The Analysis of Advantages and Disadvantages of Bitcoin Comparing to Traditional Currency from the Perspective of Monetary Function

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<tbody>
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The Analysis of Advantages and Disadvantages of Bitcoin Comparing to Traditional Currency from the Perspective of Monetary Function

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Abstract

Bitcoin, as the very first P2P encrypted cryptocurrency, has led to the rapid rise of the trend of cryptocurrency since its birth in 2009. The free market concept represented by bitcoin has revolutionized the concept of currency, which has brought challenges to traditional currency concepts to a certain extent. This paper expounds its principle and advantages, combines with the economic theory, this paper analyzes the monetary attributes of bitcoin from the perspective of monetary function, and discusses other problems exposed in the use of bitcoin in the past decade, and puts forward personal ideas on the development prospect of bitcoin.

Key words: Bitcoin; Traditional Currency; Internet Finance; Cryptocurrency

1. Introduction

In recent years, a host of digital cryptocurrencies represented by Bitcoin, have developed rapidly and gradually gained their influence, and are becoming a hot topic of researchers at the moment. Whether Bitcoin subverts the traditional currency is also a focused topic in academic and cryptocurrency circles. As a new type of currency embodied with decentralization and a prosperous conception of free market to counter the global liquidity overflow, Bitcoin born with the potential to change the economic game rules. But from perspective of the real world, Bitcoin hasn’t subverted the existing currency in his ten years age. Despite the fact it remains to be seen whether Bitcoin will be able to subvert traditional currencies in the future. Therefore, it is important and topical to revisit Bitcoin in the context of the new era. In this paper, we analyze the shortcomings of Bitcoin from the perspective of monetary function and analyze the future development direction and focus of Bitcoin market based on the shortcomings.
2. The monetary attributes of Bitcoin from the perspective of monetary functions

From the concept of Bitcoin and its features, its advantages over traditional currencies are obvious. Regards to modern international economic system, Bitcoin is able to serve as an anchor for international currency based on its aggregate unchanging nature, it can well manage global liquidity, avoid global inflation, and safeguard the value of social and individual property. Secondly, the decentralized architecture enables the establishment of an absolutely fair, transparent, and high-trust economic system, allowing currencies to exist independently of the polity and allowing capital to flow freely. Thirdly, its anonymity makes users' property more secure, avoiding various forms of risk, etc.

From fundamental concerns, these advantages can only be realized in an extremely ideal state. Achieving perfect liquidity, making freedom paralleled by regulations is almost impossible to achieve. In addition, whether a economy model fully driven by market trustworthy for everyone? Whether is the freedom that comes from complete anonymity promising? Those questions require deeper thought and further practice.

Bitcoin was originally designed to be a new widely used currency of circulation. Supposing it’s aim of subverting existing currency, Bitcoin itself needs to fulfill the functions of a currency. Marx believed that the two most basic functions of money are the measure of value and the means of circulation, while the means of payment, the means of storage, and the global currency are the functions derived from these two. Here we mainly argue for the monetary properties of Bitcoin as a measure of value, a means of circulation and a means of storage.

2.1 The measure of value

The value scale of money does not refer to concrete money but to its abstract conceptual meaning. The value of money itself is the reason why it is a measure of value. The value represented by traditional money was pegged to gold during the Bretton Woods system, and after the collapse of that system was secured by the credit of the state, in which its value rested. Where is the value of bitcoin as a measure of value? There is a doctrine that the process of bitcoin generation consumes a lot of electricity and costs, mimicking the act of gold mining, so the rare digital strings it generates coalesce to have value.

I think there is a flaw in this view. Money is a product of society so it will lose its value when separated from its society infrastructure. There are two interpretations when putting it in the context of Bitcoin. First, the account book of Bitcoin requires internet as the underlying support, yet our society hasn’t not fully merged with the internet world, which means once separated from internet infrastructures, Bitcoin will lose its value because nothing can prove one’s possession of his cryptocurrency assets. Whereas traditional currency has substantive anchors like gold and social value backing like national credit. Second, Although Bitcoin holders’ consensus is similar in some ways to national credit which endowed bitcoin values, this consensus has not yet reached universal acceptance, which is why some call Bitcoin digital gold and others call it a Ponzi scheme.

However, we cannot easily dismiss the value of Bitcoin. Although its value is limited and abstract, the possibility of a future currency, and the idealized market system Bitcoin represents is more important than its own monetary value.

2.2 The means of circulation

According to the intrinsic design of Bitcoin, the refreshing speed of the accounts book is too slow to satisfy global circulation. Since each transaction needs to interact with the P2P network to get network-wide confirmation before it can be implemented, and current technology allows the Bitcoin network to handle only about six transactions per second, which limits the rapid circulation of Bitcoin in the marketplace, Bitcoin seems hard to accommodate the rapid and frequent large volume market transactions.

Even if the advanced technology upgraded the transaction speed, I think it’s still hard for Bitcoin to circulate
as the fiat currency. Emphasizing the national authority and society stability, it’s too risky for a nation to let a fully market-driven currency to take charge of domestic market because the sovereignty will then lose its control of economic system and make domestic market bare when facing the global systematic risk. And without the admission of government, the circulation of bitcoin in one country would be totally denied.

