Employing the Digital Currency Transform in Financial Inclusion Support: A Comparative Jurisprudending Economic Study

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ABSTRACT:

Purpose –The aim of the research is to address the possibility of employing the shift to digital currencies in support of financial inclusion within the framework of Islamic transactions.

Design/Methodology/Approach-The research deals with the concept of digital currencies as taking virtual and electronic forms and encrypted forms, whether legal or illegal. It also deals with the concepts of financial inclusion, which is the provision of banking and money transfer between financial institutions to small cash dealers in order to integrate the informal sector into the formal sector.The research presented the legal opinion on the legality of dealing in digital currencies and adopting them as a store of value, circulation, and dealing in buying and selling.

Findings–The research found that dealing with digital currencies and employing them in financial inclusion processes is permissible in the event that those currencies are subject to monetary authority and official control, and therefore it may be correct to employ electronic digital currencies or official cryptocurrencies with legal supervision for the purposes of financial inclusion.

Keywords:
digital currencies - financial inclusion - legality of digital Transactions

Introduction

In the recent period, what is known as (CurrenciesDigital) has spread in all its forms and types, in particular the encrypted virtual currencies, whether electronic, virtual, legal or stable digital, or encrypted, regardless of the other names that can be applied to them, the official character of these currencies remains available in form. Digital, and it has a tangible physical presence, they are "digitally represented assets. They vary between the official authority's supervision and the lack of control over it, although it enjoys circulation and acceptance among many dealers.

The concept of financial inclusion, which is considered one of the most important pillars of economic growth, has also spread worldwide. Financial inclusion means the banks 'pursuit of reaching segments of society that do not have banking transactions in order to help them benefit from various financial services such as borrowing, deposit and savings. Many economists believe that financial inclusion works to alleviate poverty, in addition to its other social dimensions, starting with caring for families. Limited income and economic empowerment of women, and even financing small, medium and micro enterprises and integrating them into the formal financial sector, which leads to the creation of new job opportunities, thus reducing unemployment and poverty rates, improving income distribution and raising the standard of living, thus achieving sustainable economic and social growth.

The researcher believes that there are different roles for the nature of currencies under the Islamic approach in achieving legitimate economic gains, including support for targeted financial inclusion.

In light of the economic shifts towards financial inclusion with all that is intended to address all economic sectors, whether official or informal, the real problem remains the difference in the nature of work that is dealt with as a result of the emergence of a variety of digital currency in its virtual, electronic and encrypted types, and therefore the research questions that are determined through it remain The problematic of this research is as follows:

1-What is the concept and nature of both digital currencies and financial inclusion processes?
2-What is the legality of dealing in digital currencies of all kinds?
3-Is it possible to employ digital currencies of various kinds, virtual, electronic and encrypted in the processes of financial inclusion in the economies that follow the Islamic approach?

In terms of the problem of the research and its questions, this research aims to define digital currencies in their virtual, electronic and encrypted types and to demonstrate the possibility of using them in financial inclusion processes from an Islamic perspective related to the extent of the legality of using those currencies in circulation and interactions between people and from a procedural point of view according to the nature and concept of financial inclusion processes. Therefore, the objectives of this research are summarized as following:
Introducing digital currencies in terms of their nature and types:
A presentation of some jurisprudential views on - the extent of the legality of dealing in digital currencies
A statement of the procedural aspect of employing digital currencies in financial inclusion processes.

Fourth: The importance of research:

The importance of research is represented in the scientific and practical importance, which is determined by the following:
A- Scientific importance: Enriching the Islamic and economic scientific library in an economic field that is largely untapped as a result of the development of important economic tools such as digital currencies or the system of financial inclusion, as well as the scientific importance in an important aspect of jurisprudential approaches regarding the extent of legitimacy of digital currencies and their circulation and the extent to which they are considered a store for the value, or acknowledging it as a commodity, is held for the purpose of maximizing revenues.
B- Practical importance: it includes presenting some jurisprudential opinions regarding the legality of dealing in digital currencies, and the procedural viability of employing them in financial inclusion processes, especially since some of these currencies are not subject to monetary authority or official oversight like all other currencies that are dealt with.

