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Discussion Paper

LEGISLATIVE COUNCIL
PANEL ON FINANCIAL AFFAIRS

Development of Financial Technologies

INTRODUCTION

This paper provides an update on the development of financial technologies (“Fintech”) in Hong Kong and the measures to facilitate Fintech development.

FINTECH LANDSCAPE

2. With the joint effort of the Government, financial regulators, innovation partners and industry players, Hong Kong’s Fintech community has become increasingly vibrant over the past year. Cyberport Fintech cluster now comprises some 250 Fintech companies, compared to around 180 one year earlier, making it the largest Fintech community in Hong Kong. These Fintech companies engage in a wide range of applied research and development activities, including payment and remittance, robo-advisory in wealth management and insurance, cybersecurity for the financial services industry, etc.

3. Meanwhile, world-renowned innovation laboratories and accelerator programmes, for example “Accenture Fintech Innovation Lab” and “SuperCharger Fintech Accelerator”, have established their presence in Hong Kong. Together with the Cyberport Incubation Programme, these innovation laboratories and accelerator programmes have assisted over 100 Fintech start-ups in Hong Kong. Financial institutions in Hong Kong are also very proactive in organising hackathons and competitions, either on their own or in collaboration with Cyberport and Hong Kong Applied Science and Technology Research Institute (“ASTRI”), encouraging Fintech start-ups to come up with solutions to real-world problems faced by financial institutions. These activities not only provide much-needed guidance and opportunities to promising Fintech start-ups in Hong Kong, but also serve as a critical linkage between Fintech start-ups and financial institutions.

4. In October 2017, our annual flagship Fintech event, Hong Kong Fintech Week, registered another success with some 4 000 attendees from over 50 countries/regions and more than 300 speakers. Hong Kong Fintech Education Week was held right after Hong Kong Fintech Week for the first time with the participation of publicly-funded tertiary institutions. Other signature Fintech events, such as FinovateAsia 2017 and Fintech Finals 18 (“FF18”), were also well received. For FF18, 2 000 attendees from 20 countries/regions participated, underlining Hong Kong’s attractiveness in Fintech.

5. With an enabling environment for Fintech companies and their close collaboration with financial institutions, investment in Hong Kong-based Fintech companies increased to US\$546 million in 2017, compared to US\$216 million in 2016. In 2014-2017 combined, Fintech companies based in Hong Kong have raised US\$940 million, which compared favourably to US\$627 million and US\$325 million for those based in Australia and Singapore respectively¹.

MEASURES TO FACILITATE FINTECH DEVELOPMENT

6. We have adopted a five-pronged approach in facilitating Fintech development, namely (a) promotion; (b) facilitation; (c) regulation; (d) funding; and (e) talents. The following paragraphs highlight major initiatives in these five areas.

Promotion

InvestHK and Dedicated Fintech Team

7. InvestHK has set up a dedicated Fintech team since 2016 to assist Fintech companies, start-up entrepreneurs, investors, accelerators, incubators and innovation laboratories from all over the world to establish in Hong Kong and expand into the Mainland and Asian markets. The dedicated Fintech team has full-time staff in London and San Francisco, the two leading Fintech hubs, to provide one-stop service to prospective clients in Europe and North America. In 2017, the dedicated Fintech team rendered assistance to some 250 Fintech companies.

8. Riding on the success of Hong Kong Fintech Week 2017, InvestHK will continue to organise Hong Kong Fintech Week in 2018. To play to the

¹ Source: Accenture analysis of data from CB Insights.

unique strength of Hong Kong, the forthcoming Fintech Week would involve collaboration with Shenzhen so that the Fintech community locally and overseas can be brought together with the Fintech community in the Mainland to foster interflow of ideas and potential collaborations. InvestHK will also continue to sponsor and participate in major local and overseas Fintech events, such as Fintech Finals 2019, to showcase Hong Kong's advantages in Fintech and attract inward investment.

Collaboration with the Mainland and Overseas

9. In 2017, the Hong Kong Monetary Authority ("HKMA") agreed with the Office of Financial Development Service, the People's Government of Shenzhen Municipality ("OFDS") to strengthen co-operation between Hong Kong and Shenzhen in Fintech, with a view to creating a more favourable environment for the development and use of Fintech by banks and other financial institutions. The two sides co-organised the Shenzhen-Hong Kong Fintech Award. They are also exploring reciprocal soft-landing support for Fintech companies. With help from the OFDS, HKMA has lined up eight major Fintech/technology companies in Shenzhen to offer summer internship positions for students studying at tertiary educational institutions in Hong Kong. To tap into opportunities in the Bay Area, Cyberport is also working with HKMA to set up a network in Shenzhen to facilitate Hong Kong Fintech start-ups to expand into the Bay Area, as well as to bring Mainland Fintech companies to Hong Kong.

