#### How to Cite:

Khalissa, Z., Ahlam, G., Khalissa, M., & Anfel, B. (2024). Prospects of dealing with encrypted digital currencies: Bitcoin as a model. *International Journal of Economic Perspectives*, 18(10), 1520–1534. Retrieved from

https://ijeponline.org/index.php/journal/article/view/654

# Prospects of dealing with encrypted digital currencies: Bitcoin as a model

#### Zouaoui Khalissa

University of Setif 1, Algeria Email: khalissazazou@yahoo.fr

#### Ghedjati Ahlam

University of Setif 1, Algeria Email: ahlamgh@yahoo.fr

#### Medjili Khalissa

University of Setif 1, Algeria Email: khalissa46@yahoo.fr

#### **Boudilel Anfel**

University Mohamed El Bachir El Ibrahimi of Bordj Bou Arreridj, Algeria, Member in the Laboratory of Studies and Research in Rural Development.

Email: anfel.boudjelal@univ-bba.dz

**Abstract**—This research paper aims to highlight the prospects of dealing with encrypted digital currencies, taking Bitcoin as a model, as encrypted digital currencies have become a controversial issue in economic, legal and political circles due to many risks surrounding their use and trading operations. In addition to the lack of legal and economic studies that have addressed them, there is no official responsible for issuing these currencies and regulating their trading, fir their more they can be exposed to hacking, in addition to the possibility of using them in illegal and illegitimate transactions such as financing terrorism, human trafficking and money laundering.

**Keywords---**Cryptocurrencies, Bitcoin, The future of bitcoin.

آفاق التعامل بالعملات الرقمية المشفرة -عملة البتكوين نموذجا-

الملخص:

تهدف هذه الورقة البحثية إلى إبراز آفاق التعامل بالعملات الرقمية المشفرة مع أخذ عملة البتكوين نموذجا، حيث أصبحت العملات الرقمية المشفرة أمرا مثيرا للجدل في الأوساط الاقتصادية والقانونية والسياسية بسبب المخاطر العديدة المحيطة

بعمليات استخدامها وتداولها، فبالإضافة لقلة الدراسات القانونية والاقتصادية التي تناولتها فإنه لا توجد جهة رسمية مسؤولة عن إصدار هذه العملات وتنظيم تداولها، كما يمكن أن تتعرض للقرصنة، إضافة إلى إمكانية استعمالها في المعاملات غير المشروعة وغير القانونية كتمويل الارهاب والاتجار بالبشر وتبييض الأموال.

الكلمات المفتاحية: العملات المشفرة، عملة البتكوين، مستقبل البتكوين.

#### Introduction

The Technological advancement has aided in the spread of social media use among individuals via the Internet, and this communication has influenced the expansion of commercial transactions between them, making it possible to acquire products and services from any part of the world without the need to carry out transactions using a method known as electronic commerce, given that these exchanges take place digitally. It was necessary to find an alternative to paper money that requires the real presence of both parties. Hence, electronic money appeared that is exchanged through the electronic payment system on the Internet.

Unfortunately, the development continued to occur there. Rather, electronic or digital currencies appeared later, most notably the Bitcoin currency, which sparked a great deal of controversy and fear among many countries and international organizations, along with researchers and economic experts, attributable to the risks of broadening its use, as well as the acceleration it manages to achieve. Its high price compared to the short period since its appearance, as it is a highly volatile currency and relies more on speculation, and the danger lies in the possibility of its access and piracy, in addition to the weakness of its monetary structure and the absence of a central authority that regulates its work and issuance, and supports its circulation, with the absence of laws that control its issuance and dealing with it, Which may contribute more to the increase in money smuggling and laundering. According to the aforementioned, the study problem can be stated as follows:

• What is the future of bitcoin currency? What are the risks of using it on individuals and the global economy?

The primary objective of this study is to emphasize the risks of using Bitcoin currency on individuals and the global economy, as well as a variety of secondary objectives stemming from this aim:

- → Defining Bitcoin.
- → Determining the difference between bitcoin and real money.
- → Learning how to create and generate Bitcoin.
- → In addition to identifying the position of countries and economists in this regard.

To this aim, the study was divided into three parts:

<u>The first part</u>: this part revolves around cryptocurrencies, thus, it will address: what cryptocurrencies are, their characteristics, as well as the advantages and disadvantages of using them.

