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Discussion Paper

LEGISLATIVE COUNCIL
PANEL ON FINANCIAL AFFAIRS

DEVELOPMENT OF FINANCIAL TECHNOLOGIES IN HONG KONG

INTRODUCTION

This paper briefs Members on the latest development of financial technologies (“Fintech”) of Hong Kong and the relevant measures, and gives Members an overview of the proposed regulation of virtual asset trading platforms and its consultation outcome.

LATEST DEVELOPMENT OF PROMOTING FINTECH DEVELOPMENT

2. Financial institutions can make use of technology to enhance and provide innovative services. Apart from increasing their competitiveness and revenue, it also facilitates financial inclusion, providing the public with more convenient and efficient financial services. As an international financial centre, Hong Kong is an ideal place to expand Fintech business. Our Fintech ecosystem has grown into a sizable and vibrant sector over the years. At present, there are over 600 Fintech companies in Hong Kong providing services in mobile payment, cross-boundary transfer, intelligent financial consultancy, wealth management and blockchain, etc. They include various Fintech-related laboratories established by international organisations, academic institutions and private entities such as banks and commercial organisations, as well as eight virtual banks¹, four virtual insurers and one virtual asset trading platform licensed and authorised to operate in Hong Kong.

3. Hong Kong’s efforts and achievements in innovation and technology (“I&T”) have national recognition and support. The “Outline of the 14th Five-Year Plan for National Economic and Social Development of the People’s Republic of China and the Long-Range Objectives Through the Year 2035” affirms the important functions and positioning of Hong Kong in the overall development of

¹ As at end-April 2021, virtual banks have recorded 690,000 account openings and amassed over \$20 billion deposits.

the country, which includes supporting Hong Kong to enhance its international financial centre status and develop into an international I&T hub, as well as deepening and widening the connections between the financial markets of Hong Kong and the Mainland. The Government attaches great importance to the development of Fintech, and has been working closely with financial regulators, public bodies and private organisations to advance the development of Fintech sector through building a more vibrant Fintech ecosystem; enhancing financial infrastructure; nurturing Fintech talents; collaboration with the Mainland and overseas jurisdictions; and promotion of Hong Kong's strengths of Fintech, etc. The latest progress of our work on five major fronts since we last briefed the Panel in June 2020 is set out below.

(i) Building a more vibrant Fintech ecosystem

4. To provide a conducive environment for financial institutions and users to adopt Fintech on a wider scale, build a more vibrant Fintech ecosystem and increase our financial services' competitiveness, we and the financial regulators have been providing policy support.

Supervisory Sandbox

5. The Hong Kong Monetary Authority ("HKMA"), the Securities and Futures Commission ("SFC") and the Insurance Authority ("IA") launched their Fintech Supervisory Sandbox to allow financial institutions and Fintech companies to test new Fintech products and services in a secured environment with well-defined parameters, as well as gather data and users' feedbacks, thereby expediting development process, reducing development cost and improving product quality. In particular, the HKMA is considering enhancement of its Fintech Supervisory Sandbox by providing "through-train" vetting and funding arrangements for promising Fintech solutions. The enhancement will reduce the time for innovative financial products to launch in the market. It will also help nurture more novel financial products.

Regtech adoption by the banking sector

6. To facilitate wider adoption of Regtech by Hong Kong's banking sector, so as to assist them to cope with the changing operation mode, strengthen risk management and regulatory compliance efficiency, the HKMA published a whitepaper entitled "Transforming Risk Management and Compliance: Harnessing the Power of Regtech" in November last year, and launched a two-year roadmap to facilitate Regtech adoption by the banking industry through a series of promotional events and development initiatives. The HKMA launched the "Global Regtech Challenge" in March this year to enhance the interaction and

communication between banks in Hong Kong and global Regtech firms, encourage them to put forth solutions that help solve common risk management and regulatory compliance pain points experienced by banks. It will organise a large scale Regtech conference on 30 June this year to discuss vision for Regtech development and application, with a view to raising the Hong Kong banking industry's awareness of the potential of Regtech adoption.

