

bitcoin PROFIT SECRETS



GUIDE 2:

How Is The Value of Bitcoin
Determined?

Bitcoin Value – How Is The Value Of Bitcoin Determined

Bitcoin has been getting a huge amount of hype recently. It's one of the many digital currencies in existence today which acts and functions like regular money but exists entirely electronically—like data inside computers.

And that can be kind of confusing, because if there is no actual physical bitcoin:

- How can it have value?
- How can you use digital currency in a physical world?

Well actually, the question of how bitcoin has any value at all isn't so far off from the question of how most real-world money has value.

First off, Bitcoin has no actual intrinsic value, which means that it has little to no use to us outside of its economic context. But the same can be said for most real-world currencies: money only has value because the government that issues it says it does.

This is called 'fiat currency,' because its value is not tied to any physical commodity and relies on the backing of a government.

But unlike fiat currency, Bitcoin does not have an issuing authority that gives it value. Bitcoin is a decentralized currency, meaning there is no governing body that regulates its production and transactions.

It doesn't answer to any government or organization, so there isn't really a reason why it should have value, yet it does - and it can all be boiled down to utility, scarcity, and supply and demand.

Bitcoin's Value Lies In Its Utility

Before we discuss the utility of Bitcoin, first you must understand the basics of how it works. You are connected to the community of Bitcoin users through a computer network, and the ledgers that Bitcoin uses is called a blockchain: transactions are compiled into blocks, which in turn are connected in a chain-like manner, hence the name.

The ledger keepers are called miners, because what they are doing, essentially, sounds very much like gold miners who work hard to find gold: they are working for the reward in the form of bitcoins, which, like gold, are limited in supply.

So now you know how Bitcoin works. What does that have to do with its value? Everything, actually. Bitcoin's value is in its utility: its decentralization, security, and ease of transaction.

First, let's look at Bitcoin's decentralized system. Bitcoin is designed such that there is no need for any governing authority to control it. It operates through a peer-to-peer network where all transactions are recorded in the blockchain.

On the most basic level, this would mean that it is not tied to any state and therefore is the only truly borderless currency. What this means is that you can conduct transactions with people from different countries easily because you're using the same currency.

On a deeper, much more complicated level, the decentralization of Bitcoin's system creates the possibility of transforming the finance industry.

The finance industry offers multiple ways to simplify transactions for ease of convenience. There are credit and debit cards, money transferring systems, electronic bank transfers, etc. But all of these systems need to have a middleman to function—they need a company or authority to facilitate the exchange.

And what you're doing whenever you make a transaction is that you're putting your trust on the middleman—that they will get your money through or keep your money safe among other things. There is also the matter of transaction fees, which, considered per transaction, is not too much, but can easily pile up over time. What Bitcoin does is it eliminates the need for these middlemen.

As mentioned above, all transactions in the Bitcoin network are recorded in the blockchain by miners. While the blockchain and miner network has the semblance of a governing body in the sense that it keeps track of all bitcoins in existence, it's still in the public domain and therefore cannot be monopolized.

This means that no single person or group of persons has a hold on the network—which, in turn, means that bitcoins can remain fully transparent and neutral in its transactions.

But if there is no official body acting as a regulator, who can you trust to make sure that transactions do go through? The answer: no one. And it sounds bad, but it's actually a good thing.

The Bitcoin system is designed to operate without the need for trust. See, it's not simply a digital currency, it's a *cryptocurrency*, which means that it is heavily based on encryption techniques to keep it safe.

Instead of operating based on customer trust, Bitcoin operates using tried and tested mathematics (more on that later). Cheating the network is impossible due to its public environment.

Not only that, but the system is encrypted so that trying to commit fraud would require an *extremely large* amount of computing power, which would by then have been more useful if you just used it to mine more bitcoins.

The security system, aside from ensuring the reliability of Bitcoin transactions, also ensures that the identity of the Bitcoin users can be protected. Unlike in credit cards, your account number does not have any value in your transactions, which are ultimately verified using a private and public key.

It works like this: you put a digital signature to your transactions using your private key which can be verified by the users of the network using your public key. The keys are encrypted so that the public key can only ever work if you had used the correct private key in the first place.

This means that:

1. Your identity can't be stolen by criminals to make fraudulent transactions in your name.
2. You can choose to remain completely anonymous in the Bitcoin network, which may prove useful for some.

Lastly, bitcoins have the possibility of providing an ease of convenience that surpasses the traditional paying methods that we already have now. According to the Bitcoin site, using bitcoins allow you “to send and receive bitcoins anywhere in the world at any time.

