

RSIS Commentary is a platform to provide timely and, where appropriate, policy-relevant commentary and analysis of topical issues and contemporary developments. The views of the authors are their own and do not represent the official position of the S. Rajaratnam School of International Studies, NTU. These commentaries may be reproduced electronically or in print with prior permission from RSIS and due recognition to the author(s) and RSIS. Please email: RSISPublications@ntu.edu.sg for feedback to the Editor RSIS Commentary, Yang Razali Kassim.

Bitcoin and Crypto Currencies: China's Security Concerns

By Alessandro Arduino

Synopsis

Two sequential market crashes in China at the beginning of 2016 forced regulators to intervene in the main stock exchanges. However virtual currencies such as Bitcoin increased in value three-fold, while exposing potential risks, thus raising threat concerns for China.

Commentary

2016 BEGAN in China with two sequential market crashes that forced the regulators to intervene in the Shanghai and Shenzhen stock exchanges. As they did in response to the stock bubble that burst in 2015, Chinese regulators intervened to organise a centrally-planned recovery.

Despite the stimulus of US\$20 billion that the People Bank of China (PBoC) pumped into the market during the 5 January market crash, the yuan kept weakening. Gold as the usual commodity of refuge for investors during uncertain times started to gain momentum. At the same time, the virtual currencies that employ heavy cryptography and blockchain technology, such as Bitcoin, have increased in value thanks to the Chinese investments. (Instead of a centralised database to store records of all transactions, blockchain diffuses the data all over the Internet with anti-tampering cryptograph protection).

What is Bitcoin?

Launched in 2009, Bitcoin is an Internet-based crypto currency that enables anonymous users to make instant money transactions around the world, bypassing central bank regulation and supervision. Chinese investors consider Bitcoin to be a

highly volatile currency prone to speculation and quick profits, such as the ones delivered by the Chinese stock market prior to the October 2007 crash.

Although Bitcoin is the most traded virtual currency in terms of volume, more than 600 virtual crypto currencies have been created and adopted since Bitcoin's inception in 2009. In December 2013 the PBoC restricted Chinese banks and virtual payment systems such as Alipay from using Bitcoin in their transactions, labelling the virtual currency a threat to financial stability.

The move generated a Bitcoin price drop of 35% in less than one hour. Despite the ban, Bitcoin "mining" in China - high speed computers devoted to add transaction records to Internet public ledger of Bitcoin's past transactions - is half of the worldwide network mining activities; the volume of Bitcoin traded in yuan accounts for approximately 80% of the total global volume.

Role of crypto currencies in avoiding China's capital controls

Crypto currencies - Bitcoin *in primis* - are poised to increase vulnerabilities and uncertainty in the Chinese economy during 2016. The security concerns for China are a broad threat spectrum. The immediate one is associated with increased capital flight that relies on Bitcoin as a tool to avoid strict Chinese capital controls.

Another concern is over the possible collapse of virtual Ponzi schemes, based on the promise of easy profits in virtual currencies, which are increasingly attracting a cross-section of Chinese society along with their savings. The collapse of one of these virtual pyramid schemes, that take advantage of the grey area in the Chinese financial regulations, could start a domino effect that within a few hours could consume the lifetime savings of un-savvy Chinese investors.

The collapse of these fraudulent schemes or even the implosion of more legitimate funds linked to Bitcoin could ignite severe social unrest, greater than that witnessed during the October 2007 stock market crash.

Over the long term, several other threats related to the use of Bitcoin are expected to affect China's security. These threats include the lack of accountability in China's growing shadow economy as well as providing an additional tool for the financing of terrorism and illegal activities such as kidnappers' rings. Just in the last months of 2015, a high-level case of kidnapping involving the Hong Kong tycoon Wong Kwan resulted in a Bitcoin ransom demand.

In 2015, the Chinese government's options in support of the stock market ranged from capital inflow restrictions to jail terms for short-sellers (traders who were betting against the market, thus profiting from the fall). In 2016 these options are more limited due to the dwindling foreign trade account surplus and the risks related to the possible burst of the provincial government and State Owned Enterprises (SOEs) bad loan bubble, which could very well absorb the remaining reserves.

In parallel with the yuan devaluation, the Chinese online Bitcoin exchanges (such as Okcoin, Huobi and BTC China) are experiencing an increased spread in the Bitcoin-

US\$ exchange rate. A weaker yuan will attract an increasing number of Chinese to hold assets denominated in Bitcoin.

Yuan & Crypto currency links

To assuage the concern of several western countries, China needs to take additional measures to address the unregulated use of virtual currency, particularly money laundering and terrorist financing. The anonymity that is at the base of the crypto currencies is prone to abuse and must be taken into account when framing new regulations and policies.

However, Bitcoin does not need to be stigmatised as a "terrorist currency" as it is just a medium for value transfer. In this respect calls to criminalise Bitcoin are not substantiated and could be the same as a demand to stop using the US dollar since it is the preferred currency in global drugs and arms transactions.

Considering the role of the yuan with Bitcoin it is also possible to infer that future Chinese regulatory policies will have a greater influence on the Bitcoin's global value. While PBoC is currently focused on containing the volatility of the yuan, constraining additional capital outflows and limiting the pressure to depreciate the yuan, there is an urgent need for a long-term Chinese approach in dealing with crypto currencies, particularly their use for illicit purposes.

Due to the size of its economy, China now has an important impact on the global financial system. At the same time the influence of China over the value of and use of Bitcoin is growing rapidly. China therefore also bears the responsibility to provide practical solutions that will enable and perhaps even regulate the legitimate uses of crypto currencies.

Dr. Alessandro Arduino is the co-director of the Security & Crisis Management programme at the Shanghai Academy of Social Science (SASS) and was a visiting senior fellow with the China Programme at the S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University, Singapore.

Nanyang Technological University
Block S4, Level B4, 50 Nanyang Avenue, Singapore 639798
Tel: +65 6790 6982 | Fax: +65 6794 0617 | www.rsis.edu.sg