立法會 Legislative Council

LC Paper No. CB(1)724/17-18(04)

Ref: CB1/PL/FA

Panel on Financial Affairs

Meeting on 3 April 2018

Updated background brief on development of financial technologies in Hong Kong

Purpose

This paper provides background information on the development of financial technologies ("Fintech") in Hong Kong. It also summarizes the relevant views and concerns expressed by Members on the subject since 2016.

Background

2. Fintech refers to the application of information and communication technology in the field of financial services, including such areas as digital payment and remittance, financial product investment and distribution platforms, peer-to-peer financing platforms, cybersecurity and data security technology, big data and data analytics, and distributed ledger application to new asset classes and processes.¹

Steering Group on Financial Technologies

3. The Government established the Steering Group on Fintech ("the Steering Group") in April 2015 to advise the Government on measures required to develop Hong Kong into a Fintech hub. The Steering Group released its report in February 2016 setting out the broad directions and focused areas for supporting the Fintech sector, and made a number of recommendations to further Hong Kong's development into a Fintech hub. The report of the Steering Group has identified five parameters that are important in nurturing

__

¹ Page 1 of the Executive Summary of the Report of the Steering Group on Financial Technologies

a conducive ecology for Fintech development, namely promotion, facilitation, regulations, talents, and funding. The Steering Group's recommendations under the five parameters are set out in **Appendix I**.

The Government's strategies and measures to support Fintech development

- 4. According to the Government, it has been following a four-pronged approach since 2016 in developing Fintech as follows:
 - (a) encouraging existing financial institutions to provide innovative financial products and services as well as enhance its efficiency through applying Fintech;
 - (b) collaborating with stakeholders to foster a conducive ecology, and encouraging financial institutions and professional bodies to actively invest, share domain knowledge, establish incubation/accelerator programmes or innovation labs, and enhance collaboration with startups;
 - (c) encouraging the financial industry to collaborate, invest and research in Fintech projects so as to position Hong Kong as a regional platform for Fintech development; and
 - (d) upholding the principle of "technology-neutrality" and ensuring adequate investor protection.
- 5. The Financial Secretary ("FS") announced in the 2016-2017 and 2017-2018 Budgets a range of measures for fostering Fintech development in Hong Kong, and the preceding Chief Executive ("CE")'s 2017 Policy Address included an array of measures to promote the development of Fintech. According to the Government, it had, in collaboration with financial regulators and innovation organizations, rolled out a range of measures in 2016 and 2017 to support Fintech development in Hong Kong. Details of the measures are in **Appendix II**.
- 6. The incumbent CE has affirmed in her 2017 Policy Address that the Government will continue its efforts to promote local Fintech development and encourage the industry to experiment with innovative businesses. FS further announced in his 2018-2019 Budget a number of initiatives relating to the development of Fintech. The relevant details in the 2018-2019 Budget are in **Appendix III**.

Views and concerns expressed by members of the Panel on Financial Affairs

7. The Panel on Financial Affairs ("FA Panel") was briefed on the Government's strategies and measures to develop Fintech at the meetings on 11 April 2016 and 18 April 2017. Panel members also expressed views on the development of Fintech when the Panel discussed the policy initiatives of the Financial Services and the Treasury Bureau in the preceding CE's 2017 Policy Address and the incumbent CE's 2017 Policy Address at the meetings on 6 February 2017 and 20 October 2017 respectively. The major views and concerns expressed by members are summarized in the ensuing paragraphs.

Development and regulation of Fintech in Hong Kong

- 8. At the FA Panel meetings on 11 April 2016, 18 April 2017 and 20 October 2017, members in general supported the development of Fintech in Hong Kong and welcomed the progress made in some areas. However, some members were concerned that Hong Kong's Fintech development in general had lagged behind other jurisdictions including the Mainland in areas such as development in electronic payment systems. These members pointed out that the establishment of respective Fintech liaison platforms by the Hong Kong Monetary Authority ("HKMA"), the Securities and Futures Commission ("SFC") and the Office of the Commissioner of Insurance² ("OCI") was inadequate in addressing Fintech industry's concern about regulatory They called on the Administration and financial regulators to review the existing regulatory regimes in order to cope with the rapid development in Fintech. Other members relayed the industry's views that in developing Fintech, the Administration should put in place a clear legislative framework, refrain from adopting a "technology-neutral" approach and Some members enquired whether the Administration would over-regulation. consider setting targets, like converting Hong Kong into a cashless society, so as to give impetus to Hong Kong's Fintech development. There were also suggestions from members for the Administration to take the lead in adopting Fintech in various government operations and processes, and set up a working group to review and harmonize laws, subsidiary legislation, regulations and rules, as well as guidelines issued by regulators relating to Fintech on a regular basis.
- 9. On the pace of Fintech development in Hong Kong, the Government advised that consumers in Hong Kong were more cautious in accepting new Fintech services or products when compared with Mainland users. The