No bank holidays. No borders. No bureaucracy. Bitcoin allows its users to be in full control of their money.”

Bitcoins Are Incredibly Scarce

Fiat currency has a technically unlimited supply in the sense that governments can produce money whenever they want. Obviously, they don't do that because it will lead to inflation, so the production and release of money is controlled by the government based on intensive research on market trends and needs. Bitcoin, as you might have guessed, does not work the same.

Because Bitcoin is decentralized, there is no authority that decides when to make new bitcoins. The system is designed so that new bitcoins can only be created as part of a reward system for the miners.

And the reward is well-deserved: the backbone of the Bitcoin system is cryptography, or the art of writing and solving codes which requires a hefty amount of work to solve.

To update the blockchain, miners from all over the world have to race to solve a specific math problem called SHA-256, which stands for Secure Hash Algorithm 256 bit.

It's basically a math problem wherein you're given an output and you're supposed to find the input, like solving for x and y given that $x + y = 2$.

The only way to solve this kind of problem is through guesswork, and to solve the SHA-256, you'd have to go through an *insane* amount of possible solutions before you find the answer—for which you'd need an extremely powerful (not to mention expensive) computer.

Miners invest a lot of money on these supercomputers (as well as the huge amount of electricity it needs to run) all to mine new Bitcoins.

Jason Bloomberg, in an article for Forbes, writes that the value of Bitcoin is representative of this effort: because mining bitcoins take hard work, they become more valuable. So, first point to its scarcity is that bitcoins are hard to come by. You'd need a sizeable investment just to be able to create new bitcoins.

But they're even made scarcer due to the fact that there can only ever be a certain number of bitcoins in existence, which is 21 million. (If you're wondering why 21 million, it's basically because that's what's written in the source code.)

The cap on Bitcoin production is there to ensure that Bitcoin wouldn't ever be hyperinflated.

It's even designed to be produced steadily: the reward system goes by half every 210,000 blocks added to the chain (i.e., every four years), with the SHA-256 problems even varying in difficulty depending on the amount of miners—more miners mean harder problems to ensure that not too many bitcoins get produced all at once.

Projecting from this trend, the last bitcoin is estimated to be mined around the year 2140. To put things in perspective, there are about 16.74 million bitcoins in existence at the time of writing.

That fewer and fewer bitcoins can be mined as time goes by drives up the interest of the people in the currency, because rarity is desirable and highly marketable.

This increases the value of Bitcoin, because it operates using a network—the larger the network, the greater use you can get out of Bitcoin.

Supply And Demand Affects Bitcoin Value Directly

The market value of Bitcoin—that is, the money that people are willing to pay for it—follows the same old basic demand and supply rule: a high demand increases its price and a low demand decreases it.

Before we go in any further, just remember that the value of something is not the same as its price; value is what people perceive a product is worth, while price is what they pay for it. Even so, value and price go hand in hand: the price of something is directly related to its value and vice versa.

According to an article in the Economist, the increasing trend in the price of Bitcoin is what drives people to invest in it.

People are investing because they believe that, following the trend so far, they would be able to sell their Bitcoins for a much higher price in the future—which the article argues is a perfect example of the greater-fool theory.

Basically, the greater-fool theory states that the price of a product is determined not by its intrinsic value, but by the beliefs and expectations that the consumers put on the product.

From this perspective, the surging price of Bitcoin serves not to increase its actual value, but to render it irrelevant.

The market is driving the price of Bitcoin up because of growing belief that it will be worth more in the future, not because they think its value is increasing over time. However, some people argue that the surge in Bitcoin prices that the past year has seen is not indicative of it being a bubble.

In the Bitcoin site itself, it argues that it is not a bubble, citing that bubbles are artificially overvaluations of a product which tends to correct itself eventually.

It cites its relatively small and young market as the reason for the volatility in Bitcoin prices—that “choices based on individual human action by hundreds of thousands of market participants is the cause for Bitcoin's price to fluctuate as the market seeks price discovery.”

It argues that the volatility of Bitcoin prices are due to many forces such as:

- Loss of confidence in Bitcoin
- A large difference between value and price not based on the fundamentals of the Bitcoin economy
- Increased press coverage stimulating speculative demand
- Fear of uncertainty
- And old-fashioned irrational exuberance and greed

As such, Bitcoin is arguing that its growing prices can be attributed to more and more people finding the product increasingly worth their money based on its utility, thereby validating its value.

So, in summary: Bitcoin's utility and scarcity gives it value, but its prices seem to send opposing signals as to whether it's truly valuable or not.

With more and more people beginning to show interest in Bitcoin, perhaps we are barely scratching the surface of what its true value may be.