C L I F F O R D C H A N C E



THE FINTECH MARKET IN ASIA PACIFIC AN OVERVIEW



- THOUGHT LEADERSHIP

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THE FINTECH MARKET IN ASIA PACIFIC – AN OVERVIEW

The use of technology to deliver, enhance or "disrupt" financial services is transforming the sector. Whether you are an established institution upgrading the existing financial services that you offer, a new entrant launching a groundbreaking product, or a regulator or an industry body considering whether the current regime is fit for purpose, this overview will help you navigate the complex regulatory framework for fintech products across Asia Pacific.

Fintech has the potential to increase efficiency and reduce costs, to improve access to, and delivery of, financial services, to enhance the customer experience and to create markets in new and innovative financial services products. It also poses risks, including money laundering, cybersecurity, consumer protection and data privacy. However, despite these risks, financial institutions, regulators and challenger companies believe that fintech – and the opportunities it presents – should be embraced.

Fintech encompasses a wide range of financial services and products that intersect with technology. These include peer-to-peer (or P2P) lending, online payments and foreign exchange services, digital wallets and e-money, automated or robo investment advice, artificial intelligence (AI), big data analytics, blockchain and crypto-currencies and many more. While these products and services are all different, they all make use of new or developing technology to provide traditional financial services in a more cost-effective, accessible and consumer-friendly way or facilitate the expansion of new or innovative financial products and services.

The growth of fintech and the expansion of non-financial companies into the heavily regulated financial sector has resulted in a growing need for regulators, the fintech community and the financial services industry to engage fully with developments in this sphere. The vast majority of financial services legislation and regulatory standards predate the rapid advances in technology and consumer demand for innovation. While governments are keen to be seen to be encouraging innovation in a number of jurisdictions, the law has been slower to catch up.

As this overview highlights, the fintech markets in countries across Asia Pacific are diverse and regulatory approaches and appetites vary across the region. A key challenge for continued and consistent growth in the region and its attractiveness to new business, will be the extent to which common cross-border standards and regulatory policy can be developed and co-ordinated, with open capital, talent and data flows. Clearly this challenge is not unique to Asia Pacific and regulators globally are grappling with the same issue. While a comprehensive regulatory framework for the region is unlikely, we have already seen collaboration between individual countries including the cooperation agreements signed between some countries, as described later in this overview. We expect that this approach will continue with further memorandums of understanding and official fintech bridges and with countries adopting policies which have been successfully implemented and tested elsewhere. Watch this space for developments.



AUSTRALIA

Advance to go – Australia at the forefront of fintech innovation

Australia's fintech industry is rapidly progressing. With one of the highest digital adoption rates in the world, a small population with disposable income, along with a friendly regulatory environment, the Australian market is a popular, innovative and encouraging testing ground for new fintech start-ups.

Regulatory sandbox

In December 2016, the Australian Securities and Investments Commission (ASIC) delivered an 'early Christmas present' to fintech start-ups by implementing a regulatory sandbox with some 'world first' qualities.

Within the sandbox, eligible start-ups are able to test the viability of their products and services with fewer regulatory burdens. To be eligible, a fintech company must:

- not be banned from providing financial services and must not already hold an Australian financial services licence (AFSL) or Australian credit licence (ACL); and
- hold at least AUD\$1 million of public interest insurance and have implemented the required dispute resolution mechanisms.

To take advantage of the sandbox, a start-up only needs to notify ASIC of its intention to offer products and services within the sandbox rules. No further approvals from ASIC or other regulators are required and spaces are not limited, in contrast to other regulators' competitive models. Businesses are therefore able to test and refine their products quickly without having to meet the standard AFSL and ACL licensing requirements.

But, as with every good thing, there's a catch. ASIC's licensing exemption comes with limitations:

• The exemption is for one 12-month period.

- Businesses are limited to 100 retail clients, with each retail client limited to AUD\$10,000 for financial services and AUD\$25,000 for credit contracts.
- There are no limits for sophisticated clients but the total exposure of all clients must not exceed AUD\$5 million.
- For payment products, the business must enter into an arrangement with an authorised deposit-taking institution (ADI) to issue the payment product.

After the exemption period, a start-up can apply to ASIC for a tailored exemption or can apply for an AFSL or ACL.

As part of the Government's 2017-18 Budget, plans have been announced to expand the types of products and services eligible for testing in the sandbox (including crowd-sourced funding) and extending the testing timeframe from 12 months to 24 months.

Blockchain

The Australian market is deeply engaged in blockchain technology with the major banks, the Australian Stock Exchange and other industry players investing heavily in its development.

In September 2016, Standards Australia was appointed to manage the secretariat of an international technical committee for the development of blockchain standards by the International Organization for Standardization (ISO). The Committee, comprising 16 global members, is dedicated to developing the ISO/TC 307 Blockchain and electronic distributed ledger technologies. The Roadmap for Blockchain Standards was published in March 2017 by Standards Australia and lays out the blueprint for Australia's leadership of the developing international blockchain standard.

ASIC has also been proactive – releasing guidance on how blockchain technology "should" develop without stifling the fledgling market with onerous regulation. It is engaging with all existing major players to develop suitable regulations alongside new developments.

Crowd-sourced funding

Australia has made significant movements in crowd-sourced funding (CSF), passing new legislation in March 2017 to allow a limited number of companies to access CSF from 28 September 2017.

This bill allows unlisted public companies with annual turnover or gross assets up to AUD\$25 million to advertise their business plans on licensed crowd funding portals, and raise up to AUD\$5 million a year to carry them out. Retail investors may buy up to AUD\$10,000 of equity in a company through a licensed CSF platform.

Perhaps its biggest shortcoming, however, is that the legislation restricts CSF to unlisted public companies that are limited by shares and with less than AUD\$25 million in gross assets and annual revenue. This means that more than 99.7% of companies are excluded from the bill and will not be able to raise capital through CSF without changing their company structure.

The Federal Government is conducting a public consultation on extending the CSF regime to proprietary companies, submissions for which closed on 6 June 2017, and is exploring an amendment bill as part of the 2017-2018 Budget.

New Payments Platform (NPP)

Australia will be launching a new payment system, called the new payments platform or NPP in the second quarter of 2017. The NPP was newly built by SWIFT and will also be operated by SWIFT. It features an open access infrastructure for faster, more flexible Australian payments. Overlay services can be developed to complement the NPP and these are expected to be innovative and more efficient than any other real-time payment system in the world. BPAY (Australia's bill payment scheme) will provide the first overlay system and will allow consumers to send payments in real-time to someone's mobile number or email address. It will include more information with payments and allow Government departments and business to include documentation with payments.

Looking ahead

With these positive developments, the fintech industry in Australia will continue to grow strongly.

The new regulatory sandbox has only been utilised by one start up in Australia. However, ASIC is actively promoting the framework and expects that a number of companies will take advantage of it in the coming months.

Standards Australia hosted the first International Blockchain Standards meeting for ISO/TC 307 in April 2016 and an amendment to include private companies in CSF is expected to be tabled later in 2017, potentially before the law comes into effect in September 2017.

There are a number of opportunities that arise from the implementation of the NPP, such as growth in app development, in streamlining transactions and in accelerating the move away from cheques and cash to digital payments. The majority of the major banks operating in Australia are committed to participating in the platform.

