
The legal nature of cryptocurrencies and the obstacles to its identification in Iran's legal system

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ABSTRACT

Cryptocurrencies were created in order to develop a peer-to-peer payment system without the presence of intermediaries such as banks. Cryptocurrencies are managed in a decentralized manner, and the entire process of publication, payment, confirmation and processing is done by users. Understanding the nature and emerging legal issues surrounding cryptocurrencies is inevitable due to the expansion of their use and the need to identify the nature and legal aspects of cryptocurrencies. Regarding the nature of cryptocurrencies, although custom and users consider it as internet money, but from the legal point of view, it is not as compatible with the concept of money as it should be, and they do not have some necessary functions and conditions. In the international arena, the nature of cryptocurrencies is different and some people consider it as goods, money or rights. From the point of view of jurisprudence, cryptocurrencies can be examined and reflected on from individual and governance aspects, and from the governance aspect, there may be issues and problems. At the moment, in the current laws of Iran, legal establishment for cryptocurrencies is not considered, but by applying the existing laws in the country with the functions and definitions of cryptocurrencies, it can be concluded that cryptocurrencies also have "credit tax" and are "similar" to unbacked money. It is considered, therefore, in case of monitoring and legalization, its use will not conflict with the interests and rights of the public.

Introduction

Every research is preceded by questions, and the purpose of research is to find appropriate and scientific answers to the questions; Therefore, the researcher must first raise his questions in a scientific manner and define their limits and gaps, otherwise it will be difficult to achieve the goal. Regarding the current issue, i.e. the legal aspects of virtual money, it is necessary to first state the issue, the importance of the issue and its goals, and then state the questions, assumptions, and their records, and finally state the order of the chapters.

Considering the high volume of global exchanges, it can be seen that financial exchanges between other people are not limited to the geographical boundaries of a country or a specific world region and global trade is expanding rapidly. In global money exchanges, many intermediary institutions, each of which has a specific task, play a role; The same breadth and complexity of wide and long international devices has always created problems and difficulties; Therefore, economic activists are always looking for ways to facilitate world trade as much as possible. Today, many financial technologies have been introduced, each of which has its own unique features. Among these financial technologies, digital currencies or virtual money have attracted everyone's attention due to their work and the unique features they offer. Virtual money or digital currency or cryptocurrency in a general definition is a digital encrypted currency that is on the Internet and is used in many daily exchanges of people in different parts of the world. These types of currencies are the real version of online point-to-point electronic payments that enable direct transfers from one side to another without going to a bank or other financial institution. Cryptocurrency is a type of financial asset that exists on a digital, decentralized and transparent platform called block chain. These assets can earn money in working conditions. The nature of digital currencies has not yet been properly defined at the international level, and a single definition of it is not provided. Some people define it as money, some people consider it equal to gold, oil and the like and give it the title of goods. In no country has a special law been written about these currencies, which today number more than 1,500 currencies, and countries have only declared their legality or illegality. In Iran, there is still no law on this matter, and it is not yet clear what its legal status is and how the contracts concluded through it should be defined. Whether a digital currency is money or a commodity will have many legal effects on transactions, and this definition may change the nature of a transaction.

The expansion of the use of cryptocurrencies will have potential effects on the monetary and currency policies of the country, and along with the creation of new opportunities, it will bring threats to the public and the organizations that use it. Legally and jurisprudentially, as well as at the international level, there are many differences of opinion in this field, because many consider this type of currency to be the cause of prosperity and prosperity, and some people disagree and believe that virtual money has no place in the law. And failure to monitor it by an institution will cause corruption, fraud and many crimes.

Traditional money

The path of evolution of money from ancient times to today is not very clear. What is said about the evolution of money as a means of exchange, a unit of measurement and a means of preserving values is more the result of human imagination than objective scientific studies. In fact, there is no evidence at hand that shows the historical events that led to the evolution of money from its simple state to its very state. today's complex) has ended up clarifying. However, we know that money in the sense that we know it did not exist in primitive societies, and exchanges between people were in the form of exchanging goods with each other, and in this way they met their needs.

Exchange goods for goods

The exchange of goods for goods was the most primitive form of exchange in the past. Each person acquired skill in producing a product and produced that product with better quality and cheaper cost, and exchanged the surplus of that product with others and in this way met his other needs. Today, transactions and exchanges that take place in the form of barter, i.e. at the same time as the sale of a product, another product is purchased, are called direct barter transactions or direct clearing or net barter. This type of exchange also had disadvantages, including that each supplier of goods had to find a specific person who, in addition to buying his goods, would also offer him the desired goods for sale. For example, someone who has produced wheat and needs wood, should find someone who, in addition to buying his wheat, also has wood available to exchange with him. Also, there was no standard to measure

the value of each of the goods, and each of the parties had to determine the value by themselves; Such problems always slow down the exchange cycle. For this reason, societies gradually came to the idea of choosing commodity money as a medium of exchange.

Commodity money

With the expansion of the scope of production of goods and the diversity of human desires, the possibility of barter exchange of goods became more limited, therefore, in order to speed up the exchange, the existence of money became necessary and mankind used commodity money; It means that you choose a specific product as money, the choice of specific products as money depends on many factors such as culture, customs, weather, climatic conditions. For example, inhabitants of cold regions used animal skins, coastal communities used shells, hooks, inhabitants of tropical and African lands used elephant ivory as money.

The money of goods basically had 5 characteristics: First, these goods were rare, because rarity is the first requirement for the value of a thing, and an object like an ordinary stone has never had an exchange value. Of course, sometimes a commodity was rare and valuable in one place and lost its value in another place due to the abundance of inventory, which was considered one of the problems of commodity money. The second characteristic of commodity money was its recognizability, that is, the common people could recognize it, and it was not like precious stones that recognition of them was a specialized matter. The third characteristic of them was that they could be divided, that is, in exchange for a certain amount of goods that were received, they could divide a certain amount of money for the goods and give them to the other party. The fourth characteristic of these goods was that they were likenesses. In principle, goods were chosen as money for goods that had similar ones, and in other words, they were not the property of a guardian. Of course, this feature could not be enough to exclude a product from the scope of rare goods. The fifth feature was the easy carrying of a product; Because for exchanges, it was sometimes necessary to transport goods over long distances, and this was considered an important feature. In general, in different societies and at different times, many commodities have played the role of commodity money, such as cattle, grains, olive oil, wine, maidservants, slaves, salt, whale teeth, tobacco, leather, cigarettes, copper, iron, Nickel, Brass, Warsaw, Diamond, Silver and Gold. Each of the mentioned goods in the role of commodity money had advantages and disadvantages compared to each other. Four endings, maids, slaves, or diamonds cannot be crushed, but olive oil, wine, do not have this defect, and instead, four endings with births add to the wealth of the rich, and among metals, gold and silver, especially gold, due to having Economic features have been able to play the role of commodity money well for a long time. In this regard, the physical and chemical properties of gold were added to the cause and strengthened the role of commodity money. Gold and silver directly played the role of commodity money for a long time. After some time, human beings came to the conclusion that gold and silver have all the positive characteristics of becoming a monetary unit accepted by everyone, and with the diminution of the role of other commodity money, the first monetary unit was formed and around 2,500 years ago for the first time, the first metal coins were minted.

