During 2021, the HKMA achieved good progress in strengthening Hong Kong's status as a globally competitive international financial centre through a multi-pronged approach.

The HKMA unveiled "Fintech 2025" strategy to promote the wide adoption of fintech by the financial sector and bolster Hong Kong's position as a fintech hub more broadly. On the Faster Payment System, it has seen a surge in turnover during the year amid the COVID-19 pandemic.

On enhancing connectivity, significant progress was made during the year with the addition of the Cross-boundary Wealth Management Connect and Southbound Trading under Bond Connect to the suite of Connect schemes. Thanks to its world-class market infrastructure and the Connect schemes, Hong Kong is the favoured platform for Mainland funds to tap into global markets and for international investors to access the fast-growing Mainland markets.

Also during 2021, the HKMA devoted significant efforts in creating new business opportunities to strengthen the competitiveness of Hong Kong's financial platform, in areas including bond issuance, asset and wealth management, corporate treasury centres, and green and sustainable finance. To promote Hong Kong's financial services, the HKMA stepped up market outreach to overseas and Mainland stakeholders to keep them informed about the resilience of Hong Kong's financial system and the prospects it presents.

Meanwhile, the HKMA is active in international and regional central banking and regulatory forums, contributing to global efforts in maintaining financial stability and promoting financial market developments.

#### **OVERVIEW**

The HKMA announced its "Fintech 2025" strategy, covering a series of initiatives to promote wide adoption of financial technology (fintech) and strengthen Hong Kong's position as a fintech hub in Asia. The HKMA Fintech Facilitation Office (FFO), together with the banking departments, played a pivotal role in driving various key initiatives during the year including the following:



Promoting regulatory technology (Regtech) adoption



Rolling out the Tech Baseline Assessment to understand banks' adoption of fintech



Researching the application of wholesale Central Bank Digital Currency (CBDC) to cross-border payments



Conducting a study on the prospect of introducing retail CBDC (e-HKD) in Hong Kong



Developing the Commercial Data Interchange (CDI)



Enhancing talent development



Nurturing the fintech ecosystem with funding and policies



Strengthening crossborder collaboration in fintech



Expanding adoption of the Faster Payment System (FPS)

Hong Kong's position as an offshore renminbi hub remained firm, with offshore renminbi businesses registering robust growth during the year. Inflows into renminbi assets continued to gather pace as the inclusion of onshore securities in major financial market indices continued. Hong Kong plays an indispensable role in facilitating international investors' increased allocation to renminbi assets, with the Mainland–Hong Kong Connect schemes being widely accepted as the channels of choice for international investors to access onshore capital markets. In 2021, daily turnover under Northbound Bond Connect increased 34% to around RMB25.8 billion.

Following the success of Northbound Bond Connect, Southbound Bond Connect was launched in September, completing the two-way connection between the Mainland and international bond markets. In the same month, the People's Bank of China (PBoC), the HKMA and the Monetary Authority of Macao promulgated the implementation details for the Cross-boundary Wealth Management Connect (Cross-boundary WMC) Scheme in the Guangdong–Hong Kong–Macao Greater Bay Area (GBA). In October, eligible banks in Hong Kong started providing Cross-boundary WMC services together with their Mainland partner banks.

To enhance Hong Kong's role as a key offshore renminbi centre, a working group comprising the HKMA, the Securities and Futures Commission (SFC) and Hong Kong Exchanges and Clearing Limited (HKEX) was formed to conduct a feasibility study on promoting trading of renminbi-denominated equity securities in Hong Kong. A joint seminar was also co-organised by the PBoC and the HKMA in December, showcasing Hong Kong's status as an international financial centre and a leading renminbi business hub.

The HKMA continues to make progress towards strengthening the competitiveness of Hong Kong's financial platform. In particular, to increase Hong Kong's appeal as a preferred fund domicile, the HKMA worked closely with the Government and the financial industry to provide a more facilitating tax and regulatory environment for fund formation. Significant strides were also made in further elevating Hong Kong's position as a regional green and sustainable finance hub, and as a bond issuance centre. At the same time, the HKMA stepped up market outreach to promote Hong Kong's financial services to overseas and Mainland stakeholders.

Safe and efficient operation of financial infrastructure is fundamental for reinforcing Hong Kong's position as a leading international financial centre. In 2021, the four interbank Real Time Gross Settlement (RTGS) systems, the Central Moneymarkets Unit (CMU) and the Hong Kong Trade Repository achieved 100%1 system availability, outperforming the target of 99.95%. Following the launch of Southbound Bond Connect in September, the CMU became the settlement and custodian service provider for transactions conducted under both Northbound and Southbound Bond Connect.

Adoption of the FPS continued to expand in 2021. The number of registrations grew to 9.6 million at the end of 2021 and the average daily turnover for the year rose by 90% from 2020. 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 the key drivers for the continued rise in transaction volume, on top of a steady growth in person-to-person and business payments.

To promote the safety and efficiency of the local retail payment industry, the HKMA oversees six designated retail payment systems (RPSs) and supervises 15 licensed SVFs under the Payment Systems and Stored Value Facilities Ordinance (PSSVFO). During the year, the HKMA facilitated the smooth implementation of the Government's Consumption Voucher Scheme by co-ordinating and promoting dialogues and co-operation between the relevant Government parties and the SVF licensees appointed for the scheme.

In January 2022, the HKMA issued a discussion paper on crypto-assets and stablecoins, setting out the HKMA's thinking on the relevant regulatory approach and inviting views from stakeholders. Relevant factors, including feedback to this discussion paper and recommendations of relevant international bodies, will be taken into account when drawing up the appropriate regulatory regime.

Internationally, the HKMA is an active member of the central banking community and plays a leadership role in a number of regional and international committees. For example, the HKMA chairs the Working Group on Financial Markets (WGFM) established under the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)<sup>2</sup>. The HKMA also co-chairs the Policy and Standards Group of the Basel Committee on Banking Supervision (Basel Committee), the Non-Bank Monitoring Experts Group and the Financial Innovation Network of the Financial Stability Board (FSB), and leads a team that looks into supervisory issues associated with financial benchmark transition.

About 99.98% if including downtime caused by external factors.

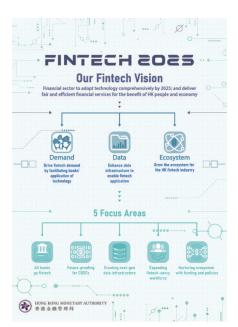
The EMEAP is a co-operative organisation of central banks and monetary authorities in the East Asia and Pacific region.

