CHAPTER 2
DEVELOPMENT OF FINANCE, ACCOUNTING AND AUDITING

BITCOIN: IT'S CONCEPT, CHARACTERISTICS AND IMPACT ON TRADE AND GLOBAL ECONOMY

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Citation:
Shakhatreh, H. (2022). Bitcoin: it's concept, characteristics and impact on trade and global economy. *Economics, Finance and Management Review*, (1), 34–41. https://doi.org/10.36690/2674-5208-2022-1-34

Received: February 22, 2022
Approved: March 26, 2022
Published: March 30, 2022

Abstract*: Bitcoin is one of the most important developments in Blockchain technology, as this currency has become the main regulator of the virtual currency of Bitcoin, it is a currency that has no physical presence and is traded in the Internet. The aim of the article is to study the concept of bitcoin and its impact on trade and the global economy. It is an important phenomenon for the economy and electronic commerce in many aspects, such as the conclusion of electronic contracts and financing, during which payments are made at low costs, but there is a danger associated with dealing with it at the level of national economic security, especially when there is no organized legislation to deal with it in order to monitor dealing with it. Therefore, there are realistic threats to dealing with Bitcoin because it is not under the control or oversight of central banks and official agencies. The most important of these threats are money laundering and terrorist financing operations, in addition to the tax difficulties due to the difficulty of monitoring its dealers It helps smuggle money abroad and thus harm the national economy, as the ambiguity and secrecy regard the dealing with the bitcoin currency and the instability of its value are source of concern for its use, which explains that there are several difficulties encountered when trading it, which has economic, financial and technical consequences.*

Keywords: *bitcoin, electronic transactions; national economy; legal regulation; virtual currencies; blockchain, risk.*

JEL Classification: G15, G21

Formulas: 0; fig.: 0; tabl.: 0; bibl.: 15

Introduction. The Bitcoin currency has spread due to the ease of its trading and profitability in dealing with financial stock exchanges and economic investments without the presence of oversight or restrictions governing them, especially since the Bitcoin currency follows high levels of confidentiality and anonymity, which forms a protection for privacy and does not allow a third party or intermediary to interfere in the dealings between the two parties to the relationship (j.everette and others:2017.p3), Bitcoin is considered an innovation in the world of technology and in the world of finance, and its repercussions have affected many countries and institutions around the world.As the spread of Bitcoin using has effects on monetary policy in countries of the world, but the central banks cannot dealing with it without legislation regulating it because it is cryptocurrency, so the use of Bitcoin in transactions and investment has dangerous repercussions on the national economy and monetary policy in the absence of organized legislation or even special laws governing through international treaties that clarify the legal frameworks governing dealing with this currency, and this will not be done,except by clarifying the concept of Bitcoin and determining the legal adaptation, especially since the current system of banks does not meet the great demand of the digital trade market, and the need has become necessary to create a convenient way for fast transactions via the Internet may go beyond the limits of legal jurisdiction, here comes the role of virtual currencies, and the most important of which is Bitcoin.

Literature review. Definition of Bitcoin, its importance and characteristics such as:

1) *Bitcoin definition.* The virtual currency (Bitcoin) has been defined as: a digital currency that is used all over the world on the Internet, and is created and exchanged from one computer to another via a decentralized network, which means that it is not subject to central control by any authority or government, and can be accessed by any connected person to internet (Matthew Kien-Meng ly : Spring 2014, p.589.) Which means that they are cryptocurrencies that do not have a real existence like coins.

Bitcoin is also defined as a digital image stored on internet, which takes shapes and appearances that mimic the appearance of physical money, transferred from it and real estate, and has a physical and virtual value in the virtual world. With real currencies, or even selling them, through an encrypted virtual contract, the most important characteristic of which is the principle of the authority of the will, without an intermediary controlling the contract, as in real currencies, in the sense that the will is absolute and does not limit it (Matthew Lee. Hertfordshire Law journal, 4 2016, p. 73). Bitcoin is also defined as: it is a digital currency that has no physical existence. It is created according to an algorithm that distinguishes each user from the other without indicating his identity and is stored in a private electronic wallet that sends and receives money, as its owner cannot be known. (Mahmoud, 2020, 141)

We can say that Bitcoin is a monetary value stored on the Internet in private wallets, not associate to a bank account, widely accepted by the non-issuer, and used for payment for various purposes.

