ICMA
International Capital Market Association

FinTech in International Capital Markets

by Gabriel Callsen

FinTech regulatory developments

IMF: Cybersecurity risk supervision

On 24 September 2019, the IMF published the paper, *Cybersecurity Risk Supervision*. This paper highlights the emerging supervisory practices that contribute to effective cybersecurity risk supervision, with an emphasis on how these practices can be adopted by those agencies that are at an early stage of developing a supervisory approach to strengthen cyber resilience. Financial sector supervisory authorities the world over are working to establish and implement a framework for cyber risk supervision. Cyber risk often stems from malicious intent, and a successful cyber attack - unlike most other sources of risk - can shut down a supervised firm immediately and lead to systemwide disruptions and failures. The probability of attack has increased as financial systems have become more reliant on information and communication technologies and as threats have continued to evolve.

BIS: Embedded supervision: how to build regulation into blockchain finance

On 16 September 2019, the BIS published the paper, *Embedded Supervision: How to Build Regulation into Blockchain Finance*. The spread of distributed ledger technology (DLT) in finance could help to improve the efficiency and quality of supervision. This paper makes the case for embedded supervision, ie a regulatory framework that provides for compliance in tokenised markets to be automatically monitored by reading the market's ledger, thus reducing the need for firms to actively collect, verify and deliver data. After sketching out a design for such schemes, the paper explores the conditions under which distributed ledger data might be used to monitor compliance. To this end, a decentralised market is modelled that replaces today's intermediary-based verification of legal data with blockchain-enabled data credibility based on economic consensus. The key results set out the conditions under which the market's economic consensus would be strong enough to guarantee that transactions are economically final, so that supervisors can trust the distributed ledger's data. The paper concludes with a discussion of the legislative and operational requirements that would promote low-cost supervision and a level playing field for small and large firms.

BIS: Suptech applications for anti-money laundering

On 29 August 2019, the BIS Financial Stability Institute released the paper, *Suptech Applications for Anti-Money Laundering*. Suptech, or the use by financial authorities of data collection or advanced data analytics tools enabled by innovative technologies, seems more advanced in the field of anti-money laundering (AML) and combating the financing of terrorism (CFT). In particular, AML/CFT authorities need suptech-enabled advanced data analytics tools to analyse large volumes of information at their disposal. AML/CFT authorities are in general pursuing similar advanced data analytics tools, such as network analysis, natural language processing, text mining and machine learning. These tools increase their ability to detect networks of related transactions, to identify unusual behaviours and, in general, to transform significant amounts of structured and unstructured data into useful information that contributes to their respective processes. Efficiency gains seem to be the number one benefit of advanced data analytics tools, which could help capacity-constrained AML/CFT authorities. However, the use of these innovative technologies gives rise to a number of challenges, including computational capacity constraints and data privacy and confidentiality issues. This paper aims to explore the various data analytics tools used by authorities tasked with AML/CFT responsibilities, as well as their practical experiences in using such tools.

ECB: In search for stability in crypto-assets: are stablecoins the solution?

On 29 August 2019, the ECB released the paper, *In Search for Stability in Crypto-assets: Are Stablecoins the Solution?* Stablecoins claim to stabilise the value of major currencies in the volatile crypto-asset market. This paper describes the often complex functioning of different types of stablecoins and proposes a taxonomy of stablecoin initiatives. To this end it relies on a novel framework for their classification, based on the key dimensions that matter for crypto-assets, namely: (i) accountability of issuer, (ii) decentralisation of responsibilities, and (iii) what underpins the value of the asset. The analysis of different types of stablecoins shows a trade-off between the novelty of the stabilisation mechanism used in an initiative (from mirroring the traditional electronic money approach to the alleged introduction of an "algorithmic central bank") and its capacity to maintain a stable market value. While relatively less innovative stablecoins could provide a solution to users seeking a stable store of value, especially if legitimised by the adherence to standards that are typical of payment services, the jury is still out on the potential future role of more innovative stablecoins outside their core user base.

ECB: Understanding the crypto-asset phenomenon, its risks and measurement issues

On 8 August 2019, the ECB published as part of the ECB Economic Bulletin, Issue 5/2019 the article *Understanding the Crypto-asset Phenomenon, its Risks and Measurement Issues*. It discusses the crypto-asset phenomenon with a view to understanding its potential risks and enhancing its monitoring. First, it describes the characteristics of the crypto-asset phenomenon, in order to arrive at a clear definition of the scope of monitoring activities. Second, it identifies the primary risks of crypto-assets that warrant continuous monitoring – these risks could affect the stability and efficiency of the financial system and the economy – and outlines the linkages that could cause a risk spillover. Third, the article discusses how, and to what extent, publicly available data allow the identified monitoring needs to be met and, by providing some examples of indicators on market developments, offers insights into selected issues, such as the availability and reliability of data. Finally, it covers selected statistical initiatives that attempt to overcome outstanding challenges.

