MCM FinTech Update[1]

Friday, March 1, 2019

JP Morgan successfully tested a digital coin to allow instantaneous payments between its institutional customers. The Global Financial Innovation Network regulatory sandbox, a collaboration among 29 regulators and official institutions, was launched. The Financial Stability Board argued that the impact on the financial sector of big technology ("BigTech") firms leveraging their technology and large user bases to provide financial services outside the regulatory perimeter, may be greater than that of FinTech firms. Crypto-asset markets rebounded in February, but the pace of initial coin offerings has slowed substantially.

Innovation

JP Morgan successfully tested a digital coin, JPM Coin, to allow instantaneous internal payments between its institutional customers. JPM Coins represent U.S. dollars held in customers' designated accounts, so customers can transfer the digital coins on JP Morgan's blockchain transaction system with immediate settlement and more efficiently than with current methods. JPM Coin is being tested with a small number of the bank's institutional clients, with plans to expand the pilot program later this year. It may eventually support other major currencies and interoperate with similar blockchain platforms. See Table 1 for a listing of other news.

Regulation

The Global Financial Innovation Network (GFIN) regulatory sandbox formally launched last January. Proposed in 2018 by the U.K. Financial Conduct Authority, the GFIN seeks to improve interactions between Fintech firms and regulators. This includes a pilot for firms wishing to test innovative products, services, or business models across member jurisdictions, with the goal of helping firms scale faster. It also aims to improve co-operation and information sharing between financial services regulators. The GFIN comprises 29 organizations from 22 jurisdictions, with the IMF and World Bank participating as observers. See table 2 for a list of other regulatory news.

The UN emphasizes more work is needed to help foster financial inclusion. The UN Secretary-General's Special Advocate for Inclusive Finance for Development reports there are now over 50 regulatory sandboxes ongoing or about to be launched. However, it concludes that they are "*neither necessary nor sufficient to promote financial inclusion, and similar results can be achieved through innovation offices and other tools*."

Commentary and Research

The Financial Stability Board published a report on Fintech and market structure in financial services. It concluded that new entrants into the financial services space, including large, established technology companies ("BigTechs"), can create a more efficient and

[1] Prepared by John Kiff and Hunter Monroe, reviewed by Tommaso Mancini Griffoli and cleared by Peter Breuer (all MCM). This issue covers developments since the February 1, 2019 edition. The information herein has not been verified through official channels. For more details behind the developments, click on the links. For an explanation of fintech concepts, see Fintech and Financial Services: Initial Considerations.

resilient financial system. However, heightened competition could pressure incumbent institutions' profitability and lead them to additional risk taking to maintain margins. In addition, the report warns that there could be implications for financial stability, including greater third-party dependencies, for example, on cloud computing services. A McKinsey report shows how China is leading the BigTech push, in which large technology firms build on pervasive consumer platforms like WeChat.

Although mobile payments have improved financial inclusion in many countries, access to smartphones varies widely, according to a Pew Research study. Smartphone ownership rates range from highs of 60 percent of the adult population in South Africa and Brazil to about 40 percent in Indonesia, Kenya and Nigeria. Among the surveyed countries, smartphone ownership is lowest in India, at 24 percent. Also, according to mobile operator industry group Groupe Spéciale Mobile Association, there is a substantial and persistent gender gap in access to mobile phone technology, particularly in Sub-Sahara Africa.

An IMF departmental paper reported on the rapid pace of implementation of new technologies in Sub-Saharan Africa. In this region close to 10 percent of GDP in transactions occur through mobile money, compared with 7 percent of GDP in Asia and less than 2 percent of GDP in other regions. The paper suggests that the challenge now is for the continent to leverage this success in mobile money to transition to other fintech services and a digital economy. Policymakers also need to address the large infrastructure gap in the region, starting with electricity and internet services.

Central banks continue to investigate the pros and cons of issuing central bank digital currency (CBDC). The National Bank of Ukraine completed a CBDC pilot project, and a Bank of Japan paper examines the potential consequences of different implementation approaches. For example, it pointed to the risk that an account-based interest-bearing CBDC could crowd out private payment instruments and discourage innovation. Along similar lines, a Bank of Korea paper warns that account-based CBDC could decrease commercial bank-supplied credit, and raise interest rates, a point made in the recently-published IMF staff discussion note on the same topic.