7. The HKMA also plans to publish a “Regtech Adoption Practice Guides” series, develop a Regtech skills framework and create a “Regtech Knowledge Hub” in the second half of this year to enhance Regtech adoption, develop talent and encourage information sharing among banks. The HKMA is at the same time developing a “Regtech Adoption Index” to quantify and monitor the overall status of Regtech adoption in the banking industry. It can also gauge the effectiveness of the two-year roadmap in facilitating Regtech adoption.

Adoption of Insurtech

8. Social distancing measures under the pandemic have spurred the application of Insurtech. During the year, the IA has facilitated the establishment of a shared virtual onboarding platform in the industry that could be used by different insurers (especially those small- and medium-sized insurers with limited resources to build their own platform) to roll out cost effective solutions. The IA also conducted a survey on Insurtech with insurers to take stock of progress of technology adoption in the market and chart the course for future Insurtech development.

Fintech Proof-of-Concept Subsidy Scheme

9. To promote more active participation by the sector to develop new financial services and products and enrich our financial market's breadth and depth, the Financial Services and the Treasury Bureau (“FSTB”) launched the Fintech Proof-of-Concept (“PoC”) Subsidy Scheme in February this year to encourage financial institutions to partner with Fintech companies to conduct PoC projects on innovative financial services products. As at end-April, applications from over 80 Fintech companies were received, with projects covering financial services applications in the banking, insurance and securities sector, as well as cross-boundary and cross-sector applications. Vetting of the applications is underway.

(ii) Enhancing financial infrastructure

10. The pandemic in the past year or so has accelerated the digitization pace of various sectors. New consumer patterns and habits such as the use of e-wallets by citizens have become a trend. We have been improving our financial

infrastructure to facilitate the launch of more Fintech solutions and keep pace with the development of various technologies for public use.

Faster Payment System (“FPS”) and iAM Smart

11. The usage of FPS has been rapidly increasing since its launch in 2018. Since last year, usage of the FPS has expanded from person-to-person payment to merchant payment and account top-up. The HKMA launched a new feature in December last year to allow citizens to link their Hong Kong identity card (HKID) number to their bank account for receiving funds from institutions which already possess the HKID number of the recipients via the FPS, making the transfer of funds more expeditious and flexible. Banks are promoting the services to their corporate customers. We and the HKMA will also explore with the industry other use cases.

12. Further to accepting various Government bill payment via FPS QR codes in 2019, starting from December last year, citizens can also use FPS for payment at designated counters and self-help kiosks of the Companies Registry, the Immigration Department, the Official Receiver’s Office and the Transport Department. As at end-April this year, the above services recorded over 2.6 million transactions, involving over HK\$3.8 billion. We are also exploring enabling online payments for government services with the FPS, a number of Government departments are preparing to launch the service from mid-2022², e-payment options will also be available for making payments in respect of most government bills and licences starting from mid-2022.

13. In addition, with the launch of the iAM Smart, a one-stop personalised digital services platform in December last year, members of the public can log in and use online services by their personal mobile phone in a smart and convenient way. At the same time, the HKMA is working with the Office of the Government Chief Information Officer to develop the business version of the “iAM Smart” digital authentication platform. It can be used to authenticate the identity of enterprises through an electronic channel. As various electronic Government services adopt iAM Smart, members of the public can choose to obtain their information stored at individual Government departments electronically, and use it for obtaining services from financial institutions. We will continue to promote the use of FPS and iAM Smart in the financial services sector to reduce cost and enhance user experience.

² The initiative will cover various services frequently used by the public, such as applying for licenses and certificates, booking and registration of services, etc.

Open Application Programming Interface (API) for the banking sector

14. The HKMA continues to facilitate banks' development and adoption of Open API, which seeks to facilitate different banks' products and services to be aggregated under the same interface, and provide more convenient services to customers. As at end-March 2021, registrations from third-party service providers to access banks' Open APIs have increased from around 800 last year to 1 000, covering information of deposits loans, insurance, investments and other banking products and services. It is expected that from December this year, 28 participating retail banks will gradually launch Phase III and IV functions of the Open API. The initial batch of API functions will cover deposit account information and online merchant payments.

Commercial Data Interchange ("CDI")

15. The HKMA announced in November last year to explore establishing the CDI, a consent-based financial infrastructure that would enable secure and efficient data flow between banks and businesses. The CDI allows enterprises to use their own data to enhance their access to financial services and solve problem of financing. The HKMA is conducting PoC study on this initiative.