EBA: Report on regulatory perimeter, regulatory status and authorisation approaches in relation to FinTech activities

On 19 July 2019, the EBA published the findings of its analysis on the regulatory framework applicable to FinTech firms when accessing the market. The Report illustrates the developments on the regulatory perimeter across the EU, the regulatory status of FinTech firms, and the approaches followed by competent authorities when granting authorisation for banking and payment services. The national regulatory status of FinTech firms with innovative business models or delivery mechanisms shows two developments: (a) the shift from non-regulated to regulated activities – notably payment initiation services and account information services now being subject to PSD2; and (b) the ancillary/non-financial nature of the services provided by FinTech firms not subject to any regulatory regime, with the exception of crowdfunding and to some extent activities related to crypto-assets. The EBA findings show few national legislative developments that could potentially create an EU unlevelled playing field. On crowdfunding, the EBA takes note of the Commission's Proposal for Regulation on crowdfunding service operators. On crypto-asset related activities, the Report refers to the EBA January Report on crypto-assets and the follow-up actions.

IMF: The rise of digital money

On 15 July 2019, the IMF published the paper, *The Rise of Digital Money*. This paper marks the launch of a new IMF series, Fintech Notes. Building on years of IMF staff work, it will explore pressing topics in the digital economy and be issued periodically. The series will carry work by IMF staff and will seek to provide insight into the intersection of technology and the global economy. The Rise of Digital Money analyses how technology companies are stepping up competition to large banks and credit card companies. Digital forms of money are increasingly in the wallets of consumers as well as in the minds of policymakers. Cash and bank deposits are battling with so-called e-money, electronically stored monetary value denominated in, and pegged to, a currency like the euro or the dollar. This paper identifies the benefits and risks and highlights regulatory issues that are likely to emerge with a broader adoption of stablecoins. The paper also highlights the risks associated with e-money: potential creation of new monopolies; threats to weaker currencies; concerns about consumer protection and financial stability; and the risk of fostering illegal activities, among others.

ESMA report on the licensing of FinTech firms across Europe

On 12 July 2019, ESMA published a *Report on the Status of Licencing Regimes of FinTech Firms* across the EU. The report is based on two surveys conducted by ESMA since January 2018, which gathered evidence from national competent authorities (NCAs) on the licensing regimes of FinTech firms in their jurisdictions. The Surveys confirmed that NCAs do not typically distinguish between FinTech and traditional business models in their authorisation and licensing activities since they authorise a financial activity and not a technology. ESMA's key findings from the surveys are: (i) The primary area where regulatory gaps and issues have been identified by NCAs and where FinTech firms do not fit neatly within the existing rules is related to crypto-assets, ICOs and DLT. (ii) The Surveys also identified the need for greater clarity around the governance and risk management processes associated with both cyber security and cloud outsourcing. (iii) There is a direct link and interdependencies between the innovation facilitators and authorising approaches for innovative FinTech business models. (iv) Finally, there is an ongoing discussion as to the need for an EU wide holistic crowdfunding regime, particularly for crowdfunding based on non-MiFID II instruments.

EBA: Assessment of impact of FinTech on payment institutions' and e-money institutions' business models

On 8 July 2019, the EBA published a thematic *Report on the Impact of FinTech on Payment Institutions' (PIs) and Electronic Money Institutions' (EMIs) Business Models*. This Report points out the EBA's key observations on PIs' and EMIs' strategies and business model changes, in particular focusing on the current trends and drivers, the different approaches to FinTech, including their interaction with BigTech firms, and the level of implementation of innovative technologies. […] Based on the EBA's observations, most PIs and EMIs are adapting their business models to cope with the competitive pressure and embrace PSD2 changes. Most institutions are keen to expand their products and services and enter new markets by (i) leveraging on cross-border services, (ii) requesting a licence to become a credit institution or third party provider (TPP), and/or (iii) embracing the new services provided under the PSD2. […]

With BigTech firms posing a potential threat to the sustainability of PIs' and EMIs' business models, institutions are planning to focus on strengthening customer loyalty in a potential increased participation of BigTech firms. The outlook of the payments sector is quite positive in terms of revenues and profitability, with an overall expectation for increased customer base and new or revamped products, accompanied by an increase in internal FinTech developments and IT spending.

Contact: Gabriel Callsen
gabriel.callsen@icmagroup.org