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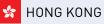
Regulatory environment for innovation

Relevant regulators in the region:

Although fintech and insurtech are not terminologies recognized by the Chinese government or used in published laws and regulations, according to the Guidelines on the Promotion of the Healthy Development of Internet Finance (FinTech Guidelines) issued on 18 July 2015, which is considered to be the first comprehensive regulation concerning regulation of fintech in China, the division of responsibilities between financial regulators is as follows:

- People's Bank of China is responsible for the regulation and supervision of Internet payment services
- China Securities Regulatory Commission is responsible for the regulation and supervision of (i) Internet lending services and (ii) Internet trust and Internet consumer finance
- China Securities Regulatory Commission is responsible for the regulation and supervision of (i) equity crowdfunding activities and (ii) Internet fund sales
- China Insurance Regulatory Commission is responsible for the regulation and supervision of Internet insurance services

In addition to these financial regulators, the Ministry of Industry and Information Technology (MIIT) is responsible for the regulation and supervision of telecommunications-related businesses involved in the provision of fintech/insurtech.



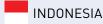
The Office of the Commissioner of Insurance (OCI) is Hong Kong's insurance regulator overseeing the financial conditions and operations of authorized insurers. There are also three self-regulatory bodies overseeing the activities of insurance intermediaries, namely (in relation to insurance agents and agencies) the Hong Kong Federation of Insurers (HKFI); (in relation to insurance brokers) the Hong Kong Confederation of Insurance Brokers (HKCIB) and Professional Insurance Brokers Association (PIBA). If the fintech/insurtech activities involve moneylending, the regulator is the Registry of Money Lenders, whose function is performed by the Registrar of Companies.

The Hong Kong Monetary Authority (HKMA) is the banking regulator overseeing institutions such as banks and deposit-taking companies. The Securities and Futures Commission (SFC) is the regulator regulating intermediaries such as brokers, investment advisers and fund managers in the securities and futures sectors. The SFC also regulates certain investment products and other listing matters.

The Office of the Privacy Commissioner for Personal Data (PCPD) is the regulator overseeing data privacy matters and enforcing the Personal Data (Privacy) Ordinance (Cap. 486).

The Communications Authority is the body regulating Hong Kong's broadcasting and telecommunications industries.

The Intellectual Property Department (IPD) is the government department that administers the intellectual property regime.



Prior to 1 January 2012, the Ministry of Finance was authorized to supervise and regulate the insurance industry through the Insurance Agency, and the Indonesian Capital Markets and Financial Institutions Supervisory Agency (Bapepam-LK) was authorized to supervise and regulate the capital markets. Prior to 31 December 2013, Bank Indonesia was authorized to supervise and regulate the banking sector.

On 22 November 2011, the government enacted Law No. 21 of 2011 on Financial Services Authority (OJK Law). The OJK Law established the Financial Services Authority (Otoritas Jasa Keuangan) (OJK), as an independent institution. With the enactment of the OJK Law, the authorities of the Ministry of Finance, Bank Indonesia and Bapepam-LK were transferred to the OJK. However, Bank Indonesia is still authorized to determine monetary policies and still focuses on the macro-prudential aspects of the banking sector.

The main function of the OJK is to organize an integrated regulatory and supervisory system with authority over all activities in the financial services sector. More specifically, the OJK regulates and supervises financial service activities in the banking sector, the capital market sector and the insurance, pension fund, financing and other financial services sectors.



Regulatory environment for innovation:

a Relevant regulators in the region (cont.):

JAPAN	The main regulator is the Financial Services Agency (FSA), which is in charge of the supervision of financial institutions, including insurance companies. Although the Ministry of Economy, Trade and Industry (METI) is not the regulator of the financial sector, it is very supportive of the introduction and promotion of fintech/
	insurtech-related businesses to the Japanese market and organizes study groups on fintech. See 1(d).
MALAYSIA	There are several regulators overseeing the financial services sector, and each such regulator would have oversight of their respective regulated institution. Specifically:
	Bank Negara Malaysia (i.e., the Central Bank of Malaysia) (BNM) would have regulatory oversight of fintech-related issues affecting the banking, insurance, money broking, financial advisory, payment systems and instruments, foreign exchange, money-changing and remittance services; and
	• the Securities Commission Malaysia (SC) would regulate fintech/insurtech activities affecting the capital markets and its participants.
	Given that fintech/insurtech involves technology and data, it is likely to also fall within the purview of:
	The Malaysian Communications and Multimedia Commission (MCMC), which regulates the communications and multimedia industry in Malaysia;
	• the Malaysian Personal Data Protection Department (PDPD), which administers the data protection regime; and
	• the Intellectual Property Corporation of Malaysia (MyIPO), which administers the intellectual property regime.
PHILIPPINES	The relevant regulators may be the Securities and Exchange Commission (with respect to financing companies), the Bangko Sentral ng Pilipinas (BSP) or the central bank of the Philippines (with respect to banks), and/or the Insurance Commission (with respect to insurance companies and insurance intermediaries).
	Other regulators may be the National Telecommunications Commission (NTC), the Office of Cybercrime (OCC), and the National Privacy Commission (NPC).
	The NTC implements the Public Telecommunications Policy Act of 1995, as amended (Telecoms Law). It also regulates and supervises the provision of publictelecommunications services, including value-added services in the telecommunications industry.
	The OCC under the Department of Justice coordinates the law enforcement efforts of the government against cybercrime and assists in the prosecution of cybercrimes. The OCC implements the Cybercrime Prevention Act of 2012 (Cybercrime Law).
	The NPC is the regulatory agency tasked to administer the Philippines' Data Privacy Act of 2012 (DPA).
	The Intellectual Property Office of the Philippines (IPOPHL) administers the intellectual property regime.
SINGAPORE	The Monetary Authority of Singapore (MAS) is Singapore's central bank and the integrated financial regulator supervising financial institutions in Singapore, including banks, insurance companies, capital markets intermediaries and other financial markets infrastructure. If the fintech/insurtech activities involve moneylending, the regulator is the Registrar of Moneylenders.
	The Infocomm Development Authority of Singapore (IDA) regulates the information and communications technology industry. The Media Development Authority of Singapore, which regulates content delivery across various platforms, will be merged with IDA in the second half of 2016 to create a new Info-Communications Media Development Authority of Singapore (IMDA). This new agency will be responsible for promoting and regulating a converged infocomm media sector and will also take over responsibility for personal data protection. The Personal Data Protection Commission currently regulates data protection in Singapore but will become part of the new IMDA in the second half of 2016.
	The Intellectual Property Office of Singapore (IPOS) administers the intellectual property regime.



Regulatory environment for innovation:

a Relevant regulators in the region (cont.):

TAIWAN	The Financial Supervisory Commission (FSC) is the competent authority responsible for development, supervision, regulation and examination of financial markets and financial service enterprises in Taiwan. There are four bureaus under the FSC:
	Banking Bureau
	Securities and Futures Bureau
	Insurance Bureau
	Financial Examination Bureau
	To develop fintech/insurtech in Taiwan, in September 2015, the FSC established the Financial Technology Office (as the coordinator among various bureaus) and the Financial Technology Advisory Committee (as consulting committee).
THAILAND	There are several regulators relevant to the operation of fintech/insurtech innovations in Thailand, depending on the operating entities and scope of business activities.
	Key regulators include the following:
	Ministry of Finance (MOF) – oversees the operation of financing, securities and credit financier business, and the business of financial institutions in Thailand.
	Bank of Thailand (BOT) – oversees business operation of commercial banks and other financial institutions, including finance companies, ranging from moneylending and currency exchange.
	• Securities and Exchange Commission (SEC) – regulator in charge of securities business, including public fundraising through capital market.
	• Ministry of Commerce (MOC) – oversees the general business operation of a company incorporated under the laws of Thailand, whether private, public or listed.
	Office of Insurance Commission (OIC) – in charge of business operation of insurance companies in Thailand.
	Electronic Transaction Commission under the Prime Minister – in charge of electronic transaction business conducted in Thailand.
★ VIETNAM	There is no single authority that has overall power to regulate fintech/insurtech in Vietnam. In fact, each authority may play a different role in regulating this area:
112110111	• State Bank of Vietnam (SBV) – Vietnam's central bank takes charge of banking activities (e.g., moneylending, payment and settlement systems, money exchange and remittance) and other banking and financial activities of credit institutions.
	Ministry of Planning and Investment (MPI) is responsible for regulating investment activities (e.g., equity crowdfunding platforms).
	Ministry of Information and Communications (MIC) is responsible for personal data privacy.
	• Ministry of Finance (MOF) is in charge of insurance business by insurers and insurance brokers, as well as securities companies and fund management companies.
	Ministry of Science and Technology (MOST) is responsible for the intellectual property regime.

CHINA	The following types of activities are currently regulated under the Fintech Guidelines: • internet payment • internet lending • internet insurance • equity crowdfunding • internet trust and Internet consumer finance
HONG KONG	Activities involving authorized insurers, insurance intermediaries and the insurance business may be regulated under the Insurance Companies Ordinance (Cap. 41), Securities and Futures Ordinance (Cap. 571) and their regulations and the relevant guidelines and codes issued by the OCI, the SFC, the HKFI, the CIB and PIBA. Authorized insurers seeking to commence or develop insurtech activities must ensure that any new activities comply with the foregoing (as applicable) and do not breach any existing license conditions.
	Payment and settlement systems (e.g., digital payments) may be regulated under the Payment Systems and Stored Value Facilities Ordinance (Cap. 584), which is administered by the HKMA. Money-changing and remittance businesses will be subject to the requirements of the Money Changers Ordinance (Cap. 34) and the Anti-Money Laundering and Counter-Terrorist Financing (Financial Institutions) Ordinance (Cap. 615).
	Virtual currencies (e.g., Bitcoin) are not specifically regulated under the Hong Kong regime; however, various financial regulators (e.g., HKMA) have reminded financial institutions and intermediaries to maintain an escalated level of vigilance in relation to the money-laundering and terrorist-financing risks associated with virtual commodities.
	Any insurtech activities involving offer of investments or securities (e.g., equity crowdfunding platforms), the dealing of securities, asset management, securities margin financing, leveraged foreign exchange trading, dealing in futures contracts, and other similar activities will potentially be regulated under the Securities and Futures Ordinance (Cap. 571) and the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32).
	Insurtech activities involving money lending may also be regulated under the Money Lenders Ordinance (Cap. 163).
	Separately, in relation to cryptography and data encryption products, they may be subject to strategic trade control under the Import and Export Ordinance (Cap. 60) and the Import and Export (Strategic Commodities) Regulations (Cap. 60G). It is possible that a license will need to be obtained for the import/export of such goods. The strategic trade control system in Hong Kong is made up of a licensing system administered by the Trade and Industry Department and an enforcement system under the purview of the Customs and Excise Department.

INDONESIA

In brief, there is no specific regulation in the insurance sector, banking sector and capital market sector that encourages such activities, which is a relatively new concept in Indonesia. However, businesses are developing digital financial service activities, such as setting e-insurance policies.

Although there is no specific fintech/insurtech regulation, the government is aware of technological developments and encourages fintech/insurtech activities. However, some regulations would need to be changed to ensure the ease of doing business. Current laws and regulations impacting on fintech/insurtech activities are stated in the following:

- Law No. 11 of 2008 on Electronic Information and Transactions (EIT Law) and its implementing regulation, Government Regulation No. 82 of 2012 on Implementation of Electronic Systems and Transactions (GR 82), which acknowledge electronic contracts such as e-policies. Under the EIT Law, "Electronic System Operator" is defined as any person, state entity, business entity and community that provides, manages and/or operates an Electronic System whether independently or collectively to an Electronic System user for its own use and/or another party's use. Based on the above definitions (which are broad in nature), any person or entity that manages and operates Electronic Systems (such as websites, applications, email, and messenger), and provides those systems to other parties, may be considered as an Electronic System Operator.
- OJK Regulation No.1/POJK.07/2013 on Protection for Consumers of Financial Services Sector (POJK 1) and OJK Circular Letter No.13/SEOJK.07/2014 on Standard Agreements, which specifically acknowledge policies in electronic form.
- GR 82, which requires all Electronic System Operators for "public service" to have their data center and disaster recovery center onshore by October 2017.
- Bank Indonesia Regulation No. 9/15/PBI/2007 (BI Regulation 9/2007) requires the data center and disaster recovery center for banks to be located onshore.
- Bank Indonesia Circular Letter No. 16/11/DKSP, dated 22 July on the Implementation of E-money Operations, regulates the provisions on electronic money. In addition, the OJK also has an unwritten policy that insurance companies must provide a hard copy of the insurance summary (ikhtisar pertanggungan) to the policyholders for any e-insurance policies with a term longer than three months.

JAPAN

Activities related to insurance business may be regulated under the Insurance Business Act and the relevant subordinated regulations and guidelines. The Act on the Protection of Personal Information (APPI) as well as the relevant subordinated regulations and guidelines is also highly relevant as many new insurance products and services related to fintech/insurtech are likely developed through personal information.

• Businesses related to payment, fund transfer, settlement and money lending are subject to the Banking Act, the Money Lending Business Act, the Act for Regulation, etc., of Receiving of Capital Subscription, Deposits, Interest on Deposits, etc., the Payment Services Act, the Installment Sales Act, the Foreign Exchange and Foreign Trade Act and the Act on Prevention of Transfer of Criminal Proceeds (Japanese primary regulations for KYC and AML) as well as their respective subordinate regulations.

Businesses related to investment advisory and investment management would be subject to the Financial Instruments and Exchange Act (FIEA) as well as the subordinate regulations.