<u>The second part</u>: This part focuses on the Bitcoin currency, which it will address what the Bitcoin currency is, how it appears and is discovered, in addition to its characteristics, while highlighting its difference in comparison to real money.

<u>The third part:</u> this part is dedicated to the mining and issuance of bitcoin, while highlighting the position of countries and economists in this regard, in addition to addressing the future of bitcoin and the risks of dealing with it on individuals and the global economy.

#### I- Encrypted digital currencies:

Due to the growth of virtual societies brought on by technological advancement and increasing Internet usage, it became necessary to find payment methods to make it easier for members of these communities to conduct their various exchanges. This managed to give rise to a new financial concept known as digital currencies. Several terms have been used to express digital currencies, such as virtual currencies, electronic currencies, encrypted currencies....etc. By the same token, digital currencies are called by this term because they are intangible, produced by computer programs, and are not subject to the government or the authority of the central bank.

#### I-1- Definition of cryptocurrency:

Cryptocurrency is vastly defined as: "a means of monetary exchange in which value is stored and transferred electronically. Virtual currencies and cryptocurrencies are two types of digital currencies. Digital currencies can include several common products such as gift cards, discount cards, airline rewards points, and cash rewards. Credit cards and cryptos share a similar feature in that they have real-world value and can be used to purchase products and services." i

In other words, a cryptocurrency is "a digital asset designed to act as a medium of exchange as defined by the South African Institute of Professional Accountants that uses cryptography (decentralized control) to secure transactions, control the creation of additional units, and verify the transfer of assets." <sup>ii</sup>

Because it employs Blockchain technology, encrypted digital currency is created using specialized software, mathematical algorithms, and global encryption techniques that make hacking and manipulating it difficult or impossible. This blockchain technology works to keep records of all transactions and transactions that take place using encrypted digital currencies <sup>iii</sup>.

They are regarded as digital assets since they enable users to accept them as a form of payment in exchange transactions without using fiat money.

#### I-2- Characteristics of encrypted digital currencies:

According to the description above, the following are the key characteristics of encrypted digital currencies:

- A virtual digital currency has no physical entity produced by computer programs.
- A virtual digital currency operates according to the principle of peer-topeer, which means that there is no external third party for transactions such as banks and banking institutions.
- A virtual digital currency is not controlled or managed by an official authority such as a central bank.

• A virtual digital currency is used as a medium of exchange via the Internet, depending on both encryption technology and blockchain technology.

### I-3- Advantages and disadvantages of cryptocurrency:

#### I-3 -1- Advantages:

The ease of commerce, cost savings, and widespread acceptance among academics are the three main advantages of adopting encrypted digital currencies. As a potential new method of transferring ownership of wealth in the long run iv, banks should carefully examine the technology behind these cryptocurrencies.

We will elaborate on these advantages in the following points:

- A- Transaction settlement speed: transactions are processed in a matter of minutes thanks to the technology used while achieving a high degree of efficiency and reducing costs, which achieves higher customer or consumer satisfaction.
- B- Reducing fees: Due to the absence of the need for a central authority, transactions can be completed at lower costs, which helps the customer or consumer to save money, in addition to reducing the number of operations necessary to complete transactions.
- C- Tracking: Transactions made using encrypted digital currencies allow the recording of more information than traditional payment systems, such as the time and value of the transaction, in addition to keeping pictures of the product or service, messages, and communications between dealers, which can be used to benefit in the event of a dispute.
- D- Security: The protocol and encryption technology used in exchanging encrypted digital currencies makes it difficult to counterfeit or reproduce them, in addition to that, users can operate security practices to protect their funds or use service providers that provide high levels of security against theft.
- E- Global: Whereas traditional currency transfers can be frozen, seized, or subject to other risks if there is any doubt as to their legality, encrypted digital currencies cannot be subject to these risks because they are available everywhere and no country can outlaw them because they were never under its control in the first place. As a result, no one can book these transactions or transfers.

#### I-3 -2- Disadvantages:

Regardless of the advantages of encrypted digital currency, there are several issues associated with its use, including extreme fluctuation in value, high investment risks, and the lack of a central issuer and illegal conduct.

- A- Money Laundering and Terrorist Funding Risks: Because of their unknown nature, encrypted digital currencies encourage circumventing the rules for money laundering and terrorist financing, and concealing the identity of transfers that could be used in the crime, money laundering, and terrorist financing.
- B- Risks related to price volatility: Given the limited increase in the number of cryptocurrency units, their lack of connection to any underlying asset, and their reliance in particular on the trust of their users, in addition to the legal risk as they are unregulated currencies.

