

Can cryptocurrencies be the future of money? The role of democracy

Mehmet Baha KARAN, Hacettepe University, Ankara, Turkey.

Discussion paper for ISINI 2022 conference

Received: 22.01.2022, Revised: 13.02.2022, Accepted: 03.03.2022

doi: <http://10.29015/cerem.939>

Aim: The purpose of this article is to evaluate if cryptocurrencies that have robust technology and anonymous features can be the money of the future. In this study, the transition phases of paper money, which started to be used at the beginning of the 17th century, to bank money, then banknotes and fiat money are examined. It is pointed out that the fiat money system has developed within the conditions of humanity's search for democracy and freedom. Fiat money can only be successful in democratic systems where institutions operate freely, and therefore it is an instrument of democracy. Authoritarian tendencies, which have started in the world since the 21st century due to nationalism, migration, and climate change, are an important factor in the widespread use of cryptocurrencies however. It has been concluded that the spread of cryptocurrencies is directly dependent on the democratic practices of countries and if authoritarianism rises, the use of cryptocurrencies will inevitably grow.

Keywords: cryptocurrencies, democracy monetary policy.

JEL: E50, D02

1. Introduction

On October 31, 2008, the article titled "Bitcoin: A Peer-to-Peer Electronic Cash System" (Nakamoto 2008) on a website at metzdowd.com presented the cryptocurrency that is called Bitcoin. Nobody had predicted then that it would have such a significant impact on our lives. Bitcoin was a virtual currency; it could be shopped, speculated, and stored value with. It essentially had all the elements that a coin should have and was encrypted with highly reliable blockchain technology,

allowing safe transactions but hiding the user's identity. Bitcoin and similar cryptocurrencies could be spent and received by anyone, anywhere, at any time throughout the world, and without the need for a bank or a government. The cryptocurrency was not only anonymous but also completely transparent and trackable. It was the most revolutionary aspect of cryptocurrencies. The technology that had backed it was a decentralized ledger (bookkeeping) system that combines cryptography, the internet, and ample data storage. Moreover, it was also very reliable. It was pretty different from today's monetary system.

In the beginning, people were hesitant about this type of money; they considered it an absurdity of the virtual world, and the transaction volume was relatively low. Previously, more money launderers and those who transacted illegally used the currency. However, increasingly investors began to trust this system, and the use of Bitcoin started to increase. While the value of one Bitcoin was \$0.08 in 2010, its price peaked at over \$50,000 in 2021, reaching over 70 million account holders ("wallet users"). Moreover, there were thousands of Bitcoin-like cryptocurrencies on the market. From the second decade of the 21st century onwards, there had been an ever-increasing intensity of debate. The cryptocurrencies are now starting to threaten the existing monetary system. Although having a very volatile price for now, with e.g. the price of Bitcoin falling below \$30,000 in 2021 and thousands of altcoins preventing from using them as a kind of money, it will undoubtedly stabilize in the future, and market dynamics will significantly reduce the number of sizeable cryptocurrencies.

2. Monetary systems and democracy

Would cryptocurrencies be the money of the future? The question began to be discussed all over the world. Undoubtedly, this transformation would not be easy. Many countries have already worked to take control of the system. But under what conditions could this money, which was not dependent on authority in its original form, flourish? Indeed, the new coin will not replace paper money easily since no country could voluntarily relinquish control of its currency and cast aside the privileges of printing money. Besides, cryptocurrencies facilitate capital flight from

CAN CRYPTOCURRENCIES BE THE FUTURE OF MONEY?

countries and make it difficult for governments to combat illegal activities.

Moreover, cryptocurrencies also have additional significant flaws. The most important of these is that it needs excessive electricity and releases excessive carbon dioxide into the environment (Zade et al. 2019). This situation is an essential threat to the world, where environmental issues are becoming increasingly problematic (Malfuzi et al. 2020). The presence of more than 6000 cryptocurrencies in the market seriously increases this the size of the problem. But cryptocurrencies show us for the first time in history that we can guarantee that each individual has a voice and that voice is not impersonated (Zerlan 2014). However, in some instances, their use pressurizes some ethical principles and the rule of law, such as safeguarding fundamental rights like the right to privacy and the proper functioning of checks and balances, including effective judicial review. (Goossens 2021). Therefore, it is challenging to predict the future of cryptocurrencies, which have legal, technical, energy and financial dimensions. However, cryptocurrencies' democracy and freedom dimensions are perhaps the most important.

