A LEGAL STUDY ON THE LEGITIMACY OF TRANSACTIONS IN DIGITAL CURRENCIES (BITCOIN AS A MODEL).

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Abstract:

Cryptocurrencies are considered one of the most significant innovations in financial technology and have experienced unprecedented growth in recent years due to the rise of e-commerce. Among these currencies, bitcoin stands out as a decentralized digital currency. The novelty of this type of currency and its unique characteristics have clearly and significantly influenced the determination of its legal nature. In addition, its characteristics have contributed to the expansion of its application, leading some legislators to seek a legal framework to accommodate this new technological entrant.

Due to the importance of this issue, it will be addressed through two sections: the first is dedicated to studying the concept of bitcoin as a cryptocurrency, while the second evaluates bitcoin as a cryptocurrency.

***Keywords**: technological evolution, digital currency, cryptocurrency, bitcoin, mining.*

INTRODUCTION

The use of electronic means in general, and the Internet in particular, has transformed the world into a small global village where the farthest reaches are as accessible as the nearest. This has facilitated life and transactions, marking a shift from the traditional physical model to an electronic one in various fields and sectors. The use of these means has become an integral part of contemporary life, which is clearly reflected in the transactions of people that now take place at a distance. With this development, a new commercial reality has emerged in which traditional currency is no longer sufficient to meet the demands of daily life, nor is it able to keep pace with remote transactions. As a result, its use has become a barrier to achieving the desired level of interaction and objectives.

All of this has necessitated a rethinking of traditional currency and the search for a new currency that meets the needs of this evolution. Electronic forms of money have emerged, but the situation has not stopped there. The advancement of financial technology has led to the emergence of a new type of payment method through the issuance of digital currencies based on electronic programming and the use of encryption techniques. Bitcoin is considered the first currency to be issued in an open-source manner, and was first introduced for trading in 2009 by an unknown technician named “Satoshi Nakamoto”[1]. However, its practical use did not begin until 2010, and transactions increased significantly within a few years, reaching a market value of more than $30 billion.

The growing use of bitcoin and the increasing supply and demand for it have raised numerous questions, leading to an examination of this phenomenon through this research paper, which attempts to answer the following question To what extent can bitcoin be considered a new challenge in the field of commercial transactions?

Answering this question requires the use of several methodologies, including descriptive, analytical, and comparative approaches. In order to integrate the descriptive and analytical methods, both were used by examining the information and facts related to this issue and analyzing its various components, starting from scientific opinions, through legal texts, to the most appropriate conclusion. Considering the prohibition of

[1]- Majdoub, Oussama, and Bahtali Ghania. "The Legal System of Bitcoin." Judicial Jurisprudence Journal, Laboratory of the Impact of Judicial Jurisprudence on Legislation, Mohamed Khider University, Biskra, Vol. 13, No. 02, October 2021, p. 623.

bitcoin transactions in some legislations, it was necessary to use the comparative approach to evaluate the perspectives of other legislations on it, especially regarding its legal nature.

Accordingly, to achieve the objectives of this research, a dual plan was adopted, dividing the topic into two sections: the first deals with the concept of bitcoin as a digital currency, while the second evaluates bitcoin as a digital currency.

CHAPTER ONE: THE CONCEPT OF BITCOIN AS A CRYPTOGRAPHIC DIGITAL CURRENCY

Bitcoin is one of the cryptographic digital currencies, alongside Litecoin, Ethereum, Namecoin, Peercoin, Zcash, Ripple, and Dash. However, as it is the first of these digital currencies, it is essential to address its definition and mechanism of operation (Section One), followed by a discussion of its characteristics (Section Two).

Section One: Definition of Bitcoin and Its Mechanism of Operation

According to the European Banking Authority, cryptographic digital currencies are a digital representation of value that is not issued by a central bank or public authority and does not necessarily relate to a fiat currency. Nevertheless, they are accepted by natural or legal persons as means of payment that can be converted and stored electronically[2].

Bitcoin is one of the significant cryptocurrencies, and its importance necessitates discussing its definition (Subsection One) and its mechanism of operation (Subsection Two).

Subsection One: Definition of Bitcoin

To define Bitcoin, we must first consider its linguistic definition (First), followed by its conventional definition (Second).

