BITCOIN, to its most ardent fans, is more than a useful way to pay for drugs. It is also a technological marvel that could disrupt much of the consumer-finance industry. But is it money? The Bitcoin economy keeps growing, despite the periodic disappearance of large quantities of currency in hacker heists. The total value of Bitcoins in circulation has risen to $7.9 billion, from just $490m a year ago, while daily transaction volume is up by almost 60%. If Bitcoin aspires to match dollars and euros for money-ness, it will need to be more than just a Mastercard for nerds.

Economists reckon money is anything that serves three main functions. It must be a “medium of exchange”, which can reliably be swapped for goods and services. It should be a stable store of value, enabling users to tuck some away and come back later to find its purchasing power more or less intact. And it should function as a unit of account: a statistical yardstick against which value in an economy is measured. The American dollar meets all three conditions. Bitcoin has some way to go.

Bitcoin does best as a medium of exchange, thanks to its clever technical design (see article). Users can quickly move holdings around anywhere in the world. Rather than relying on central clearing-houses, verification of transactions is done by “miners”, who are compensated for their work with newly created Bitcoin. The new money they create adds imperceptibly to Bitcoin inflation, spreading the cost of their work over all users.

This elegant system makes Bitcoin cheap to use. Because banks are not needed to confirm legitimate purchases, transaction fees are low. Bitcoin’s near-anonymity has also helped drive acceptance among those who would prefer to keep their transactions secret, whether drug-dealers or money-launderers. The combination of functionality and user interest means that people are finding it easier to swap coins for both goods and services and for other currencies. This rising credibility as a medium of exchange supports Bitcoin values.
Yet Bitcoin is not exactly a stable store of value. It is technically equipped to do the job: coins saved in an encrypted wallet on a hard drive can be retrieved for later use in purchases. But the currency’s worth is prone to wild gyrations. Massive Bitcoin heists, like the recent plunder of roughly 6% of outstanding Bitcoins from the Mt Gox exchange, reduce confidence in the currency. Bitcoin prices dropped by 30% against the dollar in February due in part to the Mt Gox news. In more bullish moments, interest has attracted speculators, sending values soaring—at least temporarily. Cameron and Tyler Winklevoss, twin brothers known mainly for their early quasi-interest in Facebook, recently announced plans to launch a Bitcoin tracking fund, to make it easier for amateur investors to take a punt on the technology.

Volatile values could prevent Bitcoin from ever establishing itself as a medium of account. Even the few retailers who accept Bitcoin use other currencies as their principal accounting unit. Prices are given in a prominent currency (US dollars, for instance) and the Bitcoin price fluctuates automatically with changes in the crypto-money’s exchange rate. Similarly, most Bitcoin owners work in jobs with wages paid in traditional currencies. So long as Bitcoin buyers and sellers “think” in euros or dollars it will fall short of money status. And until Bitcoin values are less volatile relative to the currencies that now dominate real economies, users are unlikely to change their monetary frame of reference.

That may be for the best, given another Bitcoin quirk. The currency’s “money supply” will eventually be capped at 21m units. To Bitcoin’s libertarian disciples, that is a neat way to preclude the inflationary central-bank meddling to which most currencies are prone. Yet modern central banks favour low but positive inflation for good reason. In the real world wages are “sticky”: firms find it difficult to cut their employees’ pay. A modicum of inflation greases the system by, in effect, cutting the wages of workers whose pay cheques fail to keep pace with inflation. If the money supply grows too slowly, then prices fall and workers with sticky wages become more costly. Unemployment tends to rise as a result. If employed workers hoard cash in expectation of further price reductions, the downturn gathers momentum.

Bitcoin’s money supply is still growing; its miners are just over halfway to producing the total possible number. New coins will be minted until around 2030. Miners may then introduce transaction fees as compensation for their critical verification work. More worryingly, deflation is already a reality. Soaring demand for the currency is partly responsible for boosting its price (therefore reducing the price of everything else in Bitcoin terms, generating deflation). But the knowledge that supply is ultimately finite is also a factor.

Digital fetters

That other currencies remain the medium of account has so far been the Bitcoin economy’s saving grace. If Bitcoin matured into a complete currency, with large numbers of workers using it as their medium of account, then its inflexibility could bring economic havoc. Money-supply “shocks”, like
the disappearance of Mt Gox, could set off a systemic collapse. Given a loss of faith in exchanges, users might withdraw their coins in a panic, leading to a dangerous decline in transaction volume. Such hoarding could threaten Bitcoin’s status as a medium of exchange, leading to its complete demise as a currency.

Reputable exchanges with large institutional holdings could help stem such panics by advertising a willingness to sell their Bitcoins to meet liquidity demand. Yet because Bitcoin reserves are finite, users may not find the promise credible. By contrast, central banks with the inexhaustible resources of the printing press face no such inconvenient constraints.


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