#### **REVIEW OF 2021**

# Hong Kong as a fintech hub in Asia Fintech 2025

In June, the HKMA unveiled its "Fintech 2025" strategy to drive fintech development in Hong Kong. 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:

- All banks go fintech
- Future-proofing Hong Kong for CBDCs
- Creating the next-generation data infrastructure
- Expanding the fintech-savvy workforce
- Nurturing the ecosystem with funding and policies



The HKMA's "Fintech 2025" strategy drives fintech development in Hong Kong

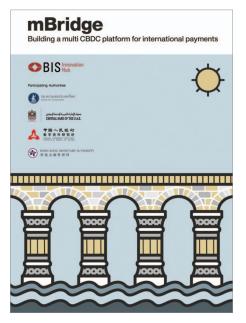
### **Fintech Adoption in the Banking Sector**

To support the "All banks go fintech" initiative of the "Fintech 2025" strategy, the HKMA rolled out the Tech Baseline Assessment in June 2021. The assessment aims to help the HKMA develop a better understanding of the current fintech landscape in the banking sector, and identify which fintech areas may warrant the HKMA's support. All licensed banks with significant operations in Hong Kong were requested to develop a three-year plan for fintech adoption by the end of 2021.

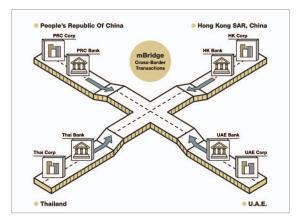
During the year, the HKMA also continued to implement its two-year roadmap to promote Regtech adoption by banks in Hong Kong, and incorporate technology in its own supervisory processes to improve efficiency and effectiveness. See page 98 of the *Banking Stability* chapter for more details.

## **Wholesale Central Bank Digital Currency**

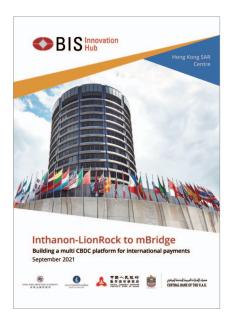
The HKMA and the Bank of Thailand expanded the scope of their joint research project with the joining of the Central Bank of the United Arab Emirates and the Digital Currency Institute of the PBoC in February 2021. Renamed as "Multiple Central Bank Digital Currency Bridge (mBridge)" and strongly supported by the Bank for International Settlements (BIS) Innovation Hub Centre in Hong Kong, the project further explores the capabilities of distributed ledger technology to facilitate real-time cross-border foreign exchange payment-versus-payment (PvP) transactions in a multi-jurisdictional context and on a 24/7 basis. A joint report was published in September to deliver the interim findings, followed by the publication of potential use cases and a future roadmap in November.



The brochure summarises potential use cases and outlines the future roadmap of the mBridge project



The participating authorities explore the feasibility of using mBridge for cross-border transactions



Joint report published by the HKMA, together with the participating authorities and BIS Innovation Hub Hong Kong Centre, presents the interim findings of the mBridge project

## **Retail Central Bank Digital Currency**

To future-proof Hong Kong in terms of CBDC readiness, the HKMA started a study on the prospect of issuing retail CBDC in Hong Kong, i.e. e-HKD, covering both technical and policy considerations. In collaboration with the BIS Innovation Hub Centre in Hong Kong, the HKMA embarked on a study called *Project Aurum* to explore the technical aspect of issuing retail CBDC. Separately, an internal cross-departmental working group was set up to study the relevant technical, policy and legal issues. In October, the HKMA released a technical white paper titled *e-HKD: A technical perspective* to explore and invite comments on potential technical design options for issuing and distributing retail CBDC.

Furthermore, the HKMA supports the Digital Currency Institute of the PBoC on the technical pilot testing of using e-CNY for cross-boundary payments. This will help promote interconnection in the GBA and bring greater convenience to Hong Kong and Mainland tourists by enhancing the efficiency and user experience of cross-boundary payments.

## **Commercial Data Interchange**

In July, the HKMA hosted a virtual symposium to encourage banks and SVF operators to join the CDI, a next-generation financial data infrastructure that aims to enable more efficient financial intermediation in the banking system. To further facilitate development and adoption, the launch of the CDI Innovation Hub was announced during the symposium. To facilitate small and medium-sized enterprise (SME) financing, the HKMA completed two phases of proof-of-concept study examining the technical feasibility of the CDI. Applying alternative data to facilitate credit assessment and the underwriting of loans, more than 550 SME loans exceeding HK\$900 million in total were approved by the participating banks during the study. Based on the encouraging results, the HKMA announced the pilot launch of the CDI in November.



SME owners commend the CDI for streamlining their loan applications

### **Talent development**

To expand the fintech talent pool, the HKMA continued to run the Fintech Career Accelerator Scheme 2.0 in collaboration with its strategic partners<sup>3</sup> to nurture young talent at various stages of their career development. More than 180 students benefitted from the scheme in 2021. Separately, the Industry Project Masters Network scheme was piloted in September to provide opportunities for master's degree students majoring in fintech to work on real-life fintech projects. To form strategic partnerships and foster collaboration in areas including fintech talent development, the HKMA entered into memorandums of understanding (MoUs) with four local universities in October.



Mr Colin Pou (middle), Executive Director (Financial Infrastructure) of HKMA, at the MoU signing ceremony with four local universities

## **Fintech Supervisory Sandbox**

The use of Fintech Supervisory Sandbox (FSS) continued to rise during the year. As of end-December 2021, a total of 234 pilot trials of fintech initiatives had been allowed in the FSS since its launch in 2016, compared with 193 as of end-2020. As of end-December 2021, the HKMA had also received in total 666 requests to access the FSS Chatroom for supervisory feedback at the early stage of fintech projects since the introduction of the Chatroom in 2017. Over 63% of the Chatroom requests were made by technology firms (tech firms).

In November, the HKMA enhanced its FSS to provide funding support under the Innovation and Technology Commission's Public Sector Trial Scheme. The main objectives of the enhancements are to invest in innovations and encourage collaboration between banks and local tech firms.

### **GBA** fintech pilot trial facility

The HKMA signed an MoU with the PBoC in October to provide a "one-stop platform" for financial institutions (FIs) and tech firms to conduct pilot trials of cross-boundary fintech initiatives, concurrently in Hong Kong and Mainland GBA cities. The platform allows FIs and tech firms to obtain early feedback from regulators and users, expediting the launch of fintech products and lowering development costs.

### eTradeConnect

To provide importers and exporters with more convenient trade finance services, a proof-of-concept study was initiated to explore connecting eTradeConnect<sup>4</sup> and the PBoC Trade Finance Platform. Building on the successful completion of phase 1 connectivity between the two platforms, phase 2 connectivity was completed in the fourth quarter of 2021. A pilot run was subsequently launched. Banks in Hong Kong and the Mainland have leveraged the connection to execute cross-boundary trade finance transactions.