The emergence of new money

In addition to printing money without backing by governments, the banking system also plays a very decisive role in increasing liquidity. One of the ways to increase liquidity in the society is the fractional reserve banking system that is implemented in most countries of the world these days. In the fractional reserve banking system, the bank is allowed to physically keep only a part of its customer's deposit. Although the customer sees the deposited amount in his account, the bank only has a part of this money in physical form. In order to increase their income, banks keep a part of users' deposits and provide the rest as loans to their other customers and earn money from the profit from loan repayments. Consider a situation where the savings rate is 10%. In this case, the bank has only 10% of the total amount of its debts at any time. Therefore, if 1000 dollars is deposited in the bank, this 1000 dollars can be converted into 9954 dollars in 50 lending times. This increase is as follows. In the first stage, due to the reserve rate of 10%, the bank keeps only \$100 and lends \$900. A customer who has taken a loan is likely to use this money to buy goods. The second person who receives this money will most likely deposit this money in another bank. In the second bank, because the reserve rate is 10%, \$90 of this \$900 is kept and \$810 is lent. This cycle continues until the initial \$1,000 becomes \$9,954, which creates 10 times

the amount of money in liquidity.

Currently, all banks in all countries of the world use the fractional reserve banking system. Economists in favor of deficit-reserve banking believe that this system makes the economy flourish; Because in the opposite system, which is full reserve banking, the bank has reserves for all its debts. Hence, the bank cannot invest its money in various matters and the saved money is not available for investment in other matters. Also, this system will generate a lot of profit for the bank because the bank will also receive bank interest from the loans it has created without backing. Opponents of this system believe that this system increases inflation. Also, because the bank actually lends money that it does not have, it is considered a form of transaction fraud. Some believe that in the Islamic system, only banks should operate as full reserve banking. Therefore, lending money that does not really exist is considered a form of gambling and haram. Some economists believe that, for the first time, banks have started to produce digital money by creating unbacked digital money in people's accounts, and in every transaction we use digital or virtual money that has no external support. The electronic revolution has also affected the means of payment of coins, bills, checks, and plastic cards, so that today we talk about electronic money. Electronic money is especially important in international transactions. Today, in advanced economies such as the United States of America, banknotes have a small share in annual transfers, that is, only about 1%, and the importance and share of checks has also decreased and is limited to about 20% annually, and instead, the importance and share Added telex and telegraphic transfers. In such a way that these types of transfers have the dominant share of 80%. In fact, the use and application of huge computers in the banking system, which is also inevitable, together with the security and ease of moving funds, which is also economical, has led to the use of not only banknotes on a limited scale, but also checks. It will gradually give place to telegraphic and telex transfers and electronic money will be introduced. With the spread of electronic money in the field of commerce, physical banknotes will be removed.

Electronic money

Electronic money is used in banking literature in two general and specific senses. In a general sense, electronic money includes all electronic payment methods. In a special sense, electronic money can be divided into two categories. The first category of "centralized" electronic money, PayPal, Mastercard, Web Money, Visa, and the second category of "decentralized" electronic money such as Bitcoin, Ethereum, Ripple, etc., which are referred to as cryptocurrency or virtual money or digital currency. In other words, cryptocurrencies themselves are a subset of electronic money in their general sense. In centralized electronic money, the currency is supported by traditional currencies. For example, PayPal is backed by dollars. In a way, it cannot be said that PayPal PayPal is a currency. For example, by charging 1000 dollars, you will receive 1000 PayPal units, and when you sell it, you will receive money equal to 1000 dollars. Centralized currencies are provided by a certain company, in other words, its wallet. accessible only on one or more special sites. In this sense, electronic money means electronic currency units issued by an issuer and stored in the form of a magnetic chip embedded in a plastic card. To perform the payment process, when using In electronic money, the holders of electronic currency units transfer from their card to the seller's card; therefore, this transaction does not lead to a material transfer of any debt or credit, but the transaction amount is deducted from the buyer's chip and added to the seller's chip .

Decentralized electronic money means that no person or institution is behind it and does not support or control it. Also, these currencies are generally not backed by physical goods such as precious metals. Transactions are done by blockchain and no specific company owns them. Users can do peer-to-peer transactions without needing to register by installing the desired currency wallet on their computer or mobile phone. These currencies do not have the support of other currencies and operate in a completely unique way. For example, Bitcoin is a decentralized digital currency that operates without intermediaries and its units are extracted and distributed in a decentralized manner and its price will vary. The codes of these cryptocurrencies are open source ³ and thus belong to the public domain. Most digital currencies are designed for greater security, elimination of intermediaries, and anonymity. The first digital currency is Bitcoin, which was created in 2009 and is now the king of the world of digital currencies. In the past few years, many digital currencies have been introduced and offered. Currently, more than 1500 digital currencies are traded in the global markets. Atrium, Bitcoin Cash, Bytecoin, Litecoin, Neo, etc. are

digital currencies.

The concepts of virtual money and the technologies used in it

Our goal in this section is to explain and understand technical topics and definitions about virtual money, so that after understanding the issue, we can investigate their nature.

Practical concepts

So far, there has been a lot of media coverage around virtual currencies. Many legal figures and even jurists have had to express their opinions in this regard. Considering that this is a complex issue that combines cryptography, software engineering, economics, law and even sociology, it is difficult to understand the nature and consequences of this issue with only a superficial view, so many Interpreters may not have a clear picture of the concepts, how they work and their implications. The purpose of the topics ahead is to equip the reader with a knowledge, however brief, to examine the technology of virtual currencies.

Decentralized

Most of today's currencies, such as the euro and the dollar, are unbacked currencies. Unbacked money has no intrinsic value and is not backed by anyone. The reason why it is called unbacked money is that the legality and existence of a currency is declared by the government decree (unbacked order) and that currency finds a foreign existence. Now, accepting money without backing depends on expectations and social custom. If trust in a currency and money is lost due to irresponsible monetary policies, the acceptance of unbacked money can stop. Experience has shown that usually leaving the government's hands free in adopting monetary policies is not a good way, because governments have a high incentive to solve and reduce the pressure of short-term financial problems by increasing the money supply. This behavior can lead to high inflation and loss of confidence in the common currency. The conventional solution is to leave monetary policy making to a semi-independent central bank. The central bank is obliged to take the necessary action by managing the monetary policies with the aim of economic growth, price stability and in some cases the stability of the financial system.