In the book *Narrow Corridor*, written by Daron Acemoğlu and James Robinson (Acemoğlu et al. 2019), the importance of establishing a balance of power between the state and the norms of society to develop economies is argued for. The authors use the concept of Leviathan, designed by Thomas Hobbes (1588-1679). They claimed that communities need a state (Leviathan) to avoid an anarchic structure. However, if the institutional arrangements in the country do not balance the state's power within the society, oppressive and totalitarian administrations will emerge. Based on historical examples, the authors demonstrate the importance of balancing state pressure with an anarchic structure called a narrow corridor for economic development. Undoubtedly, the history of money and banking is remarkable in this context.

The current radical change in money, which effectively started with Bitcoin, is the second significant historical event in the last 400 years. The first of these is related to the transition of the European economy from metal money to paper money in the early 17th century. With this revolutionary transition, first "bank money" was created, then banknotes, and finally fiat money used today. During this process that lasted for hundreds of years, while the basic functions of money were developing, the trust in

money was lost many times, crises emerged, and the system has reached the present day by renewing itself each time. At the same time, historical developments show us that the formation of paper money is an extended dynamic process and strongly related to democratic development (Quinn, Roberds 2014).

In medieval Europe, metal coins were made with gold and silver, and the value of money varied depending on the gold and silver in it. However, due to the distrust of these coins, conflicts could arise between the parties while bartering in commercial centers. For example, in its coin regulation of 1606, the Dutch Republic officially recognized 25 gold and 14 silver coins as money, although hundreds of different coins were on the market (Van Dillen 1934). Each of these coins wore out over time, or some shrewd trader tried to profit from the gold and silver scraps by eroding the gold coin. As the famous English economist Thomas Gresham said: “Bad money drives out good money”. People kept the good money to themselves and released the worn-out ones. There was complete turmoil over money. When the bad, clipped, and worn-out currencies circulated excessively in the market, this depreciated the value of the country’s main currencies and created inflation in the country. To solve this problem and facilitate transactions, merchants developed clearing systems based on intermediaries such as bankers and money changers. The first important step came from the Amsterdam Bank in the Netherlands at the beginning of the 17th century. The bank created the “bank money”. It was, in a sense, similar to Bitcoin. A powerful bank backed by the state guaranteed full conversion and the money could be used in commerce like gold coins. Since it is not easy to attribute a great value to a piece of paper, it was natural that Amsterdam merchants first kept aloof from money recorded in bank books, similar to the skepticism about virtual currencies today. The Bank of Amsterdam solved this problem quickly with the trust it gave to society and became the first institution in history to issue fiduciary money. Undoubtedly, in addition to the liberal economy implemented in the Dutch Republic in this period, the system, which was quite democratic for its time, had a significant influence. The Bank of Amsterdam determined the actual metal values of the foreign and local currencies it collected and examined. After deducting a small management fee from that value, it was recorded with a nominal (written on) value in the customer’s account. This money was not a coin, and it was called “bank money”. Since it would always be traded at its value, it

CAN CRYPTOCURRENCIES BE THE FUTURE OF MONEY?

did not depreciate like metal coins whose value decreases as they wear out (Van Dillen 1934).

From the 17th century onwards, trade and wealth boosted in Western Europe, and the number of wealthy people also increased. This time there was a widespread demand in society to protect wealth. Events such as King Charles I of England confiscating people's coins in the mint in 1640 increased this need even more. The problem of kings extorting money from the rich had been going on for hundreds of years (Jongchul 2011). In the Middle Ages, the kingdoms in Europe did not hesitate to confiscate the money and property of the nobles and lords when they needed money or for hostile reasons. During the Crusades, the Templar Knights, who established a supranational organization, became an institution that money holders trusted. The lords and nobles handed over their wealth to the iron hands of Templars (Butler et al. 2006). This way, they ensured that their inheritance was passed on to their children. Goldsmith bankers, who emerged at the end of the 17th century in London, gained great confidence in collecting the people's deposits, and the banknotes they issued began to be used as money.