Uncertificated securities market regime and eMPF platform

16. We are also implementing the uncertificated securities market regime and eMPF, an integrated digital platform, to improve efficiency, enhance user experience and lower administrative costs.

(iii) Nurturing Fintech talent

17. The Hong Kong's Fintech sector has continued to flourish. To facilitate development, we provide a range of support schemes to nurture Fintech talents.

Fintech Anti-epidemic Scheme for Talent Development ("FAST")

18. The Government launched FAST in July last year under the Anti-epidemic Fund to provide eligible Fintech companies a 12-month salary subsidy for up to 1 000 full-time positions to enrich our Fintech talent pool and support employment. By mid-May 2021, 894 applications have been received, and 676 applications have been approved for recruitment.

Training scheme

19. The FSTB, the Hong Kong Productivity Council and the Cyberport co-organised an SME ReachOut - Fintech Development Roundtable Meeting for Securities Industry in October last year to facilitate the adoption of Fintech by the securities sector for upgrading and transforming their services.

20. Furthermore, the FSTB also entrusted the Cyberport to implement the Financial Practitioners FinTech Training Programme last year. The training programme attracted the attendance of over 1 200 financial practitioners from the banking, insurance and securities sectors, which deepened their Fintech understanding, as well as promoted the adoption of Fintech in financial services. On the other hand, the HKMA continued to run the Fintech Career Accelerator Scheme 2.0 with its strategic partners to nurture young talent at various stages of their career development. In 2019 and 2020, more than 470 students participated in the programme.

(iv) Collaboration with the Mainland and overseas jurisdictions

21. We together with the financial regulators continue to adopt measures to facilitate cross-boundary application of Fintech between Hong Kong and the Mainland, and encourage the industry to explore and test various Fintech solutions and products with cross-boundary applications in the Guangdong-Hong Kong-Macao Greater Bay Area (“GBA”), thereby leveraging on Hong Kong’s close ties with the Mainland and the world, and the opportunities brought about by the development of the GBA and the Belt and Road initiative to explore new business opportunities.

eTradeConnect

22. Established under HKMA’s facilitation, the blockchain-based eTradeConnect platform made good progress last year. The first phase of the PoC study on connecting eTradeConnect with the People’s Bank of China (PBoC) Trade Finance Platform was completed in October 2020, and various cross-border trade finance transactions were subsequently conducted to provide importers and exporters in the Mainland and Hong Kong with more convenient trade finance services. The second phase of the study is underway and is expected to cover more types of trade activities and financing products.

Hong Kong-Shenzhen I&T Park (HSITP)

23. The Government is taking forward the development of HSITP in the Lok Ma Chau Loop. The vision of the HSITP is to become the world’s

knowledge hub and I&T centre, converging enterprises, research and development institutions and higher education institutions from local, Mainland and overseas. The HSITP will focus on the development of six technology areas³ including Fintech. The HSITP will provide a platform to attract talents and investments, facilitate tenants to expand overseas markets, thereby promoting the Fintech sector's growth in the region.

Central Bank Digital Currencies (“CBDCs”)

24. In recent years, central banks around the world have been studying CBDCs. Since 2019, the HKMA and the Bank of Thailand have been jointly researching the application of CBDCs to cross-border payments. A blockchain-based cross-border corridor network PoC prototype was developed, and a joint report was published to present the key findings. Recently, the research project was joined by the Central Bank of the United Arab Emirates and the Digital Currency Institute of the PBoC. The research project is strongly supported by the Bank for International Settlements Innovation Hub Centre in Hong Kong. The research project aims to foster a conducive environment for central banks in Asia and other regions to enhance the financial infrastructure for cross-border payments. In addition to wholesale CBDCs, the HKMA will also begin studying the technical aspects of retail CBDCs.

e-CNY

25. The HKMA's technical pilot testing with the Digital Currency Institute of the PBoC on using e-CNY for making cross-boundary payments went smoothly. The technical testing involved a designated bank, specific merchants and bank staff, and covered the use of the related app, system connectivity and certain use cases such as cross-boundary purchases. The HKMA is collaborating with the PBoC on the next phase of technical testing, including the feasibility of broadening and deepening the use of e-CNY for cross-boundary payments. It will offer an additional safe, convenient and innovative means of cross-boundary retail payments to residents in Hong Kong and Mainland. It will also enhance the efficiency and user experience of cross-boundary payments, and help promote the interconnection of the GBA.