-

² The Office of the Commissioner of Insurance was dissolved on 26 June 2017, and its statutory functions have been taken over by the Insurance Authority.

Government's strategy was to foster an ecology conducive to Fintech development. The rapid development in stored value facilities and retail payment systems since the enactment of the Payment Systems and Stored Value Facilities Ordinance (Cap. 584) in 2015 had demonstrated that substantial progress in the application of Fintech solutions could be achieved when the corresponding legislative framework was in place. HKMA would continue to promote the adoption of new payment methods including launching the "Faster Payment System" in 2018 which aimed to facilitate peer-to-peer payment. The Government would promote the use of new payment channels (e.g. smartphone e-wallet) for various Government fees and charges with a view to facilitating the application of new payment technologies. Such developments would help Hong Kong become a cashless society.

- Regarding the work of regulators including HKMA, SFC and OCI,2 the 10. Government advised that, apart from establishing dedicated platforms to enhance communication with the Fintech community, these regulators had rolled out a number of measures to promote Fintech development. Regulators had also been engaging relevant stakeholders proactively to gauge their views on Fintech development and help them resolve problems encountered. For instance, HKMA's Fintech Supervisory Sandbox ("FSS") allowed banks to test Fintech solutions without fully complying with HKMA's usual supervisory requirements during the trial period. Several SFC-licensed corporations had started providing services to clients that involved robo-advice, while the Insurance Authority ("IA")² had been collaborating with the Hong Kong Federation of Insurers in promoting Fintech in the insurance industry. SFC and IA had also introduced their respective FSSs to facilitate the launch of new Fintech products and services in the market. implementation of FSS revealed that regulators could enhance flexibility of the regulatory framework to cater for Fintech development as necessary.
- 11. As regards the regulatory framework for Fintech, the Government advised that drawing from discussions with stakeholders, it was noted that many services provided by Fintech companies could operate under the existing legal framework. There was currently no universal model of regulatory regime for Fintech in the international community and the Government would formulate an appropriate approach having regard to the prevailing circumstances of Hong Kong. The Government also explained that the "technology neutral" approach meant that its regulation of the industry should not result in giving any preference to those using technology. The Government would review its policy on Fintech development where necessary.
- 12. Some members urged the Administration to strengthen its efforts in promoting the use of Fintech in the securities industry including facilitating the

use of online client identity verification in opening securities accounts, which would help the local securities industry to promote business to non-local clients.

- 13. The Government advised that SFC had been maintaining close liaison with the securities industry on the use of Fintech. While SFC welcomed the use of Fintech in fulfilling the "know-your-customer" ("KYC") requirement, it had to ensure proper conduct of the KYC process. SFC had issued guidelines to the securities industry on the account opening procedures for non-local clients with a view to facilitating local securities firms in soliciting business from such clients. Development of the KYC Utility would help streamline the process.
- 14. Some members stressed the importance for the Administration to strike a proper balance between promoting the development of Fintech and protecting the interests of consumers and investors, and urged the Administration to ensure proper protection of personal data privacy in promoting Fintech development. They further called on the Government to formulate prudent regulations over Initial Coin Offerings ("ICOs") (a newly developed investment vehicle) in order to protect investors.
- The Government assured members that it attached importance to safeguarding data security in Fintech applications and protection of personal data privacy of consumers and investors, which were vital in maintaining public confidence in using Fintech. For new financial products or services developed by Fintech companies, if general consumers or retail investors were the targets, the Government had to ensure that the relevant regulatory regime would provide adequate protection to them and the regime would be commensurate with the risks of the Fintech applications concerned. regards the regulation of ICOs, the Government advised that digital tokens were generally regarded as virtual commodities. SFC advised that, depending on terms and conditions, certain digital tokens might be regarded as "securities" under the Securities and Futures Ordinance (Cap. 571). SFC had issued a statement in September 2017 to clarify when digital tokens would be subject to the securities laws of Hong Kong. HKMA and SFC would discuss the matter further and examine whether there were potential regulatory gaps.