Virtual currencies are not currently regulated. However, the FSA issued the draft amendments to the various financial regulations such as the Banking Act and the Money Lending Business Act as well as the amendments to the Payment Services Act with the aim of regulating virtual currency exchange businesses (collectively, Draft Amendments). The Draft Amendments were submitted to the Diet on 4 March 2016 and were passed on 25 May 2016.

The introduction of fintech/insurtech to Japanese financial market more or less seems to be at an early stage and a desirable regulatory framework on fintech/insurtech is still under study and discussion by the regulator and market players (please see 4 below). Further regulatory amendments with the aim of covering the cross-sectoral and cross-border development of fintech/insurtech may therefore be promoted and implemented.

MALAYSIA

Activities involving insurance, banking, money broking, financial advisory, payment systems and instruments and foreign exchange activities may be regulated by BNM under the Malaysian Financial Services Act 2013 (FSA), and its related regulations, directions, notices, guidelines and industry codes. Fintech/insurtech activities involving the money changing and remittance services may be regulated by BNM under the Malaysian Money Services Business Act 2011.

BNM had, in 2014, issued an announcement stating that Bitcoin (and likely, by extension, other virtual currencies) is not legal tender and that BNM does not regulate the operation/use of Bitcoin.

Any activities that relate to the dealing with derivatives, securities, fund management, advising on corporate finance, as well as providing investment advice and financial planning services may be regulated under the Malaysian Capital Market and Services Act 2007 (CMSA). The SC has issued guidelines regulating the crowdfunding sector (both equity and peer-to-peer). Note that financial exchange derivatives fall within the purview of BNM.

To the extent that the activities relate to cryptography and data encryption, the export of cryptographic/data encryption technology, the activities may be subject to regulation under the Malaysian Strategic Trade Act 2010.

PHILIPPINES

The BSP has yet to issue rules enumerating the specific types of fintech/insurtech activities subject to its regulations. Nevertheless, fintech/insurtech activities involving the following will be regulated by the BSP:

- quasi-banking functions. Trust, other fiduciary business and investment management activities
- foreign exchange transactions
- remittance/money transfer services
- · deposit substitute operations

- loans, investments, special credits
- treasury and money market operations, including derivative transactions, forward and swap transactions, and other financial instruments
- issuance and operations of electronic money
- issuance of bonds and other capital instruments

Furthermore, the use of information technology will be subject to the BSP Guidelines on Information Technology Risk Management for All Banks and Other BSP-Supervised Institutions.

Also, the buying, selling, or providing of insurance products and services online or via the Internet will be subject to the Guidelines on Electronic Commerce of Insurance Products issued by the Insurance Commissioner in 2014.

SINGAPORE

Activities involving insurers, insurance intermediaries and the insurance business may be regulated under the Insurance Act (Cap. 142), Financial Advisers Act (Cap. 110), and their attendant regulations, directions, notices, guidelines and industry codes (e.g., there are codes of conduct or guidelines under the auspices of the General Insurance Association (GIA) or the Life Insurance Association (LIA)). Regulated insurance companies seeking to commence or develop fintech/insurtech activities must ensure that any new activities comply with the foregoing (as applicable) and do not breach any existing license conditions. Going forward, such companies may be able to avail themselves of a regulatory sandbox to experiment with fintech solutions in the production environment but within a well-defined space and duration.

Payment and settlement systems (e.g., digital payments) may be regulated under the Payment Systems (Oversight) Act (Cap. 222A), its attendant regulations, directions, notices and guidelines. Money-changing and remittance businesses will be subject to the requirements of the Money-changing and Remittance Businesses Act (Cap. 187), its attendant regulations, directions, notices and guidelines.

In August 2016, the MAS issued a Consultation Paper on Proposed Activity-based Payments Framework and Establishment of a National Payments Council. This consultation proposes a payment framework that will supersede the Payment Systems (Oversight) Act (Cap. 222 A), and envisages regulation on an activity-basis to entities within the payments ecosystem to allow MAS to better address issues such as consumer protection, access, corporate governance, and other emerging risks such as cyber security, interoperability, technology, and money-laundering and terrorism financing.

Virtual currencies (e.g., Bitcoin) are not regulated; however, the MAS has announced that virtual currency intermediaries may be regulated for anti-money laundering and countering the financing of terrorism purposes.

Any activities involving all offers of investments of securities in Singapore (e.g., equity crowdfunding platforms), the dealing of securities, fund management, securities financing, custodial services for securities, leveraged foreign exchange trading, trading in futures contracts, among others, will potentially be regulated under the Securities and Futures Act (Cap. 289). Fintech activities involving moneylending may also be regulated under the Moneylenders Act (Cap. 188).

Separately, in relation to cryptography and data encryption, while Singapore does not have control on the import of cryptographic/data-encryption products or their use, the export of cryptographic/data-encryption products and technology listed in the Strategic Goods Control List of the Strategic Goods (Control) Order 2015, is controlled under the Strategic Goods (Control) Act (Cap. 300).

TAIWAN

Activities involving insurance companies, insurance agents or brokers and insurance businesses may be regulated under the Insurance Act, the Regulations Governing Insurance Agents, the Regulations Governing Insurance Brokers, relevant rulings and rules and guidelines promulgated by the Non-Life Insurance Association, the Life Insurance Agents Association and the Insurance Brokers Association.

Payment and settlement systems may be regulated under the Banking Act, the Act Governing Issuance of Electronic Stored Value Cards, the Act Governing Electronic Payment Institutions and relevant regulations and rulings.

Fund remittance businesses will be subject to the Banking Act, the Act Governing Electronic Payment Institutions and the Foreign Exchange Regulation Act.

Virtual currencies (e.g., Bitcoin) are not recognized by Taiwan governments. On 30 December 2013, the Central Bank of Taiwan issued a press release warning the risks of using Bitcoin.

Any activities involving investments of securities, the dealing of securities, fund management, trading in futures contracts, among others, will be regulated under the Securities Exchange Act, the Futures Trading Act and the Securities Investment Trust and Consulting Act.

THAILAND	Activities involving insurers, insurance intermediaries and the insurance business may be regulated under the Life Insurance Act B.E. 2535 (1992), as amended, and the Non-Life Insurance Act B.E. 2535 (1992), as amended, and subordinate legislation issued by the OIC.
	Regulated insurance companies seeking to commence or develop fintech/insurtech activities must ensure that any new activities comply with the foregoing (as applicable) and do not breach any existing license conditions.
	For financing-related activities, financial services in Thailand are a very heavily regulated sector. When offering fintech/insurtech products and services to the Thai market, the key questions that need to be answered are whether the business operator will be able to operate legally in Thailand and whether a license, registration or approval is required, such as a banking license, e-payment license, securities license, personal loan license, credit card business license, FX license, money transfer license, crowdfunding portal approval, etc.
	Securities-related business is also subject to licensing requirements by the SEC.
★ VIETNAM	There is no single comprehensive or specific law on fintech/insurtech, but depending on the areas involved, such activities may be governed by relevant existing laws.
VIETO IN	In principle, fintech/insurtech business must first observe the general regulations, such as the Civil Code, the Commercial Law, the Law on Enterprises, the Investment Law and other specialized regulations.
	Activities involving insurance business of insurers and insurance brokers in Vietnam may be governed by or regulated under the Law on Insurance Business and its implementing regulations.
	Activities involving credit institutions in relation to financial and banking services, including payment, money exchange, moneylending and remittance business may be subject to, among others, the Law on Credit Institutions and the Ordinance on Foreign Exchange Control and their specific implementing regulations.
	Activities involving securities companies and fund management companies may be governed by or regulated under the Securities Law and its specific implementing regulations.

What is the attitude and what are the policy views of the regulator in relation to insurtech (if any)? Is innovation encouraged?

CHINA	While there has been strong government and regulatory support for fintech/insurtech, Chinese regulators have become more and more cautious about the potential risks posed by these businesses and may impose stricter and broader regulation on various fintech/insurtech businesses.
	The significance of fintech/insurtech has been recognized and endorsed by the Chinese government. For example, the Fintech Guidelines provided strong policy direction for supporting and promoting the development and growth of fintech in China. Specifically, the Fintech Guidelines set out the following goals of the Chinese government:
	promoting innovation of fintech platforms, products and services
	encouraging cooperation between financial institutions and Internet companies
	improving access to capital for fintech firms through the promotion of venture capital, SME finance and public listings
	streamlining administrative approvals for fintech firms
	providing tax benefits for fintech/insurtech start-ups and fintech innovations
	encouraging the development of credit information infrastructure and supporting service systems for fintech/insurtech
	However, with more and more reported cases of fraudulent or problematic P2P lending platforms over the past few months, it has been reported that Chinese regulators are in the process of drafting new rules to tighten up the control over certain fintech/insurtech businesses such as Internet lending, Internet payment and Internet insurance businesses. It is estimated that many companies conducting Internet lending, Internet payment or Internet insurance businesses may be closed down or have their operating licenses revoked.
₩ HONG KONG	The regulators have been positive and encourage fintech/insurtech innovation in the following ways:
TIONO RONO	• Funding. The Hong Kong government has already made available an Enterprise Support Scheme under the Innovation and Technology Fund to encourage private sector investment in research and development activities. Funding up to HK\$10 million for each approved project would be provided on a matching basis, with no requirement for recoupment of the approved grant. Together with other similar funding schemes by the government, a pool of about HK\$5 billion is available for ventures and research projects in various technology areas including fintech/insurtech.
	• Support. The OCI, the HKMA and the SFC have set up dedicated fintech/insurtech platforms to help enhance communication between regulators and the fintech/insurtech community. Such platforms handle inquiries from the industry and provide information on related regulatory requirements to companies engaging in financial innovation. The platforms will also keep track of the latest development in the market through their exchange with the industry.
	• Policy views. The Hong Kong government has indicated that, in developing fintech/insurtech, it will uphold the "technology neutrality" principle and at the same time attach importance to investor protection. The government will help ensure that there is an appropriate balance between market innovation and investors' understanding and tolerance of risks. The government also indicated that the existing regulations are adequate to handle the challenges from the growing fintech/insurtech sector in Hong Kong.
	Developing expertise. The HKFI has recently set up a Task Force on Financial Technology Hub. It is exploring how to work with the government to promote innovation in the insurance industry, including attracting capital and talent.
INDONESIA	There is very minor regulatory support in fintech/insurtech activities. However, the government is aware of business development in the fintech/insurtech sector and encourages fintech/insurtech activities and has acknowledged that the regulatory framework needs to be updated.

What is the attitude and what are the policy views of the regulator in relation to insurtech (if any)? Is innovation encouraged? (cont.)

JAPAN

The Financial Administration Policy for 2015-2016 issued by the FSA in September 2015 (Financial Administration Policy) expressly states that the FSA will anticipate the trend of fintech/insurtech and will prepare the environment so that technological innovation can contribute to economic and financial development in Japan. Based on the Financial Administration Policy, the FSA established the Fintech Support Desk in December 2015 to serve as point of contact for consultation and information exchange on financial regulations regarding fintech. The FSA also established the Expert Panel on FinTech Venture in April 2016 to discuss desirable environment for development of fintech.

The METI has also held a series of meetings of Study Group on the Integration of Industry, Finance and IT (Study Group) since October 2015. The METI started to seek public comments on 11 agenda items identified relating to fintech on 21 April 2016 and the public comments period ended on 23 May 2016. The METI will put together the discussions held in the Study Group and the results of the public comments and will issue the final report in early summer of 2016.

- Since 1 July 2016, the METI has started to hold a series of meetings of Review Committee for Issues and Future Direction of FinTech (FinTech Review Committee).
- Although the METI planned to issue the final report of Study Group in early summer of 2016, the report was not issued within the summer of 2016. According to an officer of the METI, the METI will put together the discussions held in the FinTech Review Committee and will issue the final report around November 2016.

MALAYSIA MALAYSIA

The regulators have been positive and encourage fintech/insurtech innovation.

The SC has adopted a collaborative approach. In September 2015, the SC launched the aFINity@SC initiative (i.e., Alliance of FinTech Community) to create a network for fintech stakeholders to engage with the SC. More importantly, the SC intends to introduce policy and provide regulatory clarity for fintech/insurtech businesses through aFINity@SC. The SC also intends to work together with relevant fintech-related stakeholders, including innovators, entrepreneurs, established businesses, investors and other authorities, as part of a concerted effort to accelerate growth and innovation in the financial industry. The SC will function as the network organizer in pursuing key deliverables, which include (i) creating awareness and catalyzing development in fintech; (ii) forming hubs to organize and nurture a wider fintech/insurtech eco-system; and (iii) providing policy and regulatory clarity that is conducive for innovation.

In June 2016, BNM established the Financial Technology Enabler Group (FTEG), which is responsible for the regulatory framework to facilitate fintech in the Malaysian financial services industry. FTEG demonstrates BNM's commitment towards supporting fintech innovations for a progressive financial services sector. BNM has also shown awareness of fintech initiatives in the industry. For example, BNM recently issued a Discussion Paper on Regulatory Sandbox on 29 July 2016 setting out the key principles and its proposed approach in operationalizing a regulatory sandbox framework. This regulatory sandbox framework is intended to grant financial institutions (including insurers) and fintech companies certain regulatory flexibilities to experiment their fintech solution in a live environment, alongside appropriate safeguards for a limited period not exceeding 12 months. The initiatives by the FTEG will complement other initiatives by BNM, e.g., regulating the establishment and operations of the product aggregators in the insurance sector and launching the Market Development Fund framework to impose annual targets of point-of-sale terminals in Malaysia to be achieved by participating card organizations in collaboration with payment system operators.

