OPINION

Here’s what really is behind bitcoin’s recent rally

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A Bitcoin sign at the Bitcoin Plaza during an employment fair on the second anniversary of the cryptocurrency being accepted as a payment method, in Ilopango, El Salvador, Sept. 7, 2023.JOSE CABEZAS/REUTERS

Here we go again.

As late as Oct. 11, 2023, the value of a bitcoin BT was US$28,414. By this week, its value shot up nearly 60 per cent to about US$45,000.

What made bitcoin more valuable now than it was in October? Is it simply because many people think it is more valuable now or is expected to become more valuable?

We don’t think it’s that simple.

Bitcoin’s rise and its remarkable ability to rebound after collapsing may be explained by some very esoteric reasons. Let us explain.

Bitcoin defies its doubters in 2023

There are two parties involved in the bitcoin market. The speculators and the miners. Miners want to be the first to verify and record transactions to receive new mined bitcoins – this is their reward. For speculators, however, the fundamental value of bitcoin – at least according to economic theory – is zero as it generates no cash flows to the holder.

In a paper by Xavier Gabaix and Ralph Koijen, the authors argue “stock prices move because people do things independently of fundamentals.” In their paper titled In Search of the Origins of Financial Fluctuations, they explain that the amount of money entering the markets can have a large impact on share prices regardless of fundamentals. They do, however, conclude that in the long run prices return to fundamentals.

The miners increase the float in bitcoin by selling their reward to speculators on the market. The value of the miners’ reward is heavily dependent on the existence of speculators. Speculators can enter the market at minimum costs, whereas for miners there are costs and constraints that limit the number of miners, including requiring tens of thousands of computers and access to huge amounts of cheap electricity. For miners, it is a cost-benefit analysis.

Miners receive the new bitcoin reward by repeatedly solving complex equations, a process which is highly dependent on the amount of electricity they use. They can sell the bitcoin after they mine them. Miners are marginal traders and can time the market until more speculators arrive. For speculators, however, the hope is to resell the bitcoin at a higher price to someone else.

The total supply of bitcoin is limited to 21 million. Currently, the bitcoin system dictates the mining of one block (currently worth a 6.25 bitcoin reward) in about 10 minutes (on average, 144 blocks of new bitcoins are mined a day).

There is a “halving” policy written into bitcoin’s mining software to prevent increasing the number of bitcoins over time, thus maintaining scarcity. Halving reduces the bitcoin reward by half every four years.

The first halving happened on Nov. 29, 2012, the second on July 9, 2016, and the third on May 11, 2020. The next halving will happen on April 24, 2024, and the mining reward will be reduced from 6.25 bitcoin to 3.125 bitcoin.

In the past, halvings have typically led to an increase in the bitcoin price. Six months after the first halving in 2012, the price jumped to US$126 from US$12. After the second halving in 2016, it went to US$1,000 from US$654 within seven months, and in 2020 it shot up to US$18,040 from US$8,570 within six months.

Has anticipation of the next halving in a few months acted as an impetus for the recent rise in the price of bitcoin? In an efficient market, the effect of halving should have been built into the price since the timing and effect of the halvings every four years has been known since the beginning of bitcoin in 2009.

But the market for bitcoin is anything but efficient. About 10,000 people own approximately 30 per cent of bitcoin. Around 100,000 people own about 50 per cent of the bitcoin. It is a highly illiquid market where the insiders do not disclose their trades.

The problem with this halving argument is that the value of bitcoin should be going up all the time, and not significantly down as it has many times in the past. And bitcoin going up all the time goes against the fundamental value of bitcoin, which is zero.

The popular argument these days is that the expected approval of bitcoin exchange-traded funds is the reason behind the rise in the value of bitcoin. While this anticipated announcement has heightened the attention on bitcoin, it has curiously not resulted in higher volumes.

Average monthly trading volume between 2019 and 2021 was about two million bitcoins, whereas in 2023 it was down to 500,000 bitcoins, a decline of 75 per cent, according to bitcoinity.org.

It is not the absolute bitcoin volume that is of importance, but rather the volume relative to the float of bitcoins. And here is the crux of the situation: The supply of bitcoin has gone down markedly because of all the bitcoin tied up in the various major crypto bankruptcies of the past two years, including FTX and Three Arrow Capital. This has created a demand-supply imbalance leading to the rise in the value of bitcoin.

At some point all these bitcoins will be dumped on to the market by the bankruptcy liquidators and it will depress the value of bitcoin. The bankruptcies seem to be a more likely reason for the recent increase in the price of bitcoin and can also explain the volatility, since nobody knows when the liquidators will dump the bitcoin.

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