Challenges arising from the development of financial technologies

16. At the FA Panel meetings on 11 April 2016 and 18 April 2017, some members expressed concern that the development of Fintech would inevitably phase out existing jobs in the financial services sector. They urged the Administration to assist the employees concerned in adapting to and preparing themselves for the changes brought by Fintech development in Hong Kong. Members also stressed the need for the Government to liaise with stakeholders

including the financial services sector and the banking industry in promoting Fintech and assisting them to cope with the challenges ahead. The Government should also help change the mindset of some traditional financial institutions ("FIs") which regarded Fintech start-ups as their potential competitors.

- 17. The Government responded that it would collaborate with the industry and stakeholders in stepping up training for existing practitioners to enhance their interest in using Fintech and skill-sets to take advantage of the opportunities provided by applying information technology in the financial services industry. As regards liaison with the banking sector, the Government would encourage existing FIs to develop innovative financial products and services as well as enhance the Government's efficiency through applying Fintech. A number of initiatives like Haccelerator programmes had been organized to facilitate communication and promote cooperation of FIs and Fintech start-ups.
- 18. At the FA Panel meeting on 11 October 2017, some members raised concern about cyber attacks on financial infrastructures and stressed the importance for the Administration to accord priority in addressing cybersecurity issues in developing Fintech. They enquired about the measures taken by the Administration and HKMA to enhance cybersecurity of financial infrastructures, in particular traditional mainframe computer systems used by FIs, and new infrastructures like the Fast Payment System.
- 19. The Government advised that it attached importance on strengthening cybersecurity in developing Fintech. HKMA had carried out a number of initiatives and studies including a joint study with the Hong Kong Applied Science and Research Institute on blockchain that covered security. Besides, regulators had also been closely monitoring the security threats and vulnerabilities of information technology systems used by the financial services industry including traditional computer systems. According to the assessment of regulators, the traditional computer systems used by the industry were relatively safe.

Strategies for the development of Fintech

20. At the FA Panel meetings on 11 April 2016 and 18 April 2017, members sought details of the Government's strategies to develop Fintech including training of Fintech talents through the development of Fintech-related degree programmes in local universities. Some members suggested that Hong Kong should leverage on its link with and knowledge of the Mainland to add impetus to the development of Fintech. Enquiries were also raised as whether the

Administration would examine the feasibility of setting up offices in the Silicon Valley to support local Fintech start-ups in establishing business there.

21. The Government advised that it would continue its work in strengthening cooperation with other economies and regulators on Fintech development as well as enhancing market access for Fintech start-ups in Hong Kong. Cyberport and InvestHK had been organizing various activities to enhance cooperation with other economies on Fintech development including launching Cyberport's University Partnership Programme for local university students to join the Entrepreneurship Bootcamp in Silicon Valley. Relevant organizations including local universities, HKMA and Cyberport had been offering relevant programmes/courses to nurture Fintech talents.

Support for Fintech companies in Hong Kong

- 22. At the FA Panel meeting on 11 April 2016, some members enquired whether the Administration would consider developing a platform to help Fintech companies to seek funding from private equity funds, offering tax concessions for private equity funds to encourage their investments in Fintech companies, providing loans and affordable office premises to Fintech companies, and assisting Fintech companies in opening bank accounts in Hong Kong.
- 23. Regarding tax concession, the Government advised that given the simple and low taxation regime of Hong Kong, the implications of providing tax incentives to Fintech startups would warrant careful examination. The relevant new initiatives announced in the 2016-2017 Budget would help provide more opportunities for startups to connect with investors. For instance, the establishment of a dedicated team under InvestHK would provide one-stop service and organize pitching events to help local Fintech startups to seek funding. InvestHK would also liaise with relevant investor groups and Fintech stakeholders, and work with Cyberport in this regard. On the opening of bank accounts by Fintech start-ups, the Government pointed out that while some Fintech start-ups might have encountered some initial difficulties in opening bank accounts in Hong Kong, these start-ups had eventually resolved the problem.

