

Feasibility of Spot Currency Trading Unified with Fiat Currencies and its Challenges

Arian Dizaji

Bachelor student of financial management, Central Tehran branch, Islamic Azad University, Tehran, Iran.

Ariandizaji8186@gmail.com

Ali Dizaji

Ph.D. Department of Law, Science and Research Branch, Islamic Azad University, Tehran, Iran.
adizaji95@gmail.com

Abstract

Cryptocurrencies refer to electronic money that is transferred digitally and unbackable in computers through a platform called the blockchain. In other words, virtual money is encrypted with electronic codes and they can thus register transactions; hence, all digital currencies, including bitcoin and wallet coins can be a means of payment to replace physical money for providing goods and services, and can be used instead of fiat currencies at the national and transnational levels. There are various advantages for this replacement, such as reducing the production of banknotes and metal coins, but this development in the structure of monetary payments leads to legal and political challenges, and it is necessary to address this issue in the present research. As an introduction, the equality of the fiat and spot currencies should be measured and the possibility of applying the effects of fiat currency to spot currency and its advantages and disadvantages should be also analyzed and explained. Obviously, analyzing this issue and generalizing the characteristics of physical to virtual money will be effective and pioneering for domestic and international trade, and identifying the challenges of unification can provide a suitable platform for adopting preventive measures in terms of eliminating and controlling possible risks. On this basis, the present research analyzed the topics through data collection and desk analysis.

Keywords: Fiat currency, Spot currency, Unification theory, Legal challenges

Introduction

Printing banknotes, coining, and even the destruction of old money impose heavy costs on governments. In addition to the financial costs of printing money and coining, printing banknotes in special economic status and financial shortages is an important cause of inflation and deflation. Even though printing banknotes (quantitative facilitation) may have economic benefits in the short term, it causes negative economic consequences in the long term. The use of ATM cards is only beneficial in the national arena and up to a limited level and cannot be used for transnational trading.

Electronic and virtual money in the form of cryptocurrencies is constantly increasing and being exchanged and cryptocurrencies as new technology cannot only be eliminated, but they are developing and improving day by day, and entering into some technologies such as metaverse and trading in them totally depend on cryptocurrencies. According to this definition, welcoming modern technology reduces its risks and is an economic and rational matter. Digital currencies can replace paper and metal money and make their position stronger in this regard, especially because digital currencies have the possibility of saving and investing; hence, they can exchange in transactions. Therefore, the power of cryptocurrency in the national and transnational economy cannot be ignored. The political systems have always paid attention to precious metals, i.e. gold and silver as valuable money in historical periods (Tavassoli, 2015: 8); hence, the mercantilism school emerged with the approach of acquiring and saving gold and silver. Even though fiat currencies have largely replaced different expensive metals, social and economic needs have necessitated the invalidity of physical money and the increase in prices of gold and silver over time. Some analysts believe that the world's monetary system, which relies on the dollar, may fall and find other alternatives such as gold and silver. Digital currencies are also not left behind in the progress, and especially some of them, such as Bitcoin and Ethereum, have become an important part of the new technology platform. If political systems in the world show more favor to cryptocurrencies as a means of exchange and trade, this replacement will mature quickly and even transactions can be done with cryptocurrencies via smartphones. Therefore, the analysis and research of the concept of spot currency and its capability in the development of the monetary structure and its effectiveness on economic components are inevitable, and the scientific logic and principle of accounting and future research policy require

designing and explaining legal challenges and preventive policies before any problems with cryptocurrencies. In addition to criticizing the challenges and offering suggestions, analyzing the economic effects of replacing fiat currency with spot currency can also be useful in the economic order.

Research background

The digital currency was introduced to the world with Bitcoin in 2009, and other cryptocurrencies entered the digital market under the name of wallet coins. Due to the advancement of cryptocurrencies, their legal, financial, and economic challenges have been analyzed in national and transnational fields. Even beyond them, criminal aspects of digital currencies such as money laundering, heist, and fraud, are investigated in the criminal cycle. Studies have been conducted on the regulation of cryptocurrencies, and most countries have adopted regulations in this regard. Owing to the development of these topics, the Financial Action Task Force (FATF) introduced new standards and laws for digital currencies to overcome money laundering and terrorism and published its views about Non-Fungible Token (NFT) and Decentralized finance (DeFi) in a guide. Some countries establish and implement progressive and efficient laws for regulating cryptocurrencies, but on the contrary, some others perform weakly in this field. Regulatory frameworks have been established in any country with specific objectives such as supporting investment, fighting money laundering and terrorism, and fighting tax evasion, etc. For example, mining and using digital cryptocurrencies are allowed as a substitute for money in commercial and economic transactions in Germany. Social, political, and economic benefits in any country have a direct effect on the regulation of spot currencies, including mining, trading, holding, and the possibility of replacement.

