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Four Reasons You Shouldn't Buy Bitcoins

By: Timothy B. Lee – April 3, 2013

Discussion of the digital currency known as Bitcoin is divided into two camps. People who understand the currency well tend to be enthusiastic boosters. Those who are critical of Bitcoin tend not to understand the currency very well and, as a consequence, their criticisms tend to be superficial, misguided, or just plain wrong.

That's unfortunate because Bitcoin does have some real weaknesses. The lack of knowledgeable critics has created an echo chamber effect that I worry may produce (or may have already produced) a bubble. I'm generally a Bitcoin fan (and, full disclosure, I own some Bitcoins), but in the interest of balance, here are four reasons you should think twice before buying Bitcoins.

Losses. Traditional financial products have strong consumer protections. If someone makes a fraudulent transaction with your credit card or your bank goes belly-up, there are laws in place to limit consumer losses. Bitcoin has no such safety net. If your Bitcoins are lost or stolen, there's no intermediary with the power to make you whole.

There are two basic ways to hold Bitcoins. You can participate in the Bitcoin network yourself, storing the keys to your Bitcoins in a wallet stored on your hard drive. Or you can delegate this function to a third-party wallet service such as Coinbase.

The former option makes you vulnerable to hard drive failures, malware, and user error. To safely hold Bitcoins, you need a reliable backup system and a good encryption scheme. A single misstep or security breach could wipe out your Bitcoin holdings overnight.

The online wallet option isn't much better. Wallet services are potentially prone to the same security and reliability pitfalls as individuals, though hopefully they do a better job of guarding against them. Customers also need to worry about fraud or incompetence by those who operate the wallet service. There have been a number of cases where the operators of Bitcoin financial institutions have lost client funds because of alleged security breaches. Because there's no Bitcoin FDIC; customers have just been out of luck.

Regulation. Recently, the federal agency responsible for combatting money laundering announced new guidelines for virtual currencies. At the time, I argued that this was a positive development for Bitcoin because it signalled the feds were planning to take a relatively-hands off approach, regulating Bitcoin exchanges but leaving the rest of the Bitcoin economy alone.

But that could change. Bitcoin is extremely resistant to government regulation, a factor boosters cite as an argument in its favor. For this reason, Bitcoin has gained a loyal following among those who engage in legally dubious activities such as drug dealing and gambling. As the technology matures and becomes more widely known, more and more

people who want to avoid government scrutiny are likely to adopt it. At some point, federal law enforcement agencies may conclude that Bitcoin is a giant money-laundering machine and look for ways to shut it down.

Completely shuttering Bitcoin would be a challenge, but determined federal regulators could at least push it underground. That would greatly diminish its value for legitimate commerce, and so the currency's value would likely plunge the day the feds announced new regulatory restrictions.

Scaling. The Bitcoin protocol requires that every node in the network download a copy of every Bitcoin transaction that has ever occurred. As Bitcoin has grown more popular, running the "full" Bitcoin client has become more and more resource-intensive. The last time I started up my Bitcoin client, it took several hours to download all the transactions that had occurred in the few weeks since the last time I ran it.

To prevent things from becoming completely unwieldy, the Bitcoin protocol limits the size of each "block," the basic unit of Bitcoin's shared transaction register, to one megabyte. Since one block is created every 10 minutes, on average, this places a hard limit on the number of transactions the network can process each hour.

Right now, the network is operating well below the limit. But it's not *that* far below the limit. If the Bitcoin economy continues to grow rapidly, we're likely to hit it in the next few years.

Reaching the limit wouldn't be catastrophic; the Bitcoin protocol has an elegant system of transaction fees to process the most urgent transactions first. But it does place some limits on Bitcoin's long-term future. For example, it's hard to imagine Bitcoin ever becoming a replacement for conventional credit cards. There are far too many credit card transactions for the Bitcoin network to accommodate.

Lack of applications. Finally, there's a real question about how useful Bitcoin actually is. We know Bitcoin is popular for drugs and gambling, but does it have uses for more conventional forms of commerce? Bitcoin boosters point to sites like BitcoinStore, which says it did half a million dollars in sales last month. But it's hard to see how that kind of modest turnover can justify the current value of outstanding Bitcoins, which is now well north of \$1 billion.

Of course, the Bitcoin economy may grow rapidly in the next few years, and perhaps investors have bought Bitcoins in anticipation of that future growth. But even if they're right, there's likely to be limited upside. Usage of Bitcoin probably needs to grow rapidly just to justify the current valuation. If its growth fails to match speculators' high expectations, the currency's value is likely to fall even as the "real" Bitcoin economy continues to grow.

Conclusion. With all that said, I think there's a good chance that Bitcoins will continue to appreciate. I still have the majority of the Bitcoins I bought in early 2012 and I plan to hold onto them for a while to see what happens. But anyone thinking about investing should understand that it's an *extremely* risky proposition. There's a good chance you'll lose most or all of your money. And with each Bitcoin selling for \$120, there isn't nearly as much potential upside as there was a year ago, when you could snap up a Bitcoin for \$5. So please, only invest money you can afford to lose.