PHILIPPINES

The BSP is known for encouraging innovations in financial services. As an example, with the advent of e-money in the Philippines, the BSP has established a new supervisory unit bringing together the skills of regulators from its information technology area as well as the banking supervisory area. Through this newly established supervisory unit, the BSP strengthened its regulatory capacity to oversee e-money issuers.

The BSP is closely monitoring the progression of fintech/insurtech in the Philippines and its impact on the local banking industry.

The IPOPHL fully supports technological innovation, including financial technologies. To this end, the IPOPHL has established a nationwide network of Innovation and Technology Support Offices, which assists local innovators in claiming and protecting their intellectual property rights.



What is the attitude and what are the policy views of the regulator in relation to insurtech (if any)? Is innovation encouraged? (cont.)

SINGAPORE

There is strong government and regulatory support. The development of the fintech/insurtech space is in line with Singapore's ambition to be a Smart Nation. The MAS seeks to create a Smart Financial Centre where technology is used pervasively in the financial industry to increase efficiency, create opportunities, allow for better management of risks, and improve lives. Fintech/insurtech, which involves using technology to devise new financial services and products, is a key ingredient in building a Smart Financial Centre. The regulators have been positive and encourage fintech/insurtech innovation in the following ways:

- Funding. There are currently various funding schemes for fintech/insurtech-related innovations. In particular, the MAS committed SG\$225 million to the Financial Sector Technology & Innovation scheme (FSTI), which is aimed at growing the fintech/insurtech ecosystem in Singapore over the next five years by funding the establishment of innovation labs, institutional-level projects, and industry-wide initiatives. Some FSTI-supported projects include a decentralized record-keeping system that prevents duplicate invoicing in trade finance, a cyber-risk test-bed and a natural catastrophe data analytics exchange.
- Support. The MAS together with the National Research Foundation will be setting up a FinTech Office to serve as a one-stop virtual entity for all fintech/insurtech matters and to promote Singapore as a fintech/insurtech hub. The new FinTech Office will assist with reviewing, aligning and enhancing these funding schemes across government agencies, identify gaps and propose strategies, policies, and schemes in industry infrastructure, talent development and manpower requirements, and business competitiveness and manage the branding and marketing of Singapore as a fintech/insurtech hub through fintech/insurtech events and initiatives.
- Policy views. Recognizing that innovation may be constrained by existing regulations, the MAS indicated that it does not expect financial institutions to seek MAS approval for all new digital products and services. Instead, they may proceed to launch such products without MAS approval provided that they are satisfied with their due diligence that no license or approval is required in relation to such products. In terms of the regulatory approach, the MAS will apply a materiality and proportionality test and ensure that regulation must not front-run innovation. To further this policy, the MAS, in June 2016, published a Consultation Paper on FinTech Regulatory Sandbox Guidelines, which seeks to encourage more fintech experimentation so that promising innovations can be tested in the market and have a chance for wider adoption, in Singapore and abroad.
- Developing expertise. The MAS has also set up the FinTech and Innovation Group within the MAS comprising three divisions (two of which would focus on the regulatory policies, whereas the third would focus on innovation and keep a lookout for opportunities to cooperate with the industry to test-bed innovative solutions). This would allow the MAS to ensure that rather than having its regulations play catch-up with innovation, the MAS would stay very much involved and engaged in innovation in order to better supervise and regulate.

TAIWAN

To engage fintech/insurtech innovation by the financial institutions, the FSC adopted the following policies:

- Allowing financial industry to invest in fintech/insurtech enterprises. The FSC has announced the relevant regulation, allowing banks and financial holding
 companies to invest in financial technology companies, including companies specializing in big data, cloud computing, biometrics, robo-adviser, among others,
 and to hold up to 100% of the equity shares of the companies. The FSC has allowed insurance companies, securities firms, securities investment trust enterprises
 (SITEs), securities investment consulting enterprises (SICEs) and domestic futures commission merchants, within certain limits, to invest in business-related or
 auxiliary to fintech/insurtech-related business.
- Promoting fintech/insurtech development:
 - (a) publishing of the Financial Technology Development Policy White Paper: To master the development of network and international trend of financial technology application, the FSC published the Financial Technology Development Policy White Paper in January 2015 as Taiwan's fintech blueprint revealing the international trend, the current domestic situation, policy goals and strategies.
 - (b) promoting the e-payment ratio multiplication 5-year plan: In order to enhance the efficiency of payment, save the cost of cash payment processing, stimulate economic growth through consumer spending, reduce the scale of the underground economy, increase financial transparency, reduce the circulation of false money, and lower the crime rate, the FSC is promoting the domestic e-payment. Through both government and private sector, and the combination of finance and technology, the ratio of e-payment will be doubled in the next five years, compared to recent 26% ratio.
 - (c) encouraging insurance companies to design innovation products by using big data, such as usage-based insurance.

What is the attitude and what are the policy views of the regulator in relation to insurtech (if any)? Is innovation encouraged? (cont.)

THAILAND

The regulators have been positive and encourage fintech/insurtech innovation in the following ways:

- Crowdfunding. The SEC has published a notification in relation to equity-based crowdfunding, effective 16 May 2015, which allows a qualified company to raise funds from the public by offering shares through an electronic platform provided by a funding portal approved by the SEC, subject to several requirements and restrictions. According to the SEC press release, the SEC is considering revising its notification to further facilitate the fintech innovation.
- Payment system law. A draft new payment system law, intended to reform and unify the laws in relation to payment systems in Thailand, was approved in principle by the Cabinet on 1 December 2015. According to the summary of the draft law as proposed to the Cabinet, this draft law involves the key payment systems important to the security of the financial system (and the payment finality concept) as well as the payment system under supervision (where new requirements may be introduced, e.g., protection of float money in case of the business operator's insolvency).
- National e-Payment Master Plan. The Cabinet approved the Master Plan in principle on 22 December 2015, showing the recognition and intention to drive the transformation of Thailand's payment system to full electronic payment infrastructure both in the government and private sectors. It is hoped that the Master Plan will bring about payment infrastructure development (e.g., any ID payment system), e-Tax system, e-payment system for social welfare, financial inclusion, and a cashless society, the environment in which fintech businesses will likely thrive.
- Others. It is also expected that there will be continued developments in other laws and regulations relevant to the operation of fintech/insurtech businesses such as anti-money laundering law, exchange control law, and data protection law.

★ VIETNAM

The Vietnamese government is aware of technological developments and it encourages fintech/insurtech activities. However, some laws and regulations would need to be adjusted or developed for fintech/insurtech activities. The authorities, such as the SBV and the MOF may take a conservative view in granting relevant approval and license.

- Developing corresponding legal framework for fintech activities in Vietnam. To keep up with the development of fintech in Vietnam, regulators have gradually improved and updated its legal framework, with consideration of developments of fintech/insurtech activities, including regulations on e-commerce activities and intermediary payment services. In relation to the insurance industry, under the recently issued new decree, the sale of insurance products "via electronic transactions" is added into the possible channels that local insurers can use for sale of insurance products. This is expected to provide a legal basis to recognize online distribution channel, and promote fintech activities, in the insurance market.
- Supporting and funding. Vietnamese authorities are aware of the rapid development of fintech/insurtech activities in Vietnam. For the first time in Vietnam, the MOST and the Government of Vietnam took the initiative of stimulating the growth of technology start-ups in Vietnam by launching the project "Silicon Valley Ecosystem in Vietnam." The project seeks to create an ecosystem of innovations and technology commercialization in Vietnam.

Nonetheless, insurance, banking and other financial services are sensitive areas that need to be regulated. Although some authorities remain rather supportive, the SBV and the MOF usually takes more conservative views toward technology development in the insurance, financial and banking sectors. For instance, the SBV specifically disallows all use of virtual currency as a payment method, including Bitcoin, in Vietnam.

Generally, the government encourages fintech/insurtech innovation in Vietnam. Yet, given that insurance, banking and finance are considered sensitive areas in Vietnam, the authorities such as the SBV and the MOF may take a conservative view in granting relevant approval and licenses.

Licenses required, criteria and process:

** CHINA

Depending on the specific activities involved, the following licensing and/or regulatory requirements may be triggered for:

- conducting an Internet banking business, a financial license is required.
- conducting Internet payment services, a payment business license is required.
- internet lending business: (i) Internet small-amount lending business is subject to the requirements of provincial-level finance office; (ii) for P2P online lending, the P2P online lending platform is required to serve as intermediary only and must choose a qualified banking financial institution as the capital depository institution for both the lenders and the borrowers.
- conducting equity crowdfunding business, registration and membership with the Securities Association of China is required.
- conducting Internet fund sales, a publicly raised fund sales payment and settlement institution license is required.
- conducting Internet insurance sales, an insurance license is required. However, for insurance sales through third-party platform, no license (other than the relevant telecommunication license or recordal) is required for the third-party platform.
- conducting Internet trust business or Internet consumer finance, a financial license is required.

In addition, the relevant telecommunication license or recordal is also required for operating the online platform for providing the relevant fintech/insurtech.

★ HONG KONG

The licenses required will depend on the specific activities contemplated. We recommend seeking advice of local counsel. In brief overview:

- Designated Retail Payment Systems. The HKMA does not operate a licensing system for RPS. However, for a RPS which is designated by the HKMA, the operator needs to ensure that (a) the operations of the system are conducted in a safe and efficient manner; (b) there are operating rules that comply with the prescribed requirements; (c) there are adequate arrangements to monitor and enforce compliance with the operating rules of the system; and (d) financial resources appropriate for the proper performance of the system's particular functions are available to the system.
- Stored Value Facilities. The HKMA operates a licensing system for multi-purpose stored value facilities (SVF) (i.e., an SVF which serves as a means of payment for goods and services provided by participating merchants, which is akin to an electronic surrogate for coins and banknotes). Such licensing regime covers both "device-based" SVF (e.g., the value is stored in an electronic chip on a card) and "non-device based" SVF (e.g., a network based account where the value is stored). There are certain licensing exemptions (e.g., a SVF that is used for certain cash reward or bonus point schemes). Also, a license is not required for the issuance of a single purpose SVF (e.g., a SVF which can only be used as a means of prepayment for goods and services provided by a merchant, and such merchant is also the issuer of the SVF).
- Remittance business. A money service operator license may be required for remittance business.
- Equity Crowdfunding. Depending on the nature of the crowdfunding activity, crowdfunding platform operators may be required to be licensed under the Securities and Futures Ordinance (Cap. 571) for the following types of regulated activities: Type 1 (dealing in securities); Type 4 (advising on securities); Type 6 (advising on corporate finance); Type 7 (providing automated trading services); Type 9 (asset management). In addition, crowdfunding activity may trigger the restrictions under the offer of investment regime under the Securities and Futures Ordinance (Cap. 571) and the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32).
- Moneylending. A money lender's license may be required if the contemplated activity is not excluded or exempt under the Money Lenders Ordinance (Cap. 163).
- Telecommunications License. Under the Telecommunications Ordinance (Cap. 106), there are prohibitions against establishing or maintaining any means of telecommunications or offering in the course of business a telecommunications service. Licenses will need to be obtained from the Communications Authority for such activities, unless the relevant exemptions under the ordinance apply.
- Intellectual property registrations. For completeness, if the fintech/insurtech innovation involves a patentable invention or if there are plans to register a trademark, further information can be found at the following links:
 - (a) For patents: (http://www.ipd.gov.hk/eng/applicants/patents.htm)
 - (b) For trademarks: (http://www.ipd.gov.hk/eng/applicants/trademarks.htm)

Please note that the foregoing links may be updated from time to time and you are advised to check with local counsel for updates before relying on the above information.

d Licenses required, criteria and process (cont.):

INDONESIA

In the absence of specific regulation on insurtech no specific license is required if an insurance company sells an e-policy. A business actor that conducts e-money activities must obtain a specific license from Bank Indonesia.

Licensing from Bank Indonesia is bureaucratic and the existing regulations were introduced some time ago and are convoluted. One of the requirements to become an e-money operator is that the applicant must be a limited liability company, whether it is a foreign investment company (majority or wholly owned) or a pure local company. In the licensing process, Bank Indonesia will review the submitted documents, verify the validity of information set out in them and conduct a site visit to see an applicant's readiness to become an e-money operator. During the review and verification process, Bank Indonesia may require an applicant to have a meeting with Bank Indonesia to elaborate on the e-money product that will be offered in Indonesia and other aspects relating to provision of the product. If Bank Indonesia is satisfied with what an applicant presents, Bank Indonesia will issue an e-money business license. Under the e-money regulations, there is no specific timeline for Bank Indonesia to issue an e-money business license.

Bank Indonesia has the authority to open, close and limit the e-money licensing at its discretion, e.g., for the purposes of maintaining national efficiency, provisions of public services and fair business competition.

