how is the price of cryptocurrency defined?



Introduction

<u>Cryptocurrency</u> is a new revolutionary type of currency. Like any other currency or unit of account, they only have value because people think it has value. Some currencies are backed by gold or other precious metals; others are backed by nothing but hot air although have value because people think it has value and use it as a unit of exchange.

Cryptocurrencies were designed as a unit of exchange and as a place to store assets without relying on a central bank. This article will discuss the price of Cryptocurrency in general and what affects the price, it is not limited to Bitcoin but this will cover all cryptocurrency.

What defines the price of a cryptocurrency?



The following features are the main driver of cryptocurrency price, but not limited to these.

- Limited Supply and supply/demand.
- Energy put in in the form of electricity to secure the blockchain.
- Blockchain difficulty level.
- The utility of the currency, and how easy it is to use and store.
- Perceptions on its value by the public.
- Price of Bitcoin.
- Media.
- Investors.
- Scams.
- Market dilution.
- Innovation.
- Confidence in traditional systems.

Legal/Governmental issues.

Supply/Demand



Precious metals gain their value/perceived value due to their utility and limited supply, and price is often tied to supply/demand.

Supply/Demand is a simple economic factor that affects the price of many things. In some countries Bitcoin and other cryptocurrencies is classed as an asset, in others as a currency.

Bitcoin, for example has a maximum of 21 million whole units, divisible 100 million times. With over 7 billion people on the planet, if even 1 billion were to adopt Bitcoin, 21 million whole units would not spread very far without a significant price tag.

The supply is also bought in at a constant rate and is unchangeable due to the coconscious rules. This creates a supply that is limited, and thus people will pay more to get the coins they think have value.

Block reward halving's, like the Bitcoin halving of 2016 caused the price to slowly increase as the halving approached, due to the reduced supply of new incoming coins imminent. This can affect the price of many cryptocurrencies, but in the case of Litecoin, did not even make a major dent in the price.

Energy Usage



The energy put into securing blockchains can be intensive. In the case of <u>proof of work</u> (POW) blockchains which are the most popular form, electricity usage can be intense. In the case of Bitcoin, the blockchain uses as much energy securing it at present as a small country uses. This has a factor on the price, as it takes a certain amount of energy on average to 'mine' one Bitcoin. This goes up with difficulty increases.

Difficulty Level



The more secure the blockchain and the higher the <u>mining difficulty</u>, the higher the perceived value and price and the harder the coins are to get through mining. This can have an impact on price and ties in with the energy usage above, in the case of proof of work blockchains such as Bitcoin and Litecoin.

Utility



A key factor in the price of any cryptocurrency is its utility. If you cannot use it for something, be it an investment or for payments, then it would have no or little perceived value. In the case of Bitcoin, it is usable for payments on a reasonably high and ever increasing scale, meaning that its utility is high. Its high difficulty and energy usage give it a reasonably high price and as such can be used for an investment. The changes to utility can cause price volatility.

In the case of Ether, as it was designed a smart contract platform this is a practical utility, which increased the price of Ether over many other alternative cryptocurrencies.

Public Perceptions



The public perception of a cryptocurrency has big bearing on the value of the currency. In the case of Bitcoin, a driving factor can be people reacting positively to the innovations and the fact it is a thorn in the side of the mostly corrupt banking sector and gives competition which cannot be tampered with in the traditional way, but can also receive negative reactions and associations with criminality.

Hacks to major cryptocurrency exchanges such as Mt. Gox can also affect the reputation of Bitcoin and price in a negative way, yet innovations such as multi-signature security on wallets or innovations and payment gateways coming online can create a positive reaction.

Many cryptocurrencies are not known in the public eye bar a few and the smaller ones typically have a cult following, so their prices are much lower than say Bitcoin, Litecoin and Ether. Many cryptocurrencies are reusing the Bitcoin code and just changing some of the specifications such as the coin supply, proof of work algorithm or adding other features. How much a currency has ripped off of Bitcoin with no innovation or potential utility over Bitcoin can affect its reputation.

Price of Bitcoin



Bitcoin is often seen as the 'reserve currency' of the cryptocurrency world. Rises and falls to the price of Bitcoin often has a knock on effect with other cryptocurrencies. Litecoin in particular often has price

reactions proportional to the rise and fall of Bitcoin price, but without the <u>difficulty</u> increase that Bitcoin has in respect to the power used to secure both blockchains.

As Bitcoin was the first mainstream cryptocurrency and is the most supported, the price of Bitcoin can often influence the other cryptocurrencies.

Media



The medias reporting on Bitcoin in either a positive, or negative way can have influence on the public perceptions of Bitcoin, and can influence the price. This can even be used as an avenue to potentially manipulate the price, as many media outlets are owned by a few individuals and it is a major vector for potential price manipulation, as well as reporting on positive and negative aspects of the currency which can cause the price to fluctuate.

Investors



With all cryptocurrencies, especially smaller less known ones, investors can manipulate / inadvertently affect price in the following ways:

- With a large amount of capital at their disposal, can buy a large percentage of the coin supply, then attempt to promote good stuff about the coin to 'pump' the price.
- An investor making a large investment in a small coin can cause inadvertent price increases and falls.
- People seeing investors have confidence in a cryptocurrency

can encourage them to invest, and the more investors and the more demand for a currency, the higher the price.

Scams



Cryptocurrencies can sometimes be developed as a scam. This can often be associated with a coin that promises the latest and greatest technology, but is also 'premined' by the developers before release. This ensures they hold a good chunk of coin supply before coin release so when it is given value they dump their holdings, which crashes the value for other investors but can potentially earn the scammers a large sum of money and it is often difficult to prosecute such scams and in many jurisdictions impossible at present.