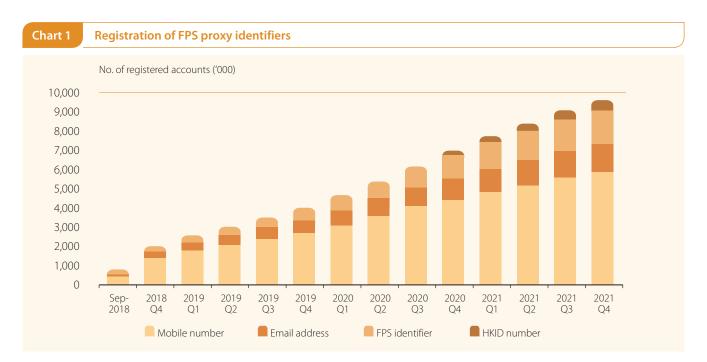
Including Hong Kong Applied Science and Technology Research Institute, Hong Kong Cyberport Management Company Limited and Hong Kong Science and Technology Parks Corporation.

With the HKMA's facilitation, eTradeConnect, a blockchain-based trade finance platform, was officially launched in October 2018. It is funded by a consortium of 13 major banks in Hong Kong.

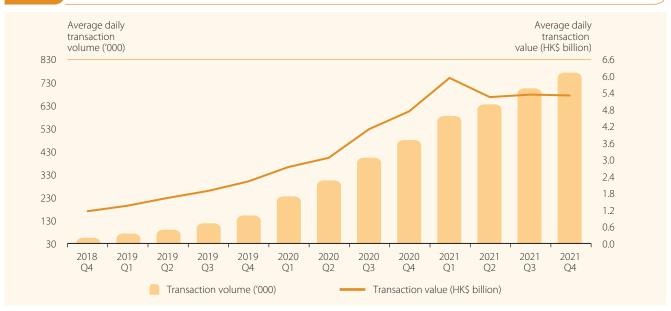
### **Faster payment system**

Since the launch of the FPS in September 2018, the number of FPS participants had increased to 37 banks and 11 SVFs at end-2021. The number of registrations also grew steadily. As of 31 December 2021, there were 9.6 million registrations (Chart 1), up 40% year on year.

Adoption and turnover of the FPS kept growing alongside increased use of electronic payments amid the COVID-19 pandemic (Chart 2). The average daily turnover reached 673,000 real-time transactions (worth HK\$5.4 billion and RMB136 million) in 2021, 90% higher than that in 2020. The increased use was also spurred by a steady growth in acceptance of the FPS as a payment tool and a gradual extension in its scope of usage, from primarily person-toperson payments to bill, retail and business payments.







The HKMA has been working closely with various government departments and the banking industry to broaden usage of the FPS. The Government has adopted the FPS for bill payments since November 2019, with a view to promoting the FPS and facilitating the public to make payments. To settle their bills, members of the public can easily scan the QR code on their bills using a mobile banking or SVF e-wallet app. In 2021, 2.5 million Government bill payment transactions amounting to HK\$4.1 billion were made through the FPS, up 49% and 92% respectively from 2020. Since December 2020, the Government has extended FPS adoption to in-person payments made at physical counters. In 2021, six additional government departments started accepting FPS QR code payments at designated counters, self-help kiosks and parking meters. By the end of 2021, 10 government departments were accepting FPS QR code payments at various service points. More than 20,000 transactions worth around HK\$33 million were recorded in 2021. Going forward, the HKMA will continue to assist the Government to adopt the FPS in other use cases, such as online fee payments.

In another positive development, more merchants have adopted the FPS to support their business operations. Merchant payments surged to an average of 115,000 transactions<sup>5</sup> per day in 2021, representing a 70% increase over 2020. The FPS is commonly used to pay bills, make in-app direct debits, and make payments for purchases completed online or via mobile apps. The increasing popularity of SVF e-wallets also contributed to more account top-up transactions via the FPS. The average daily number of top-up transactions rose significantly by 300% from 2020 to 2021.

To provide an environmentally friendly option to the public and support COVID-19 mitigation efforts, the HKMA worked with banks and SVFs to promote giving out electronic lai sees (e-laisees) via the FPS in early 2021. More information on the initiative can be found in the *Sustainability* chapter on page 198.

## **Open Application Programming Interface**

The HKMA supported development and adoption of Open Application Programming Interface (API) by the banking sector, in line with the four-phase approach of the Open API Framework<sup>6</sup>. Banks continued to collaborate with third-party service providers on various innovative services using Phase I and II Open APIs. Separately, the HKMA concluded a study on the implementation of Phase III and IV Open APIs and published a report titled *The Next Phase of the Banking Open API Journey* on the findings in May 2021. The HKMA advocated a progressive approach for implementing Phase III and IV API functions. Participating banks started implementing the initial batch of API functions, covering deposit account information and online merchant payments, from December.



Study report titled The Next Phase of the Banking Open API Journey

The figure includes payments to the Government via the FPS.

The four phases of Open API are as follows: Phase I—Product information; Phase II—Customer acquisition; Phase III—Account information; and Phase IV—Transactions.

#### Virtual banking

Virtual banking is gaining traction in Hong Kong. As at the end of 2021, the eight virtual banks had collectively acquired 1.2 million personal and SME customers and attracted HK\$25 billion of customer deposits.

# Cross-border collaboration, industry liaison and outreach

Since its establishment in March 2016, the FFO has played a crucial role in reaching out to and liaising with fintech market players to facilitate the exchange of ideas among stakeholders. Considerable efforts were also made to further strengthen cross-border fintech collaboration. During 2021, the FFO organised 16 events, including panel discussions at Hong Kong FinTech Week 2021. These events and FinTech Week attracted over 20,000 attendees and more than four million online views. The FFO also spoke at 58 fintech-related events; held 932 meetings with other regulatory authorities, industry organisations, financial institutions, tech firms and startups; and handled 102 enquiries from market participants.



Mr Eddie Yue (left), Chief Executive of HKMA, moderates a panel discussion at Hong Kong FinTech Week 2021

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

Hong Kong maintained its leading position in offshore renminbi business, underpinned by its deep pool of offshore renminbi liquidity, efficient financial infrastructure and multitude of cross-boundary portfolio flow channels. During the year, offshore renminbi business gained momentum, with bank deposits, trade settlement, payments and bond issuance recording solid expansion.

