4. Why Does Bitcoin Have Value?

TL;DR

Bitcoin derives its value from a variety of different attributes. Ultimately, both crypto and fiat currencies have value because of trust. As long as society believes in the fiat system, money will continue to have value. We can say the same for Bitcoin: it has value because users believe it does, but there is more to consider.

Unlike fiat, Bitcoin has no ***central bank***, and its decentralized structure allowed for the creation of a unique financial system. ***Blockchain*** technology offers a great deal of security, utility, and other benefits. It also provided a revolutionary way of dealing with the transfer of value globally. In many ways, Bitcoin can also act as a store of value similar to gold.

Why does money have value?

In short, what gives money value is trust. Essentially, money is a tool used to exchange value. Any object could be used as money, as long as the local community accepts it as payment for goods and services. In the early days of human civilization, we had all kinds of objects being used as money - from rocks to seashells.

What is fiat money?

Fiat money is the one issued and officialized by a government. Today, our society exchanges value through the use of paper notes, coins, and digital numbers on our bank accounts (which also define how much credit or debt we have).

In the past, people could go to the bank to exchange their paper money for gold or other precious metals. Back then, this mechanism ensured that currencies like the U.S. dollar had their value tied to an equivalent amount in gold. However, the gold standard was abandoned by the majority of nations and is no longer the basis of our monetary systems.

After removing a currency's ties to gold, we now use fiat money without any backing. This uncoupling gave governments and central banks more freedom to adopt **monetary policies** and affect the money supply. Some of the main characteristics of fiat are:

- It's issued by a central authority or government.
- It has no inherent value. It's not backed by gold nor any other commodity.
- It has an unlimited potential supply.

Why does fiat have value?

With the removal of the gold standard, we seemingly have a currency without value. Money does, however, still pay for our food, bills, rent, and other items. As we discussed, **money** derives its value from collective trust. Therefore, a government needs to firmly back and successfully manage a fiat currency to succeed and maintain a high level of trust. It's easy to see how this breaks down when faith in a government or central bank is lost due to **hyperinflation** and inefficient monetary policies, as seen in Venezuela and Zimbabwe.

Why does crypto have value?

Cryptocurrencies have some things in common with our standard idea of money, but there are some remarkable differences. Although some crypto like PAXG are pegged to commodities like gold, most cryptocurrencies have no underlying asset. Instead, ***trust*** once again plays a significant role in the value of a cryptocurrency. For example, people see value in investing in **Bitcoin**, knowing that others also trust Bitcoin and accept BTC as a payment system and medium of exchange.

For some cryptocurrencies, ***utility*** is also an important factor. To access certain services or platforms, you may need to use a utility **token**. A service in high demand will therefore provide value to its utility token. Not all cryptocurrencies are the same, so their value really depends on the features of each coin, token, or project.

When it comes to Bitcoin, we can narrow it down to six features that we'll discuss in more detail later: utility, decentralization, distribution, systems of trust, scarcity, and security.

What is intrinsic value?

A lot of the discussion regarding Bitcoin's worth is whether it has any ***intrinsic value***. But what does this mean? If we look at a commodity like oil, it has intrinsic value in producing energy, plastics, and other materials.

Stocks also have intrinsic value, as they represent equity in a company producing goods or services. In fact, many investors perform **fundamental analysis** in an attempt to calculate an asset's intrinsic value. On the other hand, fiat money has no intrinsic value because it's just a piece of paper. As we've seen, its value derives from trust.

The traditional financial system has many investment options that carry intrinsic value, from commodities to stocks. Forex markets are an exception as they deal with fiat currencies, and traders often profit from short or mid-term exchange rate swings. But what about Bitcoin?

Why is Bitcoin valuable?

The value of Bitcoin is a subjective topic with many differing opinions. Of course, one could say that the **market price of Bitcoin** is its value. However, that doesn't exactly answer our question. What's more important is why people judge it to have value in the first place. Let's dig a bit deeper into some of the characteristics that make Bitcoin valuable.

Bitcoin's value in utility

One of the major benefits of Bitcoin is its ability to quickly transfer large amounts of value worldwide without the need for intermediaries. While it can be relatively expensive to send a small amount of BTC due to **fees,** it's also possible to send millions of dollars cheaply. Here, you can see a Bitcoin transaction worth around $45,000,000 (USD) sent with a fee of just under $50 (as of June 2021).