Relevant motion passed and questions raised at Council meetings

24. At the Council meeting of 10 June 2015, Members passed a motion on "New challenges faced by Hong Kong as an international financial centre", which urged the Government, among other things, to grasp the new opportunities brought about by the "One Belt One Road" policy in consolidating

and enhancing the competitiveness of Hong Kong as an international financial centre and expediting the promotion of Hong Kong's development into a financial technology hub. At the Council meeting on 5 July 2017, Members passed a motion on "Reforming outdated legislation and promoting the development of innovation and technology", which urged the Government, inter alia, to remove various regulations and restrictions for financial innovation and provide relevant legal advice and technical support for financial services enterprises so as to assist the industry in the development and effective use of financial technology products and services. Besides, Members have raised a number of questions at Council meetings since 2016 on Government's measures in promoting the development of Fintech in Hong Kong. Issues covered in these questions include support for Fintech start-ups, measures to attract Fintech start-ups to develop businesses in Hong Kong, development of electronic payment services in Hong Kong, regulation of Fintech and initiatives to facilitate Fintech companies, assistance for the insurance industry using Fintech, etc. Details of the above motions and questions and the Government's replies are given in the hyperlinks in the **Appendix IV**.

Latest development

25. At the Panel meeting to be held on 3 April 2018, the Government will update the Panel on latest development of the Fintech sector in Hong Kong, and initiatives undertaken by the Government, regulators and other stakeholders in supporting the sector.

Relevant papers

26. A list of relevant papers is in the **Appendix IV**.

Council Business Division 1
<u>Legislative Council Secretariat</u>
29 March 2018

Major recommendations set out in the report of the Steering Group on Fintech

Parameter	Recommendations	
Promotion	Formulating a vision on Hong Kong's development in financial technologies ("Fintech") and organizing an annual premier Fintech event and competitions	
Facilitation	Establishing an office to provide targeted assistance to startups, setting up a Fintech-themed programme, attracting accelerator programmes and innovation laboratories, and positioning Hong Kong as a hub for applying and setting standards for cutting-edge Fintech technologies	
Regulations	Establishing dedicated contact points at financial regulators	
Funding	Improving dissemination of information on funding sources	
Talents	Encouraging young talents to consider entering the Fintech sector and enhancing dissemination of information on immigration policy	

Source: paragraph 8 of the paper entitled "Strategies and Measures to Develop Financial Technologies" provided by the Administration for the meeting of the Panel on Financial Affairs on 11 April 2016 (LC Paper No. CB(1)736/15-16(02))

Initiatives relating to the development of Financial Technologies ("Fintech") Implemented by the Administration in 2016-17

Mea	asures	Key achievements
(a)	Regulation	
(i)	Fintech liaison platforms set up by the Hong Kong Monetary Authority ("HKMA"), the Securities and Futures Commission and the Office of the Commissioner of Insurance respectively	 More than 200 regulatory-related enquiries received (up to end-March 2017), thus enhancing communications with the Fintech industry HKMA's Fintech Facilitation Office has so far organised ten events in Hong Kong, gathering about 2 500 stakeholders from financial institutions, investors and Fintech firms to exchange ideas and cultivate collaboration
(ii)	Payment Systems and Stored Value Facilities Ordinance	 Commenced full operation in November 2016 13 store value facility ("SVF") licences granted, with licensees comprising retail payment companies from both within and outside Hong Kong
(iii)	HKMA's Fintech Supervisory Sandbox	- 14 Fintech projects are currently using or completed testing under the Sandbox (as at March 2017), facilitating pilot trials involving banking services and a limited number of participating customers (such as staff members or focus groups of selected customers) without the need to achieve full compliance with HKMA's usual supervisory requirements during the trial period
(b)	Facilitation	
(i)	Cyberport's Fintech incubation programme and Smart-Space FinTech	- The Fintech community at the Cyberport has grown from about 90 companies a year earlier to more than 180 companies (including incubatees, startups operating in Smart-Space co-working space, office tenants, and service subscribers to its Collaboration

