The beginning of the end for cryptocurrencies

Jon Danielsson argues that cryptocurrencies have now reached the beginning of the end as the factors fuelling their success have come to a standstill

Cryptocurrencies have enjoyed a remarkable run from obscurity to a trillion dollar valuation in just over a decade. They are praised and condemned in equal measure by world leaders and have even become legal tender in some countries.

Crypto has had two stages in its short life: rapid price growth and elevation from obscurity, followed by a prolonged phase of global recognition, controversy and volatile prices fluctuating but with no long-term price increases. The signs now point to crypto commencing its final, terminal phase. Cryptocurrencies will leave a fine legacy even if they have not lived up to the crypto evangelists' promises.

The reasons why crypto has entered its final phase have much to do with why it has been successful and what it promises and fails to deliver (Bindseil *et al* 2022, Didisheim *et al* 2022). It is all down to politics, speculation, and efficiency.

Politics is fundamental to crypto. Its foundation myth is a world where technology replaces corrupt human beings and their organisations. Instead of fiat money abused by governments with their extra-low interest rates and repeated quantitative easing, we get digital money created and governed by an algorithm programmed to be fair.

Such a crypto financial system promises to be much more efficient than the setup we have today, with modern algorithms, programming languages, and systems replacing a costly, error-prone, corrupt banking system – one with centuries of legacy practices and more than half a century of incremental changes to its IT systems, with much still based on Cobol written half a century ago, running on IBM mainframes.

The third plank of the crypto mission is speculation, since the number of people buying into crypto's political and efficiency aspects is tiny – much too small to leave much mark on the world. While the true believers are essential for shaping the crypto narrative, success and failure come predominantly from speculators fuelled by Bitcoin's spectacular price rise from four cents to $16,000 today.

The foundation myth is essential for crypto's success. Not only because otherwise there is no need to replace the existing financial order, but even more importantly, it is why crypto is not a Ponzi scheme.

The crypto world is increasingly abandoning its politics. Just about every crypto exchange complies with anti-money laundering, know-your-customer and sanctions requirements imposed by the old school financial regulators

While crypto has become visible and made many speculators wealthy, it hasn't enjoyed the success promised by the foundation myth (Danielsson and Macrae 2022). They might not even make sense (Danielsson 2018). After all, the financial system is still almost entirely based on old school fiat money financial institutions.

And that is a problem because the high price of crypto is based on speculators betting on success. For that to happen, the promises of the foundation myth will have to be seen as within reach. Otherwise, speculators will likely lose heart and abandon crypto. Which can then become a vicious downward spiral. Both politics and speculation have been tested recently.

Start with politics. For the foundation myth to be believable, crypto has to be a credible alternative to the existing order and true to its political origins. However, the crypto world is increasingly abandoning its politics. Just about every crypto exchange complies with anti-money laundering, know-your-customer and sanctions requirements imposed by the old school financial regulators.

The old school financial authorities are just too powerful. Crypto is moving into the mainstream, and crypto evangelists are increasingly using the language of microprudential regulation when discussing how crypto needs to evolve.

While that does not destroy the foundation myth, it undermines and muddles the messaging. Is crypto money that is free from state control, or is it money that is managed with norms set by the state?

The efficiency aspect of the foundation myth has also been undermined. While crypto promises to be much better than the old school financial system, it has run into roadblocks because of the difficult trade-off between privacy, integrity, and efficiency.

The most popular cryptocurrency, Bitcoin, is inherently inefficient and can only handle a tiny fraction of the transactions needed by the economy. The second most popular, Ethereum, is more efficient and designed for smart contracts (crypto's primary vehicle for joining the mainstream).

However, Ethereum recently abandoned mining for proof of stake to pursue efficiency and political acceptability. While that does mean no more environmentally damaging mining, it is also a licence for Ethereum investors to print money for free, undermining the foundation myth. Meanwhile, its promises of smart contracts have run into serious roadblocks set by the financial regulators and the legal system.

The old school fiat system has not been standing still. The financial authorities and the private sector are alive to the threats crypto poses and have responded by proposing and even implementing much-needed reforms. After all, when financial intermediation is inefficient and exploitative because reform threatens the incumbents' rent, it leaves an opening for crypto.

To forestall that, the authorities have reacted. PIX in Brazil is an excellent example of what the old school system can do when pushed. We can thank crypto for central bank digital currencies.

Meanwhile, crypto is not as attractive to speculators as it used to be when they were motivated by the rise of the price of Bitcoin from four cents to $16,000. Bitcoin was also at $16,000 half a decade ago, going as low as $3,200 while reaching $67,000 at the peak. It doesn't look all that attractive as a speculative investment compared to, say, Amazon or Apple.

And then we have all the scandals. One of the biggest problems for crypto is that only the most technically competent and determined investors can manage self-custody, controlling their own keys. Most speculators need to use a crypto financial institution. And they have a habit of stealing people's money.

Lately it was FTX that loudly dismissed traditional practices – due diligence, protecting consumers, and the like – as belonging to the old school system, not the new crypto world. Very much a corruption of the crypto political philosophy.

The financial system has always attracted its share of corrupt and incompetent bankers, and there is no reason why it would be any different in the crypto world. The problem is that when speculators face substantial losses because of fraud and those losses are widely reported, it deters new speculation. Driving the price of crypto down.

Then a speculator might ask themselves, why not pick Tesla or Gamestop instead? Meanwhile, it reinforces the narrative of the old school system that its institutions are necessary for protecting the users of the system, further eroding the foundation myth.

The combination of the political mission undermined, efficiency not yet delivered, and speculators hurt suggests that crypto is about to enter its final, declining phase. Of course, that will not happen rapidly, and we will likely see crypto rallies. But unless something fundamental changes, it is the beginning of the end. Perhaps the financial authorities will lose even more control of inflation, boosting the foundation myth.

I don't think that would be sufficient by itself. The strength of crypto is decentralisation, but that is also the weakness. The crypto world can't prevent abusive firms like FTX from setting up shop. It even needs unregulated firms to facilitate speculation, and then has to live with the fallout when they fail. Meanwhile, the crypto enthusiasts have all their own views, diluting the messaging.

However, there is little public concern about crypto, either from a macro or microprudential perspective. Little suggests it poses a systemic financial threat to society. If anything, it is so small that it can't be systemic, unlike the old school, too-big-to-fail banks.

Crypto is a microprudential issue in so far as micro concerns itself with protecting the clients of the financial system. But people are allowed to take high risk – smoke, ride motorcycles, buy lottery tickets, jump out of aeroplanes, gamble and speculate on high-risk negative NPV investments. So if the authorities are fine with that, they should be OK with crypto too.

While it is the beginning of the end for crypto, it has brought much good by alerting us to all the inefficiencies and exploitation in the existing system, forcing the authorities and the private sector to reform. And that is the positive legacy crypto leaves. ■

Jon Danielsson is Director, Systemic Risk Centre, at the London School of Economics and Political Science

References

Bindseil, U, P Papsdorf and J Schaaf (2022), "The Bitcoin challenge: How to tame a digital predator", VoxEU.org, 7 January.
Didisheim, A, S Kassibrakis and L Somoza (2022), "The end of the crypto-diversification myth", VoxEU.org, 21 July.
Danielsson, J (2018), "Cryptocurrencies don't make sense", VoxEU.org, 13 February.
Danielsson, J and R Macrae (2022), "Bitcoin isn't much of a macro hedge", VoxEU.org, 25 June.

This article was originally published on VoxEU.