Can Crypto Change the Future of Money?

In the last decade, cryptocurrencies burst onto the scene, creating over $2 trillion of value. Even by today’s inflated standards, that is a lot of money, making a small number of early purchasers rich and a massive number of non-purchasers wonder if they were missing out on the chance to be become rich.

Much of the hype focuses on their potential to become the latest version of something enormously important to virtually everyone: money. Although money has taken various forms over time, it has always served as what economists would call a “medium of exchange” and what non-economists would simply call something that can be used to buy whatever is for sale. For most of human history, money was gold and other precious commodities. Around the time the printing press was invented, people started switching to a new and improved money: paper currency issued by private bankers and backed by precious metals. In the 20th Century, governments took over the business of creating money and, conveniently, gave up on backing it with precious metals or anything else for that matter — they simply started creating it out of thin air.

In the last few years, the government's monopoly on money has begun to look a bit less certain. Will cryptocurrency or some other type of new alternative currency start to compete with the dollar by becoming widely accepted as money? Is a new form of money emerging?

Before considering where we are headed, we have to strip away all of the hype and focus on precisely what alternative currencies are. They all have two distinguishing features: They are virtual currencies, meaning that they exist only electronically (not physically like printed currency or metal coins) and, most importantly, they are issued by someone other than the government.

The obvious first question is: Who is issuing these alternative currencies? In most cases, it’s not possible to tell, since the issuer can be literally anyone with some tech savvy or several hundred dollars to pay to one of the many web services that will help them set up a currency. The issuer may even be a *New York Times* journalist, such as David Segal who created his own cryptocurrency (which provided him with journalistic dividends, if not financial ones). The murkiness of who is responsible for most of these alternative currencies is true even for Bitcoin, the largest alternative currency by far, whose founder is still not fully clear.

Nevertheless, cryptocurrencies, like Bitcoin, have emerged as the leading alternative currencies. Cryptocurrencies are named after the sophisticated encryption algorithms they employ to make them secure and hard to counterfeit. Late in 2021, there were a total of over $2.22 trillion worth of cryptocurrencies in circulation, up from zero in 2009. Remarkably, the total value of cryptocurrencies was essentially the same as the total value of *all* U.S. currency in circulation (approximately $2.21 trillion) at that time. Since then, the value of cryptocurrencies has crashed, with slightly less than $1 trillion now in circulation.

Almost every discussion of cryptocurrencies goes into the block chain technology on which they are based, their encryption techniques, the virtual “wallets” in which people hold them, the widely distributed electronic ledger of every transaction, the complicated methods for bringing new units of the currency into being (called “mining”) and the extraordinary amount of electricity the whole process consumes. If this were an article about technology or an article for someone looking to invest in cryptocurrencies (of which there is no shortage), those details would be relevant. Since this is an article about the future of money, understanding those details is just as relevant to our discussion as understanding how the printer gets the ink on a twenty dollar bill. As with so many concepts in business and economics, all sorts of irrelevant technical details get in the way of true understanding.

So, what is important about alternative currencies? The vast majority of them have nothing backing them and have no intrinsic value. They are just like the dollars the U.S. government creates out of thin air, except that they are issued by someone other than the government. They are just digits in cyberspace. So, why do they have any value?

The U.S. dollar has value because it’s always accepted as payment for anything for sale. You not only *can* use the dollar but, with rare exceptions, you *must* use it to purchase things for sale and pay for obligations, including your taxes. Even a recent Bitcoin conference in New York City required payment in dollars for the attendance fee.

Meanwhile, each alternative currency has a certain value for the same reason a bar of gold, a Mickey Mantle baseball card or the certified original electronic copy of a work of art (also called a non-fungible token or “NFT”) has a certain value: because the supply is limited and that is what other people are willing to pay for it. That’s really all there is to it.

That’s easy to understand intellectually, but most people have a hard time overcoming their gut sense that there must be something more to it — that there must be some underlying objective value. I remember visiting the Getty Museum in Los Angeles with my father and seeing the painting *Irises* by Vincent van Gogh. In 1987, a few years before the Getty acquired it, it became the most expensive painting ever sold, when a private investor bought it for approximately $54 million. My father said it was a bad “cartoonish” painting and that *54 dollars* would be too high a price for it.

I thought I could prove to him that an asset is worth a certain dollar amount not because of any objective reason (like its aesthetic quality) but simply because that is what other people were willing to pay for it. So, I asked him if a $20 bill had twenty times the aesthetic quality of a $1 bill. He thought for a moment and then said, “Yes, it does to me.” The only thing this exchange wound up proving is the strong need many people have to contrive some objective basis for the value of an asset, even when clearly none exists.