Fifth: Research Methodology:

In order to achieve the objectives of the research, a solution to its problem, an answer to his questions, and an explanation of its practical and scientific importance were presented. The descriptive case study approach is used by introducing the nature of digital currencies, their types, and the terms of their circulation, as well as for financial inclusion operations with exposure to some jurisprudential opinions about the extent of legitimacy of those currencies, then demonstrating the validity of the case for employing digital currencies in the financial inclusion processes currencies ? or some of them ?, And how important is official dealing with these currencies in achieving the requirements of financial inclusion.

Sixth: Research Structure:

In order to achieve these goals, this research has been divided into two main topics, apart from the general framework of the research: The first topic included the definition of digital currencies and their types, as well as the processes of financial inclusion, and in the second topic the legality of digital currencies and procedural regulation to employ them in financial inclusion processes were dealt with, then the conclusion of the research and presentation of its results.
The first topic: an introductory framework for digital currencies and financial inclusion

This topic aims to address the theoretical framework of the research by introducing the digital currency, its origin and development, the extent of its strength in dealing, then exposure to the concept of financial inclusion and after studies that dealt with it with clarification of its importance.

First: Introducing the digital currency - its origin and development:

Currency is defined conventionally as all that nations and peoples deal with in terms of financial value, such as: gold dinars, silver dirhams, and copper money, and it was said that it is paper money: its use prevailed in the modern era, until it replaced gold and silver money, and took their job in dealing in General countries of the world. (1)

He referred to the possibility of taking money from paper by Imam Malik, out of assuming that what did not happen and explaining his ruling (2), therefore paper money is considered to be in the category of currency, as is coinage other than gold and silver, and contemporary economists have defined money and currencies as: (anything It is generally accepted as a medium of exchange, and a measure of value). And it was said that it is the unit of trade exchange that countries create and find general acceptance of the benefit in goods and services (3)

The Journal of Judicial Rulings defined currencies and cash as: gold and silver, and in another place it stated that what is meant by money and currencies is all that may be in lieu of what is sold and is related to the deb(4(

A digital currency is known by several definitions, including: Virtual currencies that can be traded or speculated completely, just like traditional or mandatory (paper) currencies, but are not subject to the control of financial institutions and governments (5). And access to it and deal with it electronically (6).

The researcher indicates that the digital currency is not covered by tangible assets, does not need any conditions or controls in its issuance, has no financial accreditation with any central economic system, and is not subject to the authorities of regulatory authorities and financial bodies. Because it depends on trading via the international network (the Internet via the Blockchain platform), and the World Bank (wb) considers the digital currency as digital representations with a specific value in its unit of account, and digital currencies differ from electronic money representing legal currencies. (Currencies Fiat), which are used as a means of digital payment, and digital currencies can be divided into three main forms: virtual currencies, electronic currencies, and legal digital currencies issued by central banks or monetary institutions, and the different forms of those currencies are indicated through the following:

A- Virtual Currencies: Virtual currencies represent one of the forms of digital currencies, and are almost the most famous in terms of using the term, or in terms of the existence of studies looking into what these currencies are. Although there is no unified definition of virtual currencies, however, many International organizations and central banks have defined them; the most prominent of them are the following:

1-European Banking Chain (AEB): “A digital representation of a value that is not issued by a central bank or a public authority and is not necessarily linked to a traditional currency, but is accepted by natural or legal persons as a means of exchange and can be transferred, stored or traded electronically.

2-European Central Bank (ECB): “A type of unregulated digital currency, which is usually issued and controlled by its developers, and is used and accepted among the members of a specific virtual community.

3- Financial Action Task Force (FATF): “A digital representation of the value that can be traded electronically or digitally and acts as a means of exchange, a unit of account and a store of value, and it has no legal basis in the country. The virtual currency is used, and differs from the legal currency of the country, meaning that there is no legal cover.

Through the previous definitions of virtual currencies, it is clear that there is a divergence of views regarding the functions of virtual currencies and the limits of their application, but all of them agree on unified principles represented by the absence of a legal framework and central authority or the existence of a real representation of these currencies against legal currencies, or support them with a cash cover, They are issued and exchanged electronically.