Aims. The aim of the article is to study the concept of bitcoin and its impact on trade and the global economy.

Methods. The methodological basis of the article was the use of general scientific research methods, such as: analysis and synthesis, induction and deduction, comparative analysis, generalization method.

Results. As illustrated above that Bitcoin is a digital currency: it is the most prominent characteristic of Bitcoin, as it exists (digitally) in the sense that it does not have any physical existence - Intangible.

It is called a “virtual” term, as it is in the cyberspace, and stored in “Digital Wallets” on the Internet, these wallets store information related to the user’s account, and are accessed through the “Mobile App”. or a computer program or a "Service Provider".

Accordingly, it follows from this feature that Bitcoin differs from mandatory money, in that the former does not have a tangible physical form, nor can it be deposited in a bank, as it is saved on virtual wallets, and finally it is easy to carry and transfer via the Internet.

Also, the dealing with Bitcoin is through "peer-to-peer": is a technical term, used in computer networks, where it means direct interaction between a user on the network called a peer or peer and between others without any intermediary between them and all peers are equal, there is no primary or even dominant peer at the center of the network. In this context, dealing in bitcoin is through a "peer-to-peer" network system, meaning that all transactions in the Bitcoin network occur without going through a trusted third party "TTp" or a financial institution, such as a bank or even authority like government.

The working way of Bitcoin, in addition to the spread of the Internet around the world and its connection with computers, makes the opportunity available for anyone to join it through specialized programmers to create accounts for them in order to manage Bitcoin transactions, after creating a special account for any Bitcoin dealer, he can conduct transactions and transfer his money to other accounts anywhere around the world through a window called the general ledger, because it is a technology that records the transactions that are concluded through all the system (Amarah Abdulhafiz: 2019, P308)

By dividing it into blocks of transactions, called “Blockchain”, its function is to keep track of every Bitcoin transaction in the current transaction, ensuring that Bitcoin is passed on to the intended person. The new blocks of Bitcoin are created through mining, which is an algorithmic system that is presented in the form of digital equations, and the miner who wants to acquire Bitcoin, must solve this mathematical equation, by means of programs for Bitcoin mining, and the increasing number of miners has increased the value of this currency more and more, the so-called mining farms appeared, which contain thousands (processors) "Motherboard" to obtain new blocks of Bitcoin (Artus Krohn-Grimberghe & Ghristohp Sorge, 2013, p. 23).

From here, these important transformations appeared at the level of the global economy, which were produced by technological developments, especially with regard to payment systems in terms of speed and effectiveness that it provides, as innovations in payment methods have reduced the role of the monetary currency and shown the existence of new currencies, which are virtual money and the most common and widespread it is the Bitcoin currency. This spread of the Bitcoin currency is due to its ease of use, low cost and speed, without the need for an intermediary (Alawi, 2020, 175). Virtual currencies are a digital representation of value, issued by private developers as a unit of account, that can be obtained, stored, accessed and transacted electronically, and is used for a variety of purposes when two parties agree to use it. (Al-Bahouth, 2017, 20). It can be said that virtual currencies are a digital representation of a monetary value that is not issued by a central bank or a public authority, and is not necessarily linked to paper currency, but is accepted by natural or legal persons as a means of payment, and can be transferred, stored or traded electronically.

2) *The importance of Bitcoin***.** There is an importance of the Bitcoin currency for consumers, merchants, exporters and others, the most important of which is the

importance of virtual currencies in a number of points, most notably (Ahmed et al., 2018, 106–107):

The feeling of security and privacy, getting rid of legal restrictions, freedom in transactions, and lower costs are of great importance to the consumer, and the attraction of new customers for trade and the increase in sales it achieves by using Bitcoin as a more efficient alternative than traditional money. Bitcoin leads to a move away from the control of the tax department for traders and legal authorities, in addition to that, the importance of dealing with Bitcoin for exporters, such as controlling the markets without the supervision of the official authorities, in addition to make profits through exchange operations and from the subscription fees of customers to produce currency, in addition to freedom from legal accountability by states.