The Australian government has voiced its ongoing commitment to engaging with fintech start-ups to promote growth in a regulated and secure environment. ASIC's Innovation Hub provides an opportunity for entrepreneurs with little experience of business and regulation to understand the regulatory environment. Since mid-2015, it has assisted 125 entities with various queries and approved 33 new licences for fintech companies. The major challenge for ASIC will be managing the fast-growing sector as companies in the early phase, potentially making use of the sandbox, outgrow the limited exemptions provided. The individual exemptions and new licences which will be necessary will continue to push the regulatory boundaries in Australia.

With the passage of legislation such as the CSF bill and a mandatory data breach notification bill, the Australian government is showing a willingness to engage with the regulatory challenges. However, both bills contain shortcomings which will need to be addressed before and as they come into force (in September 2017 and within the next 12 months respectively). Watch this space; further changes are in store.



HONG KONG

Leading regional fintech investment hub

Hong Kong attracted US\$394 million of venture capital investment in fintech companies between 2014 and 2016 and accounted for US\$216 million in fintech investments in 2016. This put Hong Kong ahead of regional peers such as Australia, Japan and Singapore, and behind only mainland China and India. A strong fintech sector is the goal for cities aspiring to become, or maintain their status, as leading financial centres. Balancing user protection, financial stability and market development has become more challenging than ever for governments and regulators. The Hong Kong government, financial regulators and industry stakeholders have rolled out a range of measures over the past year to support fintech development in Hong Kong, covering areas such as regulation, facilitation, promotion, talents and funding. These measures are intended to create an ecosystem more conducive to maintaining and reinforcing Hong Kong's position as a leading regional fintech investment hub.

Fintech Supervisory Sandbox (FSS)

The FSS, launched by the Hong Kong Monetary Authority (HKMA) allows authorised institutions (eg licensed banks) to conduct pilot trials of their fintech initiatives without requiring full compliance with the usual HKMA requirements. These initiatives must involve banking services and apply to a limited number of customers. The degree of supervisory flexibility for each individual authorised institution is to be determined by the HKMA on a case-by-case basis.

Authorised institutions have been keen to use the FSS. Between its launch in September 2016 and March 2017, six authorised institutions have applied for approval of and/or successfully launched FSS pilot trials for more than 14 fintech projects. These include projects involving biometric authentication, blockchain, chatbots and soft tokens.

Distributed Ledger Technology (DLT)

The HKMA has taken the lead in reviewing the risks and potential scope of DLT and is actively engaged with industry players in developing the technology.

In November 2016, the HKMA published the first White Paper on DLT which reported its assessment of the potential use of DLT in the banking industry and resulting regulatory implications. The second phase of the study (expected to conclude in late 2017) will involve proof-of-concept projects with banks and proposals on control principles for regulation. The proof-of-concept projects include the application of DLT for trade finance initiated by the HKMA, Deloitte and five leading trade finance banks; and the property valuation system for mortgage applications developed by Bank of China in partnership with ASTRI.

In late March 2017, the HKMA began research and proof-of-concept work on central bank digital currency in collaboration with three note-issuing banks, R3 and Hong Kong Interbank Clearing Limited. The project will explore areas such as the use of digital currency for domestic interbank payments and inter-corporate payments in the wholesale market.

Financial Services Development Council (FSDC) reports

In May 2017 the FSDC published two detailed reports on the future of fintech in Hong Kong and DLT in Hong Kong respectively. "The Future of Fintech in Hong Kong" proposes a fintech strategy with recommendations for enhancing further development of the sector, including in reference to cybersecurity, payments and securities settlement, digital identity, insurtech and regtech. "Hong Kong – Building Trust Using Distributed Ledger Technology" provides a comparative study of international DLT developments and proposes a number of recommendations regarding DLT to the Hong Kong government and the financial services industry, including establishing a leadership function within government and a hub or focal point for the DLT community. In more practical terms it also calls for embracing digital currencies and stepping up the commissioning of DLT-based proofs of concept.

Stored Value Facilities (SVF)

The new SVF regulatory regime came into effect in November 2016 and requires all facilities used for storing monetary values for general payments (eg e-wallet/e-money) to be licensed by the HKMA. As at March 2017, there were 15 SVF licensees comprising retail payment companies and authorised institutions from both within and outside Hong Kong. According to the HKMA, in Q4 2016 the total stored value and deposits among the SVF licensees totalled approximately HK\$6.7 billion and the total value of transactions was approximately HK\$29.7 billion. It is expected that the size of the SVF market will continue to grow, at least in part due to the government's current efforts to promote electronic and mobile payment fintech initiatives.

Looking ahead

To boost Hong Kong's position as an international financial centre, Hong Kong also aims to become a leading fintech centre. It follows, then, that the government and financial regulators will remain committed to further developing fintech in Hong Kong. We expect there to be a greater focus on fintech areas which play to Hong Kong's strengths – payment and settlement systems and fintech financing activities.

Some key areas to highlight in relation to expected measures to further support fintech development in Hong Kong are:

- Payment and settlement systems: the government and the HKMA will further develop new electronic and mobile payment channels/infrastructure at both the retail level (SVF and new payment services by authorised institutions on P2P mobile fund transfer) and institutional level (such as interbank payments and wholesale market payments).
- DLT/blockchain technology: the HKMA will continue its proactive role in promoting the application of DLT/ blockchain technology in the banking sector for interbank payments, wholesale market payments, securities settlement, loans and credit rating and digital identity.
- Regional/international collaboration: further establishment of governmentto-government dialogue, closer cooperation among regulators, and investment and industry cooperation. In particular, there will be more promotion of reciprocal programmes with other fintech hubs to support the expansion of Hong Kong fintech start-ups into mainland China and overseas markets while start-ups in partnering fintech hubs will be encouraged to establish operations in Hong Kong.
- Funding: further strengthening private-sector venture capital funding for fintech start-ups with additional public funding to support local innovation and technology start-ups.

SPOTLIGHT ON CYBERSECURITY

What is the problem?

Cybersecurity, ie the prevention of online attacks where data or value are stolen or services are compromised, is a significant and increasing concern for countries across Asia Pacific and globally. It is clear that improved cybersecurity capability would advantage the region as a whole, with benefits reaching far beyond the financial sector. However, there are a number of challenges to effectively combating cybercrime.

One of the challenges in this area is that the motivations for cyber attacks vary widely, (from financial, to political, to individuals keen to show their talents or frustration) and so those perpetrating attacks, the targets and the type of attacks all therefore also vary significantly. As has been seen with the recent WanaCry ransomware campaign and "pump and dump" attacks on brokers in Hong Kong, cyber attacks do not respect borders and, as society increasingly moves online, the challenge will only become greater.

International initiatives

In terms of specific initiatives, there is limited international coordination and these vary from jurisdiction to jurisdiction. A number of countries in Asia Pacific have set up dedicated centres with detailed strategies or legislation, for example, the Australian Cyber Security Centre and the Cyberspace Administration and the newly-founded Cybersecurity Association in China. In other jurisdictions the approach is more piecemeal, with regulators or bodies developing individual policies that may vary between sectors or industries, for example in Hong Kong the HKMA's "Cybersecurity Assessment Framework" to make sure banks have consistent cybersecurity standards and the "Cyber Threat Intelligence Sharing Platform" being developed by Hong Kong's Applied Science and Technology Research Institute for Hong Kong Association of Banks.