First: The Linguistic Definition of Bitcoin

The term “Bitcoin” consists of two parts: “Bit,” which refers to the smallest unit of data that can be processed or transferred, and it also denotes numbers in the binary system. It is the basic unit of information in computing and digital communications. It is generally understood that this term is digital in nature. The term “Coin” refers to currency or a coin[3]. Thus, its specific meaning is “digital currency,” while some refer to it as “cryptocurrency.[4]”

Second: The Conventional Definition of Bitcoin

The definitions provided in legal literature regarding Bitcoin have varied. One perspective considers it as[5] “a cryptographic currency that is fully traded on the internet without any physical existence, characterized by the absence of a central authority behind it.”

Another definition describes it as[6] “a cryptographic entity that does not have a physical existence in reality and is traded exclusively over the internet.” Another view defines it as[7] “digital assets designed to serve as a medium of exchange, utilizing encryption to secure transactions, control the creation of additional units,

[2]- Tareema Iman, Ghari Khalil, and Draji Anis. "Technical Analysis of Cryptocurrencies in Light of Financial Technology Innovations—Bitcoin as a Model." Economic and Financial Studies. Vol. 15, December 2022, p. 384.
[3]- Rqwan Alawi Al-Saqaf. "Bitcoin and Its Monetary Description: An Empirical Study in Light of Islamic Jurisprudence." Andalus Journal of Humanities and Social Sciences. No. 50, Vol. 80, October–December 2021, p. 55.
[4]- Zallabah, Tayeb, and Kamal Aoukasin. "Virtual Currencies: Nature and Legal Perspective—Bitcoin as a Model." Scientific Research and Islamic Studies Journal, Vol. 14, No. 01, 2022, p. 577.
[5]- Rqwan Alawi Al-Saqaf, previous reference, p. 56.
[6]- Ahmed Amadah and Saleh Boubchech. "Bitcoin and Its Legal Status in Islamic Jurisprudence and Algerian Law." Revival Journal. Vol. 19, No. 22, September 2019, p. 324.
[7]- Oussama Assad Abu Hussein. "The Legal Ruling on Dealing with Virtual Currencies." Paper presented at the 15th International Conference of the College of Sharia and Islamic Studies, University of Sharjah, "Virtual Currencies in Perspective," April 16-17, 2019, p. 114.

and verify the transfer of assets and values in a non-replicable manner. It is based on blockchain technology, which ensures transparency, speed, and trust in transfers, produced and maintained by a community known as miners."

Another perspective sees it as "a cryptographic digital currency without a physiological existence, decentralized due to the lack of a central authority to regulate it, with transactions conducted through a peer-to-peer network directly between users without intermediaries, using encryption. Verification is done via blockchain through network nodes, with records maintained in a distributed ledger."

Further, it is defined as "a digital representation of value issued by private developers as a unit of account that can be obtained, stored, accessed, and transacted electronically and used for a variety of purposes when parties agree to use it." Some define it as "a digital representation of monetary value that is not issued by a central bank or public authority and is not necessarily linked to physical currency, but is accepted by natural or legal persons as a means of payment that can be converted, stored or traded electronically"[8]. This definition is consistent with the definition proposed by the European Banking Authority.

Another definition describes it as: "A digital currency that uses encryption techniques to regulate the creation of new units of currency and to verify the transfer of funds, operating independently of any central bank."

Another perspective defines it as: "A digital cryptocurrency that relies on a high payment system, characterized by the absence of a central regulatory body behind it, managed by its users."

Additionally, another viewpoint defines it as: "A digital encrypted unit with a real financial value not linked to any other currency, managed by its user without any intermediary or central authority, exclusively through electronic media (computers and smart devices), issued through mining, with a total issuance limit of 21 million Bitcoin units, fulfilling all the functions of paper money." It is also defined as: "An encrypted digital token that is mined, awarded as a token for solving a digital puzzle as an incentive for hardware, energy, and time, contributing to executing transactions and encrypting and preserving its information record.[9]"

Another perspective sees it as: "A medium of exchange that functions like currency in some environments but does not have all the characteristics of real currency". Another legal perspective defines it as: "One of the types of unregulated (decentralized) digital money issued by private miners who control it, used for various purposes when parties agree to it, and its acquisition, storage, access, and transactions are conducted electronically."

From the previous definitions, it can be seen that there is a common understanding of the function of bitcoin, as most definitions indicate its use as a medium of exchange, while considering it a payment tool, along with specifying its reliance on a specific technical protocol or the need for supporting software to interact with it. This is evident in some definitions that mention (transactions are electronic, rely on electronic media, are accessed electronically, are based on blockchain technology).

Despite the consensus among scholars regarding its function and reliance, they differ in determining its specific characterization. While some consider it a currency, as evidenced by the use of terms such as digital cash or digital representation of monetary value or medium of exchange, others consider it a digital asset, as evidenced by terms such as digital representation of value or a digital unit with financial value. It is well known that there is a significant difference between considering it a digital asset and considering it a currency or medium of exchange.