Instamining is a variant where the ability of coins to be mined is higher at the beginning after release to achieve the same goal.

Investment scams often cause people to invest in a cryptocurrency or even pay money towards the developers to develop the currency, where the only intention is to run off with the money of investors.

Due to the public nature of a blockchain, premines and instamines can easily be spotted, and when discovered often cause the value of the coin to plummet, this can happen before or after the developers did their dump of coins.

Market Dilution



This does not so much apply to <u>Bitcoin</u>, <u>Litecoin</u>, <u>Peercoin</u> or <u>Ether</u> which all had a unique purpose at the time of development. There is many a new cryptocurrency released every day, many rips from the Bitcoin source. Due to the number of cryptocurrencies often with no practical utility* saturating the market, alternative cryptocurrencies can find it hard to gain any sort of ground in an already diluted market. Bitcoin stood out as the first with good development, Litecoin stood out as a 'silver to Bitcoin gold' coin, Peercoin used an innovative POW and POS (proof of stake) combination. Ether had a practical utility for being a smart contract token to allow distributed, secure execution of smart contracts, for the price of what the ether token is, which very few cryptocurrencies can do.

Innovation



With many cryptocurrencies being a clone of Bitcoin minus adjusting numbers, innovation is another thing which can affect price. Sometimes this results in a currency gaining ground, sometimes this alone is not enough but it is a price factor. The key innovations of some currencies are below:

Bitcoin

Bitcoin was the first mainstream well designed cryptocurrency, was released as open source and bought many innovations on its own and new innovations are still being developed for Bitcoin. It holds the #1 spot on <u>cryptocurrency price</u> at present.

Litecoin

Litecoin was the development of a 'silver to Bitcoin gold' and was designed to be used for smaller payments with a faster transaction confirmation time and as a result, higher network capacity due to more blocks being produced. This held Litecoin at the #2 spot for a long time, although Ether took this spot at present in 2016.

Ether

Ether had innovation and was not designed as a 'currency' per se but is often used as such. It used its own POW hashing algorithms and system rules, and was designed as a token to use the Ether network to execute computer code such as in a smart contract in a way where it was verifiable what was executed, due to the distributed ledger which is the Ether blockchain.

Unobtanium

Unobtanium had a fair launch and was designed as a cryptocurrency which is 'rare' to be used as a store of value, with a capped supply of 250,000 coins. This was an innovation in its own right, being merge mined with Bitcoin by some pools also give this blockchain high security. Alas, the price never went anywhere close to Bitcoin and was surpassed by Ether and even Litecoin in some cases. This could change in the future, however if the coin gained more exposure.

Innovation is not always enough on its own, as shown by the Unobtanium coin; but innovation can be a driving factor if it brings something unique with high utility to the table. This factor has been mocked also, by the development of some cryptocurrencies being mocked the fact many other cryptocurrencies just rip off the Bitcoin source code and many new coins a day are coming out with this problem. An example of community members reacting to this by mocking is here.

Confidence in traditional systems

When confidence in the traditional systems increase, such as the price of the U.S dollar going up, this can cause some people to go back to storing assets using traditional currency. This can have an effect on the price of Bitcoin in particular, and in turn the other cryptocurrencies, Bitcoin being the de facto reserve currency of the bitcoin world.

Legal and governmental issues



Legal and governmental issues can influence the price, if a government beings being oppressive with tax or asset laws, it can be trivial to hide assets in a cryptocurrency, this perceived value by a country of investors can cause changes in price. Legal moves which are positive for a cryptocurrency such as making them official as currency can have a positive effect, while a country banning it could have a negative effect.

In the case of <u>Ecuador</u>, they banned the Currency, while some other countries gave cryptocurrency official status as currency for tax purposes. The lack of legal framework in many countries is still a hurdle, as legal precedents for cryptocurrency are still being set. And due to the limited ability to control cryptocurrency on the open internet can mean it can be used against the will of a government even.

Volatility of cryptocurrency



Due to cryptocurrency being an emerging market and due to the changes it imposes on the financial system, the market is still volatile, coupled with many of the factors above, the price of a coin can rise and fall quickly, making it a risky investment without proper research carried out, but the utility of them can make them usable for payments as well as an investment which was one of the original intentions behind Bitcoin. The volatility is decreasing over time and this should hopefully result in lower volatility levels in the price.

Summary

This article has discussed many of the driving factors of cryptocurrency price and why people give it value. There are many factors, especially the price of Bitcoin, the de factor reserve currency of the Bitcoin world, price of the U.S Dollar, Innovation, energy put into securing the blockchain of a coin, and reputation issues such as public perception, scams, and media response. Dilution of the market means many alternative cryptocurrencies will find it hard to gain a foothold. But many have a cult following so have some value. Legal issues can vary the price also as discussed above.

The world of cryptocurrency is here to stay, and as people give it value as a store of wealth in the case of Bitcoin, its revolutionary payment processing ability and the ability to work between borders are all reasons to continue to use cryptocurrency.

Conclusion

This article has discussed what affects the value of cryptocurrency and what can give it value. It boils down to perception of a majority, anything has value to someone because they believe it has value, for whatever reason they may have. The main factors affecting value of cryptocurrency have been discussed and summarized, and perception of value is what ultimately gives it value, what people are willing to put in to get a unit of cryptocurrency, be it time, fait money or labour.

The same applies to any commodity such as food, water, shelter, technology or any other commodity. Effort put into creating/obtaining it and demand. So keeping cryptocurrency positive in the perceptions of people is key to maintaining value in any cryptocurrency or commodity.