Bitcoin has many characteristics and many risks that we address in the following two sections:

*1) Advantages and Disadvantages of Dealing with Bitcoin***.** Bitcoin has unique advantages that make dealing with it encouraging for individuals and companies, the most important of which are:

Advantages of dealing with Bitcoin:

– *lower fees:* The Bitcoin currency is available to everyone and without any fees for transfer, as in dealing with traditional currencies to transfer money through banks and credit card companies, and there will be no intermediary between customers and merchants, in addition to the fact that merchants have units to help process transactions and convert Bitcoin into currencies and deposit them in their bank accounts directly and on a daily basis, because these services are specific to Bitcoin, they will cost much less than credit cards.

– *Transparency and neutrality of Bitcoin dealing:* Bitcoin has a global public ledger, which contains all Bitcoin operations that are executed in full, called "Blockchain", which is an encrypted information program that undertakes the task of a unified recording of information on the network. This ledger includes a series of so-called blocks (blockchain). Each block contains a list of operations, as well as the electronic signature of the previous block that made up the ledger. Each block is linked to the previous one, which gives a comprehensive picture of everything that happens in the entire system, where everyone watches with complete transparency. A movement that moves the currency between the wallets and the number of bitcoins owned by the owner of the wallet, but at the same time no one can know the identity of its owner. This is secured through an encryption system so that no one or organization can control or tamper with the Bitcoin protocol (Mahmoud, 2020, 143-144).

– *Speed, Privacy & Confidentiality:* While dealing with Bitcoin, it is not possible to monitor the buying and selling operations that take place through it or to interfere in it by governments and banks over the currency, as it can be transferred at any time and to any place in the world, with complete privacy without passing through any supervisory entity or bank, as well as it can possessing many Bitcoin accounts and wallets without being connected to a name, address, or any information about their properties.

– *Global:* Bitcoin is not restricted to a specific country or continent, as it is worldwide, and no country can prohibit it, therefore no one can block these transactions or transfers, and transfers in traditional currencies cannot be exposed to it if it was doubtful, or it was made to pay transactions illegal, because only its owner has the power to determine the mechanism, place and type of its use (Albahouth, 2017, 32).

– *Low risk of collapse:* Regular currencies rely on governments that sometimes fail to protect their currency, such events either cause hyperinflation or a complete collapse of the currency which can wipe out the lifetime savings in one day. Bitcoin is not regulated by any government, it is a virtual global currency (Aljawareen, 2018, 5)

Disadvantages of Bitcoin:

– *Currency fluctuation:* The price of the virtual currency Bitcoin and its large fluctuations constitute a major problem for its dealers for many reasons, including that it is not based on any assets or fair valuations that can be relied upon in anticipating a decrease or rise in the price of this currency. The business in which this currency is used is still relatively small compared to what it could be, which negatively affects the price and significantly, so the loss component is very large because it lacks monetary stability, which is the most important goals of the monetary system of any country, and this does not mean that it does not happen to a currency at some point, what is meant by stability is the ability to reasonably predict currency trends, so central banks are trying to develop strategies that help relative stability so that people and the economy are not harmed.

– *Legal risks:* Dealing with the virtual currency Bitcoin reveals many risks, the nature of this encrypted currency, which is invisible, made it an attractive and convenient tool for criminals and fraudsters to practice money laundering operations and sell stolen and prohibited products such as drugs, especially in outer space due to the difficulty of identifying who is using and buying it. This is related to the extent to which individuals use Bitcoin. In their transactions, which motivates the perpetrators of these operations to use them in purchase and transfer without the need to contact intermediary financial institutions, and the decentralization of Bitcoin led to the lack of obligation to write reports on the national movement on the volume of transactions, as is the case in banking systems that require reporting to the regulatory authorities about the financial operations of the clients

– *Mining:* One of the most important obstacles to the spread of the use of Bitcoin in the world is the difficulty of mining (issuing it) by the average user due to the complexity of access programs and the complexity of the calculations necessary to perform mining operations, although the mining of the currency is available to everyone in theory.

– *Tax Evasion:* It will be difficult for government entities in charge of tax collection to collect them from the qualities that are made by virtual currencies, because they are done via the Internet without the availability of fixed records through which the amount of these qualities can be verified, and thus the state loses an important resource of the state's general budget.