How might the future look?

More consistent regulation and enforcement, with improved local and international coordination and cooperation across sectors will be key. Increasingly we expect that jurisdictions without dedicated cybersecurity centres will establish these.

INDIA

Fintech in India – a story of growth and innovation

India's fintech sector has seen exponential growth in the last few years. There is a robust payment and settlement system framework, which is broad enough to accommodate a diverse range of innovative fintech products and services. Regulators and government think-tanks are collaboratively working to shape policies on P2P lending, Bitcoin and other cashless mechanisms. Equipped with a large consumer base, the manpower to support the industry, and the efforts of wide-ranging stakeholders, including innovative start-up initiatives, attentive regulatory agencies and a growth-focused government, India has already become a promising fintech nation. In addition, demonetisation in the country has ushered in an unprecedented need for cashless payments and lending, creating new opportunities for investors.

Policy developments

• Committees

In July 2016, the Reserve Bank of India (RBI). India's central bank, set up an 'Inter-Regulatory Working Group on Fintech and Digital Banking', which, among other things, aims to align regulatory guidelines and statutory provisions. In February 2017, RBI set up an 'Inter-disciplinary Standing Committee on Cyber Security' to review the threats inherent in the existing/ emerging technology and suggest appropriate ways to strengthen cyber security and resilience. In April 2017, the Department of Economic Affairs, Ministry of Finance constituted an 'Inter-Disciplinary Committee to examine the framework of Virtual Currencies.'

Consultations

In July 2014, the Securities and Exchange Board of India (SEBI) published a consultation paper on equity crowdfunding. In April 2016, the RBI published a consultation paper on P2P lending. In January 2017, a public consultation was carried out and the 'Watal Committee' was constituted to review medium-term measures to promote the digital payment system in India. In April 2017, the Ministry of Electronics and Information Technology (MeitY), closed its consultation on draft rules for security of prepaid payment instruments, which are formulated under provisions of the Information Technology Act 2000.

• Regulatory structure

In the 2017 Budget speech two crucial proposals were mentioned in relation to fintech. The first one is the Computer Emergency Response Team for the Financial Sector (CERT-Fin) to curb hacking and secure online data. It is proposed that it will work in coordination with all financial sector regulators and other stakeholders. The second proposal is to create a Payments Regulatory Board under the aegis of the RBI by replacing the existing Board for Regulation and Supervision of Payment and Settlement Systems.

Designated fintech zones

State governments are also taking appropriate steps to strengthen fintech. They are creating state-of the-art infrastructure, improving skills and entering cooperation agreements. For example, in the state of Madhya Pradesh, the local government is developing Indore Fintech City and in the south of India, in the state of Andhra Pradesh, a Fintech Valley is being created.

Other developments

• P2P lending.

The aim of the RBI's consultation paper on P2P lending is to establish a framework for regulating technology-driven borrowing and lending transactions. We believe that the RBI will develop some definitive guidelines which will clarify various aspects such as minimum capital, permitted activity, governance requirements, fair practices code for customer dealing and data security.

• Pre-paid Payment Instruments (PPIs)

There is an existing regulatory framework for PPIs, but their growing use for purchasing goods and services, as well as funds transfers means the RBI needs to strengthen security, risk mitigation and customer protection measures. The RBI floated new draft PPI guidelines in March 2017.

• Payments banks and small banks

In November 2014, the RBI published the Guidelines for Licensing of Payments Banks. The aim is to create banking services for the unbanked population, and introduce efficient methods of electronic payment for consumers.

Robo advisers

SEBI issued a consultation paper in October 2016 that recommends bringing robo advisers within the purview of the SEBI (Investment Advisers) Regulations 2013. With growing interest in automation and an increasing number of players in the market, there are likely to be major opportunities in the sector.

• Virtual currencies

In April 2017, the Finance Ministry of India established an inter-disciplinary committee to examine the existing regulatory framework for virtual currencies such as Bitcoin. We are of the view that the recommendations/ report of the Committee will be compatible with prevailing global market practices.

Blockchain

In January 2017, the Institute for Development and Research in Banking Technology released a white paper on the use of blockchain in India's banking and finance sector. Various financial institutions including the Central Bank of India have indicated that they are keen to research and implement testing of blockchain technology.

Looking ahead

The fintech sector in India will continue to grow exponentially. We think that there will be enhanced regulatory certainty, that it will be easier to do fintech business, and that the government's and the RBI's initiatives will attract more entrepreneurs, investors and consumers in the future.

INDONESIA

Fintech – reaching the unbanked

With a population of more than 260 million spread across more than 900 islands, Indonesia needs to create an innovative financial system for people beyond the reach of conventional banking.

This creates huge potential for fintech companies in digital payments, mobile, P2P lending, digital commerce transactions, lending, personal finance and investment, comparison sites and equity crowd funding.

There has been rapid growth in the number of new fintech players in the Indonesian market during the last few years. The Indonesia Fintech Association identified approximately 120 fintech companies in the country at the end of 2016. Recognising the need for more clarity on the governing of fintech, Bank Indonesia (BI) and the Financial Services Authority (OJK) have issued regulations that allow the development of fintech in Indonesia but at the same time protect consumers' interests.

Bank Indonesia Fintech Office and regulatory sandbox

In November 2016, BI announced the launch of the Bank Indonesia Fintech Office (BI-FTO) to facilitate the development of fintech. The BI-FTO is tasked with:

- Facilitating the exchange of ideas on fintech development.
- Gathering and disseminating information on fintech developments through regular meetings with relevant ministries and international bodies.
- Assessing, monitoring and mapping the risks of fintech business models and products.

- Developing further policies.
- Helping to communicate regulatory policies to fintech developers and coordinating policies with other authorities to create a balanced legal framework.

The BI-FTO is also equipped with a regulatory sandbox in which eligible companies are able to test the viability of their concepts and products within a certain period before entering into a full licensing regime. The details of the sandbox rules still need to be developed further by BI, but the BI-FTO is an important step that shows commitment from the government to support the fintech industry.

BI regulation – operators of payment services processing

To strengthen the existing regulations in relation to fintech, particularly e-money and card-based payment system operators, in November 2016, BI issued a regulation regarding the organisation of payment transaction processing (BI Regulation). Based on the BI Regulation there are two main groups in payment services processing: The first is operators of payment-system processing (Payment Service Operators), which includes e-money operators, card-based payment system operators, switching operators, payment gateway companies and e-wallet companies. The second is payment-system supporting services (Payment Supporting Services), which includes providers of data centres, providers of disaster recovery centres, contactless technology providers and security feature providers.

The BI Regulation requires participants to be legally incorporated in Indonesia and imposes certain limitations by requiring participants to process transactions domestically, use the rupiah currency, and settle transactions through the national banking industry. A surprising element of the BI Regulation is the limitation on foreign investment (maximum 20%) in fintech companies operating as switching operators, principals, clearing operators and final settlement operators. This seems to be inconsistent with the current policy under which the government welcomes foreign investment and has relaxed foreign ownership restrictions in various other sectors. The foreign ownership limitation does not apply to issuers and acquirers of e-money and card-based payment instruments.

The BI Regulation provides that Payment Service Operators must obtain a licence from BI and requires them to apply consistent risk management and information system security standards and protect customer data.