The decentralized nature of cryptocurrencies contrasts with the structure of unbacked currencies. Central banks make monetary decisions after evaluating the evidence gathered from economic development and growth. In decentralized systems such as virtual currencies, arbitrary decisions are not possible. The main creators of the system have taken many decisions in the design phase. These decisions must be carefully balanced and provide the necessary motivation for users with different goals. Otherwise, the decentralized system is doomed to failure. Making changes in the peer-to-peer network must be approved and agreed by the majority of participants; But even then, if a significant minority does not accept the changes, implementing the changes can be technically very challenging and put the network at risk of fragmentation. One of the advantages of decentralization of power is that the changes that are not in line with the interests of the majority of users will be rejected. On the other hand, in centralized systems, sometimes the side effects and adverse consequences of adopting some changes will affect many participants. Like devaluing a currency by overprinting it, which usually leads to high inflation.

Another characteristic of decentralized systems is their resistance; Decentralized systems are strong enough to withstand attacks against them by internal and external forces. This feature has been very important for the existence of cryptocurrencies. Until today, many governments have made efforts to create digital money in a centralized manner, which in most cases have been doomed to failure. However, to defeat a decentralized system, all users must have the necessary will, and this will be much more difficult than centralized systems. The main technological success offered by cryptocurrencies in a decentralized platform is solving the problem of spending the same currency twice in a distributed financial database. A double spend attempt occurs when a user tries to spend some funds twice. All financial systems must fail this effort. This issue is relatively simple in a centralized system. In centralized systems, all transactions are recorded in a central database and attempts to spend new money in the future are first checked in said database. In a decentralized system, many versions of the database are shared among the same nodes, and maintaining the state of the database in a consistent and stable manner among these nodes has major computational problems. In the case of cryptocurrencies, this problem is well-solved by deliberate solutions.

Open source

Virtual currencies are open source software. Open source software code is freely available to anyone to use, modify and redistribute. A large part of the Internet's infrastructure runs on little-known open source software. The goal of open source software projects is to make software development similar to peer-reviewed research. By releasing the source code for the public to see and review, the goal of the open source approach is to increase the quality of the software. The difference between open source software and proprietary software is in their license. A proprietary software license gives the end user the right to use a copy of the software. However, ownership of the software still remains with the software publisher. In contrast, an open source license gives the end user the right to use, copy, modify and redistribute the software. The right to copy the software still belongs to its creator, but the creator of the open source software transfers and delegates his rights as long as the end user complies with the license and certification obligations. Another difference between open source and proprietary programs is that proprietary programs are typically distributed as compiled binary files; This means that the software is usually distributed in machine language between users and end users. To gain knowledge about what the software is doing, users must interpret the machine code in a time-consuming process called reverse engineering. Often proprietary software licenses prohibit the user from using reverse engineering techniques; Therefore, under a proprietary software license, the user is not normally allowed to understand and pursue awareness and knowledge of what the software does. In contrast, open source software is always distributed with a copy of the source code. A user who wants to know what the software does, just read its source code. For example, open-source cryptographic software has the advantage of allowing users to check if the software has backdoors or security vulnerabilities. It was highly unlikely that cryptocurrencies would be released under one of the proprietary software licenses. If a cryptocurrency was published under one of the proprietary software licenses, the creator could create new cryptos and send them to fake addresses, and no one could monitor this issue. This is the reason why most cryptocurrencies were launched as open source or migrated to an open-source license.

Proprietary software is required to be supported, maintained and updated by the company that publishes it. In contrast to open-source software, they start their life from the date they are published for the first time; Therefore, the decision of the main originator to abandon the continuation of work on the project will no longer be important; Because other developers can continue the work. For this reason, it doesn't matter who the original creator of a cryptocurrency is or where he moved to and what his goal was. Open-source projects are resilient and flexible enough that some developers disappear or become discouraged from continuing to work on the project, and other developers from around the world can continue the work.

Proponents of open-source projects argue that software companies publishing proprietary software often lose their motivation to make innovative changes because they have gained a large share of the market with their initial product. They have positioned themselves in that market. Many software markets are exclusive; Because a software product has taken a large share of the market by using the advantage of being the first; Therefore, innovation is lacking in many software categories. On the other hand, if open-source software occupies the majority of the market, this will not be the end of innovation and anyone else can improve and add new ideas; Therefore, the speed of innovation in open-source software can be higher than in closed software. One of the problems facing many open-source projects is the tragedy of shared resources. Although many people benefit from an open-source project, few developers may be motivated to contribute. Many open-source projects suffer from budget or timing issues in their development offerings. Some evidence suggests that many virtual currencies are facing such problems.

Technologies used in virtual currencies

Value transfer has traditionally been a slow, highly manual and human process. Basically, virtual money is a protocol for creating a distributed community. This protocol allows us to transfer value securely over an untrusted path. Virtual money is an open platform for transferring value and is not limited to money. Virtual currencies can also transfer digital assets. This technology is cheaper and faster than most alternatives and can create opportunities for new applications. The digital transfer of value enables the use of smart contracts. Smart contracts are contracts that do not require human interpretation and intervention to complete, their settlement and settlement is done entirely by a computer program. Smart contracts are contracts based on mathematics, as opposed to rules based on law.

The digital transfer of value opens the door to new applications where smart contracts are used. One such application is autonomous agents. These factors should not be confused with artificial intelligence. These agents are simple computer programs created for a specific task. For example, we can mention computer programs that run on the cloud that offer storage space to end users for rent and file sharing services. Until now, computer programs could not store value. He could not open a bank account in his own name with a computer program. With the aforementioned introduction, computer programs can create their own bank accounts, control their funds, enter into smart contracts with cloud service providers, and rent their storage space and computing power to others. Similarly, an autonomous agent can independently enter into a smart contract with end users, the autonomous agent can settle this contract and make payments in virtual currency to the cloud service provider and receive funds from end users in digital currency. In the following paragraphs, we will take a brief look at the technologies behind cryptocurrencies.

Block chain

Bitcoin was the first application of this technology and used blockchain to store users' asset information. If blockchain is an operating system, Bitcoin is software on this operating system. Transactions are grouped into blocks of transactions approximately every ten minutes. These blocks containing transactions are recorded one after the other in a chain of blocks called block chain. This method of recording information may be slightly different compared to the method of a conventional relational database.