While Bitcoin isn't the only network that makes this possible, it's still the largest, safest, and most popular. The **Lightning Network** also makes small transactions possible as a layer two application. But regardless of the amount, being able to make borderless transactions is certainly valuable.

Bitcoin's value in decentralization

Decentralization is one of the key features of cryptocurrencies. By cutting out central authorities, blockchains give more power and freedom to the community of users. Anyone can help improve the Bitcoin network due to its **open-source** nature.

Even the cryptocurrency's monetary policy works in a decentralized manner. The work of **miners**, for example, involves verifying and validating transactions, but it also ensures that new bitcoins are added into the system at a predictable, steady rate.

Bitcoin's decentralization gives it a very robust and secure system. No single node on the network can make decisions on everyone's behalf. Transaction validation and protocol updates all need to have group consensus, protecting Bitcoin from mismanagement and abuse.

Bitcoin's value in distribution

By allowing as many people as possible to participate, the Bitcoin network improves its overall security. The more nodes connected to Bitcoin's distributed network, the more value it gets. In distributing the ***ledger*** of transactions across different users, there's no need to rely on a single source of truth.

Without distribution, we can have multiple versions of the truth that are difficult to ***verify***. Think about a document sent via email that a team is working on. As the team sends the document among themselves, they create different versions with different states that can be difficult to track.

Also, a centralized database is more susceptible to cyber-attacks and outages than a distributed one. It's not uncommon to have issues using a credit card because of a server issue. A cloud-based system like the one of Bitcoin is maintained by thousands of users around the world, making it much more efficient and secure.

Bitcoin's value in systems of trust

Bitcoin's decentralization is a huge network benefit, but it still needs some safeguarding. Getting users to cooperate on any large, decentralized network is always a challenge. To solve this problem, known as the **Byzantine General's Problem, Satoshi Nakamoto** implemented a **Proof of Work *consensus*** mechanism that rewards positive behavior.

Trust is an essential part of any valuable item or commodity. Losing trust in a central bank is disastrous for a nation's currency. Likewise, to use international money transfers, we have to trust the financial institutions involved. There is more inbuilt trust in Bitcoin's operations than other systems and assets we use daily.

However, Bitcoin users don't need to trust each other. They only need to trust Bitcoin's technology, which has proven to be very reliable and secure and the source code is open for anyone to see. Proof of Work is a transparent mechanism that anyone can verify and check themselves. It's easy to see the value here in generating consensus that is almost always error-free.

Bitcoin's value in scarcity

Inbuilt within Bitcoin's framework is a limited supply of 21,000,000 BTC. No more will be available once **Bitcoin miners** mine the last coin around 2140. While traditional commodities like gold, silver, and oil are limited, we find new reserves every year. These discoveries make it difficult to calculate their exact scarcity.

Once we have mined all BTC, Bitcoin should, in theory, be ***deflationary***. As users lose or burn coins, the supply will decrease and likely cause an increase in price. For this reason, holders see a lot of value in Bitcoin's scarcity.

Bitcoin's ***scarcity*** has also led to the popular Stock to Flow model. The model attempts to predict BTC's future value based upon Bitcoin mining per year and the overall stock. When back-tested, it quite accurately models the price curve that we have seen so far. According to this model, the main driving force in Bitcoin's price is its scarcity. By having a possible relationship between price and scarcity, holders find value in using Bitcoin as a store of value. We'll dive further into this concept at the end of the article.

Bitcoin's value in security

In terms of keeping your invested funds safe, there aren't many other options that provide as much security as Bitcoin. If you follow the best practices, then your funds are incredibly secure. In developed countries, you can easily take for granted the security offered by banks. But for many people, financial institutions cannot provide them the protection they need, and holding large amounts of cash can be very risky.

Malicious attacks to the Bitcoin network require owning more than **51% of current mining power,** making coordination on this scale almost impossible. The probability of a successful attack on Bitcoin is extremely low, and even if it happens, it won't last long.

The only real threats to the storage of your BTC are:

- Fraud and phishing attacks
- Losing your **private key**
- Storing your BTC in a compromised custodial **wallet** where you don't own the private key

By following **best practices** to make sure the above doesn't happen, you should have a level of security that exceeds even your bank. The best part is that you don't even have to pay to keep your crypto safe. And unlike banks, there are no daily or monthly limits. Bitcoin allows you to have full control over your money.

