

UNFOLDING BITCOIN

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ABSTRACT

There has been a growth in the use of virtual currencies, which has led to an increase in volatility in the price of virtual currencies. Bitcoin is an example of a virtual money discussed in the article. The merits and disadvantages of using bitcoin are discussed in the paper. For this reason, the article proposes a number of areas for further research on bitcoin.

KEYWORDS

Bitcoin, decentralized, medium of exchange.

INTRODUCTION

The creation of bitcoin by Satoshi Nakamoto in 2008 has been one of the most significant developments in electronic payment systems throughout the globe. Digital money, such as Bitcoin, is one that is produced and kept entirely online. By leveraging the computing power of the computer to solve mathematical problems, they are not printed like any other money (Nakamoto, 2008).

As one of the first decentralized currencies, Bitcoin has revolutionized the way money works throughout the world. People have begun to feel that the history of bitcoin, which is both fascinating and controversial in some ways, portends the coming of the next digital revolution. Using Bitcoin, you may conduct peer-to-peer transactions directly between yourself and another user, eliminating the need for a middleman. The transaction costs are greatly reduced as a consequence of disintermediation.

The blockchain is a decentralized public ledger that records all of the transactions that take place between parties. Every bitcoin transaction is recorded on the blockchain, which is a database of all previous transactions. Anyone may see who owns a bitcoin, where it was spent, and how much it spent. While the

blockchain offers some anonymity, it does not give total confidentiality. Instead of the name of the

account holder, the blockchain transactions for bitcoin will feature the account holder's unique number. In addition to protecting people's personal information, this system provides a surprising amount of useful public information. Each computer's processing power is used to build the blockchain. This is a person who enables the blockchain to make use of their processing resources and therefore efficiently maintain a record of all bitcoin transactions. For every new bitcoin produced, a little portion goes to those who allow their processing power to be utilized for the maintenance of the blockchain. An anonymous, secure payment network is provided by the blockchain. As with other digital currencies, double-counting of bitcoin tokens has been a problem. This technique prevents that from happening with bitcoin. In addition, the enormous computational power needed to mine bitcoin makes it very hard to replicate a transaction block and perpetrate fraud.

Bitcoins, in contrast to conventional money, are generated via the use of mathematics rather than the mining of metal coins. The method uses a private key, whereas the verification step uses a public key. A new bitcoin is produced when these keys are mined. However, this does not imply that a limitless supply of bitcoins is possible. Satoshi Nakamoto designed the method in such a way that the total number of bitcoins that could be mined remained at 21 million. Every year, the total number of bitcoins produced is reduced by half, until there are 21 million bitcoins in circulation. Bitcoins, on the other hand, are infinitely divisible. Micropayments may be made using them. 10⁻³ millibitcoins, 10⁻⁶ microbitcoins, and 10⁻⁸ satoshis are the smallest units of bitcoin.

Exchanges allow trading between bitcoins and conventional currencies, while transaction service providers assist users store and trade their bitcoins using their own bitcoin client software. An person or a bitcoin ATM may buy bitcoins on the exchange or over the internet.

Bitcoin has grown in favor as the world moves toward a paperless and digital culture because to its unregulated currency characteristics that promise anonymity, reduced transaction costs, and increased safety. Since Bitcoin is becoming more widely accepted as a means of exchange, its trading volume will rise in tandem with its rising value. Eventually, it's projected to replace credit and debit card purchases altogether.

Although it is becoming more popular, it has also been the focus of criticism. The anonymity of bitcoin transactions raises doubts about the integrity of the transactions themselves. Since 2013, the price of Bitcoin has fluctuated greatly, rising from \$10 to \$1163 in the same year and then decreasing back down to the current level.

This year's volatility was mostly due to China's depreciation of its currency, the Yuan, as a reaction to capital restrictions. Bitcoin's price peaked in early 2017 at \$1140. Overnight, a large number of bitcoin exchanges have gone dark. One of the world's earliest bitcoin exchanges, Mt. Gox, shut down after four years of operation because of the increased speculation in the market. Governments have been deterred from recognizing bitcoin as a legal currency because of concerns about its trustworthiness.

REVIEW OF LITERATURE

Despite bitcoin's increasing popularity, scholars have been unable to pay attention to it. There is a dearth of empirical research on the factors that influence bitcoin's price and returns, as well as the connections between bitcoin and other market and economic variables. 18 of the 40 Bitcoin exchanges studied by Moore and Christin (2013) have shut down, with the more popular exchanges more likely to experience a security breach. They discovered a link between an exchange's average transaction volume and its likelihood of shutting early. According to a study conducted by Baek and Elbeck (2015), the volatility in the Bitcoin market is caused by high levels of speculation rather than external factors. The returns on the Bitcoin market were not shown to be significantly influenced by outside economic forces. When it comes to Bitcoin use, Bagdev and Chen (2014) did a thorough empirical investigation on how

people buy, sell, and invest in the digital currency. They discovered just a little amount of evidence to support the use of bitcoin as a currency. It is feasible, according to Raskin and Yermack (2016), that central banks throughout the world may introduce their own regulated digital currencies in the near future. Company architecture, usage of payment methods, consumer understanding of Bitcoin and the size of an economy all had a major impact on Bitcoin returns as discovered by Polasik et al. (2015). It's clear from a survey of the literature that academic research into this new phenomenon is still in its infancy, lacking both empirical analysis and a comprehensive grasp of the new economic tool.

CONCLUSION – A ROAD TO FUTURE RESEARCH

Bitcoin's price has risen as a result of recent events, including the depreciation of the Yuan, the Brexit vote, and the demonetization of Indian money. The extreme price volatility of bitcoin has raised doubts about its suitability as a medium of exchange. Bitcoin is difficult to utilize as a means of exchange since people are purchasing it as a speculative investment. This alternative investment route came into being at a time when the globe was in the grip of a financial crisis in 2008. This makes it desirable to do empirical research on the economic aspects that affect bitcoin price and returns. Bitcoin was created as an alternative investment instrument rather than a means of trade in response to the financial crisis. Bitcoin's popularity rises when the economy is in crisis, according to a worldwide trend. A downturn in the economy might be caused by bitcoin, though. As the demand for bitcoin continues to rise, the price is rising at an unsustainable rate, raising the possibility of a bubble forming in the market that might pop at any time. People have been stockpiling it because they believe its value will rise. The lower volume of bitcoin transactions is proof of this. Money laundering and capital flight are all made more difficult by the secrecy of online transactions. As a result, what started as a means of escaping the economic upheaval might lead to a downward cycle. The macroeconomic variables that influence bitcoin prices and returns are thus ripe for investigation. Accordingly, the country's regulatory climate has a significant impact on whether or not individuals will start using bitcoin. Prospective investors may increase their bitcoin investments in order to circumvent rules as a result of stricter controls. As a result of China's capital restrictions, this is exactly what is occurring. On the other side, a country's legislation may make it difficult or impossible to

invest in bitcoin. Another factor that might affect bitcoin's popularity is financial market growth. The use of bitcoin may be lessened as the financial market becomes more established. If bitcoin's volatility is regulated by well-developed markets, it might emerge as a digital means of exchange and help the economy become cashless. Bitcoin adoption may be affected by the current economic climate. A post-crisis emergence of bitcoin suggests that it may be used to address economic inconsistencies. Bitcoin's popularity and use may be affected by a variety of factors, including the legal environment. A macroeconomic framework that examines several levels of macroeconomic parameters should be used to identify what drives bitcoin's appeal. Also, an interesting future research direction is an event analysis of the many spikes in bitcoin's tenure since 2009.

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