The second paragraph: wallets

The software that helps the user to manage his funds is called "wallet". The functions of the wallet software are to securely store the end user's private keys, create transactions to send to the network, and collect incoming and outgoing transactions to show the balance of the user's account. When a user owns a large number of addresses, wallet software is ready to manage multiple addresses and aggregate funds within them. All wallet software can create new addresses. To generate a new address, the key generation algorithm must be executed.

Creating an address is simple and instant. A wallet software implements cryptographic protocols to sign a transaction with a private key. Are private keys usually stored on the user's device? Loss of private keys will prevent the user from accessing financial resources and funds; Of course, those funds are still available in the distributed ledger; But without the private key there would be no way to sign a transaction to spend those funds. As a result, it can be considered that those values are missing.

Wallet software helps the user create digital backups of private keys. Another risk for the wallet is that an unauthorized person, which we call an attacker, takes ownership of the private keys; Therefore, it is important to properly protect private keys stored on Internet-connected devices. Many wallets encrypt private keys before they are stored locally; This, of course, reduces the user's convenience in using the network, as they must enter a password to decrypt the private keys before using them during a transaction. However, if the device is compromised, the attacker will only be able to obtain an encrypted copy of the private key. He will then need to perform an exhaustive search attack, which is a very time-consuming process, to obtain the key cipher; Especially if the chosen password is chosen correctly. Private keys can also be stored on physical media, including a piece of paper or digital media that is not connected to the Internet. In this way, cold storage is said to mean that the private key is not accessible to the Internet and thus is immune to electronic attacks. These keys can be subject to physical theft. Some wallet implementations are actually full node implementations. A full node maintains a complete copy of the blockchain's distributed database. Wallets based on full nodes have the advantage of not relying on third-party partners to carry out their operations. In return, they have to pay for the storage and processing of the entire blockchain.

Much lighter implementations of wallets are also available. Lightweight wallets rely on third-party nodes that feed them information such as account balances and statements for addresses in the wallet. They also rely on a third-party node that relays transactions generated by the wallet. Lightweight wallets are suitable for devices with limited memory, processing and battery power, such as smartphones.

The third type of wallets are web-based wallets; In a web-based wallet, funds are transferred to a third-

party partner, often a website, who then manages the funds on behalf of the user. Here the user experience is similar to using online banking services. Web-based wallets provide convenience to their users, and in return, they charge a fee for managing the user's private keys. However, the user may open his web service one day and see his funds lost due to theft or fraud.

According to the current laws of the Central Bank of the Islamic Republic of Iran, the holding of cryptocurrencies by natural and legal persons is subject to the general provisions of foreign exchange laws. It is the responsibility of individuals to choose tools for keeping cryptocurrencies and ensuring their security, and the central bank does not recommend or guarantee any tool or cryptocurrency wallet. The functionality of the cryptocurrency wallet will be limited to the storage and transfer of cryptocurrency, and it is prohibited to embed solutions for purchasing goods and services and providing value-added services inside the country using cryptocurrencies in cryptocurrency wallets.

Mining or extraction

In traditional financial systems, governments simply print more money when needed; But in virtual money, money is not printed, virtual money is mined in a limited way. Computers around the world compete to mine various cryptocurrencies. People send cryptocurrencies to each other over the network all day long, but until something keeps records of transactions, no one will be able to make a transaction. The network of virtual money collects all the transactions made in a certain period of time and stores it in a list called a block. The job of the mining computers is to verify these transactions and for that they receive a reward (virtual money). This network has a long list of blocks known as "Blockchain". These blocks can be used to discover new money addresses. Every time a new block of transactions is created, it adds it to the blockchain and creates a long list of blockchains. But this network must be trusted so that nothing is done in it. This is where mining computers come in.

When a block of transactions is created, miners apply a mathematical formula to the information contained in the block and turn it into something else. This other thing is a much shorter, seemingly random sequence of known letters and numbers called a hash. These hashes are stored next to the block. Hashes have interesting properties. While creating a hash is easy, each hash is unique. So, in other words, only the computer knows what it has done and no person can access the information. Each time each computer successfully creates a hash, it receives some virtual money.

Non-governmental virtual currencies

According to the above, it seems that the main difference between government and non-government cryptocurrencies is their issuer. In other words, government cryptocurrencies or central bank cryptocurrencies are formed and distributed by a parent entity, which in most countries is the central bank of the same country, but non-government cryptocurrencies are made available to the public through the decentralized distribution network described. Another point about non-government currencies is their accessibility, which can be obtained in the process of mining these currencies, but in its government model, the distribution and publication of such cryptocurrencies is subject to the regulations of the Central Bank and is the monopoly of the same bank. Also, most of the public or non-governmental cryptocurrencies have more acceptance at the international level, and the cryptocurrencies issued by the central bank of each country are basically for the domestic use of that country and are a substitute for the national currency of that country.

Non-governmental virtual currencies such as Bitcoin and Ethereum and similar protocols have been banned by many countries and few laws and regulations have been established about them. On the other hand, some countries have accepted it and it has been accepted as a legal payment method. Iran is among the moderate countries in this field and has adopted a moderate policy regarding cryptocurrencies. In this way, the mining of cryptocurrencies is accepted as an industry, but buying and selling them through the exchange is not legal. Common currencies are backed by gold and silver. Theoretically, if a person gives a dollar to the bank. They should give him as much gold (although in practice, this is not possible, but the backing of these digital currencies is not gold, but mathematical formulas. All over the world, people use computer software to generate it. This The mathematical formula is available to everyone and anyone can check it. The software itself is also open source, so anyone can verify the correctness of its operation.

So, for example, Bitcoin and most virtual currencies are actually cryptocurrencies, they can be considered a digital asset that is just information. Their creative framework has made this vision quickly become an influential thing in the world of economics and global politics. The money kept in the bank is displayed to you as a credit number and you can convert it into a physical money; But Bitcoin and other virtual money never has and will never have a physical form and is actually just "data".

User privacy

Cryptocurrency transactions are stored in the block chain and are therefore publicly visible. However, the transactions do not include user information and only the addresses of the cryptocurrencies are included in it. This makes the cryptocurrency support anonymity because users' privacy is hidden behind a pseudonym. This does not mean that users' privacy is protected. First, the account balances held by each address are public and easily accessible just by querying the transaction output memory. Second, the addresses can be linked to each other by the weight of transactions between them. Therefore, virtual money has sometimes been compared to the status of someone's bank statement in which the name of the account holder has been removed. Since the origin of the funds can be traced, some funds, such as stolen money or money that has been determined to be used for illegal purposes, can be labeled as tainted and thus deprived of exchangeability. There are currently some proposals to register businesses and users who use cryptocurrencies, and it is believed that the next natural step would be to control the origin of these cryptocurrencies. This system makes the network fragmented and generally considered dangerous by the crypto community.

