

Alison Harcourt

Regulatory solutions for Fintech.

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, cryptocoins, digital currencies and peer-to-peer online lending. The introduction of cryptocurrencies around the globe, such as 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% between 2014 and 2016 according to HM Treasury (2018). The greatest bulk of this income is from cryptocurrency transactions and peer-to-peer lending. 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% 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. Yet the sector is operating in a regulatory vacuum.

Governments have been devising policy solutions to FinTech at national levels with increasing international cooperation. The goal is 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 waive a series of FCA rules for a small number of Fintech start-ups. This creates a 'safe space' for company innovation where companies could test new goods, services and delivery mechanisms. The idea is not new but based upon 'Innovation Deals' such as the Green Deal programme of the Netherlands. Such deals "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 companies¹. By 2018, it had reached its fourth cohort with 29 companies². This attracted new start-ups to the UK such as SETL which works in the retail sector as the first company to use a digital ledger. Currently, the FCA is running 'Tech Sprints' assisting companies to innovate on the regulatory front. In 2018, the FCA is running Innovate Finance events in conjunction with the Treasury and the Department of International Trade.

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.

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 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 to clear with them prior to establishment (IRS, 2018).

In the UK, Fintech has been seized upon for the establishment of new trade relations. Cross national cooperation with the FCA 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" including the establishment of a "FinTech Bridge" between respective regulatory 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 presented 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 huge opportunities for FinTech on many fronts but also challenges to security and privacy. International payments also encounter cross-border problems of data localisation and passporting. The UK however is clearly acting as policy entrepreneur in steering the future trajectory of FinTech development.

- Arner, D., W. Barberis, J. Buckley, R. (2017) "FinTech, RegTech, and the Reconceptualization of Financial Regulation" *Northwestern Journal of International Law & Business*, Vol. 37, Issue 3 (Summer 2017), pp. 371-414.
- European Commission (2016) "Better regulations for innovation-driven investment at EU level" Directorate-General for Research and Innovation. <https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better->

[regulation-why-and-how/better-regulation-guidelines-and-toolbox_en](#).

Joint statement by the Chancellor of the Exchequer and the Finance Minister of India at the 9th UK-India Economic and Financial Dialogue held in Delhi on April 4, 2017.

Internal Revenue Services (2018) Internal Revenue Bulletin. Notice 2014-21. March 25. <https://www.irs.gov/pub/irs-drop/n-14-21.pdf>.

Nicoletti, B. (2017) The Future of FinTech: Integrating Finance and Technology in Financial Services. London: Palgrave Macmillan.

Thomas, L. (2018) "The Case for a Federal Regulatory Sandbox for Fintech Companies" ce:Thomas, North Carolina Banking Institute, Vol. 22, pp. 257-282.