The story of how the goldsmiths gained such trust in the society in the land of despotic kings is quite interesting. The service provided by the goldsmiths, starting from the Republican period founded by Cromwell, is no longer limited to physical protection only. While the depositors were guaranteed that their money would be repaid on demand, they preferred to keep money safe by lending it to third parties. It was not the first time in history that loans were used for protection purposes in this way. It is known that, in the mid-seventeenth century, bankers in Seville lent most of their deposits to private entrepreneurs and commerce to escape an attempt to seize the gold kept in the vaults of King Charles V of Spain. Now the goldsmith bankers were more innovative, and instead of putting their money in their safes, they set up a system of transferable notes. This method has been very successful in combining the interests of any third party. By creating simultaneous property rights (interests) for borrowers and depositors, they wanted the Crown to know that there would be tremendous opposition if it dared to do so. Thus, they reduced the possibility of them being confiscated with their funds. It was a typical confidence-building plan that the goldsmiths pursued. The project had two key features: "permanent indebtedness" and

“transferability of the depositor’s right” (Goodman 2009).

Democracy flourished in England after the Magnificent Revolution. The newly established Bank of England’s most significant strength functioned as a “means of commitment” over Crown obligations and guaranteed the government to pay its debts reliably. In addition, while creating transparent regulations for all financial transactions, its banknotes were readily accepted throughout the country with the confidence it began in the market. In 1844, the gold system was adopted in Britain. The Bank of England took the monopoly of issuing banknotes on behalf of England to establish a ratio between its gold reserves and the banknotes it could issue. As a result, while the Bank of England, as a leading institution of the increasingly institutionalized British democracy, provided the capital and reputation that enabled England to become the great world power of the next century, the paper money system based on the gold system began to be used safely in Europe.

However, this process has not always been managed well. Following the Mississippi and South Sea Bubbles, which emerged in France and England in 1720, it caused many scandals in the USA, which was considered to be the homeland of paper money. It is known that US President Thomas Jefferson said, “I believe that banking institutions are more dangerous to our liberties than standing armies...” (Lenzer 2011). This process was also excruciating in the USA, and crises and problems continued until the Federal Reserve was established in 1913. As the gold system, which was generally accepted at the end of the 19th century, started to shake from the 1930s onwards, the Bretton Woods system, which was established in 1944, continued until 1973. Finally, so-called Fiat Money was introduced in 1973.

Fiat money is a currency without an underlying value. Instead, the government derives its value and the trust people place in its value. In other words, it is a form of currency that only holds value because of government enforcement. Therefore, the value of money can only be stable with good management. For this reason, it should not be overlooked that paper money is a “tool of democracy”. The researches show that the stability provided by the Bank of England in the 19th century and the FED in the 20th century, powered by democracy, played an essential role in the evolution of paper money into fiat money. From the 19th century to the end of the 20th century, the improvement observed in the income distribution all over the world provided the

CAN CRYPTOCURRENCIES BE THE FUTURE OF MONEY?

establishment of social balances. The balance between the power of the state and the anarchic structure eased the development of fiat money (Burgess 1952).

Managing fiat money is a highly technical task, but more than that, it is a delicate task. The hardest part is protecting against “crises”. It means making money more scarce and expensive when crisis psychology arises. While these operations require courage and expertise, they need independent central banks to run independently of their populist or self-interested politicians. Such an administration can only be successful in well-functioning democracies. In authoritarian and populist countries such as Turkey and Argentina, giving importance to loyalty rather than expertise does not back the fiat money system to succeed.

However, since the 21st century, problems such as globalization, technological revolution, income distribution disorder, migrations, nationalism, and climate have started to confront us with new realities. Now the orientation in the world has begun to unchain the Leviathan (state). Powered by the chaotic environment and developing technology, many states have started to turn towards authoritarianism. Fueled by anti-immigrant policies, the far-right has begun to gain strength even in Western societies. In addition, with the developing electronic technology, countries started to monitor their citizens with cameras, face recognition, and citizenship numbers. They began to disrupt the relations between society and the state. China, an autocratic country, is an enormous economic power globally, affecting all countries, especially the USA, and leading to the emergence of leaders like Donald Trump who aim to ignore democracy. Many thinkers like Yuval Noah Harari (2019) warn of the possibility of moving away from democracy in the future world. It would be pretty natural for people to seek alternatives to protect their wealth in such a world by considering the increasing monitoring power of the state as a threat. Undoubtedly, black money owners, global criminal organizations, and weapon dealers, who are getting more powerful with the deterioration of income distribution globally, are among them. Beyond these, the USA's irrational use of the USD as a weapon and prohibiting states such as Iran and North Korea from using the Swift system increases support for digital currencies (Reuters 2021).