*C* - *Lack of consumer protection:* there is no authority to ensure the security of electronic safes, and it is not possible to resort to justice in the event of the theft of currencies by pirates.

#### II- Bitcoin:

#### II-1- Definition of Bitcoin:

Many definitions of Bitcoin exist, the most prominent of which are:

- "Bitcoin is defined as 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 and traded electronically." vi
- It is also defined as: "encrypted digital units, which have no physical or tangible nature and have no value or self-interest, but with what has been proven in the reality of mutual benefit and relative popularity in many countries, it is considered as valued money." vii
- Another definition explains that bitcoin is: "a type of unregulated (decentralized) digital cash issued by developers who usually control it, and is used and accepted among members of a specific virtual community." viii

Based on the above definitions, it can be said that the Bitcoin currency is: an encrypted electronic currency that is traded and managed by its users via the Internet without a physical presence, and it differs from traditional currencies in the absence of a central authority and a central bank that issues it, and despite that, it functions as legal money.

#### II-2- The emergence and discovery of Bitcoin:

Bitcoin is the first encrypted digital currency and the most famous on the Internet. It appeared for the first time on the Internet in 2007 by an anonymous person named Satoshi Nakamoto, and 2008 the official website of the currency was announced by the same people, and it was unveiled in a research paper entitled "Bitcoin: Peer-to-peer Electronic ix Currency System", in which he explained how Bitcoin works, as well as highlighted its characteristics and advantages.

In 2009, Satoshi Nakamoto created (50) bitcoins, as well as the first transfer of this currency between him and Hal Finney, the actual programmer of the bitcoin currency system, and the value of the bitcoin unit against one US dollar was calculated at 1309.03 bitcoins. This was determined by the cost of the electrical energy utilized by the computer to generate bitcoins.

Meanwhile, in 2010, an electronic market was established for the exchange of bitcoins against international currencies such as the dollar and others, then the first purchase of a piece of Petla was for 10,000 bitcoins, then purchases followed until the price of one bitcoin reached 20,000 dollars on Friday, December 8, 2017.

In an attempt to avoid the risks of inflation, the Bitcoin currency's creators placed a limit on its issuance of 21 million units globally. It is anticipated to reach full issuance by 2030, after which Bitcoin can only be obtained through purchases and not generated through the mining process due to the complexity of the

algorithms that must be solved and overcome. Despite the potential scarcity of bitcoin, its developers made it splittable into tiny fractions called a satoshi. Each bitcoin contains 100 million satoshis to meet the global need for bitcoins in the future x. Germany is one of the first countries to officially recognize Bitcoin as a type of electronic money, and it can impose a tax on profits made by companies dealing in Bitcoin, while individual financial transactions remain tax-exempt xi.

The first European exchange institution for the Bitcoin currency received approval from the European Union for a bank license in 2012, while the Texas state judiciary recognized the Bitcoin currency as an investment in 2013. The total nominal value of all bitcoins in the world exceeded \$167 billion as of January 1, 2018 xii.

It is worth noting that Bitcoin is not the only virtual currency currently present in virtual markets. Due to the successes of Bitcoin, a variety of so-called "altcoins" or alternative virtual currencies have emerged with good value in the markets. The most important differences between Bitcoin and these alternative currencies are: Bitcoin is more difficult to mine and more expensive, while alternative currencies can usually be obtained in an easier and cheaper way, and its price can be more stable than the price of Bitcoin with a volatile price, and many of these currencies were created to avoid problems occurring in the Bitcoin system. Here is a list of six alteoins xiii:

Litecoin: If bitcoin is gold, then litecoin is silver, as everyone says. The popularity of Litecoin has recently increased. Although Litecoin is based on the same system as Bitcoin, it was created to make mining more accessible, affordable, and quick overall.

Dogecoin: It refers to the electronic currency of the dog, and it contains an image of a dog in its logo, and one of its most important features is the speed of production of the currency.

Novacoin: it is a digital currency constructed on open-source technology and the peer-to-peer Internet protocol. It distinguishes itself from the majority of Bitcoin alternatives in that it incorporates security programs into the currency's core, discouraging mining organizations from abusing it.

Namecoin: One million is the sum of the namecoin. This indicates that namecoins will be relatively rare, exactly the same level of rarity as Bitcoin. This helps namecoin create an uncensored internet, denying government control. It is a versatile platform that can be used for a decentralized and unregulated DNS, a kind of Internet of its own. It can also be used to send messages, vote, and system login.

