Financial technology (Fintech) has fostered innovation in the financial industry and led to the emergence of new business and operational models. This presents opportunities for financial institutions and potential benefits for investors, but it may also introduce new risks.

This edition of the SFC Compliance Bulletin highlights the SFC’s Fintech initiatives. Our overall aim is to make sure that our regulation remains effective as new technologies are introduced and that any risks to investors or to financial stability are properly managed. These initiatives are also meant to facilitate the development of technology that provides a better customer experience, increases financial inclusion and makes markets more efficient and reliable.

To this end, we have provided specific guidance to accommodate the industry’s use of new technologies while ensuring the protection of investors’ interests. We have also explored how technology could be used to make our regulatory supervision more efficient and effective. Locally and internationally, we have expanded cooperation on Fintech issues with other regulatory authorities.
Fostering innovation and market development

With the rapid growth of Fintech, close communication between regulators and the industry is essential for both to keep apprised of the latest developments. We launched the SFC Fintech Contact Point in March 2016 as a dedicated channel for businesses involved in the development and application of Fintech in Hong Kong. We also established a Fintech Advisory Group as a platform for industry participants and senior executives from the SFC to discuss the opportunities and risks presented by Fintech as well as their regulatory implications.

Recognising the potential for Fintech to increase the range and quality of financial products and services, we launched the SFC Regulatory Sandbox in September 2017 to provide a confined regulatory environment for qualified firms to conduct regulated activities using Fintech before they are introduced to the public on a wider scale.

Regulatory framework

Many of our codes and rules date to a time when the industry was paper-based and conducted business face-to-face. To keep pace with the development of Fintech, we have clarified our regulatory regime where necessary and will make further adjustments where warranted to accommodate the use of new technologies. However, the core principles underpinning our regulatory framework will remain unchanged. Some recent regulatory developments related to Fintech are summarised in the sidebar on page 3.

Virtual assets

In light of investors’ growing interest in funds with underlying virtual assets and the risks associated with this nascent asset class, we have developed regulatory standards for managers of these funds. Before licensed corporations (LCs) can conduct this activity, they will have to agree to terms and conditions which will be imposed as licensing conditions. These terms and conditions are described in the Statement on regulatory framework for virtual asset portfolios managers, fund distributors and trading platform operators issued on 1 November 2018. Such funds should only be sold to professional investors.

On the same day, we also issued a circular to intermediaries providing additional guidance on our expected standards and practices when they distribute funds which are not authorised by us and which invest in virtual assets. This guidance takes account of the unique characteristics of virtual assets and the fact that an ordinary investor in securities and futures contracts may not be familiar with the risks of investing in them.
Recent regulatory developments

To best apply our regulatory principles to business models created by new technologies and avert potential regulatory gaps, we amended our codes, clarified our requirements and provided guidance to the industry.

We provided tailored guidance on the design and operation of online platforms, including specific guidance on the provision of automated or robo-advice, while clarifying that the posting of factual, fair and balanced materials on online platforms should not in itself trigger the suitability requirement.

As onboarding a client who is not physically present for identification purposes poses impersonation risk, in particular where sufficient safeguards are not in place, we provided guidance on alternative acceptable procedures for opening accounts for individual clients.

We also provided guidance on the key controls and procedures for accepting client orders via instant messaging applications. As service providers do not provide users with tools to save, retrieve or monitor messages sent on these applications, we also alerted LCs of the importance of centralised record keeping.

We informed the industry that we would adopt a flexible approach in assessing the “relevant industry experience” requirement for a Responsible Officer applicant under the Guidelines on Competence where an applicant’s direct previous experience may be essential for integrating technology into the LC’s regulated activity.

Taken together, these two measures will ensure that the virtual asset funds available in Hong Kong are either managed or distributed by firms which are subject to the SFC’s oversight.