JAPAN

The licenses required will depend on the specific activities contemplated. We recommend seeking the advice of local counsel as it is even difficult to identify under which regulations a particular activity should be regulated. In brief overview:

- Insurance business. A license may be required to perform life or non-life insurance business. The criteria to obtain the license are specified under the relevant provisions in the Insurance Business Act and the Ordinance for Enforcement of the Insurance Business Act. The standard processing period designated under the relevant regulations is 120 days. A license may be also required to create new insurance products. The criteria to obtain the license are specified under the relevant provisions in the Insurance Business Act. The standard processing period designated under the relevant regulations is 90 days. However, the Comprehensive Guidelines for Supervision of Insurance Companies (Insurance Supervision Guidelines) express that the FSA shall endeavor to reduce the review period in light of assistance in prompt product development. In particular, it is expressed that stylized and simple products and the products that are substantially the same as the other companies' existing products shall be, in principle, reviewed within 45 days.
- Insurance broker business. A registration may be required to run a insurance broker business. The criteria to be registered are specified under the relevant provisions in the Insurance Business Act. The standard processing period designated under the relevant regulations is 30 days.
- Accepting deposits. In order to accept deposits from customers, a license may be required. The criteria to be registered are specified under the relevant provisions in the Banking Act and other Ordinance for Enforcement of the Banking Act. The standard processing period designated under the relevant regulations is one month.
- Money lending and credit provision for settlement. In order to perform money lending and credit provision for settlement (including credit card), a license or registration may be required depending on the type of activities. For banking business license, please see item 3 above. For money lending business, the criteria to be registered are specified under the relevant provisions in the Money Lending Business Act. The standard processing period designated under the relevant regulations is two months. For credit provision for settlement, the criteria to be registered are specified under the relevant provisions in the Installment Payment Act. The standard processing period designated under the relevant regulations is 60 days.
- Prepaid card or other prepaid type of service. Issuers of prepaid payment instruments for third-party business need to be registered. The criteria to be registered are specified under the relevant provisions in the Payment Services Act. The standard processing period designated under the relevant regulations is two months.
- Funds transfer service. In order to run a fund transfer service, a license or registration may be required depending on the monetary amount to be transferred. For banking business license, please see item 3 above. For fund transfer service providers under the Payment Service Act, the criteria to be registered are specified under the relevant provisions in the Payment Service Act. The standard processing period designated under the relevant regulations is two months.
- Investment advisory and investment management business. In order to perform investment advisory or investment management business, a registration may be required. The criteria to be registered are specified under the relevant provisions in the FIEA. The standard processing period designated under the relevant regulations is two months.
- Crowdfunding. A registration as type II financial instruments business operator may be required for crowdfunding made through collective investment scheme. The criteria to be registered are specified under the relevant provisions in the FIEA. The standard processing period designated under the relevant regulations is two months.

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Licenses required, criteria and process (cont.):



The licenses required will depend on specific activities that are contemplated. The relevant licenses that may be required include, among others:

- Banking or insurance licenses and approvals for other approved businesses. No person may carry on banking or insurance businesses or any other approved businesses such as the operation of a payment system, issuance of a designated payment instrument, money-broking businesses or financial advisory businesses without a license or an approval from BNM.
- Capital market services license. No person may carry on a business in any of the regulated activities (which include dealing with derivatives, dealing with securities, fund management, advising on corporate finance, providing investment advice and financial planning services) unless licensed by the SC. Individuals undertaking such activities must also obtain a capital market services representative license from the SC.
- Crowdfunding license. Any person carrying on a crowdfunding business (including peer-to-peer crowdfunding/lending activities) must be licensed by the SC.
- Moneylending license. Any person undertaking moneylending services must be licensed by the Ministry of Housing and Local Government, unless exempted.
- Money services license. Any person engaged in the money-changing or remittance businesses must be licensed by BNM.
- MCMC license. Network services, network facilities, application services and content application services providers must be licensed by the MCMC.
- Intellectual property registrations. Trademark and/or patent registrations can be filed for fintech/insurtech innovations, which involve a patentable innovation or which can be registered as a trademark with MyIPO. Depending on whether there are any objections raised to such registrations, it may take between 1 and 1.5 years to register a trademark and 5 and 6 years to register a patent in Malaysia.

Save for trademark registrations, which may take between 1 and 1.5 years, and patent registrations, which may take between 5 and 6 years, it generally takes 3 to 6 months to obtain licenses and approval from the various regulators above, subject to the submission of a complete set of documents and information for the application.



The type of licenses required will depend on the activities contemplated.

For the following activities, a financial services licenses must be obtained from the BSP:

- Quasi-banking functions
- Trust, other fiduciary business and investment management activities
- Foreign exchange transactions
- Remittance/money transfer services
- Deposit substitute operations
- · Loans, investments, special credits
- Treasury and money market operations, including derivative transactions, forward and swap transactions, and other financial instruments
- Issuance and operations of electronic money
- Issuance of bonds and other capital instruments

With respect to the use of technology, the following licenses may be required:

- Value-Added Services (VAS) Provider License. Under the Telecoms Law, a VAS provider is an entity which, relying on the transmission, switching, and local distribution facilities of a local exchange or inter-exchange operator or overseas carrier, offers enhanced services beyond those ordinarily provided for by such carriers. The NTC considers as VAS the delivery of applications services, including mobile banking, electronic payments, and point-of-sale services. To register with the NTC as a VAS provider, an entity must be at least 60% Filipino-owned.
- Intellectual Property Rights Registrations. Patents, industrial designs, utility
 models, trademarks and service marks may be registered with the IPO. Computer
 programs are also entitled to copyright protection. Copyrighted works may be
 registered with the IPO or the National Library.

It usually takes about a month to obtain a financial service license from the BSP.

For patents, information is available at http://www.ipophil.gov.ph/services/patents/patent-application-flow-chart

 $For copyright, information is available \ at \ \underline{http://www.ipophil.gov.ph/services/copyright/guidelines-on-copyright-registration-and-deposit}$

For trademarks, information is available at http://www.ipophil.gov.ph/services/trademark/application-process-flow-chart

d Licenses required, criteria and process (cont.):

SINGAPORE

The licenses required will depend on the specific activities contemplated. We recommend seeking the advice of local counsel. In brief overview:

- Designated Payment Systems. No operator or settlement instituion of a designated payment system may hold itself out as such unless the payment system has been designated by the MAS and annual fees are required for operators of designated systems. There are additional conduct of business and reporting obligations. There is no formal application for a license for designated payment systems. However, payment systems that may satisfy the criteria to become designated payment systems would be advised to engage the MAS on their business activities in Singapore.
- Stored Value Facilities. Holders of widely accepted stored value facility (WASVF) with an aggregate of more than SG\$30 million will need to be approved as a holder of a WASVF and an approved bank must undertake full liabilities for the stored value held. The SVF Guidelines must comply with the minimum standards. Multipurpose SVFs whose aggregate value is SG\$30 million or less and single-purpose SVFs are subject to a light touch regime where no MAS approval is required, although certain restrictions may continue to apply and they are strongly encouraged to adopt and implement the SVF Guidelines, taking into consideration the nature, size and complexity of their SVFs. Applications to be approved holders of WASVF may take between 3 and 6 months; however, we recommend engaging local counsel and the MAS as early as possible in the process.
- Remittance business. A remittance license is required for remittance business, unless exempt.
- Equity crowdfunding. A capital markets services license may be required for an equity crowdfunding platform. In June 2016, the MAS announced that it will make it easier for start-ups and small and medium enterprises to access securities-based crowdfunding. The MAS has published guidelines on advertising relating to securities-based crowd-funding and FAQs on lending-based crowdfunding.
- Moneylending. A moneylender's license may be required if the contemplated lending activity is not excluded or exempt. Further information for applying for a moneylending license can be found at the following link: https://www.mlaw.gov.sg/content/rom/en/information-for-moneylenders.html.
- Services-Based Operator License. A company intending to lease telecommunication network elements (such as transmission capacity and switching services) from any Facilities-Based Operator (FBO) licensed by IDA to provide their own telecommunication services, or to resell the telecommunication services of FBOs to third parties will need to apply for a Services-Based Operator (SBO) License. The SBO Licenses issued by IDA fall under two categories: the SBO (Individual) License category, where individual licensing is required for the stipulated types of operations and services; and the SBO (Class) License category where interested parties will only be required to register with IDA before providing the stipulated types of services. In general, operators who lease international transmission capacity for the provision of their services will be licensed individually.
- Intellectual property registrations. For completeness, if the fintech/insurtech innovation involves a patentable invention or if there are plans to register a trademark, further information can be found at the following links:
- (a) for patents (http://www.ifaq.gov.sq/IPOS/apps/fcd_faqmain.aspx#FAQ_2510)
- (b) trademarks (http://www.ifaq.gov.sg/IPOS/apps/fcd faqmain.aspx#FAQ 2255)

Please note that the foregoing links may be updated from time to time and you are advised to check with local counsel for updates before relying on the above information.

Licenses required, criteria and process (cont.):

TAIWAN

The licenses required will depend on the specific activities contemplated. We recommend seeking the advice of local counsel. In brief overview:

- Payment Services. An entity must obtain an Electronic Payment Institution license (EPS License) if it would like to offer electronic payment services, including (i) collection and paying agent for actual transactions; (ii) stored-value services for online/and online to offline transaction; and (iii) fund transfer among electronic payment accounts, by providing an electronic payment platform through the Internet.
- Store-Value Facilities. Issuer must obtain an Electronic Stored-Value Card License (E-SVC License) if it would like to issue open-loop stored-value cards that can be used for multiple purposes (to purchase products and services provided not only by the issuer but also by any third party).
- Remittance Business. If anyone wishes to conduct remittance service, it must have a banking license or an EPS License.
- Equity Crowdfunding. A securities brokerage license is required for an equity crowdfunding platform.
- Moneylending. If the lender is an individual (P2P lending), a license is not required. However, such P2P lending shall not include any activities in relation to issue of securities/ instruments (which requires approval by the FSC) or deposit taking (which requires a banking license).

THAILAND

The licenses required will depend on the specific activities contemplated. We recommend seeking the advice of local counsel.

In brief overview, key licenses for financial services operation in Thailand include:

- finance company license (for accepting deposits of money, or accepting money from the public, subject to withdrawal on demand, or at the end of a specified period, other than the acceptance of deposits of money, or acceptance of money from the public in accounts to be withdrawn by checks, and of employing such money in any way, such as the granting of credits, or buying and selling of bills of exchange or any other negotiable instruments)
- personal loan license (for providing loan, accepting, buying, discount purchasing, or discount purchase subrogating a bill or any owner-transferred instrument to a natural person without stipulating the objective or having the objective to acquire goods or services, and with no objective to be used in one's own business, with no property or assets as collateral; and providing loan arising from hire purchase and leasing of goods to a natural person that the business operator does not sell in normal trade, except for cars and motorcycles
- foreign exchange business license
- international money transfer agent license
- treasury center license
- securities license based on types of regulated businesses such as securities dealing, securities brokerage, securities advisory, securities underwriting, private fund management, mutual fund management, securities lending or short sale, and venture capital
- license for derivatives dealer, derivatives agent, derivatives advisor or derivatives fund manager
- license for electronic payment business, such as e-money provider, credit card network provider, EDC (electronic data capture) provider, transaction switching provider, clearing service provider, settlement service provider, substitute payment service provider, and provider of electronic payment through any device or network

As there are many licenses involved in the conduct of finance-related and security-related businesses in Thailand (depending on the specific fintech/insurtech activities contemplated), advice of local counsel on the criteria or qualifications for obtaining such licenses should be sought.

However, from a general standpoint, the criteria for obtaining each license shall be based on the following qualifications of the applicants:

- nationality
 - objectives of the company board composition
- types of entity

- registered and paid-up capital
- directors and major shareholders qualifications

d Licenses required, criteria and process (cont.):



The licenses required will depend on the specific activities contemplated. We recommend seeking the advice of local counsel.

For banking, lending, payment, foreign exchange-related services, licenses or approvals are required by the SBV. For instance, to provide intermediary payment services (e.g., e-wallet, payment portal), fintech/insurtech companies must apply for an intermediary payment license at the SBV.

For insurance businesses, insurers and insurance brokers are required to apply for a business license from the MOF's Insurance Supervisory Authority.

For securities and fund management businesses, licenses or approvals are required by the MOF's State Securities Commission.

Furthermore, if the fintech/insurtech innovation involves a patentable invention or if there are plans to register a trademark, the relevant companies are strongly recommended to obtain the patent and/or trademark registrations.

Criteria to obtain a license and how long it takes to obtain the license depend on the type of license to be applied, the relevant laws and the licensing authorities.

From a general standpoint, the criteria to obtain licenses shall be based on legal conditions under local laws and relevant international treaties, e.g., Vietnam's WTO Commitments, financial capacity of investors, requirements and feasibility of proposed business models, registered and paid-up charter capital, corporate governance requirements, and requirements on key personnel and human resources. The timeline may also vary depending on whether the direct licensing authority needs to consult with higher or relevant authorities before it issues the license.

e Is the use of telematics and/or biometrics regulated?

CHINA	Provision of telematics services is regulated in China. Specifically, location-based information services are subject to licensing and regulatory requirements for the providing Internet mapping services and value-added telecommunications services in China. Use of biometrics data is not specifically regulated under Chinese law.
★ HONG KONG	The PCPD has issued the "Guidance on Collection and Use of Biometric Data" and indicated that biometric data (e.g., physiological data and behavioral data) can be considered as personal data under the Personal Data (Privacy) Ordinance (Cap. 486). Accordingly, insurers and insurance intermediaries collecting or using biometric data could be regarded as data users under the ordinance and such data should only be used where justified. Appropriate procedural and technological safeguards should also be put in place to prevent unauthorized access to and wrongful use of biometric data.
	Insurers and insurance intermediaries should ensure that such use is compliant with any existing regulations or conduct of business requirements. Further, depending on how such technology is used, we may need to consider whether other areas of regulation are attracted.
INDONESIA	There is no regulation regarding telematics and biometrics in Indonesia. The utilization of telematics and biometrics in Indonesia itself is still relatively rare.
JAPAN	There are no specific regulations for the use of telematics. However, any insurance product that uses the telematics must ensure that the use is compliant with any existing insurance regulations such as approval for new insurance products.
	In relation to the use of biometrics, the Guidelines for Personal Information Protection in the Financial Sector (Personal Information Protection Guidelines) impose stringent restrictions on the collection, use and transfer of sensitive personal information in addition to the restrictions to be generally applied to the collection, use and transfer of any personal information under the APPI. Although the collection, use and transfer of sensitive personal information are generally prohibited under the Personal Information Protection Guidelines, the collection, use and transfer of biometrics, falling under the category of sensitive personal information for the purpose of identity verification, are permitted exceptions, subject to consent of the data subject. Under the Personal Information Protection Guidelines, financial institutions must, in particular, carefully handle sensitive personal information to avoid any collection, use and transfer deviating from the purpose mentioned above. The Practical Guidelines for Security Control Measures provided in the Guidelines for Personal Information Protection in the Financial Sector (Practical Guidelines) further set out the detailed measures that need to be taken in relation to biometrics falling under the category of sensitive personal information.
MALAYSIA MALAYSIA	There are no specific regulations for the use of telematics or biometrics. It is likely that insurers will continue to be subject to general conduct of business and data privacy requirements. Further, depending on how such technology is used, we may need to consider whether other areas of regulation (e.g., telecommunications or pharmaceuticals) would apply.
PHILIPPINES	There are no specific regulations for the use of telematics or biometrics on its own.
	However, the processing of personal information attached to the telematics or biometrics will attract data privacy implications under the DPA.
	Further, depending on how such technology is used, we may need to consider whether other areas of regulation are attracted (e.g., telecommunications or pharmaceuticals).

e Is the use of telematics and/or biometrics regulated? (cont.)