(v) Promoting Hong Kong's Fintech strength

26. The FSTB provides funding support to the dedicated Fintech team in InvestHK (Fintech team) for promotion of Hong Kong's advantages in Fintech and attracting Fintech companies and talents from other places to come to Hong Kong.

³ Healthcare technologies, big data and artificial intelligence, robotics, new material, microelectronics, and Fintech.

In the past year, the Fintech team provided assistance to over 40 overseas companies looking to set up in Hong Kong, involving investment amount of \$900 million and 500 new jobs. The Fintech team also hosted some 40 online marketing and promotion campaigns, including the “FintechHK” roadshows targeting key markets around the globe which attracted attendance of over 3 000 persons. The Fintech team also sponsored and participated in a number of international Fintech events to showcase the latest development and advantages of Hong Kong’s Fintech and attract Fintech companies and startups with growth potential to expand their businesses in Hong Kong. In addition, the HKMA will collaborate with the Hong Kong Science and Technology Parks and Cyberport to attract more financial, technology or research institutes to set up laboratories in Hong Kong, with a focus on advantageous areas such as Regtech and cyber security.

27. Furthermore, we organized the annual flagship event Hong Kong Fintech Week in full virtual manner in November 2020, industry leaders from the banking, securities, investment, insurance and technology sectors around the world attended and spoke at the event, covering a series of topics of interest to the sector including CBDCs, virtual asset trading platform, virtual bank and application of artificial intelligence to Fintech, etc. The event streamed over 100 hours of content continuously to participants, attracting over 1.2 million viewers from over 130 economies, seeing over 18,000 total business contacts made. Over 550 Fintech companies and over 30 corporates and investors from 44 economies participated in the Global Fast Track Programme⁴. We are actively preparing the Hong Kong Fintech Week 2021 tentatively scheduled for November.

REGULATION ON VIRTUAL ASSET TRADING PLATFORMS

28. The rapid development of virtual asset trading activities in recent years have offered opportunities for the financial system but at the same time posed risks. The SFC announced in November 2019 a new regulatory framework for virtual asset trading platforms. Platforms which operate in Hong Kong and offer trading of at least one security token, if capable of meeting robust regulatory standards comparable to those which apply to licensed securities brokers and automated trading venues, may apply to be licensed by the SFC. Licensed platforms also need to comply with additional requirements to address specific risks associated with virtual assets, including the requirement that platform operators can only offer their services exclusively to professional investors. Furthermore, licensed platforms will be placed in the SFC Regulatory Sandbox for a period of close and intensive supervision. The SFC issued its first licence to a

⁴ The programme aimed to bridge global Fintech companies with Hong Kong corporations and investors to explore business opportunities.

platform operator last year and is considering a number of licence applications from interested platforms.

29. To address money laundering and terrorist funding risks of virtual asset activities, in early 2019, the Financial Action Task Force required jurisdictions to regulate virtual asset services providers and supervise their compliance on anti-money laundering and counter-terrorist funding measures. To this end, the Government launched a three-month public consultation exercise in November last year on the proposed establishment of a robust regulatory regime to regulate virtual asset trading platforms. Under the proposal, any person seeking to engage in the regulated activity of operating a virtual asset exchange in Hong Kong will be required to apply for a licence from the SFC. Licensed virtual asset service providers will be subject to the anti-money laundering and counter-terrorist financing requirements stipulated under the Anti-Money Laundering and Counter-Terrorist Financing Ordinance (Cap. 615) as well as other regulatory requirements, including that they can only offer services to professional investors, so as to ensure the protection of market integrity and investor interest.

30. The Government published the consultation conclusions in May this year. There is broad support for the overall direction and framework of the proposed licensing regime. Having regard to the consultation outcome, we will commence drafting of the amendment bill and aim to introduce the bill into the Legislative Council for scrutiny in the next legislative session.

ADVICE SOUGHT

31. Members are invited to note the content of this paper, and give views and suggestions on measures to promote and support Fintech development, as well as the proposed regulatory regime for virtual asset trading platforms.