





APFF FINANCIAL TECHNOLOGY WORKSHOP Encouraging Innovation, Promoting Inclusion and Managing Risks

5 July 2017 Auditorium A-C, 1st Floor, Asian Development Bank Mandaluyong City, Metro Manila, Philippines

Jointly Organized by
ASIAN DEVELOPMENT BANK (ADB)
APEC BUSINESS ADVISORY COUNCIL (ABAC)
ASIA-PACIFIC FINANCIAL FORUM (APFF)

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The rapid evolution of financial technology (fintech)¹ presents today's regulators with a critical challenge. New business models, new players entering markets long dominated by traditional financial service providers, and the latter's embrace of new technologies are impacting regulators' mission of promoting financial stability, protecting consumers and privacy and maintaining the integrity of financial systems.

However, fintech also brings opportunities. Innovations are helping unbanked individuals and small businesses gain access to finance. New applications are enhancing business processes such as clearing and settlement, compliance, risk management and fund administration. Technologies such as blockchain and artificial intelligence are helping financial service firms improve their efficiency and responsiveness to customer needs. Emerging markets hoping to leapfrog their way to modernization will benefit from these innovations, but must adequately address emerging risks and concerns.

The impact of fintech has been most strongly felt in well-developed markets, particularly in Europe and North America, where favorable environments for start-ups exist and financial sectors are more diverse. In emerging markets such as those in Asia, the development of fintech has been uneven and concentrated in the areas of payments and credit, particularly marketplace or peer-to-peer (P2P) lending. China accounts for an overwhelming portion of fintech credit in Asia, while payments fintech has developed significantly across a broader range of markets.²

Nevertheless, the evolution and growth of fintech in Asian emerging markets continue to accelerate, requiring policy and regulatory responses. In two roundtables convened in 2016 under the auspices of the Asia-Pacific Financial Forum (APFF),³ policy makers and regulators agreed on the need to establish a regional platform to bring together stakeholders from the public and private sectors to help identify key issues in timely fashion as they arise. These stakeholders would include representatives from fintech startups and major financial institutions, related service providers, associations and experts, government and regulatory agencies and relevant international organizations.

This workshop seeks to respond to this need by bringing these stakeholders together to initiate discussions, starting in areas where significant disruption is already occurring in the region and where regulators are most concerned and are taking early steps toward proactive regulation. A session will also be devoted to regulatory technology (regtech), where solutions in a number of key areas are being developed by industry and being tested or adopted by regulators. Finally, the workshop will provide an opportunity to share

¹ These categories includes payments, insurance, planning, lending and crowd funding, block chain, trading and investment, data and analytics and security as described in OICV-IOSCO, *IOSCO Research Report on Financial Technologies (Fintech)*, February 2017., p. 4.

² Sean Creehan and Nicholas Borst, "Asia's Fintech Revolution," *Asia Focus* (Federal Reserve Bank of San Francisco, February 2017). The convenors of this workshop are grateful to the authors and the Federal Reserve Bank of San Francisco for providing fundamental insights that have aided in designing the structure of this workshop.

³ These were the *APFF Roundtable on Financial Innovation: How can we harness innovation to build bigger, robust and inclusive financial markets?* (24 February 2016, PayPal Corporate Campus, Silicon Valley, California, USA) and the *APFF Roundtable on Financial Innovation: Fintech* 2016: Challenges and Opportunities for Asian Industry and Regulators (15 July 2016, Co-organized by ABAC and ASIFMA and Co-hosted by the Hong Kong Monetary Authority, Hong Kong, China).

experiences in implementing regulatory sandboxes and discuss broader questions related to regulatory approaches and institutional arrangements.

<u>AGENDA</u>					
08:30- 09:00	Registration and Networking				
09:00- 09:20	OPENING SESSION				

Welcome and Introduction

Mr. Satoru Yamadera, Principal Financial Sector Specialist, Economic Research and Regional Cooperation Department (ERCD), Asian Development Bank (ADB)

Opening Address

TBD

09:20- SESSION 1: FINTECH IN ASIA-PACIFIC EMERGING MARKETS: OVERVIEW OF LATEST DEVELOPMENTS

This session will provide overviews on the latest developments in Asia-Pacific emerging markets with respect to fintech, as well as on the steps that financial regulators and policy makers in these markets have been taking in response to the emergence of new technologies and business models.

Moderator: Dr. Julius Caesar Parreñas, Coordinator, Asia-Pacific Financial Forum (APFF); and Senior Advisor, Nomura Research Institute Ltd.