SINGAPORE	There are no specific regulations for the use of telematics or biometrics on its own; however, insurance companies should ensure that such use is compliant with any existing regulations or conduct of business requirements. Data privacy concerns will also apply. Further, depending on how such technology is used, we may need to consider whether other areas of regulation are attracted (e.g., telecommunications or pharmaceuticals).
TAIWAN	Except for the Personal Data Protection Act, there are no specific regulations for the use of telematics or biometrics on its own. Insurance companies should ensure that such use is compliant with any existing regulations or conduct of business requirements.
THAILAND	There are no specific regulations for the use of telematics or biometrics on its own; however, insurance companies should ensure that such use is compliant with any existing regulations or conduct of business requirements. Further, depending on how such technology is used, we may need to consider whether other areas of regulation are attracted (e.g., telecommunications or pharmaceuticals).
	In addition, if any insurance company engages in an electronic transaction, such insurance company shall be subject to the Secure Method Royal Decree issued under the Electronic Transactions Act (the E-Transactions Act), which requires an application of information technology security at a strict level.
★ VIETNAM	There are no specific regulations for the use of telematics or biometrics on its own. However, insurance companies should ensure that such use is compliant with any existing regulations or conduct of business requirements. Data privacy concerns may also apply. Further, depending on how such technology is used, we may need to consider whether other areas of regulation are attracted (e.g., telecommunications or pharmaceuticals).

Does the regulator draw a distinction between institutions that are "too big to fail" vs. "too small to care"?

CHINA	No.
★ HONG KONG	There can be different standards of regulation for retail payment systems. Under the Payment Systems and Stored Value Facilities Ordinance (Cap. 584), the HKMA administers a designation system for retail payment systems (RPS), and may designate an RPS if it considers that the system is likely to become an RPS whose proper functioning is material to the monetary or financial stability of Hong Kong. A designated RPS is required to comply with the control and compliance requirements under the ordinance.
INDONESIA	Yes for banks. Although there is no regulation that specifically regulates fintech/insurtech, the OJK's current view creates different risk management standards. Proposed regulation will address the risk from fintech/insurtech innovation and is intended to be proportional with the risks of fintech/insurtech activities.
JAPAN	Based on the discussions in the Study Group, drawing a clear distinction between institutions that are "too big to fail" and "too small to care" has not been a big focus. However, some regulations contain aspects such as the Payment Services Act, which defines fund transfer service as transfer of a certain limited fund (JPY1 million under the subordinate regulations) or less, whereas any fund transfer of a larger amount is supposed to be handled by licensed banks.
MALAYSIA	Yes, both BNM and the SC have indicated that different markets are subject to different levels of regulation, i.e., adopting the concept of proportionate regulation. By way of examples:
	 the SC takes the position that "the level of regulation imposed will depend on the proposed market characteristics, including the structure of the market; sophistication of market users and rights of access; types of products traded; and risks posed by such markets" for operators of equity crowdfunding; the CMSA distinguishes between the levels of investor protection for institutional and non-institutional investors; and
	the FSA distinguishes payment systems and designated payment systems, which could affect public confidence or impact monetary stability and therefore carry a higher risk than normal payment systems.
PHILIPPINES	Yes, some banks in the Philippines are tagged as "too big to fail" or "D-SIB" (for domestic systemically important banks). D-SIBs are characterized as banks whose distress or disorderly failure would cause significant disruptions to the wider financial system and economy. A bank's classification as a D-SIB is based on four criteria: size, interconnectedness, substitutability, and complexity.
	Higher capital requirements are imposed on banks identified as a D-SIB. Furthermore, D-SIBs are subject to higher supervisory expectations by the BSP. Furthermore, IPOPHL fees for IP services vary for big entities vis-à-vis small entities.

Does the regulator draw a distinction between institutions that are "too big to fail" vs. "too small to care"?

SINGAPORE	Yes, there can be different standards of regulation, for example, for payment systems. While the MAS has general oversight functions and information gathering powers over payment systems, it has more extensive powers in relation to designated payment systems, which are those where the MAS is satisfied that a disruption in the operations of the payment system could trigger, cause or transmit further disruption to participants or systemic disruption to the financial system of Singapore; a disruption in the operations of the payment system could affect public confidence in payment systems or the financial system of Singapore; or it is otherwise in the interests of the public to do so.
	Based on recent public announcements by the MAS, this distinction between "too big to fail" and "too small to care" may also be applied to fintech/insurtech innovations that may not already be regulated. This is because, as mentioned, the MAS has announced that it will apply a materiality and proportionality test and regulation introduced to address risks from fintech/insurtech innovation must be proportionate to the risk posed.
TAIWAN	Yes, there can be different standards of regulation. For example, under the Electronic Payment Institutions Act, if the daily balance of the funds in the third-party payment service provider's account during the past one-year period does not exceed NTD1 billion (approximately USD303 million), such service provider is not required to obtain an electronic payment institution license from the FSC.
THAILAND	Currently, there is no specific distinction between institutions that are "too big to fail" versus "too small to care." Distinction is drawn based on types of entity and types of businesses that such entity is engaged in.
★ VIETNAM	There is no specific legal regulation drawing a distinction between institutions that are "too big to fail" versus "too small to care." However, in practice, large-scale institutions or entities carrying higher risks to the relevant financial systems, whether or not from fintech/insurtech innovation, often receive more attention from or stricter supervisions by the authorities.



Technology and risk management: What laws (if any) do insurance companies have to comply with in respect of technology risk management?

CHINA	According to the Guidelines for the Administration over the Informatization of Insurance Companies (for Trial Implementation) issued by CIRC, effective 1 January 2010, insurance companies established and licensed within China are required to comply with the following obligations with respect to technology risk management: • establish data center and disaster recovery center within the territory of China • establish and implement detailed internal rules and systems concerning IT and network security management • appoint a chief information officer or a person who is mainly responsible for the IT-related work • conduct security assessment before implementation of new information systems and/or technologies • establish monitoring and reporting system for IT security • conduct risk assessment and audit of IT system
HONG KONG	The OCI has published the "Guidance Note on the Use of Internet for Insurance Activities" (GN 8), which applies to authorized insurers and insurance intermediaries in relation to their insurance activities or transactions conducted on the Internet. GN 8 requires all practicable steps to be taken to ensure that a comprehensive set of security policies and measures that keep up with the advancement in Internet security technologies shall be in place and that the electronic payment system (e.g., credit card payment system) shall be secure. Also, based on the OCI's "Guidance Note on the Corporate Governance of Authorized Insurers" (GN10), from a corporate governance perspective, the boards of certain authorized insurers shall ensure that there are in place a sound internal control system and a comprehensive risk management policy.
	From a data privacy perspective, insurers and insurance intermediaries should take appropriate measures to protect the customer data against unauthorized or accidental access, processing or erasure. The PCPD has also issued the "Best Practice Guide for Mobile App Development," which provides guidance on how data privacy protection measures should be incorporated into the development process of a mobile app.
INDONESIA	There are no specific laws and regulations in the insurance sector prescribing rules on technology risk management. The existing regulations are more general in nature and principled based that businesses need to be prudent, take security steps and do due diligence (e.g., on systems that are used).
JAPAN	The Insurance Supervision Guidelines contain the provisions regarding system risk management environment as one of the points to be assessed to examine the appropriateness of insurance companies' operational risk management environment.
MALAYSIA	Among others, licensed insurers must comply with the Guidelines on Management of IT Environment and Guidelines on Data Management and MIS Framework issued by BNM. Licensed insurers that carry out Internet insurance activities must also comply with BNM's Guidelines on Internet Insurance (Consolidated) issued by BNM. The Guidelines on Risk Governance and Guidelines on Stress Testing, which extend to the use of technology, also apply.
PHILIPPINES	Insurance companies should comply with the Guidelines on Electronic Commerce of Insurance Products issued by the Insurance Commissioner. The guidelines provide for online privacy requirements and security of payment and personal information, among others.



Technology and Risk Management: What laws (if any) do insurance companies have to comply with in respect of technology risk management? (cont.)

SINGAPORE	Licensed insurers (other than captive insurers and marine mutual insurers) will need to comply with MAS 127 Notice on Technology Risk Management, registered insurance brokers will need to comply with Insurance companies MAS 506 Notice on Technology Risk Management, and licensed financial advisers will need to comply with FAA-N18 Notice on Technology Risk Management. The Technology Risk Management Guidelines, Business Continuity Guidelines, MAS 126 Notice Enterprise Risk Management for Insurers, MAS Circular No. SRD TR 02/2014 IT Security Risks Posed By Personal Mobile Devices, MAS Circular No. SRD TR 01/2014 System Vulnerability Assessments and Penetration Testing, MAS Circular No. SRD TR 01/2015 Early Detection of Cyber Intrusions and MAS Circular No. SRD TR 03/2015 Technology Risk and Cyber Security Training for Board will also need to be complied with.
TAIWAN	According to the Guidelines for Insurance Enterprise to Conduct Electronic Commerce promulgated by FSC, an insurer licensed to conduct e-commerce shall obtain the international standard verification of information security management system (ISO27001) by 1 July 2017. If the insurer fails to obtain and maintain the ISO27001 verification before the deadline, it will be prohibited from operating the e-commerce business.
	In addition, the licensed insurer shall also comply with the Guideline for Life Insurance Enterprises to Conduct Security Assessments on Computer System/Information Security and the Guideline for Non-Life Insurance Enterprises to Conduct Security Assessments on Computer System/Information Security to conduct the technology risk assessment and management.
THAILAND	Licensed insurers will need to comply with the OIC Notification re: Criteria, Processes and Conditions in Prescribing Minimum Standard for Risk Management of Life Insurance Companies B.E. 2551 (2008) and OIC Notification re: Criteria, Processes and Conditions in Prescribing Minimum Standard for Risk Management of Non-Life Insurance Companies B.E. 2551 (2008).
	In addition, insurers should consider adopting operational risk management guidance (prepared in accordance with the international standard of International Association of Insurance Supervisors (IAIS)) in preparing their own minimum risk management standard in order to comply with the OIC notifications above.
	As mentioned in the response to question 1(c), the Secure Method Royal Decree requires insurance companies that engage in e-transaction to apply the required information technology security at a strict level and to comply with the security method management stipulated therein.
	If any insurance company offers an e-payment service to customers and if it is regarded as an e-payment service provider under the E-Transactions Act, it is required to comply with security methods applicable to e-payment service providers under the Bank of Thailand Notification No. SorRorKor 3/2552 Re: Policies and Measures on Security of Information Systems for Business Operations of Electronic Payment Service Providers.
★ VIETNAM	Insurance companies should comply with the Information Technology Law, the Law on Network Information Security, and the Law on E-Commerce and relevant specific guiding regulations.





Are there any laws governing big data, including the collection, use, storage, disclosure and transfer of personal data?

CHINA	There is no compreh Law, the NPC Decisi
	In the context of coll data subjects the pu keep the personal da and (ii) adopt technic loss occurs or may o
	Chinese central gove storage and use of b
★ HONG KONG	The Personal Data (I disclosure and trans commentaries relate
	Insurance companie

There is no comprehensive personal data protection law in China, but the concept exists under various laws and regulations such as the Tort Liability Law, the Criminal Law, the NPC Decision on Strengthening the Protection of Network Information, and the Consumer Protection Law.

In the context of collecting and processing electronic personal data, the relevant Chinese laws and regulations require that organizations must expressly inform the data subjects the purposes, scope and manner of data collection and use and obtain their consent to the same. Furthermore, organizations have an obligation to (i) keep the personal data of data subjects confidential, and must not disclose (unless with the data subject's consent), sell or unlawfully provide the same to a third party, and (ii) adopt technical and other necessary measures to ensure that the data is secure, and must take remedial steps immediately where data disclosure, damage or loss occurs or may occur.

Chinese central government has shown increased interest in the use of big data by issuing several notices and circulars with framework policies and rules dealing with storage and use of big data by government agencies. Detailed enabling rules or specific regulations to govern the use of big data are yet to be promulgated.

The Personal Data (Privacy) Ordinance (Cap. 486) (PDPO) applies to the private sector as well as the public sector. The PDPO regulates the collection, use, storage, disclosure and transfer of personal data in Hong Kong. In addition to the baseline requirements of the PDPO, the PCPD has issued guidance and published commentaries related to collection of personal data through the Internet and online behavioral tracking.