Theoretical and practical basics

The digital currency was introduced to the world with Bitcoin and started working in 2009, and two pizzas were bought for the first time for 10,000 Bitcoins on May 22, 2010. At that time, the value of each bitcoin was 0.0025 dollars. That day was called "Bitcoin Pizza Day" when a real person paid 10,000 bitcoins to buy two pizzas for 25 dollars (Akhavan, 2017). The main goal of Bitcoin and most digital currencies has been to eliminate intermediaries such as banks in a way that currency can be sent easily, quickly, cheaply, and safely from origin to destination, and cryptocurrencies are the best tools to deal with the shortcomings of the traditional banking system. For the first time in 1998, a person named "Vidan" presented the idea of digital currencies as an alternative to fiat currencies issued by governments, and the idea was implemented with the creation of Bitcoin. According to the examination of the evolution of cryptocurrencies, this technology has serious opponents and proponents:

- Opponents are divided into two groups: some of them deny the monetary role of cryptocurrency and assume that it is an abstract commodity. Governments and the Financial Action Task Force (FATF) have this theory, and others believe that even though cryptocurrency can replace money, it is full of objections and criticisms (Houben, Snyers, 2018: 100). On this basis, they are trying to minimize the monetary role of cryptocurrencies. On the contrary, proponents of the monetary role of cryptocurrencies criticize the opponents' theory and defended the monetary position of cryptocurrencies by presenting convincing arguments and believing that fiat and traditional currencies can be replaced by digital currencies.

Nowadays, digital currencies have established their position and have been used in online shopping, international transactions, facilitating heavy transactions, investing, bypassing sanctions, etc. Many coins are active in the blockchain arena, and Bitcoin is the main and most valuable digital currency with a major share in the world.

It is necessary to examine the nature of fiat currency and analyze the function of cryptocurrencies in the monetary structure after getting knowledge about the nature of money to conclude about the monetary or commodity nature of cryptocurrencies.

The concept and nature of money

Money nature can be examined in monetary theories (metallism-chartalism). In the metallism theory, money has material support and appears in the form of precious metals such as gold and silver, and thus gold and silver are considered money. On the contrary, money has no relation to materials and goods in the chartalism theory, but it has established credibility, and does not have a high value in nature; hence, the political systems give credit to money, and gold and silver are defined and considered as the support of money. According to the role and nature of money, economists have provided different definitions of it, some of which are mentioned as follows.

John Hicks: Money is something that performs the functions of money. (Yousefi, 148)

John Maynard Keynes: Money is something with three functions: exchange intermediary, measure, and value storage. (Yousefi, 148)

John Marshall: Money is a means of exchange and storage of economic values. (Yousefi, 148)

Aerobic Fisher: Money is a property right that is accepted by the public. (Eslami, 11)

The above-mentioned definitions quite indicate that physical and tangible money is not as valuable as its credit value, but it becomes valid and valuable owing to the political and economic power of political systems (states). In this case, most definitions of money are consistent with the chartalism theory, and thus the value of money is symbolic and has a creditable nature. Even some economists have gone beyond and believe that one day the advancement of technology will free money from its physical form, and then the nature of money will be revealed as a social phenomenon and not a physical object. (Scientific, Research quarterly of Economics-2015) Therefore, money indicates an abstract value and is determined and valued legally by the order of governments. In this regard, the credibility of the issuing government plays an important role in the valuation of fiat.

Money is an absolute word, and due to the stabilization of digital currencies, money contains both fiat and spot, and it is necessary for countries to establish strict regulations for the use of cryptocurrencies to facilitate international trade and legally transfer money. In this regard, the involvement of the International Monetary Fund (IMF), as a pillar of the United Nations, is very important in setting up irrevocable regulations on cryptocurrencies for member countries and establishing international monetary cooperation between members, as well as creating a stable currency system in the field of electronic money.

Analysis of cryptocurrencies based on the nature of money (fiat currency)

Precious metals such as gold and silver are the most obvious examples of real money. Other than precious metals, whatever is called money has no real value, especially banknotes which do not have serious and real value compared to metal money, and in short, the validity of fiat currencies is arbitrary.