10. Hong Kong also pursues co-operation with other Fintech hubs. In 2017, we entered into a Fintech Bridge Agreement with the United Kingdom ("UK") to provide a framework for Fintech companies on both sides to use the facilities and assistance available in the other place to explore new business opportunities. Cyberport and HKMA brought a Fintech delegation to London in September 2017 to expand partnership network for Fintech industry players between the two cities. Our financial regulators also entered into Fintech co-operation agreements with their overseas counterparts, including Switzerland, Singapore, Australia, Poland, Malaysia and the UK.

Facilitation

Cyberport

11. As announced in the 2018-19 Budget, \$200 million will be allocated to Cyberport to enhance the support for start-ups, including Fintech start-ups, and promote the development of the digital technology ecosystem. Cyberport will also launch an "easy landing" programme to attract multinational companies,

including overseas and Mainland leading Fintech companies, to set up offices and research and development units in Hong Kong. It is envisaged that these initiatives will further expand and enrich the Fintech community in Hong Kong.

Faster Payment System

12. As part of financial infrastructure development, HKMA will launch the Faster Payment System (“FPS”) in September 2018. The FPS will provide a round-the-clock real-time payment platform allowing banks and stored value facilities (“SVF”) operators to offer their customers faster, more convenient and comprehensive payment and transfer services.

13. The launch of the FPS will also facilitate the development of the SVF market. Since the commencement of the “Payment Systems and Stored Value Facilities Ordinance” in 2016, HKMA has issued 13 SVF licences. Three licensed banks are also offering SVF services. In the third quarter of 2017, there were 44.9 million SVF accounts in use, with the number and value of transactions being 1.4 billion and \$34.5 billion respectively. Total SVF float and deposit amounted to \$7.5 billion. These SVF operators are proactive in marketing their services which include electronic coupons, family group e-wallet management, online shopping, global remittance and QR code payment. Their service coverage has also expanded to supermarkets, convenience stores, wet markets and taxis, etc. To further facilitate the use of QR code in retail payments, HKMA is working with the industry to introduce a common QR code standard to facilitate merchants in using a single QR code to accept different payment schemes. The Government is also exploring the use of e-wallets in settling Government bills.

Applications of technologies

14. Riding on the success on the Distributed Ledger Technology (“DLT”) proof-of-concept work on trade finance as described in the whitepapers published by HKMA, seven banks in Hong Kong are commercialising the prototype into the Hong Kong Trade Finance Platform (“HKTFP”) to digitise and share trade documents, automate processes and reduce risks and frauds. HKMA is also building a cross-border DLT infrastructure, the “Global Trade Connectivity Network”, with the Monetary Authority of Singapore to connect the HKTFP to the National Trade Platform in Singapore and to digitalise cross-border trade and trade finance processes, making them safer, more efficient and cost-effective.

15. HKMA launched an industry consultation on its proposed Open Application Programming Interface (“API”) framework in the first quarter of 2018, with a view to start implementing the first phase of Open API by the end of

2018. Open API would allow banks' internal data and systems to be progressively opened up and accessed by third parties so that product comparison and aggregated views of financial position may be offered by third-party apps or websites to customers.

Regulation

Supervisory sandboxes

16. Financial institutions are actively exploring the use of Fintech to enhance efficiency and offer better financial services. To facilitate innovation in financial services, HKMA, Securities and Futures Commission ("SFC") and Insurance Authority ("IA") launched or improved their respective supervisory sandboxes in 2017. By February 2018, 29 new Fintech solutions had been tested or were being tested in HKMA's supervisory sandbox, and 19 solutions have been subsequently rolled out. SFC and IA are also in active dialogue with parties who are interested in making use of their sandboxes.

17. As part of its enhanced sandbox, HKMA introduced the Fintech Supervisory Chatroom ("Chatroom") in November 2017 to further facilitate Fintech companies, so that they can directly access the Chatroom without the need to partner with a bank. By February 2018, HKMA had received 69 requests to access the Chatroom. Topics discussed covered Fintech solutions related to customer authentication, remote account opening, cybersecurity, etc.

Virtual Banks

18. In September 2017, HKMA announced a series of initiatives to prepare Hong Kong to move to a new era of smart banking. One initiative is to facilitate the introduction of virtual banks, which can promote Fintech and innovation, new customer experience and financial inclusion. Overseas experiences show that it is commercially feasible and technically viable for virtual banks without any physical branches to operate. HKMA welcomes the establishment of virtual banks in Hong Kong, and completed a public consultation on its Authorization Guideline of Virtual Banks in March 2018. HKMA is studying the comments received, with a view to issuing a revised guideline in May 2018.