Identification of virtual money in Iranian law

Legal status of virtual money

One of the most important challenges of any emerging phenomenon in Iran's economy is the opinion of Sharia regarding it and the duty of Muslims towards it, and virtual money is one of these phenomena. Due to the complexity of this issue, jurists of different religions have presented conflicting opinions, but in general, by reviewing the opinions of researchers in this field, it can be concluded that the cryptography should be extracted with the two approaches of individual jurisprudence and government jurisprudence on two levels. and transaction as well as examined with three scenarios of goods, money and securities. According to what was said before, some consider digital currencies as money and virtual currency, therefore it is necessary to examine the nature of money from the point of view of jurisprudence and then the legal elements and rules that govern it in the case of money. Virtual including Bitcoin was analyzed. In this regard, we will first examine the jurisprudence of virtual money and then discuss other legal issues.

Jurisprudential review of virtual money

Imamiyyah jurists have had a different approach to the phenomenon of money, especially in recent centuries when the development of money has been more fraudulent than before. This difference of opinion is caused by the understanding of the jurists and their customs of the time about the concept of money. The first point in analyzing the phenomenon of money is to consider it as a phenomenon in its current emergence and not to look for the traces of current money in former institutions and past societies. Therefore, the first step in identifying the rules of virtual money is the jurisprudential explanation of the nature of money. By explaining the nature of money and matching it with virtual money, the rulings related to this form of money can be explained. Before analyzing the nature of virtual money, it is necessary to pay attention to the fact that based on the analysis of the various types of virtual money, the author assumes that virtual money is essentially money. and not treating them as commodities; Although there are detailed discussions about whether cryptocurrencies such as Bitcoin are money or commodities, and some governments have recognized it as a commodity, in this section we are in the position of jurisprudential analysis of virtual currencies.

The nature of credit property of money and its support

In a division, goods can be placed in three categories: the first category of goods that have consumption value and the purpose of their exchange is their own use and consumption; The second category of goods

that have both consumption and exchange value, these goods were more popular in the past and have a clear appearance in the period of barter transactions, and even the coins, like dirhams and dinars, are of this type. The third category is goods that have only pure exchange value, the only example of which is current money. In fact, current money is in demand for being money and not for being a commodity; They demand money for what can be bought with it. With regard to this point of view, there was no such thing as the current money in the period of legislation, and most of the jurists and jurists, when faced with the phenomenon of money and its forms, have interpreted and compared it with the dirham and dinar of the covenant of legislation, and from this point of view, their understanding can be mixed with errors. Of course, the exact understanding of the nature of money has been a dispute between experts and jurists, and the confusion of jurists' opinions about monetary obligations is due to the ambiguity in the nature of this phenomenon.

The privacy of virtual money

The private nature of most cryptocurrencies means that the publisher and creator of it is not the government and that a person or persons have created it under a certain platform is a matter of debate. Jurists believe that the privacy of virtual money does not affect its legitimacy. In the monetary laws based on the social contract between the government and the people, money is defined as credit property, maintaining the value of money based on criteria, but some governments did not fulfill this promise during financial crises. Non-fulfillment of this obligation has caused users to prefer a virtual money system that is immune from government interference.

The private or public nature of the authentic character in the monetary credit between the creator and the user is not one of the essential elements of money, work and its legitimacy. The use of Roman or Persian dinars in the era of legislation among the merchants of Hejaz indicates that they are not a reliable source of money. Therefore, if between the inventor of virtual money, as the first party of the contract, regardless of whether his character is public or private, and the users of virtual money, as the acceptor of the contract, an exchange such as virtual money is placed in exchange for goods or services of other value, and If the parties agree to it, the Shariah approves the consent of the parties subject to compliance with the general rules of contracts.

Entering virtual money into the real world

The most important challenge that has made the acceptance of virtual money difficult is its entry into the real world. Changing the amount of money by injecting virtual money into the monetary system of countries and not having control over these currencies is the most important challenge of accepting the legitimacy of the use of these currencies. . The form of manipulation of the monetary system affects the monetary policy makers of the current currencies as well, and it is even possible that with the continuation of this practice and with more distrust of the people, as well as the expansion of the virtual world in the human lifestyle, the power of the current monetary policy makers will decrease and the inventors of money Virtual spheres steal monetary power. However, in the current money system, it is not easy to arrange two monetary products of the real and virtual world in one system.

Legal review of virtual money

After examining the virtual money and its compatibility with money from the point of view of jurisprudence, which is a requirement for the recognition of money in Iranian law, now we will examine the legal aspects of virtual money by matching these existing legal concepts and natures. The first paragraph: Taxation of virtual money, since money is one of the types of property and money is actually a financial concept, we first examine the nature of money from a lexical, economic, legal and jurisprudential point of view, because property is in various chapters of jurisprudence and in economic discussions. And it has many legal uses, so we examine its meaning and purpose from these angles and after that we come to the position of expressing the concept of symbolic property.

The concept of property from the lexical, economic, jurisprudential and legal perspectives

A) Wealth According to lexicologists, there are several definitions of wealth in the dictionaries, of which we mention a few examples. Property: It is something that is known and does not need to be defined.

Property: It is what you own.

Property: property of any kind, and in the eyes of the villagers, it refers to livestock such as camels and sheep. It should be noted that although there may be problems with these lexical definitions and cases of violations are brought, the benefit of these definitions is that they help us understand the term meaning of property in the eyes of jurists and lawyers.

Property according to economists

Throughout history, there have been three basic and general theories about the value and cost of things among economists.

Theory of value (desirability): According to this theory, wealth is (everything that is desirable according to customs and reason).

This is the theory of property (everything that is used in the production or study of the value theory of the cost of production or work).

Combination theory (cost value, utility): According to this theory, property is anything that, in addition to having utility and utility for custom and reason, also has relative scarcity characteristics.

It should be noted that this theory of integration is compatible with the theory of many jurists regarding wealth.

Property, according to jurists, none of the existing laws in Iran, especially the civil law, has defined property, and it can be said that this is due to the fact that there is room for interpretation of the law, as well as the place of custom in this area. Don't be tight. In the way of expressing the concept of property, jurists are divided into two categories, they provide definitions for property, such as Mr. Dr. Seyed Hassan Emami, who writes that property (in legal terminology refers to something that can be traded and in terms of economy has the value of exchange, and if objects do not have such value as air, they are not considered property. It has the following elements.

- 1 .It can be assigned to a person (legal, real), so air is not property.
- 2 .If it has a benefit, then a grain of wheat is not property.
- 3 .Transferable.
- 4 .It has a rational benefit.
- 5 .Property is not an indication, but the fact that it is property.

