CBDCs and Cryptocurrencies: Can They Coexist?

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Last October, The Bahamas launched the world’s first fully-fledged central bank digital currency (CBDC). The Sand Dollar, and more generally CBDCs, represent a fundamental shift in central bank monetary policy. Currently, central banks offer two forms of central bank money. The first of these is simple—cash, which can be used by the general public for everyday transactions. The second is more complex and powers the Real Time Gross Settlement systems (RTGS) operated by central banks and used by financial institutions for interbank settlements. In RTGS systems, financial institutions hold accounts directly with the central bank and transfer a form of legal tender that represents central bank claims with other financial institutions.

CBDCs provide a third form of central bank money that is entirely digital. Digital currencies are, of course, nothing new; cryptocurrencies have existed since the mysterious Satoshi Nakamoto released his Bitcoin whitepaper in 2008 in the midst of the Great Recession. However, the launch of government-backed digital currencies have some wondering whether stateless cryptocurrencies will continue to exist in a post-CBDC world. Despite skepticism from central bankers, the use cases of CBDCs and cryptocurrencies are sufficiently unique to justify their cohabitation in the global financial system.

What are CBDCs?

CBDCs like those released by the Bahamas come in two different types: wholesale and retail. This paper will mainly focus on retail CBDCs, since the direct access that they give central banks to the general public will likely transform monetary policy. However, it should be noted that wholesale CBDCs will likely replace the already digitized RTGS systems used by central banks discussed above.

Retail CBDCs (henceforth “CBDCs”) provide the general public with a digital payment instrument that is a direct liability of their nation’s central bank. They are a sort of virtual cash, with each CBDC token issued by the central government marked with a unique identifier to prevent counterfeiting. As in the case of the Sand Dollar, CBDCs can be held in digital wallets in accounts directly against the central bank, bypassing the bank requirement needed for many modern day payment methods. However, other proposed CBDC projects maintain the role of commercial banks as middlemen and do not allow citizens to hold their currency directly with the central bank.

Central banks globally are monitoring The Bahamas to inform their own digital currency projects. According to the Bank of International Settlements, 86% of central banks are undergoing some form of work towards their own CBDCs. Some central banks are farther along in CBDC development than others. The People’s Bank of China, for example, has been developing their digital yuan since 2014 and is currently conducting experimental giveaways of the currency. The European Central Bank could have its own digital euro as soon as 2025. Researchers at the Federal Reserve and MIT have been conducting CBDC research since last
year, though Fed Chairman Jerome Powell has stressed the importance for the United States “to get it right than be first.”

What do central banks hope to gain from CBDCs?

There are several problems that central banks face today that may be solved by issuing CBDCs. First, issuing a digital currency could reduce the costs of printing, distributing, and storing physical cash. Second, some central banks view the decline in cash usage as a threat to their public mandate to provide access to risk-free central bank money, a mandate that instead could be fulfilled by CBDCs. Third, central banks may see the ability to issue CBDCs directly to citizens as a way to promote financial inclusion for unbanked populations currently unable to access a full range of financial services and digital payment methods. Finally, central banks may issue CBDCs to address geopolitical problems. For example, Russia sees a digital ruble as a way of mitigating the impact of international sanctions, while China views its digital yuan as a way to challenge global hegemony of the U.S. dollar.

In addition to solving today’s problems, CBDCs offer new opportunities for central banks and governments. CBDCs could be programmed to have negative interest rates and, if no physical cash exists for people to switch to, central banks could implement a true negative interest rate policy. Central banks may also set expiration dates on some CBDCs to quickly increase spending in the short term. Further, governments could use CBDCs to make direct cash injections to targeted regions after a natural disaster or to provide quick relief during a pandemic. Governments may also be able to detect, track, and even reverse illicit transactions using CBDCs.

Can CBDCs and crypto coexist?

In addition to lessening the financial system’s existing problems and providing new opportunities for monetary and fiscal policy, central banks also view CBDCs as a potential shield against the rise of cryptocurrencies.

Central banks see CBDCs as a legitimate digital currency alternative to cryptocurrency, which some central bankers regard as a “highly speculative asset.” According to Fed Chairman Jerome Powell, a partial reason for the Fed’s research into CBDCs is the misconception held by the public that private cryptocurrencies are actual currency. The anonymity of cryptocurrencies also remains a concern for central banks, which may enable criminal activity, money laundering, and other “funny business.” Current U.S. Treasury Secretary Janet Yellen, for example, argues that use of cryptocurrencies for illicit activities is a “growing problem” (though a 2021 report found that the share of cryptocurrency used for criminal activity fell from 2.1% to 0.34%—dropping by an estimated $11.4 billion). Central banks are also worried about the impact that cryptocurrencies, particularly stablecoins that peg their market value to a single currency, will have on monetary policy and overall financial stability. When Facebook announced its own stablecoin coin project in 2019, central banks and lawmakers alike pushed back, citing the dangers that it posed to state sovereignty and consumer privacy.
Despite this skepticism from central bank and government officials, cryptocurrencies will likely still exist in a CBDC world. The technology and organizational structures behind cryptocurrencies and CBDCs are sufficiently different to justify their coexistence. Most cryptocurrencies are built using blockchain technology and operate free from a central authority. In contrast, CBDCs are issued solely by their central banks, which maintain considerable control. This remains the case whether the CBDC implements blockchain technology (like The Bahamas’) or does not (like China’s).

Cryptocurrency investors are concerned about the centralized nature of CBDCs for three reasons. First, the traceability of CBDCs could have an unprecedented impact on the privacy of transactions, and some central banks admit that the same CBDC features that allow for better control of illicit activity could threaten the privacy of transactions by ordinary citizens. Of equal importance is data protection. A highly centralized system is a prime target for a cyber-attack, as The Bank for International Settlements conceded in a 2020 report. Finally, investors remain skeptical of the monetary and fiscal policy supporting CBDCs. In countries experiencing hyperinflation like Zimbabwe and South Sudan, citizens have already eschewed their local fiat currencies for cryptocurrencies. While CBDCs may solve some of the issues faced by these countries’ currencies, they are unlikely to address the underlying inflationary causes. In the developed world, investors are beginning to view cryptocurrency, particularly Bitcoin, more as a store of value than a medium of exchange, especially in a time of unprecedented quantitative easing in response to the COVID-19 pandemic. The unprecedented tools for monetary policy offered by CBDCs, particularly the ability to implement negative interest rates, will likely only reinforce investors’ belief in cryptocurrency as a safe haven.

Therefore, it is unlikely that the rise of CBDCs will mean the fall of cryptocurrencies. While an outright government ban of cryptocurrency is still possible, a peaceful coexistence between CBDCs and cryptocurrencies is more likely as governments respond to increased institutional adoption with a guiding regulatory framework.