Central banks and legislators are considering how to respond to falling cash usage. Cash production and distribution are becoming less economically viable, and cash usage less convenient. Some central banks are looking into CBDC for this reason, and a De Nederlandsche Bank official has suggested that banknotes could be replaced by user-printed single-use banknotes with integrated QR codes. Some jurisdictions are forcing merchants to accept cash. For instance, the New Jersey legislature and the Philadelphia City Council have passed laws banning cashless stores, and other U.S. cities are weighing similar bills.

According to a recent CB Insights report, global Fintech funding deals topped $39 billion in 2018, versus $18 billion in 2017. Asia accounts for 57 percent of the funding, including $14 billion raised by China's Ant Financial, North America 31 percent and Europe 9 percent. Africa, Australia and South America account for a combined 2 percent.

Market Developments

Crypto-asset market capitalization increased during February (Figure 1). At $140 billion, it is up about 18 percent since end-January, although still well below the

$830 billion peak in January 2018. Bitcoin finished February at about $3,900 (up 11 percent over the month), with Ethereum up 30 percent and XRP 7 percent. Possible market drivers include signs of increasing institutional investor interest in crypto-assets. U.S. asset manager Morgan Creek announced a crypto-focused fund with $40 million invested, including from two Virginia state employee pension funds. Also, the University of Michigan endowment fund plans to increase its investment in Andreessen Horowitz's crypto-asset fund. However, two bitcoin exchange-traded fund proposals continue to sit before the U.S. Securities and Exchange Commission. Also, there were no initial coin offerings (ICOs) in February (Figure 2).

There is increasing interest in security token offerings (STOs), where the token represents an investment asset. These record and track ownership rights and information on a blockchain, rather than on a digital certificate. Proponents say that STOs offer more regulatory clarity than ICOs, although there are higher barriers to entry. Also, STOs are cheaper than initial public offerings (IPOs) because they remove numerous middlemen and paperwork, plus they allow for fractional underlying asset ownership and 24/7 trading. In addition, STOs can be used to mobilize illiquid assets, such as real estate. According to Inwara.com, there were 93 STOs in 2018 and 9 in January 2019.

Canadian crypto-asset exchange QuadrigaCX filed for creditor protection in the province of Nova Scotia while owing about $130 million to its customers. QuadrigaCX announced in mid-January that its CEO, who suddenly passed away in December, was the only member of the QuadrigaCX team to have access to its private keys, meaning the exchange could not access $130 million in crypto assets stored offline.

Correction: The last issue stated that the e-money licensing regime in Lithuania is being criticized. The FinTech Update, as a news summary, should have been clearer that this concern was raised by a newspaper columnist and was not an assessment by Fund staff of Lithuania's e-money licensing regime, which is guided by EU Regulations and Directives, as well as licensing guidelines put forward by the European Banking Authority. In particular, electronic balances issued to clients of e-money institutions are matched in full by real funds safeguarded in the accounts held in conventional credit institutions.

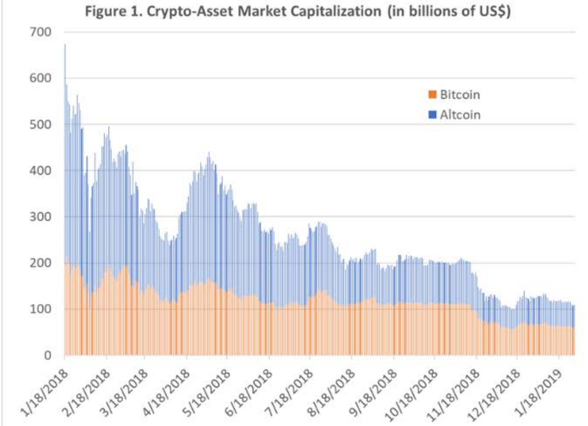

Figure 1. Crypto-Asset Market Capitalization (in billions of US$)

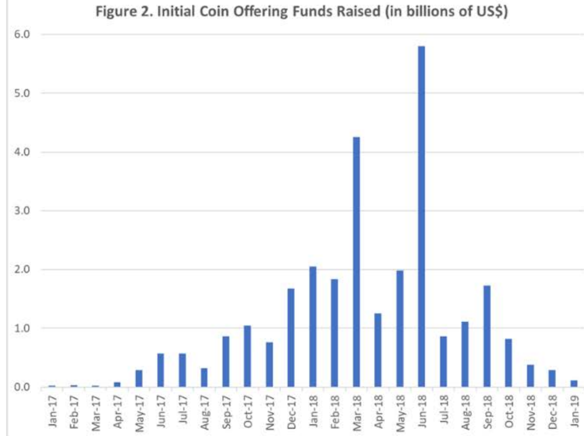

Figure 2. Initial Coin Offering Funds Raised (in billions of US$)

