# Norman Chan: Facilitating financial innovation in Hong Kong

Welcoming remarks by Mr Norman T L Chan, Chief Executive of the Hong Kong Monetary Authority, at the HKMA Fintech Day, Hong Kong, 25 October 2017.

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Good morning, distinguished guests, ladies and gentlemen.

- 1. This is the second year that the HKMA organises a Fintech Day. I am pleased to say that, compared with the much smaller venue at PMQ last year, we have almost 1,000 participants attending today's event, which is double of the participation last year. This is a clear demonstration of the very rapid growth in the interest as well as progress in the field of fintech in Hong Kong.
- 2. Talking about progress, I would like to update you on the latest developments since I announced a "New Era of Smart Banking" on 29 September at the annual conference of the Hong Kong Institute of Bankers. You may recall that I mentioned seven initiatives to prepare Hong Kong to enter into the Smart Banking Era: a Faster Payment System, Supervisory Sandbox 2.0, Virtual Banking, Open API, Banking Made Easy, Cross-border Collaboration, and Research and Talent Development. Although it is only less than a month after my announcement, I am pleased to report on the encouraging progress made in respect of two of these seven initiatives, i.e. cross-border collaboration, and research and talent development.

#### Cross-border collaboration

## Singapore

- 3. One of the key characteristics of Fintech is that it is borderless. While each financial market has many idiosyncratic factors, fintech can offer solutions that cut through different geographical and market boundaries. For example, breakthrough in biometric authentication technology is helpful not only in the advanced markets but also in the developing markets. By the same token, cybersecurity threats can originate from anywhere in the world and is not bound by national boundaries. There is a high degree of commonality in the application of fintech, especially in the context of cross-border financial transactions and flows. So it is crucial for Hong Kong to enhance its collaboration with other financial centres to share experience and learn from each other. In this context, I am very pleased to announce that I have just signed a Cooperation Agreement on fintech with the Managing Director of the Monetary Authority of Singapore (MAS), Mr Ravi Menon. To mark the occasion, a simple ceremony will be held later this morning to exchange the signed Agreement. May I take this opportunity to thank my MAS colleagues for working very hard with us on this most meaningful collaboration.
- 4. Hong Kong and Singapore are the two leading international financial centres in Asia. Both the HKMA and MAS are actively promoting the use and development of fintech respectively. There is considerable scope for the two places to collaborate and achieve a win-win outcome. A priority area of collaboration is the use of fintech in advancing the hitherto paper-based trade finance system that has been in use for as long as trade existed. As we know, trade finance is an integral part of the global trading system and the paper-based system is very inefficient and prone to human errors and fraud. But then it has proved to be very difficult for the trade finance processes to be automated or digitalised mainly because multiple parties and banks in different jurisdictions are involved in a single trade transaction. Unless there is a common global standard for the digitisation of trade-related documents and a trusted central repository, it is pointless for any party or jurisdiction to change the paper-based system on its own. However, with the breakthrough of the Distributed Ledger Technology (DLT), we firmly believe that the time has come for trade finance to move into

the digital era. Together with a consortium of five banks in Hong Kong, the HKMA conducted in the second half of 2016 a proof-of-concept project on the use of DLT to build a trade finance platform in Hong Kong. I am pleased to announce that the proof-of-concept project has been successful in that it can digitise trade documents, automate the processes, allow sharing of required documentation among authorised participants, and reduce human errors and risks of fraud. We are therefore moving into the next phase of the project by developing a full production system. The consortium, now joined by two more banks, is in the process of conducting tender for the system development. We aim to build an open system in which other banks in Hong Kong are welcome to join if they are interested. It is obvious that the new platform will create the highest value if the majority of banks engaging in trade finance businesses are making use of it.