Fiat currencies will not achieve such an important position in economic exchanges if there is no order and support from governments. Given the many commonalities between fiat and spot currencies, it seems that cryptocurrencies can be a good substitute for tangible money as a technological technology with the support of political systems. The use of physical money at the national and transnational levels has two major and effective effects on the social and economic life of countries.

- Money and mandatory requirements of governments cause inflation in society. The negative effects and consequences of inflation and its economic damage are obvious.

- Issuing money, including banknotes and metal coins, imposes major costs on governments, and even the destruction of money is costly for political governments.

- Cryptocurrencies have the following characteristics according to the above-mentioned principles.

- 1- They do not have storage and support like gold and silver

- Cryptocurrencies have no intrinsic value but are valued based on technological criteria.

- They are not considered material goods but have a credit creation structure.

Therefore, fiat currencies have common features with spot currencies, and they can be replaced due to the lack of intrinsic value of both at least in terms of apparent and creditable value, and there is only the problem that cryptocurrencies do not have gold and silver reserves in central banks. Gold and silver are not saved as much as money is sold and issued, but valid and reliable support or guarantee can be considered for cryptocurrencies through regulations for digital currencies. In addition to the established validity of cryptocurrencies, the title "property" can also be considered for cryptocurrencies, meaning that property can be traded or has a rational and legal benefit and can be acquired in the legal doctrine. The sum of the attributes and characteristics of property can be applied to digital currencies, and thus cryptocurrencies are also properties due to common sense.

The peer-to-peer (P2P) Merchant Application is widely carried out in digital trades; hence, people interact with each other to buy and sell digital currencies, and thus the realization of the principle of replacing digital currencies with all kinds of fiat currencies as well as goods and services is important.

I reputable currency exchanges such as Binance, Bitstamp, Kraken, Bittrex, Cox, as well as exchanges active in the domestic environment of countries are replacing dollars and euros with digital currencies, and a replacement process is almost stable, but there is a limited process of replacing cryptocurrencies with goods and services and it is being performed by agreement in some countries.

Effects of replacing cryptocurrencies with fiat currency

Cryptocurrencies have achieved a very important position in the economic arena as modern and technological technology. In the national and transnational arena, many people have traded or invested (mining and storing) in this field, and the progress of digital currencies has been so fast and deep as their replacement in monetary systems and banking structures has become a major challenge.

Some indices and facts make it necessary to replace fiat currency with spot currency.

- 1- The ability to plan for digital currencies is easy and inexpensive compared to physical money such as fiat, gold, and silver.

- 2- The cryptocurrency whales or traders and miners have little need for governmental support, and governments can only facilitate and stabilize the unification path with their support.

- 3- Splitting electronic money into fiat currency and precious metals is done easily and at a low cost.
- 4- Transportation of spot currencies is cost-effective, safe, and convenient compared to fiat currencies and metals.
- 5- It is possible to easily replace cryptocurrencies with each other, and even though this replacement is also possible in precious metals and physical money, it has its difficulties and obstacles and cannot be done as easily as cryptocurrencies.
- 6- Even though fiat currencies have the same validity and durability as cryptocurrencies, the durability of cryptocurrencies is longer than banknotes.
- 7- Trading cryptocurrencies is easier and simpler than fiat currency and precious metals, but this feature can become more prominent with political support.
- 8- The safety of fiat currency and precious metals is less than cryptocurrencies, and often the security threats of cryptocurrencies are negligible (cryptocurrency security).
- 9- Owing to the same base and unit around the world, cryptocurrencies can become global money and exchange on a global scale in commercial and economic fields, while this feature is sometimes impossible and difficult in fiat currencies (globality).
- 10- Holding cryptocurrencies (usually inside a digital wallet) is easier and cheaper than holding fiat currencies.
- 11- Cryptocurrencies can be traded at all hours of the day and night, while it is impossible for physical money and gold and silver at all round-the-clock hours.
- 12- There are brokering and intermediation, especially in the field of precious metals, and currencies such as dollars and euros but they do not exist or are minimal in cryptocurrencies.
- 13- It is difficult and almost impossible for governments and banks to access the identity of the owners of cryptocurrencies, while banks have complete control over the information and identity of their customers.
- 14- Cryptocurrencies can be used in international payments under sanctions, and it makes a suitable opportunity for countries with weak banking systems and can decrease transaction costs.
- 15- Employment creation through trading is another benefit of cryptocurrencies so that traders start trading cryptocurrencies worldwide.
- 16- Citizens need a currency platform based on cryptocurrencies to buy and sell in Metaverse. Cryptocurrencies are the only legal money for buying and selling virtual goods in Metaverse. Therefore, Metaverse is dependent on digital currencies. Like the real world, Metaverse wants to enable buying and selling for its users, and this goal can only be achieved with cryptocurrencies, that is, digital currencies are a fundamental concept in Metaverse because it is not possible to trade with fiat currencies in Metaverse, and all financial transfers must be made by digital currencies as the desired currency for Metaverse can be obtained from visiting the trading exchanges. Therefore, the metaverse world is a reason for the existence of cryptocurrencies. The metaverse cannot survive without cryptocurrencies.

