06% to 6.11% (2022: 4.46% to 6.48%) and terminal capitalisation rates which ranged from 4.25% to 6.70% (2022: 3.20% to 6.35%). Significant increases or decreases in any of those inputs in isolation would result in significantly lower or higher fair value measurements, respectively.

All of the Group's investment properties are classified under Level 3 of the fair value hierarchy. There were no transfers into or out of Level 3 during the year. The net losses recognised in the income and expenditure account relating to revaluation of investment properties held at the reporting date were HK\$2,798 million (2022: HK\$2,000 million).

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

19 PROPERTY, PLANT AND EQUIPMENT

| | Group | | | | |
|--------------------------------------|--------------|---------------------|---|------------|--------------|
| | Owned assets | | Right-of-use assets | | |
| | Premises | Plant and equipment | Computer software licences and system development costs | Premises | Total |
| Cost | | | | | |
| At 1 January 2022 | 3,854 | 1,849 | 613 | 730 | 7,046 |
| Additions | 3 | 175 | 273 | 30 | 481 |
| Disposals/write-offs | – | (1) | – | (3) | (4) |
| At 31 December 2022 | 3,857 | 2,023 | 886 | 757 | 7,523 |
| At 1 January 2023 | 3,857 | 2,023 | 886 | 757 | 7,523 |
| Additions | – | 192 | 210 | 172 | 574 |
| Disposals/write-offs | – | (19) | – | (40) | (59) |
| At 31 December 2023 | 3,857 | 2,196 | 1,096 | 889 | 8,038 |
| Accumulated depreciation | | | | | |
| At 1 January 2022 | 1,603 | 1,373 | 447 | 270 | 3,693 |
| Charge for the year | 88 | 141 | 32 | 119 | 380 |
| Written back on disposals/write-offs | – | (1) | – | (2) | (3) |
| At 31 December 2022 | 1,691 | 1,513 | 479 | 387 | 4,070 |
| At 1 January 2023 | 1,691 | 1,513 | 479 | 387 | 4,070 |
| Charge for the year | 88 | 138 | 37 | 125 | 388 |
| Written back on disposals/write-offs | – | (19) | – | (40) | (59) |
| At 31 December 2023 | 1,779 | 1,632 | 516 | 472 | 4,399 |
| Net book value | | | | | |
| At 31 December 2023 | 2,078 | 564 | 580 | 417 | 3,639 |
| At 31 December 2022 | 2,166 | 510 | 407 | 370 | 3,453 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Fund | | | | |
|---------------------------------|--------------|---------------------------------------|-----------------------------|------------|--------------|
| | Owned assets | | Right-of-use assets | | |
| | | Computer software licences and system | Plant and development costs | Premises | Total |
| Cost | | | | | |
| At 1 January 2022 | 3,843 | 907 | 613 | 527 | 5,890 |
| Additions | – | 140 | 273 | 30 | 443 |
| At 31 December 2022 | 3,843 | 1,047 | 886 | 557 | 6,333 |
| At 1 January 2023 | 3,843 | 1,047 | 886 | 557 | 6,333 |
| Additions | – | 111 | 210 | 36 | 357 |
| At 31 December 2023 | 3,843 | 1,158 | 1,096 | 593 | 6,690 |
| Accumulated depreciation | | | | | |
| At 1 January 2022 | 1,592 | 673 | 447 | 213 | 2,925 |
| Charge for the year | 88 | 76 | 32 | 81 | 277 |
| At 31 December 2022 | 1,680 | 749 | 479 | 294 | 3,202 |
| At 1 January 2023 | 1,680 | 749 | 479 | 294 | 3,202 |
| Charge for the year | 88 | 72 | 37 | 85 | 282 |
| At 31 December 2023 | 1,768 | 821 | 516 | 379 | 3,484 |
| Net book value | | | | | |
| At 31 December 2023 | 2,075 | 337 | 580 | 214 | 3,206 |
| At 31 December 2022 | 2,163 | 298 | 407 | 263 | 3,131 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

The net book value of owned premises comprises:

| | Group | | Fund | |
|---|--------------|-------|--------------|-------|
| | 2023 | 2022 | 2023 | 2022 |
| In Hong Kong | | | | |
| Leasehold land and the building situated thereon (leasehold between 10 and 50 years) | 2,057 | 2,145 | 2,054 | 2,142 |
| Outside Hong Kong | | | | |
| Freehold land and the building situated thereon | 21 | 21 | 21 | 21 |
| TOTAL | 2,078 | 2,166 | 2,075 | 2,163 |

20 CERTIFICATES OF INDEBTEDNESS, GOVERNMENT-ISSUED CURRENCY NOTES AND COINS IN CIRCULATION

| | Group and Fund | | | |
|---|------------------------------|--------------------|---|-------------------|
| | Certificates of Indebtedness | | Government-issued currency notes and coins in circulation | |
| | 2023 | 2022 | 2023 | 2022 |
| Carrying amount | 593,235 | 605,959 | 12,941 | 13,160 |
| Reconciliation with face value: | | | | |
| Hong Kong dollar face value | 592,585 | 605,575 | 12,927 | 13,151 |
| Linked exchange rate for calculating the US dollars required for redemption | US\$1=HK\$7.80 | US\$1=HK\$7.80 | US\$1=HK\$7.80 | US\$1=HK\$7.80 |
| US dollars required for redemption | US\$75,972 million | US\$77,638 million | US\$1,657 million | US\$1,686 million |
| Market exchange rate for translation into Hong Kong dollars | US\$1=HK\$7.80855 | US\$1=HK\$7.80495 | US\$1=HK\$7.80855 | US\$1=HK\$7.80495 |
| Carrying amount | 593,235 | 605,959 | 12,941 | 13,160 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

21 BALANCE OF THE BANKING SYSTEM

Under the interbank payment system based on Real Time Gross Settlement principles, all licensed banks maintain a Hong Kong dollar clearing account with the Hong Kong Monetary Authority (HKMA) for the account of the Fund. The aggregate amount in these clearing accounts, which must not have a negative balance, represents the total level of liquidity in the interbank market.

Under the weak-side Convertibility Undertaking, the HKMA undertakes to convert Hong Kong dollars in these clearing accounts into US dollars at the fixed exchange rate of US\$1=HK\$7.85. Likewise, under the strong-side Convertibility Undertaking, licensed banks can convert US dollars into Hong Kong dollars in these accounts, as the HKMA undertakes to buy US dollars at the fixed exchange rate of US\$1=HK\$7.75. Within the Convertibility Zone bounded by the two Convertibility Undertakings, the HKMA may choose to conduct market operations in a manner consistent with Currency Board principles. Such operations can result in matching changes in the balances of these accounts.

The balance of the banking system is repayable on demand and non-interest-bearing.

22 PLACEMENTS BY BANKS AND OTHER FINANCIAL INSTITUTIONS

| | Group and Fund | |
|-----------------------------|-----------------------|-------------|
| | 2023 | 2022 |
| At amortised cost | | |
| Placements by central banks | 22,020 | 22,455 |
| Placements by banks | 77,100 | 77,000 |
| TOTAL | 99,120 | 99,455 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

23 PLACEMENTS BY FISCAL RESERVES

| | Group and Fund | |
|--|----------------|---------|
| | 2023 | 2022 |
| Placements by Operating and Capital Reserves | | |
| (i) with interest payable at a fixed rate determined annually | | |
| General Revenue Account | 116,443 | 167,032 |
| Capital Works Reserve Fund | 145,648 | 208,017 |
| Civil Service Pension Reserve Fund | 55,857 | 53,864 |
| Innovation and Technology Fund | 29,822 | 29,278 |
| Lotteries Fund | 23,535 | 23,404 |
| Capital Investment Fund | 17,941 | 20,429 |
| Loan Fund | 6,690 | 7,886 |
| Disaster Relief Fund | 78 | 48 |
| | 396,014 | 509,958 |
| (ii) with interest payable at market-based rates | | |
| General Revenue Account | 4 | 4 |
| | 396,018 | 509,962 |
| Placements by Future Fund with interest payable at a composite rate determined annually | | |
| Land Fund | 294,608 | 250,427 |
| General Revenue Account | 4,800 | 4,800 |
| | 299,408 | 255,227 |
| TOTAL | 695,426 | 765,189 |

Fiscal Reserves comprise Operating and Capital Reserves and the Future Fund.

Placements by Operating and Capital Reserves are repayable on demand. Interest on the majority of these placements is payable at a fixed rate determined in January each year. The rate is the average annual investment return of the Fund's Investment Portfolio for the past six years or the average annual yield of three-year Government Bond for the previous year subject to a minimum of zero percent, whichever is the higher. This rate was fixed at 3.7% per annum for 2023 (2022: 5.6%).

The Future Fund was established on 1 January 2016. Placements by Future Fund comprise an initial endowment from the balance of the Land Fund, periodic top-ups from the General Revenue Account and ad-hoc transfers from the Land Fund as directed by the Financial Secretary. These placements are divided into two portions: one linked with the performance of the Investment Portfolio and another linked with the performance of the Long-Term Growth Portfolio. Interest on these placements is payable at a composite rate which is computed annually, on a weighted average basis, with reference to the above-mentioned fixed rate determined for placements by Operating and Capital Reserves and the annual rate of return linked with the performance of the Long-Term Growth Portfolio. The composite rate for 2023 was 4.8% (2022: -3.0%). In accordance with the directive made by the Financial Secretary in October 2022, the repayment date of placements by Future Fund and the interest thereon (note 29) was extended from 31 December 2025 to 31 December 2030 unless otherwise directed by the Financial Secretary according to the terms of the placements.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

24 PLACEMENTS BY HKSAR GOVERNMENT FUNDS AND STATUTORY BODIES

| | Group and Fund | |
|---|-----------------------|-------------|
| | 2023 | 2022 |
| Placements with interest payable at a fixed rate¹ determined annually | | |
| Bond Fund | 293,917 | 266,392 |
| Community Care Fund | – | 6,399 |
| Elite Athletes Development Fund | 9,871 | 9,519 |
| Employees Retraining Board | 11,651 | 12,227 |
| Environment and Conservation Fund | 6,208 | 6,226 |
| Hong Kong Housing Authority | 40,283 | 38,846 |
| Hospital Authority | 16,691 | 16,601 |
| Language Fund | 7,205 | 6,947 |
| Research Endowment Fund | 52,398 | 52,267 |
| Samaritan Fund | 5,821 | 7,127 |
| Trading Funds | 9,317 | 10,611 |
| Other funds ² | 13,938 | 14,261 |
| | 467,300 | 447,423 |
| Placements with interest payable at market-based rates | | |
| Deposit Protection Scheme Fund | 1,356 | 1,618 |
| TOTAL | 468,656 | 449,041 |

¹ The rate is the average annual investment return of the Fund's Investment Portfolio for the past six years or the average annual yield of three-year Government Bond for the previous year subject to a minimum of zero percent, whichever is the higher. This rate was fixed at 3.7% per annum for 2023 (2022: 5.6%).

² This is a collective placement by 16 HKSAR Government funds (2022: 15 HKSAR Government funds).

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

25 PLACEMENTS BY SUBSIDIARIES

| | Fund | |
|---|---------------|--------|
| | 2023 | 2022 |
| Placements by: | | |
| HKMC Annuity Limited ¹ | 27,549 | 23,690 |
| HKMC Insurance Limited ² | 3,637 | 3,507 |
| The Hong Kong Mortgage Corporation Limited ³ | – | 3,391 |
| TOTAL | 31,186 | 30,588 |

¹ Placements by HKMC Annuity Limited are unsecured, interest-bearing and have fixed repayment terms from 6 to 10 years.

² Placements by HKMC Insurance Limited are unsecured, interest-bearing and have a fixed repayment term of 6 years.

³ Placements by The Hong Kong Mortgage Corporation Limited are unsecured, interest-bearing and repayable on demand.

26 EXCHANGE FUND BILLS AND NOTES ISSUED

| | Group and Fund | |
|---|------------------|-----------|
| | 2023 | 2022 |
| At fair value | | |
| Exchange Fund Bills and Notes issued | | |
| Exchange Fund Bills | 1,227,258 | 1,179,895 |
| Exchange Fund Notes | 18,193 | 20,527 |
| | 1,245,451 | 1,200,422 |
| Exchange Fund Bills held | (989) | (99) |
| TOTAL | 1,244,462 | 1,200,323 |

Exchange Fund Bills and Notes (EFBN) issued are unsecured obligations of the Fund and are one of the components of the Monetary Base in the Currency Board Account. Exchange Fund Bills are issued by the Fund for maturities not exceeding one year. Exchange Fund Notes are issued by the Fund with maturities of 2 years or more.

Since January 2015, the Fund has ceased to issue Exchange Fund Notes with tenors of three years or above to avoid overlapping with Government Bonds of the same tenors. To maintain the overall size of Exchange Fund paper, the Fund has issued additional Exchange Fund Bills to replace maturing Exchange Fund Notes of those tenors.

Exchange Fund Bills held by the Fund as a result of market making activities are considered as redemption of the bills issued and are netted off.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

An analysis of the nominal value of EFBN issued at the beginning and the end of year is set out below:

| | Group and Fund | | | |
|---|------------------------|------------------------|------------------------|------------------------|
| | 2023 | | 2022 | |
| | Exchange Fund Bills | Exchange Fund Notes | Exchange Fund Bills | Exchange Fund Notes |
| Issued by the Currency Board Operations segment | | | | |
| Nominal value at 1 January | 1,186,298 | 21,200 | 1,125,217 | 23,400 |
| Issuance | 3,973,227 | 4,800 | 3,813,938 | 4,800 |
| Redemption | (3,922,545) | (7,600) | (3,752,857) | (7,000) |
| Nominal value at 31 December | 1,236,980 | 18,400 | 1,186,298 | 21,200 |
| Long positions held by the Financial Stability and Other Activities segment | | | | |
| Nominal value at 31 December | (1,000) | – | (100) | – |
| Total nominal value | 1,235,980 | 18,400 | 1,186,198 | 21,200 |
| Carrying amount, at fair value | 1,226,269 | 18,193 | 1,179,796 | 20,527 |
| Difference | 9,711 | 207 | 6,402 | 673 |

The fair value changes of EFBN issued are attributable to changes in benchmark interest rates.

27 BANK LOANS

| | Group | |
|---|---------------|--------|
| | 2023 | 2022 |
| At amortised cost | | |
| Bank loans repayable: | | |
| Within one year | 2,737 | 45 |
| After one year but not later than two years | 1,589 | 2,632 |
| After two years but not later than five years | 11,033 | 12,037 |
| TOTAL | 15,359 | 14,714 |

As at 31 December 2023, the banking facilities of the Group were secured by mortgage over the investment properties with a fair value of HK\$22,038 million (2022: HK\$22,822 million) (note 18).

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

28 OTHER DEBT SECURITIES ISSUED

| | Group | |
|--|----------------|-------------|
| | 2023 | 2022 |
| Debt securities issued, carried at amortised cost | 12,193 | 24,068 |
| Debt securities issued, designated as hedged items under fair value hedge | 147,429 | 104,796 |
| Debt securities issued, designated as hedged items under cash flow hedge | 2,741 | 2,819 |
| TOTAL | 162,363 | 131,683 |

An analysis of the nominal value of other debt securities issued at the beginning and the end of year is set out below:

| | Group | |
|------------------------------|-----------------|-------------|
| | 2023 | 2022 |
| Total debt securities issued | | |
| Nominal value at 1 January | 135,608 | 115,960 |
| Issuance | 98,329 | 97,594 |
| Redemption | (69,456) | (77,622) |
| Exchange differences | (43) | (324) |
| Nominal value at 31 December | 164,438 | 135,608 |
| Carrying amount | 162,363 | 131,683 |
| Difference | 2,075 | 3,925 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

29 OTHER LIABILITIES

| | Group | | Fund | |
|--|----------------|------------|----------------|---------|
| | 2023 | 2022 | 2023 | 2022 |
| | | (restated) | | |
| Accrued interest on placements by Fiscal Reserves (Future Fund) ¹ | 118,228 | 135,233 | 118,228 | 135,233 |
| Accrued interest on placements by a subsidiary | – | – | 2,885 | 2,211 |
| Other interest payable | 4,327 | 2,149 | 522 | 407 |
| Unsettled purchases of securities | 46,253 | 44,540 | 46,253 | 44,540 |
| Accrued charges and other liabilities | 12,505 | 17,709 | 8,860 | 5,323 |
| Insurance contract liabilities | 19,262 | 15,773 | – | – |
| Lease liabilities | 802 | 751 | 226 | 284 |
| Tax payable | 605 | 535 | – | – |
| Deferred tax liabilities | 810 | 1,384 | – | – |
| Provision for expected credit losses on loan commitments | 30 | 21 | – | – |
| TOTAL | 202,822 | 218,095 | 176,974 | 187,998 |

¹ In accordance with the directives made by the Financial Secretary in December 2015 and October 2022, the accrued interest on placements by Future Fund should be rolled over and compounded at the composite rate (note 23) on an annual basis and shall only be paid upon maturity of the placements (i.e. 31 December 2030) unless otherwise directed by the Financial Secretary according to the terms of the placements.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

30 CASH AND CASH EQUIVALENTS AND OTHER CASH FLOW INFORMATION

(a) Components of cash and cash equivalents

| | Group | | Fund | |
|--|----------------|---------|----------------|---------|
| | 2023 | 2022 | 2023 | 2022 |
| Cash and money at call | 195,831 | 209,717 | 190,478 | 203,850 |
| Placements with banks and other financial institutions | 172,720 | 176,271 | 122,720 | 148,520 |
| Treasury bills and commercial papers | 22,700 | 49,212 | 22,700 | 49,212 |
| Certificate of deposit | 14,987 | 8,868 | 14,987 | 8,868 |
| TOTAL | 406,238 | 444,068 | 350,885 | 410,450 |

(b) Reconciliation of cash and cash equivalents

| | Note | Group | | Fund | |
|---|------|--------------------|-------------|--------------------|-------------|
| | | 2023 | 2022 | 2023 | 2022 |
| Amounts shown in the balance sheet | | | | | |
| Cash and money at call | 7 | 195,831 | 209,717 | 190,478 | 203,850 |
| Placements with banks and other financial institutions | 8 | 206,137 | 197,421 | 155,125 | 164,910 |
| Treasury bills and commercial papers | 9 | 1,038,346 | 1,033,689 | 1,038,346 | 1,033,689 |
| Certificates of deposit | 9 | 209,496 | 141,029 | 209,496 | 141,029 |
| | | 1,649,810 | 1,581,856 | 1,593,445 | 1,543,478 |
| Less: Amounts with original maturity beyond 3 months | | (1,243,572) | (1,137,788) | (1,242,560) | (1,133,028) |
| Cash and cash equivalents in the statement of cash flows | | 406,238 | 444,068 | 350,885 | 410,450 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

(c) Reconciliation of liabilities arising from financing activities

The table below shows changes in the liabilities arising from financing activities, which are liabilities for which cash flows were, or future cash flows will be, classified in the statement of cash flows as cash flows from financing activities.

| | Group | | Fund | |
|--|-------------------------|---|-----------------------------------|-----------------------------------|
| | Bank loans (note 27) | Other debt securities issued (note 28) | Lease liabilities (note 29) | Lease liabilities (note 29) |
| | | | | |
| At 1 January 2022 | 16,130 | 116,334 | 887 | 337 |
| Changes from financing cash flows | | | | |
| Repayment of bank loans | (22) | – | – | – |
| Proceeds from issue of other debt securities | – | 97,470 | – | – |
| Redemption of other debt securities issued | – | (77,622) | – | – |
| Principal portion of lease payments | – | – | (121) | (83) |
| Non-cash changes | | | | |
| Increase in lease liabilities relating to new leases | – | – | 30 | 30 |
| Amortisation | 25 | 92 | 14 | 4 |
| Exchange differences | (1,419) | (323) | (45) | – |
| Change in fair value | – | (4,268) | – | – |
| Other changes | | | | |
| Interest portion of lease payments | – | – | (14) | (4) |
| At 31 December 2022 | 14,714 | 131,683 | 751 | 284 |
| At 1 January 2023 | 14,714 | 131,683 | 751 | 284 |
| Changes from financing cash flows | | | | |
| Repayment of bank loans | (46) | – | – | – |
| Proceeds from issue of other debt securities | – | 98,147 | – | – |
| Redemption of other debt securities issued | – | (69,456) | – | – |
| Principal portion of lease payments | – | – | (130) | (94) |
| Non-cash changes | | | | |
| Increase in lease liabilities relating to new leases | – | – | 160 | 36 |
| Amortisation | 35 | 182 | 14 | 3 |
| Exchange differences | 656 | (44) | 21 | – |
| Change in fair value | – | 1,851 | – | – |
| Other changes | | | | |
| Interest portion of lease payments | – | – | (14) | (3) |
| At 31 December 2023 | 15,359 | 162,363 | 802 | 226 |

The total cash outflows for leases of the Group and the Fund in 2023 were HK\$157 million (2022: HK\$147 million) and HK\$97 million (2022: HK\$87 million) respectively.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

31 OPERATING SEGMENT INFORMATION

The Group determines its operating segments based on the reports reviewed by the chief operating decision maker. As a central banking institution, the HKMA is responsible for managing the Fund and maintaining the monetary and banking stability of Hong Kong. The Group comprises operating segments as stated in note 2.20.