Compensating the value of money in digital currencies

There are multiple views regarding compensation for currency depreciation. Some experts and jurists believe that it is not permissible to compensate for the decrease in the value of money, and they do not consider it as a guarantor, and they consider the debtor as a guarantor of that which the debtor is a guarantor of, and as in money, it is equal to its nominal and numerical value. slow and paying more than that is not allowed. One of their reasons is that: 1- The nominal value of money is the national criterion of money. (Ayatollah Sheikh Javad Tabrizi, Ayatollah Sistani and Seyyed Kazem Haeri) 2- Compensation for the devaluation of money is an example of riba. (Ayatollah Fazil Lankarani and Ayatollah Sobhani) 3- The loss caused by the decrease in the value of money is beyond the borrower's will and we cannot force him to compensate. 4- If the debtor is obliged to reduce the value of money, the contract will be concluded with ignorance; Because it is not clear much more than the demand and the contracts that are ignorant are void and prohibited, but it must be said that the reasons presented do not prevent compensation for the damage caused by the decrease in the value of money; Especially in cases where the creditor is not satisfied with the debtor's outstanding debt. Here, based on the "harmless" rule, compensation can be awarded, and extortion by payment will not be equal to the actual value. On the other hand, some people believe in the need to compensate the value of money. Although some jurists consider money as a parable, they consider it necessary to compensate for the decrease in its value; Because they consider the purchasing power and exchange value of money to be involved. For this reason, they have said that if the value of money decreases and the debtor gives the same amount to the creditor, the simile does not apply, and it should be paid according to the purchasing power at the

time of receiving the money, so that the simile is true. (Ayatollah Mohammad Taqi Behjat and Ayatollah Sanei) Another reason that has been stated is to prevent the loss of the creditor; If the loss is large and significant. (Ayatollah Nasser Makarem Shirazi) Those who consider money or long-term people to be its guardians, consider it necessary to compensate for the decrease in the value of money because what the borrower is responsible for is the purchasing power and property of money, not its nominal value. (Mohammed Mahdi Asefi, Ayatollah Mohammad Hadi Marafet and some other jurists also believe in compensation with different reasons. In lawsuits where the subject is religion and the type of money is common and the debtor refuses to pay due to the demand of the creditor and the debtor's ability. In the event of a significant change in the annual price index from the due date to the time of payment and after the creditor's demand, the court will calculate and rule on the proportionality of the change in the annual index determined by the Central Bank of the Islamic Republic of Iran, unless the parties agree to a compromise in another way. In addition to this article, there is also a note to Article 2 of the Check Issuance Law (approved 1379), which states:

The holder of the check can order the issuer to pay all the damages and costs that he has incurred directly and conventionally in order to collect his claim from him, whether before the judgment is issued or after. The court requests that if the holder of the check requests compensation for the aforementioned damages and expenses after the issuance of the judgment, he must submit his request to the same court that issued the judgment. He accepted the opinion of the experts who consider money as a similar asset to the nominal value of credit and consider the reduction of the purchasing power of money as a loss and damage that has been caused to the subject of the contract and must be compensated, therefore, in the assumption that the debtor is late in payment and The creditor is not satisfied with the delay and ordered to compensate for the loss, but in the assumption that the parties themselves have specified a specific date for paying the debt and the money is paid at the same time, the creditor has acted to his own detriment, and since the rule of action governs the rule of harmlessness. They have ordered not to compensate for the loss. As a result, compensation for the depreciation of money can only be demanded if the conditions of Article 522 of the Civil Procedure Law exist, and in the assumption that the ruler gives a deadline because it means that the parties have delayed the deadline for paying the debt, the depreciation of money cannot be demanded. As mentioned, Bitcoin and other credit digital assets are also a type of virtual property and its purchasing power is similar, so it is justified to compensate for the lost value or purchasing power of virtual money. Martyr Sadr, despite the fact that he considers money as a property, he does not see the similarity of money only in the paper and the number of units written on it; Moreover, they consider money as something that embodies its real price, and the real price of money is its "purchasing power" or its exchange value.

Prohibition of usury and virtual money

In paragraph 1 of Article 1 of the Law on the Implementation of Article 44 of the Constitution (approved in 2013), the legislator has stipulated in the definition of usury and its types that "usury is of two types: a) Usury on loans and that is the interest that is paid according to the condition or according to Procedure, the lender receives from the borrower. b) Transactional usury is the excess that one of the parties to a transaction receives from the other party in excess of the exchange or exchange, provided that the exchange, maquill, or mazon, and arfa or shar'a are of the same gender. According to Article 595 of the Islamic Penal Code, any type of agreement between two or more people under any contract such as sale, loan, peace, and the like, with the additional condition of dealing with the same gender, or receiving an excess of the amount paid. It is considered usury and is recognized as a crime. The perpetrators, including the usurer, the usurer, and the intermediary between them, in addition to refusing the addition to the owner of the property, will be sentenced to six months to three years in prison and up to 74 lashes, as well as the equivalent of the property as a monetary penalty. In other words, the legislator has determined punishments for three categories of people and considered them criminals. The first is the one who gives usury, the second is the one who takes usury, and the third is the one who acts as an intermediary between usury receiver and usurer.

Prohibition of gambling and digital currencies

Although the scope of Gharr in the civil law has not been stated by the jurists and writers of civil law, but according to the articles of the civil law, according to the Imami jurisprudence, in the case of exchange contracts, such as sale, lease, salam, mudaraba and the like, Gharr It is relevant, as in Article

100 of the Civil Law, which stipulates: The following conditions are essential for the validity of any transaction: and Article 219 of the Civil Code, which says:

The subject of the transaction should not be ambiguous, except in special cases for which a brief knowledge is sufficient." Regarding the transactions, they are formulated in general and specify that the transaction is clear and in other words, it is not ambiguous. Therefore, in addition to selling, it can also be used in other barter contracts; Because the provisions related to obligations and contracts generally apply to all contracts (certain and indefinite, sales contracts and other contracts), unless the law specifies otherwise, such as a peace contract (Article 752 of the Civil Code) and Ja'ala (Article 564 of the Civil Code) which refer to the fact that it is not necessary for the case of peace and wages to be known from all aspects.

Functions of digital currencies

As many tools have been used as currency in previous societies and years, one of the most famous of them is wampum; Virtual money can also be traded as a currency and a means of exchange. Therefore, the currency must not be physically usable, and the important thing is that it must be rare and rare to become valuable. Accordingly, in a world that is rapidly moving from analog to digital, even a new technology like Bitcoin can be authentic and authentic, when money is also converted from analog to digital, virtual money is definitely suitable for this field. Of the thousands of different currencies that call themselves "digital currencies", Bitcoin is the first. Bitcoin is a big and credible contender. Economists and financial experts have debated for years whether it is an asset or a currency. In terms of Bitcoin valuation, this is not a big deal. It doesn't matter how people use Bitcoin or other cryptocurrencies; It matters why people choose them. Along with their technology and unique features, cryptocurrencies will bring many functions to users and adopters. But it is very important to pay attention to the advantages and disadvantages of cryptocurrencies in addition to paying attention to the many features they have.