Fintech: An Overview of Latest Developments

Mr. Henri Arslanian, FinTech & RegTech Lead for China and Hong Kong, PwC; and Adjunct Associate Professor; University of Hong Kong

An Overview of Policy and Regulatory Responses

Professor Douglas Arner, Kerry Holdings Professor in Law, University of Hong Kong

Advancing Financial Innovation in Asia: The ASEAN Financial Innovation Network (AFIN) Mr. Sopnendu Mohanty, Chief Fintech Officer, Monetary Authority of Singapore; and

Mr. Sopnendu Monanty, Chief Fintech Officer, Monetary Authority of Singapore; and Mr. Ivan Daniel Mortimer-Schutts, Regional Leader for Retail Payments and Mobile Banking in East Asia, International Finance Corporation (TBC)

Open Forum

10.25

Moderator's Concluding Summary

10:35-	Collee Break
10:50- 12:15	SESSION 2: PANEL DISCUSSION – PAYMENTS The development of fintech in the payments sector is a major issue across various markets in Asia, as non-banks that largely played a supporting function vis-à-vis the banking sector in the past are now increasingly offering innovative financial services, driven by smart phone technology, Asia's huge market for payments and efforts to leapfrog old payment technologies. Many of these new services using mobile phone platforms do not alter the underlying structure of the payment system, as they continue to operate in conjunction with traditional bank accounts and credit or debit cards. However, others that provide digital wallets competing with banks and card networks for fee revenue or those offering new services such as insurance and investment promise to be more disruptive. While still at a nascent stage, blockchain technology has the potential to provide speedier and

more efficient clearing and settlement for trade finance, cross-border payment and syndicated lending, and smart contracts can fuel automatic payments and transfers. Wider adoption of these innovations would have disruptive effects as they replace legacy financial infrastructure currently being used, including trusted third parties such as clearing houses. The cost of remittances are likely to fall if mobile payment services, virtual currencies and pre-paid cards succeed in replacing bank-based transfers.

Adoption of these new technologies, however, face challenges in terms of regulatory frameworks (including compliance with AML rules), the lack of supporting infrastructure (e.g., availability of payment card readers) and issues intrinsic to the technology (e.g., volatility of virtual currency exchange rates). Asian regulators are responding to these challenges in various ways, undertaking research and conducting experiments. This session will discuss these issues and regulatory responses, particularly with respect to retail payments, blockchain technology for clearing and settlement, and digital currencies.

Moderator: Mr. Boon-Hiong Chan, Director, Head of Market Advocacy APAC & MENA, Deutsche Bank AG

Moderator's Opening Remarks

Mr. Suu Wei Ho, Government Relations Director for Southeast Asia, PayPal Inc (E-payment readiness of emerging Asian economies)

Mr. Arvin Singh, APAC Director of New Channels, Visa (Evolving industry: Unbundling, competition and collaboration between niche fintech firms and existing service providers)

Ms. Pia Bernadette Roman-Tayag, Director. Inclusive Finance Advocacy, Bangko Sentral ng Pilipinas (Innovative regulatory responses: the Philippine experience)

Ms. Julia Walker, Head of Market Development, Risk - Asia Pacific, Thomson Reuters (Developments in fintech: payments and anti-money laundering)

Mr. Shuhei Aoki, Corporate Officer and Executive Strategist, Hitachi, Ltd. (Promoting innovation in the payments sector)

Open Forum

Moderator's Concluding Summary

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Lunch

13:30-14:50

SESSION 3: FINTECH CREDIT

Fintech credit (which includes marketplace or peer-to-peer lending, platform loans that are securitized and invoice trading) emerged to fill the financing needs of many households and small enterprises unable to obtain loans from traditional financial institutions. In Asia, this has mostly taken the form of online platforms that connect borrowers with investors. China has been by far the largest market for fintech lending in Asia, with characteristics that set it apart from other Asian markets, such as the predominance of consumer loans (as opposed to business loans) and retail investors (as opposed to institutional investors).

Despite its growth, however, fintech credit remains a small portion of the total credit market (only 3 percent in the case of China), and banks are expanding their presence by developing their online platforms or investing in start-ups. Regulation has been largely light-touch or negligible, with China among Asian markets having the most detailed focus on risk management, fraud prevention and consumer protection, while dealing with the challenge of a highly fragmented market that is not easily regulated. As fintech credit grows in volume and importance across the region, however, policy makers and regulators will need to step up their responses.

This session will discuss this issue, focusing on the evolution of technology, business models and regulatory responses in the areas of consumer and business fintech credit, and the use of

data analytics and algorithms with respect to the development of financial identity.