- RMB1.5 trillion
   average daily turnover of RMB RTGS system,
   reaching a historical high
- RMB7.1 trillion
   RMB trade settlement handled by banks in Hong Kong, +12%
- RMB944.7 billion
   RMB deposits, including outstanding certificates of deposit, +25%
- RMB163.6 billion outstanding RMB loans, +8%
- RMB109.6 billion offshore RMB bond issuance, +87%
- ♦ 70%+ of global RMB SWIFT payment

Northbound Bond Connect continued to serve as a major channel for international investors to trade in the Mainland bond market using market infrastructures and financial services in Hong Kong. Driven by the inclusion of renminbi bonds in multiple major fixed income indices, 3,233 investors had registered under Bond Connect by end-2021, up 37% from end-2020. Daily turnover under Northbound Bond Connect averaged RMB25.8 billion in 2021 (a 34% increase from 2020) and accounted for 56% of overall trading turnover by foreign investors.

During the year, Northbound Bond Connect trading was further facilitated by the introduction of an Enhanced CNY Conversion Service, which allows investors to engage up to three banks to conduct onshore currency conversion and foreign exchange hedging. Other enhancements included the extension of the cut-off time for securities instructions and Hong Kong dollar RTGS funding instructions, and the introduction of a "dealer pay model", which allows trading fees to be built into quoted bond prices. In September, a new electronic trading platform was added to support Northbound Bond Connect. These enhancements offered more convenience and flexibility for investors under Northbound Bond Connect, and drove further inclusion of onshore assets in major financial indices.

Following the success of Northbound Bond Connect,
Southbound Bond Connect was launched in September,
providing Mainland institutional investors with a convenient
channel to get exposure to offshore fixed income through
Hong Kong via the connection between Mainland and Hong
Kong financial infrastructure institutions. Southbound Bond
Connect promotes further mutual access between the
Mainland and Hong Kong financial markets and facilitates the
development of the local bond market by bringing more
Mainland investors and bond issuers to Hong Kong.
The scheme has received a positive response and operations
have been smooth, with transactions covering major bond
products tradeable in the Hong Kong market and
denominated in multiple currencies.

Following three rounds of industry consultation, the PBoC, the HKMA and the Monetary Authority of Macao promulgated the implementation details for the Cross-boundary WMC in September. The Cross-boundary WMC deepens the connectivity of the Mainland and Hong Kong financial markets in the area of wealth management and offers a convenient channel for individual investors in the GBA to invest in more diversified wealth management products

across the boundary. Up to end-2021, 19 eligible Hong Kong banks have started offering Cross-boundary WMC services together with their Mainland partner banks. More than 21,000 individual investors (including Hong Kong and Macao) participated in the scheme and more than 5,000 cross-boundary remittances (including Hong Kong and Macao) totalling more than RMB400 million were completed. Considering this was the first time many retail investors were conducting cross-boundary investments, the authorities had stepped up investor education efforts together with the industry, and established sound mechanisms for regulatory co-operation and enforcement to protect the rights and interests of investors.

In October, the Shenzhen Municipal People's Government issued a total of RMB5 billion in offshore municipal government bonds in Hong Kong, including RMB3.9 billion of green bonds. It was the first time a Mainland municipal government issued bonds outside the Mainland. This marks a significant step in strengthening Hong Kong as the global hub for offshore renminbi business.

To further expand the channels for the two-way flow of cross-boundary renminbi funds and develop offshore renminbi products in Hong Kong, a working group comprising the HKMA, the SFC and HKEX was formed in October to conduct a feasibility study on promoting trading of renminbi-denominated equity securities in Hong Kong.

The PBoC and the HKMA co-organised a thematic seminar in December to discuss the positioning and future development of Hong Kong as an international financial centre and an offshore renminbi business hub. The seminar took place in Hong Kong and Beijing through an online connection, with in-depth exchanges among senior officials from financial regulators and representatives from international organisations, financial institutions and academia.

# Hong Kong as an asset and wealth management centre

The HKMA continues to reinforce Hong Kong's status as an asset and wealth management hub through platform building and outreach.

Hong Kong is Asia's largest private equity hub outside the Mainland, with around US\$182 billion in capital under management and around 600 private equity firms as of December 2021. The HKMA continues to work with stakeholders to enhance Hong Kong's private equity platform. Since the introduction of the Limited Partnership Fund regime in August 2020, the HKMA has been striving to boost industry awareness of the new fund vehicle and facilitate its adoption by industry firms. By the end of 2021, 409 Limited Partnership Funds had been registered. Meanwhile, the tax concession regime for carried interest came into operation on 7 May 2021. This, coupled with the fund-level tax exemption regime rolled out in 2019, provides a competitive tax environment to facilitate the development of private equity funds.

With its unique advantage as the dominant gateway to the Mainland and its unparalleled access to investment opportunities, Hong Kong is also well positioned as a family office hub. The HKMA is constantly working to meet the needs of family offices. For example, the HKMA is undertaking initiatives with various Government agencies and the financial industry to foster a facilitating environment for family offices to set up and operate in Hong Kong; this most recently involved a review of relevant tax arrangements in September.

# Hong Kong as a green and sustainable finance hub

In recent years, the HKMA has been pursuing various initiatives to enhance Hong Kong's position as a regional green and sustainable finance hub. See pages 180 to 183 of the *Sustainability* chapter for more details.

# Hong Kong as a hub for corporate treasury centres

Hong Kong's role as a gateway to the Mainland and its wide-ranging strengths as an international financial centre provide corporates with unparalleled access to talent as well as financial and professional services. Since the introduction of the Corporate Treasury Centre tax regime in June 2016, the HKMA has been actively promoting and engaging with the industry to raise awareness of Hong Kong's value proposition as a Corporate Treasury Centre hub, resulting in a growing number of multinational and Mainland corporates setting up Corporate Treasury Centres in Hong Kong.

# Hong Kong as a financing hub for infrastructure investments

The HKMA Infrastructure Financing Facilitation Office serves as an important platform to facilitate infrastructure investments by leveraging Hong Kong's status as an international financial centre. The office has around 100 international partners, including key industry stakeholders such as multilateral financial agencies and development banks, project developers and operators, public sector entities and professional service firms.

Full list of Infrastructure Financing Facilitation Office partners:



# Hong Kong's bond market development Hong Kong as an international bond hub

According to the International Capital Market Association, Hong Kong was, for six consecutive years, the largest centre for arranging international bond issuance by Asian issuers. Issuance volume reached a record high of US\$207 billion in 2021, capturing 34% of the market. In 2021, Hong Kong also captured 25% of bond listings resulting from international bond issuances in Asia.

#### **Government Green Bond Programme**

Following the establishment of the world's first government Global Medium Term Note Programme dedicated to green bond issuances in early 2021, the HKMA assisted the Government to issue close to US\$6.5 billion equivalent of institutional green bonds in February and November 2021. More details can be found on page 183 of the Sustainability chapter.