Peercoin: It is another currency from the principle of digital encrypted virtual currency. Like Bitcoin, peercoin is based on peer-to-peer Internet protocol. Bercoin offers an increase in the efficiency of mining, as well as in improving security and guarantees to avoid abuse by the mining group. Peercoin has a market capitalization that is fourth among the alternative virtual currencies.

Faircoin: It is also a cryptocurrency, like Litecoin, that often adjusts the difficulty of mining. And unlike some other cryptocurrencies, faircoin is regularly updated to incorporate new features and improvements, including protection from abuse and forking by crowd-mining.

#### II-3- Characteristics of Bitcoin:

The Bitcoin currency has a variety of features, which we will directly address below: xiv

A- A coded digital unit:

By digital, is therefore implied that it is entirely virtual, consisting only of numbers displayed by its electronic forums, as opposed to the natural, physical, sensory, and physical existence of paper money. By encrypted, it is meant that accessing its electronic wallets and stealing its contents is nearly impossible due to the cryptographic strength in it and the work of miners in documenting Currencies and transfers. The term "ecosystem" refers to a group of people who work in the construction industry.

B- It has a financial value assessed:

In practical terms, it has proven to be of mutual financial benefit and relative popularity in a number of countries, only if it is accepted in real sales operations in many stores around the world, as well as its exchange in paper currencies such as dollars and others. This has been recognized by some countries and accepted in the performance of government taxes and fees, and this means that they acquired cash idiomatically according to the appearance.

C- Not linked to any other currency:

Due to the fact that electronic money and other electronic payments, like PayPal and others, are linked to the paper money issued by the government, unlike the bitcoin currency, which is not related to any other currency, this restriction prevents the bitcoin currency from being used.

D- Its creator and system devised are unknown:

The party that created and devised the Bitcoin currency, and its complex mechanism of action, whether in issuance, documentation, or the exchange process, is an anonymous party, which means that the source and controller of this currency are unknown, and of necessity, it can change the rules of the game whenever it wants, even if it claims otherwise.

E- It is managed by its user:

As its creator states, it runs on a peer-to-peer basis, as there is no third party, neither government nor others, and this implies that the bitcoin currency is transferred from one person to another without the interference of any intermediary or authority. Centralization either inhibits or facilitates this transaction, giving the client the ability to pay and transfer to any location in the world with no constraints. It also enjoys other advantages, including the speed of transfers and low or no fees, as transfers through it do not take a few seconds, and all its operations are recorded In a unified record without identifying the real identity of the contractors, and this is another advantage for it, which is the preservation of confidentiality and personal privacy. This may eliminate the work of banks in terms of money transfers.

In the absence of a central authority that supervises and regulates transactions and large financial transfers, the advantage of decentralization and confidentiality may be used in internationally prohibited transactions such as trafficking in people, drugs, weapons, financing terrorism, money laundering, and other illegal matters.

F- It functions the same as paper money:

Paper money represents anything that is often used as a means of exchange and a standard of worth and is widely acknowledged by individuals. It is also a value store, as well as a method of future payments and debt settlement.

#### II-4- The difference between Bitcoin and real money:

The Bitcoin currency is an entirely digital currency that circulates via the Internet in a virtual world only without its physical presence, while the bank notes are tangible and have a real physical existence, and are made of papers and other materials. It is a system that functions without a central warehouse or one manager, that is, it differs from traditional currencies in the absence of a central regulatory body behind it.

The issuance of bitcoin currency is available to any person or entity with experience in software and mathematics, as well as what is required for the issuance of bitcoin, whereas the central bank is the only entity authorized to issue paper money, according to the country's monetary policy, which is based on an accurate comparison of the ratio of goods and services to the ratio of the money supply in the market.

Paper money must be matched by a balance of gold, foreign currencies, foreign instruments, or any securities guaranteed by the government in what is called the currency cover, while this is not available in the digital currency xv.

The Bitcoin currency is not regulated or controlled by any central authority, whether in terms of its value, or in terms of its movement, and there is also no third party working to organize exchanges, so dealing with it is through peer-to-peer, unlike securities that are supervised by the Central Bank as the representative of the state in implementing its monetary policy.