Insurance companies may also need to ensure that their dealing with personal data does not contravene any business conduct requirements. For example, under the proposed new regulatory regime for insurance intermediaries (which will be administered by the Independent Insurance Authority in place of the OCI), there are conduct requirements requiring an insurance intermediary to act honestly, fairly, in the best interests of the policyholders (or the potential policyholders), and with integrity, and to ensure that the assets of the policyholders (or the potential policyholders) are promptly and properly accounted for.

INDONESIA

Indonesia does not have a regulation that deals specifically with big data. There are several regulations that govern the transfer of data or data storage:

Transfer of data

Under Article 1 (27) of Regulation 82, private data means any individual data the validity of which is saved, maintained and kept, and the confidentiality of which is to be protected. As the EIT Law and Regulation 82 regulates electronic transactions, they only regulate data protection issues related to electronic transactions, and the term private data under the EIT Law is defined strictly as individual data that is saved, maintained or kept in the form of electronic data.

In accordance with Article 26 of the EIT Law, protection of private data is a part of privacy rights. Privacy rights are a right to:

- enjoy private life free from disturbance;
- be able to communicate with other persons without being spied upon; and
- \bullet control the access of information on someone's personal life and personal data.

Under Article 1 (4) of Regulation 82, the administrator of an electronic system means any person (i.e., Indonesian citizen, foreign citizen or legal entity), state-administrator, business entity (private company, partnership or legal or business entity) and people who provide, manage and/or operate electronic systems, severally or jointly, for the user of electronics system for their own and/or others' purposes.



Are there any laws governing big data, including the collection, use, storage, disclosure and transfer of personal data? (cont.)

INDONESIA

Under Article 15 of Regulation 82, the administrator of an Electronic System (Penyelenggara Sistem Elektronik) is obliged to:

- maintain the confidentiality, unity and availability of private data;
- secure that the collection, use and utilization of private data is done upon the consent of the owner of private data, unless provided otherwise by applicable laws and regulations:
- secure that the use or disclosure of data is conducted with the consent of the owner of private data and in accordance with the purpose conveyed to him/her at the time of collection of the private data.

However, Regulation 82 and the EIT Law do not provide clear definitions of the terms "collection," "use," and "utilization" of private data. Therefore, the terms can be interpreted in a general manner.

The EIT Law and Regulation 82 do not clearly define "owner of private data." As a result, the definition of the owner of private data can be broadly interpreted (e.g., an individual (Indonesian or foreign citizen), legal entities, etc.).

POJK 1 and Circular Letter No 14/SEOJK.07/2014 on Confidentiality and Security of Consumers' Private Information and/or Data provides that financial services companies that obtain personal data from third parties (including individuals and entities) and intend to use that data, must obtain written statements from those third parties that those third parties have obtained written approval from their consumers consenting to the use of that data. Any transfer of consumers' data to any third party can be done only with prior written consent from the consumers, and when the financial services companies transfer these data to any third parties (based on the consumers' written consent), the financial services companies must ensure that the third parties receiving the data will only use the data for the agreed purpose. Circular 14 further provides that consumer personal information includes the following data: (i) for individual consumers: name, address, date of birth and age, telephone number and name of birth mother; and (ii) for corporate consumers: name of company, address, composition of directors and commissioners, including data of their identification documents such as passports, KTP or stay permits; and shareholders composition.

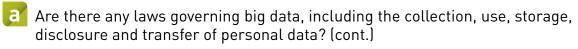
POJK 1 provides that consent from customers on the use of their data (including to transfer the data) must be obtained in writing.

Data storage

GR 82 requires all electronic system operators for "public service" to have their data center and disaster recovery center onshore by October 2017. Under the EIT Law, an "electronic system operator" is defined as any person, state entity, business entity and community that provides, manages and/or operates an electronic system whether independently or collectively to an electronic system user for its own use and/or another party's use. Based on the above definitions (which are broad in nature), any person or entity that manages and operates electronic systems (such as websites, applications, email, and messenger), and provides those systems to other parties, may be considered as an electronic system operator. Bank Indonesia BI Regulation 9/2007 specifically requires the data center and disaster recovery center for banks to be located onshore. BI Regulation 9/2007 stipulates that if a bank intends to have its data center and/or disaster recovery center offshore, it must first obtain a prior approval from Bank Indonesia and/or OJK and comply with certain requirements (as further explained below). BI Regulation 9/2007 also provides that banks may only engage an offshore third-party IT service provider with Bank Indonesia and/or OJK's prior approval.

There is a rudimentary data protection law before Parliament and the Ministry of Communications and Informatics have a draft data protection regulation (both of which are inconsistent). However, it is fair to say that Indonesia will be moving in line with regional and European regulations once there is a focus on providing specific regulation.





JAPAN	The APPI applies to business operators handling personal information database comprising of personal information of more than 5,000 individuals (note that this requirement of 5,000 or more individuals will be abolished under the amended APPI to come into force within two years from 9 September 2015 when the amended APPI was promulgated [Amended APPI]). The APPI regulates the collection, use, storage, disclosure and transfer of personal data. However, there were discussions that it was unclear whether big data would fall under the category of personal information and accordingly whether the APPI would apply. Under the Amended APPI, the definition of personal information is expanded and it is clarified that anonymized and unrestorable personal information can be used under certain relaxed requirements. In addition to the baseline requirements of the APPI, additional specific requirements under the Personal Information Protection Guidelines will apply to financial institutions including insurance companies.
MALAYSIA	The Malaysian Personal Data Protection Act 2010 (PDPA) governs personal data collected or processed in respect of commercial transactions by persons established in Malaysia or who use equipment in Malaysia to process personal data. In addition to the baseline requirements of the PDPA, additional requirements apply with respect to sensitive personal data (such as medical records, political affiliations and others), and data users in prescribed industries (such as the medical, banking and insurance industries).
	The PDPA sets out data protection principles governing the collection, use, disclosure, accuracy, retention, access to and security of personal data. Data users are also required to develop and implement a security policy that complies with prescribed security standards.
	The FSA and CMSA also have specific confidentiality restrictions relating to regulatory-related information and customer information.
PHILIPPINES	Insurance companies should comply with the Guidelines on Electronic Commerce of Insurance Products issued by the Insurance Commissioner. The guidelines provide for online privacy requirements and security of payment and personal information, among others.
SINGAPORE	Singapore's Personal Data Protection Act 2012 (PDPA) and its attendant Personal Data Protection Regulations (which came into effect on 2 July 2014) applies to all organizations in the private sector. The PDPA regulates the collection, use, storage, disclosure and transfer of personal data in Singapore. In addition to the baseline requirements of the PDPA, additional specific mandatory regulations also apply to certain industries (such as banking and medical) with respect to certain categories of sensitive personal data (such as bank customer information and medical records).
	Insurance companies will also need to ensure that their dealing with personal data do not contravene any business conduct requirements or any technology risk management guidelines.



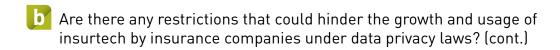


Are there any laws governing big data, including the collection, use, storage, disclosure and transfer of personal data? (cont.)

TAIWAN	Taiwan's Personal Data Protection Act (amended on 30 December 2014)(TPDPA) and relevant regulations and rulings apply to government authorities, all organizations in the private sector and individuals. The TPDPA regulates the collection, use, process and cross-border transfer of personal data in Taiwan.
	The TPDPA provides the definition for "use," "process" and "cross-border transfer." "Process" means in order to establish or use the personal data, to record, input, storage, edit, correct, duplicate, index, delete, output, link or transfer for internal use the personal data. "Use" means to use the collected personal data in ways other than the "use." "Cross-border transfer" means to process or use the data subject across border.
	• The Insurance Act of Taiwan regulates the collection and use of sensitive personal data. Under the Insurance Act, the following person/entity may collect, process or use sensitive personal data (medical records, medical treatment or health examination of individuals), with the written consent of the data subject:
	(a) insurance enterprises, insurance agents, brokers and surveyors that operate or conduct business in accordance with the Insurance Act
	(b) juristic persons commissioned by insurance enterprises to provide assistance in confirming or performing their obligations under an insurance contract
	(c) insurance-related foundations established with the permission of the competent authority to handle disputes and matters relating to compensation for victims of motor vehicle accidents
THAILAND	There is currently no specific law governing big data. Exploitation of personal data may be done without the consent of the data subject if that use does not unlawfully injure the personal data rights of the data subject. However, any use of personal data in a way that unlawfully injures the right to personal data, intentionally or negligently, would violate the Constitution and may constitute a wrongful act (a tort) under the Thai Civil and Commercial Code.
	In addition, the use of personal data by certain types of business sector is regulated under specific laws, such as telecommunications, credit bureau or financial services.
	If an insurance company offers an e-payment service to customers and if it is regarded as an e-payment service provider under the E-Transactions Act, it is required to stipulate a personal data policy (i.e. user data retention and confidentiality level).
	The Thai Cabinet approved in principle the Personal Data Protection Bill (the PDPB) in January 2015. It is pending further consideration by relevant authorities before passing into law. The PDPB has certain restrictions with regard to the collection, use, storage, disclosure and transfer of personal data. For example, consent must be obtained from the data owners for the collection, use, and disclosure of personal data. The transfer of personal data is subject to certain conditions unless the consent is obtained from data owners for the transfer. If the PDPB enters into force, insurance companies would be subject to the requirements under the PDPB.
	Please note, however, that there is no specific timeline when the PDPB will be passed and it is still subject to changes.
★ VIETNAM	Vietnam has no single comprehensive law that governs big data or addresses individual and organizational privacy rights. Instead, these issues and relevant provisions are governed under the Civil Code, the IT Law, the Law on Network Information Security, the Consumer Protection Law, the Penal Code, the Insurance Business Law, the Telecommunications Law and other specialized regulations (where applicable), where these matters are addressed in fairly general terms, and in certain implementing regulations that contain more specific provisions.

Are there any restrictions that could hinder the growth and usage of insurtech by insurance companies under data privacy laws?

CHINA	No.
HONG KONG	Yes, the PDPO provides that: a data user needs to take practical steps to safeguard personal data from unauthorized or accidental access, processing, erasure, loss or use personal data must be accurate and should not be kept for a period longer than is necessary to fulfil the purpose for which it is used personal data must be used for the purpose for which the data is collected or for a directly related purpose, unless voluntary and explicit consent with a new purpose is obtained from the data subject
INDONESIA	No. Although there is an express requirement to obtain written consent from customers before transferring their data, which is problematic. Businesses need to consider the most practical way to obtain the written consent from the customers. In practice, the insurance companies include the consent in their standard insurance policy clause.
JAPAN	With respect to transfer of personal information, under the APPI, there are no specific provisions regulating the transfer of personal information to third parties who are located overseas and it was unclear whether the APPI would apply to such third parties. Under the Amended APPI, in order to transfer personal information to third parties who are located overseas, unless (i) such third parties are located in countries that have personal information protection system comparable to that of Japan or (ii) such third parties establish the system that meets the requirements necessary to continuously take measures corresponding to requirements under the Amended APPI, the transferor needs to obtain the data subject's consent to transfer to third parties who are located overseas.
	With respect to big data, as discussed above, under the APPI, there were discussions whether the APPI would apply to the use of big data and therefore the relevant market players, including insurance companies, tended to hesitate to use big data. Even under the Amended APPI, it is still unclear to what extent the business operators need to have personal information anonymized in order for the information to be treated as anonymized data, which can enjoy the benefits of the relaxed requirements. Proper guidelines clarifying safe harbors will be necessary.
MALAYSIA	Yes, the PDPA provides certain requirements in relation to the processing of personal data. Some of the requirements under the PDPA are as follows: • consent from the data subject is required prior to the personal data being processed (including a transfer of such personal data) • a written notice must be issued to notify the data subject of a prescribed list of information in the Malay and English languages • the personal data shall not be disclosed for any purpose other than the purpose for which it is disclosed • a data user shall take practical steps to protect the personal data • the personal data processed shall not be kept longer than is necessary • a data user must take all reasonable steps to ensure that the personal data is, among others, accurate and not misleading • a data subject must be provided access to his personal data and be able to correct his personal data
PHILIPPINES	Yes. Under the DPA, a personal information controller shall have the following responsibilities: • ensure that proper safeguards are in place to guarantee the confidentiality of the personal information processed and prevent its use for unauthorized purposes • implement reasonable and appropriate organizational, physical and technical measures intended for the protection of personal information against any accidental or unlawful destruction, alteration and disclosure, as well as against any other unlawful processing • use contractual or other reasonable means to provide a comparable level of protection while the information is being processed by a third party • designate an individual who is accountable for the entity's compliance with the DPA



PHILIPPINES	Moreover, an obscure law, Presidential Decree No. 1718, passed in 1980, prohibits the transfer of documents or information relating in any manner to any business carried on in the Philippines, unless the sending thereof complies with the following:
	• consistent with and forms part of a regular practice of furnishing to a head office or parent company or organization outside of the Philippines
	in connection with a proposed business transaction requiring the furnishing of the document or information
	 required or necessary for negotiations or conclusions of business transactions, or is in compliance with an international agreement to which the Philippines is a party made pursuant to the authority granted by the designated representative of the President of the Philippines
SINGAPORE	Yes, the PDPA provides the following:
	• an organization (including insurance companies) should not transfer personal data outside of Singapore unless it ensures that the transferred personal data will be afforded a standard of protection that is at least comparable to that provided under the PDPA.
	• an organization is required to ensure that personal data in its possession and control is protected from unauthorized access and use, and implement appropriate physical, technical and organizational security safeguards commensurate with the amount, nature and sensitivity of the personal data involved, to protect the personal data.
	• an organization should cease to retain personal data as soon as it is reasonable to assume that the purpose for which the personal data was collected is no longer being served and when the retention is no longer necessary for legal or other business purposes.
TAIWAN	Yes. According to the TPDPA, the Taiwan government may prohibit an individual/entity from conducting cross-border transfer of the personal data under one of the following circumstances:
	where substantial national interests are involved
	where international treaties or agreements specify otherwise
	where the rights and interests of the data subject are likely to be damaged as a result that the data recipient country does not have appropriate laws and regulations to protect personal data
	• where the TPDPA may be avoided because the personal data is transmitted or used by way of indirect transmissions to a third country or area
	In addition, according to the Directions for Operation Outsourcing by Insurance Enterprises, an insurance enterprise shall obtain the FSC's prior approval for outsourcing to an offshore service provider (such as a data center outside Taiwan).
THAILAND	Currently, Thailand does not have a consolidated law governing personal data protection. However, if the PDPB is passed under the current format, there are certain restrictions that could hinder the growth and usage of insurtech such as:
	• an organization (including insurance companies) acting as data controller is required to ensure that personal data in its possession and control are protected from unauthorized access and use, and implement appropriate security measures.
	cross-border transfer of personal data will also be subject to certain requirements and restrictions.
	• an organization (including insurance companies) acting as data controller should cease to retain personal data as soon as the data owners revoke their consent (unless there is any restriction on revoking consent), after the expiration of the retention period, or personal data that is no longer relevant or in excess of necessity.
★ VIETNAM	No. Vietnam data privacy regulations remain rather nascent and only impose basic privacy requirements.
VIETO W	As a general principle, individuals and organizations must grant their prior informed consent to the collection, use and transfer of their personal information. Proper consent requires that the individual or organization collecting, using and/or transferring the personal information, discloses to the person to whom it pertains where the information wil be transmitted to and consolidated, how it will be used, to whom the personal information will be transferred and for how long it will be stored.
	An organization should cease to retain personal data as soon as the purpose for which the personal data was collected is no longer being served, or when the agreed-upon retention period expires.