From all of the above, it can be said that Bitcoin is an encrypted digital unit with a real financial value, not linked to any other currency, managed by its users without any intermediary or central authority, exclusively through electronic media (computers and smart devices), and it fulfills all the functions of money.

[8]- Zallabah, Tayeb, and Kamal Aoukasin, previous reference, p. 577.
[9]- Naas Salahuddin and Ben Saniya Abdul Rahman. "The Virtual Currency Bitcoin and Investor Sentiment: Is There a Relationship?" Strategy and Development Journal, Vol. 10, No. 01, 2020, p. 117.

Section Two: How Bitcoin Works

Bitcoin is mined over the Internet using a decentralized, competitive process called mining. This is a complex mathematical process that results in encrypted equations. Mining is performed by miners, who are individuals located anywhere in the world. They must use powerful, advanced computers connected to the Internet to download or upload the free mining software "Bitcoin Miner". Miners can then mine individually (solo)[10] or connect their machines to a mining pool and a bitcoin wallet.

The mining process requires a large amount of electrical energy, during which the miner runs the mining program on a specialized computer that tracks individual transactions of buying and selling bitcoin over a peer-to-peer network. The miner then performs the tasks necessary to process and confirm these transactions by competing with other miners to solve a series of puzzles, called algorithms, that they receive from the Bitcoin network. This involves a series of sequential mathematical and logical steps to solve a problem and reveal a long string of numbers and letters.

The mathematical equation is solved when the miner finds the correct input to a mathematical function called a hash (the hash is a means of processing encryption algorithms through intensive mathematical operations, consisting of a string of numbers and letters that do not resemble the original input data, and is used to verify the validity of the transaction; thus, it is considered the digital signature of the previous block in the ledger). This effectively links the verified transaction ledger to previous transaction blocks. To find the correct hash input, the miner must effectively guess the input at random, as finding an input by any other means is computationally infeasible due to the security guarantees of the hash function. Once the task is completed and the algorithms are solved, the program issues a bitcoin and adds it to the miner's electronic wallet.

It is noteworthy that solving the equation and decrypting it is awarded to the miner with the highest hash power, who then receives a reward from the network in the form of a certain number of bitcoins, known as a block[11]. It is observed that as the number of miners increases, the time it takes to generate a block decreases, making it increasingly difficult for miners with lower hash power to discover a block.

Section Two: Characteristics of Bitcoin as a Cryptographic Digital Currency Bitcoin

has several characteristics that distinguish it from other currencies, including:

- Unregulated currency: It is not backed by any official or institutional entity or international organization.

- Decentralized currency: Bitcoin is a decentralized currency, meaning that it is not subject to any particular authority, governmental or non-governmental, in terms of issuance or control[12]. It is not issued by central banks or any other central issuing authority, national or international, but is generated autonomously by the currency's protocol. Changing the Bitcoin protocol itself requires the participation of nearly all users. In addition, the production and generation of this currency is not controlled by any entity or state, but is available to all users of the system through complex computational processes known as mining[13].

[10]- Lafi Muhammad Dradkeh. "Challenges of Legal Regulation in Financial and Banking Technologies: Bitcoin as a Model for Safe Use with Technological Guarantees in the Absence of Legal Protections." Kuwait International Law College Journal, Proceedings of the 5th Annual International Conference, Special Supplement, No. 3, May 2018, p. 339.

[11]- Blockchain: A record in a chain of blocks that contains multiple transactions in progress, confirmed approximately every 10 minutes, through the addition of a new block containing a set of transactions. (Taken from Rqwan Alawi Al-Saqaf, previous reference, p. 57).

[12]- Talat Lamiya. "The Virtual Currency Bitcoin: Concept, Characteristics, and Risks to the Global Economy." Horizons of Science Journal, University of Zian Achour, Djelfa, Vol. 04, No. 16, June 2019, p. 154.

[13]- Sara Mutla Al-Qahtani. "The Legal Adaptation of Bitcoin Among Jurisprudential Differences and Legal Objectives." Umm Al-Qura University Journal of Sharia Sciences and Islamic Studies, 2023, p. 181.

In terms of control, no monetary authority of any country has the ability to manage its price or supply[14], as it is not affiliated with any entity[15]. As a result, there is no central authority to monitor its trading volume or determine its market value[16]. Decentralization has been used to achieve the principle of encryption and to support the strength of financial transactions conducted through the systems used in digital currencies. It allows users to purchase whatever they want, whether legally or illegally, and allows them to transfer funds from both regulated and unregulated sources, all without the oversight of a central authority or central bank.

