THE FUTURE OF BITCOIN AND OTHER CRYPTOCURRENCIES

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Abstract: *Bitcoin and other crypocurrencies are decentralized digital currencies without a national bank that can be transferred from client to client on the distributed ledger unconditionally. In the March of 2020, the price of Bitcoin was only around 6.000 USD whereas, it reached to almost 60.000 USD in May 2021, only after one year. It is obvious that the Corona pandemia has changed the destiny of the Bitcoin and other cryptocurrencies. Traditionally, a currency should have three features that distinguish it from all other commodities. These features are having the capability of being used as a medium of exchange, being a unit of account and functioning as a store of value. Although it is early to state that Bitcoin and other cryptocurrencies perform all of these features, the popularity of them as a currency in the market is rising and they are more preferred as a commodity to invest. The crptocurrency market and particularly Bitcoin, turned out to be the most resistant to economic fluctuations experienced by all global markets in the last one year. However, the future of Bitcoin and other cryptocurrencies is closely related to the course of pandemia and several other factors which may push down demand for them.*
Keywords: *Bitcoin, cryptocurrency, pandemy, anonymity, blockchain.*

1. Introduction

Electronic money or cryptocurrency is a digital currency, which does not depend on a central bank or a physical token or paper but based on an open source cryptographic techniques represented by block chain data structure. Bitcoin is the first digital currency of the world invented with the purpose of competing on the market with central banks, which are responsible for issuing real currency. The concept of Bitcoin was introduced to the market in 2008 by Satoshi Nakamoto, who according to others is not his true name, thereby making the pioneer of Bitcoin anonymous. In any case, the identity of the pioneer of Bitcoin is of less consequence and importance, what matters is how Bitcoin has impacted the global market in particular and the whole world in general.

The essence of the introduction of the Bitcoin was to enable network member to transfer the money value between themselves directly without involving a third party like a Central Bank or a clearing house as is the case in most money value transfer. With the increased rate of Bitcoin circulation due to its approval in the market by several companies, different sections of the society, as well as the market itself, have started putting forth arguments regarding Bitcoins such as academic papers, debates or TV programs, that are tackling a different aspect of Bitcoin. (Raskin and Yermack, 2016).

This study is aimed to shed light on the historical development of Bitcoin starting from its invention as a concept to its acceptance as a commodity and payment method while sharing detailed analysis about the factors influencing its rapid growth and fluctuations in its market price. The study also provides a detailed analysis of the advantages and disadvantages of Bitcoin and other cryptocurrencies.

2. Historical Development and the Basic Concepts of Bitcoin

After 2008 financial crises, people were seeking a currency that which would not be regulated by a central authority. Additionally, as markets and human society developed, more sophisticated tools for the exchange of commodity were needed. In this respect, the introduction of cryptocurrency has revolutionized the international payment system to a size that was unimaginable just a few years ago (Boshkov, 2019).

On October 31, 2008 a computer scientist called Satoshi Nakamoto published a paper that introduced and explained the operation and the idea of the Bitcoin (BTC) system. The framework was published as an open source on 9 November 2008, and finally the first virtual currency Bitcoin was developed on 3 January 2009 and was first used as a virtual currency in a transaction on 12 January 2009 (Haşlak, 2018). Bitcoin is an autonomous digital currency and is not subject to central authority regulation and or to inflation. It had been constructed on a peer-to- peer network called Blockchain.

Cryptocurrencies are created by mining, which means that computers solve complex equations and get a certain number of coins as a reward. A massive pool of computers solving complex equations holds the whole Bitcoin network, where new coins are being mined and transfers are sent. This means without the internet network, there would be no Bitcoins. The Bitcoin digital money essentially functions the same way as a regular currency however, a bit more complex as compared to a fiat currency.

The primary motive behind Bitcoin's creation was to achieve a cryptocurrency where a person could transfer the currency to another person anywhere in the world without costing high transactions and without the trustworthy third party. Today, the top 10 cryptocurrencies in value in May 2021 are Bitcoin, Ethereum, Binance Coin, Dogecoin and Cardano (Coinmarketcap, 2020).

Cryptocurrency enables for encrypted electronic transfers between two persons and without the need of central authority. Furthermore, these transactions represented in special internal ledger which. cryptographic techniques safeguard such entries, by using public-private key pairs, and hashing functions. „Crypto" refers to the different encryption algorithms that used.

Cryptocurrency has been built on a system called Blockchain. Blockchain is a global database operated by a fragmented computing network. There is no central authority that distribute the cryptocurrencies, and that is the main characteristic of cryptocurrencies.

There are three main types of cryptocurrency (Frankenfield, 2020).

a. Bitcoin is the first and has the most percentage of the cryptocurrency market with nearly 60%.

b. Altcoin, which are cryptocurrencies lunched after BTC's success. They had been seen as better alternatives to BTC. The term „Altcoin" refers to all cryptocurrencies other than BTC. Today, there are more than 5,000 types of cryptocurrencies.

c. Crypto tokens, which are specific fungible and tradable assets or services generated by an initial coin offering (ICO) and are also found on a blockchain.

3. The Functionality of Bitcoin as a Currency

Traditionally, a currency should possess three features which distinguish it from all other commodities. The physical form of the currency does not matter as long as it performs the required functions and is considered to be money. The first feature of a currency is that it should be capable of being used as a medium of exchange. This is to say money should be accepted as a tool of payment for goods and services in a society.