OJK regulation – P2P lending

In December 2016, OJK issued a regulation on P2P lending services. The P2P Regulation provides that a P2P lending company must be registered and obtain a licence from OJK. To qualify for registration, the P2P lender must have paid-up capital of at least IDR 1 billion (approximately US\$75,000). It is required to increase its capital to IDR2.5 billion (approximately US\$188,500) upon application for the licence. A maximum lending limit of IDR2 billion (approximately US\$150,000) is set for each borrower. Foreigners are allowed to participate but the maximum foreign shareholding ownership of P2P lending companies is capped at 85%, which seems to be consistent with current requirements for other types of financing company. This provides an opportunity for foreign parties to control a P2P lender. Any change of ownership in the P2P lender is subject to OJK approval.

Looking ahead

These regulations demonstrate the government's acknowledgement of fintech's potential. However, these regulations are only the first steps in creating a more regulated fintech industry. There have been reports that OJK proposes to set up a fintech innovation hub where local fintech businesses can connect and collaborate in a broader regulatory sandbox.

Collaboration with other ministries is also essential in the development of fintech. For example, the mechanism to use a digital signature has been formulated under the current law and regulations on electronic transactions. As the next step, to validate the use of a digital signature in transactions, OJK has initiated a cooperation agreement with the Ministry of Communications and Information Technology to set up a certification authority in financial services.



ASIA PACIFIC FINTECH BRIDGES AND COOPERATION AGREEMENTS

Increasingly countries are recognising that international cooperation is crucial to help develop their domestic fintech market. The following agreements are currently in place in the countries covered in this overview.

Party/Country	Counterparty	Date	Description/Purpose
ASIC, Australia	SFC, Hong Kong	13 June 2017	Cooperation agreement which provides a framework for cooperation to support and understand financial innovation in each economy.
ASIC, Australia	Indonesia, Otoritas Jasa Keuangan (OJK)	21 April 2017	Cooperation agreement concerning information exchange on innovation in financial services, including technology updates, regulatory development and fintech innovation hubs.
ASIC, Australia	Ontario Securities Commission (OSC), Canada	2 November 2016	Cooperation agreement providing a framework for referrals, cooperation and sharing information to promote innovation in their respective markets.
ASIC, Australia	Capital Markets Authority of Kenya (CMA), Kenya	21 October 2016	Cooperation agreement aimed at promoting innovation in financial technology services.
ASIC, Australia	Singapore, MAS	16 June 2016	Innovation Functions Co-operation Agreement intended to help innovative businesses to grow and expand into their respective markets.
ASIC, Australia	Financial Conduct Authority (FCA), UK	23 March 2016	Agreement to support innovative businesses, which among other things is intended facilitate referrals and cooperation between their respective markets.
HKMA, Hong Kong	FCA, UK	7 December 2016	Cooperation Agreement providing a framework for referrals, cooperation and sharing information to promote innovation in their respective markets.
SFC, Hong Kong	FCA, UK	12 May 2017	Cooperation agreement providing a framework for referrals, cooperation and sharing information to promote innovation in their respective markets.
Government of Andhra Pradesh, India	MAS, Singapore	22 October 2016	Cooperation agreement to promote innovation in financial services in their respective markets.
Finance Minister, India	Chancellor of the Exchequer, UK	19 January 2016	Joint statement where India and the UK agree to work together on building commercial and regulator-to-regulator links that can underpin further fintech growth in both countries.
JFSA, Japan	MAS, Singapore	13 March 2017	Cooperation framework providing for referrals, cooperation and sharing information to promote innovation in their respective markets.

Party/Country	Counterparty	Date	Description/Purpose
JFSA, Japan	FCA, UK	9 March 2017	Exchange of letters on fintech cooperation framework providing for referrals, cooperation and sharing information to promote innovation in their respective markets.
Digital Economy Corporation (MDEC), Malaysia	UK Trade & Investment (UKTI),	2 June 2016	Memorandum of understanding to strengthen partnerships in the ICT sector and to jointly promote the adoption of digital economy solutions, including in relation to fintech.
PBOC, People's Republic of China	FCA, UK	11 November 2016	Cooperation agreement aimed at facilitating information sharing and promoting innovation in financial services.
MAS, Singapore	The Association of Supervisors of Banks of the Americas (ASBA)	9 June 2017	Memorandum of understanding which provides a framework for fintech cooperation between Singapore and ASBA member countries.
MAS, Singapore	International Finance Corporation (IFC) of the World Bank Group	23 May 2017	Memorandum of cooperation providing for establishment and development of the ASEAN Financial Innovation Network which aims to facilitate broader regional adoption of fintech innovation.
MAS, Singapore	Autorité de Contrôle Prudentiel et de Résolution (ACPR), Autorité des Marchés Financiers (AMF), France	27 March 2017	Cooperation agreement to share information about emerging fintech trends, potential joint innovation projects, and regulatory issues pertaining to innovative financial services.
MAS, Singapore	Abu Dhabi Global Market (ADGM)	8 March 2017	Cooperation agreement to foster closer cooperation on developments and initiatives that nurture fintech entrepreneurship and support innovation in financial services in their respective markets.
MAS, Singapore	Korean Financial Services Commission (KFSC)	24 October 2016	Cooperation agreement to foster greater cooperation and facilitate information sharing on fintech.
MAS, Singapore	Swiss Financial Market Supervisory Authority (FINMA)	12 September 2016	Cooperation agreement to foster greater cooperation and facilitate information sharing on fintech.
MAS, Singapore	UK Financial Conduct Authority (FCA)	11 May 2016	Fintech Bridge which included signing of a regulatory cooperation agreement, providing a framework for referrals, cooperation and information sharing between their respective markets.
Ministry of Trade & Industry, Singapore	Department of Commerce, United States	2 August 2016	Memorandum of understanding establishing a collaboration platform that will focus on opportunities in the infrastructure sector, including smart city solutions and the digital infrastructure supporting the fintech sector.



JAPAN

Catching up with the fintech revolution

Despite its strength in consumer technology, Japan lags behind other countries in the region when it comes to fintech. Strict financial regulation and low demand for innovative financial services from risk-averse consumers who are keener on cash than credit cards, means that the industry has been slow to take off. However, recent regulatory changes are expected to kickstart the sector.

Regulatory changes to facilitate innovation

An amendment to the Banking Act of Japan became effective in April 2017 and enables banks or bank holding companies to own more than 5 per cent. of a technology company. This frees up Japanese banks to enter into tie ups with fintech companies that are developing blockchain or robo advisory services, for example.

Virtual currencies

At the same time as the amendment to the Banking Act, a definition of "virtual currency" was added to the Payment Services Act of Japan. Previously, there was no definition of virtual currencies, like Bitcoin, under any Japanese law and it was uncertain how virtual currencies would be treated in the Japanese legal system. Now, however, virtual currencies are treated as a means of settlement, and registration is required to conduct virtual currencies exchange business, including the sale and purchase of virtual currencies and the exchange of one virtual currency for another.

Open API

The Financial Services Agency of Japan (JFSA) is also considering introducing a registration system for fintech companies that want to connect directly with banks' databases and computer systems by means of Open API. This would be achieved through further amendment to the Banking Act, and an amendment act has been enacted and will become effective in 2018.