Disadvantages of replacing cryptocurrencies

- 1- The lack of access to the identity of the owners of cryptocurrencies has caused the lack of identification of terrorist groups and disruptors in the political and economic system, and it is thus a major challenge for political governments.
- 2- Lack of a technical mechanism to monitor and control cryptocurrency transactions and the amount of mining and investment for tax collection by governments
- 3- They are suitable platforms for committing criminal acts such as money laundering and fraud and criminal activities.
- 4- Mining has raised the concern of environmental activists
- 5- The development of cryptocurrencies challenges the power of central banks in regulating and implementing monetary policies
- 6- The risk of capital outflow from developing countries to other countries is accelerated with the help of cryptocurrencies
- 7- Extreme fluctuations in the price of cryptocurrencies are another disadvantage of this technology, and this fluctuation is a serious challenge in replacing spot currencies with fiat.

Summary and Conclusion

Political, legal, and economic challenges of electronic money in replacing it with fiat currencies were examined and discussed in the present research. Even though there are risks such as money transfer for terrorist and subversive actions, tax evasion, money laundering, etc., such risks and threats can not only be predicted and prevented through technological initiatives but cannot prevent the identification and replacement of spot currencies with fiat as a modern monetary model. Confrontation and conflict with technology have never been a solution, but flexibility and discovering solutions to reduce or eliminate risks and legally provide a platform for operation are rational and inevitable. The disadvantages of replacing cryptocurrencies with fiat currency are

insignificant compared to its advantages and they necessitate their replacement theory. Furthermore, the disadvantages of this replacement can be overcome by establishing legal structures.

Economic exchange with current and fiat currencies imposes printing and destruction costs on governments and has inflation effects, leading to disastrous results in public livelihood and the economy. The majority of monetary policies in all countries are set based on the theory of chartalism, in other words, physical money has symbolic credit due to the order and support of political systems with the knowledge that fiat currency has no intrinsic value. Powerful governments with political and economic order play a special role in crediting the common currency by regulating monetary systems and special support. If physical money has established validity, then digital currencies also have such a feature. It may be objected that physical money is backed by gold and silver in central banks, but it has been proven that this backing is not as much as the amount of gold and silver saved, and governments, especially in developing countries, ignore the reserves and print money. If the will of the political systems is focused on the support and development of cryptocurrencies, governments can impose requirements under the title of backing or guarantees for cryptocurrencies through regulation. Therefore, cryptocurrencies are the technological reality of today's world, and the government's legislative intervention and regulation for mining, trading, holding, exchange, etc. are necessary and inevitable according to the fast-paced scope of this technology. The governments can define the requirements related to monetary systems and policies at the heart of regulations to predict the corruption and negative consequences caused by cryptocurrencies and their legal challenges such as money laundering, taxes, fraud, and other criminal aspects, and prevent crimes by creating solution rules.

Advantages such as "ease of planning for cryptocurrencies", "divisibility of electronic money", "transfer security", "ease of replacing cryptocurrencies with each other", "possibility of the durability of cryptocurrencies", "intelligent and low-cost transfer", "possibility of countering security threats", "common base and unit of all currencies", "the universality of electronic money", "easy and free storage of cryptocurrencies", "the possibility of trading cryptocurrencies at all round-the-clock hours", "elimination of brokerage and mediation", "the principle of confidentiality of information", "facilitating international transactions", and "creating employment as a trader, holder, and miner" are the attributes and features that justify the replacement of cryptocurrencies in daily transactions of citizens and businessmen in the national and transnational arena with fiat currencies. In the regulation process, disadvantages caused by cryptocurrencies and legal challenges can be resolved through technological innovations. Disadvantages such as illegal replacement of money, the unauthorized activity of exchanges, criminal acts in blockchains, uncontrolled mining, and price fluctuations of cryptocurrencies can be overcome with policies and mandatory rules of governments under laws and regulations. The lack of serious support of governments for the blockchain of cryptocurrencies is the today's problem for unification (replacement) theory and its challenges. If political systems decide to support it, they adjust and coordinate the structures of electronic money like monetary policies. In this regard, the role of the International Monetary Fund is very important in the regulation of the monetary system of cryptocurrencies, the expansion of cooperation between governments, and helping to stabilize the exchange rate of cryptocurrencies. In Article 1 of the Fund Statute, the issue of "monetary system" is held absolutely, and thus the intervention of the International Monetary Fund in electronic money and the formulation of international regulations such as UNCITRAL (United Nations Commission on International Trade Law) will be very helpful.