Sources: Figure 1: https://coin.dance; Figure 2: https://coinschedule.com

Table 1. Other FinTech Innovation News
Last year, Fintech companies issued 38 percent of all U.S. personal loans, according to TransUnion, up from 35 percent a year earlier and just 5 percent as recently as 2013. The banks' share is down to 28 percent and credit unions to 21 percent.
The UK led Europe in fintech investment in 2018, raising about $1.7 billion, compared with $3.5 billion for all of Europe, according to Pitchbook data.
The Bank of Thailand will help the National Bank of Cambodia establish and develop a QR code framework for retail payments to enable better payment linkages between the two countries.
Alipay is handling transactions at 3,000 U.S. Walgreens stores and 7,000 locations by April.
Japan's Mizuho Group has developed a smartphone app that will allow customers to pay at a wide range of Japanese stores using its forthcoming J Coin stablecoin. Alipay has partnered with this effort and will soon allow customers to pay for goods in Japan via QR code-powered J Coin.
Japan's MUFG is launching a blockchain-based payments network next year. The Global Open Network will be capable of processing over a million transactions per second.
Commerzbank and technology companies Continental and Siemens have jointly conducted a money market security transaction pilot using R3's Corda-based blockchain platform.
HSBC's claims that its blockchain-based FX Everywhere platform saved 25 percent versus traditional methods.
Remittance firms UAE Exchange and Unimoni have gone live with their Finablr blockchain-based (Ripple) cross-border remittance platform, starting with payments for its customers to Thailand.
New World Development and Hong Kong Applied Science and Technology Research Institute launched the PropTech blockchain real estate documentation management platform, with the Bank of China (Hong Kong) as first bank user.
U.S. financial services provider Fidelity's crypto trading and custody platform is in its final testing phase.
Germany's Eurex derivatives exchange is reportedly planning to launch digital asset-based futures contracts.
Iran has reportedly launched a gold-backed cryptocurrency called "PayMon" – the Persian word for covenant – with four local banks, in a move made following international sanctions.
Investment bank Banco BTG Pactual SA is releasing its own blockchain-based security token, The ReitBZ token will be backed by distressed real estate assets in Brazil.
Inveniam Capital Partners plans to tokenize about $260 million of real estate and debt transactions, starting with a building in Miami, Florida. valued at $65.5 million.
The International Securities Services Association, a group of 30 Asian and European central securities depositories, is exploring crypto custody.
The French telecom company Orange rolled out a 3G-powered "smart feature phone" powered by a "light" operating system that brings smartphone-like functionalities to cheap feature phones.

Table 2. Other FinTech Regulatory Developments
The Bank of Lithuania has updated its position on virtual assets and initial coin offerings (ICOs).
Wyoming became the first U.S. state to enact changes in the law empowering private ownership of crypto-assets, in a bid to create a U.S. version of Switzerland's Crypto Valley.
South Korea's financial authorities are consulting on a peer-to-peer lending legal framework, seeking to encourage investment by raising the ceiling while enhancing protective measures for investors.
Luxembourg passed new legislation, with the purported objective of providing market participants with more transparency and legal certainty regarding the circulation of securities with blockchain technology. The bill is also geared to make the transfer of securities more efficient by reducing the number of intermediaries.
Indonesia's Commodity Futures Trading Supervisory Agency has established a legal framework for operating crypto and digital assets futures markets.
The Philippines Cagayan Economic Zone Authority has introduced a new set of crypto-asset rules.
Thailand will amend the Securities and Exchange Act so that tokenized securities can be officially issued on blockchain. The Thai Securities and Exchange Commission will issue additional rules so that crypto platforms can seek a securities depository license.
The Reserve Bank of India is examining bringing payment gateway operators under its direct regulatory ambit, to make the digital payments ecosystem more secure and stable.
Bahrain's central bank has issued new crypto-asset regulation, covering licensing, governance, risk management, AML-CFT, business conduct, conflict of interest, reporting and cybersecurity.