Cybersecurity:



Are there any laws governing cybersecurity or to mitigate cybersecurity concerns?

CHINA	Yes. Most notably, the following laws contain provisions concerning cybersecurity:
_	The National Security Law, which provides the state's focus on safeguarding the security of cyberspace.
	• The 9th Amendment to the Criminal Law, which provides that network service providers will be subject to criminal liabilities, if they: (i) fail to comply with network security management obligations, causing large-scale dissemination of illegal information or other serious results; or (ii) knowingly provide technical support (such as Internet access, server hosting, network storage or communications transmission) to aid crimes committed through information networks.
	• The Anti-terrorism Law imposes obligations on telecom business operators and Internet service providers to (i) provide technical support to authorities in connection with investigations for terrorism, (ii) adopt security measures, monitor terrorist content and cooperate with investigations, and (iii) verify customer identity.
	The Draft Cybersecurity Law, which has yet to take effect, will be the first Chinese law that focuses exclusively on cybersecurity and addresses various aspects of cybersecurity in China.
HONG KONG	The Crimes Ordinance (Cap. 200) criminalizes certain activities, including access to computer with criminal or dishonest intent and destroying or damaging property. Under the Telecommunications Ordinance (Cap. 106), unauthorized access to computer by telecommunications is also an offense. Regulated financial institutions (including insurance companies) may also be expected to have comprehensive risk management systems and policies and disaster recovery plans in relation to cybersecurity risk.
INDONESIA	No. Indonesia does not have a cybersecurity law, although this is being considered.
JAPAN	The Basic Act on Cybersecurity provides the framework of the government's cybersecurity strategy and basic policies. The Cybersecurity Strategic Headquarters was established under the Cabinet based on this act and the National Center of Incident Readiness and Strategy for Cybersecurity (NISC) was established under the Cabinet based on the Order for Organization of the Cabinet Secretariat.
	The Insurance Supervision Guidelines contain the provisions regarding cybersecurity management as one of the points to be assessed to examine the appropriateness of insurance companies' system risk management environment.
MALAYSIA	The Malaysian Penal Code criminalizes theft, which could extend to conduct involving cybersecurity breaches/theft.
_	The Malaysian Computer Crimes Act 1997 criminalizes unauthorized access to computer material and unauthorized modification of the contents of any computer.
	In addition, the Malaysian Communications and Multimedia Act 1998 criminalizes unauthorized use of any device and unauthorized interception of any communications and the distribution or advertising of any communications equipment used for interception.
	The PDPA also has a security principle that requires data users to take practical steps to protect the personal data from any loss, misuse, modification, unauthorized or accidental access or disclosure, alteration or destruction.
	It should be noted that the SC has issued a public consultation paper on the proposed regulatory framework on cybersecurity in March 2016. In the paper, the SC views sound management of cybersecurity risks as a key priority to strengthening the resilience of the Malaysian capital markets. Further, the proposed regulatory framework requirements are intended to guide capital market participants (and it would not therefore apply to insurance companies) to achieve a certain state of cybersecurity resilience commensurate with their cybersecurity risk exposures and impact.
PHILIPPINES	The Cybercrime Law enumerates and punishes cybercrimes, imposes duties upon service providers, and provides tools for enforcement of cybersecurity.
	Under the Cybercrime Law, a service provider is an entity that provides users of its service with the ability to communicate by means of a computer system. It can also be an entity that processes or stores computer data on behalf of such communication service or users of such service.
	A service provider is expected to do the following:
	• disclose or submit subscriber's information, traffic data or relevant data in its possession or control to competent authorities within 72 hours after the receipt of an order to submit



Cybersecurity:

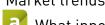


Are there any laws governing cybersecurity or to mitigate cybersecurity concerns? (cont.)

PHILIPPINES	• collect or record by technical or electronic means, and/or cooperate and assist competent authorities in the collection or recording of computer data, upon the issuance of a court warrant
	• report to the OCC its compliance with enforcement orders and reporting requirements under the Cybercrime Law
	• immediately and completely destroy computer data subject of a preservation and examination when the required period expires
	• ensure the confidentiality of preservation orders issued
	The Cybercrime Law also enumerates cybercrimes, including computer-related forgery, computer-related fraud and computer-related identity theft.
SINGAPORE	Singapore's Computer Misuse and Cybersecurity Act (Cap. 50A) criminalizes certain activities, including the unauthorized access, use, interception and modification of computers, data and computer services, and empowers the Minister of Home Affairs to act against cybersecurity threats. The Singapore Minister of Communications and Information has also indicated that a new Cyber Security Bill will be introduced in 2017 to strengthen the powers of the Cyber Security Agency to protect Singapore's critical infrastructure and national systems, such as those in the energy and transport sectors, from cyber threats. Regulated financial institutions (including insurance companies) may also be expected to have comprehensive risk management systems and policies and disaster recovery plans in relation to cybersecurity risk.
TAIWAN	Taiwan does not have specific or special law governing cybersecurity. However, under the Criminal Code of Taiwan:
	• Article 318-1 provides that "a person without reason discloses the secrets of another which he knows or possesses through the use of a computer or other relating equipment shall be sentenced to imprisonment of not more than two years, short-term imprisonment, or a fine not more than five thousand yuan."
	• Article 339-3 provides that "a person who for purpose to exercise unlawful control over other's property for himself or for a third person takes property of another by entering false data or wrongful directives into a computer or relating equipment to create the records of acquisition, loss or alteration of property ownership shall be sentenced to imprisonment for not more than seven years; in addition thereto, a fine of not more than seven hundred thousand yuan may be imposed."
	Articles 358 to 363 are offenses against the computer security.
	In addition, regulated financial institutions (including insurance companies) are required to have risk management systems and policies and disaster recovery plans in relation to cybersecurity risk.
THAILAND	Thailand has the Computer Crime Act B.E. 2550 (2007) (Computer Crime Act) criminalizing certain activities, including the unauthorized access, use, and modification of computer data and computer system. It also empowers the officials under the act to be able to investigate offenses under the Computer Crime Act. These powers include, among others:
	copying computer data and traffic data of such computer system
	accessing a computer system or computer data storage equipment
	decoding a person's computer data
	seizing or attaching a computer system for the purpose of obtaining further details of an offense
	The Thai Cabinet also approved in principle the National Cyber Security Bill in January 2015. It is pending further consideration by relevant authorities before promulgation. The Bill prescribes certain criteria to combat cyberattacks and ensure cybersecurity.
	Please note, however, that there is no specific timeline when the Bill will be passed and it is still subject to changes.
★ VIETNAM	On 19 November 2015, Vietnam adopted the Law on Network Information Security, which will take effect on 1 July 2016. This law prescribes, among others, cyber information security activities; civil cryptography products and services; and standards and technical regulations on cyber information security.



Market trends:



What innovations are insurance companies and/or regulators looking at implementing?

CHINA	Fintech/insurtech innovations in China are still a relatively recent phenomenon. As a result, there are no specific insurtech innovations that we are aware of in the insurance sector. As mentioned, the insurance regulator has recently expressed its concern over the lack of regulation and risk control of online insurance businesses conducted by unlicensed online platforms. Accordingly, the insurance regulator has announced that it will clamp down on unlicensed Internet insurance businesses as one of its major tasks for 2016.
₩ HONG KONG	Hong Kong is still a relatively nascent, emerging fintech/insurtech hub when compared to most established players such as London and New York. However, recent government initiatives and increased marketing are raising awareness. The Hong Kong government launched the Steering Group on Financial Technologies in 2015 to examine the city's potential as a key fintech/insurtech hub, and in the 2016/2017 Budget, the government confirmed it would adopt most of the recommendations made by the Steering Committee in its recent report.
	In Hong Kong, some insurers have introduced wearable devices and mobile apps, which are used to track fitness activities of policyholders of life and health insurance products. Using such analytics, the insurers will offer premium discounts to the policyholders based on their level of physical activities, so as to encourage them to exercise regularly. The underwriting risks of such insurers are expected to improve as a result.
INDONESIA	We are aware some insurance companies are starting to sell online insurance products. However, the practices are only related to simple insurance products such as travel insurance protection with minor sum-insured values. In addition, most insurance companies are providing online accounts but more for the purpose of allowing customers to check their claims and their investment funds (for unit-linked products).
JAPAN	In Japan, as mentioned in 1(c) above, the direction and contents of insurtech innovations to be implemented are still under study and discussion by the regulator and market players including insurance companies.
	Since 2015, some non-life insurance companies introduced new insurance products utilizing telematics. In spring of 2016, it was reported that many leading life and non-life insurance companies would strengthen R&D on products utilizing insurtech such as non-life insurance products using Internet of Things information and life insurance products using genetic information.
MALAYSIA	As mentioned in 1(c) above, BNM is currently seeking to obtain feedback from the public on the introduction of a regulatory sandbox by the final quarter of 2016. In addition, BNM has indicated that it intends to regulate the establishment and operations of the product aggregators in 2016.
	To date, only banks in Malaysia have publicly announced the implementation of innovation and accelerator programs (rather than insurance companies), although we expect insurance companies to undertake similar initiatives in the near future.
PHILIPPINES	Sun Life of Canada (Philippines), Inc., a life insurance provider in the Philippines, and Voyager Innovations, a digital innovations arm, have recently entered into a strategic partnership for the development of insurtech services for emerging markets. However, the particular insurtech innovation, which will be implemented, has not yet been disclosed to the public.



Market trends:



What innovations are insurance companies and/or regulators looking at implementing? (cont.)

SINGAPORE	In April 2015, the MAS launched a web aggregator called compareFIRST, which allows consumers to compare the premiums and features of life insurance products and acts as a direct purchase channel, allowing people to buy simple life insurance products without commissions and financial advice. Since July, many banks and insurance companies have announced innovation hubs or accelerator programs, with the support of the MAS and other relevant government bodies, including the IDA.
TAIWAN	In October 2015, the FSC allowed insurance companies, within certain limits, to invest in business-related or auxiliary to financial technology-related business (such as big data analysis, software design and Internet of Things).
THAILAND	We have seen certain insurance companies/brokers using fintech/insurtech innovations as new channels for offering new insurance products to customers. Certain insurance companies have partnered with these fintech/insurtech operators, such as AgentMate, Savinsure, Directasia.com, etc., in offering their insurance products through this channel.
★ VIETNAM	Fintech/insurtech is new in Vietnam, but we have seen certain insurance companies starting to look for fintech/insurtech innovations in analyzing big data, which can help them to determine their target customers and business decisions.

Have there been fintech/insurtech-related cases (including competition and/or data privacy) in Asia Pacific?

CHINA	There have been quite a number of cases where the operation of P2P lending platforms has been characterized as criminal offenses involving illegal fundraising or unlicensed deposit taking, and the persons found to be responsible for these platforms have been subject to criminal sanction.
★ HONG KONG	There are no specific cases by the financial regulators so far.
INDONESIA	We are not aware of any fintech/insurtech case in Indonesian courts (noting that there are no law reports in Indonesia).
JAPAN	There have been a number of cases where administrative sanctions were imposed on financial institutions due to the lack of appropriate management of customer information; however, such cases were mere loss, leakage or misuse of customer information and were not necessarily fintech/insurtech-related cases. We are not aware of any fintech/insurtech-related competition cases.
MALAYSIA	There are no specific cases by the financial regulators so far.
PHILIPPINES	There are no specific cases by the financial regulators so far.
SINGAPORE	On 17 March 2016, the Competition Commission of Singapore issued an infringement decision against ten financial advisers in Singapore for engaging in an anti-competitive agreement to pressure their competitor, iFAST Financial Pte. Ltd., to withdraw its offer of a 50% commission rebate on competing life insurance products on the Fundsupermart.com website. The ten financial advisers were fined between SG\$5,000 and SG\$405,114, depending on each financial advisor's respective life insurance business turnover and aggravating and mitigating factors. This is the first case involving market access and restriction of market access involving firms in the financial services industry and highlights that the Competition Commission of Singapore will enforce the law where necessary to ensure that new and innovative players can access the market and compete fairly in Singapore.
TAIWAN	With regard to P2P lending, the FSC issued a news release on 28 April 2016 questioning the following: • guarantee of fixed return and taking funds from the lender before a loan agreement is signed may constitute deposit taking regulated under the Banking Act • investment return shall not exceed 20% per annum (the maximum annual interest rate permitted under the Civil Code) • high return with low cost and low risk could constitute fraudulent advertisement regulated by the Fair Trade Act • membership with high return may constitute multilevel marketing regulated by the Fair Trade Act
THAILAND	There are no specific cases by the financial regulators so far.
★ VIETNAM	There are no specific cases by the financial regulators so far.