| | Group | | | | | | | |
|--|--------------------------|----------|---------------------|-----------|--|------------|---------|------------|
| | Currency Board | | Reserves Management | | Financial Stability and Other Activities | | Total | |
| | Operations (note (a)) | | Management | | Other Activities | | Total | |
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| | | | | | | (restated) | | (restated) |
| Income | | | | | | | | |
| Interest and dividend income | 86,626 | 30,029 | 48,979 | 37,831 | 8,359 | 2,998 | 143,964 | 70,858 |
| Investment gains/(losses) | 16,533 | (43,007) | 78,146 | (226,442) | (1,554) | (4,329) | 93,125 | (273,778) |
| Other income | – | – | 107 | 66 | 746 | 667 | 853 | 733 |
| | 103,159 | (12,978) | 127,232 | (188,545) | 7,551 | (664) | 237,942 | (202,187) |
| Expenditure | | | | | | | | |
| Interest expense | 45,718 | 11,999 | 55,644 | 49,951 | 8,372 | 2,760 | 109,734 | 64,710 |
| Other expenses | 1,585 | 1,605 | 2,045 | 1,994 | 4,766 | 977 | 8,396 | 4,576 |
| | 47,303 | 13,604 | 57,689 | 51,945 | 13,138 | 3,737 | 118,130 | 69,286 |
| Surplus/(Deficit) before share of (loss)/ profit of associates and joint ventures | 55,856 | (26,582) | 69,543 | (240,490) | (5,587) | (4,401) | 119,812 | (271,473) |
| Share of (loss)/profit of associates and joint ventures, net of tax | – | – | (8,031) | (4,767) | 55 | 61 | (7,976) | (4,706) |
| Surplus/(Deficit) before taxation | 55,856 | (26,582) | 61,512 | (245,257) | (5,532) | (4,340) | 111,836 | (276,179) |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Group | | | | | | | | | |
|---|-----------------------|-----------|---------------------|-----------|--|--------------------|---------------------------------|--------|------------------|--------------------|
| | Currency Board | | Reserves Management | | Financial Stability and Other Activities | | Re-allocation (notes (b) & (c)) | | Total | |
| | Operations (note (a)) | | Reserves Management | | Financial Stability and Other Activities | | Re-allocation (notes (b) & (c)) | | Total | |
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 (restated) | 2023 | 2022 | 2023 | 2022 (restated) |
| Assets | | | | | | | | | | |
| Backing Assets | | | | | | | | | | |
| Investment in designated | | | | | | | | | | |
| US dollar assets | 2,098,273 | 2,120,691 | - | - | - | - | - | - | 2,098,273 | 2,120,691 |
| Interest receivable on designated | | | | | | | | | | |
| US dollar assets | 6,941 | 5,217 | - | - | - | - | - | - | 6,941 | 5,217 |
| Net accounts (payable)/receivable | (5,514) | (15,942) | - | - | - | - | 16,872 | 22,966 | 11,358 | 7,024 |
| Other investments | - | - | 2,125,782 | 2,077,372 | 260,359 | 231,480 | (989) | (99) | 2,385,152 | 2,308,753 |
| Other assets | - | - | 20,043 | 22,687 | 10,667 | 10,797 | - | - | 30,710 | 33,484 |
| TOTAL ASSETS | 2,099,700 | 2,109,966 | 2,145,825 | 2,100,059 | 271,026 | 242,277 | 15,883 | 22,867 | 4,532,434 | 4,475,169 |
| Liabilities | | | | | | | | | | |
| Monetary Base | | | | | | | | | | |
| Certificates of Indebtedness | 593,235 | 605,959 | - | - | - | - | - | - | 593,235 | 605,959 |
| Government-issued currency notes and coins in circulation | 12,941 | 13,160 | - | - | - | - | - | - | 12,941 | 13,160 |
| Balance of the banking system | 44,950 | 96,251 | - | - | - | - | - | - | 44,950 | 96,251 |
| Exchange Fund Bills and Notes issued | 1,245,451 | 1,200,422 | - | - | - | - | (989) | (99) | 1,244,462 | 1,200,323 |
| Interest payable on Exchange Fund Notes | 126 | 99 | - | - | - | - | - | - | 126 | 99 |
| Net accounts payable | 241 | 518 | - | - | - | - | - | - | 241 | 518 |
| Placements by banks and other financial institutions | - | - | 77,100 | 77,000 | 22,020 | 22,455 | - | - | 99,120 | 99,455 |
| Placements by Fiscal Reserves | - | - | 695,426 | 765,189 | - | - | - | - | 695,426 | 765,189 |
| Placements by HKSAR Government funds and statutory bodies | - | - | 467,300 | 447,423 | 1,356 | 1,618 | - | - | 468,656 | 449,041 |
| Bank loans | - | - | 15,359 | 14,714 | - | - | - | - | 15,359 | 14,714 |
| Other debt securities issued | - | - | 644 | 608 | 161,719 | 131,075 | - | - | 162,363 | 131,683 |
| Other liabilities | - | - | 152,857 | 165,888 | 38,385 | 35,799 | 16,872 | 22,966 | 208,114 | 224,653 |
| TOTAL LIABILITIES | 1,896,944 | 1,916,409 | 1,408,686 | 1,470,822 | 223,480 | 190,947 | 15,883 | 22,867 | 3,544,993 | 3,601,045 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

(a) Currency Board Operations

Starting from 1 October 1998, specific US dollar assets of the Fund have been designated to back the Monetary Base, which comprises Certificates of Indebtedness, government-issued currency notes and coins in circulation, balance of the banking system and EFBN issued. While specific assets of the Fund have been earmarked for backing the Monetary Base, all the Fund's assets are available for the purpose of supporting the Hong Kong dollar exchange rate under the Linked Exchange Rate system.

In accordance with an arrangement approved by the Financial Secretary in January 2000, assets can be transferred between the Backing Portfolio and general reserves when the Backing Ratio reaches either the upper trigger point (112.5%) or the lower trigger point (105%). This arrangement allows transfer of excess assets out of the Backing Portfolio to maximise their earning potential while ensuring that there are sufficient liquid assets in the Backing Portfolio. The Backing Ratio reached the upper trigger point of 112.5% in early May 2023. Assets were transferred from the Backing Portfolio to general reserves and the Backing Ratio was brought down to around 110% (2022: The Backing Ratio did not reach the above trigger points). The Backing Ratio stood at 110.73% as at 31 December 2023 (2022: 110.12%).

(b) Re-allocation of assets and liabilities

For the purpose of the Currency Board Operations segment, certain liabilities of the Fund are deducted from the Backing Assets and certain assets are deducted from the Monetary Base in order to allow proper computation of the Backing Ratio. The following items are re-allocation adjustments to reconcile the segmental information to the Group balance sheet:

- (i) the Backing Assets are presented on a net basis in the Currency Board Operations. Accounts payable for unsettled purchases of securities and redemption of Certificates of Indebtedness are included in "net accounts (payable)/receivable" to offset corresponding investments in the Backing Assets. As at 31 December 2023, deductions from the Backing Assets comprised "other liabilities" of HK\$16,872 million (2022: HK\$22,966 million); and
- (ii) the Monetary Base is also presented on a net basis. As Hong Kong dollar interest rate swaps have been used as a means to manage the cost of issuing Exchange Fund Notes, interest receivable and unrealised gains on these interest rate swaps are included in "net accounts payable" to reduce the Monetary Base. As at 31 December 2023, there were no "other assets" (2022: Nil) deducted from the Monetary Base.

(c) Exchange Fund Bills and Notes held

EFBN held by the Financial Stability and Other Activities segment are treated as redemption of EFBN issued in the Currency Board Operations segment.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

32 PLEDGED ASSETS

Assets are pledged as margin for futures contracts, over-the-counter derivative financial instruments and securities lending agreements and as collateral for securing general banking facilities. Securities lent do not include EFBN in issue. There are no financial assets pledged against contingent liabilities.

| | Note | Group | | Fund | |
|--|------|---------------|--------|--------------|-------|
| | | 2023 | 2022 | 2023 | 2022 |
| Assets pledged | | | | | |
| Cash and money at call | | 5,877 | 6,830 | 5,877 | 6,830 |
| Financial assets measured at fair value through income and expenditure account | | 8,501 | 5,133 | 8,501 | 5,133 |
| Equity interests in associates | | 1,372 | 1,519 | – | – |
| Equity interests in joint ventures | | 2,671 | 2,953 | – | – |
| Investment properties | 18 | 22,038 | 22,822 | – | – |
| Secured liabilities | | | | | |
| Derivative financial instruments | | 1,747 | 1,394 | 1,747 | 1,394 |
| Bank loans | 27 | 15,359 | 14,714 | – | – |
| Other debt securities issued | | 644 | 608 | – | – |

During the year, the Group entered into collateralised reverse repurchase agreements, repurchase agreements and securities lending transactions that may result in credit exposure in the event that the counterparty to the transaction is unable to fulfil its contractual obligations. The Group controls credit risk associated with these activities by monitoring counterparty credit exposure and collateral values on a daily basis and requiring additional collateral to be deposited with or returned to the Group when deemed necessary.

These transactions are conducted under terms that are usual and customary to standard lending, and securities borrowing and lending activities.

33 COMMITMENTS

(a) Capital commitments

Capital expenditure authorised but not provided for in the financial statements at the reporting date is as follows:

| | | Group | | Fund | |
|---------------------------------------|--|--------------|-------|--------------|-------|
| | | 2023 | 2022 | 2023 | 2022 |
| Contracted for | | 80 | 62 | 36 | 59 |
| Authorised but not yet contracted for | | 1,104 | 1,129 | 993 | 999 |
| TOTAL | | 1,184 | 1,191 | 1,029 | 1,058 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

(b) Credit facility to the International Monetary Fund

The Fund has participated in the New Arrangements to Borrow (NAB), a standby credit facility provided to the International Monetary Fund (IMF) for the purpose of managing instability in the international monetary system. The facility is subject to periodic review and renewal. As at 31 December 2023, the Fund had an undertaking under the NAB to lend foreign currencies to the IMF up to HK\$7,136 million equivalent (2022: HK\$7,086 million equivalent), in the form of a loan bearing prevailing market interest rates. The outstanding principal due from the IMF under the NAB amounted to HK\$7 million equivalent (2022: HK\$34 million equivalent) (note 15).

(c) Credit facility to the Hong Kong Deposit Protection Board

The Fund has provided the Hong Kong Deposit Protection Board (HKDPB) with a standby credit facility of HK\$120 billion (2022: HK\$120 billion) at prevailing market interest rates for meeting the necessary liquidity required for payment of compensation in the event of a bank failure. As at 31 December 2023, there was no outstanding balance due from the HKDPB under this facility (2022: Nil).

(d) Repurchase agreements with other central banks

The Fund has entered into bilateral repurchase agreements with various central banks in Asia and Australasia amounting up to HK\$44,899 million equivalent (2022: HK\$44,878 million equivalent). The arrangement allows each organisation to enhance the liquidity of its foreign reserve portfolio with minimal additional risk. As at 31 December 2023, there was no outstanding transaction with any central bank under this arrangement (2022: Nil).

(e) Chiang Mai Initiative Multilateralisation Agreement

The Chiang Mai Initiative Multilateralisation (CMIM) was established under the aegis of the Association of Southeast Asian Nations (ASEAN) member countries together with China, Japan and Korea (ASEAN+3) to provide short-term US dollars through currency swap transactions to participants facing balance-of-payments and liquidity difficulties with a total size of US\$240 billion (2022: US\$240 billion). Hong Kong, through the HKMA, participates in the CMIM and has undertaken to commit up to US\$8.4 billion (2022: US\$8.4 billion) out of the Fund. Hong Kong has the right to request liquidity support up to US\$8.4 billion (2022: US\$8.4 billion) from the CMIM in case of emergency. Up to 31 December 2023, there had been no request to activate the CMIM (2022: Nil).

(f) Bilateral swap agreement

The People's Bank of China and the HKMA announced in July 2022 enhancements to the existing bilateral currency swap agreement. Its size has been expanded from RMB500 billion/HK\$590 billion to RMB800 billion/HK\$940 billion. It has also become a long-standing arrangement with no need for renewal. The arrangement helps enhance renminbi liquidity in Hong Kong to support the continued development of Hong Kong's offshore renminbi market. As at 31 December 2023, the amount drawn under the arrangement was RMB20 billion (2022: RMB20 billion).

(g) Investment commitments

The Group's subsidiaries with principal activities of holding investments, including properties, had outstanding investment commitment of HK\$300 billion equivalent as at 31 December 2023 (2022: HK\$284 billion equivalent).

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

(h) Other commitments

A subsidiary of the Group, The Hong Kong Mortgage Corporation Limited, had outstanding undrawn loan commitments of HK\$1,013 million as at 31 December 2023 (2022: HK\$2,110 million).

34 CONTINGENT LIABILITIES

(a) Uncalled portion of investment in the Bank for International Settlements

As at 31 December 2023, the Fund had a contingent liability of up to 16.1 million SDRs or HK\$169 million equivalent (2022: 16.1 million SDRs or HK\$167 million equivalent), in respect of the uncalled portion of its 4,285 shares (2022: 4,285 shares) in the Bank for International Settlements (note 10).

SDR is an international reserve asset created by the IMF. Its value is based on a basket of five major currencies comprising US dollar, euro, renminbi, yen and pound sterling. As at 31 December 2023, SDR 1 was valued at US\$1.3440 (2022: US\$1.3352).

(b) Financial guarantees

The Group has provided guarantees in respect of bank loans granted to joint ventures. The maximum liability as at 31 December 2023 was HK\$4,750 million equivalent (2022: HK\$4,728 million equivalent).

35 MATERIAL RELATED PARTY TRANSACTIONS

Transactions with related parties are conducted at rates determined by the Monetary Authority taking into account the nature of each transaction on a case-by-case basis.

All the material related party transactions and balances, including commitments, are disclosed in notes 4(b), 4(c), 4(d), 13, 16, 17, 23, 24, 25, 29 and 33(c).

The Exchange Fund Advisory Committee (EFAC) and its Sub-Committees advise the Financial Secretary in his control of the Fund. Members of the EFAC and its Sub-Committees are appointed by the Financial Secretary. Transactions with companies related to members of the EFAC and its Sub-Committees, if any, have been conducted as a normal part of the operation of the Group and on terms consistent with its ongoing operations.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

36 FINANCIAL RISK MANAGEMENT

This note presents information about the nature and extent of risks to which the Group is exposed, in particular those arising from financial instruments, and the risk management framework of the Group. The principal financial risks the Group is exposed to are credit risk, market risk and liquidity risk.

36.1 Governance

The Financial Secretary is advised by the EFAC in his control of the Fund. The EFAC is established under section 3(1) of the Exchange Fund Ordinance, which requires the Financial Secretary to consult the Committee in his exercise of control of the Fund. Members of the EFAC are appointed in a personal capacity by the Financial Secretary under the delegated authority of the Chief Executive of the HKSAR for the expertise and experience that they can bring to the Committee. Such expertise and experience include knowledge of monetary, financial, investment management and economic affairs, as well as of accounting, management, business and legal matters.

The EFAC is assisted in its work by five Sub-Committees, which monitor specific areas of the HKMA's work and report and make recommendations to the Financial Secretary through the EFAC.

Among these Sub-Committees, the Investment Sub-Committee (ISC) monitors the HKMA's investment management work and makes recommendations on the investment policy and strategy of the Fund and on risk management and other related matters. Operating within the policies and guidelines endorsed by the EFAC or its delegated authority, the Exchange Fund Investment Office (EFIO) of the HKMA conducts the day-to-day management of the Fund's investment activities, with the Risk and Compliance Department, which is independent of the front office functions of the EFIO, carrying out the risk management activities of the Fund.

36.2 Investment management and control

Investment activities of the Fund are conducted in accordance with the investment benchmark derived from the Fund's investment objectives. The investment benchmark directs the strategic asset allocation of the Fund and is reviewed on a regular basis to ensure that it consistently meets the investment objectives. Changes to the investment benchmark, if required, must be endorsed by the EFAC.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

The Fund's target asset and currency mix are as follows:

| | 2023 | 2022 |
|----------------------------------|-------------|------|
| Asset type | | |
| Bonds | 70% | 70% |
| Equities and related investments | 30% | 30% |
| | 100% | 100% |
| Currency | | |
| US dollar and Hong Kong dollar | 81% | 81% |
| Others ¹ | 19% | 19% |
| | 100% | 100% |

¹ Other currencies included mainly euro, renminbi, pound sterling and yen.

In addition to the investment benchmark, the EFAC determines the risk tolerance level governing the extent to which the Fund's asset and currency mix may deviate from the investment benchmark, taking into account the risk volatility of and correlation across the asset classes and markets that the Fund is allowed to invest in. Authority to take medium term investment decisions is delegated to senior management of the EFIO.

The Risk and Compliance Department is responsible for risk management and compliance monitoring regarding the investments of the Fund. It monitors the risk exposure of the Fund, checks compliance of investment activities against established guidelines and reports and follows up any identified breaches.

36.3 Credit risk

Credit risk is the risk of financial loss when a counterparty or a borrower fails to meet its contractual obligations. The Group's credit risk arises principally from the investments of the Fund and the loan portfolio held by the subsidiaries.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

36.3.1 *Management of credit risk*

The HKMA maintains effective credit risk management over the investments of the Fund. Based on the delegated authority of the EFAC, the Credit, Rules and Compliance Committee (CRCC) was established within the HKMA with the following responsibilities: (i) to establish and maintain the Credit Exposure Policy to govern the investments of the Fund; (ii) to review the adequacy of the existing credit risk management practices and, where necessary, formulate proposals for amendments; (iii) to conduct analysis of credit risk issues; (iv) to establish and review credit limits for the approved issuers and counterparties; (v) to review and consider proposals of amendments to the Operational Rules for Exchange Fund Investments as appropriate, and make recommendations to the Monetary Authority for endorsement; and (vi) to monitor the compliance of the investments of the Fund with the established policies and limits, and report and follow up any identified breaches. The CRCC is chaired by the Deputy Chief Executive (Monetary) whose responsibilities are independent of the day-to-day investment activities of the Fund, and includes representatives from the EFIO, the Risk and Compliance Department, the Monetary Management Department, and the Research Department of the HKMA.

In light of the rapidly evolving risk environment, the HKMA will remain vigilant in monitoring and managing the Fund's credit risk exposure, and will sustain the impetus for better credit risk management practices to support the investment activities of the Fund.

Credit limits are established in accordance with in-house methodologies as set out in the Operational Rules for Exchange Fund Investments and the Credit Exposure Policy to limit exposures to counterparty, issuer and geographical risks arising from the investments of the Fund.

(a) Counterparty risk

The Fund selects its counterparties in lending, placement, derivatives and trading transactions prudently and objectively. Since the Fund conducts transactions with a counterparty for a range of financial instruments, credit limits are established to limit the overall exposure to each authorised counterparty based on its credit ratings, financial strength and other relevant information.

Counterparty credit exposures are measured according to the risk nature of financial products involved in the transaction. Counterparty credit exposures of derivatives include an estimate for the potential future credit exposure of the derivative contracts, in addition to their positive mark-to-market replacement value.

(b) Issuer risk

Issuer risk arises from investments in debt securities. Credit limits for approved issuers are set on both individual and group levels to control the risk of loss arising from the default of debt securities issuers and to prevent undue risk concentration.

Moreover, to be qualified as an approved investment, a new market or financial instrument must meet the minimum credit, security and liquidity requirements of the Fund.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

(c) Geographical risk

Geographical risk is broadly defined to include both the sovereign risk and the transfer risk. Sovereign risk denotes a government's ability and willingness to repay its obligations. Transfer risk is the risk that a borrower may not be able to secure foreign exchange to service its external obligations, for example, due to an action by the government to impose restrictions on the transfer of funds from local debtors to foreign creditors. Under the existing framework, geographical concentration limits are established to control the Fund's overall credit risk exposures to the economies endorsed by the CRCC.

The above credit limits are reviewed regularly. Credit exposure is monitored against these limits on a daily basis. To ensure prompt identification, proper approval and consistent monitoring of credit risk, the Fund has implemented a unified automated credit monitoring system which provides fully-integrated straight-through-processing linking the front, middle and back office functions. The pre-deal checking takes place in the front office prior to the commitment of any transaction to ensure that the intended transaction will not exceed the credit limits. The end-of-day compliance checking further verifies that the Fund complies with the established credit policies and procedures.

Any breaches of credit limits are reported to the CRCC and the ISC, and are followed up by the Risk and Compliance Department in a timely manner. The approval authorities to sanction these breaches are set out in the Credit Exposure Policy.

To manage the exposure to credit risk arising from the loan portfolio and mortgage insurance business, a prudent risk management framework is established to: (i) select Approved Sellers carefully; (ii) adopt prudent mortgage purchasing criteria and insurance eligibility criteria; (iii) conduct effective and in-depth due diligence reviews; (iv) implement robust project structures and financing documentation; (v) perform an ongoing monitoring and reviewing mechanism; and (vi) ensure adequate protection for higher-risk mortgages.