B- Electronic money (moneyElectronic): Many definitions related to electronic money have appeared, whether by international organizations, central banks, or economic researchers, and some definitions came to be reduced to the general function of electronic money, and some of them were reduced in terms of the form that characterizes it, while gold Some have sought to expand its definition and make it comprehensive for every financial transaction that takes place by means of modern technology. The most prominent definitions of electronic money are presented as follows:

1-The World Bank (wb): “An electronic payment method denominated in legal tender.

2- The Bank for International Settlements (BIS): “A monetary value in the form of credit units that is stored on an electronic tool that the consumer possesses, where he pays the price of this value, which decreases or increases whenever it is used for purchases or in the event of restoring a new value on it.

3-European Central Bank (ECB): “The electronically stored monetary value, which represents an obligation on its source, is issued upon receipt of funds for the purpose of conducting payment transactions, and is also accepted by a natural or legal person other than its source.

4-Financial Action Group (fatf): - A digital representation of the legal tender used to exchange the value associated with the legal tender electronically.

5-The Central Bank of Jordan (CBI): “Cash values stored by electronic means whose source is obligatory in exchange for receiving their value in cash.

Through the previous definitions of electronic money, it can be said that electronic money has the characteristic of the money transferred to it from the legal paper money issued by the institutions and central banks regulating in particular, it is not a -stand-alone cash as much as it is a non-material representation of legal money. Whereas its issuance is to convert the form of money from a physical to a digital one to be used as a tool for payments and financial transfers between customers and financial institutions that issue them by relying on electronic means, and it is a form of prepaid money that represents an obligation on its source towards others. (Kabil, 2020)

As a result of the wide confusion and overlap between the concept of both electronic money and virtual currencies, it was necessary to state that electronic money is a monetary value in a specific currency, issued in the form of electronic data, stored on electronic means, and used as a tool for payment and transfer to achieve various purposes, and enjoy wide acceptance.

The issuance of electronic money is to convert the form of money from the traditional image to the electronic image. Each legal currency can be expressed in several forms of money, so that each image symbolizes a specific value of that currency, and this symbol can be in the form of a coin, or paper Cash, or a group of data stored electronically on an electronic means such as cards, electronic wallets and other modern means of payment; So it can be said that electronic money is not a new currency, but .rather a new form of legal currency

C- Fixed or stable digital currencies (Stable-coin): The fixed or stable digital currency is a form of digital currency, except that it is characterized by the possibility of issuing it against a guarantee representing the value of a basic asset, and the type of these assets varies from currency to currency, and the peg is usually Currencies:

1) with some legal currencies such as the US dollar or the euro, or linking them to other assets such as precious metals such as gold or even other cryptocurrencies. (www.cbinsight.com

A stable digital currency is also viewed as a type of cryptocurrency designed to maintain a stable market price, and although the mechanisms differ from one currency to another, stable currencies are assumed to be somewhat resistant to market fluctuations, so that they do not face changes or fluctuations. Great in prices, as many stable currencies have their fixed value as a result of being linked to the price of another .asset such as the US dollar or gold

On the other hand, stable currencies take advantage of the advantages offered by cryptocurrencies such as transparency, security, stability, digital wallets, speed of transactions, low fees, and privacy, without losing the guarantees of confidence and price stability resulting from the use of currencies and legal .assets as a cover for them

One of the most recent examples of globally stable currencies is Facebook's (Libra) currency project, which will be used in payments made through social media applications (Facebook, WhatsApp, Instagram) as transferring money between users or to carry out sales and purchases made through these application. Facebook has published a white paper (paperwhite) on developing its new currency on 06/18/2019, during which it indicated that the new currency will be fully supported by a reserve of real assets, where a basket of bank deposits and short-term government securities will be kept in a reserve. The corporation for every unit created from the currency, and this reserve will be managed with the aim of preserving the value of the currency, and the assets will also be kept in a geographically distributed network by custodians; with the aim of providing security and decentralization of assets.

The white paper specified that the new currency will be tasked with creating a simple financial and global infrastructure that enables billions of people to use it, as it consists of three parts that work together to create a more comprehensive financial system, which is that it is based on block-chain technology that is secure, scalable, and reliable, It is backed by a reserve of assets designed to give it real value, and is governed by an independent institution mandated to develop the financial system. Views on this currency vary between the welcome and the opposing ones, as the Bank for International Settlements (BIS) determined that the encrypted currency project of Facebook may harm the banking sector, and the bank published a report in which it showed that major technology companies such as (Google, Facebook and Amazon) could establish Dominant site quickly, thanks to its vast user network. While these companies can promote financial inclusion, they can pose financial stability, competition and data protection threats.