What are the most immediate challenges to insurtech innovation?

CHINA	1. Lack of centrally coordinated regulator for fintech/insurtech business. While there are various regulators overseeing specific financial service sectors, they have not put in place a coordinated scheme to address their overlapping jurisdiction, which often results in a lack of specific guidance and supervision of fintech/insurtech innovation.
	2. Difficulty in securing licenses. Due to the lack of specific rules and regulations, it has been difficult to obtain the appropriate licenses required for conducting fintech activities, which constantly result in the legality of the relevant fintech business being questioned or challenged.
	3. Cybersecurity issues
HONG KONG	1. Complexity of the sector-specific regulatory regime in Hong Kong and the different types of licenses and/or authorization needed
HOITO HOITO	2. The high costs of development and innovation and lack of finances for start-ups
	3. Cybersecurity. As the sophistication of cyber criminals have evolved, it is crucial to ensure that there are robust policies and systems in place to address cybersecurity. Failure to do so may also affect customer confidence.
INDONESIA	1. Regulations. The government anticipates that it is likely to be behind market developments and in regulating fintech activities. This then provides less clarity to businesses as to how matters may be regulated, and reliance on older regulations, which may not be as conducive to the fintech space (for example, written consent for data use and transfer).
	2. Technology. Local technology may not be sufficient to accommodate the development of fintech products.
	3. Customers. Although Internet utilization is becoming more common in Indonesia and Indonesians are more tech-savvy than before, customers may take time to accept fintech/insurtech. Currently most selling and buying of financial products is personal in nature. Customers will need more assurance and more time to accept fintech/insurtech services.
JAPAN	1. The lack of appropriate legislation covering the cross-sectoral and cross-border development of fintech/insurtech
	2. The high costs of development and innovation
	3. The lack of skilled personnel who have the capacity in both financial and technological areas and the limited mobility of such skilled personnel
MALAYSIA	1. Regulatory and compliance. Currently, many fintech/insurtech businesses do not fall squarely within any particular regulatory regime in Malaysia. Until such time as there are clear regulatory prescription governing fintech/insurtech companies and their businesses, fintech/insurtech companies must evaluate their fintech/insurtech innovation at the outset and question whether their business activity can be undertaken without the fintech/insurtech company becoming a regulated entity, or whether it would have to seek appropriate licenses or approval and incorporate internal compliance frameworks such as anti-money laundering procedures. An understanding of the consumer protection and liability exposures may also be lacking.
	2. The high costs of development and innovation. Particularly for start-ups, the lack of funding has not been adequately dealt with hinders access to facilities, especially for the fintech sector.
	3. Skill and talent. The necessary infrastructure, talent and skill set to catalyze fintech/insurtech developments in Malaysia are lacking. Guidance will have to be sought from more developed markets.

What are the most immediate challenges to insurtech innovation? (cont.)

PHILIPPINES	1. Cybersecurity. Local networks, including government networks, and websites remain vulnerable to hacking.
	2. Unregulated digital money such as Bitcoins can be used as a medium for illegal transactions, and can also expose consumers to risk.
SINGAPORE	1. The high costs of development and innovation; for start-ups, the lack of finances.
	2. Cybersecurity. As the sophistication of cybercriminals has evolved, it is crucial to ensure that there are robust policies and systems in place to address cybersecurity. Failure to do so may also affect customer confidence.
	3. The lack of skilled employees that are able to effectively develop, utilize and apply fintech/insurtech innovations.
TAIWAN	1. Heavy regulations and high capital requirements for start-ups to obtain the relevant licenses impose a high cost on development and innovation
	2. No special cybersecurity laws or regulations (only general criminal liabilities under the Criminal Code)
	3. Lack of patent and know-how to develop fintech
THAILAND	1. Lack of supporting legislation and regulations for governing the secure implementation of fintech/insurtech innovation, including consolidated data privacy protection laws. Current regulations are still unsupportive for small players in the market.
	2. Thai consumers still do not have much knowledge about fintech/insurtech innovations and still prefer traditional methods when transacting.
	3. Small user base and lack of funding and finances for fintech/insurtech innovation.
★ VIETNAM	1. The majority of consumers in Vietnam are generally still unfamiliar with fintech/insurtech innovations. As such, consumers prefer the traditional means of financial instruments, which seem to be safer and easier to use.
	2. Vietnam lacks skilled and trained employees specializing in fintech/insurtech innovations.
	3. Despite regular legislative updates, the legal framework of Vietnam has not effectively caught up with the rapid development of technology in general and fintech/insurtech in particular.

What has been, or could be, the impact of fintech/insurtech on the financial services industry?

** CHINA	Fintech/insurtech will likely continue to play an important role in the financial services industry in China given the policy objective of the Chinese government to promote fintech/insurtech as well as the increasing use of digital devices by Chinese consumers.
	The Chinese government is considering setting up a centralized financial and monetary regulator that may have comprehensive power to regulate most (if not all) fintech/insurtech activities. This has been considered one of the most significant impacts of fintech/insurtech innovation on the regulation of the financial services industry in China.
★ HONG KONG	Fintech/insurtech will likely be a key enabler in designing better and more efficient work processes and creating new business models that will deliver higher growth, cost savings and better services for industry participants.
INDONESIA	The impact on financial services is just occurring (e.g. mobile banking). There is a huge potential for financial services in Indonesia and with the appropriate products, education, security and regulation, fintech/insurtech will, no doubt, grow.
JAPAN	Fintech/insurtech is expected to be a key driver in introducing new business opportunities and business models in the financial sector. It will also likely promote competition between existing financial institutions and new market entrants.
MALAYSIA	The most imminent impact of fintech/insurtech on the financial services industry in Malaysia will likely be in the banking and insurance (please refer to 5e below) sectors.
	In respect of the banking sector in particular, there has been an evolution in payment methods. Further, CIMB and Maybank (which are among the largest banking institutions in Malaysia) have also implemented innovation and accelerator programs in Malaysia.
	Also, the regulation of crowdfunding platforms and peer-to-peer lending operators by the SC encourages alternative lending platforms, which provide an online marketplace for lenders to exercise greater discretion and choice, based on their risk appetite. There will also be lower costs of borrowing and greater transparency in the communications chain between borrowers and lenders.
	Finally, we foresee that the use of technology will eventually displace traditional labor-intensive working models and result in greater automation in respect of client-fronting activities and decision-making processes, through the use of robo advisers, artificial intelligence and blockchain technology, reducing reliance on skill-based labor.
PHILIPPINES	Local networks, including government networks, and websites remain vulnerable to hacking.
	Unregulated digital money such as Bitcoins can be used as a medium for illegal transactions, and can also expose consumers to risk.
SINGAPORE	Fintech/insurtech will likely be a key enabler in designing better and more efficient work processes and creating new business models that will deliver higher growth, cost savings and better services for industry participants.
TAIWAN	Traditional financial products or services may be replaced by new products or services provided by start-ups or multinational high-tech or companies.
THAILAND	The development of fintech/insurtech technologies and innovations will continue to shape customer behavior, business models, and the structure of the financial services industry, and will become new trends that should be closely monitored.
★ VIETNAM	The development of fintech/insurtech innovations is expected to introduce new business opportunities and business models in the insurance, banking and financial sectors. These are expected to deliver higher growth and efficiency and better services.

What insurtech trends or disruptions may impact insurance companies?

CHINA	It remains to be seen if Internet insurance will continue to grow in China in the future, given the recent regulatory action taken by the Chinese insurance regulator.
₩ HONG KONG	We expect to see insurance companies seek to acquire or team up with non-insurance tech players such as new digital insurance start-ups or telematics-related companies in order to deliver new offerings and better price risk, extend the value chain and have greater overall efficiency. With big data, we also expect to see more insurers better adopt end-to-end analytics solutions that cross the entire insurance value chain. In doing so, they hope to gain an enriched, single-client view and the ability to execute a targeted pipeline.
	Another area may be "just-in-time" insurance. It has also been suggested that the traditional concept of insuring an asset over many periods is outdated, and that instead, the business should move to a more transactional consumption model where just-in-time insurance is delivered on mobile and underwritten in seconds.
	Use of telematics, which is becoming more prevalent for insurers in Hong Kong, will enable insurers to accumulate customers' voluminous behavioral information. This will allow insurers to have a deeper insight of their customers, which in turn will assist them in formulating new directions for products and pricing their risks more accurately. Insurers will need to be mindful of the need to ensure the accuracy and reliability of these information. Insurers will also need to devise controls and systems for these analytics to be appropriately integrated into the offering to the customers (e.g., offering premium discount, determining future premiums, etc.). As the use of such analytics may directly affect the customers, any incidents of misuse, leakage or improper application of such analytics will pose a reputation risk for the insurer.
INDONESIA	In practice, distribution of products is personal in nature (telemarketing and agents). If the regulations are not sufficient to give customers protection, the customers may stay with conventional products and distribution channels. The key issues are to ensure courts will accept digital evidence more readily and that regulation is updated so that e-policies can be issued and digitalization embraced.
JAPAN	As mentioned in 1(c) above, the next trends are still under study and discussion by the regulator and market players, although we already see some initial moves such as the formation of a JV by a car manufacturer and a non-life insurer on telematics insurance development. In the discussions held in the Study Group, it was pointed out that new market entrants from different business areas and the commoditization of risks due to technical innovation in various areas would disrupt traditional business model of insurance companies. Although it is not currently easy to expect the extent and speed of disruption, there will be an existing trend of insurance companies making significant investments in R&D on products utilizing insurtech. Please also see 5(a) above.
MALAYSIA	Insurance companies will be disrupted at key pressures across the value chain.
	In respect of product distribution, online aggregators that assist customers with comparisons of insurance coverage may displace traditional distribution channels, which are primarily manpower-focused (i.e., through insurance agents and distributors). With such information easily accessible through a "one-click solution," there will be greater competition between insurers to leverage on technology to modify their traditional processes and allow for a shorter time for the issuance of insurance policies while at the same time ensuring compliance with underwriting risks measures.
	Self-driving and pay-as-you-go rentals may affect traditional insurance underwriting models development based on a single or paper ownership structure. Risk determination for underwriting models may also shift toward the use of personalized statistical data through telematics.
	We expect insurance companies to vary their business models in the future, whereby they may choose to partner with or acquire non-insurance technology players to incorporate business models that are more data intensive (and less manpower and capital intensive) and platform/infrastructure based. This could result in greater access to more innovative product offerings, with better value for end customers. The greater utility value derived from the use of big data by insurers will also assist with ensuring such outcomes.

What insurtech trends or disruptions may impact insurance companies? (cont.)

PHILIPPINES	We expect insurance companies partnering with insurtech and technology entities to help them develop their technology and business strategies.
SINGAPORE	We expect to see insurance companies seek to acquire or team up with non-insurance tech players such as new digital insurance start-ups or telematics-related companies in order to deliver new offerings, better price risk, extend the value chain and have greater overall efficiency. As an example, insurance companies are looking to mine data sets to identify underwriting opportunities for those who suffer chronic illnesses such as dementia and obesity. With big data, we also expect to see more insurers better adopt end-to-end analytics solutions that cross the entire insurance value chain. In doing so, they hope to gain an enriched, single client view and the ability to execute a targeted pipeline.
	Another area may be "just-in-time" insurance. It has also been suggested that the traditional concept of insuring an asset over many periods is outdated, and that instead, the business should move to a more transactional consumption model where just-in-time insurance is delivered on mobile and underwritten in seconds.
	We may increase accessibility to insurance in Singapore. The MAS' compareFIRST web aggregator was successful with more than 180,000 visits within the first three months of its launch and we may see the cost of insurance become lower, providing access to lower-income consumers.
TAIWAN	Taiwan insurance companies are discussing how to use big data to conduct risk analysis and offer new products to customers. They also consider downsizing their sales force and selling products through banks and digital channels.
	The existing sales channels of insurance (such as insurance solicitors, brokers and agents) may be reduced. From KYC (Know Your Customer) to KYDC (Know Your Digital Customer), Taiwan insurers need to develop new technology to know digital customers.
THAILAND	We expect to see insurance companies more involved in insurtech innovation in many areas, whether by themselves or through partnership with other insurtech operators, in order to create efficiency in providing insurance services to customers.
	Potential areas that insurtech innovation could play roles in insurance business might include the offering of insurance products, price comparison between insurance products and policy underwriting, claims management services.
★ VIETNAM	We expect to see insurance companies more involved in insurtech innovation in many areas. Development of insurtech will offer more financial choice to customers, which will have significant impact on the market of insurance business. We expect to see more and more insurance companies cooperate with insurtech players to diversify their insurance products, diversify their distribution channels and facilitate the development of the insurance market in Vietnam. In particular, electronic transactions will be developed to supersede traditional transactions. In doing so, insurers will improve their competitive advantage and bring more benefit to the insurance purchasers as well.

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