- Open source currency: This means that its database is open and available to all users of the system who have a copy on their personal computers, allowing for inspection and modification according to certain rules.

- Digital currency: The most notable feature of bitcoin is that it is a digital imaginary currency with no physical or tangible existence[17]. It is not embodied in a physical document; rather, it is produced, traded, and stored entirely through computer technology[18]. Therefore, bitcoin has no intrinsic value; it consists of numbers and symbols that are transferred between individuals' electronic wallets in a manner that makes it difficult to track the details of sales and purchases or the identities of participants. It is recognized within a specific system and has fluctuating values due to speculation and market volatility according to the laws of supply and demand.

- Cryptographic currency: Bitcoin is considered a cryptographic currency because it is fundamentally based on encryption in all aspects. Encryption transforms the form of information using mathematical equations or algorithms, converting readable data into unreadable data to prevent unauthorized access by individuals not authorized to read or deal with it.

Encryption is used to protect against counterfeiting, falsification, and replication. The encryption of this currency is facilitated by advanced and modern information security technologies, all aimed at providing effective protection for users and monitoring any breaches that may be attempted by Internet hackers.

The process of encrypting information is done through a method called hashing, which is a cryptographic technique that allows inputs to be converted into encrypted codes through algorithms that produce consistent results based on this process. Decryption can only be performed using a secret number held by the other party to the transaction, known as a public key[19].

Global Currency: Bitcoin is considered a global currency because its operating system allows money to be transferred from anywhere in the world to anywhere else in the world. It is not tied to a specific geographic location, nor is its operating system limited to a specific country. It is conceivable that bitcoin could be accepted as payment, allowing it to be exchanged from one user to another anywhere in the world[20]. As a result, countries cannot ban it or prevent transactions using it because it is not under their control. Furthermore, no external entity can stop Bitcoin transactions, regardless of their subject matter. Transactions cannot be seized or frozen, nor are they subject to the risks that traditional currency transactions face if they are suspected or intended for illegal transactions. This is because only the owner has the authority to determine the method, place, and manner of use[21].

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[14]- Kabahem Sami and Hjira Tumi. "Virtual Currency (Bitcoin): Between Legal Prohibition and Inevitable Existence." Legal Analyst, Vol. 03, No. 01, 2021, p. 05.
[15]- Saber Mahmoud Mohamed Al-Mazal. "Financial Transactions Using Bitcoin: A Comparative Analytical Study." Legal Journal, a specialized journal in legal studies and research, p. 65.
[16]- allabah, Tayeb, and Kamal Aoukasin, previous reference, p. 579.
[17]- Kabahem Sami and Hjira Tumi, previous reference, p. 04.
[18]- Zallabah, Tayeb, and Kamal Aoukasin, previous reference, p. 578.
[19]- Ahmed Amadah and Saleh Boubchech, previous reference, p. 329; Muthana Waadallah Younes Al-Naimi. "Bitcoin: The Peer-to-Peer Electronic Payment System and Its Ruling in Islamic Law," 2018, p. 18, published at [Alukah Network](https://www.alukah.net).
[20]- Talat Lamiya, previous reference, p. 156.
[21]- Lafi Muhammad Dradkeh. "Challenges of Legal Regulation in Financial and Banking Technologies: Bitcoin as a Model for Safe Use with Technological Guarantees in the Absence of Legal Protections." Special Supplement, No. 3, Part 1, May 2018, p. 341.

Direct Currency: Bitcoin is a direct currency because it lacks an intermediary, allowing transactions to occur directly between users in a peer-to-peer system without the intervention of an intermediary or supervisor. The concept of a trusted intermediary is excluded in bitcoin transactions, as operations are conducted directly between parties without a third party. This highlights the fact that cryptocurrency is two-dimensional, as opposed to non-cryptocurrency, which is three-dimensional and requires the intervention of an intermediary to trade[22].

The removal of the intermediary raises the issue of the emergence of miners, who act as intermediaries and receive a fee for processing and verifying transactions for authenticity. However, they do not function as traditional intermediaries; their authority is to ensure the integrity of the transaction.

Secure Currency: Bitcoin is characterized by a high level of security, and its system was created to ensure the safety of its users. It guarantees accuracy by ensuring that financial transfers reach their intended recipients without error. The system executes commands with high precision based on the information provided by the sender and receiver. It also ensures fairness by completing transactions that are pending confirmation and execution according to specific protocols. In addition, bitcoin allows for the anonymity of the parties involved, as personal information cannot be identified due to its non-specific nature. Sending and receiving is based on public keys and numbers, making it resistant to impersonation attacks, as each user has unique sequential codes that represent their identity.