#### **Government Bond Programme**

To promote the sustainable development of the bond market in Hong Kong, the Legislative Council approved a resolution in July to raise the borrowing limit of the Government Bond Programme from HK\$200 billion to HK\$300 billion.

During the year, the HKMA arranged nine tenders of institutional government bonds with a total nominal value amounting to HK\$19.4 billion, including the inaugural tender of HK\$1 billion of Floating Rate Notes indexed to the Hong Kong Dollar Overnight Index Average (HONIA) to promote the usage of HONIA as an alternative reference rate in Hong Kong. As at the end of 2021, the total nominal amount of outstanding institutional bonds was HK\$85.5 billion.

On the retail front, the HKMA arranged the issuance of iBond (an inflation-linked retail bond) in June in the amount of HK\$20 billion and Silver Bond<sup>7</sup> in August in the amount of HK\$30 billion to Hong Kong residents, with a tenor of three years. The eligible age for subscribing to Silver Bond was lowered from 65 to 60. The iBond issuance attracted more than 709,000 applications with a total subscription amount of over HK\$53.9 billion, and the Silver Bond issuance attracted more than 256,000 applications with subscription amounts exceeding HK\$67.8 billion. The total nominal amount of retail bonds outstanding as at the end of 2021 was HK\$82.7 billion.

## Hong Kong's treasury markets

The HKMA participates actively in international discussions and closely works with the Treasury Markets Association (TMA) to enhance the professionalism of Hong Kong's treasury market participants and prepare industry stakeholders for international developments.

Through participation in the Global Foreign Exchange Committee, the HKMA and the TMA contributed to the review of the Foreign Exchange Global Code, and the publication of the updated Code in July. 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 helped the banking and corporate sectors continue to transition away from LIBOR into the respective alternative reference rates.

The HKMA also worked with the TMA in engaging local market participants to support the development of the HONIA-linked market. These efforts included the inaugural issuance of the HONIA-indexed floating rate note under the Government Bond Programme in November.

#### Over-the-counter derivatives market

The HKMA closely works with the SFC to develop detailed rules for implementing the regulatory regime for the OTC derivatives market in Hong Kong to reduce systemic risk and enhance transparency in the OTC derivatives market. Different aspects of the regulatory regime have been introduced in phases. The first phase of mandatory clearing and the second phase of mandatory reporting took effect in September 2016 and July 2017 respectively. Following public consultation in June 2021 on further enhancements to the regime, an updated list of financial service providers under the mandatory clearing regime came into effect in January 2022.

The HKMA participated in several international forums and the OTC Derivatives working groups established under the FSB, contributing to the 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 these agencies' concerns about the rating outlook. During the year, S&P Global Ratings, Moody's Investors Service and Fitch Ratings maintained Hong Kong's rating at AA+, Aa3 and AA- respectively.

#### **Outreach initiatives**

The HKMA proactively engages with industry stakeholders to reach out to the broader financial community locally and overseas, so that decision makers are better informed about the resilience of Hong Kong's financial system and the growth opportunities it presents.

In 2021, through 79 webinars, speaking engagements and individual engagements, the HKMA reached out to local and international audiences, including nearly 20,000 senior executives and professionals from central banks, institutional investors, pension funds, insurance companies, corporates, ultra-high-net-worth individuals and family offices.

# Market Outreach Event Participant Analysis

**Events Hosted** 



79

~1-2 events/week throughout 2021 Audience Reached



20,000

Channelled through:

- Institutional banks
- Industry associations
- Chambers of commerce
- Individual engagements

Senior Executives



33%

Whose ripple effect will cascade down their organisations

Sectors Covered



11

Including:

- Banks
- Asset managers / Hedge funds / Private equity funds
- Asset owners
- Professional service providers
- Corporates

## Hong Kong's financial infrastructure

The multi-currency, multi-dimensional payment and settlement platform of the HKMA, with extensive domestic and overseas system linkages, continued to operate smoothly and efficiently, and has helped maintain Hong Kong as a regional hub for payment and settlement of funds and securities (Chart 3).

Chart 3 Hong Kong's multi-currency financial infrastructure **Mainland** • Cheque • e-Cheque and e-bill **CLS Regional Payment** Macao Systems<sup>b</sup> **Hong Kong** PvP **Trade Repository** Japan CSD for OTC Derivatives RTGS Systems DvP CMU Mainland CSDs<sup>c</sup> HKD **Fund Order Routing and USD Settlement System Mainland** International CSDsd **CIPS** DvP **Debt Securities Settlement System EUR RMB** • CNAPS • SZFSS Regional CSDs<sup>e</sup> • Cheque **IHKD & RMB** HKCC • e-Cheque and e-bill OTCC **HKSCC** DvP **FPS SEOCH** HKD, USD & RMB DvP Note a: CDFCPS, RTGS links with Shenzhen and Guangdong Note b: PvP links with Malaysia, Thailand and Indonesia
Note c: Cross-boundary links with CCDC and SHCH (Bond Connect) and CSDC (Mutual Recognition of Funds) Note d: Cross-border links with Clearstream and Euroclear
Note e: Cross-border links with Austraclear (Australia), KSD (South Korea) and TDCC (Taiwan) CCDC - China Central Depository & Clearing Co., Ltd. (settlement system for fixed income securities in Mainland) DvP - Delivery-versus-payment CDFCPS - China's Domestic Foreign Currency Payment System (RTGS system for foreign currency payment in Mainland) PvP - Payment-versus-payment 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 Mainland) CSD - Central securities depository 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

SEOCH - SEHK Options Clearing House Ltd (central counterparty providing clearing and settlement for options)

SHCH - Shanghai Clearing House (settlement system for fixed income securities in Mainland)

TDCC - Taiwan Depository and Clearing Corporation (Taiwan's securities settlement system)

SZFSS - Shenzhen Financial Settlement System

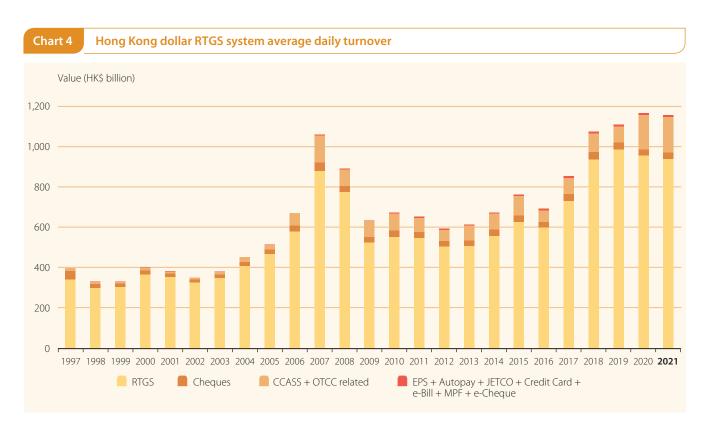
### Hong Kong dollar RTGS system

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 ran smoothly and efficiently in 2021, with a daily average transaction value of HK\$939.7 billion (30,593 items), compared with HK\$956.1 billion (29,491 items) in 2020.