Investigating cryptocurrencies with a governance perspective

Although some cryptocurrencies do not have any problems from the point of view of individual jurisprudence and rulings on valuation, but due to the dangers and risks raised, they threaten the country's economy and the capital of the general society and are suspected of being harmful, so their use should be avoided. It is not permissible from the point of view of Sharia and government jurisprudence, while some others such as national cryptocurrencies with real asset backing such as gold or oil will not have these issues, and due to its non-usurious nature and the impossibility of printing money without backing, it is close to the Islamic monetary system.

Governing rules

In order to examine cryptocurrencies, it is necessary to consider jurisprudential rules to examine an emerging phenomenon in the governance and public dimension. In the following discussions, we have tried to state them in a simple and easy way while preserving the scientific, legal and jurisprudential content as much as possible.

Rule

One of the important jurisprudential rules, which is the basis of many other jurisprudential rules in jurisprudence, is the Harmful Rule. Of course, there are different theories in explaining its contents. The most important of them is the theory of Sheikh Ansari based on the negation of a harmful ruling and the theory of Akhund Khorasani, which means the negation of a ruling in the language of the negation of the subject of harm, based on which the provisions of the rule negate those rulings whose subject is harm, and the Imam's interpretation of the rule that Negation of harm is considered to be due to the rulings of the Sultanate and government. According to this general ruling, any Shariah law that causes damage to the life, property, or honor of a Muslim and violates the rights of another is prevented from being implemented and practiced according to that law, and any worship or transaction that It requires a worldly personal loss - except for the basic essential duties such as Jihad, Khums, Zakat, Hajj, Qisas, Hudud and Diat, which are imposed for the sake of more important benefits - it is negated and removed. Since the indiscriminate entry of virtual money without the supervision of the government, as the exclusive policymakers of monetary policy, may damage the rights of members of the society and

national wealth, based on the principle of harmlessness, the production and flow of these money in the real economy can be considered incorrect .

The rule of respect

Respect means honoring and holding respect for everything in accordance with it. The meaning of the rule of respect is to respect people's property, to protect their property from seizure and encroachment; This means that, firstly, trespassing against them is not permissible, and secondly, in the event of trespassing and trespassing, the aggressor is responsible and guarantor. Therefore, according to the rule of respect and sanctity of damage to the property of Muslims, the unsupervised entry of this money into the real economy causes a loss in the amount of money and wealth of the real economy.

The rule of maintaining the system

One of the essential issues of jurisprudence is the need to maintain the system and prevent the disruption of the Muslim life system. The jurists have considered this principle as a rational and necessary rule to the extent that in many cases they have given up primary rulings and given fatwas to secondary rulings in order to preserve this principle. According to this rule, if it is seen that both intellectuals and intellectuals consider something good because it preserves the system and the survival of the species, or they consider it ugly because it disrupts the system, the Shariah must rule according to their ruling. ; Because he is one of the intellectuals, but the leader of the intellectuals. Therefore, considering the challenges of virtual money such as security problems, facilitation of internet crimes, tax evasion and money laundering, which will disrupt the economic and even political and social system of the society, it is expedient for the Islamic ruler to regulate the production and circulation. This form of money prevents it from entering the real economy.

Loss rule

Among the famous jurisprudential rules that jurists have adhered to regarding guarantee is the rule of loss. The provisions of the rule of loss are included in "I lose the property of another person for the guarantor". The meaning of the rule is that anyone who wastes or consumes or exploits another's property without his permission is the guarantor of the owner of the property. Therefore, if a monetary policy maker, by not respecting the expediency and jealousy of Muslims and policies that cause damage to Muslim property, causes a decrease in the value of wealth and damage to rights, it is according to the rule of loss of the guarantor, and his act of loss is based on the rule of respect and the principle of sanctity of damage to Muslim property. It is respected.

Governments' policy approach to virtual currencies

Cryptocurrencies, while having their unique advantages, also carry risks and dangers that have caused various governments to establish laws and regulations related to them. Although this is difficult, because due to the decentralized nature of cryptocurrencies, it cannot be monitored by a government body. Of course, it should be mentioned that due to the cross-border nature of these types of money, the establishment of international regulations and standards can be more helpful. Some countries have dealt with this emerging phenomenon with a positive and regulatory approach, while others have declared it illegal and limited it with a negative approach. Meanwhile, there are countries that have not yet been able to show a specific reaction to cryptocurrencies and declare a position. Below is an overview of the legislative situation in selected countries.

Positive and regulatory approach

1. America: While accepting Bitcoin, the American government considers its profit as a taxable income and collects its tax through the self-declaration process. Due to the importance of new financial instruments such as Bitcoin, the US Congress and Senate were informed about what Bitcoin is in hearings. In these meetings, Bitcoin was interpreted as the nature of virtual space (Internet) and just as the Internet had opportunities and threats, the opportunities and threats of Bitcoin were examined and it became clear that the opportunities of Bitcoin for America It is more than its threats. In sum, all American government authorities in these meetings expressed their concern about illegal uses of digital currencies, but they also emphasized that digital currencies have legitimate uses that should be

strengthened with proper regulation; Because in America, according to the existing laws, there is no need to pass a new law, but it is necessary to regulate the field. In this direction, the Financial Crimes Network of the US Treasury Department and the Ministry of Justice of this country published official statements regarding the regulation of virtual currencies such as Bitcoin. As the first priority, the American financial crime network started to regulate Bitcoin exchange in 2011. In the law approved on March 18, 2013 (April 2013), the Financial Crimes Network of the United States defined currency or real currency as follows: Coins and bills issued by the United States of America that are designated as common currency and are normally valued at The title of the intermediary of exchanges is in progress and is accepted. On the other hand, virtual currency is a medium of exchange that acts as currency in some environments, but it does not have all the characteristics of real currency and will not be placed in the place of legal money in any ruling. Therefore, by referring to this definition, it is clear that in American policy, Bitcoin and similar financial instruments are not defined as real currency, but the new title of "virtual money" is intended to apply to it. Of course, the type of virtual money that this center regulated are money that can be exchanged for real money or act as a substitute for these money.