## III. Bitcoin mining and the position of countries and economists in this regard:

#### 3.1- Bitcoin mining and issuance:

The bitcoin currency is not issued through central banks such as the case with traditional currencies, however, the bitcoin currency (virtual version) is issued through a process called bitcoin mining. This process is conducted by miners and is not limited to a specific party or people. Nonetheless, it is available for everyone anywhere in the world, but it requires time and computers with high and fast specifications that allow downloading the free mining program Bitcoin Miner, and with this program, it is possible to solve a number of equations that miners get from the Bitcoin network and call them algorithms, and the algorithm is a set of sequential mathematical and logical steps necessary to solve a problem, after completing the solution of the algorithm, the program issues the bitcoin currency and adds it to the electronic wallet of whoever mined it xvi.

Whereas, with the increase in the currencies extracted since 2009, the complexity of the mathematical equations required to decode the code increased, and the higher the price of the digital currency, the more complex the mining process, which made the use of a computer for extraction a completely unprofitable process. Therefore, several powerful devices appeared in the specifications specialized in extraction, including the Antminer S9, Avalon 6, and SP20 Jackson. These devices require an investment that is not simple, as their cost sometimes reaches more than 3000 US dollars, and they also consume a large amount of energy, and they need constant cooling, Therefore, all of this must be taken into account when considering this type of investment xvii.

The Bitcoin currency's creators put in place a set of controls to avoid inflation, setting a ceiling for its issuance at about 21 million units in the world, and it is expected that the full issuance will be reached during the period 2025-2030 when an average of about 25 bitcoins is issued every 10 minutes. over the world, and this number is cut in half every four years until the last bitcoin is produced, at which point bitcoin can be gained by purchasing rather than mining.

Obtaining bitcoins by purchasing them is done by bank transfer or payment by bank card. There are many sites that provide this service, perhaps the most famous of which are: Coinbase.com, Xapo.com BitStamp.com, or through the official website of www.Bitcoin:buy.bitcoin.com

By rendering the algorithms that must be solved more difficult as time goes on and the number of miners rises, the designers of bitcoin will make it increasingly harder to produce it through mining, ensuring that no more bitcoins are ever created.

#### 3.2- The position of countries and economists on the Bitcoin currency:

The stances of countries on the bitcoin currency varied from acceptance to rejection, and in some cases, neutrality, and the first country that dealt officially and accepted the bitcoin currency in 2016 in paying taxes was Switzerland, then the German government followed suit and officially recognized it as a type of electronic money, allowing the German government to accept it. Profits produced by companies dealing in bitcoins are taxed, whereas individual transactions are tax-free, and the European Court of Justice has accepted bitcoins for tax purposes.

In this regard, a ruling was issued by a US federal judge that Bitcoin is a currency and a type of cash, and it can be subject to government regulation. A federal court in the US state of Colorado considered the case of purchasing Bitcoin units on credit and when the payment date jumped in value, the debtor refused to pay their value at the time. The judge ruled that the value should be paid at the time of fulfillment. xviii

The Las Vegas-based "Robocoin" company installed the world's first ATM for bitcoin in the Canadian city of Vancouver, making Canada the first country to embrace such a device. Canadian Calgary and the others in the United States of America. This device is called Kiosk will be installed in the cities of Seattle and

Austin, USA, and it is very similar to a traditional ATM, but it includes scanners to read personal identification documents such as a driver's license or passport to confirm the identity of users.

China, in turn, issued new laws forbidding the use of "Bitcoin" and instructed financial experts in the Chinese Central Bank to work on issuing a private digital currency that can be controlled and circulated by the country's financial system. The head of the research unit at the Chinese Central Bank, Yao Qian, said that digital currency has several benefits, including reducing the cost of remittances, expanding the scope of the financial system, and facilitating financial services, so the electronic currency imposes itself, so what he is doing with his colleagues in the Chinese Central Bank will be the green light for the process of issuing an electronic currency for China, and it is managed by the bank The Chinese central bank in order to maintain safe trading, market confidence, and transparency. xix

Concerning the Arab World countries, they started using Bitcoin relatively late, as it was announced that this currency was accepted for the first time in Jordan in a tea bar in the capital, Amman. This was followed by a pizza restaurant and an ATM in Dubai, and the Safeer Market became one of the first markets in Kuwait and the Middle East to accept Bitcoin in its transactions. As for the electronic currency in the Arab media scene, news articles have recently begun to talk about it, albeit slightly. xx

Economists are divided between those who feel this currency is a scheme to dominate the global economic system and those who believe it is the future of the global monetary system and that people will convert to money in the future. Both the use of this money and the progressive abandonment of paper money have their justifications.