2.3 The means of storage

Money as a means of storage can spontaneously regulate the amount of money in circulation. It serves as a “reservoir” function. When the amount of money needed in circulation decreases, the excess money is withdrawn from circulation; when the amount of money needed in circulation increases, some of the stored money enters circulation. For Bitcoin, there are many different types of wallets, such as online wallets, offline wallets, central wallets, etc. The security and convenience is ensured by the private key public key technology, but it is questionable whether Bitcoin deposits are equivalent to purchasing power. The purchasing power represented by bitcoin is very volatile due to its frequent and large price fluctuations. Take the present day for example. On February, 2020 Bitcoin was at near $10,000 per coin, to March, 2020 it fell to near $3,000 per coin. The instability of the price of Bitcoin makes it a much weaker means of storage, and it would be very difficult to guarantee the safety of personal wealth in Bitcoin.

In summary, bitcoin can hardly satisfy the main functions of money, and its nature of virtual, lack of consensus, and price volatility make it difficult to satisfy the functions of a measure of value, a means of storage and a means of circulation. From the analysis of Bitcoin's monetary characteristics, Bitcoin is more inclined to be a special investment commodity born in the context of people's inflationary crisis of credit money. Although its original intention was to design a currency that can be circulated, its monetary properties are not obvious as of now.

In the context of modern society, fiat currencies are better suited to the practical needs of modern economic systems and various nation sovereigns for its function of regulating the market and promoting the implementation of policies. Although fiat currencies has the risk of dysfunctional circulation, it can actually be corrected by adjusting the exchange rate, improving the economic structure, and implementing supporting economic policies. The risks associated with the uncontrollability of Bitcoin and its decentralized nature, on the other hand, are incalculable and cannot be adjusted.

3. Other Disadvantages of Bitcoin Compared to Traditional Currencies

It is important to state that the disadvantages presented here is an issue raised under the assumption that Bitcoin becomes a circulating currency.

3.1 Inequity in the distribution of currency holdings

Bitcoin's value was discovered in a very short period of time, which went from 0.003 cents each in 2010 to a billion fold increase of $10,000 each today in just 11 years. And the difficulty of mining bitcoin was very low in the early days of bitcoin. The vast majority of Bitcoin’s wealth was in the hands of Satoshi Nakamoto and the early coin holders. Of course, in the current situation where Bitcoin does not circulate as a fiat currency, this situation does not compromise fairness because people can choose not to enter the Bitcoin market, but for the circulation of currency, equality of the population is the cornerstone of currency issuance.
3.2 Predictable deflation

Since the total amount of bitcoin was set at 21 million coins, the deflationary nature is obvious and it is
difficult to cope with the growing volume of the world economy. The only way to meet the demand for growth in
the economy is to increase its value. Holders who understand the trend of its appreciation will choose to keep
holding it for profit, thus less and less money circulating in the market, the economy in general goes into a freeze,
causing a depression. Once the economic goes to the deflation channel, it will be very harmful to social
development.

3.3 Lack of regulatory measures

Bitcoin as a decentralized currency means that it is not regulated by any institution, its illegal usages are not
easy to ignore. There are many people who use the anonymity and decentralization of digital currency to launder
money, avoid taxes, and conduct illegal black market transactions. Bitcoin's long-term development cannot be
achieved without state regulation and legal safeguards, but the involvement of central institutions is a serious
violation of Bitcoin's decentralized philosophy. Such a contradictory relationship makes bitcoin face whether or
not to improve recognition and acceptance with the help of the law in the middle of a difficult problem.

3.4 Confusion of purpose

Satoshi Nakamoto's original intention in creating Bitcoin was to design a decentralized digital currency that is
able to circulate. As far as the current situation of Bitcoin development is concerned, the monetary role of Bitcoin
is largely disregarded, while its investment attribute are becoming stronger and stronger. The increasing number
of speculators and dramatic price fluctuations are evidence that the investment attributes of bitcoin has occupied the
high ground of bitcoin's role. Most people hope to make huge profits from short term investments in bitcoin and
other cryptocurrencies, such a market situation makes one wonder whether it is a high risk, high reward gamble or
a Ponzi scheme. In the future, when the bitcoin price bubble has dissipated, will the conceptions that bitcoin
represents still be able to attract new investors, and will all the existing investors quit the game.

4. Conclusion

In summary, Bitcoin has some of the monetary functions, but its value is vague and not widely recognized by
society. Presently its nature is more inclined to be an investment commodity. It will take more effort and time for
Bitcoin to become a legal currency.

By the very nature of currency, anything can be money, and so can Bitcoin, as long as everyone agrees that it
is the usable currency. Bitcoin's value as a currency will only be endorsed when the majority accept and use it.
Bitcoin needs to grow its social influence, improve its currency utility with constant technological innovation, and
attract more users to form its currency ecosystem, on the basis of which a Bitcoin-based currency system can be
established. If bitcoin's use is limited to a certain circle its commodity value will always suppress its monetary
properties. More people will chase huge profits of swing trading in cryptocurrencies and ignore its essence.
Investing in a currency itself is a strange choice, as the currency does not bring any added benefit, but only returns
in the change of its value. In the Bitcoin ecosystem, the people involved are both investors and users. Bitcoin's
volatility will affect each and every one of them so it needs to develop in a smooth, orderly path in order to realize
a higher purpose.

In the current development situation, Bitcoin cannot be separated from fiat currency as its value is anchored
by fiat currency. On the other hand, Bitcoin represents an idealized marketplace of free circulation and
decentralization brought by cryptocurrencies which I think will serve as a complement of modern economic
system for a long time.
References