5. However, this is only half of the story. As we all know, trade is by definition cross border and invariably involves parties and financial institutions in two or more jurisdictions. So it is not good enough for a jurisdiction to do it alone in digitalising trade finance. In this connection, I am pleased to say that the first item of collaboration between Hong Kong and Singapore would be the building of a DLT interface linking the domestic trade finance platforms being developed separately in the two centres. Later this morning, colleagues from the HKMA and MAS will talk more about this exciting collaborative project. What I want to say here is that this interface would likely to be the first of its kind in the world in the application of DLT in solving the century-old problem arising from the inefficiency of the paper-based trade finance system. This new trade platform interface, once developed and implemented, would allow our other trading partners around the world to plug into it. This will be an important piece of market infrastructure that helps demonstrate Hong Kong's commitment not only to technological innovation but also to cross-border collaboration to promote more efficient trade and financial flows for the benefit of our businesses and peoples.

## **UK and Others**

- 6. I am also pleased to report that the HKMA has expanded and strengthened our ties with several other overseas authorities in the area of fintech collaboration in addition to Singapore. For example, we signed a Fintech Cooperation Agreement with the Financial Conduct Authority (FCA) of the UK in December last year. Later this morning, a colleague from Project Innovate of the UK FCA will share with us their experiences in fintech development. Moreover, the London-Hong Kong RMB Forum, which was first set up in 2012, has recently been expanded to become "London-Hong Kong Financial Services Forum" so as to cover wider areas such as fintech and the Belt and Road Initiative. This year's annual meeting of the Forum will be held in Hong Kong in December, and is expected to be attended by high level government and private sector representatives from both sides to discuss a whole range of financial collaboration issues.
- 7. I should perhaps mention that we are also in active discussions with some other jurisdictions, including Switzerland, which share a common interest in mutual cooperation in promoting fintech. I hope to be able to report more news in the not too distant future.

#### Guangdong-Hong Kong-Macao Bay Area

- 8. As well as building collaborative ties across the world, we are also creating partnership closer to home. There is a huge upside in tapping the considerable potential in fintech development in the Guangdong-Hong Kong-Macao Bay Area. The Bay Area has a population of over 66 million and a GDP of over US\$1.3 trillion. With the deepening of the financial sector and the expanding cluster of technology talents and industrial base, the Bay Area is going to become one of the main engines of growth for China and a very fertile ground for innovation in financial services and fintech.
- 9. Recognising the importance of cross-border collaboration in the Bay Area, the HKMA, as a start, has signed a Fintech MOU with the Office of Financial Development Service ("OFDS")

of the Shenzhen Municipal Government. Now, I am pleased to announce that, in pursuing our commitment to collaboration, Hong Kong and Shenzhen will jointly launch three fintech initiatives:

(i)	A fintech competition;
(ii)	A soft-landing scheme; and
(iii)	A talent development programme.

### Fintech Competition

10. Together with the Shenzhen OFDS, we will organize a fintech competition that is open to participation by Shenzhen and Hong Kong financial institutions. It offers total prizes of more than HK\$7 million for the winning fintech products or solutions. I am sure the awards will provide a strong incentive for financial institutions to innovate, either by themselves or in partnership with fintech firms. There are two categories of awards, both of which are open to Shenzhen and Hong Kong-based regulated financial institutions. The first is for the use of fintech, while the second is for cross-border financial innovation. It is a prestigious award and I would encourage Hong Kong financial institutions to take part and showcase their achievements. The Director-General of OFDS will share with us more details about this exciting competition in the next session.

## Soft-landing scheme

- 11. The second initiative is a mutual referral system for fintech firms this is sometimes called "soft-landing". Under this programme, the OFDS will provide support to Hong Kong fintech firms that want to establish a presence in Shenzhen, perhaps with a view to using it as a springboard to tap into the enormous market of Mainland China.
- 12. To better utilise this valuable opportunity, we are working with our strategic partner, Cyberport, on the establishment of cross-border soft-landing facilities in Shenzhen. Such an arrangement would give qualified Hong Kong fintech firms access to the business support from OFDS, which would be helpful for these firms to expand their business to the Mainland. At the same time, Cyberport will leverage on this platform in Shenzhen to assist Mainland fintech companies to establish operations in Hong Kong.
- 13. Given the geographical proximity between Hong Kong and Shenzhen, I have no doubt that this collaboration will further enhance Hong Kong's role as the springboard to help homegrown and overseas firms reaching out to the Mainland market.