36.3.2 *Exposure to credit risk*

The maximum exposure to credit risk of the financial assets of the Group and the Fund at the reporting date is equal to their carrying amounts. The maximum exposures to credit risk of off-balance sheet exposures are as follows:

| | Group | | Fund | |
|---|----------------|-------------|----------------|-------------|
| | 2023 | 2022 | 2023 | 2022 |
| Loan commitments, guarantees and other credit related commitments | 246,280 | 246,690 | 317,627 | 317,492 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

36.3.3 Credit quality and expected credit losses measurement

In general, expected credit losses are calculated using three main parameters, i.e. probability of default, loss given default and exposure at default. The 12-month expected credit losses are calculated by multiplying the 12-month probability of default, loss given default and exposure at default. Lifetime expected credit losses are calculated using the lifetime probability of default instead. The probability of default represents the expected point-in-time probability of a default over either (i) the next 12 months (i.e. 12-month probability of default) or (ii) the remaining lifetime of the financial instrument (i.e. lifetime probability of default), based on conditions existing at the reporting date and forward-looking information that affect credit risk. The exposure at default represents the expected balance at default, taking into account the repayment of principal and interest from the reporting date to the default event together with any expected drawdown of a committed loan. The loss given default represents expected losses on the exposure at default 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.

While cash and money at call, loans and loan commitments under 100% SFGS and DLGS, and financial guarantee contracts are subject to the impairment requirements, the Group has estimated that their expected credit losses are minimal and considers that no loss allowance is required. Credit quality and expected credit losses measurement for other financial instruments are analysed below.

(a) Placements with banks and other financial institutions

The Group has established an expected credit losses calculation methodology that is based on the probability of default assigned to each counterparty according to their external credit ratings and the related historical credit losses experience, adjusted for forward-looking information, to determine the amounts of loss allowances.

These financial assets are considered to have a low credit risk. The loss allowances are measured at amounts equal to 12-month expected credit losses.

The credit quality of placements with banks and other financial institutions is analysed below:

| | Group | | Fund | |
|---|----------------|---------|----------------|---------|
| | 2023 | 2022 | 2023 | 2022 |
| Credit rating¹ | | | | |
| AA- to AA+ | 72,453 | 130,692 | 63,548 | 125,139 |
| A- to A+ | 124,083 | 56,036 | 88,035 | 33,843 |
| Lower than A- or un-rated ² | 9,601 | 10,693 | 3,542 | 5,928 |
| Gross carrying amount | 206,137 | 197,421 | 155,125 | 164,910 |
| Less: allowances for expected credit losses | (4) | (5) | – | (2) |
| Carrying amount | 206,133 | 197,416 | 155,125 | 164,908 |

¹ This is the lowest of ratings designated by Moody's, Standard & Poor's and Fitch.

² This included mainly balance with central banks which is not rated.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

The movements in loss allowances for placements with banks and other financial institutions during the year are as follows:

| | Group | Fund |
|--|--------------|-------------|
| At 1 January 2022 | 8 | 3 |
| Decrease in loss allowances recognised in the income and expenditure account | (3) | (1) |
| At 31 December 2022 | 5 | 2 |
| At 1 January 2023 | 5 | 2 |
| Decrease in loss allowances recognised in the income and expenditure account | (1) | (2) |
| At 31 December 2023 | 4 | – |

(b) Debt securities

The Group predominantly invests in liquid OECD member countries' government bonds and other quasi-government debt securities issues. As at 31 December 2023, approximately 54% (2022: 63%) of the debt securities held by the Group were rated "double-A" or above by Moody's, Standard & Poor's or Fitch.

For debt securities measured at amortised cost or fair value through other comprehensive income, the Group has established an expected credit losses calculation methodology that is based on the probability of default assigned to each issuer according to their external credit ratings and the related historical credit losses experience, adjusted for forward-looking information, to determine the amounts of loss allowances.

These debt securities are considered to have a low credit risk. The loss allowances are measured at amounts equal to 12-month expected credit losses.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

The credit quality of debt securities is analysed below:

(i) Debt securities measured at fair value

| | Group | | Fund | |
|--|------------------|-----------|------------------|-----------|
| | 2023 | 2022 | 2023 | 2022 |
| Credit rating¹ | | | | |
| Debt securities measured at fair value through income and expenditure account | | | | |
| AAA | 232,151 | 294,210 | 232,151 | 294,210 |
| AA- to AA+ | 1,266,480 | 1,442,748 | 1,266,480 | 1,442,748 |
| A- to A+ | 524,149 | 444,358 | 524,149 | 444,358 |
| Lower than A- or un-rated ² | 775,847 | 592,051 | 775,847 | 592,041 |
| TOTAL | 2,798,637 | 2,773,367 | 2,798,627 | 2,773,357 |
| Debt securities measured at fair value through other comprehensive income | | | | |
| AA- to AA+ | 1,622 | 1,048 | – | – |
| A- to A+ | 887 | 196 | – | – |
| TOTAL | 2,509 | 1,244 | – | – |

¹ This is the lowest of ratings designated by Moody's, Standard & Poor's and Fitch.

² This included mainly debt securities issued by the Bank for International Settlements which are not rated.

(ii) Debt securities measured at amortised cost

| | Group | |
|---|---------------|--------|
| | 2023 | 2022 |
| Credit rating¹ | | |
| | | |
| AAA | 396 | 405 |
| AA- to AA+ | 3,879 | 4,398 |
| A- to A+ | 10,304 | 8,345 |
| Gross carrying amount | 14,579 | 13,148 |
| Less: allowances for expected credit losses | (5) | (5) |
| Carrying amount | 14,574 | 13,143 |

¹ This is the lowest of ratings designated by Moody's, Standard & Poor's and Fitch.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

There were no movements in loss allowances for debt securities measured at fair value through other comprehensive income in 2023 and 2022. The movements in loss allowances for debt securities measured at amortised cost during the year are as follows:

| | Group | |
|--|--------------|-------------|
| | 2023 | 2022 |
| At 1 January | 5 | 4 |
| Increase in loss allowances recognised in the income and expenditure account | – | 1 |
| At 31 December | 5 | 5 |

- (c) Loan portfolio measured at amortised cost

The Group uses three categories for loans which reflect their credit risk and how the loss allowances are determined for each of those categories. These categories do not apply to loans under 100% SFGS nor DLGS because their expected credit losses are minimal in view of the full guarantee provided by the HKSAR Government.

A summary of the assumptions underpinning the Group's expected credit loss model on loans is as follows:

| Category | Group definition of category | Basis for calculation of expected credit losses |
|-----------------|---|--|
| Stage 1 | Loans that have a low credit risk with borrowers having a strong capacity to meet the contractual obligations at the reporting date or there have not been significant increases in credit risk since initial recognition | 12-month expected credit losses |
| Stage 2 | Loans for which there have been significant increases in credit risk since initial recognition, where significant increases in credit risk are presumed when contractual payments are more than 30 days past due | Lifetime expected credit losses – not credit impaired |
| Stage 3 | Loans that have objective evidence of impairment including those that exhibit characteristics of non-repayment or those with contractual payments that are 90 days past due | Lifetime expected credit losses – credit impaired |

Loans will be written off when there is no reasonable expectation of recovery on the delinquent interest and/or principal repayments.

Over the term of the loans, the Group accounts for its credit risk by appropriately providing for expected credit losses on a timely basis. In determining the expected credit losses, the Group considers historical credit risk information with reference to external or internal credit ratings and applies forward-looking factors, such as macroeconomic data and credit outlook of the borrowers, to perform multi-scenario analysis.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

The credit quality of loan portfolio is analysed below:

| | Group – 2023 | | | |
|---|---------------|------------|-----------|---------------|
| | Stage 1 | Stage 2 | Stage 3 | Total |
| Loan portfolio with external credit rating¹ | | | | |
| BBB- to BBB+ | 2,223 | – | – | 2,223 |
| BB- to BB+ | 3,424 | – | – | 3,424 |
| Lower than BB- | 4,585 | 477 | 149 | 5,211 |
| Gross carrying amount | 10,232 | 477 | 149 | 10,858 |
| Less: allowances for expected credit losses | (64) | (19) | (117) | (200) |
| | 10,168 | 458 | 32 | 10,658 |
| Loan portfolio with internal credit rating | | | | |
| Gross carrying amount | 10,245 | 5 | 7 | 10,257 |
| Less: allowances for expected credit losses | (25) | – | (1) | (26) |
| | 10,220 | 5 | 6 | 10,231 |
| TOTAL | 20,388 | 463 | 38 | 20,889 |

| | Group – 2022 (restated) | | | |
|---|-------------------------|------------|-----------|---------------|
| | Stage 1 | Stage 2 | Stage 3 | Total |
| Loan portfolio with external credit rating¹ | | | | |
| BBB- to BBB+ | 722 | – | – | 722 |
| BB- to BB+ | 2,829 | – | – | 2,829 |
| Lower than BB- | 3,818 | 410 | 149 | 4,377 |
| Gross carrying amount | 7,369 | 410 | 149 | 7,928 |
| Less: allowances for expected credit losses | (56) | (13) | (86) | (155) |
| | 7,313 | 397 | 63 | 7,773 |
| Loan portfolio with internal credit rating | | | | |
| Gross carrying amount | 10,795 | 10 | 8 | 10,813 |
| Less: allowances for expected credit losses | (13) | – | (1) | (14) |
| | 10,782 | 10 | 7 | 10,799 |
| TOTAL | 18,095 | 407 | 70 | 18,572 |

¹ These are equivalent ratings of Moody's, Standard & Poor's or Fitch provided by an external institution.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

The movements in loss allowances for loan portfolio during the year are as follows:

| | Group | | | |
|--|-------------|-----------|------------|------------|
| | Stage 1 | Stage 2 | Stage 3 | Total |
| At 1 January 2022 | 46 | 20 | 94 | 160 |
| Increase/(Decrease) in loss allowances for change in net exposures | 11 | (1) | – | 10 |
| (Decrease)/Increase in loss allowances for change in credit risk | (3) | (17) | 19 | (1) |
| Transfers into Stage 1 | 18 | (18) | – | – |
| Transfers into Stage 2 | (3) | 29 | (26) | – |
| At 31 December 2022 | 69 | 13 | 87 | 169 |
| At 1 January 2023 | 69 | 13 | 87 | 169 |
| Increase in loss allowances for change in net exposures | 32 | – | – | 32 |
| (Decrease)/Increase in loss allowances for change in credit risk | (10) | 4 | 31 | 25 |
| Transfers into Stage 2 | (2) | 2 | – | – |
| At 31 December 2023 | 89 | 19 | 118 | 226 |

(d) Loan commitments

The movements in provision for expected credit losses on loan commitments during the year are as follows:

| | Group | | | |
|--|------------|----------|---------|-----------|
| | Stage 1 | Stage 2 | Stage 3 | Total |
| At 1 January 2022 | 22 | 1 | – | 23 |
| Decrease in provision for expected credit losses recognised in the income and expenditure account | (2) | – | – | (2) |
| Transfers into Stage 1 | 1 | (1) | – | – |
| At 31 December 2022 | 21 | – | – | 21 |
| At 1 January 2023 | 21 | – | – | 21 |
| Increase in provision for expected credit losses recognised in the income and expenditure account | 4 | 5 | – | 9 |
| Transfers into Stage 2 | (1) | 1 | – | – |
| At 31 December 2023 | 24 | 6 | – | 30 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

36.3.4 Concentration of credit risk

The majority of the Group's credit risk exposures are from the holding of highly liquid debt securities issued or guaranteed by OECD member countries' governments and other quasi-government entities. The maximum credit risk exposure by industry group is analysed below:

| | Group | | Fund | |
|--|------------------|-----------|------------------|-----------|
| | 2023 | 2022 | 2023 | 2022 |
| | (restated) | | | |
| Governments and government agencies | 1,792,059 | 2,085,908 | 1,691,961 | 1,992,744 |
| Supra-nationals | 216,446 | 185,613 | 215,335 | 185,139 |
| States, provinces and public-sector entities | 179,816 | 188,983 | 258,315 | 267,929 |
| Financial institutions | 635,150 | 500,276 | 567,226 | 452,312 |
| Others ¹ | 803,313 | 631,366 | 970,306 | 786,728 |
| TOTAL | 3,626,784 | 3,592,146 | 3,703,143 | 3,684,852 |

¹ These included debt securities issued by the Bank for International Settlements.

36.4 Market risk

Market risk is the risk that changes in market variables such as interest rates, exchange rates and equity prices may affect the fair values or cash flows of investments.

36.4.1 Types of market risk

(a) Interest rate risk

Interest rate risk refers to the risk of loss arising from changes in market interest rates. This can be further classified into fair value interest rate risk and cash flow interest rate risk.

Fair value interest rate risk is the risk that the fair value of a financial instrument will fluctuate because of changes in market interest rates. The Group is exposed to fair value interest rate risk since a substantial portion of its investments is in fixed-rate debt securities. These securities are subject to interest rate risk as their fair values will fall when market interest rates increase. Other significant financial assets and financial liabilities with a fixed interest rate, and therefore subject to interest rate risk, include placements with banks and other financial institutions and EFBN issued.

Cash flow interest rate risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Because the Group has no significant floating-rate investments and liabilities, the Group's future cash flows are not materially affected by potential changes in market interest rates.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

(b) Currency risk

Currency risk is the risk of loss arising from changes in foreign exchange rates. A large portion of the Group's foreign currency assets is held in US dollars with the remaining mainly in other major international currencies. When the exchange rates of the relevant foreign currencies against the Hong Kong dollar fluctuate, the value of these foreign currency assets expressed in Hong Kong dollar will vary accordingly.

Due to the linked exchange rate of the US dollar relative to the Hong Kong dollar, the Group's currency risk principally arises from its assets and liabilities denominated in foreign currencies other than the US dollar.

(c) Equity price risk

Equity price risk is the risk of loss arising from changes in prices or valuation. The Group's equity and related investments are subject to price risk since the value of these investments will decline if market prices or valuation fall.

The majority of the equity securities held by the Group are constituent stocks of major stock market indexes and companies with large market capitalisation.

36.4.2 *Management of market risk*

The market risk of the Fund as a whole is regularly measured and monitored to prevent excessive risk exposure. The investment benchmark and tracking error limit of the Fund govern the asset allocation strategies. These, together with the volatility of asset markets, will affect the Fund's market risk exposure. The Fund uses derivative financial instruments to manage its exposures to market risk and facilitate the implementation of investment strategies. The market risk of the Fund is mainly measured and monitored using a Value-at-Risk (VaR) methodology.

VaR is calculated using the parametric approach based on a 95% confidence level and one-month time horizon. The result represents the maximum expected loss of the Fund over a one-month period under normal market conditions, with a 5% chance that the actual loss may exceed the calculated VaR. The Fund's absolute VaR and the relative VaR (i.e. the VaR of the Fund relative to its investment benchmark), expressed in dollar amounts, are measured by the Risk and Compliance Department and reported to management, the ISC and the EFAC on a regular basis.

The relative VaR of the Fund is also used to calculate the actual tracking error of the Fund against its investment benchmark. This is regularly monitored against the tracking error limit endorsed by the EFAC to ensure that the market risk exposure of the Fund is within its limit. The tracking error of a portfolio indicates how well the portfolio tracks its investment benchmark. The smaller the tracking error, the closer the portfolio tracks its benchmark. The tracking error limit is established to prevent the Fund from taking unduly large market risk with respect to its investment benchmark. The actual tracking error of the Fund is regularly reported to the ISC and the EFAC, and any breach of the limit is followed up in a timely manner.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

VaR is a widely accepted measure of market risk within the financial services industry. It provides users with a single amount to measure market risk and takes into account multiple risks. VaR should however be assessed in the context of some of its inherent limitations. The calculation of VaR involves a number of assumptions that may or may not be valid in a real life scenario, in particular in extreme market conditions. The calculation of VaR assumes that future events can be predicted by historical data, and that changes in risk factors follow a normal distribution. The end-of-day basis does not reflect intraday exposures. In addition, the confidence level on which calculation of VaR is based needs to be taken into account as it indicates the possibility that a larger loss could be realised.

To compensate for some of the limitations of VaR, the HKMA also conducts stress tests to estimate the potential losses under extremely adverse market conditions. This serves to identify the major attributes of market risk under extreme market conditions, and helps to prevent the Fund from being exposed to excessive market risk. The results of the stress tests are also reported to the ISC and the EFAC on a regular basis.

To manage the interest rate risk arising from the fixed-rate debt securities issued by the Group to fund the purchase of portfolios of loans, a major portion of the risk is hedged using fair value hedges in the form of interest rate swaps by swapping into floating-rate funding to better match the floating-rate assets.

The Fund's investment in less liquid assets (i.e. private equity and real estate) is grouped under the Long-Term Growth Portfolio. The investment risks of the less liquid assets are managed at the aggregate level through such measures as asset class approval, allocation limit and aggregate general partner exposure. The target asset allocation of the Long-Term Growth Portfolio is determined concurrently with that of other asset classes, subject to prudent risk management principles and portfolio diversification strategy.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

36.4.3 Exposure to market risk

(a) Interest rate risk

The interest rate gap position in respect of the Group's major interest-bearing assets and liabilities, including the net repricing effect of interest rate derivatives is shown below. The assets and liabilities are stated at carrying amounts at the reporting date and categorised by the earlier of contractual repricing dates or maturity dates.

| | Group – 2023 Repricing period of interest-bearing financial instruments | | | | | | | Non-interest-bearing financial instruments |
|--|--|------------------|-------------------|-----------------|------------------|----------------|------------------|--|
| | 3 months or less | | 1 year or less | | 5 years or less | | 10 years or less | |
| | 1 month or less | but over 1 month | but over 3 months | but over 1 year | but over 5 years | Over 10 years | Total | |
| Assets | | | | | | | | |
| Cash and money at call | 194,494 | – | – | – | – | – | 194,494 | 1,337 |
| Placements with banks and other financial institutions | 145,530 | 44,650 | 15,933 | – | – | – | 206,113 | 20 |
| Financial assets measured at fair value through income and expenditure account | 458,133 | 443,109 | 850,278 | 591,622 | 331,848 | 104,783 | 2,779,773 | 1,105,524 |
| Financial assets measured at fair value through other comprehensive income | – | 94 | 86 | 2,054 | 275 | – | 2,509 | 1,364 |
| Debt securities measured at amortised cost | 78 | 652 | 5,166 | 5,504 | 3,174 | – | 14,574 | – |
| Loan portfolio | 104,823 | 4,341 | 8,637 | 11 | 760 | 1,586 | 120,158 | – |
| Interest-bearing assets | 903,058 | 492,846 | 880,100 | 599,191 | 336,057 | 106,369 | 3,317,621 | |
| Liabilities | | | | | | | | |
| Placements by banks and other financial institutions | 90,120 | 9,000 | – | – | – | – | 99,120 | – |
| Placements by Fiscal Reserves with interest payable at market-based rates ¹ | 4 | – | – | – | – | – | 4 | – |
| Placements by HKSAR Government funds and statutory bodies with interest payable at market-based rates ¹ | 1,356 | – | – | – | – | – | 1,356 | – |
| Exchange Fund Bills and Notes issued | 392,186 | 584,786 | 256,849 | 9,473 | 1,168 | – | 1,244,462 | – |
| Bank loans | 5,408 | 3,632 | 466 | 5,853 | – | – | 15,359 | – |
| Other debt securities issued | 2,833 | 50,262 | 55,784 | 49,803 | 1,503 | 2,178 | 162,363 | – |
| Interest-bearing liabilities | 491,907 | 647,680 | 313,099 | 65,129 | 2,671 | 2,178 | 1,522,664 | |
| Net interest-bearing assets/(liabilities) | 411,151 | (154,834) | 567,001 | 534,062 | 333,386 | 104,191 | 1,794,957 | |
| Interest rate derivatives (net position, notional amounts) | 3,616 | (23,837) | 4,254 | 11,217 | (141) | 3,237 | (1,654) | |
| Interest rate sensitivity gap | 414,767 | (178,671) | 571,255 | 545,279 | 333,245 | 107,428 | 1,793,303 | |