The cryptocurrency is characterized by its instability, as it does not have a fixed monetary value. It is noted that the value of bitcoin has fluctuated over a short period of time. As such, bitcoin has been described as bubble-like in value along with other cryptocurrencies[23].

Section Two: Evaluation of Bitcoin

Discussing the evaluation of Bitcoin requires determining its legal nature (First Requirement), followed by identifying its advantages and disadvantages (Second Requirement).

First Requirement: The Legal Nature of Bitcoin

Opinions vary on the legal nature of bitcoin as a type of cryptocurrency. Some scholars argue for its monetary nature, while others reject this view and argue for its unique characteristics.

Subsection One: The Monetary Nature of Bitcoin

Some scholars advocate for the monetary nature of Bitcoin, but they are divided on this issue. While some view it as a type of currency (First), others see it as a non-physical form of conventional money (Second), and another group sees it as a new form of currencies (Third).

First: Bitcoin as a Form of Currency

One perspective is that cryptocurrencies in general, and bitcoin in particular, should be classified as money. It is considered a form of official currency and serves as an alternative to traditional currencies[24]. Thus, it is permissible to transact with it according to legitimate exchange rules, since it is considered a means of payment and a substitute for traditional currencies. According to this view, the functions of money are that it serves as a unit of account for measuring goods and services, as a medium of exchange, and as a store of value. Bitcoin, as a digital currency, fulfills these three functions: it serves as a means of valuing goods and services (unit of account), it is used in commercial transactions and exchanges (medium of exchange), and it has a value that merchants worldwide accept as a form of payment without requiring conversion into real currency (store of value). As such, it helps settle debts when used as payment and is easily transferred from

[22]- Lafi Muhammad Dradkeh, previous reference, p. 341.
[23]- From this: Abdullah Al-Aqeel, Abdul Bari Mashal, taken from Rqwan Alawi Al-Saqaf, previous reference, p. 62.
[24]- Fadi Tawkil. "The Legal Regulation of Cryptocurrencies: Bitcoin." Dar Al-Nahda Al-Arabiya, 2019, p. 65.

one hand to another, although the method of transfer varies. While physical cash transfers occur when a buyer hands money to a seller for a good or service, digital currencies are transferred electronically[25].

This perspective has faced significant criticism because the nature of digital currencies lacks many of the fundamentals that characterize traditional currency. It is not enough for a currency to simply be a store of value, have purchasing power, and serve as a means of payment, buying, selling, and trading to qualify as an official currency. It must also have the legal and moral backing of the issuing state[26]. National legislatures must recognize it in this regard, and it should be produced by central banks, allowing for control and regulation of its issue and trade by each country, along with the determination of its value and exchange rate. In addition, it should be deposited in bank accounts by bank employees and traded through various payment methods. This is something that digital currency lacks because it is created and made available for trading by programmers or ordinary individuals who are not affiliated with any government or private entity. No official or governmental body monitors its source or oversees transactions conducted with it[27], and deposits are made through specialized electronic programs. Moreover, its trading is conducted through electronic means linked to digital wallets. As a result, digital currencies cannot have the above characteristics unless they are converted into a currency recognized by developed countries, central banks and financial market authorities worldwide.

Due to these differences, it has become clear that accepting this viewpoint is challenging, leading to another perspective that considers bitcoin as a non-physical form of traditional money.

Second: Bitcoin as a Non-Physical Currency

Some scholars argue that while Bitcoin is a form of currency, it is, on the other hand, a non-physical currency. It is merely an intangible asset, lacking a material form. Bitcoin is a digital imaginary currency with no physical existence, and therefore cannot be considered a tangible, material object.

Third: Bitcoin as a New Form of Currency

The majority of scholars consider bitcoin to have the characteristics of independent money. On the one hand, it fulfills the functions of money by serving as a medium of exchange[28], a unit of account, and a measure of value. On the other hand, it was created to be a currency outside the control of central banks. Thus, it is a new currency with unique characteristics that distinguish it from others, manifested in digital form with a specific monetary value. Its value is derived from the large number of users who interact with it on the Internet, which is a key factor in its strength and value. Therefore, its value cannot be diminished by the lack of a physical form; it is enough to have a wallet with a username and a unique password, making possession a symbolic matter. This is especially true since the wallet is protected similarly to any personal account, such as an email or a Facebook profile.