The CEO of JPMorgan, one of the largest financial banks, said about Bitcoin: "This is an investment bubble," and here he means that it will be for a short period of time, then it will end and everything related to it will end with it. Some international organizations have underestimated the risks posed by digital currencies to the fundamentals of the current financial system, as the International Monetary Fund indicated that the volume of digital currencies is still very small, estimated at \$7 billion, or 0.1%, of the \$4.1 trillion dollar money supply.

According to the chief economist at Citibank, Bitcoin has failed because it demonstrates the risk of hacking, which is a fundamental flaw in programming. He is referring to the numerous hacking incidents, the most significant of which involved the Japanese company Mt. Jox in 2014, which lost thousands of coins in a single day. Bitcoin was valued at that time at \$480 million, without investigators being able to know the source of this theft until today, as well as the company "Coincheck" when was hacked by professional hackers in digital currencies and networks and they stole digital currencies from it for an amount that amounted to \$534 million in January 2018, in addition to the breach of the Nice Hash website, and the breach led to the loss of more than 4,700 bitcoins, which is worth more than \$78 million at the price of that time in 2017, and other hacking incidents. xxi

According to Frédéric Oudia, CEO of the French company SocGen, governments cannot control transactions involving cryptocurrencies (such as bitcoin) if they cannot identify the parties involved. As long as cryptocurrencies cannot be controlled, they will never replace traditional currencies, so there is no future for them. Despite the fact that some of the transactions made use of blockchain technology when the business went public.

Stefan Hofritscher, Allianz's head of global strategy and economics, warned that Bitcoin would eventually lose all of its value and become worthless. Forbes editor Chuck Jones also confirmed that investing in digital currencies is dangerous speculation and the market is highly unregulated, and everyone who thinks about this matter should be prepared to lose their entire investment. xxii

Janet Yellen, the head of the Federal Reserve (central bank), provided the following definition of digital currencies: as being an "origin for speculation" it is not a fixed source of value and is not considered legal tender, explaining in her last press conference as head of the US Central Bank, that the risks caused by "Bitcoin" are limited, and this Because the digital currency plays a small role in the payment system in the United States, she also responded to fears of losing money in such financial instruments by saying: "I do not see a great danger in this to financial stability."

Nariman Behravesh, the head economist at IHS Market, is one among many who supports it and believes that the technology that supports cryptocurrencies "blockchain" has great transparency, and will be used in all transactions in the future, but he warns that few cryptocurrencies will survive "but they will become part of the system global finance over the next ten years. xxiii

By March 2020, according to Fundstrat Global Advisors' head of research Tom Lee, the price of bitcoin will rise to \$91,000. He also developed a database, statistics, and graphs on bitcoin that help visualize currency trends in the short and long term. The data included the cost of mining. Bitcoin, hourly, day, and month trends for the currency, as well as technical analysis. xxiv

#### 3.3- The future of Bitcoin:

The public was surveyed by the American website insidewith.com regarding the significance of the Bitcoin currency and if it may be included in the assortment of lawfully traded currencies: "Should the government classify Bitcoin as a legal currency?" 1,504,275 people voted "No", or 82 percent. % of the respondents, while 393,648 people did not vote "yes," or 18%. This referendum was preceded by a decision issued by the Securities and Exchange Commission to refuse to classify Bitcoin from the list of legally traded currencies in the United States of America. This obsession and fear of the financial authorities towards digital currency cast a shadow over the trading of this currency. xxv

It is understandable that governments are wary of using digital currencies, especially Bitcoin because they are new, limitless, and impossible for the government to regulate. The risks expected from the spread of Bitcoin and the rest of the digital currencies are divided into two types of risks as follows: xxvi

#### A- Risks expected for individual users:

High Volatility: Bitcoin price is very volatile. The typical 30-day volatility is around 40% and the 90-day volatility is close to 70%. These fluctuations in value are difficult for many people to deal with.

Government legislation: If the government deems bitcoin illegal it will be a big problem, at the moment, the government's position on cryptocurrencies is not clear and the risk is real because bitcoins are not subject to taxation. Government regulations can make Bitcoin less attractive and thus these restrictive regulations will greatly contribute to its depreciation.

Competition: Other cryptocurrencies could easily overpass bitcoin. Offering faster transactions, complete anonymity, storage space, and other improvements could lead to a decrease in the market share of Bitcoin. If we look at the high quality of emerging digital currencies, this scenario seems very plausible.