In addition to settling large-value payments, CHATS handles daily bulk clearing 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).

The FPS serves as an extension of Hong Kong dollar CHATS to enable 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, with a daily average real-time payment transaction value of HK\$5.4 billion (672,760 items) in 2021.



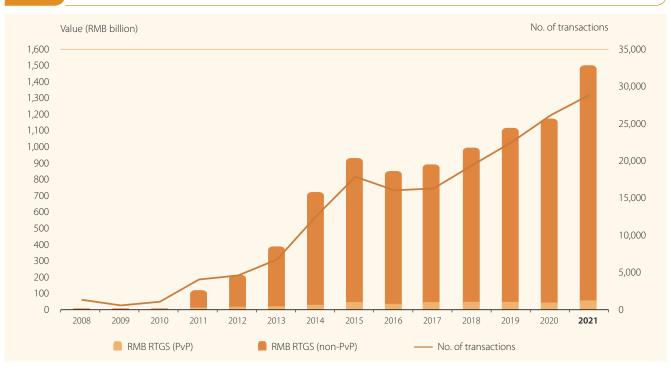
## RTGS systems for other currencies in Hong Kong

The renminbi, US dollar and euro RTGS systems all operated smoothly during the year. 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 allows financial institutions around the world a much longer operating window to settle offshore and cross-boundary renminbi payments through Hong Kong's

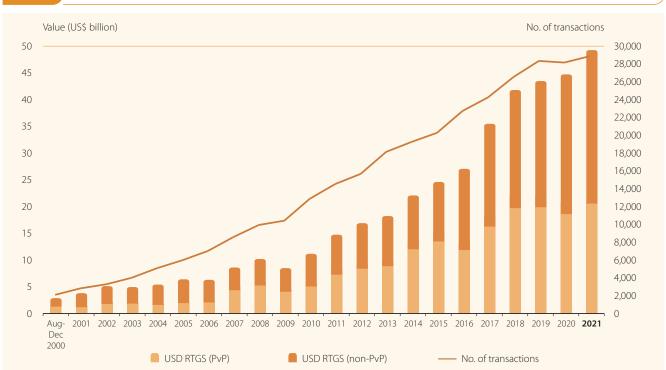
infrastructure. The average daily value of Mainland–Hong Kong cross-boundary renminbi payments amounted to around RMB290 billion in 2021, accounting for 19% of the total turnover.

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 6 US dollar RTGS system average daily turnover







#### Table 1

#### **RTGS** systems for other currencies

			Number of		Average daily
		Settlement institution or	participants at	Average daily	transactions
RTGS system	Launch date	clearing bank	end-2021	turnover in 2021	in 2021
Renminbi RTGS system	June 2007	Bank of China (Hong Kong) Limited	Direct: 213	RMB1,522.6 billion	29,307
US dollar RTGS system	August 2000	The Hongkong and Shanghai	Direct: 116	US\$49.5 billion	29,011
		Banking Corporation Limited	Indirect: 104		
Euro RTGS system	April 2003	Standard Chartered Bank	Direct: 38	€527 million	631
		(Hong Kong) Limited	Indirect: 19		

Like the Hong Kong dollar FPS, renminbi FPS as an extension of renminbi CHATS has been operating smoothly since inception in September 2018, with a daily average real-time payment transaction value of RMB136.0 million (729 items) in 2021.

### Payment-versus-payment

PvP is a settlement mechanism for foreign exchange transactions, ensuring payments involving two currencies are links have been established among the Hong Kong dollar, renminbi, US dollar and euro RTGS systems.

Hong Kong's US dollar RTGS system also established three cross-border PvP links. PvP greatly improves settlement efficiency and eliminates settlement risk arising from time lags in settlements and time zone differences8. In 2021, the transaction values of Hong Kong dollar-, renminbi- and US dollar-related PvP transactions amounted to approximately HK\$13,341 billion, RMB12,649 billion and US\$4,881 billion respectively while it was nil for euro-related PvP transactions.

## Payment links with the Mainland

The HKMA works closely with Mainland authorities to provide efficient cross-boundary payment links (Chart 8) to meet growing demand. In 2021, the average daily turnover of various system links, including RTGS cross-boundary links with the Mainland's Domestic Foreign Currency Payment System, recorded a total value equivalent to around HK\$1 billion. The Hong Kong dollar and US dollar RTGS system links with Shenzhen and Guangdong handled more than 11,000 transactions, with a total value equivalent to HK\$197.7 billion.

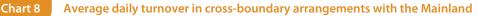
The joint cheque-clearing facilities provide a clearing service for cheques drawn on banks in Hong Kong and presented in Shenzhen and Guangdong. In 2021, these facilities processed about 7,000 Hong Kong dollar, renminbi and US dollar cheques, with a total value equivalent to around HK\$0.9 billion.

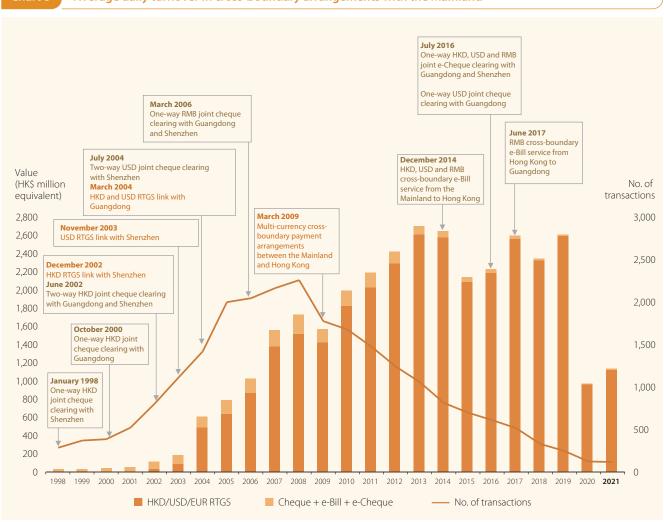
#### **Payment links with Macao**

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 2021, Hong Kong dollar cheques and US dollar cheques amounting to about HK\$9 billion and about US\$41 million respectively were cleared.