¹ Placements by Fiscal Reserves, HKSAR Government funds and statutory bodies with interest payable at a fixed rate or a composite rate determined annually are excluded because their interest rates are not determined on the basis of market interest rates (notes 23 and 24). As at 31 December 2023, such placements amounted to HK\$1,162,722 million.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Group – 2022 (restated) | | | | | | | Non-interest-bearing financial instruments | |
|--|--|---------------------------|--------------------------|-------------------------|---------------------------|----------------|------------------|--|--|
| | Repricing period of interest-bearing financial instruments | | | | | | | | |
| | 1 month or less | 3 months but over 1 month | 1 year but over 3 months | 5 years but over 1 year | 10 years but over 5 years | Over 10 years | Total | | |
| Assets | | | | | | | | | |
| Cash and money at call | 207,850 | – | – | – | – | – | 207,850 | 1,867 | |
| Placements with banks and other financial institutions | 162,417 | 32,523 | 2,456 | – | – | – | 197,396 | 20 | |
| Financial assets measured at fair value through income and expenditure account | 473,776 | 408,343 | 842,962 | 563,215 | 366,067 | 101,593 | 2,755,956 | 1,074,767 | |
| Financial assets measured at fair value through other comprehensive income | – | 290 | – | 692 | 262 | – | 1,244 | 1,264 | |
| Debt securities measured at amortised cost | 78 | – | 2,510 | 6,363 | 4,192 | – | 13,143 | – | |
| Loan portfolio | 96,465 | 4,649 | 3,755 | 3,375 | 634 | 1,082 | 109,960 | – | |
| Interest-bearing assets | 940,586 | 445,805 | 851,683 | 573,645 | 371,155 | 102,675 | 3,285,549 | | |
| Liabilities | | | | | | | | | |
| Placements by banks and other financial institutions | 99,455 | – | – | – | – | – | 99,455 | – | |
| Placements by Fiscal Reserves with interest payable at market-based rates ¹ | 4 | – | – | – | – | – | 4 | – | |
| Placements by HKSAR Government funds and statutory bodies with interest payable at market-based rates ¹ | 1,618 | – | – | – | – | – | 1,618 | – | |
| Exchange Fund Bills and Notes issued | 327,020 | 627,986 | 232,272 | 10,824 | 2,221 | – | 1,200,323 | – | |
| Bank loans | 5,094 | 3,580 | – | 6,040 | – | – | 14,714 | – | |
| Other debt securities issued | 3,950 | 29,339 | 38,442 | 55,905 | 1,870 | 2,177 | 131,683 | – | |
| Interest-bearing liabilities | 437,141 | 660,905 | 270,714 | 72,769 | 4,091 | 2,177 | 1,447,797 | | |
| Net interest-bearing assets/(liabilities) | 503,445 | (215,100) | 580,969 | 500,876 | 367,064 | 100,498 | 1,837,752 | | |
| Interest rate derivatives (net position, notional amounts) | (1,508) | (25,825) | 10,645 | 13,479 | 922 | 367 | (1,920) | | |
| Interest rate sensitivity gap | 501,937 | (240,925) | 591,614 | 514,355 | 367,986 | 100,865 | 1,835,832 | | |

¹ Placements by Fiscal Reserves, HKSAR Government funds and statutory bodies with interest payable at a fixed rate or a composite rate determined annually are excluded because their interest rates are not determined on the basis of market interest rates (notes 23 and 24). As at 31 December 2022, such placements amounted to HK\$1,212,608 million.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Fund – 2023 | | | | | | | Non-interest-bearing financial instruments | |
|--|--|-----------------------------------|--------------------------|-------------------------|---------------------------|----------------|------------------|--|--|
| | Repricing period of interest-bearing financial instruments | | | | | | | | |
| | 1 month or less | 3 months or less but over 1 month | 1 year but over 3 months | 5 years but over 1 year | 10 years but over 5 years | Over 10 years | Total | | |
| Assets | | | | | | | | | |
| Cash and money at call | 190,236 | – | – | – | – | – | 190,236 | 242 | |
| Placements with banks and other financial institutions | 130,138 | 9,370 | 15,617 | – | – | – | 155,125 | – | |
| Financial assets measured at fair value through income and expenditure account | 458,133 | 443,109 | 850,278 | 591,622 | 331,848 | 104,783 | 2,779,773 | 629,144 | |
| Interest-bearing assets | 778,507 | 452,479 | 865,895 | 591,622 | 331,848 | 104,783 | 3,125,134 | | |
| Liabilities | | | | | | | | | |
| Placements by banks and other financial institutions | 90,120 | 9,000 | – | – | – | – | 99,120 | – | |
| Placements by Fiscal Reserves with interest payable at market-based rates ¹ | 4 | – | – | – | – | – | 4 | – | |
| Placements by HKSAR Government funds and statutory bodies with interest payable at market-based rates ¹ | 1,356 | – | – | – | – | – | 1,356 | – | |
| Exchange Fund Bills and Notes issued | 392,186 | 584,786 | 256,849 | 9,473 | 1,168 | – | 1,244,462 | – | |
| Interest-bearing liabilities | 483,666 | 593,786 | 256,849 | 9,473 | 1,168 | – | 1,344,942 | | |
| Net interest-bearing assets/(liabilities) | 294,841 | (141,307) | 609,046 | 582,149 | 330,680 | 104,783 | 1,780,192 | | |
| Interest rate derivatives (net position, notional amounts) | 5,387 | (11,868) | 1,471 | 1,715 | 58 | 3,237 | – | | |
| Interest rate sensitivity gap | 300,228 | (153,175) | 610,517 | 583,864 | 330,738 | 108,020 | 1,780,192 | | |

¹ Placements by Fiscal Reserves, HKSAR Government funds and statutory bodies, and subsidiaries with interest payable at a fixed rate or a composite rate determined annually are excluded because their interest rates are not determined on the basis of market interest rates (notes 23, 24 and 25). As at 31 December 2023, such placements amounted to HK\$1,193,908 million.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Fund – 2022 | | | | | | | Non-interest-bearing financial instruments | |
|--|--|---------------------------|--------------------------|-------------------------|---------------------------|----------------|------------------|--|--|
| | Repricing period of interest-bearing financial instruments | | | | | | | | |
| | 1 month or less | 3 months but over 1 month | 1 year but over 3 months | 5 years but over 1 year | 10 years but over 5 years | Over 10 years | Total | | |
| Assets | | | | | | | | | |
| Cash and money at call | 203,620 | – | – | – | – | – | 203,620 | 230 | |
| Placements with banks and other financial institutions | 153,201 | 9,366 | 2,341 | – | – | – | 164,908 | – | |
| Financial assets measured at fair value through income and expenditure account | 473,776 | 408,343 | 842,962 | 563,215 | 366,067 | 101,593 | 2,755,956 | 640,231 | |
| Interest-bearing assets | 830,597 | 417,709 | 845,303 | 563,215 | 366,067 | 101,593 | 3,124,484 | | |
| Liabilities | | | | | | | | | |
| Placements by banks and other financial institutions | 99,455 | – | – | – | – | – | 99,455 | – | |
| Placements by Fiscal Reserves with interest payable at market-based rates ¹ | 4 | – | – | – | – | – | 4 | – | |
| Placements by HKSAR Government funds and statutory bodies with interest payable at market-based rates ¹ | 1,618 | – | – | – | – | – | 1,618 | – | |
| Exchange Fund Bills and Notes issued | 327,020 | 627,986 | 232,272 | 10,824 | 2,221 | – | 1,200,323 | – | |
| Interest-bearing liabilities | 428,097 | 627,986 | 232,272 | 10,824 | 2,221 | – | 1,301,400 | | |
| Net interest-bearing assets/(liabilities) | 402,500 | (210,277) | 613,031 | 552,391 | 363,846 | 101,593 | 1,823,084 | | |
| Interest rate derivatives (net position, notional amounts) | | | | | | | | | |
| Interest rate sensitivity gap | 3,870 | (10,356) | 3,536 | 1,463 | 1,120 | 367 | – | | |
| | | | | | | | | | |
| | | | | | | | | | |

¹ Placements by Fiscal Reserves, HKSAR Government funds and statutory bodies, and subsidiaries with interest payable at a fixed rate or a composite rate determined annually are excluded because their interest rates are not determined on the basis of market interest rates (notes 23, 24 and 25). As at 31 December 2022, such placements amounted to HK\$1,243,196 million.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

(b) Currency risk

The currency exposure of the Group is summarised below:

| | Group | | | |
|---------------------|------------------|------------------|-----------------|-------------|
| | 2023 | | 2022 (restated) | |
| | Assets | Liabilities | Assets | Liabilities |
| Hong Kong dollar | 297,892 | 2,790,726 | 295,053 | 2,852,760 |
| US dollar | 3,580,742 | 685,344 | 3,527,562 | 676,908 |
| | 3,878,634 | 3,476,070 | 3,822,615 | 3,529,668 |
| Others ¹ | 653,800 | 68,923 | 652,554 | 71,377 |
| TOTAL | 4,532,434 | 3,544,993 | 4,475,169 | 3,601,045 |

| | Fund | | | |
|---------------------|------------------|------------------|-----------|-------------|
| | 2023 | | 2022 | |
| | Assets | Liabilities | Assets | Liabilities |
| Hong Kong dollar | 151,193 | 2,692,210 | 171,602 | 2,761,877 |
| US dollar | 3,296,713 | 652,754 | 3,266,400 | 663,801 |
| | 3,447,906 | 3,344,964 | 3,438,002 | 3,425,678 |
| Others ¹ | 568,585 | 24,545 | 570,036 | 25,119 |
| TOTAL | 4,016,491 | 3,369,509 | 4,008,038 | 3,450,797 |

¹ Other currencies included mainly euro, renminbi, pound sterling and yen.

(c) Equity price risk

As at 31 December 2023 and 2022, the majority of equity investments were reported as “financial assets measured at fair value through income and expenditure account” as shown in note 9.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

36.4.4 Sensitivity analysis

The VaR positions of the Fund as at 31 December and during the year, based on a 95% confidence level and one-month time horizon, are as follows:

| | Fund | |
|-----------------------------|---------------|--------|
| | 2023 | 2022 |
| Value-at-Risk | | |
| At 31 December ¹ | 55,919 | 68,113 |
| During the year | | |
| Average | 55,314 | 64,703 |
| Maximum | 67,737 | 79,199 |
| Minimum | 47,517 | 43,550 |

¹ The amount represented 1.4% of the Fund's investments which were subject to VaR measurement as at 31 December 2023 (2022: 1.7%).

36.5 Liquidity risk

Liquidity risk refers to the risk that the Group may not have sufficient funds available to meet its liabilities as they fall due. In addition, the Group may not be able to liquidate its financial assets at a price close to fair value within a short period of time.

36.5.1 Management of liquidity risk

To ensure sufficient liquidity to meet liabilities and the ability to raise funds to meet exceptional needs, the Group invests primarily in liquid financial markets and instruments that are readily saleable to meet liquidity needs. There are internal investment restrictions to prevent undue concentrations in individual debt securities issues, debt securities issuers, and groups of closely related debt securities issuers. There are also limitations on the maximum proportion of assets that can be placed in fixed term deposits and less liquid assets, and requirements regarding the ability to convert foreign currency assets into cash. In addition, prudent liquidity control measures are imposed on the Fund's investments in less liquid credit assets such as asset-backed securities. All these restrictions and limits are designed to promote the liquidity of assets and consequently minimise the liquidity risk. The liquidity risk for the Fund's investment is monitored on an aggregate basis through appropriate portfolio mix with sufficient liquid assets to offset investments of less liquid assets. Compliance with these limits is monitored by the Risk and Compliance Department and any breaches are reported to the ISC and are promptly followed up.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

36.5.2 Exposure to liquidity risk

The remaining contractual maturities at the reporting date of major financial liabilities, commitments and derivative financial liabilities, which are based on contractual undiscounted cash flows and the earliest date on which the Group can be required to pay, are shown below:

| | Group – 2023 Remaining maturity | | | | | | |
|---|------------------------------------|---------------------|----------------------|--------------------|---------------------|------------------|---------------------|
| | 3 months or less | | 1 year or less | | 5 years or less | | 10 years or less |
| | 1 month or less | but over 1 month | but over 3 months | but over 1 year | but over 5 years | Over 10 years | Total |
| Non-derivative cash outflows | | | | | | | |
| Certificates of Indebtedness | 593,235 | – | – | – | – | – | 593,235 |
| Government-issued currency notes and coins in circulation | 12,941 | – | – | – | – | – | 12,941 |
| Balance of the banking system | 44,950 | – | – | – | – | – | 44,950 |
| Placements by banks and other financial institutions | 90,672 | 9,084 | – | – | – | – | 99,756 |
| Placements by Fiscal Reserves | 396,018 | – | – | – | 299,408 | – | 695,426 |
| Placements by HKSAR Government funds and statutory bodies | 332,793 | 5,800 | 15,600 | 109,366 | 5,097 | – | 468,656 |
| Exchange Fund Bills and Notes issued | 393,015 | 589,412 | 261,616 | 10,059 | 1,221 | – | 1,255,323 |
| Bank loans | 62 | 64 | 3,026 | 13,384 | – | – | 16,536 |
| Other debt securities issued | 1,961 | 48,718 | 60,960 | 56,248 | 2,082 | 3,140 | 173,109 |
| Lease liabilities | 10 | 23 | 119 | 312 | 72 | 1,888 | 2,424 |
| Other liabilities (excluding lease liabilities) | 34,219 | 23,951 | 85 | 6 | 118,228 | 5 | 176,494 |
| Loan commitments, guarantees and other credit related commitments | 246,280 | – | – | – | – | – | 246,280 |
| TOTAL | 2,146,156 | 677,052 | 341,406 | 189,375 | 426,108 | 5,033 | 3,785,130 |
| Derivative cash outflows/(inflows) | | | | | | | |
| Derivative financial instruments settled: | | | | | | | |
| – on net basis | 416 | 76 | (290) | 160 | 114 | 59 | 535 |
| – on gross basis | | | | | | | |
| Total outflows | 75,321 | 103,743 | 11,778 | 36,875 | 2,871 | – | 230,588 |
| Total inflows | (74,361) | (102,401) | (11,433) | (36,451) | (2,884) | – | (227,530) |
| TOTAL | 1,376 | 1,418 | 55 | 584 | 101 | 59 | 3,593 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Group – 2022 (restated) | | | | | | Total | |
|---|-------------------------|---------------------------|--------------------------|-------------------------|---------------------------|---------------|------------------|--|
| | Remaining maturity | | | | | | | |
| | 1 month or less | 3 months but over 1 month | 1 year but over 3 months | 5 years but over 1 year | 10 years but over 5 years | Over 10 years | | |
| Non-derivative cash outflows | | | | | | | | |
| Certificates of Indebtedness | 605,959 | – | – | – | – | – | 605,959 | |
| Government-issued currency notes and coins in circulation | 13,160 | – | – | – | – | – | 13,160 | |
| Balance of the banking system | 96,251 | – | – | – | – | – | 96,251 | |
| Placements by banks and other financial institutions | 99,919 | – | – | – | – | – | 99,919 | |
| Placements by Fiscal Reserves | 509,962 | – | – | – | 255,227 | – | 765,189 | |
| Placements by HKSAR Government funds and statutory bodies | 306,495 | 2,100 | 9,280 | 112,350 | 18,816 | – | 449,041 | |
| Exchange Fund Bills and Notes issued | 327,192 | 630,827 | 236,149 | 11,754 | 2,468 | – | 1,208,390 | |
| Bank loans | 59 | 58 | 362 | 15,777 | – | – | 16,256 | |
| Other debt securities issued | 2,462 | 21,845 | 43,761 | 66,493 | 2,804 | 3,208 | 140,573 | |
| Lease liabilities | 11 | 25 | 101 | 307 | 41 | 1,789 | 2,274 | |
| Other liabilities (excluding lease liabilities) | 47,618 | 13,846 | 120 | 27 | 135,233 | 4 | 196,848 | |
| Loan commitments, guarantees and other credit related commitments | 246,690 | – | – | – | – | – | 246,690 | |
| TOTAL | 2,255,778 | 668,701 | 289,773 | 206,708 | 414,589 | 5,001 | 3,840,550 | |
| Derivative cash outflows/(inflows) | | | | | | | | |
| Derivative financial instruments settled: | | | | | | | | |
| – on net basis | 330 | 605 | 1,009 | 775 | 405 | 117 | 3,241 | |
| – on gross basis | | | | | | | | |
| Total outflows | 35,982 | 78,905 | 13,534 | 32,844 | 2,875 | – | 164,140 | |
| Total inflows | (35,349) | (77,771) | (12,694) | (31,787) | (2,898) | – | (160,499) | |
| TOTAL | 963 | 1,739 | 1,849 | 1,832 | 382 | 117 | 6,882 | |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Fund – 2023 | | | | | | |
|---|--------------------|------------------|----------------|-----------------|------------------|---------------|------------------|
| | Remaining maturity | | | | | | |
| | 1 month or less | 3 months or less | 1 year or less | 5 years or less | 10 years or less | Over 10 years | Total |
| Non-derivative cash outflows | | | | | | | |
| Certificates of Indebtedness | 593,235 | – | – | – | – | – | 593,235 |
| Government-issued currency notes and coins in circulation | 12,941 | – | – | – | – | – | 12,941 |
| Balance of the banking system | 44,950 | – | – | – | – | – | 44,950 |
| Placements by banks and other financial institutions | 90,672 | 9,084 | – | – | – | – | 99,756 |
| Placements by Fiscal Reserves | 396,018 | – | – | – | 299,408 | – | 695,426 |
| Placements by HKSAR Government funds and statutory bodies | 332,793 | 5,800 | 15,600 | 109,366 | 5,097 | – | 468,656 |
| Placements by subsidiaries | 2,446 | – | 4,900 | 10,650 | 13,190 | – | 31,186 |
| Exchange Fund Bills and Notes issued | 393,015 | 589,412 | 261,616 | 10,059 | 1,221 | – | 1,255,323 |
| Lease liabilities | 8 | 16 | 77 | 130 | – | – | 231 |
| Other liabilities (excluding lease liabilities) | 31,950 | 23,933 | 37 | 1,933 | 118,228 | – | 176,081 |
| Credit related commitments | 317,627 | – | – | – | – | – | 317,627 |
| TOTAL | 2,215,655 | 628,245 | 282,230 | 132,138 | 437,144 | – | 3,695,412 |
| Derivative cash outflows/(inflows) | | | | | | | |
| Derivative financial instruments settled: | | | | | | | |
| – on net basis | 256 | 67 | 96 | 103 | 79 | 59 | 660 |
| – on gross basis | | | | | | | |
| Total outflows | 74,341 | 73,023 | 387 | – | – | – | 147,751 |
| Total inflows | (73,469) | (72,100) | (384) | – | – | – | (145,953) |
| TOTAL | 1,128 | 990 | 99 | 103 | 79 | 59 | 2,458 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Fund – 2022 | | | | | | Remaining maturity | |
|---|------------------|-----------------------------------|-----------------------------------|---------------------------------|-----------------------------------|---------------|--------------------|--|
| | 1 month or less | | 3 months or less but over 1 month | | 5 years or less but over 1 year | | | |
| | 1 month or less | 3 months or less but over 1 month | 1 year or less but over 3 months | 5 years or less but over 1 year | 10 years or less but over 5 years | Over 10 years | | |
| Non-derivative cash outflows | | | | | | | | |
| Certificates of Indebtedness | 605,959 | – | – | – | – | – | 605,959 | |
| Government-issued currency notes and coins in circulation | 13,160 | – | – | – | – | – | 13,160 | |
| Balance of the banking system | 96,251 | – | – | – | – | – | 96,251 | |
| Placements by banks and other financial institutions | 99,919 | – | – | – | – | – | 99,919 | |
| Placements by Fiscal Reserves | 509,962 | – | – | – | 255,227 | – | 765,189 | |
| Placements by HKSAR Government funds and statutory bodies | 306,495 | 2,100 | 9,280 | 112,350 | 18,816 | – | 449,041 | |
| Placements by subsidiaries | 5,243 | – | – | 10,400 | 14,945 | – | 30,588 | |
| Exchange Fund Bills and Notes issued | 327,192 | 630,827 | 236,149 | 11,754 | 2,468 | – | 1,208,390 | |
| Lease liabilities | 8 | 16 | 68 | 199 | – | – | 291 | |
| Other liabilities (excluding lease liabilities) | 36,531 | 13,811 | 66 | 1,524 | 135,233 | – | 187,165 | |
| Credit related commitments | 317,492 | – | – | – | – | – | 317,492 | |
| TOTAL | 2,318,212 | 646,754 | 245,563 | 136,227 | 426,689 | – | 3,773,445 | |
| Derivative cash outflows/(inflows) | | | | | | | | |
| Derivative financial instruments settled: | | | | | | | | |
| – on net basis | 194 | 125 | 184 | 290 | 327 | 117 | 1,237 | |
| – on gross basis | | | | | | | | |
| Total outflows | 30,263 | 70,995 | 230 | – | – | – | 101,488 | |
| Total inflows | (29,734) | (70,085) | (229) | – | – | – | (100,048) | |
| TOTAL | 723 | 1,035 | 185 | 290 | 327 | 117 | 2,677 | |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

36.6 Operational risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. Operational risk is inherent in all aspects of the Group's operations covering all business segments.

The Group's objective is to cost-effectively manage operational risk to prevent financial losses or damage to the Group's reputation.

The primary responsibility for the development and implementation of controls to address operational risk rests with line management, with oversight by an internal high-level Risk Committee. The Committee is chaired by the Chief Executive of the HKMA with the Deputy Chief Executives as members. The Risk Committee provides direction and guidance for line management in managing operational risk.

Operational risk management is supported by a formal risk assessment process. This is conducted annually and supplemented with quarterly updates. It requires each division to assess and rank the potential impact and likelihood of occurrence of financial and operational risks. It also requires divisions to review the procedures and controls in place for addressing the identified risks. This risk and control self-assessment is reviewed by the Internal Audit Division of the HKMA to ensure consistency and reasonableness before submission to the Risk Committee, which has the responsibility for ensuring that the identified risks are properly addressed. Results of this risk assessment are also taken into account, in conjunction with other risk factors, for the development of an annual Internal Audit work plan. The Internal Audit Division will audit the risk areas at various frequencies depending on the levels of risks and the results of past audits. It reports its findings regularly to the EFAC Audit Sub-Committee and the Chief Executive of the HKMA and follows up on outstanding issues to ensure that they are resolved in a proper manner.