Moderator: Dr. Michael Turner, President and CEO, Policy and Economic Research Council (PERC)

Moderator's Opening Remarks

Mr. Janos Barberis, Asia Lead, Digital Finance Institute; and Founder and CEO, SuperCharger Fintech Accelerator (Overview of key issues: fintech lending in Asian emerging markets)

Mr. James Zheng, Chief Financial Officer, Shanghai Lujiazui International Financial Asset Exchange Co.Ltd (Lufax) (Consumer P2P Lending)

Ms. Yihan Fang, CEO, CreditEase Yirendai (Business P2P Lending)

Mr. Ankush Tewari, Senior Director, Market Planning, LexisNexis Risk Solutions (Use of big data in fintech lending)

TBD

Open Forum

Moderator's Concluding Summary

14:50- SESSION 4: REGTECH 15:45

While much attention has been given to the disruptive impact of fintech, technologies are being developed that can promote more effective and efficient attainment of key regulatory objectives and make compliance by regulated institutions with rules and regulations less costly and more aligned with the mission of providing inclusive and responsive financial services to the real economy. Regtech⁴ solutions can help address a number of compliance and regulatory issues, including: risk data aggregation; modeling, scenario analysis and forecasting; monitoring payment transactions; identifying clients and legal persons; monitoring internal culture and behavior within regulated institutions; trading in financial markets; and identifying new regulations. Among these solutions are those in areas such as machine learning, robotics, artificial intelligence, cryptography, biometrics, distributed ledger technology, application programming interfaces and shared utility functions and cloud applications.⁵

This session will discuss a few key state-of-the-art regtech solutions that have been recently developed within the industry and are now being looked at by regulators, early results and responses so far, and the likely shape of future developments.

Moderator: Mr. Michael R.K. Mudd, Managing Partner, Asia Policy Partners LLC

Moderator's Opening Remarks

Mr. Yoshiaki Wada, Board Member, XBRL International and Senior Manager, NTT Data Corporation (Online automated regulatory reporting)

TBD (Solutions to addressing cyber risk in financial services)

Mr. Timothy Choon, Managing Director, FICO Tonbeller Compliance Solutions Asia Pacific (Use of data for anti-fraud and anti-money laundering)

Open Forum

Moderator's Concluding Summary

15:45- Coffee Break

⁴ Regtech, as defined by the Institute of International Finance, is "the use of new technologies to solve regulatory and compliance requirements more effectively and efficiently," Institute of International Finance, *Regtech: exploring solutions for regulatory challenges*, Washington DC, October 2015.

⁵ Institute of International Finance, RegTech in Financial Services: Technology Solutions for Compliance and Reporting, Washington DC, March 2016.

16:00

16:00-17:25

SESSION 5: REGULATORY FRAMEWORKS AND APPROACHES

Even as fintech continues to evolve from its current early stages of development in the region, regulators are responding by being proactive, especially in the areas of payments and fintech lending, where significant disruption is already occurring. A number of regulators are turning to regulatory sandbox approaches that can support innovation while closely monitoring and managing their impact on consumers and financial stability. The emergence of fintech has also lent greater urgency to finding practical solutions to key issues such as financial identity and the standardization of technology, and how existing regulations can be applied to new non-bank market participants.

Many regulators are revisiting fundamental questions, including whether to move away from regulating types of institutions toward regulating types of activities, how to achieve effective regulation across various institutions responsible for oversight of different financial subsectors and technologies, and what regulatory approach can best encourage innovation while enabling adequate risk management. This session will focus on the sharing of experiences and perspectives to contribute useful insights to regulators on how they can respond to the challenge of fintech.

Moderator: Mr. John Ott, Partner, Bain & Company

Moderator's Opening Remarks

Mr. Satoru Yamadera, Principal Financial Sector Specialist, Economic Research and Regional Cooperation Department (ERCD), Asian Development Bank (ADB) (Financial identification and standardization of technology)

Mr. William Hallatt, Partner, Herbert Smith Freehills (The perspective from industry – the ASIFMA Fintech Best Practices)

Ms. Lisa O'Connor, Head of Standards, Asia Pacific, SWIFT (ISO 20022/role of global financial messaging standards)

Mr. Janos Barberis, Asia Lead, Digital Finance Institute; and Founder and CEO, SuperCharger Fintech Accelerator

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Moderator's Concluding Summary

17:25-17:30

CLOSING SESSION

Concluding Remarks

Mr. Satoru Yamadera, Principal Financial Sector Specialist, Economic Research and Regional Cooperation Department (ERCD), Asian Development Bank (ADB)

Dr. Julius Caesar Parreñas, Coordinator, Asia-Pacific Financial Forum (APFF); and Senior Advisor, Nomura Research Institute Ltd.

17:30

End of Workshop