Currency simplifies and makes it possible the daily transactions of buying and selling (König, 2001).

The second characteristic of money is to be a unit of account, which meant that it can measure value of items as a standard. The third characteristic of money is that it functions as a store of value meaning that it can keep the purchasing power of a commodity to spend it in future (O'Dwyer, 2014).

To be accepted as a currency, Bitcoin is expected to be used as a medium of exchange in the market at first. It must be stated that it is difficult to acquire accurate market data regarding the use of Bitcoin in the daily exchange of goods. At present, there are over 100 multinational companies accepting Bitcoin as a medium of payment. These included IT companies such as Microsoft and Apple (Arsov, 2017).

To be regarded as a currency it must be possible to use it to measure the value of goods and services. For any currency to be regarded as a unit of account, it must be divisible, verifiable and fungible. Bitcoin serves as a unit of account which is derived from Bitcoin's functionality as a medium of exchange. When a payment is done in Bitcoins, the merchants convert the Bitcoins received as payments into standard currencies. It is also speculated that Bitcoin is not a unit of account due to its highly volatile value which can be considered as a negative factor. But it should be mentioned that it does not prevent Bitcoin from functioning as a unit of account (Lo and Wang, 2014).

For an entity to be considered as a currency, it must be capable of being a reasonable value container, meaning that is must have the capability of maintaining its value for a certain amount of time. Traditionally, this means that the owners of the currency should be able to exchange it for goods and services at a future date when necessary. The fiat currencies are subjected to inflation within time, therefore their value reduces and their ability to function as a store of value will diminish as well. This gives an advantage to due to the fact that it is free from the interference of governments and central authorities.

4. Advantages and Disadvantages of Bitcoin

The main advantages of Bitcoin can be listed as follows : (Kancs,2015).

- Non-interference from third party is one of the factors that contributed to the popularity of Bitcoin as it does not allow the requirement of a third party as Central Banks or government.
- The transaction costs are very low as compared to those of other currencies. In addition to this, there are no charges such as bank account fees. Furthermore, Bitcoin transactions are not subject to tax, generally speaking.
- On top of other features, what makes Bitcoin different from fiat money and thereby giving it an advantage is the fact that its transactions are private. The Bitcoin transactions are designed to be performed without the need to reveal the identity of the parties involved in the transaction.
- The Bitcoins are stored in wallets as fiat currencies stored in bank accounts, these wallets are stored digitally and contain private keys which makes it hard to be accessed by another individual.
- Bitcoin offers a platform which is transparent and public, thus anyone is able to follow and see the chain of transactions performed so far. Bitcoin is an open source project which makes the transaction process to be transparent to all and helps transparency while creating new coins.
- Using Bitcoin does not carry about inflation. It is well known that controlling money supply can be used as an advantage in countering inflation. Bitcoin was

created to be free of central control, thus inflation rate and supply of the currency are determined by the miners publicly. Therefore, Bitcoin will not be exposed to high inflation rates like the fiat currency.

The main disadvantages of Bitcoin can be listed as follows : (Yermack, 2016)

- Bitcoin has fluctuation in its market price and these could be rather sudden and very sharp. These fluctuations caused some of the vendors and financiers to avoid using it. The volatility results in serious losses for some of the owners of Bitcoins, therefore some investors and financiers have become reluctant in investing or using Bitcoin.
- The Bitcoin is held responsible as it may be used in illegal activities. This is because the parties of Bitcoin transactions are anonymous as it creates an open field for criminals to interact and make payments anonymously. Since the transactions cannot be monitored by third parties, criminal activities such as money laundering, drug trade could not be traced back.
- The limited accessibility of Bitcoin is effectual particularly in areas where internet access is limited, for example, Africa, Asia and South America. Since Bitcoin relies on internet and CPU power to operate and for the transactions to be completed, their absence reduces the number of people who can use Bitcoin. Furthermore, Bitcoin transactions are rather more complicated than the transactions of fiat money.
- Since Bitcoin are stored on wallets in digital form, usually, hackers try to steal Bitcoins from the merchants, the trading platforms and well as the common users. In addition to the cyber-attacks, there is a danger of the Bitcoin wallets being hacked or infected by computer viruses, which may cause those Bitcoins unclaimed by anyone.

5. The Future of Bitcoin and Other Cryptocurrencies

Cryptocurrency has become a global phenomenon in recent years. There are many concerns about the technology and its capacity to disrupt traditional financial systems. Supporters of Bitcoin and other cryptocurrencies assert that cryptocurrency is superior to traditional physical currencies because it is not dependent on central authorities. Others argue that it essentially recreates a system that alreasy exists. In this regard, it could make easier for people to commit fraud since no central authority exists to be able to regulate and monitor Bitcoin transactions. Another striking fact about Bitcoin is that people who live in countries with weak currencies and high inflation may be better off investing in Bitcoin than buying local stocks and bonds.

The future of cryprocurrencies and Bitcoin is still debatable. Proponents see limitless potential, however critics see nothing other than risk. There are serious doubts that the value of Bitcoin may crash at some point. The discussions about the future of Bitcoin and other cryptocurrencies are very broad. It is too early to come to a conclusion but the future of Bitcoin and other cryptocurrencies are also dependent on the course of the pandemy. While the Covid-19 pandemy contributed to the value growth of Bitcoin, the ending of the pandemy may cause a substantial loss of value in Bitcoin and other cryptocurrencies.

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