Operational risk is also inherent in the investment activities and processes of the EFIO. To enhance its operational risk oversight, the Risk and Compliance Department formalised its operational risk management framework for the EFIO. The key elements of the framework include identification and monitoring of key risk indicators; reporting to the senior management of the HKMA on the operational risk profile of the EFIO; handling of operational risk incidents; and issuing monthly operational risk reports to relevant senior executives.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

37 FAIR VALUE MEASUREMENT OF FINANCIAL INSTRUMENTS

37.1 Fair value of financial instruments measured at fair value on a recurring basis

37.1.1 Fair value hierarchy

The carrying values of financial instruments measured at fair value at the reporting date across the three levels of the fair value hierarchy are shown below:

| | Group – 2023 | | | |
|--|------------------|------------------|----------------|------------------|
| | Level 1 | Level 2 | Level 3 | Total |
| Assets | | | | |
| Financial assets measured at fair value through income and expenditure account | | | | |
| Treasury bills and commercial papers | 21,015 | 1,017,331 | – | 1,038,346 |
| Certificates of deposit | – | 209,496 | – | 209,496 |
| Other debt securities | 1,486,264 | 64,531 | – | 1,550,795 |
| Equity securities | 475,513 | 84,855 | 66,404 | 626,772 |
| Investment funds | – | – | 459,888 | 459,888 |
| | 1,982,792 | 1,376,213 | 526,292 | 3,885,297 |
| Financial assets measured at fair value through other comprehensive income | | | | |
| Debt securities | 2,509 | – | – | 2,509 |
| Equity securities | – | – | 1,364 | 1,364 |
| | 2,509 | – | 1,364 | 3,873 |
| Derivative financial instruments | 165 | 2,677 | – | 2,842 |
| Loan portfolio | – | – | 1,907 | 1,907 |
| TOTAL | 1,985,466 | 1,378,890 | 529,563 | 3,893,919 |
| Liabilities | | | | |
| Exchange Fund Bills and Notes issued | – | 1,244,462 | – | 1,244,462 |
| Derivative financial instruments | 256 | 5,403 | – | 5,659 |
| TOTAL | 256 | 1,249,865 | – | 1,250,121 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Group – 2022 (restated) | | | |
|--|-------------------------|-----------|---------|-----------|
| | Level 1 | Level 2 | Level 3 | Total |
| Assets | | | | |
| Financial assets measured at fair value through income and expenditure account | | | | |
| Treasury bills and commercial papers | 147,867 | 885,822 | – | 1,033,689 |
| Certificates of deposit | – | 141,029 | – | 141,029 |
| Other debt securities | 1,537,584 | 61,065 | – | 1,598,649 |
| Equity securities | 493,374 | 77,552 | 61,560 | 632,486 |
| Investment funds | – | – | 424,870 | 424,870 |
| | 2,178,825 | 1,165,468 | 486,430 | 3,830,723 |
| Financial assets measured at fair value through other comprehensive income | | | | |
| Debt securities | 1,244 | – | – | 1,244 |
| Equity securities | – | – | 1,264 | 1,264 |
| | 1,244 | – | 1,264 | 2,508 |
| Derivative financial instruments | 240 | 2,711 | – | 2,951 |
| Loan portfolio | – | – | 1,226 | 1,226 |
| TOTAL | 2,180,309 | 1,168,179 | 488,920 | 3,837,408 |
| Liabilities | | | | |
| Exchange Fund Bills and Notes issued | – | 1,200,323 | – | 1,200,323 |
| Derivative financial instruments | 193 | 6,982 | – | 7,175 |
| TOTAL | 193 | 1,207,305 | – | 1,207,498 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

| | Fund – 2023 | | | |
|--|------------------|------------------|---------------|------------------|
| | Level 1 | Level 2 | Level 3 | Total |
| Assets | | | | |
| Financial assets measured at fair value through income and expenditure account | | | | |
| Treasury bills and commercial papers | 21,015 | 1,017,331 | – | 1,038,346 |
| Certificates of deposit | – | 209,496 | – | 209,496 |
| Other debt securities | 1,486,254 | 64,531 | – | 1,550,785 |
| Equity securities | 475,513 | 84,855 | 49,922 | 610,290 |
| | 1,982,782 | 1,376,213 | 49,922 | 3,408,917 |
| Financial assets measured at fair value through other comprehensive income | | | | |
| Equity securities | – | – | 1,364 | 1,364 |
| Derivative financial instruments | 165 | 1,300 | – | 1,465 |
| TOTAL | 1,982,947 | 1,377,513 | 51,286 | 3,411,746 |
| Liabilities | | | | |
| Exchange Fund Bills and Notes issued | – | 1,244,462 | – | 1,244,462 |
| Derivative financial instruments | 256 | 2,303 | – | 2,559 |
| TOTAL | 256 | 1,246,765 | – | 1,247,021 |

| | Fund – 2022 | | | |
|--|------------------|------------------|---------------|------------------|
| | Level 1 | Level 2 | Level 3 | Total |
| Assets | | | | |
| Financial assets measured at fair value through income and expenditure account | | | | |
| Treasury bills and commercial papers | 147,867 | 885,822 | – | 1,033,689 |
| Certificates of deposit | – | 141,029 | – | 141,029 |
| Other debt securities | 1,537,574 | 61,065 | – | 1,598,639 |
| Equity securities | 493,374 | 77,552 | 51,904 | 622,830 |
| | 2,178,815 | 1,165,468 | 51,904 | 3,396,187 |
| Financial assets measured at fair value through other comprehensive income | | | | |
| Equity securities | – | – | 1,264 | 1,264 |
| Derivative financial instruments | 240 | 1,294 | – | 1,534 |
| TOTAL | 2,179,055 | 1,166,762 | 53,168 | 3,398,985 |
| Liabilities | | | | |
| Exchange Fund Bills and Notes issued | – | 1,200,323 | – | 1,200,323 |
| Derivative financial instruments | 193 | 2,640 | – | 2,833 |
| TOTAL | 193 | 1,202,963 | – | 1,203,156 |

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

The Group's policy is to recognise transfers between levels of fair value hierarchy as at the reporting date in which they occur. During the year, there were no transfers of financial instruments between Level 1 and Level 2 of the fair value hierarchy (2022: Nil).

An analysis of the movement between opening and closing balances of Level 3 financial assets, measured at fair value using a valuation technique with significant unobservable inputs, is shown below:

| | 2023 | | | |
|---|---|---|---|---|
| | Group | | Fund | |
| | Measured at fair value through income and expenditure account | Measured at fair value through other comprehensive income | Measured at fair value through income and expenditure account | Measured at fair value through other comprehensive income |
| At 1 January 2023 | 487,656 | 1,264 | 51,904 | 1,264 |
| Net gains recognised in the income and expenditure account | 11,160 | – | 3,756 | – |
| Net gains recognised in other comprehensive income | – | 100 | – | 100 |
| Purchases | 60,008 | – | 5,038 | – |
| Sales | (29,480) | – | (9,545) | – |
| Exchange differences | 86 | – | – | – |
| Transfers into Level 3 | 829 | – | 829 | – |
| Transfers out of Level 3 | (2,060) | – | (2,060) | – |
| At 31 December 2023 | 528,199 | 1,364 | 49,922 | 1,364 |
| Net gains recognised in the income and expenditure account relating to revaluation of those assets held at the reporting date | 10,565 | – | 3,159 | – |

| | 2022 | | | |
|--|---|---|---|---|
| | Group | | Fund | |
| | Measured at fair value through income and expenditure account | Measured at fair value through other comprehensive income | Measured at fair value through income and expenditure account | Measured at fair value through other comprehensive income |
| At 1 January 2022 (as previously reported) | 515,980 | 1,336 | 58,106 | 1,336 |
| Adjustments on initial application of HKFRS 17 | 650 | – | – | – |
| At 1 January 2022 (restated) | 516,630 | 1,336 | 58,106 | 1,336 |
| Net (losses)/gains recognised in the income and expenditure account | (57,910) | – | 1,739 | – |
| Net losses recognised in other comprehensive loss | – | (72) | – | (72) |
| Purchases | 67,325 | – | 3,947 | – |
| Sales | (40,061) | – | (13,746) | – |
| Exchange differences | (186) | – | – | – |
| Transfers into Level 3 | 2,695 | – | 2,695 | – |
| Transfers out of Level 3 | (837) | – | (837) | – |
| At 31 December 2022 (restated) | 487,656 | 1,264 | 51,904 | 1,264 |
| Net (losses)/gains recognised in the income and expenditure account relating to revaluation of those assets held at the reporting date | (57,729) | – | 1,834 | – |

In 2023 and 2022, certain financial instruments were transferred between Level 2 and Level 3 of the fair value hierarchy reflecting changes in transparency of observable market data for these instruments.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

37.1.2 Valuation techniques and key inputs

The fair value of financial instruments classified under Level 1 is based on quoted market prices in active markets for identical assets or liabilities at the reporting date.

In the absence of quoted market prices in active markets, the fair value of financial instruments classified under Level 2 is estimated using present value or other valuation techniques, with inputs based on market conditions existing at the reporting date. Specific valuation techniques and key inputs used to value these financial instruments include:

- (a) quoted market price or broker quotes for similar instruments;
- (b) derivative financial instruments are priced using models with observable market inputs including interest rate swap and foreign exchange contracts; and
- (c) commercial papers and debt securities are priced using discounted cash flow techniques with observable yield curves.

For unlisted investment funds and certain equity securities which are classified under Level 3, their fair values are estimated by making reference to valuation reports provided by external investment managers. It is not practicable to quote a range of key unobservable inputs.

For certain unlisted equity securities valued by the Group, which are classified under Level 3, their fair values are derived from Comparable Company Valuation Model, which derives the valuation of investments based on factors including their earnings/book value, price multiples of comparable public companies and a discount factor for a lack of liquidity. Significant unobservable inputs used under this valuation method include price multiples of similar companies and liquidity discount:

| Significant unobservable inputs | Quantitative amount | |
|--|----------------------------|-------------|
| | 2023 | 2022 |
| Price multiples of similar companies | 1.1 – 24.1 | 3.4 – 18.0 |
| Liquidity discount | 20% | 20% |

The shareholding in the Bank for International Settlements (note 10) is classified under Level 3. Its fair value is estimated based on the Group's interest in the net asset value of the Bank at the reporting date, discounted at 30% to reflect the discount rate used by the Bank for share repurchases.

Loan portfolio measured at fair value through income and expenditure account is classified under Level 3 with fair value determined by using an internal model based on income approach by discounting future cash flows which are dependent on the expected terms of the loans, annuity payout, premium and interest income, loan repayment and the value of collaterals (for example, the residential properties or insurance policies securing the loans).

If the fair values of these investments had increased/decreased by 10%, it would have resulted in an increase/a decrease in the Group's surplus for the year of HK\$52,820 million (2022 (restated): a decrease/an increase in the Group's deficit for the year of HK\$48,766 million) and in other comprehensive income of HK\$136 million (2022: a decrease/an increase in other comprehensive loss of HK\$126 million).

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

37.2 Fair value of debt securities not measured at fair value on a recurring basis

The fair values of debt securities measured at amortised cost and other debt securities issued that were not measured at fair value are shown below:

| | | Group – 2023 | | | |
|--|----|----------------|------------|---------|---------|
| | | Carrying value | Fair value | | |
| | | Note | Level 1 | Level 2 | Total |
| Financial assets | | | | | |
| Debt securities measured at amortised cost | 12 | 14,574 | 10,494 | 3,768 | 14,262 |
| Financial liabilities | | | | | |
| Other debt securities issued | 28 | 162,363 | – | 162,224 | 162,224 |
| | | | | | |
| | | Group – 2022 | | | |
| | | Carrying value | Fair value | | |
| | | Note | Level 1 | Level 2 | Total |
| Financial assets | | | | | |
| Debt securities measured at amortised cost | 12 | 13,143 | 9,730 | 2,872 | 12,602 |
| Financial liabilities | | | | | |
| Other debt securities issued | 28 | 131,683 | – | 131,400 | 131,400 |

In the absence of quoted market prices in active markets, the fair values of debt securities classified under Level 2 are estimated using present value or other valuation techniques, with inputs based on market conditions existing at the reporting date. The valuation technique for other debt securities issued is the use of discounted cash flow model based on a current yield curve appropriate for their remaining term to maturity.

All other financial instruments of the Group and the Fund are measured at fair value or carried at amounts not materially different from their fair values as at 31 December 2023 and 2022.

Exchange Fund – Notes to the Financial Statements (continued)

(Amounts expressed in millions of Hong Kong dollars, unless otherwise stated.)

38 POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE FOR THE YEAR ENDED 31 DECEMBER 2023

Up to the date of issue of these financial statements, the HKICPA has issued a number of amendments, new standards and interpretations which are not yet effective for the year ended 31 December 2023 and which have not been adopted in these financial statements. The Group is in the process of making an assessment of the expected impact of these developments, new standards and interpretations on the Group financial statements in the period of initial application. So far it has concluded that the adoption of them is unlikely to have a significant impact on the Group financial statements.

39 APPROVAL OF FINANCIAL STATEMENTS

The financial statements were approved by the Financial Secretary on the advice of the Exchange Fund Advisory Committee on 8 April 2024.

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Annex Authorized Institutions and Local Representative Offices

at 31.12.2023

Licensed Banks

Incorporated in Hong Kong

Airstar Bank Limited
 Ant Bank (Hong Kong) Limited
 Bank of China (Hong Kong) Limited
 BANK OF COMMUNICATIONS (HONG KONG) LIMITED
 Bank of East Asia, Limited (The)
 China CITIC Bank International Limited
 China Construction Bank (Asia) Corporation Limited
 Chiyu Banking Corporation Limited
 Chong Hing Bank Limited
 CITIBANK (HONG KONG) LIMITED
 CMB WING LUNG BANK LIMITED

DAH SING BANK, LIMITED
 DBS BANK (HONG KONG) LIMITED
 FUBON BANK (HONG KONG) LIMITED
 Fusion Bank Limited
 Hang Seng Bank, Limited
 Hongkong and Shanghai Banking Corporation Limited (The)
 Industrial and Commercial Bank of China (Asia) Limited
 Livi Bank Limited
 Morgan Stanley Bank Asia Limited
 Mox Bank Limited
 Nanyang Commercial Bank, Limited

OCBC Bank (Hong Kong) Limited
 (formerly known as OCBC Wing Hang Bank Limited)
 Ping An OneConnect Bank (Hong Kong) Limited
 PUBLIC BANK (HONG KONG) LIMITED
 Shanghai Commercial Bank Limited
 Standard Chartered Bank (Hong Kong) Limited
 Tai Sang Bank Limited
 Tai Yau Bank, Limited
 Welab Bank Limited
 ZA Bank Limited

Incorporated outside Hong Kong

AGRICULTURAL BANK OF CHINA LIMITED
 Australia and New Zealand Banking Group Limited
 Banco Bilbao Vizcaya Argentaria S.A.
 Banco Santander, S.A.
 Bangkok Bank Public Company Limited
 Bank J. Safra Sarasin AG
 also known as:
 Banque J. Safra Sarasin SA
 Banca J. Safra Sarasin SA
 Bank J. Safra Sarasin Ltd
 Bank Julius Baer & Co. Ltd.
 Bank of America, National Association
 Bank of China Limited
 Bank of Communications Co., Ltd.
 BANK OF DONGGUAN CO., LTD.
 Bank of India
 Bank of Montreal
 BANK OF NEW YORK MELLON (THE)
 Bank of Nova Scotia (The)
 BANK OF SINGAPORE LIMITED
 BANK OF TAIWAN
 BANK SINOPAC

Banque Pictet & Cie SA
 Barclays Bank PLC
 BDO UNIBANK, INC.
 also known as:
 BDO
 BDO Unibank
 Banco De Oro
 Banco De Oro Unibank
 BDO Banco De Oro
 BNP PARIBAS
 CA Indosuez (Switzerland) SA
 Canadian Imperial Bank of Commerce
 CATHAY BANK
 CATHAY UNITED BANK COMPANY, LIMITED
 Chang Hwa Commercial Bank, Ltd.
 Chiba Bank, Ltd. (The)
 CHINA BOHAI BANK CO., LTD.
 CHINA CITIC BANK CORPORATION LIMITED[#]
 China Construction Bank Corporation
 China Development Bank
 China Everbright Bank Co., Ltd.

CHINA GUANGFA BANK CO., LTD.
 China Merchants Bank Co., Ltd.
 CHINA MINSHENG BANKING CORP., LTD.
 China Zheshang Bank Co., Ltd.
 Chugoku Bank, Ltd. (The)
 CIMB Bank Berhad
 Citibank, N.A.
 Commonwealth Bank of Australia
 Coöperatieve Rabobank U.A.
 CREDIT AGRICOLE CORPORATE AND INVESTMENT BANK
 CREDIT INDUSTRIEL ET COMMERCIAL
 Credit Suisse AG
 CTBC Bank Co., Ltd
 DBS BANK LTD.
 Deutsche Bank Aktiengesellschaft
 DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main

Deletion in 2023

ABN AMRO Bank N.V.
 Commerzbank AG

Annex Authorized Institutions and Local Representative Offices at 31.12.2023 (continued)

| | | |
|---|---|---|
| E.Sun Commercial Bank, Ltd. | Mashreq Bank - Public Shareholding Company also known as Mashreqbank psc | Sumitomo Mitsui Trust Bank, Limited TAIPEI FUBON COMMERCIAL BANK CO., LTD. |
| EAST WEST BANK | MEGA INTERNATIONAL COMMERCIAL BANK CO., LTD. | TAISHIN INTERNATIONAL BANK CO., LTD |
| EFG Bank AG | MELLI BANK PLC | Taiwan Business Bank, Ltd. |
| also known as: | Mitsubishi UFJ Trust and Banking Corporation | Taiwan Cooperative Bank, Ltd. |
| EFG Bank SA | Mizuho Bank, Ltd. | Taiwan Shin Kong Commercial Bank Co., Ltd. |
| EFG Bank Ltd | MUFG Bank, Ltd. | Toronto-Dominion Bank |
| ERSTE GROUP BANK AG | National Australia Bank Limited | UBS AG |
| FAR EASTERN INTERNATIONAL BANK | National Bank of Pakistan | UCO Bank |
| First Abu Dhabi Bank PJSC | NATIXIS | UniCredit Bank AG |
| First Commercial Bank, Ltd. | NongHyup Bank | UNION BANCAIRE PRIVÉE, UBP SA |
| Hachijuni Bank, Ltd. (The) | O-Bank Co., Ltd. | also known as UNITED PRIVATE BANK, UBP LTD |
| HDFC BANK LIMITED | Oversea-Chinese Banking Corporation Limited | United Overseas Bank Ltd. |
| HONG LEONG BANK BERHAD | Philippine National Bank | Wells Fargo Bank, National Association |
| HSBC Bank plc | Ping An Bank Co., Ltd. | Woori Bank |
| HSBC Bank USA, National Association | PT. Bank Negara Indonesia (Persero) Tbk. | Yuanta Commercial Bank Co., Ltd |
| Hua Nan Commercial Bank, Ltd. | Qatar National Bank (Q.P.S.C.) | |
| HUA XIA BANK CO., Limited | Royal Bank of Canada | |
| ICICI BANK LIMITED | Shanghai Commercial & Savings Bank, Ltd. (The) | |
| Indian Overseas Bank | Shanghai Pudong Development Bank Co., Ltd. | |
| Industrial and Commercial Bank of China Limited | Shiga Bank, Ltd. (The) | Deletion in 2023 |
| Industrial Bank Co., Ltd. | Shinhan Bank | NATWEST MARKETS PLC |
| Industrial Bank of Korea | Shizuoka Bank, Ltd. (The) | Union Bank of India |
| ING Bank N.V. | Skandinaviska Enskilda Banken AB | Westpac Banking Corporation |
| INTESA SANPAOLO SPA | Societe Generale | |
| JPMorgan Chase Bank, National Association | Standard Chartered Bank | |
| KBC Bank N.V. | State Bank of India | |
| KEB Hana Bank | State Street Bank and Trust Company | |
| Kookmin Bank | Sumitomo Mitsui Banking Corporation | |
| Land Bank of Taiwan Co., Ltd. | | |
| LGT Bank AG | | |
| also known as: | | |
| LGT Bank Ltd. | | |
| LGT Bank SA | | |
| MALAYAN BANKING BERHAD | | |

Annex Authorized Institutions and Local Representative Offices at 31.12.2023 (continued)

Restricted Licence Banks

Incorporated in Hong Kong

| | |
|---|--|
| ALLIED BANKING CORPORATION (HONG KONG) LIMITED | Goldman Sachs Asia Bank Limited |
| Banc of America Securities Asia Limited | Habib Bank Zurich (Hong Kong) Limited |
| Bank of China International Limited | J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED |
| Bank of Shanghai (Hong Kong) Limited | KDB Asia Limited |
| Citicorp International Limited | ORIX ASIA LIMITED |

