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MANCHESTER
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# Insight

## Bitcoin: Currency or Commodity?

*-Manchester Capital Management Strategy Group*

You don't understand bitcoins? You have a right to be confused. Even the basic question of whether it is a currency or commodity is unclear. Proponents of bitcoin claim it will be the future of commerce and transaction processing. Critics claim the rising price of a bitcoin is nothing more than a speculative bubble that negatively impacts its ability to be effectively used as currency.

A bitcoin, to simplify, is a packet of data. The bitcoin was invented in 2009 by an unidentified programmer known as Satoshi Nakamoto. Due to the way that bitcoin is generated, there is a finite supply, set at approx. 21 million, that will be reached by 2040[1].

**Transactions**

Until bitcoin's invention, completing any online transaction required a chain of service providers, each of whom adds cost to the transaction and keep a ledger of account holders' balances. Using bitcoin eliminates the need for intermediaries.

A simple example may suffice to explain the process. Let's assume Jane owns a bitcoin, stored in a wallet (an encrypted computer file) and managed by an application she has installed on her computer. She wants to give the bitcoin to John, who also has a wallet managed by an application. She sends it to John's address (his public key) and signs it using her private key. The two applications carry out the transaction and ensure its safety by authenticating the public and private keys.

The application then broadcasts a message to a network of nodes on the Internet. Every ten minutes, the nodes (called miners) gather all of the recently broadcast transactions and add them to the "block chain," the universal ledger of bitcoin transactions. Once added to the block chain, the transaction is final, ensuring that Jane cannot "double spend" the bitcoin.

**Pros and Cons**

Because non-bitcoin, online transactions require an intermediary, they are not anonymous. Since John Doe's identity is tied to his bank account, his identity is known. If Jane were to pay John in cash, there would be no public record of the transaction. Bitcoin falls somewhere in between. Bitcoins are like cash in that there is no third party that knows Jane's identity but, the times, amounts, and public keys of all bitcoin transactions are recorded in the block chain.

Every transaction that has ever occurred in the history of the bitcoin economy is publicly viewable and unalterable. While the public keys in the block chain are not tied to anyone's identity, tying a real-world identity to a pseudonymous bitcoin address is possible in certain instances. Some identifying information, such as an IP address, is often recorded when transacting in bitcoin.

So, why use bitcoins when you can use dollars? Think of it as a new payment system with lower transaction costs. Credit card use comes with considerable costs to merchants. Since bitcoins, at their core, are simply packets of data, they can also be used to transfer stocks, bets, and other sensitive information.

Though the number of daily transactions on bitcoin's network has tripled over the past two years to around 260,000, that volume pales in comparison to intermediaries like Paypal (~17 million per day) or Visa (~275 million per day). At a current value of around $2,800 per bitcoin, there are $46 billion of bitcoins in circulation, well below the $1.5 trillion of U.S. currency and roughly $8 trillion worth of gold in the world.

**Future**

If people were to start using bitcoins on a regular basis they would rise in value, given their finite supply, with disastrous results. In bitcoin terms prices for goods and services would decline. In this type of deflationary environment, people tend to spend less and the economy grinds to a halt. In order to have economic growth, we need the monetary base to grow as well which is why bitcoin cannot act as a primary currency. In addition, its value is too unstable and it takes too long (up to two days in some cases) to process a transaction. Investors generally do not want assets denominated in a currency whose value fluctuates wildly.

The current rise in bitcoin is likely a result of it being used as a store of value as opposed to a currency, acting as a modern day version of gold (though without the practical uses unless someone can figure out how to hang a bitcoin from a necklace).

## New to the Firm

- Estate and Tax Planning
- Family Governance & Succession Planning
- Estate, Trust and Charitable Administration

Manchester Capital Management is excited to welcome Mr. Alexander Popovich in the role of Managing Director of Estate and Tax Planning. Alex comes to Manchester with nearly 20 years of experience in assisting families with estate, tax, charitable, and succession planning.

Alex is a frequent speaker and presenter on family planning. Immediately prior to joining, Alex spent 7 years at JPMorgan as a Managing Director, most recently managing the tax and planning practice in Southern California. Prior to that Alex spent over 13 years in private law practice, practicing in NY, NJ, Florida, Washington DC, Virginia, Maryland, and Toronto, Canada.

When not working, Alex loves spending time with his wife, Debbie and his 3 children. Alex enjoys long-distance running, golf, cooking, reading, and the outdoors.

Since we believe it has no practical use, we struggle to calculate an appropriate valuation for a bitcoin and fear today's value has more in common with tulip bulbs than gold. We expect bitcoin will be used as a way to shield transactions from the prying eyes of others and as a store of value, not as a currency.


ENDNOTES

1. 1 https://www.bitcoin.com/getting-started
2. 2 http://www.bitcoinblockhalf.com/