References

- Eslami, Toutounchian, presented in the first conference on Islamic economics, vol. 3, p. 11.
- Akhavan, Peyman; Movahednia, Alireza; Darabi, Ali (2021). *Binance, digital currency exchange*. Atinegar Publications, first edition.
- Akhavan, Peyman, (2017), *Digital currencies, bitcoin, blockchain, and basic concepts*, Tehran, Atinegar Publications.
- Tavassoli, Mohammad-Esmaeil (2015). *Analysis of the nature of money and the pillars of monetary policy in Islamic economics*, Research Institute of Hawzah and University, Qom, first edition.
- Sobhani, Hassan, Droudian, Hossein, (2015). *A critique on views of the Austrian school in rejecting banknotes*, Quarterly.
- Shiravi, Abdol Hossein (2019), *International Trade Laws*, 11th edition, Samt Publications
- Scientific-research journal of planning and budget*, 20th year, No. 1.
- Karimian, Alireza (2021), *The Basics of Cryptocurrencies*, Arad Ketab Publications, first edition.
- Komeijani, Akbar, Arabi, Hadi; Tavassoli, Mohammad-Esmail (2012). *Review and criticism of Western economic thinkers' theories about the nature of money*. *Quarterly of Iranian Economic Research*, 17th year, No. 51.
- Mohammadi, Ali (2021), *Everything about Metaverse*, Bavin Ketab, Second edition

- Yousefi, Ahmad-Ali (1998). The nature of money and its jurisprudential and economic strategies, Tehran, Research Institute of Islamic Culture and Thought.
- Akhavan, Peyman, Philsoophian, Maryam, Rajabion, Lila, and Namvar, Morteza (2018), Developing a Block-chained Knowledge Management model (BCKMM): Beyond traditional knowledge management, The 19th European conference on Knowledge Management (ECKM 2018), September, Italy.
- Akhavan, Peyman, Philsoophian, Maryam, and Namvar, Morteza (2021). The Mediating Role of Blockchain Technology in Improvement of Knowledge Sharing for Supply Chain Management, Management Decision, DOI10.1108/MD-08-2020-1122
- Alonso-Monsalve, S., Suarez-Cetrulo, A. L., Cervantes, A., & Quintana, D. (2020). Convolution on neural networks for high- frequency trend prediction of cryptocurrency exchange rates using technical indicators. *Expert Systems with Applications*, 149, 113250.
- Alzaatreh, A., & Sulieman, H. (2019). On fitting cryptocurrency log-return exchange rates. *Empirical Economics*, 1-18.
- Arnason, S.L. (2015). Cryptocurrency and Bitcoin. A possible foundation of future currency : why it has value, what is its history and its future outlook .
- Bauriya, A., Tikone, A., Nandgaonkar, P., & Sakure, K. S. (2019). Realtime cryptocurrency trading system. *International Research Journal of Engineering and Technology (IRJET)*, 6.
- Bichler, M., & Kaukal, M. (1999). Design and implementation of a brokerage service for electronic procurement. Paper presented at the proceedings. Tenth International Workshop on Database and Expert.
- Houben, R. and Snyder, A. (2018), cryptocurrencies and blockchain: legal context and implications for financial crime, money laundering and tax evasion, European Parliament study, July 2018, p.100. (electronically available via <https://www.europarl.europa.eu/cmsdata/150761/TAX3%20Study%20on%20cryptocurrencies%20and%20blockchain.pdf>).
- <https://blockgeeks.com/the-impact-of-bitcoin-on-the-global-economy/>
- Umlauf, Thomas S., (2018), Is Bitcoin Money? An Economic-Historical Analysis of Money, Its Functions and Its Prerequisites, Conference: 85th International Atlantic Economic Conference, At London, United Kingdom.
- Xiong, Wanting, Fu, Han, Wang, Yougui (2017), Money creation and circulation in a credit economy, *Journal Physica A* 456 (2017) 425-437