In consideration of the serious investor protection issues associated with trading virtual assets, our 1 November 2018 statement also sets out a conceptual framework for exploring whether we should regulate virtual asset trading platforms. At the end of the exploratory stage, if we decide that we should regulate them, then this framework will provide an opportunity for those platform operators which are capable and willing to adhere to a high level of standards and practices to provide virtual asset trading services in a sandbox environment under our close supervision. This will provide a potential path for compliance with a view to setting licensed operators apart from those which do not seek a licence.

The SFC’s booth at Hong Kong Fintech Week 2018
Regulatory collaboration

The Fintech cooperation agreements we signed with regulators in overseas jurisdictions provide mechanisms for sharing information and referrals of innovative firms seeking to enter other markets (see table below).

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<th>Jurisdiction</th>
<th>Regulator</th>
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<td>May 2017</td>
<td>UK Financial Conduct Authority</td>
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<tr>
<td>Jun 2017</td>
<td>Australia Australian Securities and Investments Commission</td>
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<tr>
<td>Aug 2017</td>
<td>Dubai Dubai Financial Services Authority</td>
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<td>Sep 2017</td>
<td>Malaysia Securities Commission Malaysia</td>
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<td>Feb 2018</td>
<td>Switzerland Financial Market Supervisory Authority</td>
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<tr>
<td>May 2018</td>
<td>Abu Dhabi Financial Services Regulatory Authority</td>
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Risk management

We closely monitor LCs’ risk management practices to determine whether they need to be enhanced in response to technological developments or to address concerns such as cybersecurity risks and data privacy breaches.

To mitigate hacking risks, we mandated two factor authentication (2FA) along with 19 other baseline requirements for all internet brokers. Since 27 April 2018, logging into internet trading systems requires authentication utilising two of the following factors: what you know (such as your login password), what you have (such as an SMS one-time password received via your mobile) and who you are (such as your fingerprint). Other baseline requirements came into effect in July 2018, including prompt notification to clients upon system login and timely patch management. To assess compliance, we will conduct surveys and inspections of LCs on a sample basis soon.

Not all senior management understand the complex inner workings of their firms’ information technology (IT) systems. It is important to put in place a proper governance structure and responsibility system – eg. hiring suitably qualified and experienced persons as Manager-In-Charge for IT and adopting robust risk management policies as well as appropriate procedures to escalate matters to senior management and the board before problems get out of control.

Internally, we established a Market Intelligence Programme and a Data Analytics Group to analyse data for regulatory purposes and monitor risks using new technologies. We also launched a risk data strategy and analytics project to analyse key risk indicators to improve our oversight of LCs. (See “Suptech developments” on page 5.)

Conclusion

We encourage the industry to develop Fintech in a balanced manner, in line with our regulatory principles. Protecting investor interests is paramount. Senior management of LCs should put in place a proper governance structure to ensure that the risks arising from the use of new technologies are properly managed.
Suptech developments

While regulatory technology (Regtech) refers to the use of innovative technology by the industry in regulatory compliance, supervisory technology (Suptech) refers to the use of innovative technology by regulators to support supervision.

The number of SFC licensees rose significantly over the past five years, with the number of LCs growing at an annual compound rate of 7% to about 2,900. We have enhanced our data analytic capabilities to process additional information about the business and operational activities of the increasing number of licensees to ensure we supervise them efficiently and effectively.

We are now considering how to enhance data collection and analysis for better risk assessment. We will revamp the statutory returns through which we obtain data from the industry, such as the Financial Resources Rules Return and Business and Risk Management Questionnaire, and will also revamp the SFC Online Portal to standardise and streamline the submission of self-reporting notifications.

Recent years saw a significant increase in the volume of trading data as well as the complexity of data relationships. To facilitate our assessments of compliance with business conduct standards by LCs which engage in high volume electronic trading, we analysed LCs’ trading behaviour and patterns on a trial basis and identified irregularities, control deficiencies and non-compliance in the data which might otherwise have gone undetected.

Encouraged by the results, we commissioned an external consultant to formulate strategies for using advanced data analytics in technology-enabled supervisory procedures and to develop industry standards prescribing the content and format of trading-related data (covering the full trading order cycle from client order to trade execution) to be submitted to us upon our request.