3. Conclusion

As a result, in today's increasingly complex world, the liberal dimension of cryptocurrencies gains importance beyond its other features. Although cryptocurrencies cause significant environmental, ethical, and legal problems, the use of distributed technology and algorithms can raise trust and legitimacy concerning the functioning of public institutions. At the same time, blockchain could also help generate trust and legitimacy regarding the composition of democratic institutions. It provides secure political campaigns and voting procedures that prerequisite sustainable democracies (Goossens 2021). Their ability to hide individuals' identity and wealth and escape the control of authoritarian states in their monetary transactions will become increasingly important in a world where nationalism is strengthened by migration and climate crises. We are probably at the beginning of the journey of crypto money. The destination of this journey will largely depend on the degree of the democratic practices of the states. History whispers that as the world's countries move away from democratization, cryptocurrencies will become widespread no matter what governments do to restrict their emergence.

References

- Acemoğlu D., Robinson J. (2019), *The narrow corridor. States, societies, and the fate of liberty*, Penguin Publishers, New York.
- Anna I. (2021), Iran uses crypto mining to lessen impact of sanctions, Reuters, May 21, <https://www.reuters.com/technology/iran-uses-crypto-mining-lessen-impact-sanctions-study-finds-2021-05-21/> [10.03.2022].
- Burgess R.W. (1952), Money as an instrument of democracy, "Proceedings of the American Philosophical Society", vol. 96 no. 5, pp. 566-572.
- Butler A., Dafoe S. (2006), *The warriors and bankers*, Lewis Masonic, Surrey UK.
- Goodman H. (2009), The formation of the Bank of England. A response to changing political and economic climate, 1694, "Penn History Review", vol. 17 no. 1, <https://repository.upenn.edu/phr/vol17/iss1/2> [10.02.2022].
- Goossens J. (2021), Challenges and opportunities of blockchain and smart contracts for democracy in the distributed, algorithmic state, in *Blockchain and public law. Global challenges in the era of decentralization*, Pollicino O., De Gregorio G. (eds.), Edward Elgar Publishing, Cheltenham, pp. 76-88.
- Harari N.Y. (2019), *21 lessons for the 21st century*, Vintage Publications, New York.

CAN CRYPTOCURRENCIES BE THE FUTURE OF MONEY?

Hobbes T. (2010), *Leviathan*, Martinich A.P., Battiste B. (eds.), Broadview Press, Peterborough.

Jongchul K. (2011), How modern banking originated. The London goldsmith-bankers' institutionalization of trust, "Business History", vol. 53 no. 6, pp. 939-959.

Lenzer R. (2011), Thomas Jefferson warned the nation about the power of the banks, "Forbes", October 11, <https://www.forbes.com/sites/robertlenzner/2011/11/06/thomas-jefferson-warned-the-nation-about-the-power-of-the-banks/?sh=7a8af2a62b18> [10.02.2022].

Malfuzi A., Mehr A., Rosen M., Alharthi M., Kurilova A. (2020), Economic viability of bitcoin mining using a renewable-based SOFC power system to supply the electrical power demand, "Energy", vol. 203(c) art. 117843.

Nakamoto S. (2008), Bitcoin: a peer-to-peer electronic cash system, <https://www.metzdowd.com/pipermail/cryptography/2008-October/014810.html> [10.02.2022].

Quinn S., Roberds W. (2014), How Amsterdam got fiat money, "Journal of Monetary Economics", vol. 66 no. C, pp. 1-12.

Van Dillen J.G. (1934), The Bank of Amsterdam, in *History of the principal public banks*, van Dillen J.G. (ed.), Martinus Nijhoff, The Hague, pp. 79-124.

Zade M., Myklebost J., Tzscheuschler P., Wagner U. (2019), Is bitcoin the only problem? A scenario model for the power demand of blockchains, "Frontiers in Energy Research", vol. 7, <https://www.frontiersin.org/articles/10.3389/fenrg.2019.00021/full> [10.02.2022].

Zerlan J. (2014, May), Bitcoin as the ultimate democratic tool, *Wired*, May, <https://www.wired.com/insights/2014/04/bitcoin-ultimate-democratic-tool/> [10.02.2022].