

lakyara vol.281

# Outlook for cryptocurrencies and blockchain has turned hazy

Shin Kusunoki

10.April.2018



**Shin Kusunoki**

Executive Fellow

Nomura Research Institute, Ltd.

**NOTE**

1) Kusunoki, Shin, *FinTech 2.0: Kinyu to IT no kankei ga bijinesu wo kaeru (FinTech 2.0: How the fusion of finance and IT will change business)*, (2016, Chuokeizai-sha).

2) Mt. Gox, a Japanese bitcoin exchange, was bankrupted in 2014 by a loss of bitcoins in its custody. It was the world's largest bitcoin exchange at the time.

3) Examples include the Goldman Sachs-led R3 blockchain consortium, which includes Mitsubishi UFJ and Mizuho Financial Groups.

## Executive Summary

*The FinTech boom has largely revolved around bitcoin and blockchains in particular, even as experts warned of various risks posed by cryptocurrencies such as bitcoin. These risks manifested in full force in 2017, undermining the narrative that blockchain technology would inevitably revolutionize the financial system. The outlook for cryptocurrencies and blockchains has turned quite hazy.*

### FinTech boom and bitcoin

When my book *FinTech 2.0*<sup>1)</sup> was published two years ago, the FinTech boom was in full swing. In the US, \$20 billion of venture capital was invested in FinTech in 2015. Much of the excitement accompanying the boom was focused on bitcoin and blockchains in particular. Bitcoin is a cryptocurrency based on a white paper of unknown authorship that was published under the pseudonym Satoshi Nakamoto. Blockchain is bitcoin's enabling technology.

One major reason for the excitement surrounding bitcoin and blockchains was that they have the potential to liberate financial transactions from the incumbent financial system (e.g., the SWIFT network) and, in turn, government regulation. Another reason is that, being Internet-based and therefore able to bypass the incumbent financial system's costly infrastructure, they could reduce transaction costs by as much as an order of magnitude. A third reason is that bitcoin was rapidly appreciating in value against fiat currencies.

Nearly all of the finance and FinTech experts I interviewed a couple years ago were dismissive of bitcoin, partly because it had recently plummeted in value in response to the Mt. Gox incident<sup>2)</sup> in Japan. Blockchains, however, were a different story. Many of the experts believed that blockchain technology, independent of bitcoin, was potentially as game-changing as the Internet.

This belief gave rise to multiple initiatives<sup>3)</sup> to apply blockchain technology throughout the financial sector. The blockchain developed as bitcoin infrastructure was a novel concept, an architecturally radical departure from existing financial IT systems. Many thought leaders believed that huge business opportunities would ensue if complex banking systems and interbank transaction systems could be re-

architected atop blockchains.

### Cryptocurrencies' drawbacks

Bitcoin and other cryptocurrencies have some long-known drawbacks. A 2017 book<sup>4)</sup> warned of nearly all of their practical drawbacks, including some that did not manifest until later. Blockchain technology was developed for trading bitcoin but cryptocurrency trading requires more than blockchain technology alone. Just as securities trading is facilitated by exchanges and brokers, entities analogous to securities broker/dealers are required for cryptocurrency trading. Like conventional securities brokers, these entities must provide market information and implement security measures to protect their customers' interests. Although entirely unrelated to the blockchain, such ancillary functions are critically important to ensure the integrity and security of cryptocurrency trading. Additionally, unforeseen circumstances sometimes arise in the course of financial transactions. Criminals are always lurking in the shadows and their crimes usually target vulnerabilities in financial system security. That is why broker/dealers' functions in securities markets are costlier than securities exchanges'.

4) Matsuo et al., Burokkuchen gijutsu no mikaiketsu mondai (Blockchain technology's unresolved problems), (2017, Nikkei Business Publications).

