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Can Bitcoin Become Global Currency

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ABSTRACT: Cryptocurrency is only one example of the many breakthroughs made possible by globalisation. Despite widespread doubt about cryptocurrency's long-term success, it still has the potential to become a global currency substitute. This piece explores the potential for Bitcoin, the first decentralised cryptocurrency, to replace traditional fiat money as the major medium of exchange throughout the globe. The study's goal is to identify and examine factors that may hasten Bitcoin's acceptance throughout the world. This research will provide insight on Bitcoin's viability as a worldwide currency.

KEYWORDS: Bitcoin, cryptocurrency, globalisation, global currency, gold, and financial market.

I. INTRODUCTION

Cooperation, standardisation, and global uniformity have all reached new heights as a result of globalisation. Important international groups like the United Nations and the World Trade Organisation have been established in the previous two hundred years.

More often, officials from various governments meet to explore how to better coordinate policies and eliminate barriers. A global currency would be the next major boost to the global economy as globalisation continues to grow since it would eliminate the danger of changing exchange rates, reduce transaction costs, and stimulate increasing cross-border interchange of goods and services.

Global Currency Definition

A "global currency" is one that is accepted and utilised in every country. There are two requirements that must be met by the global currency before it may be used as a medium of exchange among all people.

Excessive liquidity Safe bet Low susceptibility to changes in the market Consensus acceptance This means it may be used to conveniently make purchases at a large number of different stores.

The European Union's acceptance of the Euro as its regional currency provides valuable insight into the factors necessary for the successful introduction of a global currency.

The Euro in Regional Perspective: Two Minutes

The triumph of the Euro in the European Union might have far-reaching implications for the future of money across the world. The European Union (EU) was established in the late 1960s to foster "stability and an environment for growth and development" ("The History of the Euro", 2022). It took the European Union (EU) ten years (1990-1999) to prepare the economic groundwork for the launch of the Euro by creating an internal market with free capital movements within the region, establishing the regional central bank to regulate the new currency, and then finally fixing the exchange rate and launching the currency ("The History of the Euro", 2022). Extensive work and cooperation resulted in the Euro, which has brought benefits and drawbacks to the area. For 19 of the EU's 28 member states, the Euro has become an economic promise that cements their union. Despite the EU's best efforts during the first internal market preparation period, a number of countries that eventually joined the Eurozone brought with them insurmountable gaps that changed the regional economy's balance in an unfavourable direction.

These issues were mitigated by other benefits of the common Euro that exceeded them. The absence of currency fluctuations and the associated expenditures is one example of the advantages that might result.

This short overview of the Euro's history elucidates the three prerequisites for the effective introduction of a global currency:

To begin, all nations in the currency union must reach the same level of economic growth.

- Secondly, the selected currency must be non-biased in terms of politics. Because of the dramatic impact on the economic power balance, the common currency cannot be the currency of any one of the member nations.



Thirdly, the new currency's standards need to be monitored and implemented by a governing organisation or authorities.

Currency Options Around the World

One of the current major currencies, gold, or a representation from the developing cryptocurrency sector are the three front-runners for the job of global currency right now.

Since the end of the bartering era, gold has served as the basis for all currencies. Gold has kept its value because its worth has been recognised throughout cultures and ages.

Gold has traditionally served as a shelter for investors during times of market volatility due to its perceived stability. All of these features seem to be present in gold, making it a formidable candidate for the role of world currency. Its value is recognised globally (and can be converted to any currency), giving it considerable liquidity, and its stability in value is commonly held to provide the highest degree of security. However, gold fails to meet all three of the requirements for the creation of the global currency. Gold mines are also unevenly spread around the globe, with most being located in only a few of nations that have historically had a strong position in international commerce. Despite its widespread use, gold is not and cannot exist for the reasons stated above.

Although adopting gold as a worldwide currency would help the world's existing major nations, it is not a politically neutral money. Again, no official body is considered as having the power to control the gold market. Gold's dwindling value and unfavorability as a global currency are mostly attributable to the difficulties of utilising, administering, and spreading gold. Gold was formerly widely utilised in commerce, but it has since been mostly replaced by paper money and digital credit.

II.LITERATURE REVIEW

To solve the issue of double spending in digital currencies, Satoshi Nakamoto published a white paper on the cryptography email list metzdowd.com on October 31, 2008 ("Bitcoin History"). The Bitcoin block chain began on January 3, 2014, when the genesis block was mined ("Bitcoin History"). The public's perception of Bitcoin has been damaged by its steep price declines since June 2011 ("Bitcoin History"). One of the magazine's co-founders, Buterin, wrote an article titled "Anniversary of the Great Bubble of 2011" in which he reflected on the event and argued that the rapid recovery proves that Bitcoin enthusiasts "are willing to endure hard times for the sake of a brighter long-term future" (2012).