Subsection Two: The Unique Nature of Bitcoin

The intangible nature of bitcoin and its classification as an intangible movable asset has led scholars to reconsider its legal nature. Some see it as a commodity, others as a means of payment, and still others as a tool for the exchange of services.

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[25]- For countries that do not recognize Bitcoin as currency under their national laws, the only way to describe the digital currency as money is to classify it as foreign currency. If recognized as money in one country, it falls under the category of foreign currency for others, placing the responsibility on national central banks to intervene and establish legal rules governing transactions with such currencies. (Taken from Rqwan Alawi Al-Saqaf, previous reference, p. 62).

[26]- Ahmed Al-Sayed Labib Ibrahim. "Payment with Electronic Money: Nature and Legal Regulation—Analytical and Comparative Study." Dar Al-Jami'a Al-Jadida, 2009, pp. 107-108.

[27]- Sara Mutla Al-Qahtani, previous reference, p. 186.

[28]- From this: Rafiq Al-Masri, Ashraf Dawabah, Muhammad Al-Arian, taken from Rqwan Alawi Al-Saqaf, previous reference, p. 62.

First: Bitcoin as a commodity

Another perspective is that bitcoin[29] is a commodity because its value as a digital currency is not exclusively tied to the performance of a particular economy. Changes in interest rates and increases in the money supply have only an indirect effect on its value[30]. Its price volatility makes it similar to other commodities, especially since one of the key characteristics of currency is its stability of value. Moreover, this view posits that the ambiguity of its source and the lack of a guarantor make it a fictitious commodity[31]. Notably, the Canada Revenue Agency (CRA) has adopted this classification and considers it to be a commodity[32].

This was also affirmed by the Oklahoma State Court in a case filed in September 2014 against a group of bitcoin traders for engaging in fraudulent transactions with local market agents, involving the exchange of $30,000 in cash for bitcoin. The court ruled that bitcoin is merely a commodity that can be traded. The International Court of Justice took a similar stance in 2012, classifying it as a commodity.

Second: Bitcoin as a Means of Payment

Some scholars consider bitcoin to be a means of payment, justifying this position by referring to Japan's Payment Services Act, which granted bitcoin this designation in 2016. The law did not recognize it as legal tender, but as a means of payment. Financial regulators in Japan proposed that it be treated as a payment method on par with traditional currencies. A year later, the government officially recognized it as a payment method, which expanded its use to Gulf countries such as Qatar, the United Arab Emirates, Kuwait and Bahrain, reaching about 200,000 users. Jordan was the first country to allow its use in cafes in the capital Amman, followed by its acceptance in a pizza restaurant and an ATM in Dubai, and later by information systems companies in Palestine, making the Al-Safir market the first market in Kuwait and the Middle East to accept bitcoin in its transactions[33].

Third: Bitcoin as a Tool for Exchanging Services

The refusal of many countries to grant legal status to cryptocurrencies in general and Bitcoin in particular has led some to view it as a means of exchanging goods and services. This perspective emerged, especially after it became clear that the purpose of Bitcoin is speculative trading aimed at profit, rather than serving as an intermediary for exchanges or a means of transferring ownership of goods and services from one party to another[34].

Based on the above, it is evident that the legal nature of Bitcoin varies significantly due to differing national stances, with some considering it an electronic currency, while others view it as a commodity, a means of payment, or a tool for exchanging services.

Second Requirement: Advantages and Risks of Bitcoin

Evaluating Bitcoin requires outlining its advantages (Subsection One) and its risks (Subsection Two).

Subsection One: Advantages of Bitcoin

Bitcoin has several advantages that increase its appeal to users, including:

- Low Fees: Bitcoin transactions are characterized by low fees, as users do not incur costs related to transfer and conversion that banks and credit card companies typically charge. This is due to the absence of a third party, which creates a direct connection between the transacting parties, with the currency moving directly

[29]- Khalid Mamdouh Ibrahim. "The Legal Regulation of Metaverse Technology: A Comparative Study." Dar Al-Fikr Al-Jamii, Alexandria, 1st ed., 2023, p. 250.
[30]- Osama Majdoub and Ghania Bahtali, previous reference, p. 634.
[31]- Muhammad Jamal Zain and Abdul Basit Jasem Muhammad. "Virtual Currency (Bitcoin): Its Legal Adaptation and Regulation." Legal Sciences Journal, College of Law, University of Baghdad, No. 2, 2020, p. 153.
[32]- Marzouk Amal. "Bitcoin: A New Currency or a Financial Bubble?" Ray of Light Journal of Economic Studies, Vol. 3, No. 2, September 2019, p. 82.
[33]- Khalid Mamdouh Ibrahim, previous reference, p. 270.
[34]- Talat Lamiya, previous reference, p. 157.

from the buyer's wallet to the seller's wallet. There are no transfer fees or exposure to varying exchange rates or other costs imposed by traditional money transfer channels.