Measures	Key achievements	
	Centre) - As at end-February 2017, a total of 54 Fintech start-ups have been admitted to Cyberport's designated incubation programme, on track to assist 150 start-ups by 2020 - Smart-Space FinTech has been fully operational from December 2016, providing 4 300 square meters of dedicated co-working space. At least two incubation/accelerator programmes will be held in the Smart-Space in 2017	
(ii) Cutting-edge Fintech	 HKMA commenced in late March 2017 a research and a proof-of-concept work on central bank digital currency in collaboration with the three note-issuing banks, the Hong Kong Interbank Clearing Limited and R3 (a consortium of financial institutions and other stakeholders to explore the potential of Distributed Ledger Technology ("DLT")) HKMA and the Hong Kong Applied Science and Technology Research Institute ("ASTRI") collaborated with a number of banks to explore the feasibility of applying DLT, and published a whitepaper on DLT in November 2016 The Cyber Resilience Assessment Framework, Professional Development Programme and Cyber Intelligence Sharing Platform under HKMA's Cybersecurity Fortification Initiative were implemented in December 2016 	
(iii) HKMA-ASTRI Fintech Innovation Hub	 Since the Hub's formal launch in November 2016, five banks and three technology firms have used the Hub for trial or demonstration of five Fintech solutions that may have potential for industry-wide applications The Hub supported the banking sector for developing prototypes for the use of DLT in trade financing and other aspects, so as to test how the concept can be applied in different operational scenarios 	

Measures		Key achievements	
(iv)	Haccelerator Programme	- HKMA launched the Fintech Haccelerator programme in late March 2017 in collaboration with Cyberport, offering banks and SVF licensees a platform for organising Hackathon and Accelerator competitions to explore innovative solutions, recruit talents and identify cooperation opportunities with Fintech startups and innovators	
(c)	Promotion		
(i)	InvestHK dedicated Fintech team	 The inaugural Hong Kong Fintech Week was held in November 2016, attracting 2 500 participants from within and outside Hong Kong Sponsorship for large-scale events such as Finovate Asia, a demo-only conference held in November 2016 alongside the Hong Kong Fintech Week, and the Fintech Finals 2017, a conference and start-up competition which took place in January 2017. The two events together enabled around 60 Fintech companies from around the world to showcase or compete by pitching their businesses in Hong Kong Assistance rendered to around 40 Fintech startups over the past six months to encourage them to establish presence in Hong Kong 	
(d)	Talents		
(i)	Internship and immersion programme	 Under the HKMA-ASTRI Fintech Career Accelerator Scheme announced in December 2016, 12 participating banks and HKMA will offer over 100 Fintech-related internships in summer 2017 for undergraduate and postgraduate students from ten local tertiary education institutions Under the Cyberport University Partnership Programme, 53 university students have already joined the Entrepreneurship Bootcamp in Silicon Valley arranged by the Stanford Graduate School of Business in 2016-17 	
(e)	Funding		
(i)	Innovation and Technology Fund	- The Enterprise Support Scheme, launched in 2015 by the Innovation and Technology Commission to provide funding support for enterprises to conduct	

Measures	Key achievements
	in-house research and development and encourage private sector investment in innovation and technology, received over 20 Fintech-related applications, with two approved in-principle (as at end-February 2017) - Technology Voucher Programme, which aims to subsidise local small- and medium-sized enterprises in using technological services and solutions to improve productivity, or upgrade or transform their business processes, received nine applications from companies in banking, insurance or other financial services (as at end-February 2017)

Source: Annex to the paper entitled "Development of Financial Technologies" provided by the Administration for the meeting of the Panel on Financial Affairs on 18 April 2017 (LC Paper No. CB(1)777/16-17(03))

Initiatives of Fintech development in Hong Kong set out in the 2018-2019 Budget Speech of the Financial Secretary

Innovation and Technology

XXX

64. To shine in the fierce innovation and technology ("I&T") race amidst keen competition, Hong Kong must optimise its resources by focusing on developing its areas of strength, namely biotechnology, artificial intelligence, smart city and financial technologies ("Fintech"), and forge ahead according to the eight major directions set out by the Chief Executive. In order to achieve results, our targeted efforts must be underpinned by adequate resources. In last year's Budget, I reserved \$10 billion for supporting I&T development. This year, I will set aside an additional \$50 billion.