Consequently, regulators around the world must coordinate to ensure a level playing field between large technology companies and banks. ”The bank stated that it also needed a“ more comprehensive ”approach that took into account financial regulation, competition policy and data)privacy regulations (www.tleblockerypto.com

Since 2008 when Satoshi Takamoto published his famous research paper, many currencies have appeared that are electronically traded through the Internet, and that relies on cryptography and algorithms to verify transactions and issue units of the currency, as a means of eliminating the role of regulators in terms of issuing and monitoring cash. And control it, and cancel the role of financial institutions in financial intermediation to transfer money, and there are still divergent views at the present time between the regulators in the world about cryptocurrencies in terms of their definition and advantages, but it can be said that it is a form of digital currency that depends on its issuance and circulation on Cryptography. Since this study was developed to focus on cryptocurrencies, and where the relationship of these currencies to digital and virtual currencies was previously clarified, there are many cryptocurrencies that have cracked in the Internet space during the past few years, and the most prominent examples of these currencies are the following:

1-**Bitcoin**: Bitcoin is defined as a virtual currency based on cryptography in its issuance and circulation. It is decentralized and is not supported by the government or any other legal entity. It cannot be exchanged for gold or any other commodity according to the regulation. However, specific, and the "Bitcoin" currency in its design relies on an electronic cash system that works according to the principle of peer-to-peer (p2P). This eliminates the need for a central authority to manage its establishment or issuance process.

2-**Litecoin**: Litecoin is the second cryptocurrency to appear after Bitcoin. It was launched in October 2011, and its program is like an open source Bitcoin program, but there are two main differences between both currencies: The first is the speed of transactions, since transactions in "litecoin" are done faster than "bitcoin", as it takes the time required to create a block in "bitcoin" about ten minutes, while the average time for creating a block in the "litecoin" currency is approximately One minute. The second difference is the maximum currency width, where the total number of coins that will be issued from "Litecoin" is (84) million, which is much higher than the maximum limit specified in "Bitcoin" of (21) million pieces.

3-Ripple currency: This name is called on the payment settlement platform (system) that was launched by the private company (Ripple) in 2012, and the currency used within this platform is called the currency "Ripple" (XRP), although this currency is not It was initially designed to be used by individuals to pay for services, but it targeted banks and financial institutions that could use this platform to settle payments between them, as the originator of the "riyal" currency was to replace the global SWIFT network as a provider of secure financial messaging services.

And that what is different about this currency is that it does not use blockchain technology, but rather uses its own mechanism that relies on a specific group of distributed servers used to verify movements, so the XRP coin is not mined, but 2100 billion pieces were created when it was launched. For the first time, 55 billion pieces of them have been placed in a trust account, so that the units are issued in an orderly manner that is controlled through the so-called smart contracts.

4-Ethereum: The “Ethereum” currency is based on a decentralized platform that was launched in 2015 that uses blockchain technology to process its movements. Technically speaking, the “Ethereum” platform itself is not a cryptocurrency but is used to operate what are known as smart contracts (smart contract) and the exchange on this platform requires payment of incentives, and here comes "Ether" is the currency in circulation within this platform. Ethereum uses the concept of Proof of Work (POW) as in Bitcoin to prove transactions.

The "Ether" currency differs from the "Bitcoin" in several ways, including: The time to create a block in "Ethereum" is less than in "Bitcoin", as it ranges between 14-15 seconds compared to ten minutes in "Bitcoin", and the number of "Bitcoin" units produced decreases with the passage of time, while the number of issued "Ether" units remains constant throughout the year.

Second: The concept and nature of financial inclusion: The financial inclusion system guarantees ease of access, availability, and use of the formal financial system for all members of society. It is the ability of an individual or institution to access tools and products that meet their needs and financial capabilities (World Bank, 2014).

For this reason, the Central Bank defined financial inclusion processes as providing financial services or products to all segments of society, whether individuals or institutions, with adequate quality and reasonable prices that enable them to deal with official financial channels such as banks, postal agencies, and civil associations.