- Global Nature: Bitcoin is a global currency, not tied to any specific geographical location. It is available across various countries and is not subject to the control of any one nation.

- Speed: Digital currencies, especially Bitcoin, facilitate and expedite money transfer systems, leading to faster transactions.

- Respect for Privacy and Confidentiality: The unique nature of Bitcoin makes privacy one of its most important features. Transactions are not subject to oversight, making it impossible to trace their flow on the blockchain. This reduces government and bank control, allowing for transfers anytime and anywhere in the world with complete privacy, free from bank or regulatory oversight.

- Transparency: Bitcoin is transparent, allowing anyone with a Bitcoin wallet to see how many Bitcoin units the wallet owner possesses and the number of transactions conducted through it. This is due to the Bitcoin protocol, which records every transaction made. As a result, everyone can see the movement of currency between wallets transparently, although the identity of the wallet owner remains unknown.

- Security: One of the most important features of Bitcoin is its security, which stems from its status as a cryptographic currency. The encryption used in Bitcoin is one of the largest distributed computing projects in the world, making it difficult to counterfeit or replicate.

Second Branch: Risks of Bitcoin

Given that Bitcoin is a monopolistic currency concentrated in the hands of a small group of individuals who own high-performance computers and are skilled in information technology, practical realities have shown that despite its advantages, it carries numerous risks. This concentration of power poses significant threats on multiple levels, as monopolists can manipulate it according to their whims.

Difficulty in Tracking Currency Source

The secrecy and privacy surrounding Bitcoin, while a positive feature, also present a significant danger. This anonymity facilitates the execution of suspicious and illegal transactions over the internet, making it challenging for security agencies to trace the source of the currency[35].

Difficulty in Issuing Bitcoin:

One of the main challenges hindering the widespread use of Bitcoin is the difficulty in mining it, which requires advanced technical skills and high-performance resources. Ordinary users face significant barriers due to the complexity of the necessary software and the computational operations required for mining, which demand substantial electrical energy[36].

Price Volatility:

The volatility of bitcoin's price is a serious concern for its users, limiting its adoption and encouraging fraudsters to exploit this instability through fake currency exchange websites. These criminals can launch cyberattacks to create panic among users, negatively impacting the value of bitcoin. They then buy bitcoin at lower prices and sell it when its value rebounds, resulting in financial losses for users. For example, the price of bitcoin skyrocketed from $200 to $800 in 2013 before experiencing a decline, highlighting the risks for investors.

.Means for Illegal Transactions:

Bitcoin is often used for illicit transactions and financing illegal activities. Some individuals exploit it for money laundering, contributing to arms and drug trafficking, and facilitating the transfer of funds from

[35]- Talat Lamiya, previous reference, p. 156.

[36]- For details of the case, refer to the following website: [Droit du Partage](https://droitdupatrage.com/2014/08/20/le-bitcoin-peut-servire-a-realiser-dublanchiment/).

organized crime. This association with criminal activities increases overall crime rates and leads to more financial fraud.

The rise of Bitcoin's popularity can be attributed to the Silk Road[37], an online marketplace known for selling prohibited goods and services, which relied on deep web technology and decentralized information exchange. Its closure by the U.S. government following the arrest of its creator, Ross Ulbricht, highlighted the risks associated with Bitcoin, particularly its use in illegal activities.

Hacking Risks:

As a digital currency stored in electronic wallets, bitcoin is highly vulnerable to hacking and tampering[38]. While strong encryption and the work of miners make it difficult to counterfeit or duplicate bitcoin[39], hackers can steal digital wallets stored online or on personal computers. If a user's account is compromised, the anonymity of the network makes it nearly impossible to recover lost funds, and victims cannot take legal action against hackers.

Lack of regulation:

A key characteristic of bitcoin as a digital currency is the lack of a regulatory authority to which users can turn in cases of fraud or scams. Users are fully responsible for their digital assets.

Loss of Access Keys:

Bitcoin holders can lose their access keys, leading to an increase in dormant bitcoins.

Disagreement between governments and financial institutions:

The ambiguous stance of governments and financial institutions on bitcoin poses significant challenges to its users. The lack of a unified stance has resulted in the confiscation of millions of dollars from individuals and companies under various allegations, such as money laundering or lack of licensing[40]. Germany, for example, has officially recognized bitcoin as a form of electronic money and is taxing the profits of companies that trade in bitcoin, while individual transactions remain tax-free. Conversely, a U.S. federal judge has classified bitcoin as a form of currency subject to federal regulation.