Looking ahead

The JFSA is aggressively seeking to establish and introduce new mechanisms and regulations regarding IT and financial industry businesses. Following the amendment to the Banking Act, Japanese banks have started acquiring fintech subsidiaries. The JFSA plans to take further steps to "open" the banking system up to "third party" fintech venture businesses. The Japanese fintech industry looks set to be developed by existing financial industry players, including banks, as well as fintech venture disruptors. Fintech is currently considered one of the key areas for facilitating/ fostering new business in Japan and for stimulating economic growth.

Although the volume of banking business in Japan is huge, the Japanese banking industry - especially the traditional commercial banking sector - is not necessarily interconnected with global banking industries and systems. However, the transfer of funds in Japan is becoming increasingly borderless, and banking business looks set to become more international. This might be achieved partly through certain fund transfer systems using virtual currencies or blockchain technology, and some Japanese banks have started developing "new age" fund transfer systems of this nature

There are already several fintech disruptors in the Japanese financial markets. They are small but are growing. It is likely that overseas fintech service providers will enter the Japanese market once regulations are prepared and gateways to the Japanese banking systems are opened. Therefore, it seems the Japanese fintech market is ready to expand to the next level in the very near future.

MALAYSIA

An emerging sector meeting consumer demand

Fintech is an emerging industry in Malaysia. Over the past few years, it has received increasing attention and awareness from regulators, market players, and consumers. The presence of many fintech start-ups and support from the banking industry, coupled with demands from consumers for faster, cheaper, and more conveniently available financial services, has led to the development of fintech regulations by Malaysian regulators.

Creating a fintech-friendly environment

The various regulatory authorities in Malaysia have set up a number of initiatives to promote the fintech industry, including:

- The Alliance of FinTech Community or "aFINity@SC", was launched by the Securities Commission of Malaysia (SC) in September 2015. It serves as a hub for raising awareness, nurturing the fintech sector and providing policy and regulatory clarity to promote responsible financial innovation in this sector.
- The Financial Technology Enabler Group (FTEG), was set up by Malaysia's central bank – Bank Negara Malaysia (BNM) in June 2016. It comprises a cross-functionality group within BNM, which is responsible for the formulation and enhancement of regulatory policies to facilitate the adoption of technological innovations in the Malaysian financial services industry.
- The Fintech Association of Malaysia (FAOM), was established by the fintech community in Malaysia in November 2016. Its objective is to be a national platform to support Malaysia to become the leading hub for fintech innovation and investment in the region. The FAOM aims to be the voice of Malaysia's fintech community and to engage with industry players including regulators in policy making.

Equity crowdfunding and P2P lending regulations

In December 2015, the SC issued the Guidelines on Recognised Markets to, among others things, regulate equity crowdfunding platforms in Malaysia. The Guidelines were revised in April 2016 to take into account the operation of P2P financing platforms. The Guidelines require a platform operator to make an application to the SC to be a "registered market operator" in order to carry out its business in Malaysia.

To date, the SC has approved six registered market operators for equity crowdfunding platforms to provide services in Malaysia.

Regulatory sandbox

In October 2016, BNM issued the Financial Technology Regulatory Sandbox Framework to boost innovation in fintech. This provides regulatory flexibility to financial institutions and fintech companies in Malaysia to experiment with fintech solutions in a live, controlled environment for a limited time, subject to appropriate safeguards and supervision by BNM. After the testing period, BNM will consider whether to allow the participant to launch on a larger scale. If granted permission by BNM, participants will be assessed on applicable licensing, approval and registration criteria under the relevant legislation.

As at 29 May 2017, BNM has issued licences to four companies to operate within this sandbox. These companies are: GoBear Ltd and GetCover Sdn Bhd, which are financial advisors and insurance aggregator platforms, MoneyMatch Sdn Bhd, which offers remittance and money changing services, and WorldRemit Ltd, which is in the business of remittance services.

Looking ahead

The Governor of BNM has encouraged financial institutions in Malaysia to embrace the opportunities presented by fintech. Banks have entered into partnerships with fintech start-ups and various companies and have also set up their own fintech units. For example, in April 2017, Malaysia's second-largest financial group, CIMB, announced that it is setting up CIMB Fintech, a standalone unit to explore innovative banking solutions.

The Malaysian regulatory authorities have expressed their intention to enact specific legislation and guidelines to promote fintech growth in a more regulated and secure environment. The SC is planning to regulate the services of robo advisers, for example.

Fintech has opened up new opportunities in Malaysia to serve untapped markets such as the Islamic finance industry with Shariah-compliant products for the region, as well as the global market.



THE PEOPLE'S REPUBLIC OF CHINA

Balancing innovation with risk

With encouragement from policy-makers, China's fintech industry has boomed in recent years. China currently has more than 500 million internet finance users, which makes it the largest fintech market in the world. However, regulators are increasingly aware of the risks associated with these develoments.

Regulatory framework

Unlike other jurisdictions, China's fintech industry started with almost no regulation. The first overall policy supporting and guiding the development of fintech, 'The Guiding Opinions on Promoting Healthy Development of Internet Finance,' was released in July 2015 by the People's Bank of China (PBOC), the China Banking Regulatory Commission (CBRC), the China Insurance Regulatory Commission (CIRC), the China Securities Regulatory Commission (CSRC) and the Ministry of Industry and Information Technology (MIIT) together with other five government regulators. It sets forth the basic requirements for internet financial activities including P2P lending, internet/ mobile payments, equity crowdfunding, sales of funds through the internet, and internet insurance.

In April 2016, the State Council General Office published the 'Circular on the Implementation Plan of A Special Remediation Campaign Addressing Risks Associated with Internet Finance.' It intends to launch a nationwide campaign to deal with non-compliance in the internet finance sector and further implement the Guiding Opinions. To echo the Circular, detailed implementing rules have been enacted by the regulators in each sector.

In November 2016, the Standing Committee of the National People's Congress promulgated the PRC Cyber-security Law, which will take effect on 1 June 2017. This sets out statutory rules for constructing, operating, maintaining and using networks, cyber security monitoring and administration as well as network data protections that are applicable to all network operators. Detailed implementing rules under various aspects covered by the Cyber-security Law will be introduced and may have a material impact on China's fintech industry.

These policies and regulations demonstrate that the Chinese government's focus has gradually shifted from encouraging innovation and development in fintech to enhancing supervision and risk control. As a result, there is no regulatory sandbox.

Under China's regulatory regime, fintech service providers need to be licensed as internet content providers (ICPs). However, due to foreign investment restrictions in the sector, it is difficult for a foreign fintech firm to explore opportunities in the China market without a local partner.

Internet payments

Internet payments via non-banking institutions are now widely used all over China through WeChat wallet and Alipay. In December 2015, PBOC issued the 'Administrative Measures for Internet Payment Services of Non-banking Payment Institutions.' The Administrative Measures laid down a comprehensive regulatory framework for internet payment services (including detailed requirements on client management, business parameters, risk control and customer protection of licensed non-banking payment institutions), and introduced three categories of payment accounts and the requirement for a real-name management system. In April 2016, PBOC, together with other relevant governmental and judicial regulators, jointly issued the 'Implementing Proposals for the Special Rectification of Non-banking Payment Institution Risks,' following which we have seen implementing regulations and rules on the custody and supervision of payment reserve money as well as regulatory actions to crack down on the provision of unlicensed or illegal payment services.