Incorporated outside Hong Kong

| | |
|--|---|
| ACCESS BANK UK LIMITED (THE)* | Thanakharn Kasikorn Thai Chamkat (Mahachon) |
| EUROCLEAR BANK | also known as KASIKORN BANK PUBLIC COMPANY LIMITED |
| Korea Development Bank (The) | |
| PT. BANK MANDIRI (PERSERO) Tbk | |
| Siam Commercial Bank Public Company Limited (The) | |

Deposit-taking Companies

Incorporated in Hong Kong

| | | |
|--|---|-----------------------------------|
| BCOM Finance (Hong Kong) Limited | Commonwealth Finance Corporation Limited | KEXIM ASIA LIMITED |
| BPI International Finance Limited | Corporate Finance (D.T.C.) Limited | PUBLIC FINANCE LIMITED |
| Chau's Brothers Finance Company Limited | FUBON CREDIT (HONG KONG) LIMITED | Vietnam Finance Company Limited |
| Chong Hing Finance Limited | KEB Hana Global Finance Limited | WOORI GLOBAL MARKETS ASIA LIMITED |

Incorporated outside Hong Kong

NIL

Annex Authorized Institutions and Local Representative Offices at 31.12.2023 (continued)

Local Representative Offices

| | | Deletion in 2023 |
|-----------------------------------|--------------------------------------|---------------------------|
| ABC BANKING CORPORATION LTD | Metropolitan Bank and Trust Company | |
| Ashikaga Bank, Ltd. (The) | National Bank of Canada | Citco Bank Nederland N.V. |
| BANCO BPM SOCIETA' PER AZIONI | Nishi-Nippon City Bank, Ltd. (The) | Doha Bank Q.P.S.C. |
| Banco Bradesco S.A. | Oita Bank, Ltd. (The) | Gunma Bank, Ltd. (The) |
| Banco Security | P.T. Bank Central Asia | Norinchukin Bank (The) |
| BANK OF BEIJING CO., LTD. | P.T. Bank Rakyat Indonesia (Persero) | Silicon Valley Bank |
| Bank of Fukuoka, Ltd. (The) | Resona Bank, Limited | Union Bank of Taiwan |
| Bank of Kyoto, Ltd. (The) | Shinkin Central Bank | |
| Bank of Yokohama, Ltd. (The) | Shoko Chukin Bank, Ltd. (The) | |
| Banque Cantonale de Genève | Swissquote Bank SA | |
| Banque Transatlantique S.A. | also known as: | |
| BENDURA BANK AG | Swissquote Bank AG | |
| CAIXABANK S.A. | Swissquote Bank Inc. | |
| CLEARSTREAM BANKING S.A. | Swissquote Bank Ltd | |
| Dukascopy Bank SA | VP Bank Ltd | |
| Export-Import Bank of China (The) | also known as: | |
| also known as China Exim Bank | VP Bank AG | |
| Habib Bank A.G. Zurich | VP Bank SA | |
| Iyo Bank, Ltd. (The) | Yamaguchi Bank, Ltd. (The) | |
| Manulife Bank of Canada | | |

Table A Five-year Financial Summary

| (HK\$ billion) | 2019 | 2020 | 2021 | 2022 (restated) | 2023 |
|--|---------|---------|---------|--------------------|----------------|
| For the year | | | | | |
| Total income | 267.4 | 255.3 | 198.6 | (202.2) | 237.9 |
| Total expenditure | 92.2 | 101.8 | 122.4 | 69.3 | 118.1 |
| <i>Of which include interest expense on placements by Fiscal Reserves, HKSAR Government funds and statutory bodies</i> | 62.8 | 81.3 | 109.9 | 48.1 | 52.1 |
| Surplus/(Deficit) | 177.6 | 150.3 | 79.6 | (276.9) | 112.2 |
| At year end | | | | | |
| Total assets | 4,431.2 | 4,811.0 | 5,060.3 | 4,475.2 | 4,532.4 |
| Total liabilities | 3,510.6 | 3,737.5 | 3,908.5 | 3,601.0 | 3,545.0 |
| <i>Of which include:</i> | | | | | |
| <i>Certificates of Indebtedness</i> | 516.1 | 556.2 | 592.4 | 606.0 | 593.2 |
| <i>Balance of the banking system</i> | 67.7 | 457.5 | 377.5 | 96.3 | 45.0 |
| <i>Exchange Fund Bills and Notes issued</i> | 1,152.3 | 1,068.9 | 1,148.6 | 1,200.3 | 1,244.5 |
| <i>Placements by Fiscal Reserves, HKSAR Government funds and statutory bodies</i> | 1,465.9 | 1,224.3 | 1,367.6 | 1,214.2 | 1,164.1 |
| Accumulated surplus | 920.3 | 1,070.8 | 1,150.0 | 875.4 | 987.9 |

Table B Major Economic Indicators

| | 2019 | 2020 | 2021 | 2022 | 2023 |
|--|-----------|-----------|---------|-----------|--------------------------------|
| I. Gross Domestic Product | | | | | |
| Real GDP growth (%) | (1.7) | (6.5) | 6.5 | (3.7) | 3.2^(a) |
| Nominal GDP growth (%) | 0.3 | (5.9) | 7.2 | (2.1) | 6.5^(a) |
| Real growth of major expenditure components of GDP (%) | | | | | |
| – Private consumption expenditure | (0.8) | (10.6) | 5.6 | (2.2) | 7.3^(a) |
| – Government consumption expenditure | 5.1 | 7.9 | 5.9 | 8.0 | (4.3)^(a) |
| – Gross domestic fixed capital formation of which | (14.9) | (11.1) | 8.3 | (7.4) | 10.8^(a) |
| – Building and construction | (10.8) | (9.1) | (0.5) | 7.4 | 7.1^(a) |
| – Machinery, equipment and intellectual property products | (20.8) | (16.0) | 15.2 | (18.9) | 20.7^(a) |
| – Exports ^(b) | (6.1) | (6.7) | 17.0 | (12.5) | (6.5)^(a) |
| – Imports ^(b) | (7.2) | (6.9) | 15.8 | (12.2) | (5.3)^(a) |
| GDP at current market prices (US\$ billion) | 363.1 | 344.9 | 368.9 | 358.7 | 382.1^(a) |
| Per capita GDP at current market prices (US\$) | 48,360 | 46,110 | 49,768 | 48,827 | 50,697^(a) |
| II. External Trade (HK\$ billion)^(b) | | | | | |
| Trade in goods ^(c) | | | | | |
| – Exports of goods | 4,255.1 | 4,198.3 | 5,236.0 | 4,812.5 | 4,497.1^(a) |
| – Imports of goods | 4,375.6 | 4,239.7 | 5,211.3 | 4,853.0 | 4,625.3^(a) |
| – Balance of trade in goods | (120.5) | (41.3) | 24.7 | (40.5) | (128.3)^(a) |
| Trade in services | | | | | |
| – Exports of services | 799.1 | 519.2 | 615.1 | 650.5 | 774.1^(a) |
| – Imports of services | 634.2 | 426.3 | 480.0 | 495.2 | 620.7^(a) |
| – Balance of trade in services | 164.9 | 92.9 | 135.0 | 155.4 | 153.4^(a) |
| III. Fiscal Expenditure and Revenue (HK\$ million, fiscal year) | | | | | |
| Total government expenditure ^(d) | 609,330 | 816,074 | 693,338 | 810,478 | 728,682^(a) |
| Total government revenue ^(e) | 598,756 | 583,534 | 722,700 | 688,139 | 627,061^(a) |
| Consolidated surplus/(deficit) | (10,575) | (232,541) | 29,361 | (122,339) | (101,621)^(a) |
| Reserve balance as at end of fiscal year ^(f) | 1,160,308 | 927,767 | 957,128 | 834,790 | 733,169^(a) |
| IV. Prices (annual change,%) | | | | | |
| Consumer Price Index (A) | 3.3 | (0.6) | 2.9 | 2.2 | 2.3 |
| Composite Consumer Price Index | 2.9 | 0.3 | 1.6 | 1.9 | 2.1 |
| Trade Unit Value Indices | | | | | |
| – Domestic exports | 1.1 | 0.3 | 4.9 | 2.7 | 1.5 |
| – Re-exports | 1.1 | (0.6) | 5.4 | 7.9 | 4.4 |
| – Imports | 1.3 | (0.7) | 5.5 | 8.1 | 3.9 |
| Property Price Indices | | | | | |
| – Residential flats | 1.5 | (0.5) | 3.0 | (5.9) | (8.7)^(a) |
| – Office premises ^(g) | (2.1) | (13.7) | 7.2 | (1.3) | (5.5)^(a) |
| – Retail premises | (7.1) | (5.6) | 4.7 | (3.7) | (6.7)^(a) |
| – Flatted factory premises | (0.0) | (7.0) | 6.4 | 0.1 | (4.3)^(a) |

Table B Major Economic Indicators (continued)

| | 2019 | 2020 | 2021 | 2022 | 2023 |
|--|----------|----------|----------|----------|-----------------|
| V. Labour | | | | | |
| Labour force (annual change,%) | (0.2) | (1.7) | (1.2) | (2.4) | 1.2 |
| Employment (annual change,%) | (0.3) | (4.7) | (0.6) | (1.6) | 2.7 |
| Unemployment rate (annual average,%) | 2.9 | 5.8 | 5.2 | 4.3 | 2.9 |
| Underemployment rate (annual average,%) | 1.1 | 3.3 | 2.6 | 2.3 | 1.1 |
| Employment ('000) | 3,871.4 | 3,690.9 | 3,670.2 | 3,613.2 | 3,709.6 |
| VI. Money Supply (HK\$ billion) | | | | | |
| HK\$ money supply | | | | | |
| – M1 | 1,533.1 | 1,972.7 | 2,078.9 | 1,708.4 | 1,533.3 |
| – M2 ^(h) | 7,438.8 | 7,922.1 | 8,044.0 | 8,096.5 | 8,250.1 |
| – M3 ^(h) | 7,454.7 | 7,937.0 | 8,057.4 | 8,109.0 | 8,262.8 |
| Total money supply | | | | | |
| – M1 | 2,484.7 | 3,231.9 | 3,490.9 | 2,769.3 | 2,598.2 |
| – M2 | 14,745.9 | 15,606.6 | 16,272.6 | 16,536.6 | 17,195.3 |
| – M3 | 14,786.4 | 15,644.0 | 16,310.9 | 16,569.4 | 17,234.1 |
| VII. Interest Rates (end of period,%) | | | | | |
| Three-month interbank rate ⁽ⁱ⁾ | 2.43 | 0.35 | 0.26 | 4.99 | 5.15 |
| Savings deposit | 0.00 | 0.00 | 0.00 | 0.55 | 0.79 |
| One-month time deposit | 0.12 | 0.02 | 0.02 | 0.23 | 0.57 |
| Banks' 'Best lending rate' | 5.00 | 5.00 | 5.00 | 5.63 | 5.88 |
| Banks' 'Composite rate' | 1.09 | 0.28 | 0.21 | 2.11 | 2.94 |
| VIII. Exchange Rates (end of period) | | | | | |
| USD/HKD | 7.787 | 7.753 | 7.798 | 7.808 | 7.811 |
| Trade-weighted Effective Exchange Rate Index (Jan 2020=100) | 100.1 | 95.3 | 95.3 | 102.0 | 103.5 |
| IX. Foreign Currency Reserve Assets (US\$ billion) ^(j) | 441.4 | 491.9 | 496.9 | 424.1 | 425.7 |
| X. Stock Market (end of period figures) | | | | | |
| Hang Seng Index | 28,190 | 27,231 | 23,398 | 19,781 | 17,047 |
| Average price/earnings ratio | 13.3 | 17.6 | 15.1 | 10.3 | 10.3 |
| Market capitalisation (HK\$ billion) | 38,058.3 | 47,392.2 | 42,272.8 | 35,581.7 | 30,985.5 |

- (a) The estimates are preliminary.
- (b) Compiled based on the change of ownership principle in recording goods sent abroad for processing and merchanting.
- (c) Includes non-monetary gold.
- (d) Includes repayment of government bonds and notes.
- (e) Includes net proceeds from issuance of green bonds under the Government Green Bond Programme.
- (f) Includes changes in provision for loss in investments with the Exchange Fund.
- (g) The price index of office premises cannot be compiled in March 2022, as well as in August to October and December 2023, as there were insufficient transactions for Grade A office space in those months.
- (h) Adjusted to include foreign currency swap deposits.
- (i) Refers to three-month Hong Kong Dollar Interest Settlement Rates.
- (j) Excludes unsettled forward transactions but includes gold.

Table C Performance Ratios of the Banking Sector^(a)

| | All Authorized Institutions | | | | | Retail Banks | | | | |
|---|-----------------------------|--------|--------|--------|-------------|--------------|--------|--------|--------|-------------|
| | 2019 % | 2020 % | 2021 % | 2022 % | 2023 % | 2019 % | 2020 % | 2021 % | 2022 % | 2023 % |
| Asset Quality^(b) | | | | | | | | | | |
| As % of total credit exposures ^(c) | | | | | | | | | | |
| Total outstanding provisions/impairment allowances | 0.49 | 0.62 | 0.60 | 0.76 | 0.81 | 0.36 | 0.51 | 0.51 | 0.69 | 0.78 |
| Classified ^(d) exposures: | | | | | | | | | | |
| – Gross | 0.39 | 0.66 | 0.66 | 0.98 | 1.10 | 0.29 | 0.57 | 0.59 | 0.96 | 1.15 |
| – Net of specific provisions/individual impairment allowances | 0.19 | 0.37 | 0.38 | 0.56 | 0.58 | 0.15 | 0.34 | 0.35 | 0.57 | 0.62 |
| – Net of all provisions/impairment allowances | (0.10) | 0.04 | 0.07 | 0.22 | 0.29 | (0.07) | 0.07 | 0.08 | 0.27 | 0.37 |
| As % of total loans ^(e) | | | | | | | | | | |
| Total outstanding provisions/impairment allowances | 0.70 | 0.87 | 0.85 | 1.10 | 1.17 | 0.56 | 0.77 | 0.77 | 1.05 | 1.18 |
| Classified ^(d) loans: | | | | | | | | | | |
| – Gross | 0.57 | 0.90 | 0.89 | 1.40 | 1.56 | 0.48 | 0.82 | 0.85 | 1.42 | 1.67 |
| – Net of specific provisions/individual impairment allowances | 0.28 | 0.50 | 0.50 | 0.81 | 0.83 | 0.25 | 0.45 | 0.49 | 0.83 | 0.90 |
| – Net of all provisions/impairment allowances | (0.13) | 0.03 | 0.04 | 0.30 | 0.39 | (0.08) | 0.05 | 0.07 | 0.37 | 0.50 |
| Overdue > 3 months and rescheduled loans | 0.34 | 0.57 | 0.56 | 0.85 | 1.24 | 0.32 | 0.49 | 0.50 | 0.79 | 1.30 |
| Profitability | | | | | | | | | | |
| Return on assets (operating profit) | 0.95 | 0.65 | 0.62 | 0.66 | 0.92 | 1.19 | 0.77 | 0.59 | 0.67 | 1.06 |
| Return on assets (post-tax profit) | 0.83 | 0.58 | 0.55 | 0.55 | 0.77 | 1.05 | 0.69 | 0.53 | 0.57 | 0.89 |
| Net interest margin | 1.24 | 0.97 | 0.86 | 1.10 | 1.38 | 1.63 | 1.18 | 0.98 | 1.31 | 1.68 |
| Cost-to-income ratio | 45.6 | 50.7 | 55.3 | 50.6 | 43.8 | 39.5 | 47.0 | 54.7 | 48.0 | 38.8 |
| Loan impairment charges to total assets | 0.09 | 0.14 | 0.07 | 0.17 | 0.22 | 0.08 | 0.12 | 0.08 | 0.20 | 0.26 |
| Liquidity | | | | | | | | | | |
| Loan-to-deposit ratio (all currencies) | 75.3 | 72.3 | 71.7 | 68.5 | 62.8 | 62.3 | 59.6 | 60.8 | 59.6 | 56.7 |
| Loan-to-deposit ^(f) ratio (Hong Kong dollar) | 90.3 | 83.5 | 86.7 | 88.4 | 84.2 | 81.1 | 75.9 | 79.0 | 80.1 | 78.1 |
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Table D Authorized Institutions: Domicile and Parentage

| | 2019 | 2020 | 2021 | 2022 | 2023 |
|--|------|------|------|------|------------|
| Licensed Banks | | | | | |
| (i) Incorporated in Hong Kong | 31 | 31 | 31 | 31 | 31 |
| (ii) Incorporated outside Hong Kong | 133 | 130 | 129 | 124 | 120 |
| Total | 164 | 161 | 160 | 155 | 151 |
| Restricted Licence Banks | | | | | |
| (i) Subsidiaries of licensed banks: | | | | | |
| (a) incorporated in Hong Kong | 1 | 1 | – | – | – |
| (b) incorporated outside Hong Kong | 4 | 4 | 4 | 3 | 4 |
| (ii) Subsidiaries or branches of overseas banks which are not licensed banks in Hong Kong | 7 | 7 | 8 | 8 | 8 |
| (iii) Bank related | 3 | 3 | 2 | 2 | 2 |
| (iv) Others | 2 | 2 | 2 | 2 | 2 |
| Total | 17 | 17 | 16 | 15 | 16 |
| Deposit-taking Companies | | | | | |
| (i) Subsidiaries of licensed banks: | | | | | |
| (a) incorporated in Hong Kong | 3 | 3 | 3 | 3 | 3 |
| (b) incorporated outside Hong Kong | 3 | 3 | 3 | 3 | 3 |
| (ii) Subsidiaries of overseas banks which are not licensed banks in Hong Kong | 4 | 3 | 3 | 3 | 3 |
| (iii) Bank related | – | – | – | – | – |
| (iv) Others | 3 | 3 | 3 | 3 | 3 |
| Total | 13 | 12 | 12 | 12 | 12 |
| All Authorized Institutions | 194 | 190 | 188 | 182 | 179 |
| Local Representative Offices | 43 | 43 | 39 | 37 | 31 |

**Table E Authorized Institutions:
Region/Economy of Beneficial Ownership**

| Region/Economy | Licensed Banks | | | | | Restricted Licence Banks | | | | | Deposit-taking Companies | | | | |
|---------------------------|----------------|------|------|------|------|--------------------------|------|------|------|------|--------------------------|------|------|------|------|
| | 2019 | 2020 | 2021 | 2022 | 2023 | 2019 | 2020 | 2021 | 2022 | 2023 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Asia & Pacific | | | | | | | | | | | | | | | |
| Hong Kong, China | 9 | 9 | 9 | 9 | 9 | – | – | – | – | – | 1 | 1 | 1 | 1 | 1 |
| Australia | 5 | 5 | 5 | 4 | 3 | – | – | – | – | – | – | – | – | – | – |
| Mainland China | 30 | 32 | 32 | 32 | 33 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| India | 12 | 10 | 9 | 7 | 6 | – | – | – | – | – | 1 | 1 | 1 | 1 | 1 |
| Indonesia | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | – | – | – | – | – |
| Japan | 10 | 10 | 10 | 10 | 10 | 2 | 2 | 1 | 1 | 1 | 1 | – | – | – | – |
| Malaysia | 4 | 4 | 4 | 4 | 4 | – | – | – | – | – | 1 | 1 | 1 | 1 | 1 |
| Pakistan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | – | – | – | – | – |
| Philippines | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| Republic of Korea | 5 | 5 | 6 | 6 | 6 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| Singapore | 6 | 6 | 6 | 6 | 6 | – | – | – | – | – | – | – | – | – | – |
| Taiwan, China | 20 | 20 | 20 | 20 | 20 | – | – | – | – | – | 1 | 1 | 1 | 1 | 1 |
| Thailand | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | – | – | – | – | – |
| Vietnam | – | – | – | – | – | – | – | – | – | – | 1 | 1 | 1 | 1 | 1 |
| Sub-Total | 106 | 106 | 106 | 103 | 102 | 10 | 10 | 10 | 10 | 10 | 13 | 12 | 12 | 12 | 12 |
| Europe | | | | | | | | | | | | | | | |
| Austria | 1 | 1 | 1 | 1 | 1 | – | – | – | – | – | – | – | – | – | – |
| Belgium | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | – | – | – | – | – |
| France | 7 | 7 | 7 | 6 | 6 | – | – | – | – | – | – | – | – | – | – |
| Germany | 3 | 3 | 3 | 3 | 2 | – | – | – | – | – | – | – | – | – | – |
| Italy | 3 | 2 | 2 | 2 | 2 | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 1 | 1 | 1 | 1 | 1 | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 3 | 3 | 3 | 3 | 2 | – | – | – | – | – | – | – | – | – | – |
| Spain | 2 | 2 | 2 | 2 | 2 | – | – | – | – | – | – | – | – | – | – |
| Sweden | 2 | 2 | 1 | 1 | 1 | – | – | – | – | – | – | – | – | – | – |
| Switzerland | 6 | 7 | 7 | 6 | 6 | – | – | – | – | – | – | – | – | – | – |
| United Kingdom | 9 | 6 | 6 | 6 | 5 | – | – | – | – | – | – | – | – | – | – |
| Sub-Total | 38 | 35 | 34 | 32 | 29 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Middle East | | | | | | | | | | | | | | | |
| Iran | 1 | 1 | 1 | 1 | 1 | – | – | – | – | – | – | – | – | – | – |
| Qatar | 1 | 1 | 1 | 1 | 1 | – | – | – | – | – | – | – | – | – | – |
| United Arab Emirates | 2 | 2 | 2 | 2 | 2 | – | – | – | – | – | – | – | – | – | – |
| Sub-Total | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| North America | | | | | | | | | | | | | | | |
| Canada | 5 | 5 | 5 | 5 | 5 | 2 | 2 | 1 | 0 | 0 | – | – | – | – | – |
| United States | 10 | 10 | 10 | 10 | 10 | 4 | 4 | 4 | 4 | 4 | – | – | – | – | – |
| Sub-Total | 15 | 15 | 15 | 15 | 15 | 6 | 6 | 5 | 4 | 4 | 0 | 0 | 0 | 0 | 0 |
| Brazil | 1 | 1 | 1 | 1 | 1 | – | – | – | – | – | – | – | – | – | – |
| Nigeria | – | – | – | – | – | – | – | – | – | – | 1 | – | – | – | – |
| Sub-Total | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Grand Total | 164 | 161 | 160 | 155 | 151 | 17 | 17 | 16 | 15 | 16 | 13 | 12 | 12 | 12 | 12 |