Moreover, based on the importance of the financial inclusion system in promoting economic reform and supporting economic activities while encouraging all individuals of all living standards to engage in the financial system, more than 55 countries pledged to achieve financial inclusion in 2010, and more than 30 of them launched and prepared national strategies and initiatives. To achieve this concept, in its broad aspects, the importance of financial inclusion is not limited to that only, but it can also help strengthen measures to confront the Corona virus, which came to impose new pressures on the banking system in light of the increasing need for digital transformation and the development of digital financial services and electronic payments applications more than ever before.

Despite the acceleration of the pace of achieving financial inclusion globally, there is a disparity between developing and developed countries in this regard, as 94% of adults in high-income countries own a bank account, compared to only 63% in poor countries. Bank accounts - and there were 1.7 billion people as of 2017 - live in developing countries. This discrepancy is due to many reasons, including that some individuals do not have sufficient funds to require opening bank accounts, and others find that the cost of opening the account is high, especially if there is a large distance between the place of residence and the nearest branch of a financial institution, in addition to the lack of the required documents at Others, or lack of confidence in the financial and banking system.

The Second Part

The Legality of Digital currencies and supporting the Financial Inclusion

Dealing with virtual currencies is one of the contemporary jurisprudential issues in Islamic economics. Several jurisprudential adaptations of virtual currencies have been received by contemporary researchers, the most important of which is their adaptation as a currency of value and price. There are several reasons for that, including the following:

- That the entity that created it is valued as a digital currency.

It performs the function of paper money in that it is considered a store of value.

- That it is possible to buy with its value, which indicates it is valuable.

People have known that it is a currency and they have traded for it by buying and selling and it is a means of commercial exchange, and this is a special custom that is taken. Criticism, in order to function, must be acceptable to a certain group of people (similar to private custom). I would answer that with the following:

"That there is a difference between the virtual currency and the monetary currency, the latter is considered a government version in which dealing is subject to certain laws that have acquired their value from the authority of the state and subject to their dealing with its laws"

The jurists have agreed that the issuance of money belongs to the state in order to protect cash from fraud (forgery) and also take into account the interests of the people and preserve and maintain their money. As for the virtual currency (digital), we find that the source is unknown and does not bear responsibility for this money, while its book value is zero, exceeding its value. In illusory markets, thousands of dollars, and its value fluctuates in the trading market, fluctuates sharply, because there is no guarantor for it and responsible for it (5).

However, some virtual currencies that will be issued by countries can be adapted as a "transient currency between the United Arab Emirates and the Kingdom of Saudi Arabia and the (em) - cash currency that will be issued by the Dubai government. Such currencies take the rule of paper money, because they are a government version subject to dealing with certain laws that have gained their value from the state's authority.

As for saying that it performs the function of paper money in that it is considered a store of value, that is difficult to consider because it does not have a real value cover of paper or other equivalent, and is unable to maintain its purchasing power, given its rapid impact on any technological, technical, or penetration event, or Official position.

As for saying that people have come to know it as a currency, it is answered that the general custom has not been established that the virtual currency is money, and it is still subject to hesitation, and one of the conditions for working with the custom, and the condition of regularity is not available, especially with the prohibition of many countries trading in virtual currencies in their monetary system And the banker.

This meets an important response that controlling custom in our time is also impossible, for any criticism is a general custom on the one hand and private on the other, and therefore the exchange and money changers found that they were adapted as a commodity to be bought and sold.

- Virtual currencies are not issued by any central bank or financial institution, as they are a commodity that can be bought and sold.
- It is not covered by any currency or metal, and its value is determined based on the supply and demand criteria.
- That the virtual currency acts as a mediator for the exchange and not between a basket of currencies.

The response to that is that the issuer and developer of this software wanted it to be a price, not a commodity, because it has no value in its abstract nature, and the definition of commodities in all except for prices, and what is being accepted as prices for sales are not intended for themselves, but rather for what they express In addition to the fact that the virtual currency is divisible, for example, one bitcoin equals 100 million satoshis (which is the parts of the Bitcoin currency), and therefore the price can be at variance, unlike commodities that are difficult to divide.

