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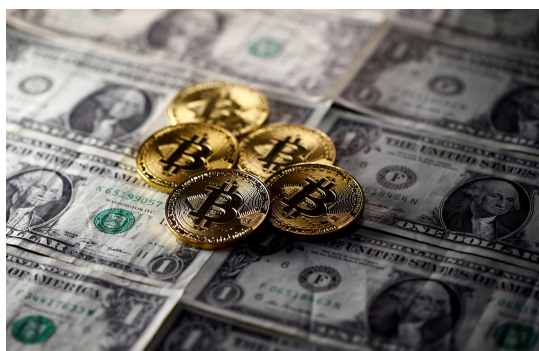
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STREETWISE

What Is Bitcoin? Not What You Think

While bitcoin is a wonderful academic creation, it doesn't do most of the things that would be expected of a currency



The attention bitcoin is getting raises plenty of questions, mostly about whether the mania behind the cryptocurrency's 10-fold gain this year will end in a crash. PHOTO: DADO RUVIC/REUTERS



By

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It is plausible to believe that bitcoin has had a faster rise in value than any asset in history. The \$11,000 per bitcoin it passed on Wednesday compares with a value of less than half a cent when a Florida programmer paid 10,000 bitcoins for two pizzas in May 2010—a percentage gain of more than 250 million.

The attention the cryptocurrency is getting raises plenty of questions, mostly about whether the mania behind bitcoin's 10-fold gain this year will end in a crash.

The bigger question for those thinking of buying bitcoin is what it actually is. Satoshi Nakamoto, the pseudonymous creator of the cryptocurrency, designed it in 2009 as a secure online alternative to cash, a way to make payments without needing the trust and checks of the bank-based dollar system.

"The bitcoin is a beautiful mathematical object," said Yves Choueifaty, who has just launched a bitcoin mutual fund at Tobam, the French fund manager he founded.

But while bitcoin is a wonderful academic creation, it isn't doing what its founder envisaged: cutting transaction costs and allowing "small casual transactions."

Instead, bitcoin has become a vehicle for hoarding by libertarians and hard-currency enthusiasts who fear central banks will inflate away their savings, and for gambling by hordes of speculators attracted to its wild price swings.

Everything I have just written will infuriate bitcoin aficionados. So let's go through the three roles of a currency:

Medium of exchange. If you can't pay someone in it, it definitely isn't money.

Store of value. A currency should be a useful place to keep savings, and—thanks to its use as a medium of exchange—is more convenient than keeping savings in property, gold or cattle.

Unit of account. Other things should be valued in the currency: the accounts of a business, or the price of property, cows and everything else.

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Bitcoin is a poor medium of exchange, because relatively high fees need to be paid to get a transaction prioritized by the computers of the “miners” who run the distributed database known as the blockchain. Wednesday’s backlog of 70,000 or so bitcoin trades waiting to go through is fairly normal, with a peak in May above 230,000—and low-fee transactions

sometimes take days to be confirmed.

Bitcoin buffs often point to the number of stores that accept the cryptocurrency as proof of its success. Yet, dozens of new funds, listed vehicles and apps have launched this year with a sales pitch that they make it easy for investors to get into bitcoin. If it is easier to get bitcoins by buying a listed company than just buying bitcoins, it is unlikely to become widely used anytime soon.

Bitcoin is pretty poor as a store of value, too. An investor who put in \$1,000 at the start of the year might not agree, since the bitcoins are now worth over \$10,000. But the point of storing value is to be fairly confident of what it might be worth in future. The value of the dollar is eroded by inflation, but when the Federal Reserve is doing its job properly that should erode slowly and fairly predictably. By contrast, just this year bitcoin has had five-day periods where it was up 44% or down 25% against the dollar.

Storing a lot of bitcoin is also hard. For all that see it as “digital gold,” bitcoin funds are turning to physical safes—where they store sheets of paper on which cryptographic keys are printed—to keep their cryptocurrency safe from hackers and staff. That isn’t so much more convenient than real gold, and fund fees are often higher than for gold funds.

Bitcoin’s price volatility wouldn’t matter if it was a unit of account. As Mr. Choueifaty says, bitcoin has no volatility from the perspective of bitcoin, as 1 bitcoin is still worth 1 bitcoin. Yet, the base price of almost everything is set in traditional currencies, so the bitcoin price of pizzas and other stuff fluctuates wildly as the bitcoin exchange rate swings about.

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Of course, bitcoin technology can be improved, and other cryptocurrencies offer a plethora of alternatives. New versions—bitcoin cash, bitcoin gold, and last week bitcoin diamond—keep splitting off. Technology overlays allow small transactions to take

place off the blockchain, reducing costs. And companies operating wallets can act like banks by netting off transactions between their customers.

But for the moment, bitcoin’s best hope looks like attracting more and more buyers who want to shift their savings onto the blockchain—and speculators willing to bet that those savers will arrive. The soaring price of bitcoin alone shows that expectations are high. But as currency historian and Berkeley economics professor Barry Eichengreen said: “Expectations can change.”

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