P2P lending

In order to strengthen the administration of online P2P lending platforms and crack down on illegal fundraising, CBRC, MIIT, the Ministry of Public Security and the Cyberspace Administration of China jointly issued the 'Interim Administrative Measures on the Business of Online Lending Information Intermediaries.' in August 2016. According to the Interim Administrative Measures, P2P lending is defined as direct borrowing and lending between natural persons, legal persons and other organisations through a P2P platform, while P2P platforms are clarified to be pure information intermediaries for matching P2P lenders and borrowers. A P2P platform is required to make filings with the relevant local financial supervisory authorities. Furthermore. P2P platforms are required to comply with strict information disclosure obligations and are prohibited, among other things, from: financing the platform operator itself or its affiliates, through the platform; directly or indirectly accepting or pooling funds from lenders; providing security to, or promising principal or interest in return for, lenders; and extending loans, issuing financial products, or providing intermediary services for the purpose of financing investment in stocks, futures and derivatives.

Blockchain

The Chinese government has shown an increasing interest in blockchain technology. MIIT has issued the 'China Blockchain Technology and Application Development White Paper,' and organised a government-industry working group to present a plan for promoting the development and adoption of blockchain technology. In particular, PBOC has noted that the potential applications of blockchain technology are not only dealing in virtual currencies or commodities but also allowing information to be transferred and updated by network participants. Also mentioned is the fact that while the value of blockchain technology is materialising, blockchain technology is also giving rise to new legal and regulatory issues in the financial industry, which financial regulators need to have a thorough understanding of before its use becomes more widespread in China.

PBOC Fintech Committee

In May 2017, PBOC established a fintech committee to organise "in-depth research into the influence of fintech development on areas including monetary policy, financial markets, stability and payment clearance". The committee is also tasked with strengthening the implementation of regtech.

Looking ahead

Huge market demand as well as the new policies, regulations and rules, means that China's fintech industry will continue to thrive in a favourable environment but with increased oversight.

Having experienced the fintech industry's unsupervised savage growth stage (including several scandals, such as the P2P lender Ezubao, which fraudulently took US\$7.6 billion from 900,000 lenders), Chinese regulators are determined to rectify non-compliance in the market and to create a more orderly environment for its development. Supervision and risk control will be a focus for China's fintech development in 2017.

SPOTLIGHT ON ANTI-MONEY LAUNDERING (AML) CONCERNS AND DIGITAL ID

Checking the identity of customers and ensuring client relationships remain in compliance with the regulatory framework is a significant and increasing burden to financial institutions. While technology is facilitating the development of many new products in the market which claim to ease this burden for institutions, there is potentially a more central solution to this: comprehensive online databases maintained by the public sector containing relevant ID information for public and private transactions. While online repositories already commonly exist for information in the public domain such as company registers, use of a secure online repository which financial institutions and regulators would refer to authorise transactions is more novel.

Governments globally have been experimenting in this area. In India, the Aadhaar system is a significant biometric ID platform for individuals under which more than 1 billion digital identity numbers have been allocated to Indian citizens. In Singapore, the MAS piloted in Q1 2017 a national know-your-customer (KYC) utility for financial services, jointly developed by the Ministry of Finance and GovTech. This utility is based on an existing government digital identity service for individuals in Singapore, MyInfo.

Hong Kong's FSDC is proposing to go even further in its May 2017 "The Future of Fintech in Hong Kong" report, with a full digital ID utility that would cover both individuals and corporates. Each participant would have a digital profile comprising identity, preferences and transaction history, which, once established, would be updated by the participants.

Clearly, across all jurisdictions there is some way to go before such a system could be utilised across all types of transaction. It will be crucial that the underlying technology (which may be DLT in some cases) is perfected and that all regulatory authorities are brought on board, given that in many cases such a system would require changes to existing regulatory frameworks. Clearly security and data privacy concerns will also be paramount in the development of any such system.

PHILIPPINES

With 47.7 million active internet users. an average of 30 million smartphone users, and a projected 70 per cent. smartphone adoption rate by the end of 2017, the Philippines is a growing market for domestic and international fintech companies. While the largest chunk of technology-enabled transactions in the Philippines consists of electronic payments for government transactions, the Bangko Sentral ng Pilipinas (BSP), the Philippines' central monetary authority, reports continued growth in the use of internet and mobile platforms among the entities it regulates for prepaid mobile phone services, paying bills, sending money, making donations, shopping online, and purchasing goods in stores.

Regulation and E-money

Fintech regulation in the Philippines began with the BSP regulating the use of electronic money in 2009. "E-money" is defined as monetary value represented by a claim on its issuer (which may be a bank, non-bank financial institution or any other non-bank entity) that is electronically stored in an instrument or device, issued against the receipt of funds in an amount not less than the monetary value issued, accepted as a means of payment by persons or entities other than the issuer, withdrawable in cash or cash equivalent, and issued as approved by the BSP.

Under the E-money regulations, banks, non-bank financial institutions and any other non-bank entity are required to secure prior BSP approval as an electronic money issuer (EMI), and secure a remittance licence from the BSP before issuing E-money. If the EMI is not a bank and intends to engage in lending, it must also secure a quasi-banking licence from the BSP.

Under current regulations, E-money may only be redeemed at face value and may not earn interest, and is therefore not deemed to be a deposit. E-money issuers are required to have a minimum paid-up capital of approximately US\$2 million and are generally subject to a monthly load limit of approximately US\$2,000. They are compelled to maintain sufficient liquid assets equivalent to the amount of E-money issued which may not be invested in instruments other than in bank deposits, government securities, and other low risk liquid assets as the BSP may allow.

E-money issuers are also required to comply with a stringent list of requirements as a precondition to the issuance of an E-money license. These include: a sophisticated and accurate record keeping system; anti-money laundering safeguards; acceptable redress mechanisms for customers; sound and prudent management, administrative, and accounting procedures and adequate internal control mechanisms; properly designed computer systems thoroughly tested to the BSP's satisfaction; appropriate security policies and measures to safeguard the integrity, authenticity, and confidentiality of data and operating processes; adequate business continuity and disaster plans; and effective audit functions.

E-money issuers are also subject to periodic reporting obligations and are required to seek BSP approval before implementing any change or enhancement to their systems (eg additional capabilities or change in technology service providers).

The E-money regulations also govern the provision of e-wallets and cash cards. In mid 2016, 58 companies provided e-wallets and 29 companies provided cash cards in the Philippines.

Virtual currency

E-money regulations exclude virtual currencies. The BSP has noted the unchecked proliferation of Bitcoin-based payment services such as Coins.ph and the mobile phone app Abra and estimates that virtual currency-based payments and remittance transactions are worth US\$ 5-6 million per month to major players.

In February 2017, the BSP issued Guidelines for Virtual Currency Exchanges in a bid to regulate the conversion or exchange of the Philippine Peso to virtual currencies and vice versa. Noting that its obligation to encourage financial innovation is balanced by its duty to combat money laundering and terrorist financing and to ensure consumer protection and financial stability, the BSP gave virtual currency exchanges an opportunity to legitimise their operations by registering with the BSP as a remittance company. In doing so, however, the BSP cautiously declared that it does not intend to endorse any virtual currency such as Bitcoin "since it is neither issued or guaranteed by a central bank nor backed by any commodity." It also clarified that it did not intend to regulate the issuance of virtual currencies per se, which would be impracticable.