Table F Presence of World's Largest 500 Banks in Hong Kong

| Positions at 31.12.2023 | Number of Overseas Banks ^(b) | | | | | Licensed Banks ^(c) | | | | | Restricted Licence Banks ^(c) | | | | | Deposit-Taking Companies ^(c) | | | | | Local Representative Offices | | | | | | | |
|-------------------------------------|---|------|------|------|------------|-------------------------------|------|------|------|------------|---|------|------|------|-----------|---|------|------|------|-----------|------------------------------|------|------|------|-----------|----|----|----|
| | 2019 | 2020 | 2021 | 2022 | 2023 | 2019 | 2020 | 2021 | 2022 | 2023 | 2019 | 2020 | 2021 | 2022 | 2023 | 2019 | 2020 | 2021 | 2022 | 2023 | 2019 | 2020 | 2021 | 2022 | 2023 | | | |
| World Ranking ^(a) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-20 | 20 | 19 | 19 | 19 | 19 | 33 | 30 | 30 | 29 | 29 | 4 | 4 | 4 | 4 | 4 | 1 | – | 1 | 1 | 1 | – | – | – | – | – | – | – | – |
| 21-50 | 27 | 28 | 28 | 28 | 26 | 30 | 30 | 29 | 28 | 29 | 3 | 3 | 2 | 1 | 1 | – | 1 | – | – | – | 2 | 2 | 2 | 3 | 1 | 2 | 2 | 3 |
| 51-100 | 31 | 30 | 31 | 30 | 28 | 27 | 27 | 28 | 29 | 25 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 6 | 5 | 5 | 3 | 5 | 6 | 5 | 5 |
| 101-200 | 37 | 36 | 36 | 33 | 30 | 25 | 23 | 24 | 23 | 22 | 3 | 4 | 4 | 4 | 4 | 1 | 2 | 2 | 2 | 2 | 10 | 11 | 10 | 8 | 6 | 10 | 11 | 10 |
| 201-500 | 39 | 35 | 34 | 36 | 37 | 26 | 20 | 23 | 23 | 24 | 1 | 1 | 1 | 1 | 2 | 4 | 2 | 2 | 2 | 2 | 10 | 12 | 8 | 10 | 9 | 10 | 12 | 8 |
| Sub-total | 154 | 148 | 148 | 146 | 140 | 141 | 130 | 134 | 132 | 129 | 12 | 13 | 12 | 11 | 12 | 8 | 7 | 7 | 7 | 7 | 28 | 30 | 25 | 24 | 21 | 28 | 30 | 25 |
| Others | 27 | 30 | 25 | 20 | 17 | 23 | 31 | 26 | 23 | 22 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 15 | 13 | 14 | 13 | 10 | 15 | 13 | 14 |
| Total | 181 | 178 | 173 | 166 | 157 | 164 | 161 | 160 | 155 | 151 | 17 | 17 | 16 | 15 | 16 | 13 | 12 | 12 | 12 | 12 | 43 | 43 | 39 | 37 | 31 | 43 | 43 | 39 |

(a) Top 500 banks/banking groups in the world ranked by total assets. Figures are extracted from The Banker, July 2023 issue.

(b) The sum of the number of licensed banks, restricted licence banks, deposit-taking companies and local representative offices exceeds the number of overseas banks with presence in Hong Kong due to the multiple presence of some of the overseas banks.

(c) Consist of branches and subsidiaries of overseas banks.

Table G Balance Sheet: All Authorized Institutions and Retail Banks

All Authorized Institutions

| (HK\$ billion) | 2019 | | | 2020 | | | 2021 | | | 2022 | | | 2023 | | |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | HK\$ | F/CY | Total |
| Assets | | | | | | | | | | | | | | | |
| Loans to customers | 6,219 | 4,157 | 10,377 | 6,107 | 4,392 | 10,499 | 6,426 | 4,467 | 10,893 | 6,603 | 3,968 | 10,571 | 6,421 | 3,772 | 10,193 |
| – Inside Hong Kong ^(a) | 5,312 | 1,928 | 7,240 | 5,262 | 2,095 | 7,357 | 5,537 | 2,175 | 7,712 | 5,719 | 1,991 | 7,710 | 5,702 | 1,925 | 7,628 |
| – Outside Hong Kong ^(b) | 908 | 2,229 | 3,137 | 845 | 2,297 | 3,142 | 889 | 2,292 | 3,181 | 884 | 1,977 | 2,861 | 718 | 1,846 | 2,565 |
| Interbank lending | 648 | 5,128 | 5,776 | 528 | 5,149 | 5,678 | 486 | 5,040 | 5,526 | 516 | 5,134 | 5,649 | 568 | 5,327 | 5,895 |
| – Inside Hong Kong | 311 | 604 | 915 | 290 | 590 | 880 | 246 | 585 | 832 | 238 | 510 | 747 | 267 | 531 | 798 |
| – Outside Hong Kong | 337 | 4,524 | 4,861 | 238 | 4,560 | 4,798 | 240 | 4,455 | 4,694 | 278 | 4,624 | 4,902 | 301 | 4,796 | 5,097 |
| Negotiable certificates of deposit (NCDs) | 146 | 373 | 519 | 171 | 343 | 514 | 123 | 336 | 459 | 136 | 398 | 534 | 162 | 448 | 610 |
| Negotiable debt instruments, other than NCDs | 1,395 | 3,690 | 5,086 | 1,306 | 4,076 | 5,383 | 1,452 | 4,279 | 5,731 | 1,598 | 4,080 | 5,678 | 1,725 | 4,441 | 6,167 |
| Other assets | 1,033 | 1,672 | 2,705 | 1,453 | 2,338 | 3,792 | 1,189 | 2,569 | 3,758 | 1,287 | 3,312 | 4,599 | 1,196 | 3,225 | 4,421 |
| Total assets | 9,442 | 15,020 | 24,462 | 9,566 | 16,299 | 25,865 | 9,676 | 16,691 | 26,367 | 10,139 | 16,892 | 27,031 | 10,072 | 17,213 | 27,285 |
| Liabilities | | | | | | | | | | | | | | | |
| Deposits from customers ^(c) | 6,884 | 6,887 | 13,772 | 7,311 | 7,202 | 14,514 | 7,414 | 7,772 | 15,186 | 7,468 | 7,971 | 15,440 | 7,624 | 8,598 | 16,222 |
| Interbank borrowing | 959 | 4,514 | 5,473 | 851 | 4,748 | 5,599 | 771 | 4,688 | 5,459 | 792 | 3,944 | 4,736 | 778 | 3,574 | 4,351 |
| – Inside Hong Kong | 499 | 606 | 1,105 | 464 | 605 | 1,069 | 373 | 628 | 1,002 | 397 | 557 | 955 | 411 | 568 | 979 |
| – Outside Hong Kong | 461 | 3,908 | 4,368 | 387 | 4,142 | 4,530 | 398 | 4,059 | 4,457 | 394 | 3,387 | 3,781 | 366 | 3,006 | 3,372 |
| Negotiable certificates of deposit | 181 | 623 | 803 | 229 | 655 | 884 | 176 | 597 | 773 | 177 | 619 | 796 | 123 | 503 | 626 |
| Other liabilities | 2,200 | 2,214 | 4,414 | 2,114 | 2,755 | 4,869 | 2,059 | 2,890 | 4,949 | 2,457 | 3,603 | 6,060 | 2,484 | 3,602 | 6,086 |
| Total liabilities | 10,224 | 14,238 | 24,462 | 10,505 | 15,359 | 25,865 | 10,420 | 15,947 | 26,367 | 10,894 | 16,137 | 27,031 | 11,008 | 16,276 | 27,285 |

Retail banks

| (HK\$ billion) | 2019 | | | 2020 | | | 2021 | | | 2022 | | | 2023 | | |
|--|--------------|--------------|---------------|--------------|--------------|---------------|--------------|--------------|---------------|--------------|--------------|---------------|--------------|---------------|---------------|
| | HK\$ | F/CY | Total | HK\$ | F/CY | Total |
| Assets | | | | | | | | | | | | | | | |
| Loans to customers | 4,988 | 1,939 | 6,927 | 5,005 | 2,106 | 7,111 | 5,282 | 2,250 | 7,532 | 5,401 | 2,040 | 7,441 | 5,301 | 1,965 | 7,266 |
| – Inside Hong Kong ^(a) | 4,456 | 1,068 | 5,524 | 4,457 | 1,151 | 5,608 | 4,711 | 1,242 | 5,953 | 4,845 | 1,095 | 5,941 | 4,872 | 1,052 | 5,924 |
| – Outside Hong Kong ^(b) | 532 | 871 | 1,403 | 549 | 955 | 1,504 | 572 | 1,008 | 1,579 | 556 | 945 | 1,500 | 429 | 912 | 1,342 |
| Interbank lending | 407 | 2,039 | 2,445 | 316 | 2,237 | 2,553 | 265 | 2,204 | 2,469 | 325 | 2,267 | 2,592 | 364 | 2,397 | 2,761 |
| – Inside Hong Kong | 255 | 381 | 636 | 219 | 374 | 593 | 176 | 343 | 519 | 195 | 269 | 465 | 220 | 304 | 525 |
| – Outside Hong Kong | 152 | 1,657 | 1,809 | 97 | 1,863 | 1,960 | 88 | 1,861 | 1,950 | 130 | 1,997 | 2,127 | 144 | 2,093 | 2,237 |
| Negotiable certificates of deposit (NCDs) | 105 | 117 | 223 | 130 | 124 | 254 | 110 | 136 | 246 | 108 | 133 | 241 | 82 | 162 | 244 |
| Negotiable debt instruments, other than NCDs | 1,106 | 2,502 | 3,608 | 1,082 | 2,805 | 3,888 | 1,188 | 3,012 | 4,199 | 1,343 | 2,901 | 4,244 | 1,444 | 3,234 | 4,678 |
| Other assets | 871 | 1,272 | 2,143 | 1,166 | 1,699 | 2,865 | 951 | 2,088 | 3,039 | 992 | 2,623 | 3,614 | 952 | 2,646 | 3,598 |
| Total assets | 7,477 | 7,870 | 15,346 | 7,700 | 8,971 | 16,671 | 7,795 | 9,689 | 17,485 | 8,168 | 9,964 | 18,132 | 8,144 | 10,403 | 18,547 |
| Liabilities | | | | | | | | | | | | | | | |
| Deposits from customers ^(c) | 6,149 | 4,972 | 11,122 | 6,595 | 5,329 | 11,924 | 6,688 | 5,709 | 12,397 | 6,741 | 5,754 | 12,495 | 6,790 | 6,016 | 12,807 |
| Interbank borrowing | 373 | 635 | 1,008 | 373 | 857 | 1,230 | 323 | 1,014 | 1,338 | 334 | 746 | 1,079 | 293 | 829 | 1,122 |
| – Inside Hong Kong | 244 | 160 | 404 | 245 | 230 | 475 | 191 | 270 | 461 | 210 | 211 | 421 | 199 | 219 | 419 |
| – Outside Hong Kong | 129 | 475 | 604 | 128 | 626 | 754 | 132 | 744 | 876 | 123 | 535 | 658 | 94 | 610 | 704 |
| Negotiable certificates of deposit | 57 | 87 | 144 | 94 | 80 | 174 | 77 | 86 | 164 | 92 | 65 | 157 | 18 | 53 | 71 |
| Other liabilities | 1,815 | 1,257 | 3,072 | 1,711 | 1,632 | 3,343 | 1,705 | 1,882 | 3,586 | 1,995 | 2,405 | 4,400 | 2,024 | 2,523 | 4,547 |
| Total liabilities | 8,395 | 6,951 | 15,346 | 8,774 | 7,897 | 16,671 | 8,793 | 8,691 | 17,485 | 9,161 | 8,971 | 18,132 | 9,126 | 9,421 | 18,547 |

Table H Major Balance Sheet Items by Region/Economy of Beneficial Ownership of Authorized Institutions

| (HK\$ billion) | Mainland | | | | | | Total |
|---|-------------|--------------|--------------|--------------|--------------|---------------|---------------|
| | China | Japan | US | Europe | Others | | |
| Total Assets | 2022 | 9,605 | 1,267 | 1,577 | 3,498 | 11,084 | 27,031 |
| | 2023 | 9,948 | 1,085 | 1,415 | 3,698 | 11,139 | 27,285 |
| Deposits from Customers | 2022 | 5,815 | 331 | 841 | 1,861 | 6,592 | 15,440 |
| | 2023 | 6,079 | 364 | 847 | 2,198 | 6,734 | 16,222 |
| Loans to Customers | 2022 | 4,329 | 513 | 312 | 1,294 | 4,123 | 10,571 |
| | 2023 | 4,390 | 376 | 302 | 1,175 | 3,949 | 10,193 |
| Loans to Customers | 2022 | 3,030 | 314 | 252 | 814 | 3,300 | 7,710 |
| Inside Hong Kong ^(a) | 2023 | 3,186 | 243 | 237 | 739 | 3,223 | 7,628 |
| Loans to Customers | 2022 | 1,299 | 199 | 60 | 480 | 823 | 2,861 |
| Outside Hong Kong ^(b) | 2023 | 1,204 | 134 | 65 | 436 | 727 | 2,565 |

(a) Defined as loans for use in Hong Kong plus trade finance.

(b) Includes "others" (i.e. unallocated).

Figures may not add up to total because of rounding.

Table I Flow of Funds for All Authorized Institutions and Retail Banks

All Authorized Institutions

| Increase/(Decrease) in (HK\$ billion) | 2022 | | | 2023 | | |
|--|------------|--------------|--------------|--------------|--------------|----------------|
| | HK\$ | F/CY | Total | HK\$ | F/CY | Total |
| Assets | | | | | | |
| Loans to customers | 177 | (499) | (322) | (182) | (197) | (379) |
| – Inside Hong Kong ^(a) | 182 | (184) | (2) | (17) | (66) | (82) |
| – Outside Hong Kong ^(b) | (5) | (315) | (320) | (165) | (131) | (296) |
| Interbank lending | 30 | 94 | 123 | 52 | 193 | 245 |
| – Inside Hong Kong | (9) | (76) | (84) | 29 | 21 | 51 |
| – Outside Hong Kong | 38 | 169 | 208 | 23 | 172 | 195 |
| All other assets | 256 | 607 | 863 | 63 | 324 | 387 |
| Total assets | 463 | 201 | 664 | (67) | 320 | 253 |
| Liabilities | | | | | | |
| Deposits from customers ^(c) | 54 | 200 | 253 | 156 | 627 | 782 |
| Interbank borrowing | 21 | (744) | (723) | (14) | (370) | (384) |
| – Inside Hong Kong | 24 | (71) | (47) | 14 | 11 | 25 |
| – Outside Hong Kong | (3) | (673) | (676) | (28) | (381) | (409) |
| All other liabilities | 400 | 734 | 1,134 | (28) | (117) | (145) |
| Total liabilities | 475 | 189 | 664 | 114 | 140 | 253 |
| Net Interbank Borrowing/(Lending) | (9) | (838) | (847) | (66) | (563) | (630) |
| Net Customer Lending/(Borrowing) | 123 | (699) | (575) | (338) | (823) | (1,161) |

Retail Banks

| Increase/(Decrease) in (HK\$ billion) | 2022 | | | 2023 | | |
|--|-------------|--------------|--------------|--------------|--------------|--------------|
| | HK\$ | F/CY | Total | HK\$ | F/CY | Total |
| Assets | | | | | | |
| Loans to customers | 119 | (210) | (91) | (100) | (75) | (176) |
| – Inside Hong Kong ^(a) | 135 | (147) | (12) | 26 | (43) | (17) |
| – Outside Hong Kong ^(b) | (16) | (63) | (79) | (126) | (32) | (159) |
| Interbank lending | 60 | 63 | 123 | 39 | 130 | 170 |
| – Inside Hong Kong | 19 | (73) | (54) | 25 | 35 | 60 |
| – Outside Hong Kong | 41 | 136 | 178 | 14 | 95 | 109 |
| All other assets | 194 | 421 | 615 | 36 | 385 | 421 |
| Total assets | 373 | 274 | 647 | (25) | 440 | 415 |
| Liabilities | | | | | | |
| Deposits from customers ^(c) | 53 | 45 | 98 | 50 | 262 | 312 |
| Interbank borrowing | 10 | (269) | (258) | (41) | 83 | 43 |
| – Inside Hong Kong | 19 | (59) | (40) | (11) | 9 | (3) |
| – Outside Hong Kong | (9) | (210) | (218) | (30) | 75 | 45 |
| All other liabilities | 305 | 503 | 808 | (44) | 105 | 61 |
| Total liabilities | 368 | 279 | 647 | (35) | 450 | 415 |
| Net Interbank Borrowing/(Lending) | (50) | (332) | (381) | (80) | (47) | (127) |
| Net Customer Lending/(Borrowing) | 66 | (255) | (189) | (150) | (337) | (487) |

(a) Defined as loans for use in Hong Kong plus trade finance.

(b) Includes "others" (i.e. unallocated).

(c) Hong Kong dollar customer deposits include swap deposits.

Figures may not add up to total because of rounding.

Table J Loans to and Deposits from Customers by Category of Authorized Institutions

| (HK\$ billion) | Loans to Customers | | | | Deposits from Customers ^(a) | | | |
|---------------------------------|--------------------|--------------|---------------|------------|--|--------------|---------------|------------|
| | HK\$ | F/CY | Total | % | HK\$ | F/CY | Total | % |
| 2019 | | | | | | | | |
| Licensed banks | 6,192 | 4,118 | 10,310 | 99 | 6,869 | 6,871 | 13,740 | 100 |
| Restricted licence banks | 21 | 34 | 55 | 1 | 9 | 16 | 26 | – |
| Deposit-taking companies | 7 | 5 | 12 | – | 6 | 1 | 6 | – |
| Total | 6,219 | 4,157 | 10,377 | 100 | 6,884 | 6,887 | 13,772 | 100 |
| 2020 | | | | | | | | |
| Licensed banks | 6,084 | 4,352 | 10,436 | 99 | 7,298 | 7,183 | 14,481 | 100 |
| Restricted licence banks | 17 | 35 | 52 | – | 8 | 19 | 27 | – |
| Deposit-taking companies | 6 | 5 | 10 | – | 5 | 1 | 6 | – |
| Total | 6,107 | 4,392 | 10,499 | 100 | 7,311 | 7,202 | 14,514 | 100 |
| 2021 | | | | | | | | |
| Licensed banks | 6,402 | 4,426 | 10,829 | 99 | 7,401 | 7,754 | 15,155 | 100 |
| Restricted licence banks | 18 | 35 | 53 | – | 9 | 17 | 26 | – |
| Deposit-taking companies | 6 | 6 | 12 | – | 5 | – | 5 | – |
| Total | 6,426 | 4,467 | 10,893 | 100 | 7,414 | 7,772 | 15,186 | 100 |
| 2022 | | | | | | | | |
| Licensed banks | 6,579 | 3,927 | 10,506 | 99 | 7,457 | 7,957 | 15,415 | 100 |
| Restricted licence banks | 19 | 35 | 54 | 1 | 6 | 14 | 20 | – |
| Deposit-taking companies | 5 | 6 | 11 | – | 4 | – | 5 | – |
| Total | 6,603 | 3,968 | 10,571 | 100 | 7,468 | 7,971 | 15,440 | 100 |
| 2023 | | | | | | | | |
| Licensed banks | 6,394 | 3,726 | 10,119 | 99 | 7,613 | 8,579 | 16,192 | 100 |
| Restricted licence banks | 22 | 40 | 62 | 1 | 6 | 19 | 25 | – |
| Deposit-taking companies | 5 | 6 | 11 | – | 5 | – | 5 | – |
| Total | 6,421 | 3,772 | 10,193 | 100 | 7,624 | 8,598 | 16,222 | 100 |

(a) Hong Kong dollar customer deposits include swap deposits.

The sign “–” denotes a figure of less than 0.5.

Figures may not add up to total because of rounding.