2) Risks of Bitcoin. There are many risks surrounding the Bitcoin currency and realistic threats, because it is not under the control of banks or supervision and its use instead of the traditional payment system and also its acceptance by many companies and individuals around the world, which led to the start of the transition to the era of the digital economy and the digital economy, which is a series of economic, social and cultural activities that they are performed on information networks and are related to the use of information and communication technologies by the bank, commercial transactions and benefiting from education using the Internet and devices connected between them.

The most important of these risks are:

1) Decentralization of dealing with the currency of Bitcoin due to lack of legislative and regulatory texts:

There is no control or any government power, as it allows the payment of cash directly via the Internet, without the need for an intermediary to intervene, so it is transmitted directly, from the buyer to the seller, or more precisely from the transferee to the beneficiary. (Abdullah Al-Bahouth, Virtual Money: pg. 19)

Bitcoin is a decentralized currency that does not belong to any country, bank, or any regulatory body. It is a cryptocurrency, which is difficult to trace. Because it does not have serial numbers, in contrast to electronic money that belongs to either a state, a bank or a regulatory body, and it has serial numbers through which dealers can be tracked. This feature that is unique to Bitcoin, made it unique by the decision of the contracting parties, without the broker having authority It is the same as in electronic money, and this defect poses risks to the person dealing with it, as one of its risks is that it is considered a means of money laundering and support for terrorist groups and criminal organizations, and the state has no authority over it to impose taxes and fees on its dealers.

Due to the lack of legislative texts regulating the currency of Bitcoin, it is not possible to punish or fine those dealing with it, because the general principle that governs the Penal Code is that there is no crime or punishment without a text, and it is the responsibility of the legislator to take the initiative to organize legislation that regulates this currency and imposes penalties on violators and those who employ it as an illegal method.

2) Bitcoin Cryptocurrency. The disadvantage of Bitcoin is that it is encrypted; , i.e. it is confidentiality in dealing, it is not reached by non-dealers, and in fact this mode may be a fertile environment for tax evasion, money laundering and the sale of contraband, then the goal of encryption is to distance digital dealing outside the financial and monetary system in countries, and not to be subject to central banks, however, avoiding encryption is practically impossible ; Because it is one of the pillars of digital currency. (Ahmed Amer, Digital currencies (Bitcoin as a model): 2019, p. 283).

3) *Constant fluctuation in the price of Bitcoin*. The most significant risks of dealing with the currency (Bitcoin) is fluctuate the price of its value, it goes down and rises from time to time without proof of a specific price and without precedents (Mothan W.Y.: https://www.alukah.net/)

4) *Mining.* To obtain the Bitcoin, it is necessary to mine to obtain the electronic currency, through complex calculations, via central processing devices (Motherboard) with a high degree of technology, and these processors need continuous work for a period of time, to solve the calculations posed by the mining program of the (Bitcoin), however, this period requires permanent energy, and the presence of mining farms for thousands of processors in America and Russia at the present time, makes it difficult to mine using ordinary processors

5) *Hacking.* Bitcoin is vulnerable to piracy and theft because it is a currency stored in a digital wallet. Virtual money is more vulnerable to these risks, and in fact, there have been many hacking incidents of virtual wallets that were not well protected from piracy, and what increases the risk is the inability of the user whose money was stolen from his account to recover them, due to the unknown mechanism of the system's work and the inability of the aggrieved to take legal measures to prosecute them. (Abdullah Salman AlBahouth, Virtual Currency, p. 34.).

Discussion. Bitcoin considered a currency resulting from modern technological techniques and has many advantages and risks because it is used to transfer money over the Internet and can be used in legitimate and illegal business and this leads to affecting the national and global economy, especially due to the lack of various international legislation for a tight legal regulation to deal with the currency of Bitcoin, but the only legal fact that can be asserted is that Bitcoin trading is considered a legal act that falls within the area of commercial activities in order to deal with money and provide services, and the Bitcoin currency has raised a legal controversy about drawing its economic dimensions in light of international changes and challenges of the modern era, so it constitutes a system Virtually parallel to the international monetary system.