#### Talent development programme

14. The third and last initiative we are working jointly with Shenzhen relates to talent development. You may recall that last year we launched the Fintech Career Accelerator Scheme and, since then, more than 70 Hong Kong students have been working on fintech projects in 12 banks and the HKMA. Building on the success of this scheme, and with the support of the Shenzhen OFDS, we have secured commitments from several high-tech firms in Shenzhen, including Ping An Technology, WeBank, Tencent and others, to offer summer intern positions for Hong Kong students to learn the latest technologies, not only in financial application but also in areas such as big data analytics or artificial intelligence. This people-to-people approach will deepen collaborative ties between Hong Kong and Mainland China in fintech development to our mutual benefit.

#### Enhanced research

- 15. Finally, I want to talk about enhanced research, which is one of the seven initiatives in the package helping Hong Kong to migrate to the new era of Smart Banking. Today we will publish our second whitepaper on DLT. You may recall that we released the first DLT whitepaper around this time last year, in which we explained how the technology works, outlined proof-of-concept projects and, more importantly, identified potential implementation challenges and issues. This year, with the help from the Law Society of Hong Kong, eminent law professors in the field, consultancy firms, and the Applied Science and Technology Research Institute, I am pleased to say we have compiled the DLT whitepaper 2.0 to provide advice on over 20 governance, control, legal and compliance issues identified in the first whitepaper.
- 16. While there have been lively discussions in the fintech community on the technology and application aspects of DLT over the past year, there has not been enough focus on the deployment and implementation issues gathered from practical and diverse proof-of-concept applications. There have been very few suggestions to address the governance, control, legal and compliance issues raised by DLT.
- 17. In our second whitepaper, we have confirmed the promising nature of DLT while acknowledging that DLT cannot be a universal solution for all financial applications. Experts taking part in our research have also confirmed that the issues identified in the first whitepaper are valid and that many of them would need new thinking to overcome. While the solution will depend on the precise application, the whitepaper has provided broad advice in areas such as the importance of governance structure and its implications on the level of control and liability acceptable to participants, how a hybrid model of DLT and traditional database may be used to resolve the immutability nature of DLT in the storage of personal data, the limits of smart contracts, and the need of adequate security and controls over the operating environment of DLT.
- 18. The next step would be for the HKMA to work with the banking industry and the fintech community to turn the findings and advice in the second whitepaper into a set of practical guidelines for the use of DLT in the banking sector in the future. Given the rapidly evolving nature of DLT, this is no easy task to undertake. We welcome comments and input from the stakeholders and stand ready to share the findings of our research and practical experience with our international peers.

## Conclusion

- 19. Ladies and gentlemen, now is an exciting time for financial innovation. Technology is a game changer for the future of banking, payment and other financial services. It will differentiate winners from losers. I am very pleased to share with you today the important progress made by Hong Kong in cross-border collaboration and the use of DLT applications. As I said in my speech last month, the transformation of our banking system to a new and higher level of Smart Banking is not just something that is nice to a have, it is a must! To stay relevant and ahead of the game in this new era, I am sure you will agree that the collaborative efforts and research developments that I just mentioned are the essential building blocks to facilitate financial innovation and prepare Hong Kong to advance to the new Smart Banking Era.
- 20. Finally, I wish you a productive and fruitful time here at the HKMA Fintech Day, and trust that you will benefit from today's rich plenary and parallel sessions.
- 21. Thank you very much.