Table K Loans to Customers inside Hong Kong by Economic Sector

All Authorized Institutions

| Sector (HK\$ billion) | 2019 | | 2020 | | 2021 | | 2022 | | 2023 | |
|---|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|
| | HK\$ | % |
| Hong Kong's visible trade | 453 | 6 | 425 | 6 | 485 | 6 | 420 | 5 | 365 | 5 |
| Manufacturing | 301 | 4 | 306 | 4 | 313 | 4 | 313 | 4 | 299 | 4 |
| Transport and transport equipment | 327 | 5 | 350 | 5 | 330 | 4 | 292 | 4 | 268 | 4 |
| Building, construction and property development, and investment | 1,618 | 22 | 1,618 | 22 | 1,710 | 22 | 1,712 | 22 | 1,679 | 22 |
| Wholesale and retail trade | 376 | 5 | 349 | 5 | 325 | 4 | 312 | 4 | 301 | 4 |
| Financial concerns (other than authorized institutions) | 909 | 13 | 918 | 12 | 908 | 12 | 923 | 12 | 899 | 12 |
| Individuals: | | | | | | | | | | |
| – to purchase flats in the Home Ownership Scheme, the Private Sector Participation Scheme and the Tenants Purchase Scheme | 78 | 1 | 94 | 1 | 106 | 1 | 106 | 1 | 126 | 2 |
| – to purchase other residential property | 1,466 | 20 | 1,580 | 21 | 1,735 | 22 | 1,808 | 23 | 1,854 | 24 |
| – other purposes | 779 | 11 | 777 | 11 | 830 | 11 | 792 | 10 | 800 | 10 |
| Others | 932 | 13 | 939 | 13 | 970 | 13 | 1,033 | 13 | 1,038 | 14 |
| Total^(a) | 7,240 | 100 | 7,357 | 100 | 7,712 | 100 | 7,710 | 100 | 7,628 | 100 |

Retail Banks

| Sector (HK\$ billion) | 2019 | | 2020 | | 2021 | | 2022 | | 2023 | |
|---|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|
| | HK\$ | % |
| Hong Kong's visible trade | 316 | 6 | 296 | 5 | 336 | 6 | 280 | 5 | 252 | 4 |
| Manufacturing | 211 | 4 | 206 | 4 | 192 | 3 | 201 | 3 | 202 | 3 |
| Transport and transport equipment | 211 | 4 | 237 | 4 | 224 | 4 | 204 | 3 | 194 | 3 |
| Building, construction and property development, and investment | 1,203 | 22 | 1,216 | 22 | 1,282 | 22 | 1,291 | 22 | 1,270 | 21 |
| Wholesale and retail trade | 256 | 5 | 227 | 4 | 220 | 4 | 209 | 4 | 204 | 3 |
| Financial concerns (other than authorized institutions) | 513 | 9 | 488 | 9 | 488 | 8 | 443 | 7 | 424 | 7 |
| Individuals: | | | | | | | | | | |
| – to purchase flats in the Home Ownership Scheme, the Private Sector Participation Scheme and the Tenants Purchase Scheme | 78 | 1 | 94 | 2 | 106 | 2 | 106 | 2 | 126 | 2 |
| – to purchase other residential property | 1,464 | 27 | 1,578 | 28 | 1,732 | 29 | 1,806 | 30 | 1,851 | 31 |
| – other purposes | 627 | 11 | 610 | 11 | 665 | 11 | 675 | 11 | 692 | 12 |
| Others | 644 | 12 | 656 | 12 | 706 | 12 | 725 | 12 | 709 | 12 |
| Total^(a) | 5,524 | 100 | 5,608 | 100 | 5,953 | 100 | 5,941 | 100 | 5,924 | 100 |

(a) Defined as loans for use in Hong Kong plus trade finance. Figures may not add up to total because of rounding.

Table L Deposits from Customers

| (HK\$ billion) | All Authorized Institutions | | | | Retail Banks | | | |
|--|-----------------------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|
| | Demand | Savings | Time | Total | Demand | Savings | Time | Total |
| Hong Kong Dollar ^(a) | | | | | | | | |
| 2019 | 1,036 | 2,641 | 3,207 | 6,884 | 945 | 2,594 | 2,610 | 6,149 |
| 2020 | 1,432 | 3,373 | 2,507 | 7,311 | 1,302 | 3,302 | 1,991 | 6,595 |
| 2021 | 1,504 | 3,577 | 2,333 | 7,414 | 1,352 | 3,496 | 1,839 | 6,688 |
| 2022 | 1,128 | 2,708 | 3,632 | 7,468 | 1,029 | 2,652 | 3,059 | 6,741 |
| 2023 | 958 | 2,317 | 4,349 | 7,624 | 870 | 2,275 | 3,645 | 6,790 |
| Foreign currency | | | | | | | | |
| 2019 | 952 | 2,295 | 3,641 | 6,887 | 612 | 2,013 | 2,347 | 4,972 |
| 2020 | 1,259 | 2,967 | 2,976 | 7,202 | 820 | 2,631 | 1,877 | 5,329 |
| 2021 | 1,412 | 3,251 | 3,109 | 7,772 | 894 | 2,848 | 1,968 | 5,709 |
| 2022 | 1,061 | 2,696 | 4,215 | 7,971 | 756 | 2,340 | 2,658 | 5,754 |
| 2023 | 1,065 | 2,454 | 5,079 | 8,598 | 735 | 2,121 | 3,160 | 6,016 |
| Total | | | | | | | | |
| 2019 | 1,987 | 4,936 | 6,848 | 13,772 | 1,557 | 4,607 | 4,958 | 11,122 |
| 2020 | 2,691 | 6,340 | 5,483 | 14,514 | 2,122 | 5,934 | 3,868 | 11,924 |
| 2021 | 2,916 | 6,828 | 5,443 | 15,186 | 2,246 | 6,344 | 3,807 | 12,397 |
| 2022 | 2,189 | 5,404 | 7,847 | 15,440 | 1,785 | 4,993 | 5,717 | 12,495 |
| 2023 | 2,023 | 4,771 | 9,428 | 16,222 | 1,605 | 4,396 | 6,805 | 12,807 |

(a) Hong Kong dollar customer deposits include swap deposits.

Figures may not add up to total because of rounding.

Table M Geographical Breakdown of Net External Claims/(Liabilities) of All Authorized Institutions

| Region/Economy ^(a) (HK\$ billion) | 2022 | | | | 2023 | | |
|---|--|----------------------|---------------------------------------|--|----------------------|---------------------------------------|--|
| | Net Claims on/(Liabilities to) Non-Bank Customers | | Total Net Claims/ (Liabilities) | Net Claims on/(Liabilities to) Non-Bank Customers | | Total Net Claims/ (Liabilities) | |
| | Net Claims on/(Liabilities to) Banks | Outside Hong Kong | | Net Claims on/(Liabilities to) Banks | Outside Hong Kong | | |
| Developed Countries | 1,240 | 2,222 | 3,462 | 1,644 | 2,353 | 3,997 | |
| United States of America | 388 | 948 | 1,336 | 510 | 1,023 | 1,533 | |
| Japan | 44 | 780 | 824 | 304 | 759 | 1,063 | |
| Australia | 197 | 105 | 302 | 220 | 116 | 336 | |
| United Kingdom ^(b) | 238 | 81 | 319 | 141 | 97 | 238 | |
| France | 79 | 41 | 120 | 128 | 68 | 195 | |
| Canada | 168 | 75 | 243 | 115 | 78 | 193 | |
| Germany | 41 | 50 | 91 | 74 | 62 | 136 | |
| Luxembourg | 90 | 32 | 122 | 102 | 19 | 121 | |
| Switzerland | 55 | (2) | 53 | 109 | 4 | 113 | |
| Ireland | (1) | 31 | 30 | 0 | 31 | 31 | |
| New Zealand | 28 | 9 | 37 | 13 | 18 | 31 | |
| Netherlands | (34) | 63 | 29 | (36) | 61 | 25 | |
| Liechtenstein | 18 | (1) | 17 | 21 | (1) | 21 | |
| Sweden | 0 | 17 | 17 | 1 | 15 | 16 | |
| Belgium | 5 | (0) | 5 | 0 | 4 | 4 | |
| Finland | 2 | 1 | 3 | 1 | 2 | 3 | |
| Austria | (12) | 1 | (10) | 1 | 1 | 3 | |
| Norway | 4 | 1 | 5 | (0) | 2 | 2 | |
| Denmark | 1 | (1) | (0) | 1 | (0) | 0 | |
| Portugal | 1 | (1) | 0 | 1 | (1) | 0 | |
| Greece | (0) | (0) | (0) | 0 | (1) | (1) | |
| Cyprus | (0) | (2) | (2) | (0) | (2) | (2) | |
| Spain | (29) | (4) | (34) | (24) | (0) | (25) | |
| Italy | (43) | (1) | (44) | (39) | (2) | (41) | |
| Others | 0 | (0) | (0) | 0 | (0) | (0) | |
| Offshore centres | 55 | 5 | 60 | 90 | (72) | 19 | |
| West Indies UK | 0 | 105 | 105 | 0 | 66 | 67 | |
| Cayman Islands | (3) | 61 | 58 | 1 | 15 | 16 | |
| Bahrain | 6 | 3 | 9 | 7 | 2 | 10 | |
| Panama | 2 | 1 | 3 | 5 | 1 | 6 | |
| Singapore | 13 | (109) | (96) | 89 | (84) | 6 | |
| Bahamas | (0) | 1 | 1 | 1 | 3 | 3 | |
| Jersey | (0) | 7 | 7 | (0) | 3 | 3 | |
| Lebanon | 0 | (0) | (0) | 0 | 2 | 2 | |
| Isle of Man | 0 | 0 | 0 | 0 | 1 | 1 | |
| Vanuatu | (0) | (0) | (0) | (0) | (0) | (1) | |
| Guernsey | (0) | 1 | 1 | (0) | (1) | (1) | |
| Barbados | 0 | (2) | (2) | 0 | (2) | (2) | |
| Mauritius | 2 | 2 | 4 | (5) | (1) | (7) | |
| Samoa | 0 | (27) | (27) | 0 | (36) | (36) | |
| Macao, China | 35 | (39) | (4) | (7) | (42) | (49) | |
| Others | 0 | (0) | (0) | 0 | (0) | (0) | |
| Developing Europe | (7) | (5) | (12) | (17) | (7) | (24) | |
| Poland | 0 | 0 | 0 | (0) | 1 | 1 | |
| Czech Republic | 0 | 1 | 1 | (0) | 1 | 1 | |
| Turkey | 2 | (1) | 1 | 1 | (2) | (0) | |
| Hungary | (0) | 1 | 1 | (0) | (0) | (1) | |
| Russia | (9) | (5) | (14) | (18) | (7) | (25) | |
| Others | (0) | (1) | (1) | 0 | 0 | 0 | |

Table M Geographical Breakdown of Net External Claims/(Liabilities) of All Authorized Institutions (continued)

| Region/Economy ^(a) (HK\$ billion) | 2022 | | | | 2023 | | |
|---|--|----------------------|---------------------------------------|--|----------------------|---------------------------------------|--|
| | Net Claims on/(Liabilities to) Non-Bank Customers | | Total Net Claims/ (Liabilities) | Net Claims on/(Liabilities to) Non-Bank Customers | | Total Net Claims/ (Liabilities) | |
| | Net Claims on/(Liabilities to) Banks | Outside Hong Kong | | Net Claims on/(Liabilities to) Banks | Outside Hong Kong | | |
| Developing Latin America and Caribbean | | | | | | | |
| Brazil | 15 | (5) | 9 | 38 | 2 | 40 | |
| Chile | 3 | 4 | 7 | 19 | 3 | 22 | |
| Venezuela | 2 | 10 | 12 | 4 | 9 | 13 | |
| Peru | 12 | (0) | 12 | 12 | (0) | 12 | |
| Jamaica | 0 | 2 | 2 | 4 | 2 | 6 | |
| Argentina | 0 | 1 | 1 | 0 | 1 | 1 | |
| Mexico | (1) | 0 | (1) | (0) | 1 | 0 | |
| Others | 0 | (18) | (17) | 0 | (11) | (10) | |
| | (1) | (5) | (6) | 0 | (4) | (4) | |
| Developing Africa and Middle East | | | | | | | |
| United Arab Emirates | 142 | 40 | 182 | 212 | 64 | 276 | |
| Qatar | 89 | 37 | 126 | 133 | 29 | 162 | |
| Saudi Arabia | 71 | 19 | 90 | 81 | 29 | 110 | |
| Egypt | 4 | 35 | 39 | 10 | 52 | 61 | |
| Côte d'Ivoire | 4 | 2 | 5 | 12 | 3 | 15 | |
| South Africa | 0 | 3 | 3 | 0 | 6 | 6 | |
| Israel | 2 | (1) | 1 | 6 | (1) | 5 | |
| Oman | 0 | (1) | (0) | 0 | (1) | (0) | |
| Algeria | 0 | (0) | (3) | (1) | (1) | (1) | |
| Nigeria | (3) | (0) | (15) | (11) | (3) | (14) | |
| Kuwait | (12) | (3) | (14) | (11) | (12) | (24) | |
| Others | (7) | (45) | (52) | (5) | (38) | (43) | |
| Developing Asia and Pacific | | | | | | | |
| Republic of Korea | 180 | (480) | (300) | 389 | (670) | (281) | |
| India | 231 | 89 | 320 | 195 | 131 | 326 | |
| Thailand | (20) | 64 | 45 | 13 | 64 | 77 | |
| Malaysia | 67 | (24) | 43 | 62 | (12) | 50 | |
| Indonesia | 53 | (8) | 45 | 55 | (7) | 48 | |
| Cambodia | 8 | 15 | 22 | 11 | 26 | 36 | |
| Bangladesh | 10 | 7 | 17 | 8 | 4 | 13 | |
| Sri Lanka | 12 | 1 | 13 | 8 | 1 | 9 | |
| Fiji | (1) | 3 | 2 | (2) | 3 | 1 | |
| Brunei Darussalam | (1) | (0) | (1) | (0) | (0) | (1) | |
| Mongolia | 0 | 2 | 1 | (1) | 0 | (1) | |
| Laos | (1) | 0 | (1) | (2) | 0 | (1) | |
| Pakistan | (1) | (1) | (1) | (0) | (2) | (2) | |
| Myanmar | (0) | 0 | (1) | (2) | (3) | (5) | |
| Vietnam | (1) | 23 | (6) | (24) | 19 | (5) | |
| Nepal | (29) | (2) | (5) | (10) | (1) | (11) | |
| Philippines | (4) | (14) | (21) | (3) | (10) | (13) | |
| Kazakhstan | (7) | (8) | (7) | 2 | (15) | (14) | |
| Taiwan, China | 1 | (375) | (379) | 42 | (412) | (370) | |
| Mainland China | (5) | (258) | (385) | 43 | (457) | (414) | |
| Others | (127) | 4 | 0 | (5) | 1 | (4) | |
| International organisations | 0 | 150 | 150 | 0 | 200 | 200 | |
| Overall Total | 1,625 | 1,925 | 3,551 | 2,356 | 1,870 | 4,226 | |

(a) Regions and economies are classified according to the Bank for International Settlements' (BIS) Guidelines for Reporting the BIS International Banking Statistics issued in March 2013.

(b) Excluding figures for Guernsey, Isle of Man and Jersey since March 2004.

Figures may not add up to total because of rounding.

Abbreviations

| | | | |
|--------------------|--|----------------|---|
| AI | – Authorized institution | HKIMR | – Hong Kong Institute for Monetary and Financial Research |
| AMCM | – Monetary Authority of Macao | HKMA | – Hong Kong Monetary Authority |
| AML | – Anti-money laundering | HKMC | – The Hong Kong Mortgage Corporation Limited |
| AML/CFT | – Anti-money laundering and counter-financing of terrorism | HKMCI | – HKMC Insurance Limited |
| AoF | – Hong Kong Academy of Finance | HKPF | – Hong Kong Police Force |
| ASEAN | – Association of Southeast Asian Nations | HKSAR | – Hong Kong Special Administrative Region |
| bankCBCM | – Cross-Border Crisis Management Group for banks | HKTR | – Hong Kong Trade Repository |
| Basel Committee | – Basel Committee on Banking Supervision | HTM | – Held-to-maturity |
| BIS | – Bank for International Settlements | IA | – Insurance Authority |
| BO | – Banking Ordinance | ICAC | – Independent Commission Against Corruption |
| BP | – Backing Portfolio | IFC | – International financial centre |
| CBDC | – Central Bank Digital Currency | IMF | – International Monetary Fund |
| CCP Expanded Group | – Expanded Group on alternative financial resources for the resolution of central counterparties | IOSCO | – International Organization of Securities Commissions |
| CDD | – Customer due diligence | IP | – Investment Portfolio |
| CDI | – Commercial Data Interchange | IRRBB | – Interest rate risk in the banking book |
| CHATS | – Clearing House Automated Transfer System | Key Attributes | – Key Attributes of Effective Resolution Regimes for Financial Institutions |
| CMG | – Crisis Management Group | LAC | – Loss-absorbing capacity |
| CMOF | – Ministry of Finance of the People's Republic of China | LAC Rules | – Financial Institutions (Resolution) (Loss-absorbing Capacity Requirements — Banking Sector) Rules |
| CMU | – Central Moneymarkets Unit | LERS | – Linked Exchange Rate System |
| COVID | – Coronavirus disease | LTGP | – Long-Term Growth Portfolio |
| Cross-boundary WMC | – Cross-boundary Wealth Management Connect | mBridge | – Multiple Central Bank Digital Currency Bridge |
| CSD | – Central securities depository | MIP | – Mortgage Insurance Programme |
| CSSs | – Clearing and settlement systems | MoU | – Memorandum of Understanding |
| CU | – Convertibility Undertaking | MPF | – Mandatory provident fund |
| DLGS | – Dedicated 100% Loan Guarantee Scheme | OECD | – Organisation for Economic Co-operation and Development |
| DLT | – Distributed ledger technology | Open API | – Open Application Programming Interface |
| D-SIBs | – Domestic systemically important banks | OTC | – Over-the-counter |
| ECF | – Enhanced Competency Framework | PBoC | – People's Bank of China |
| e-CNY | – Digital renminbi | PFMI | – Principles for Financial Market Infrastructures |
| EFAC | – Exchange Fund Advisory Committee | Proxy ID | – Proxy identifier |
| EFBNs | – Exchange Fund Bills and Notes | PSSVFO | – Payment Systems and Stored Value Facilities Ordinance |
| e-HKD | – Retail Central Bank Digital Currency in Hong Kong | PvP | – Payment-versus-payment |
| EMEAP | – Executives' Meeting of East Asia-Pacific Central Banks | Regtech | – Regulatory technology |
| EMEs | – Emerging market economies | ReSG | – Resolution Steering Group |
| ESG | – Environmental, social and governance | RIs | – Registered institutions |
| FFO | – Fintech Facilitation Office | RMB | – Renminbi |
| fintech | – Financial technology | RPSs | – Retail payment systems |
| FIRO | – Financial Institutions (Resolution) Ordinance | RTGS | – Real Time Gross Settlement |
| FMI | – Financial market infrastructure | RWAs | – Risk-weighted amounts |
| FPS | – Faster Payment System | SEACEN | – South East Asian Central Banks |
| FSB | – Financial Stability Board | SFC | – Securities and Futures Commission |
| G20 | – Group of Twenty | SFGS | – SME Financing Guarantee Scheme |
| GBA | – Guangdong-Hong Kong-Macao Greater Bay Area | SGR | – Study Group on Resolution |
| GDP | – Gross domestic product | SME | – Small and medium-sized enterprise |
| GBP | – Government Green Bond Programme | SPM | – Supervisory Policy Manual |
| GSC | – Governance Sub-Committee | Suptech | – Supervisory technology |
| G-SIB | – Global systemically important bank | SVF | – Stored value facility |
| HKAB | – The Hong Kong Association of Banks | Swap Connect | – Mutual access between interest rate swap markets in Hong Kong and the Mainland |
| HKD | – Hong Kong dollar | Swift | – Society for Worldwide Interbank Financial Telecommunication |
| HKEX | – Hong Kong Exchanges and Clearing Limited | USD | – US dollar |
| HKIB | – Hong Kong Institute of Bankers | uTLAC | – Unallocated total loss-absorbing capacity |
| HKICL | – Hong Kong Interbank Clearing Limited | VA | – Virtual asset |

Reference Resources

The *HKMA Annual Report* is usually published in April each year. A number of other HKMA publications provide explanatory and background information on the HKMA's policies and functions. These include:

HKMA Sustainability Report (online publication)

(usually published in April each year)

HKMA Quarterly Bulletin (online publication)

(published in March, June, September and December each year)

Monthly Statistical Bulletin (online publication)

(published in two batches on the third and sixth business days of each month)

Most HKMA publications are available for downloading free of charge on the HKMA website (www.hkma.gov.hk).

The main texts of the regular briefings by the HKMA to the Legislative Council Panel on Financial Affairs are available online (<https://www.hkma.gov.hk/eng/data-publications-and-research/legislative-council-issues/>).

The HKMA website contains detailed and extensive information on the whole range of the HKMA's work. This information includes press releases, statistics, speeches, guidelines and circulars, research reports, and features on topical issues.

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