#### Payment link with Japan

To support real-time settlement of Japanese Government Bond transactions in Hong Kong dollar, the HKMA and Bank of Japan launched a delivery-versus-payment (DvP) link for cross-currency securities transactions between Hong Kong dollar CHATS and the Bank of Japan Financial Network System Japanese Government Bond Services on 1 April 2021. The DvP link facilitates banks to conduct cross-currency repo transactions to obtain Hong Kong dollar funds.



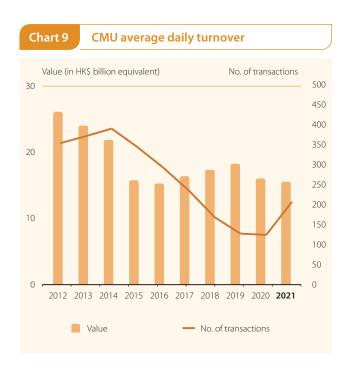


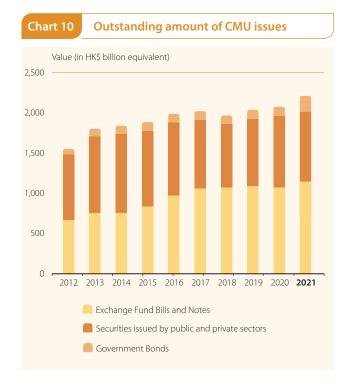
## Debt securities settlement system

The CMU provides an efficient, multi-currency clearing, settlement and depository service. Through the CMU's linkages with international and regional central securities depositories, investors outside Hong Kong can hold and settle securities lodged with the CMU, while Hong Kong investors can hold and settle foreign securities held with central securities depositories outside Hong Kong. In 2021, the CMU processed an average daily value of HK\$15.6 billion in 210 secondary market transactions (Chart 9). Among the debt securities lodged with the CMU at the end of the year, the outstanding amount of Exchange Fund Bills and Notes was HK\$1,148.6 billion, the outstanding amount of debt securities issued by public and private sectors was equivalent to HK\$865.2 billion and the outstanding amount of Government Bonds was HK\$197.6 billion (Chart 10). To help Hong Kong capitalise on the further opening up of the Mainland financial market and to support new business initiatives, the HKMA started to upgrade the CMU system by phases. In 2021, a seamless interface between the CMU and the Mainland's Cross-Border Interbank Payment System was established to provide DvP service to support Southbound Bond Connect transactions.

# Over-the-counter derivatives trade repository

By the end of 2021, the Hong Kong Trade Repository had recorded 3,251,179 outstanding OTC transactions, compared with 2,821,191 in 2020. The HKMA participated in a number of international discussions and working groups on reporting standards for trade repositories to keep abreast of relevant developments and ensure the local trade repository continued 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, prepaid cards)

The HKMA regulates the SVF licensees (Table 2) under a risk-based approach, taking into account the supervisory experience accumulated since the inception of the SVF licensing regime and the relevant market developments.

During the year, the HKMA followed up with SVF licensees on their progress in implementing enhancements to account structure and opening requirements, and provided supervisory guidance to the industry on various key issues such as the rolling out of new functions and services. In addition, the HKMA promoted public awareness of issues related to usage and regulation of the SVFs.

The HKMA also provided necessary supervisory guidance to the SVF industry to, among other things, help SVF licensees improve the efficiency and effectiveness of their control systems, including anti-money laundering and counterfinancing of terrorism (AML/CFT) controls. In particular, a circular was issued in September to share observations from the thematic reviews of SVF licensees' AML/CFT controls over the prepaid card business. The HKMA also conducted risk-sensitive supervision, undertaking nine desk-based reviews on the SVF licensees' AML/CFT controls. Together with these supervisory measures, the HKMA also exercised its power under the PSSVFO as warranted and in a proportionate manner, and has taken disciplinary action against an SVF licensee in December for deficiencies in AML/CFT controls.

In support of the Consumption Voucher Scheme announced in the Financial Secretary's 2021–22 Budget, the HKMA actively co-ordinated and promoted dialogues and co-operation between the relevant Government parties and the SVF licensees appointed for the scheme.

The number of SVF accounts stood at 66.4 million as at the end of 2021. In the fourth quarter, 1.7 billion transactions totalling HK\$80.5 billion were recorded (Chart 11).

## Chart 11 Growth trend of the SVF industry in 2021



Table 2

#### **Register of SVF licensees**

(in alphabetical order) (as at 31 December 2021)

### **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

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 SVFs)<sup>a</sup>

Bank of Communications (Hong Kong) Limited

Dah Sing Bank, Limited

Hongkong and Shanghai Banking Corporation Limited (The)

 Pursuant to Section 8G of the PSSVFO, a licensed bank is regarded as being granted a licence.

### **Retail payment systems**

The Monetary Authority has designated six RPSs, which process payment transactions involving participants in Hong Kong under the PSSVFO, on the grounds that proper functioning of these systems is of significant public interest (Table 3). The HKMA adopts a risk-based approach in the oversight of the designated RPSs, which are required under the PSSVFO to operate in a safe and efficient manner.

Table 3

System operators of designated RPSs

(in alphabetical order) (as at 31 December 2021)

American Express

EPS Company (Hong Kong) Limited

Joint Electronic Teller Services Limited

Mastercard

UnionPay International

Visa

# Crypto-assets particularly payment-related stablecoins

The rapid development of crypto-assets, particularly stablecoins, has become a topic of keen interest internationally. The HKMA has been actively participating in the relevant international discussion, keeping in view the latest market developments, and considering the appropriate regulatory framework for Hong Kong, noting potential risks that these products might pose to monetary and financial stability, anti-money laundering efforts and user protection.

In January 2022, the HKMA issued a discussion paper on crypto-assets and stablecoins, setting out the HKMA's thinking on the relevant regulatory approach and inviting views from stakeholders. Relevant factors, including feedback to this discussion paper and recommendations of relevant international bodies, will be taken into account when drawing up the appropriate regulatory regime.

## **Electronic cheques**

The use of electronic cheques (e-Cheques) was steady during 2021. To promote wider adoption, the HKMA has been working closely with potential third-party service providers to explore the use of e-Cheque open API service to facilitate presentment of e-Cheques in the Mainland.

## Hong Kong Academy of Finance

The Hong Kong Academy of Finance (AoF)<sup>9</sup> was set up in June 2019 to serve as a centre of excellence for developing financial leadership and a repository of knowledge in monetary and financial research, including applied research. In 2021, 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), and the GBA and the Mainland.