As remittance companies, virtual currency exchanges are required to comply with registration, minimum capital, internal controls, and regulatory reports and compliance with the anti-money laundering laws and regulations. In addition, virtual currency exchanges are required to adopt adequate risk management and security control mechanisms to address technology risks just like E-money issuers. However, unlike E-money issuers, virtual currency exchanges are not required to demonstrate, and have approved, their record keeping systems; redress mechanisms; management, administrative and accounting procedures; computer

systems; business continuity and disaster plans; and audit functions. This has led to some criticism that, while the BSP admits it is not keen on the use of virtual currencies, it is effectively stricter on E-money than on virtual currencies.

Regulatory sandbox

In June 2016, the BSP acknowledged that fintech helps financial inclusion – one of the government's main economic aims. The BSP announced that it was adopting a regulatory sandbox approach to new technology and emphasised the need to keep regulation proportionate to prevent it from stifling innovation. The BSP has stated that crowdfunding platforms and safely managed digital currencies could soon be part of mainstream financial solutions. However, the procedure for using the BSP's regulatory sandbox has not yet been clarified.

In February 2017, the BSP announced that it would soon issue an E-know your client circular. It cited as an example geocoding, where fintech innovations would make it impracticable to conduct a conventional know your client check.

SINGAPORE

Creating a Smart Financial Centre

In line with Singapore's national Smart Nation agenda, the Monetary Authority of Singapore (MAS) has set its sights on making Singapore a Smart Financial Centre where technology is used "to increase efficiency, create opportunities, allow for better management of risks, and improve lives". The MAS has stated that Fintech is key to establishing a Smart Financial Centre and has introduced a number of initiatives and adopted a regulatory approach to encourage innovation.

Structural changes

In August 2015, the MAS launched the Fintech & Innovation Group to lead its Smart Financial Centre initiatives. In March 2017, the MAS then created the Data Analytics Group to harness the power of data analytics, enhance its supervision of financial institutions, make regulatory compliance more efficient and improve work efficiency across the organisation.

Apart from these institutional changes, in May 2016 the MAS launched a Fintech Office with the National Research Foundation to serve as a one-stop virtual entity for all fintech related matters and to promote Singapore as a fintech hub. The MAS has committed S\$225 million over a five year period to support innovation.

Regulatory sandbox

The MAS actively encourages fintech experimentation so that innovations can be tested within a well-defined market and time period. This provides a greater chance for adoption, while retaining appropriate safeguards to maintain the overall safety and soundness of the financial system. Any interested company – and not just financial institutions – can apply to enter the Fintech Regulatory Sandbox to test the viability of its proposed financial products, services and/or processes while being subject to a reduced regulatory burden.

The MAS, in its guidelines published in November 2016, expressed that the sandbox may not be suitable for financial products, services and/or processes similar to those already being offered in Singapore (unless a different technology is being applied, or the same technology is being applied differently), and may not be suitable if the applicant has not demonstrated that it has undertaken its due diligence prior to submitting its application. In addition, an applicant should ensure that the objective, principles and evaluation criteria specified in the guidelines are satisfied before submitting an application.

The MAS can take up to 21 working days (from when it receives all of the necessary information) to determine if an applicant is potentially suitable for the sandbox. If the applicant is assessed as potentially suitable, it will undergo further assessment before approval is granted. If an application is approved, the company will proceed to the testing stage. If the company requires an extension of the sandbox period, it should apply at least a month before the expiration of the sandbox period. Approval will be granted by the MAS on a case-by-case basis.

Payments reform

In August 2016, the MAS published a consultation paper proposing a consolidated activity-based payments regulatory framework, as well as the establishment of a National Payments Council. The proposed amendments to the regulatory framework would bring the existing regulatory regimes governing, amongst other things, payment systems, stored value facilities, and remittance businesses, under a single framework. Fintech companies would then only be required to apply for a single licence to undertake one or more payment activities.

As payment systems and services continue to evolve, this approach would address the historical issue of entities potentially being regulated under more than one regulatory regime, and allow the MAS to regulate in a more targeted way. Although the MAS has yet to publish its responses to this consultation paper, it has stated that further consultation exercises will be conducted to seek feedback on the specific draft legislation and policies required to implement the proposals.

Fund raising

To support "next-generation Asian growth companies", the MAS has proposed various initiatives to make funding more accessible.



In the crowdfunding space, the MAS has proposed steps to make it easier for start-ups and small and medium enterprises (SMEs) to access equity or securities-based crowdfunding (SCF). SCF could give rise to prospectus requirements and licensing requirements for SCF platforms, unless an exemption is available. In this connection, the MAS will simplify the pre-qualification checks for investors accessing SCF offers (where the SCF platform facilitates SCF offers to such investors under the small offers exemption). The MAS will also reduce the financial requirements for SCF platforms servicing accredited and institutional investors, which will allow these platforms to apply for a licence more easily. In addition, the MAS has published new guidance to SCF platform operators on the parameters within which they can publicise their platforms and services, as well as FAQs on lending-based crowdfunding.

In its consultation paper published in February 2017, the MAS has proposed a simplified authorisation and regulatory regime for venture capital fund managers that satisfy prescribed criteria. This differentiates venture capital fund managers from other types of fund managers and reflects the MAS's assessment that they pose a lower risk.

Other measures proposed by the MAS include: strengthening the role of finance companies as active providers of SME finance by adjusting the regulations that apply to them; studying the introduction of Dual Class Share structures which could potentially support the growth of high-tech companies; working with industry players to study successful private market financing platforms in other financial centres; and engaging with potential platform operators with the aim of introducing such solutions in Singapore.

Looking ahead

Deputy Prime Minister and Chairman of the MAS, Tharman Shanmugaratnam, says Singapore's aim is to create a fintech ecosystem where innovation thrives. This comprises the innovation centres of financial institutions, the growing fintech start-up scene, institutes of research and higher learning, investors, and connectivity to regional markets. As of November 2016, Singapore is home to more than 300 fintech start-ups and more than 20 global banks and insurance companies have set up innovation labs and research centres in Singapore.

At a global level, the MAS has entered into a growing network of fintech co-operation agreements and partnerships with regulators in other jurisdictions, including the Financial Conduct Authority (FCA), the Australian Securities and Investments Commission (ASIC), the Swiss Financial Market Supervisory Authority (FINMA), the Financial Services Agency (FSA) of Japan, the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and the Autorité des Marchés Financiers (AMF) of France. In March 2017, MAS approved the first entity into the regulatory sandbox and we expect further applications to be approved in due course.

Singapore's fintech sector is complemented by growing developments in insurtech, regtech, lawtech and healthtech. This is increasing the technology talent pool, attracting investors and supporting Singapore's wider technology sector. The commodities and oil and gas industries have also shown interest in the potential of distributed ledger or blockchain technology for trading activities and trade financing products.

However, it remains unclear how Singapore's drive for innovation will sit alongside increasing enforcement activity by MAS around anti-money laundering (AML) and know-your-client. The increasing role of "shadow infrastructure" or unregulated businesses in providing various services to regulated entities may prompt additional regulatory scrutiny.