Conclusion. Based on the study, the following conclusions can be drawn:

- Bitcoin is a type of encrypted digital currency that is intangible and is traded via the Internet.
- The lack of central control to protect dealing with Bitcoin is a result of the weak infrastructure of this currency because it is produced in an encrypted digital form and without interference from any financial authority.
- A great risk and an uncertain future for individuals and companies, as well as the national economy, as a result of dealing with Bitcoin in its current state.
- Lack of legislation regulating dealing with Bitcoin leads to its use in illegal activities.
- Bitcoins are managed by their users without any central or regulatory authority.

Based on the study, the following recommendations can be provided:

- Pre- and adequate preparation of the legal, economic and technical means to ensure the safe use of the bitcoin in the event of its adoption and away from any potential risks or threats.
- Develop appropriate means to monitor the dealing with Bitcoin, its movement and trends, because of its national interest that affects the national economy.

- The possibility of setting controls for dealing with these currencies, including Bitcoin, by international organizations such as the International Monetary Fund and the World Bank.
- Developing the culture of society in order to protect them from deception and fraud as a result of dealing in such currencies.
- Activating the role of central banks to rent a tool to monitor these cryptocurrencies, including Bitcoin.
- The International Monetary Fund also recommended to setting rules and controls to integrate this cryptocurrency with the rules of the global monetary system.
- I recommend countries to put in place special legislation regulating dealing with Bitcoin.

References:

1. J.Everettle and others: Risks and vulnerabilities of virtual currency. Cryptocurrency as apayment method, public-private analytic exchange program. 2017. p3.
2. Matthew Kien-Meng Ly. COINING BITCOIN'S "LEGAL-BITS": EXAMINING THE REGUALTORY FRAMEWORK FOR BITCOIN AND VIRTUAL CURRENCIES. *Harvard Journal of Law & Technology*. Volume 27, Number 2, Spring 2014, p.589.
3. Matthew Lee, Online Role Play Games-The legal response, *Hertfordshire Law journal*, 4 2016, p. 73. available online: http://www.herts.ac.uk/data/assets/pdf_le/0011/38666/HLJ_V4I2_Lee.pdf.
4. Al-Bahouth, A. Virtual money concept, types and economic effects. *Scientific Journal of Economics and Trade*, Ain-Shams University, Faculty of Commerce, Cairo, Vol. 1, 2017, P26.
5. Abed, A. Provisions for dealing with electronic currencies (Bitcoin and similar), *Iraqi University Journal*, Vol. 44, Ch.3, 2019, P 308.
6. Artus Krohn-Grimberghe & Ghristohp Sorge, Practical Aspects of the Bitcoin system, *CRYPTOME*, 2013, p. 23. Available: http://cryptome.org/2013/09/bitcoin-practical-aspects.pdf.
7. Amer, B. Digital currencies (Bitcoin as a model) and their compatibility with money controls in Islam. *University of Sharjah Journal of Sharia Sciences and Islamic Studies*, Vol. 16, Edi. 1, 2019, P 283.
8. Alnuaimi, M. Bitcoin Peer-to-Peer Electronic Payment System, An article published on the Alukah Network website: https://www.alukah.net, 17-05-2018.
9. Alaqeel, M. Jurisprudence rulings related to the electronic currency Bitcoin, *Alnoor Library*, Edi. 1, P 17-33, https://www.noor-book.com
10. Al Bahouth, A. Virtual Currency, P34.
11. Ahmed & Et. al (2018). The economic efficiency of encrypted virtual currencies: *Bitcoin as a model,Asra International Journal of Islamic Finance*, Vol. 9, Edi 1.
12. Al Bahouth, A. (2017). Virtual money concept, types and economic effects. *Scientific Journal of Economics and Trade*, Edi. 1, Ain-Shams University, Egypt.
13. Al Jawareen, A. (2017) Bitcoin, Economic Effects and Expected Risks, *Papers in Monetary Policy*, Iraqi Economists Network.
14. Alawi, S. (2020) The impact of virtual currencies on monetary policy and the Central Bank, *Journal of Baghdad College of Economic Sciences University*, Special issue of the scientific conference of the Department of Accounting Sciences.
15. Mahmoud, H. (2020). The legal and juridical ruling of the virtual currency (Bitcoin), *Tikrit University Journal of Law*, Vol 4, Edi 3, Ch. 1.