Securities and Futures Industry

19. SFC recognises that investment products would be increasingly distributed through online platforms. SFC hence issued in 2017 a consultation

paper on the proposed guidelines on online distribution and advisory platform, with additional protective measures proposed for the sale of complex products on online platforms. SFC is studying the consultation results and drawing up its conclusion. SFC is also working with the industry to explore remote onboarding so as to allow the industry to better serve clients.

Insurance Industry

20. IA launched in September 2017 the Fast Track for applications for authorisation of new insurers owning and operating solely digital distribution channels, without the use of any conventional channels involving agents, banks or brokers. This aimed at promoting the development of Insurtech in Hong Kong. IA is also drafting a Guideline on Cybersecurity to authorised insurers, with an aim to improving the cybersecurity governance of the insurance industry.

Initial Coin Offerings and Cryptocurrencies

21. In promoting Fintech, the Government and regulators need to strike a balance between promoting financial innovations and protecting investors and consumers. In view of the hype around initial coin offerings (“ICO”) and cryptocurrencies, Financial Services and the Treasury Bureau (“FSTB”) and Investor Education Centre (“IEC”), a subsidiary of SFC, jointly launched a public education campaign on the risks associated with ICO and cryptocurrencies in January 2018. The campaign aimed to provide the public with a better understanding of the potential risks of participating in ICOs and cryptocurrency transactions.

22. In addition, HKMA has repeatedly reminded the public to exercise extra caution regarding virtual commodities given their highly speculative nature. SFC issued a statement in September 2017 to point out that depending on the facts and circumstances of an ICO, the relevant cryptocurrencies may be “securities” and subject to the securities laws of Hong Kong. SFC further issued a circular in December 2017 following the trading of Bitcoin futures contracts in the US and warned investors about the risks involved in investing in cryptocurrencies and other crypto-related investment products, and published another warning in February 2018 to urge investors to be mindful of potential scams as well as the investment risks associated with ICOs and trading on cryptocurrency exchanges. The Government and the regulators will continue to closely monitor the development of ICO and cryptocurrencies in Hong Kong and globally, and maintain contacts with regulators in other jurisdictions through active participation in meetings of relevant international organisations, such as the Financial Stability Board and the International Organization of Securities Commissions (“IOSCO”).

Talents

23. The Chinese University of Hong Kong and the Hong Kong Polytechnic University launched, for the first time, dedicated programmes in Fintech starting from the 2017/18 academic year. The Study Subsidy Scheme for Designated Professionals/Sectors also covers self-financing Fintech-related undergraduate programmes starting from the 2018/19 academic year. Furthermore, the University of Hong Kong, along with Cyberport and other industry players, will launch Asia's first Fintech Massive Open Online Course in May 2018.

24. In collaboration with Cyberport, ASTRI and Hong Kong Science and Technology Parks, HKMA launched the upgraded version of the Fintech Career Accelerator Scheme ("FCAS") in January 2018 as FCAS 2.0. The upgraded scheme will offer a new Fintech-focused entrepreneurship summer boot camp, a new summer internship programme in partnership with renowned Shenzhen Fintech firms, an enhanced gap year full-time placement programme at one of the 20 participating banks or HKMA, and a new full-time graduate programme to target young talents of various stages of their career development. Cyberport also collaborated with the Stanford Graduate School of Business in the last three years and sent some 160 university students to Silicon Valley for Fintech entrepreneurship training.

Funding

25. Technology firms including Fintech companies are supported by various funding schemes, including (a) Enterprise Support Scheme which provides funding support to investment on innovation and technology projects; (b) Technology Voucher Programme which subsidises local enterprises in using technological services and solutions to improve productivity, or upgrade or transform their business processes; and (c) various funding and support programmes offered by Cyberport. Cyberport Creative Micro Fund is one of these programmes, which aims to support ideation and innovation in the digital space. This programme has supported over 60 Fintech projects.

26. The Government also launched the \$2 billion Innovation & Technology Venture Fund ("ITVF") in September 2017 to encourage investment from venture capital funds into start-ups from the Fintech and other technology sectors. The Government and each venture capital fund will invest in eligible start-ups concurrently at an overall ratio of 1:2. Selection of venture capital

funds as ITVF co-investment partners is in progress and the selection result is expected to be announced in the second quarter of 2018.

ADVICE SOUGHT

27. Members are invited to note the content of this paper. Views and comments on the measures taken to facilitate Fintech development are welcomed.

Financial Services and the Treasury Bureau

March 2018