Accordingly, the researcher believes that as long as the financial inclusion processes mean making services and products available to all segments of society through dealing with official channels that are subject to monetary authority, then the use of digital currencies in support of financial inclusion processes needs procedural controls in addition to the Sharia controls, those procedural controls can be listed according to the nature The digital currency is as follows:

A- Concerning virtual currencies: It is one of the forms of digital currencies that is expressed as a digital representation of a value that is not issued by a central bank or a public authority and is not necessarily linked to a traditional currency, so it cannot be employed in financial inclusion processes even if it is accepted by natural or legal persons As a means of exchange, even if it is transferred or stored electronically, due to the lack of the condition of official control and clear legal channels.

B- Concerning electronic currencies: which is known as electronic money. If it is issued by international organizations or central banks that is reduced to the general function of electronic money, then it is thus a financial transaction that takes place through modern technology means, thus it is considered an “electronic payment method based on legal currency. Financial inclusion operations, even if they take an intangible form, because of their association with electronic transfers, which is the area of financial inclusion processes through which transfers are made via electronic media between banks and various financial institutions.

T- Concerning stable digital currencies: It is one of the forms of digital currencies, but it is characterized by the possibility of issuing it in exchange for a guarantee representing the value of a basic asset, and the type of these assets varies from one currency to another, and the link ratio in these currencies is usually (1: 1) with some currencies Legal such as the US dollar or the euro, or linked to other assets such as precious metals such as gold, or even to other cryptocurrencies. The researcher believes that if it is linked to a currency or a metal that is under the control of the Monetary Authority in trading and monitoring issuance and dealing, then it is undoubtedly suitable for financial inclusion operations. If it is linked to another cryptocurrency whose location is outside the monetary authority, then it cannot be employed in financial inclusion processes and its rule is the rule of virtual currencies due to the absence of oversight and stability of trading prices.

Consequently, regulators around the world must coordinate to ensure a level playing field between large technology companies and banks. ”The bank stated that it also needed a“ more comprehensive ”approach that took into account financial regulation, competition policy and data privacy regulations, so that this currency could be used in Financial inclusion processes.

D- Concerning crypto currencies: which depend on cryptography and algorithms to verify transactions and issue units of the currency, as a means to abolish the role of regulatory authorities in terms of issuing, monitoring and controlling cash, and abolishing the role of financial institutions in financial intermediation, and this in the view of the researcher is not at all suitable for the purposes of inclusion Financial, due to the need of each customer for special entry data that is outside the control of the official monetary authority.

Conclusion and Results

Digital currencies include multiple types of currencies, including encrypted virtual currencies, whether electronic, virtual, legal or stable digital, or encrypted, and regardless of the other names that can be given to them, the official character of these currencies remains. They are available in digital form and have a tangible physical presence. The assets represented in digital form vary between the official authority’s supervision and lack of control over it, although it enjoys circulation and acceptance among many dealers.

Financial inclusion defines the banks ’endeavor to reach segments of society that do not have banking transactions in order to help them benefit from various financial services such as borrowing, deposit and savings. It aims to develop social dimensions, including concern for low-income families, empowering women economically, financing small, medium and micro enterprises and integrating them into the formal financial sector.

The jurists have agreed that the issuance of money is the jurisdiction of the state in order to protect cash from fraud (forgery) and also to take into accounts the interests of the people and to preserve and maintain their money. As for the virtual currency (digital), we find that the source is unknown and does not bear responsibility for this money, and while its book value is zero, it exceeds its value in illusion markets is thousands of dollars, and its value fluctuates in the trading market a sharp fluctuation due to the lack of its guarantor and the person responsible for it, and if some virtual currencies are adapted so that countries issue them as a project, they take the rule of paper money, because it is a government issuance in which dealing is subject to certain laws that have gained their value from the authority of the state.

The research concluded that dealing with digital currencies and employing them in financial inclusion processes is permissible in the event that those currencies are subject to monetary authority and official control, and therefore it may be correct to employ electronic digital currencies or official cryptocurrencies with legal supervision for the purposes of financial inclusion.

The research recommends that regulators around the world coordinate to ensure a level playing field between large technology companies and banks. ”The bank also needs to take a“ more comprehensive ”approach that takes into account financial regulation, competition policy and data privacy regulations, so that this currency can be employed in financial inclusion processes .

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