Regulating financial technology

Alison Harcourt considers risks and opportunities of FinTech and the challenges that regulators face

Financial technology (FinTech) is greatly changing the way in which citizens live and work on a day to day basis. Fintech refers to technological solutions for electronic transactions such as blockchains, cryptochains, digital currencies and peer-to-peer online lending. The introduction of cryptocurrencies around the globe, such as Altcoin, Bitcoin, LiteCoin, PeerCoin and Ripple, and the adoption of national e-currencies, such as the Bank of England's RSCoin and the M-Pesa in Kenya, are accelerating FinTech use. The growth in mobile phone use, interfaces such as Alexa and Google Home Fiber Voice and social media platforms ease the payment of online goods and services.

As the world moves towards paperless money and online transactions, London has established itself as a world hub for FinTech. The UK's FinTech was worth £6.6 billion with an annual growth rate of 22 per cent between 2014 and 2016 according to HM Treasury (2018). The greatest bulk of this income is from cryptocurrency transactions and peer-to-peer lending. UK Trade & Investment (UKTI) estimates the highest growth to be in 'peer-to-peer lending, online payments and the data and analytics products (credit reference, capital markets and insurance)' which represent 60 per cent of the market. In its 2018 FinTech strategy, the UK Treasury stated 'the UK market is one of the most attractive markets in Europe based on our analysis of market opportunity, availability of capital and regulatory environment'. With more people working in Fintech in the UK than in New York, Singapore, Hong Kong and Japan combined, the UK market has become an important part of the global economy. In face of these developments, regulatory responses have invariably been characterized as a game of catch-up. At the same time, regulatory responses have also been strategic, involving processes both of regulatory competition and cooperation.

The overall regulatory goal has been to encourage solutions and new market players to FinTech with the support of government measures. The UK has been particularly proactive. This began in the UK when the Financial Conduct Authority (FCA) was looking for innovative ways to move the UK out of the financial crisis and at the same time to reform and regulate a changing financial sector. The FCA established Project Innovate, 'regulatory sandboxes' and its FinTech Initiative. The sandbox schemes waived a series of FCA rules for a small number of FinTech start-ups. This was to create a 'safe space' for company innovation where companies could test new goods, services and delivery mechanisms. The idea was not new but was based on 'Innovation Deals', such as the Green Deal programme of the Netherlands. Such programmes 'do not support "normal" business activities, but would be restricted to innovative initiatives that have only a recent and limited or even no access to the market with the potential of wide applicability' (European Commission, 2016).

The first FCA sandbox in 2016 fostered 24 companies.[1] By 2018, it had reached its fourth cohort with 29 companies.[2] This attracted new start-ups to the UK such as SETL which worked in the retail sector as the first company to use a digital ledger. At the time of writing, the FCA was running 'Tech Sprints', assisting companies to innovate on the regulatory front. In 2018, the FCA was also running Innovate Finance events in conjunction with the Treasury and the Department of International Trade.

The UK sandboxes triggered interest from the European Commission and states around Europe. FinTech sandboxes have begun to emerge in Denmark, Germany, Ireland, Netherlands and Sweden. Globally, this was followed by regulatory sandboxes being set up in Hong Kong, Australia and Singapore.

Other UK-led initiatives have since been noted such as the relaxation and introduction of flexible rules for selected new market entrants and the introduction of self-regulatory trust schemes. These include FinTech developments by the US Federal Reserve Board, US Treasury and Securities and Exchange Commission (SEC) and the incoming US financial law which raises the Dodd-Frank threshold from $50 billion to $250 billion for smaller enterprises and eases restrictions for FinTech (Thomas, 2018). Trust schemes include the European Union's eIDAS Regulation on electronic identification and trust services for electronic transactions in the internal market which came into effect in 2016. In the US, regulatory guidance has accompanied the legality of cryptocurrencies via the Financial Crimes Enforcement (FinCEN) agency and the Internal Revenue Service requirement that intermediaries have to clear with them prior to establishment (IRS, 2018).

In the UK, FinTech was also seized upon for the establishment of new trade relations. Cross national cooperation with the FCA involved, for example, setting up RegTech partnerships with Australia and Singapore in 2017. In 2018, FinTech was a key highlight of UK trade negotiations with India where the two partners aimed to 'deepen bilateral collaboration on FinTech and explore the possibility of a regulatory cooperation agreement' (Joint statement UK-India, 2017) including the establishment of a 'FinTech Bridge' between respective regu-

latory authorities. Indian and African states are of particular interest to the UK given the growth in FinTech. Citizens, particularly in rural areas, have limited access to banks and normally financial transactions are done via post offices and other local intermediaries which incur time and fees (World Bank, 2017). Mobile phones are rapidly alleviating this problem with applications and online bank accounts which increase financial inclusion of citizens in the economy.

FinTech presents many advantages particularly as it substantially lowers the cost for transactions in comparison to fiat money. However, the pace of technological change also presents many challenges. Financial services have for decades been operated by established incumbents (banks and intermediaries) with cultures that often slowed technological adoption and barred entry for new operators. Similarly, technological solutions are developed by the largest tech companies worldwide presenting problems of market concentration, customer lock in and lack of interoperability. Lastly, the need for customer authentication often requires technologies such as device fingerprinting, voice and facial recognition as well as biometric data which is increasingly used to authenticate identity. For example, India has introduced the AADHAR card which has registered biometric data (including iris scans and thumb prints) of over 1.2 billion people. The creation of huge databases presents not only vast opportunities for FinTech on many fronts but also challenges to security and privacy. International payments also encounter cross-border problems of data localization and passporting.

The UK however is clearly acting as policy entrepreneur in steering the future trajectory of FinTech development and how this game at regulatory competition will eventually develop, what trajectories will become critical, and how regulators will be positioning themselves in FinTech represents one of the key regulation research agendas over the coming years.

1 Billion, BitX, Blink Innovation Limited, Bud, Citizens Advice, Epephyte, Govcoin Limited, HSBC, Issufy, Lloyds Banking Group, Nextday Property Limited, Nivaura, Otonomos, Oval, SETL, Tradle, Tramonex and Swave.

2 BlockEx, Capexmove, Chasing Returns, Community First Credit Union, Creativity Software, CreditSCRIPT, Dashly, Ehterisc, Finequia, Fractal, Globacap, Hub85, London Media Exchange, Mettle, Mortgage Kart, Multiply, Natwest, NorthRow, Pluto, Salary Finance, TokenMarket, Tokencard, Universal Tokens, Veridu Labs, World Reserve Trust, Zippen, 1825, 20|30.

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