Crypto Is Still Too Cryptic
These digital assets are opaque, volatile and prone to scams

By the Editors

Blockchain has gone mainstream. Last year 16 percent of Americans claimed to have speculated in cryptocurrencies based on blockchain technology, and this year’s Super Bowl broadcast included several ads for crypto markets. But even as their cheerleaders encourage others to dabble in cryptocurrencies, their worth remains dubious. Their values are quite volatile, and as unregulated assets, they leave average investors vulnerable to crashes and scams. Just as worrisome, creating these digital resources guzzles energy at a prodigious rate, contributing to climate change.

This is a highly unregulated industry in its Wild West era. The Biden administration recently signed an executive order telling federal agencies to study the problem because the crypto market lacks the consumer protections that stabilize this type of investment and deter its use by criminals. If people decide to wade into these uncharted waters, they should do so with the utmost care.

Blockchain, a digital ledger that records transactions, is public, decentralized—spread among the computers in a network—and secure. Theoretically, data stored via blockchain are nearly impossible to modify without leaving signs of fraud. As a result, the technology can support a variety of applications, including secure sharing of medical data and tracking financial transactions.

Cryptocurrencies, such as Bitcoin and Ether, can be used to pay for goods much like legal tender, except that exchanges are recorded via blockchain. Although the technology ostensibly frees crypto users from central authorities such as governments or banks, most people still interact with it through intermediaries. Crypto exchanges allow people to buy and sell cryptocurrencies the way investors trade stocks. Unlike stocks, however, cryptocurrencies do not derive their value from a tangible object or company and cannot be guaranteed by a trusted authority.

As a result, cryptocurrency speculation can be extremely volatile. For example, the value of Bitcoin once dropped by 30 percent in a single day. Although the stock market has weathered similar dips, when this happens, the federal government and other entities can step in to try to stabilize fluctuations. With cryptocurrencies, there are no such backups.

Blockchain also enables users to shield their identities. This anonymity, as well as freedom from official oversight, has made cryptocurrencies popular among ransomware hackers. Anonymity also makes it difficult for buyers to assess the legitimacy of any given cryptocurrency exchange—the person running the exchange can take in money from investors while hiding behind a pseudonym, then steal the loot. In 2021 scammers nabbed $14 billion worth of cryptocurrencies.

In addition, cryptocurrencies are not minted by a government; instead many must be “mined” by members of the decentralized network performing computing tasks to help validate transactions of that particular cryptocurrency. These tasks require enormous energy: in 2021 mining a single Bitcoin required enough electricity to power an American household for nine years. And the more Bitcoins are mined, the more power is needed to earn new ones. This escalation favors early adopters of the system, who got in when it was easier to earn Bitcoins. Much like in a pyramid scheme, early adopters benefit from bringing newcomers into the fold: additional traders will drive up the value of their existing assets.

Similarly energy-hungry processes are also used to mint NFTs—non-fungible tokens—but the two technologies are not the same. Think of an NFT as a digital receipt that represents ownership of a specific object, with blockchain helping to track that ownership as it transfers from entity to entity. Using NFTs could be a boon for artists: people can often share and download digital art for free, but by selling an NFT of a digital art piece, the artist gets paid while ensuring that the person who purchases the art is acknowledged as the official owner. Like cryptocurrencies, however, NFTs’ value can vary wildly.

This type of value-distorting craze is not new—think of the convoluted mortgage-market derivatives that caused the 2008 financial crisis. Unlike those, crypto has become a mass-market product advertised to everyday buyers. But the risk of creating bubbles that could bankrupt untold numbers of people is the same. So, until this industry is better monitored or regulated, investing in crypto or NFTs remains a gamble taken in the dark—buyer beware.