Despite the rapid pace of change and the risks posed by emerging technologies, the MAS acknowledges the need for smart regulation – that promotes innovation while safeguarding public confidence and financial stability – and has adopted a proportional approach to the introduction of regulations. We expect a number of developments on both the technology and regulatory front in the near future.

THAILAND

Introducing the age of digitisation

Thai interest in fintech has increased significantly in the past two years in both the public and private sectors, driven by the government's new national economic model, "Thailand 4.0." Introduced in a bid to transform Thailand into a digital economy, it promotes creativity and innovation in sectors such as agriculture, biotech, embedded technology, robotics, digital, and high-value services.

Structure changes

In September 2016, the Ministry of Information and Communication Technology was dissolved and replaced with the Ministry of Digital Economy and Society. This is expected to lead to policies which will provide a more favourable environment for the fintech sector, especially for non-banks, start-ups and SMEs. Despite the creation of the new ministry, the main regulators bringing about the legal framework for fintech developments are the Bank of Thailand (BOT), the Office of the Securities and Exchange Commission (SEC) and the Office of Insurance Commission (OIC). The SEC will oversee firms engaged in the capital markets, whilst the BOT and the OIC will oversee players in the banking sector and insurance sector, respectively.

Regulatory sandbox

In February 2017, the SEC launched a regulatory sandbox. This allows participating companies to experiment with financial products or services for a period of up to one year without having to comply with the usual licensing requirements applicable to investment advisory, private fund management and derivatives brokerage, dealing and advisory businesses. To be eligible, applicants (which may be banks, non-banks or fintech firms operating in Thailand) must prove, amongst other things, that they plan to offer 'innovative financial services' which would benefit the Thai capital markets. They must also have sufficient capital,

operating systems and personnel to provide the relevant products or services, as well as a clear exit strategy once the period of the regulatory sandbox ends. Participating companies will be required to submit progress reports to the SEC on their testing. If the products or services tested are proven to be successful, the SEC will consider adjusting its regulations to allow these companies to obtain a licence to conduct the relevant business. To date, no firm has applied for such a licence.

The BOT and OIC have also launched their own regulatory sandbox initiatives. The BOT has created a regulatory sandbox allowing banks, non-banks, fintech firms and technology firms incorporated in Thailand to test innovative lending and payment service products. The time limit will be approved by the BOT on a case-by-case basis. Many companies have submitted applications to participate, but no approval has yet been granted by the BOT. The guidelines and application requirements for the insurance regulatory sandbox have recently been issued by the OIC. Companies that are eligible to participate in the insurance regulatory sandbox include insurance companies, insurance brokers, fintech firms and technology firms incorporated in Thailand. Participating companies will be allowed to test innovative insurance products (such as insurance products that are not yet available in Thailand, smart contracts and automated claim processes) for a period of up to one year, unless extended by the OIC.

Crowdfunding

Since 2015, it has been possible for start-ups and SMEs to raise capital through an equity crowdfunding portal approved by the SEC. The SEC recognises that the provision of this type of funding must be simple, cost-effective and expeditious. The regulatory requirements for equity crowdfunding are not as strict as those for normal IPO capital raisings, and equity crowdfunding which meets the SEC's requirements is exempted from the filing and prospectus requirements. There



is no limit either on how much institutional investors may contribute or how much capital could be raised by an issuer from institutional investors. However, for retail investors, the SEC requires that the amount of capital that can be raised by an issuer must not exceed Baht 20 million in the first 12 months and not more than Baht 40 million in aggregate. Investments made by retail investors are also limited to Baht 50,000 per enterprise and Baht 500,000 annually.

Payment reform

The Draft Payment System Act (Draft Payment Act), which aims to streamline the regulations governing payment systems and payment services as well as to empower the BOT to supervise the operation of payment systems and payment services in Thailand, was approved by the Thai Cabinet in December 2015. It was finally proposed to the National Legislative Assembly (NLA) for consideration in March 2017. However, there is no clear timeline as to when this new law will be approved by the NLA for enactment.

Under the Draft Payment Act, the BOT has a duty to supervise the Essential Payment System (defined as a fundamental payment system which has the capability for highvalue money transfers). The BOT also has the authority to issue regulations to govern the Essential Payment System, including those concerning the operation of systems, validity of money transfers and risk management. Significantly, the unwinding of fraudulent transactions under the Civil and Commercial Code and the laws on bankruptcy do not affect the validity of the Essential Payment System's operations under the Draft Payment Act. In addition, the Draft Payment Act empowers the BOT to indicate types of payment systems or payment services (including credit card, ATM, and electronic money transfers) which will be regulated by the BOT. The BOT may issue regulations to govern payment systems or payment services in relation to, for example, the financial status of the operator, standard of

business operation, information disclosure, outsourcing or system security.

P2P lending

In October 2016, the BOT issued a consultation paper on the provision of a P2P lending platform with the aim of enacting the new regulations within 2017. The P2P lending platform will allow the direct matching of lenders and borrowers via an online platform operated by alicensed intermediary.

The BOT hopes that the new lending system will provide greater financial access for Thai customers as well as allow nonbank operators to engage in lending at a lower cost. However, this new lending system will need to be carefully supervised. The reliability of the operator and its operating system, as well as data protection, are the main concerns. Specific regulations on data protection will need to be imposed by the BOT on P2P operators, as currently Thailand does not have generic data privacy law which governs private data transfer or sharing by unregulated business operators.

Looking ahead

Whilst the government is keen to encourage the fintech sector in Thailand, it is too soon to judge whether these legal developments and government initiatives will fulfil the objective of promoting Thailand as a fintech hub. There remain many regulatory challenges for the government and fintech operators to overcome. So far, the level of participation by financial institutions and fintech start-ups is low, given that the new experiments require high capital investment, special expertise and sophisticated technology.

Although regulators are trying to reduce the legal barriers for fintech operators, there are still concerns regarding investments by foreigners in fintech and other related businesses in Thailand. The Foreign Business Act contains certain prohibitions preventing foreign individuals, foreign entities and foreign majority-owned Thai entities from carrying on certain restricted businesses, unless a foreign business licence is obtained from the Ministry of Commerce or a specific exemption applies (such as an investment promotion). The range of restricted businesses include, amongst others, wholesaling, retailing and most types of service businesses. Without a specific exemption, fintech will fall under the ambit of service business, which is restricted for foreigners.

As a result, companies with 50 per cent or more of their share capital held by foreigners will not be allowed to engage in a fintech business, unless a foreign business licence is obtained. Unfortunately, these licences are granted on a case-by-case basis, and the application process is lengthy. This is a major hurdle for the development of fintech in Thailand, as advanced technology and knowledge-sharing from overseas would significantly assist development of the industry. However, there is a channel which foreign companies may use if they wish to operate in Thailand. The Board of Investment of Thailand (BOI) has specified a fintech business as one of the businesses it promotes. Any business activity which is recognised by specific authorities (eg the SEC or the BOT) as a fintech business will likely be regarded as a fintech business under the BOI's requirements. If BOI promotion is granted, a business operator will then be allowed to be majority owned by foreigners. It remains to be seen how frequently this route will be taken.

Clifford Chance has also produced an overview and an in-depth report on the regulation of fintech products in Europe. For further information or to request a copy please contact fintech@cliffordchance.com

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