Security of services/products: In order to be able to use bitcoins you need wallets, exchanges, payment processors, etc. Not all of these services are completely secure, and if your money is stolen, all you can do is hope your service provider will give you your money back.

Lack of Safety Mechanisms: There are no safety features with Bitcoin. You will be issued a private key or a set of unrelated words that will safeguard your wallet at the start of the transaction. Your money will be lost along with your key if you misplace it. There is no way to change your password, get in touch with customer service, or prove your identity to get your account back. When your account is lost, there is nothing anyone can do to help you get it back.

#### B- The expected risks to the global economy:

Impact on foreign financial transfers: Remittances are the engine of growth for economies that depend largely on a workforce from abroad. Currently, banks that charge extra for processing and transaction fees facilitate remittances. Also, the transaction time is fairly slow, and it will take the recipient no more than seven days to get the money. Using bitcoin, people can get around these warnings and get more out of their money than traditional money transfers would require. Moreover, currency transfers via these transfers are quite expensive, while bitcoin transfers are much simpler and require none of these costs at all. From this, we can only expect overseas workers to rely heavily on bitcoin as a more convenient and less expensive way to send money back to their families.

Environment and Economy: Bitcoin is mined through a complex infrastructure system and software.

Similarly to any other traditional method of mining, bitcoin mining also affects the environment in different ways. As the servers used in mining consume a large amount of energy. We can only imagine how much is spent on running countless servers around the world. In response, environmental legislation will need to be introduced to address energy consumption related to bitcoin mining.

Strengthening the digital economy and the beginning of the decline of the traditional economy: Adam Smith initially proposed the concept of specializing in the wealth of nations, and digital currencies are serving as a new sovereign monetary power, encouraging the creation of a radical new sector in the wholly uncontrolled digital economy. In his theory of comparative advantage, David Ricardo later developed this idea, proposing that nations should specialize in industrial production that offers distinct advantages. The same is true for cryptocurrencies, and establish its own comparative advantage by utilizing the Internet's infrastructure directly.

In the same line of thought, countries can take advantage of these digital currencies, especially small countries. Adopting Bitcoin as a major currency can represent a way to attract companies and businessmen, which in turn will enhance economic and technological development.

In case this currency is properly used, it may develop and become a new way of dealing, as it is a more effective and less expensive way to transfer money, and the matter depends on the stability of its exchange rate against other currencies, the stability that remains subject to the position of governments and the adoption of a greater number of companies and stores for it.

Without a question, Bitcoin is a desirable currency due to its simplicity, decentralization, and availability of free services. It is also contentious due to abuse, but it prepares the way for a virtual currency system that may change or add new services to the current global financial system. xxvii

#### Conclusion

From its very beginnings, the Bitcoin currency has sparked considerable debate among economists and governments, owing to a number of ambiguous issues concerning it, including the entity that created it as well as the currency's users, as well as the reason for its high value in the absence of any official body, authority, or central bank. It has been embraced, and there have been no economic or legal studies conducted on it, notwithstanding the ambiguity surrounding this currency. Moreover, it has attracted many users who accept to deal with it from individuals and institutions, and adopt it as a means of payment, due to its ease of use, and its transfer in the electronic market. This does not negate the fact that dealing with them is fraught with many risks, starting with their connection to illegal activities such as money laundering, financing terrorism, drug trafficking, and human trafficking..., up to the possibility of being exposed to piracy and electronic access.

#### Referrals and references:

Consider Times New Roman font, size 10, and interlines spacing 1. The bibliographic sources of the scientific material in the article are only those from which quotations are made, and precise exactly page / The referrals and references are arranged sequentially as they appear in the text of the text, and are all listed according to the American Psychological Association (APA) method, and be automatically placed margins in the last article (insert automatically and not

manually) and not in the end of the page, the same way included in this template as follows:

- 1. Ahmed,f. k. (2016). the role of collaborative culture in knowledge sharing and creativity among embloyees. *pakistan journal of commerce and social sciences*, *vol* 10(no 2), 338,339.
- 2. Huma, a. a. (2014). Impact of organizational culture on organizational commitment and job satisfaction. *Europen journal of business and management*, vol 6(no 27), 31,32.
- 3. Joosung, l. (2018). The effects of knowledge sharing on individual creativity in higher education institutions. *administrative sciences*, *vol* 8(no 21), 3.
- 4. sharareh, m. m. (2013). relationship between organizational structure and knowledge sharing culture. *interdisciplinary journal of contemporary reserch in business*, *vol* 5(no 2), 519,520.
- 1. Grant Thornton. (2016). Digital, Virtual and Cryptocurrencies: Issues and Accounting Risks. Grant Thornton International Ltd. Available At: hptt://www.grantthoronton.global.com.
- 2. South African Institute of Professional Accountants (SAIPA) . (2018) . Accounting for Cryptocurrency. Journal of Professional Accountant, Issue 32.
- 3. Pano Rama Stock Exchange. (June, 2018) . "Virtual Currencies: Their Risks and Mechanism of Action: Palestine and Its Position on Dealing in Digital Currencies. a specialized electronic publication, available at: http://www.pex.ps
- 4. Bunjaku, F., Gjorgieva-Trajkovska, O., and Miteva-Kacarski, E. (2017) . "Cryptocurrencies: Advantages and Disadvantages". Journal of Economics, Vol. 2, Issue. 1.
- 5. Ivaschenko, A.I. . (2016) . "Using Cryptocurrency in The Activities of Ukrainian Small and Medium Enterprises in order to Improve their Investment Attractiveness. Problems of Economy, Vol. 3.
- 6. EBA Opinion on virtual currencies. European Banking Authority, 4 July 2014
- 7. Statement of the Islamic Economic Forum on the WhatsApp regarding the legality of Bitcoin held on: January 11, 2018, p. 9.
- 8. Virtual Currency Schemes, European Central Bank, October 2012, p:13, Virtual Currency Schemes-a further analysis, European Central Bank, February 2015, p 4.
- Satoshi Nakamoto, Bitcoin: A Peer-to-Peer Electronic Cash System, Available at: https://web.archive.org/web/20191231235902/https://bitcoin.org/bitcoin. pdf
- 10. Salah, Abdel-Fattah Mohamed Ahmed, (2015), "Bitcoin: An encrypted electronic currency that may cause a new global economic crisis," International Islamic Economics Journal, Issue 33, available at: www.giem.info http:/p: 25
- 11. Hamed, Mahy Eddine, (December 2014), "Bitcoin Electronic Currency", Faisal Islamic Bank of Sudan, Issue 76, available at: http://search.mandumah.com
- 12. Peter D. Devries, An Analysis of Cryptocurrency, Bitcoin, and the Future, October 2016, Available at: https://www.researchgate.net/publication/324330313,p,5.

- 13. https://islamonline.net/23540 The digital currency "Bitcoin": is it an economic bubble?
- 14. Ghassan Muhammad Al-Sheikh, Jurisprudential Rooting of Digital Currencies Bitcoin as a Model, The Fifteenth International Conference on: Virtual Currency in Libra, April 16-17, 2019, University of Sharjah, pp.: 32-34.
- 15. Adnan Al-Jawarin, The Economic Effects and Expected Risks of the Bitcoin Currency, April 2018, available at: https://www.researchgate.net/publication/324330313, p:4
- 16. Salah, Abdel-Fattah Mohamed Ahmed, reference previously mentioned.
- 17. Adnan Al-Jawarin, reference previously mentioned, p.: 4
- 18. Ahmed Mohamed Essam El-Din, What do you know about Bitcoin, Research and Development Department Journal, Issue 73, September 2014, p. 51
- 19. The digital currency "Bitcoin": Is it an economic bubble?, https://islamonline.net/23540, reference previously mentioned.
- 20. Installation of the first crypto ATM in Dubai, available at: https://ar.cryptonews.com/news/dubai-first-crypto-atm-installed-2946.htm
- 21. Statement of the Islamic Economic Forum on the legality of Bitcoin 18 January 2018, available at: https://bit.ly/2UibK1f
- 22. Bitcoin on the verge of falling below \$8,000, available at https://www.aljazeera.net/news/scienceandtechnology
- 23. Bitcoin, reference previously mentioned, available at: https://ar.wikipedia.org/wiki
- 24. https://www.aljazeera.net/news/scienceandtechnology
- 25. The digital currency "Bitcoin": Is it an economic bubble?, reference previously mentioned.
- 26. Adnan Al-Jawareen, The Economic Effects and Expected Risks of Bitcoin, reference previously mentioned, pp. 11-12.
- 27. Adnan Mustafa Al-Bar, Blockchain Technology and Electronic Currencies, an article published in The Week Magazine, June 2018, p. 7.