Bitcoin as a store of value

Most of the characteristics already described also make Bitcoin a good fit as a **store of value**. Precious metals, U.S. dollars, and government bonds are more traditional options, but Bitcoin is gaining a reputation as a modern alternative and digital gold. For something to be a good store of value, it needs:

- **Durability**: So long as there are still computers maintaining the network, Bitcoin is 100% durable. BTC cannot be destroyed like physical cash and is, in fact, more durable than fiat currencies and precious metals.
- **Portability**: As a digital currency, Bitcoin is incredibly portable. All you need is an Internet connection and your private keys to access your BTC holdings from anywhere.
- **Divisibility**: Each BTC is divisible into 100,000,000 **satoshis**, allowing users to make transactions of all sizes.
- **Fungibility**: Each BTC or satoshi is interchangeable with another. This aspect allows the cryptocurrency to be used as an exchange of value with others globally.
- **Scarcity**: There will only ever be 21,000,000 BTC in existence, and millions are already lost forever. Bitcoin's supply is much more limited than inflationary fiat currencies, where the supply increases over time.

- **Acceptability**: There's been widespread adoption of BTC as a payment method for individuals and companies, and the blockchain industry just continues to grow every day.

If you want to explore the topic a bit more, check out **Is Bitcoin a Store of Value?.**

Closing thoughts

There is, unfortunately, no single and neat answer as to why Bitcoin has value. The cryptocurrency has the key aspects of many assets with worth, like precious metals and fiat, but doesn't fit into an easily identifiable box. It acts like money without government backing and has scarcity like a commodity even though it's digital.

A general lack of knowledge and misunderstanding has led some to question whether Bitcoin has any value at all. With words like "scam" and "**Ponzi scheme**" used, it's easy to see that some people have unfounded fears. But, ultimately, Bitcoin runs on a very secure network and the cryptocurrency has a considerable amount of value placed on it by its community, investors, and traders.

Critical Thinking Questions

1. What are the main factors that give Bitcoin its value, and how do these compare to the factors that give fiat money its value? Discuss the role of trust in both cases.

2. How does the decentralization of Bitcoin provide benefits over centralized financial systems, and what potential challenges might arise from a decentralized structure?

3. In what ways does the concept of scarcity influence the value of Bitcoin, and how does this compare to traditional commodities like gold or oil?

4. Explain the concept of intrinsic value. How does Bitcoin's lack of intrinsic value affect its perception and acceptance as a form of currency?

5. Considering the security features of Bitcoin, what are the potential risks involved in using and storing cryptocurrencies, and how can individuals mitigate these risks to protect their investments?

Glossary

- **Blockchain (noun)** - A decentralized, digital ledger that records transactions across many computers in such a way that the registered transactions cannot be altered retroactively.
- **Central bank (noun)** - An institution that manages a state's currency, money supply, and interest rates.
- **Commodity (noun)** - A raw material or primary agricultural product that can be bought and sold, such as gold, oil, or wheat.
- **Consensus (noun)** - General agreement among the members of a given group or community.
- **Cryptocurrency (noun)** - A digital or virtual currency that uses cryptography for security and operates independently of a central bank.
- **Decentralization (noun)** - The process of distributing or dispersing functions, powers, people, or things away from a central location or authority.
- **Deflationary (adjective)** - Characterized by or tending to cause a reduction in the general level of prices in an economy.
- **Divisibility (noun)** - The ability of an asset to be divided into smaller units of value.
- **Durability (noun)** - The ability to withstand wear, pressure, or damage.
- **Fungibility (noun)** - The property of a good or a commodity whose individual units are essentially interchangeable.
- **Hyperinflation (noun)** - Extremely rapid or out of control inflation.
- **Intrinsic value (noun)** - The actual worth of an asset, company, currency, or product, determined through fundamental analysis without reference to its market value.
- **Ledger (noun)** - A book or other collection of financial accounts.
- **Mining (noun)** - The process by which transactions are verified and added to

the blockchain and the means through which new cryptocurrency is released.

- **Portability (noun)** - The quality of being easily carried or moved.
- **Scarcity (noun)** - The state of being in short supply; shortage.
- **Trust (noun)** - Firm belief in the reliability, truth, ability, or strength of someone or something.
- **Utility (noun)** - The state of being useful, profitable, or beneficial.
- **Verification (noun)** - The process of establishing the truth, accuracy, or validity of something.
- **Volatility (noun)** - The liability to change rapidly and unpredictably, especially for the worse.