A diverse range of activities was organised under the AoF's Leadership Development Programme: 15 seminars and discussion panels in virtual and hybrid format were held, including nine sessions of the Distinguished Speakers Series featuring world-renowned speakers<sup>10</sup> and one episode of the Interview Series under the theme Navigating Through Uncertainties and Chaos<sup>11</sup>. The discussions covered global geo-political and economic developments and financial market issues, as well as the speakers' personal stories of success. A new four-module Thematic Programme on Fintech and Digitalisation was organised, where 14 leaders from the industry and academia shared their insights and practical experience. The AoF also co-organised a number of events with international and local organisations, including the BIS, the Civil Service College, the Insurance Authority and The University of Hong Kong.

The AoF is set up with full collaboration amongst the HKMA, the Securities and Futures Commission, the Insurance Authority and the Mandatory Provident Fund Schemes Authority. It brings together the strengths of the academia, the industry, professional training institutes and the regulatory community to develop financial leadership and promote research collaboration.

Speakers of the Distinguished Speakers Series included Mr Ashley Alder (SFC), Mr John Waldron (Goldman Sachs), Mr Larry Fink (BlackRock), Mr Ray Dalio (Bridgewater Associates), Mr John Dugan (Citigroup), Mr David Rubenstein (The Carlyle Group), Sir Howard Davies (NatWest Group), Mr Mark Tucker (HSBC) and Professor Masaaki Shirakawa (former Governor of the Bank of Japan).

The episode featured Professor Edward Chen (HKU SPACE).

To benefit a wider audience, most of the events were open to non-AoF Members and video recordings of many events were made accessible from the AoF's website or YouTube channel. Delivery through digital channels enabled the AoF to expand its reach to a much broader spectrum of stakeholders not only in Hong Kong but also in the Mainland and the rest of the world. For example, the HKIMR-AoF Expert Speakers Series on Renminbi Exchange Rate Formation *Mechanism and Exchange Rate Outlook* in August was broadcast live on online financial platforms, attracting over 1.16 million viewers. More efforts put into publicising AoF activities digitally, through upgrading the AoF YouTube channel, website and quarterly newsletters, and actively publishing posts on the AoF LinkedIn page, have also helped the AoF to gradually build up its brand as a reputable platform for knowledge exchange and insights on economic and financial issues, particularly those related to Hong Kong and the Mainland.

On the research front, during 2021, the Hong Kong Institute for Monetary and Financial Research (HKIMR), the research arm of the AoF, published two applied research reports that explored algorithmic and high-frequency trading in Hong Kong's equity market, and artificial intelligence and big data in the financial services industry in the Asia-Pacific region. The research findings were widely disseminated to local and international market participants, regulators and academics through a variety of channels, including panel discussions at large-scale events (such as Hong Kong FinTech Week 2021), webinars and through social media. The response from the financial community on both reports was positive and encouraging. In addition, the HKIMR published three applied research papers that covered topics including ESG, and market microstructure.



Mr Agustín Carstens (left), General Manager of BIS, discusses the uneven recovery from COVID-19 among the world economies, and Mr Eddie Yue (right), Chief Executive of HKMA, shares the HKMA's green finance work at the AoF's Economic Recovery from COVID-19 and Beyond webinar



Mr Larry Fink, Founder, Chairman, and CEO of BlackRock, talks about a "tectonic shift" towards sustainable investment, how BlackRock analysed investees' exposure to climate risks and green investment opportunities at an AoF webinar



The panel session on AI and Big Data Adoption in APAC: A Talent Development Perspective at Hong Kong FinTech Week 2021

# International and regional co-operation Participation in 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 Meeting, 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). financial innovation and benchmark transition, among other topics. It is a member of the FSB Steering Committee group on NBFI, which is charged with organising and providing strategic direction on NBFI-related initiatives within the FSB, as well as ensuring effective co-ordination with standardsetting bodies in this area. The HKMA also co-chairs the Non-bank Monitoring Experts Group that 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 resilience of the NBFI sector. 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, and leads a drafting team under the FSB Standing Committee on Supervisory and Regulatory Cooperation to monitor progress and follow up on supervisory issues associated with benchmark transition.

Under the advocacy of the G20, the FSB co-ordinated with the relevant stakeholders, including the Committee on Payments and Market Infrastructures under the BIS, to begin a comprehensive study on enhancing cross-border payments. The HKMA, as a member of the Task Force on Cross-border Payments set up by the Committee on Payments and Market Infrastructures, contributed to the development of building blocks and a roadmap to address the challenges of the existing arrangement of cross-border payments.

The HKMA is also 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 committees, including the Asian Consultative Council, the Financial Stability Institute Advisory Board, the Markets Committee, the Committee on the Global Financial System, as well as the Basel Committee and the Committee on Payments and Market Infrastructures.

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 its first Centres in Hong Kong. The Hub Centre maintains close collaboration with the HKMA, and its current project focus areas are CBDC, open finance and green finance. As part of Innovation BIS 2025, the reorientation of the BIS Asian Office since 2019 has brought deeper engagement and closer collaboration with Asian central banks.

Separately, the HKMA assumed the co-chairmanship of the Policy and Standards Group of the Basel Committee in January. The group will lead the work on developing and implementing prudential standards. For details about the HKMA's participation in the Basel Committee, see the *Banking Stability* chapter on pages 99 to 102.

#### **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 WGFM. The WGFM makes policy recommendations on central bank services as well as developments in the foreign exchange, money and bond markets, and has been promoting regional bond market development through the Asian Bond Fund initiative. As part of its WGFM chairmanship, the HKMA steered studies on implications of financial benchmark reforms, and US dollar liquidity and funding dynamics in the EMEAP region, incorporating pertinent market observations after the COVID-19 outbreak. The HKMA was also appointed chair of the Study Group on Resolution, which supports knowledge sharing among regional authorities in relation to resolution in a cross-border context. In addition, the HKMA continued to prepare the Monetary and Financial Stability Committee's half-yearly Macro-Monitoring Report to assess the region's risks and vulnerabilities and the policy implications.

## **Supporting the Global Financial Safety Net**

The pandemic has highlighted the importance of the Global Financial Safety Net (GFSN) in safeguarding financial stability. As a member of the global financial community, Hong Kong maintains its commitment to strengthening the GFSN through participation in the International Monetary Fund (IMF) New Arrangements to Borrow (NAB)<sup>12</sup> and ASEAN+3<sup>13</sup> Chiang Mai Initiative Multilateralisation (CMIM)<sup>14</sup>. Effective 1 January 2021, the IMF Executive Board approved doubling the NAB credit arrangement through to 2025. Meanwhile, further enhancements were made to optimise the operation of the CMIM<sup>15</sup>.

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.

ASEAN+3 comprises the 10 Association of Southeast Asian Nations (ASEAN) member countries (Brunei, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam), together with China, Japan and South Korea.

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 now stands at US\$240 billion.

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.