

Cryptocurrencies and their implications for Singapore

As cryptocurrencies evolve, keeping up with blockchain technology – likely to become widely used – is key. Singapore is keeping abreast. **BY RAMKISHEN RAJAN AND DANIEL HURST**

THE market capitalisation of bitcoin and other cryptocurrencies seems to keep hitting fresh highs almost every other week. More cautious observers remind us about the “tulip mania” of 17th century Netherlands.

Central banks around the world are keeping a close eye on this phenomenon. The managing director of the Monetary Authority of Singapore (MAS) Ravi Menon announced recently that the Singapore government would monitor the market for risks, but not regulate cryptocurrencies for the time being.

THE RISE OF CRYPTOCURRENCIES

The major impetus for the creation of Bitcoin seems to have come from the global financial crisis and the resulting concerns about the fragility and opacity of the world banking system. This seemed to be one of the motivating factors behind the creation of bitcoin, when it was launched in 2009 by a mysterious figure, Satoshi Nakamoto.

There are two other underlying motivating factors:

The first is a desire by some parties for a more decentralised monetary and financial arrangement and to reduce the monopoly power of central banks in monetary creation. This is not a new phenomenon. There has been a long, established field of thought on “free banking”; its advocates have argued that money should be competitively issued rather than be centralised and issued by a single entity in a country (that is, the central bank). The major proponent of this view has been the Austrian economist Friedrich Hayek, who called for the privatisation of money.

The second underlying motivating factor is it is a natural consequence of the new wave of fintech development and the sharing economy, which has led to massive disruptions and transformational changes in the financial sector in recent times.

THE RISKS

There are valid concerns about money laundering, fraudulent or other illegal activities (including terrorist financing) due to the anonymous nature of transactions, and the limited regulatory framework to manage transactions involving digital tokens.

Further, the activity in question can change quickly, as was the case with the bitcoin split in August. Technical disagreements about the blockchain prompted the currency to fork into two branches: bitcoin and the new offshoot known as bitcoin cash; another split into bitcoin gold is said to have just occurred. Regulatory schemes must thus be nimble to be effective.

From a financial stability perspective, to date the rise of cryptocurrencies and Initial Coin Offering (ICOs) may not have systemic risks due to their hitherto limited linkages with the broader financial system and real economy.

However, if cryptocurrencies do become more widespread in their use, they clearly have potential for systemic risks. And if cryptocurrency becomes more widely used, it will have significant impact on the conduct and effectiveness of monetary policy, issuance and use of fiat currencies (that is, legal tender issued by central banks, not backed by commodities), central bank seigniorage revenues of central banks (that is, the difference between revenue generated from money creation and its production costs)



If cryptocurrencies become more widely used, they clearly have potential for systemic risks.
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and the central bank’s ability to oversee and manage the payments system.

Arguably of more concern – and potential – is the growing widespread use of blockchain technologies (that is, decentralised and transparent ledger to record and manage transactions) which underlie the cryptocurrencies. This decentralised arrangement creates obvious difficulties for regulators.

Traditional financial regulations were not designed for trading based on blockchain technology – a kind of shared, public database of transactions that is updated and visible to the vast network of market participants.

JAPAN AND CHINA

With some exceptions, policymakers worldwide have recognised the need to understand cryptocurrencies and the underlying distributed ledger technology. In some senses they have little choice, as failure to embrace these new innovations may lead to erosion of their control over payments system and ability to manage the macroeconomy over time (in terms of monetary policy and role as the lender of last resort).

Japan has taken quite a calculated liberal approach to cryptocurrencies and positioned itself as one of the most cryptocurrency-friendly countries in the world. Earlier this year, it passed a law to regulate virtual currencies, which was seen as giving a confidence boost to the sector.

Days after the new law came into effect in April, Japanese electronics retailer Bic Camera announced a pilot under which it would accept bitcoin payments in several of its brick-and-mortar stores.

Japan’s Financial Services Agency (FSA) has also asked cryptocurrency exchanges to register with it. The exchanges must maintain a minimum capital stock of 10 million yen, among other conditions. It was recently announced that the registration of 11 exchanges had been approved; another 17 applications are still pending.

In contrast, China has banned ICOs and moved to shut down cryptocurrency exchanges believed to be linked to criminal activities such as illegal securities issuance, financial fraud and pyramid schemes. It is likely that the ban will not be permanent and was meant to give the authorities some breathing room to put in place regulatory safeguards. This is especially so since the country – while still growing rapidly – has been faced with concerns about financial instability and capital outflows.

There is speculation that China has been developing a national digital currency. Regulators elsewhere will be watching closely to see where China finally lands.

SINGAPORE’S WAY FORWARD

Even if countries do not roll out their own digital currencies, the blockchains underpinning them are likely to become very widely used in the future. Therefore, experimentation in the field of distributed ledger technology is critical.

Singapore, which has an ambitious plan of becoming a Smart Financial Centre, is among the pioneers in this regard (along with Australia, Canada, South Korea, and the Nordic countries, among others). The MAS has been exploring the use of a digital version of the Singapore dollar to facilitate inter-bank payments. Dubbed “Project Ubin”, it is said to be based on a similar Bank of Canada project (Project Jasper) with Singapore-specific alterations.

It is only with such experimentation that policymakers can fully understand how to best harness their benefits (in terms of smart contracts and reduced costs of fund transfers, especially cross-border payments, for example) while putting in place appropriate regulations and disclosure requirements to minimise various risks posed by virtual currencies.

Policymakers should also work closely with industry players to understand the practicalities and maintain dialogue with regulators in other countries because of the global scope of the issue. The MAS and the Hong Kong Monetary Authority (HKMA) recently signed an agreement to collaborate on a number of projects based on blockchain technologies.

The debate surrounding fintech and cryptocurrencies could also gain from forward-looking research projects. Despite the explosion in cryptocurrencies, there has been limited academic work in the area. There might be scope in Singapore to launch a large-scale research policy project on issues related to blockchain technology, implications for central banking policies, and the potentially transformative impact on how government services could be delivered.

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