We are still left with the question of why people are willing to pay truly extraordinary amounts for some alternative currencies and nothing for others (actually most others, if you look at the great number of alternative currencies that have been launched but have gone nowhere). The answer to that question would be a great subject for an article on marketing, since little difference objectively exists between most of these currencies. Maybe a person with a significant social media presence owns a great amount of a particular currency and promotes it to make themself rich(er). Maybe people enjoy the online community that has developed around some of these currencies. Maybe they like the image the currency uses, such as the cute Japanese Shiba Inu dog of Dogecoin, which started in 2013 as a joke and has reached a total valuation of well into the billions of dollars. The fact that some currencies flourish while almost identical currencies fail is a reminder that economics attempts to understand human values and behavior which, notwithstanding the claims of many economists, cannot always be reduced to the kind of objective formulas that work in the hard sciences, like chemistry and physics.

So, will these currencies all crash and burn or will some survive to become alternatives to the major currencies issued by national governments? There is absolutely no way to know for sure, but there are a few facts that might help us reach an informed opinion.

The first is that the issuers of alternative currencies are not regulated like the Fed (which controls the U.S. dollar and which is extensively regulated by our laws and monitored by Congress), nor are their activities anywhere nearly as transparent. The Fed’s leaders and the rules they are legally obligated to follow can be determined with certainty — try figuring that out for Bitcoin or for most alternative currencies and you’ll see what I mean by a lack of transparency. One of the consequences of this lack of regulation is that the issuers of these alternative currencies (whoever they may be) may get greedy and start issuing more units of their currency, diluting the value of existing units. They almost all claim they will not or cannot do this, but how would someone using the currency go about enforcing that promise, or get compensated if the issuer fails to keep it?

This is true even of so called “stable coins,” a type of cryptocurrency whose value is tied to an underlying asset that has a stable value, like the U.S. dollar. The idea is that the issuer of a stable coin holds the actual asset to which the coin is linked (the way governments used to hold precious metals to back their currencies). Therefore, the stable coin is supposed to be just a digital representation of a real asset and, thereby, have the same stable and objective value as the real asset.

Notwithstanding their name, “stable coins” may not be so stable. Try confirming who is holding what where and in what amount in connection with these currencies and their flaws will become immediately apparent. Even Tether, which is the largest stable coin and is linked to the dollar so that each “Tether token” has a value of $1, has failed to prove that it holds a number of dollars equal to the value of its outstanding currency. Furthermore, stable coins don’t guarantee that they can be redeemed or exchanged for the real assets to which they are linked and their issuers are supposedly holding.

A second important consideration regarding alternative currencies is that there may be flaws in the technology, making these currencies vulnerable to hacking, counterfeiting or a whole host of other scams. To understand the magnitude of this problem, think about how difficult and frustrating addressing an issue with your bank account can be when you call customer service. Now think about how difficult and frustrating addressing that issue would be if your “bank” were some unregulated entity that only existed in cyberspace, were not affiliated with any real live human beings, and did not even offer any customer service in the first place.

A third consideration is that the government may crack down on alternative currencies, viewing their issuance as a Ponzi scheme or a violation of the securities laws that govern selling "investments" to the public. The United States could ban alternative currencies entirely or, like China, make them more difficult to use by limiting the payment, storage and other services that may be needed in connection with them. Such prohibitions may be hard to enforce, but they have the potential to tank values.

The government could also make trading in such currencies less alluring if it came up with a way to cut through the anonymity of the alternative currency marketplace. This would seriously impair one of the more significant current uses for alternative currencies — to pay for many illegal transactions, such as satisfying ransom demands by computer hackers. It would also enable governments to collect more of the tax that is legally due on any profits traders make, much of which, as of this writing, goes unreported to the tax authorities.

Another risk to alternative currencies is the potential for central banks to issue their own digital currencies (called Central Bank Digital Currency or “CBDC”). The central banks of a few Caribbean nations have already started to issue digital versions of their nation’s currency and many others, including the Fed, are looking into doing this. CBDCs have the transparency, credibility and security that comes with official government issuance. On the other hand, CBDCs may raise privacy concerns for potential users, particularly those who use alternative currencies for illegal transactions. The key point is that if central banks embrace innovative technology and proceed with a digital version of money, alternative currencies could face a major competitive threat.

The likelihood of the government getting into the digital currency business or legally prohibiting or restricting alternative currencies is certain to increase if any of these currencies start to pose a threat to the government’s monopoly on money. This monopoly enables the government to influence the economy through monetary policy and help get us out of economic downturns. Therefore, the government is unlikely to give it up without a fight.

Alternative currencies have a long way to go before they are widely accepted as money. Nevertheless, alternative currencies may rebound from their recent slump, especially if they become easier to use and large organizations with some credibility start to issue them.

Historically, when people faced uncertainty and questioned the stability of their government, they bought gold or other tangible assets like diamonds. Some cryptocurrencies could be viewed as “digital gold” and therefore fill that role, at least to some extent. People are willing to attach multi-billion dollar valuations to currency units that are completely made up — fabricated out of thin air — by people who may not be known, who impose rules which may not be clear, and who use technology that we almost certainly do not understand.

The future of cryptocurrencies is now seriously in question. In the first six months of 2022, they dropped in value by 60%. Nevertheless, their ascent in the last several years speaks volumes about the desire to get rich quick, the fear of missing out and, somewhat ominously, the lack of confidence people have in their governments and their traditional currencies.

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