XXX

Cyberport

69. Moreover, I will allocate \$200 million to Cyberport to enhance the support for start-ups and promote the development of digital technology ecosystem. Cyberport is going to launch an "easy landing" programme to attract multinational companies (including overseas and Mainland leading internet enterprises and Fintech companies) to set up offices and research and development units in Hong Kong. It will also roll out a new support scheme, offering financial assistance up to \$200,000 for each eligible start-up to conduct market research and promotion, as well as participate in business missions, trade fairs and exhibitions, etc. outside Hong Kong. The financial assistance offered under Cyberport;s incubation programme to individual start-ups will also increase by 50 per cent to \$500,000.

Financial Services Industry

XXX

Faster Payment System and Virtual Banks

- 88. The Hong Kong Monetary Authority ("HKMA") is prepared to launch a Faster Payment System offering 24-hour real-time payment function. This will allow banks and Stored Value Facility service providers to provide real-time, round-the-clock, cross-institution payment and fund transfer service to their business and personal customers.
- 89. Moreover, since virtual banks are considered commercially and technically viable based on overseas experience, the HKMA is consulting the industry on

reviewing and amending the relevant guidelines, and will make the best endeavour to issue licences within this year.

XXX

Dedicated Provision for Development of Financial Services Industry

94. I have set aside a dedicated provision of \$500 million for the development of the financial services industry in the coming five years, providing necessary support for bond market development, Fintech, green finance, manpower training and other aspects of financial services.

Source: paragraphs 64, 69, 88, 89 and 94 of the 2018-2019 Budget Speech of the Financial Secretary (at:

https://www.budget.gov.hk/2018/eng/pdf/e_budget_speech_2018-19.pdf)

List of relevant papers

Date/Period	Event	Paper/Minutes of meeting
10 June 2015	The Legislative Council ("LegCo") passed the motion on "New challenges faced by Hong Kong as an international financial centre" moved by Hon NG Leung-sing	Wording of the motion passed
26 February 2016	The Steering Group on Financial Technologies released its report	Press Release Report of the Steering Group
11 April 2016	The Panel on Financial Affairs ("FA Panel") was briefed by the Administration on its strategies and measures to develop financial technologies ("Fintech") in Hong Kong	(LC Paper No. CB(1)736/15-16(02)) <u>Minutes</u>
27 April 2016	Hon Frederick FUNG raised a written question on "Development of Financial Technologies"	
29 June 2016	Hon CHAN Kin-por raised a written question on "Attracting Financial Technology Start-up Companies to Develop Their Businesses in Hong Kong"	

Date/Period	Event	Paper/Minutes of meeting
6 February 2017	FA Panel was briefed by the Administration on the policy initiatives of the Financial Services and the Treasury Bureau featured in the Chief Executive's 2017 Policy Address	(LC Paper No. CB(1)459/16-17(04)) <u>Minutes</u>
8 February 2017	Hon CHAN Chun-ying raised an oral question on "Financial technology development in Hong Kong"	
18 April 2017	FA Panel was briefed by the Administration on the development of Fintech in Hong Kong	
10 May 2017	Hon CHAN Kin-por raised a written question on "Financial technology development in Hong Kong"	<u>Hansard</u> (pages 6972- 6975)
5 July 2017	LegCo passed the motion on "Reforming outdated legislation and promoting the development of innovation and technology" moved by Hon Charles Peter MOK	Wording of the motion passed
5 July 2017	Hon CHAN Kin-por raised a written question on "Measures to facilitate the development of the insurance industry"	

Date/Period	Event	Paper/Minutes of meeting
20 October 2017	FA Panel was briefed by the Administration on the policy initiatives of the Financial Services and the Treasury Bureau featured in the Chief Executive's 2017 Policy Address	(LC Paper No. CB(1)47/17-18(01)) <u>Minutes</u>
6 December 2017	Hon Charles Peter MOK raised an oral question on "Regulating and facilitating financial technology development"	
31 January 2018	Hon Kenneth LAU raised a written question on "Electronic payment services"	
7 February 2018	Dr Hon Elizabeth QUAT raised a written question on "Support for start-up enterprises"	