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China's Crypto Economy: Sacrificing Opportunity for Control?

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SYNOPSIS

The rapid advancement of cryptocurrencies since 2009 has brought forth a new and innovative encompassing ecosystem – the crypto economy – in the form of the metaverse, blockchain technology, non-fungible tokens, cryptocurrency exchanges, secondary cryptocurrency trading businesses, and decentralised payment networks. The crypto economy also poses innumerable political and socioeconomic risks to China. Hence, Beijing has resolutely banned cryptocurrency activities to (i) enhance political and socioeconomic stability, (ii) strengthen its administration of state policies, and (iii) reduce its energy misemployment and environmental concerns.

COMMENTARY

The evolution of cryptocurrencies has brought forth blockchain technology that creates a decentralised, entrenched ledger, making it easier to direct assets and record transactions in a corporate network. Forbes has called the metaverse a US$1 trillion revenue opportunity as technology moves towards Web 3.0. The non-fungible tokens (NFT) industry has also seen massive growth in total sales of US$17.6 billion in recent years – a more than 21,000 per cent increase from 2020.

Notwithstanding this, governments globally have taken variegated stances toward the use and treatment of cryptocurrencies. Democratic countries like Australia, the US, and those in Western Europe have taken more *laissez-faire* stances, while some of the more authoritarian countries like Algeria, Egypt, and China have banned the use of cryptocurrencies completely.

This commentary explores the rationale for China's resolute ban on the crypto economy, even though its expansion will spur much-needed economic growth and the creation of new business and employment opportunities.

Threat to China’s Political and Socioeconomic Systems

Cryptocurrencies are an essential component of the crypto economy, which has seen blistering expansion over the past decade. As suggested earlier, Forbes predicts that the metaverse, which only uses cryptocurrency for transactions, has the potential to generate US$1 trillion in income. Furthermore, the total market capitalisation of cryptocurrencies topped more than US$3.4 trillion as of 27 December 2024, making the mercurial asset class too sizeable to ignore. Therefore, why would Beijing choose to ban the use of cryptocurrencies and forgo the opportunity to participate in the growth of the crypto economy?

To answer this, we must first understand the Chinese government’s priorities. Previous studies have assessed that the Chinese Communist Party’s (CCP) legitimacy and political and socioeconomic stability precede all other concerns under China’s one-party system. Thus, the possibility of the misemployment of cryptocurrencies and a crypto economy collapse poses significant threats to the government’s stability.

Before 2017, China was the world’s largest cryptocurrency market, with 80 per cent of bitcoin transacted in renminbi (RMB). China was also responsible for 75 per cent of the world's bitcoin mining operations until the activity was banned in May 2022. Under these circumstances, China’s political and socioeconomic stability would be severely undermined in the event of a catastrophic collapse or misuse of cryptocurrencies.

Moreover, Nobel Prize-winning economist Paul Krugman saw “uncomfortable parallels” between cryptocurrencies and the subprime crisis, which sparked the global financial crisis in 2007. Indeed, during a 12-month span from late 2021 to late 2022, cryptocurrencies lost more than US$2 trillion in market capitalisation, equating to roughly 75 per cent of their aggregated value, causing upheaval in the crypto economy. Overall, the widespread usage of cryptocurrencies could create an economic and political debacle requiring Beijing’s intervention.

Challenge to China’s Ability to Administer Policies

As cryptocurrencies are transacted on decentralised blockchains, no centralised institution or government owns them. Thus, cryptocurrencies pose a number of challenges for the Chinese government. First, as the decentralised blockchains lie beyond Beijing’s jurisdiction, cryptocurrencies can be used to circumvent China’s strict capital controls. Second, cryptocurrencies can be used to support illegal activities such as terrorist funding and financial crimes that will go undetected by Beijing. Third, cryptocurrencies impede China’s capacity to administer political and socioeconomic policies since their supply directly affects the nation’s credit and money supply management. Lastly, cryptocurrencies challenge Beijing’s financial and political authority by providing an alternative medium of exchange. Hence, activities conceived through the use of cryptocurrencies pose significant threats to China’s economy and challenge the effectiveness of its policies and authority.

Indeed, Tobias Andrew, a senior official at the International Monetary Fund, stated that price swings inherent in cryptocurrencies are “destabilising” financial flows in emerging nations, and using cryptocurrencies instead of fiat currencies poses "immediate and acute concerns". Andrew also said that cryptocurrencies are being utilised to transfer funds out of countries deemed unstable, which can further exacerbate financial crises. To demonstrate its resolve to exert greater control over its economic and political levers, Beijing banned financial institutions and payment businesses from using cryptocurrencies two months after Baidu, China's largest search engine, began taking bitcoin in October 2013.

To gain greater control over its financial system and moderate the use of cryptocurrencies, Beijing began exploring the use of its own digital currency (e-CNY) in 2014. Subsequently launched on 4 January 2022, the e-CNY now has about 260 million users. Notwithstanding this, cryptocurrencies have established a global niche for their usage in the contemporary digital era.

Energy Consumption and Environmental Concerns

Bitcoin is based on a decentralised network and must be "mined", unlike conventional types of currency, which are issued by a single institution such as a central bank. This form of computer mining consumes vast amounts of energy and emits enormous amounts of carbon dioxide, especially when done on a large scale.

Before Beijing's crackdown on cryptocurrency mining, China was responsible for a significant portion of the world's bitcoin mining. Cambridge University estimated that "the bitcoin network would rank 32nd in the world in terms of energy consumption if it were a country". A report by the Chinese Academy of Sciences estimated that if Beijing had not intervened, China would have consumed about 297 Twh of energy on cryptocurrency mining activities by 2024 – surpassing the combined energy consumption of Italy and Saudi Arabia – and emitted 130 million metric tons of carbon dioxide – surpassing the combined greenhouse gas emissions of the Czech Republic and Qatar.

Furthermore, China suffered intermittent energy shortages in 2021 and 2022, which impacted the lives of tens of millions of people due to rising coal costs. Failure to adequately address issues related to intractable energy consumption, negative externalities, and private enterprises taking advantage of government energy subsidies resulting from cryptocurrency mining activities will likely result in heightened socioeconomic tensions within China.

Conclusion

The crypto economy is here to stay, and cryptocurrencies will play a larger role as a medium of exchange in the digital era. Policymakers must weigh the political and socioeconomic threats presented by the crypto economy against the benefits it provides.

Over time, political attitudes toward cryptocurrencies have diverged across countries. Comparatively, Western democracies – where powerful business groups wield significant influence over policymaking – have taken steps to liberalise the use of cryptocurrencies, while Beijing has taken steps to limit their use.

The CCP's need for greater economic and political control will continue to place

China’s digital and technological economy at a significant disadvantage to those of Western economies. As the US tries to contain China’s rise and technological advancement, China must take a more receptive approach to adopting cryptocurrencies and the crypto economy. Rather than restricting the use of cryptocurrencies entirely, Beijing should establish institutions and formulate ground rules to regulate their use to keep its digital economy competitive.

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