Bitcoin's reliability and security are dependent on how hardy its user base is. While the dollar has been a fiat currency for some time now, its continued value stems from the widespread belief that the United States government would continue to back the currency, regardless of economic conditions, in the same way that the gold standard convention has maintained the value of gold. Similarly, the Bitcoin community's unwavering faith in Bitcoin's ultimate preeminent position in the global market is seen in their continuous voluntary use of Bitcoin despite its ups and downs in the past. This hypothetical standard might be as effective as, or perhaps more so than, those imposed by a regulating organisation.

Satoshi Nakamoto's seminal work, "A Peer-to-Peer Electronic Cash System" (2008), lays the groundwork.

Nakamoto proposes the Bitcoin concept in a paper released in 2008, which represents a radical departure from conventional wisdom in the realm of digital currency. He claims that disagreements develop anytime an impartial third party (often a financial institution) is employed to complete a transaction because of the "inherent weaknesses of the trust based model." Trust is essential because reversibility is persistent. Since Bitcoin is the first decentralised online peer-to-peer transaction system that delivers a cryptographic proof rather than depending on faith, he believes that it may allow for direct electronic trading between individuals. The possibility of duplicate spending is a fundamental problem that has stopped past cryptocurrencies from obtaining widespread adoption. By including a timestamp in each block chain and keeping a public history record of transactions, Nakamoto and the Bitcoin framework directly address this problem, with the majority vote of CPU power (the network of computer power provided by Bitcoin miners and users) confirming or rejecting the honesty of each block. He adds that the same "consensus system" may be used to determining whether or not new laws or incentives are required.

III.LIMITATIONS

Since the Bitcoin dataset is so small (just eight years of data), and the neural network model used to generate predictions is so rudimentary, there are still a lot of gaps in this article. While the model predicts a rise in Bitcoin transactions for the year as a whole, it projects a decline in the number of Bitcoin transactions during the middle of the year due to seasonality. This discrepancy may be attributed to the model's sensitivity to the quality of the input data. This drop might

be explained by the speculative nature of the Bitcoin market in its infancy, but as Bitcoin's popularity grows, investors will once again feel comfortable betting on the cryptocurrency's long-term viability.

IV.HYPOTHESIS

Bitcoin's potential as an international currency has been met with both support and criticism.

Bitcoin, on the one hand, has the potential to significantly enhance international money transfers. The first benefit is that it may be widely distributed in a shorter amount of time. Bitcoin's mining system is one of a kind since it really pays miners for their efforts. Since there is a hard cap of 21 million Bitcoins that may ever be mined and distributed, the cost of mining (or mining difficulty) will gradually increase over time, causing a corresponding fall in the mining rate. The concept behind this design is to mimic the scarcity, or inherent worth, of gold in order to prevent inflation from occurring as a consequence of an excessive issuance of currency into the money system. The simplicity of the method is also a benefit.

usage. To make a purchase without using a bank, a Bitcoin user only has to exchange their local currency for Bitcoin and set up the transfer destination (a wallet address).

Potential Bitcoin users, however, have a number of worries, including those related to Bitcoin's security, government regulation, and price volatility. Concerns regarding Bitcoin's security are a key barrier to its widespread use, according to research by Ermakova et al. Many people have chosen to overlook Bitcoin's development from its infancy because of its unfavourable reputation. Theft attempts and market collapses have been less prevalent as time has gone on. Many people are anxious about possible price increases as a consequence of the Bitcoin speculative bubble. After much internal discussion, the editors of The Economist came to the conclusion in their 2022 article "What if the bitcoin bubble bursts?" that Bitcoin had established a "healthy bubble," since the system is still mainly "self-contained" and unlikely to spread contagion to the rest of the economy. As was also said before, the fact that the Bitcoin community is composed of true believers contributes to Bitcoin's inherent resistance against infection. Due to their interdependence, they have a high collective risk tolerance, yet they can't undertake coordinated withdrawals from the system. Fear of deflation ranks third among people's worries. Once the maximum supply of 21 million Bitcoin is mined, deflation will set in, making Bitcoin more expensive relative to other commodities, boosting savings rates and discouraging investment. But Bitcoin's decentralisation gets overlooked in the backlash. It's true since Cawrey said so on Coindesk.com.

V.RESULT

It's possible to extrapolate a train loss of 0.023035 from the first simulation. The model, which considers the whole dataset (183 observations), anticipates a record number of Bitcoin transactions in 2018. Because the dataset has already been scaled and normalised, the prediction results in a straight orange line that closely follows the distribution of the data points.

With a train loss of 0.0034763, the prediction from the second try seems to be more reliable. While the model predicts an increase in Bitcoin transactions in 2018, it provides a more nuanced perspective on the pattern by predicting that the number of Bitcoin transactions will peak in the first half of the year and then drastically plummet. The model uses a subset of the full dataset (data from 2020-2022) as training data.

VI.CONCLUSION

The future of Bitcoin is murky since it is still in its infancy.

However, the study has considered the pros and cons of Bitcoin's potential as a worldwide currency. As of right now, these predictions are more conjectural than anything else, but once the neural network forecasts are finalised, Bitcoin's tendency towards growing popularity and market dominance should become more clear.

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