### Cryptocurrencies in 2017

Cryptocurrencies returned to the limelight in 2017, which proved to be a watershed year. In April 2017, Japan became the first country to legalize cryptocurrencies as a means of payment when it amended its Financial Settlement Act. If cryptocurrency trading were legally construed as a goods transaction, it would be subject to Japan's consumption tax, but the amended Financial Settlement Act officially exempted it from consumption taxation by recognizing cryptocurrencies as a means of payment. The move ignited a bitcoin investment boom. The amended Financial Settlement Act's effective date roughly coincided with the launch of Coincheck, a cryptocurrency exchange that has since gained notoriety for a security breach that resulted in the theft of customers' holdings of the XEM cryptocurrency issued by the NEM.io Foundation. During the course of 2017, bitcoin rose in price more than tenfold before crashing at year-end.

Even while bitcoin was soaring in price, financial experts remained skeptical. Many said that bitcoin was just another in a long line of bubbles. In late 2017, the cryptocurrency mania abruptly died down in response to a US Securities and Exchange Commission decision to reject an application for a bitcoin ETF listing. Monetary authorities globally have repeatedly commented negatively on bitcoin. The tone of their comments has grown increasingly disparaging and, since

January, taken on an air of finality. Most notably, Bank of England Governor Mark Carney said bitcoin has “pretty much failed” as a currency. His verdict echoed Neel Kashkari, President of the Federal Reserve Bank of Minneapolis, who said bitcoin is for “toy collectors.” Kashkari added, “I don’t really think of bitcoin as a currency. I think of it as a novelty.”

Meanwhile, a series of untoward incidents at cryptocurrency exchanges have also had negative repercussions. In December 2017, Youbit, a Korean cryptocurrency exchange, filed for bankruptcy following the alleged theft of customers’ bitcoins by North Korean hackers. In January 2018, Coincheck, the Japanese cryptocurrency exchange mentioned earlier, lost XEM coins valued at over US\$500 million<sup>5)</sup>. Some commentators argue that cryptocurrency exchanges’ recurring woes are merely a manifestation of unaddressed problems that have long been a concern. In any case, cryptocurrencies are undeniably still in an embryonic stage as financial infrastructure.

5) Additionally, Zaif, another Japanese cryptocurrency exchange, experienced a trading system glitch in February (<https://www.reuters.com/article/cryptocurrencies-japan/zero-yen-japanese-cryptocurrency-exchange-briefly-trips-up-trade-idUSL4N1QB15J>).

### Blockchains’ future

So what do the experts who said cryptocurrencies had no future but were bullish on blockchains think today? Among those I have recently interviewed, one replied, “All of the efforts to apply blockchain technology to the financial system were really valuable because we now realize that the financial system is littered with black boxes in the form of outdated infrastructure built in an era of scarce computing capacity. By rebuilding such old infrastructure, we can radically remake the financial system. The US financial industry is aggressively moving in that direction. That said, blockchain technology may not necessarily be used in the financial system of the future. If such a revolutionary technology were not used, its omission would be because we have a wealth of other technologies more fit for purpose.”

The outlook for bitcoin and blockchains has turned quite hazy.

## **about NRI**

*Founded in 1965, Nomura Research Institute (NRI) is a leading global provider of system solutions and consulting services with annual sales above \$3.7 billion. NRI offers clients holistic support of all aspects of operations from back- to front-office, with NRI's research expertise and innovative solutions as well as understanding of operational challenges faced by financial services firms. The clients include broker-dealers, asset managers, banks and insurance providers. NRI has its offices globally including New York, London, Tokyo, Hong Kong and Singapore, and over 12,000 employees.*

*For more information, visit <http://www.nri.com/global/>*

.....

The entire content of this report is subject to copyright with all rights reserved.  
The report is provided solely for informational purposes for our UK and USA readers and is not to be construed as providing advice, recommendations, endorsements, representations or warranties of any kind whatsoever.  
Whilst every effort has been taken to ensure the accuracy of the information, NRI shall have no liability for any loss or damage arising directly or indirectly from the use of the information contained in this report.  
Reproduction in whole or in part use for any public purpose is permitted only with the prior written approval of Nomura Research Institute, Ltd.

Inquiries to : Business Planning & Financial IT Marketing Department  
Nomura Research Institute, Ltd.  
Otemachi Financial City Grand Cube,  
1-9-2 Otemachi, Chiyoda-ku, Tokyo 100-0004, Japan  
E-mail : kyara@nri.co.jp

<http://www.nri.com/global/opinion/lakyara/index>

.....