In the Arab world, Jordan was one of the first countries to recognize bitcoin, followed by Dubai, where it was accepted in a pizza restaurant and an ATM, as well as information systems companies in Palestine and the Al-Safir market in Kuwait. In contrast, Algeria's 2018 financial law banned bitcoin transactions and warned users of potential penalties[41]. Article 117 of that law states that "the purchase, sale and possession of virtual currencies are prohibited," defining virtual currencies as those used by internet users that lack physical backing such as coins or banknotes.

Algerian legislation, in accordance with the E-Commerce Law 05/18[42], requires that electronic transactions be carried out through platforms established and operated by the Bank of Algeria and the Algerian Post Office, using authorized payment methods in accordance with current legislation. These platforms are subject to the supervision of the Bank of Algeria to ensure compliance with interoperability requirements and the confidentiality and security of data exchanges, conditions not met by bitcoin as a currency.

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[38]- Suweilehi Nour Al-Din. "The Impact of Bitcoin Mining and Virtual Currencies on the Stability of the Global Monetary System." Scientific Horizons Journal, Vol. 10, No. 02, 2018, p. 231.
[39]- Talat Lamiya, previous reference, p. 158.
[40]- Talat Lamiya, previous reference, p. 158.
[41]- Law No. 17-11 dated 8 Rabi' al-Thani 1439 AH, corresponding to December 27, 2017, concerning the Finance Law for 2018, Official Gazette, No. 76, published on December 28, 2017.
[42]- Law No. 18-05 dated 24 Sha'ban 1439 AH, corresponding to May 10, 2018, regarding Electronic Commerce, Official Gazette, No. 28, published on May 16, 2018.

CONCLUSION:

From the foregoing discussion, it is clear that bitcoin is one of the decentralized cryptocurrencies traded over the Internet that has emerged from the new commercial reality. Notably, legal scholars have not reached a consensus on a comprehensive definition of bitcoin due to the diversity and complexity of its implications. However, there is some agreement in recognizing it as a medium of exchange or payment tool that operates according to a specific technical protocol that requires supporting mechanisms.

The process of creating bitcoin is accomplished through mining, which is performed by miners who perform complex, encrypted mathematical calculations to verify transactions. In return, they are rewarded in the form of bitcoin. Because of the privacy surrounding its creation, bitcoin has numerous characteristics: it is a global, digital, decentralized, dual, encrypted, and secure currency. Despite these characteristics, legal scholars have differing opinions on its legal nature. Some see it as legal tender, others as a new form of currency, and still others as a commodity, a means of payment, or a tool for exchanging services. Legal classification is closely linked to national perspectives and recognition.

It is noteworthy that, since the 2018 Finance Law, the Algerian legislator has prohibited trading in bitcoin, continuing with Law 18.05 on e-commerce, which requires payments to be made by authorized means in accordance with the applicable legislation. This prohibition stems from the negative aspects associated with Bitcoin, as it is considered a tool for tax evasion, facilitating dubious financial transactions and contributing to drug trafficking and money laundering, mainly due to the lack of regulation, which makes it more vulnerable to hacking.

In summary, bitcoin is: - A widely used digital currency characterized by properties that remove barriers for its users.

- Issued through mining processes based on solving algorithms and equations.

- Prohibited by the Algerian legislator and many other jurisdictions due to its risks and lack of legal framework.

Given the increasing use of bitcoin among certain groups, it is essential to take the following actions:

1. Organize meetings and seminars with legal, economic and technical experts to clarify the implications of cryptocurrencies, including consultations with religious authorities to determine their legality.

2. Unify Arab legislation regarding bitcoin transactions, especially as many countries are moving towards allowing such transactions.

3. Participate in international and local efforts to establish appropriate mechanisms for bitcoin through specific regulatory legislation.

4. Involve central banks and financial institutions in the supervision of bitcoin transactions by integrating its technologies into banking systems.

5. Develop a legal framework to ensure its safe use if adopted, minimizing potential risks and threats.

6. Create mechanisms to monitor Bitcoin transactions and movement to protect national and economic interests.

7. Utilize technological advances to detect bitcoin transactions and punish offenders, thereby reducing the risks associated with its use.

8. Limit technological developments that threaten regulatory measures and oversight.

By addressing these considerations, it may be possible to create a more secure environment for bitcoin transactions while leveraging its unique properties for economic benefit.

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