Conceptual framework of cryptocurrency policy

In a document called "Introduction to the Regulation of Cryptocurrencies in Iran's Economy", the Vice President of Economic Research of the Research Center of the Islamic Council of Iran has outlined a conceptual framework for examining the status of cryptocurrencies, which we will examine. According to the items stated in the pros and cons section, the challenges can be categorized into four main axes. These four axes are: theoretical and knowledge problems, security of individual capital, social violations and crimes, and the threat of macroeconomics in the following model, the challenges of cryptocurrencies are drawn based on these four axes, which are responsible for solving each of the challenges, the mentioned institutions. are in the model. In fact, the model below is a road map that should be seen in all its dimensions for policy making and referred to the relevant institution.

To extract the jurisprudential dimensions of cryptocurrency after the thematics that was discussed in the previous sections, from the point of view of individual jurisprudence, including the rulings of value and valuation, the four principles of transactions (prohibition of loss, gharr, exchange of wealth for falsehood and riba), preservation of individual property, trust The ownership and the principle of freedom in transactions, as well as government jurisprudence, including the principles of harmlessness and harmlessness and the negation of mustaches, were examined and determined in the form of questions; Then these questions were given to Islamic financial experts and the following results were obtained by majority vote:

- 1 .In general, the approach of jurisprudence is affirmative in facing financial issues such as "cryptocurrency"; So that if the new issue does not conflict with the standards of Sharia, it will be approved by jurisprudence, as in the case of gold and silver, they were also approved by Islam, not that it was established. This issue also existed at the time of exchanging goods for goods, and anything could be used as a means of exchange, provided that there was no prohibition from Sharia; For example, a gambling device cannot be used as a means of exchange; So, in the first stage, the validity of common sense is important in relation to that object, and in the next stage, checking whether its use is a violation of Islamic standards or not? For example, the use of conventional money is not without its problems due to its consequences, such as the decrease in the value of money (general theft from people's pockets) and compliance with the usury system. Encrypted money has the initial condition that it is valid in the eyes of common sense, and every day its use is becoming more widespread in the life of common sense and common sense, and also in the next stage, it is not compatible with any of the general principles of exchange such as the prohibition of loss, gharr, riba, etc. Wealth is not incompatible with falsehood, oppression, etc.
- 2 .Money approved by Shia jurisprudence is not limited to physical cash; As Islam has approved the exchange of goods for goods and any goods that do not contradict the standards of Sharia can be used for the exchange.
- 3 .The value and wealth of an object is due to its desirability among the intellectuals who compete with each other to obtain it. In electronic money (banking), the value comes from trust in the government,

and in encrypted money, it comes from people's trust in the secure platform and block chain mechanism.

4. In Awadin terms, ownership is part of the terms; But there is no stipulation that that wealth is derived from consumption value; As in common bank money, the banknote itself has no consumption value and all authorities agree on the permissibility of using it, as a result, there is a possibility that the value and wealth of something arise from public trust and acceptance towards it.

5. Cryptocurrency is expensive; According to the available statistics, the number of applicants, users and acceptors of encrypted money is increasing every day, therefore, according to the rules of finding an object in terms of value, this money has value, which means that it is desirable both between custom and reason. They compete with each other to study it.

6. The need to have money backing is a historical economic issue and has nothing to do with the jurisprudence system. The discussion of support in economics is important because it leads to the determination of the value of that money, otherwise money will lose its value in exchange for the service and benefit that people and the government have forged for it (store of value, means of exchange and calculation). obtains, of course, its value and value depend on its volume in relation to the volume of goods and services that can be exchanged with it; But if it is established that paper money does not have a physical support like gold and silver, its consequences must be examined from the point of view of jurisprudence. From the point of view of jurisprudence, this issue of paper money getting its money from the credit of the government - or in any other way accepted by custom - is fine; But its consequences, such as devaluation of money (a kind of silent theft), betrayal of trust by the government's wrong policies, and matching the money creation system with usury, will not be without problems. There is no physical support in cryptocurrency, just like bank notes, and it has gained its value from the popularity among intellectuals - due to providing a safe and fast platform for transferring assets and being limited, so that intellectuals compete with each other to obtain it. they pay; Therefore, it has value and there is no need to discuss about the support, of course, like bank notes and other bank money, its value and value depend on its volume compared to exchangeable goods and services.

Conclusion

The expansion of virtual space and available technologies in this space increases its power every day; Such a limitless environment has even affected the economic issues of people and different countries of the world. At a time when people are looking for the best way to do their domestic and international exchanges, they inevitably turn to the latest technology available in the virtual space, namely "virtual money". Due to the different nature of this so-called money from existing traditional money, in such an environment where many people still do not have detailed information about the structure and technical and legal issues of cryptocurrencies, a suitable platform is provided for profit seekers. Therefore, it is necessary to get to know and understand this very complex technology properly, society and individuals should be given the necessary knowledge so that they have a proper understanding of the methods of exchanging virtual money, the rules governing cryptocurrencies, their nature, and even if necessary, the possibility of suing for lost rights. Let them have their own in these cases. According to the issues and investigations that were done in this research, the following results can be achieved:

1. Virtual money can be introduced as private money (which means that the government does not play a role in creating, promoting and supporting it) that does not require any intermediary institution such as a central bank or a special support company or institution and operates in a decentralized manner. does In the early years of the rise and emergence of the phenomenon of cryptocurrencies, whose origin is Bitcoin, the attitude of the world community towards this innovation was pessimistic and fraudulent. At that time, few people thought that this currency could gain popularity among Internet users over the years and remain immune from various types of attacks.

2. Virtual money does not exist in physical form and there are only accounts containing public and private tokens. The account information along with the transactions between the accounts are recorded in a ledger that requires a large amount of computer computing power to verify and record this

information throughout the network member computers in the world.

3 .The main goals of the formation of virtual money are to eliminate intermediaries, reduce costs, increase the speed of transfer and anonymity of the parties of an exchange. All transactions of a virtual currency (e.g. Bitcoin) are registered in a public ledger that all persons can access and help the system in confirming its transactions. Blockchain guarantees the security and preserves the stability of transactions and data of virtual money. The characteristics of the blockchain system can be listed as speed, security, transparency and neutrality, the availability of the data transferred from the beginning, the open source and the system can be developed.

4. There is a major difference between the two concepts of "virtual money" and "digital money"; In a way, digital currencies represent traditional unbacked currencies such as the dollar, and virtual money is a new concept that is also referred to as "cryptocurrency", an example of which is Bitcoin. It is important to mention that the use of the word "money" for virtual money is considered a form of tolerance, and there are still few countries in the world that accept cryptocurrencies as money.

5 .Different countries of the world have currently implemented different policies regarding virtual money; Some have considered it as a commodity, some as capital, and others as money and a method of payment. In our country, Iran, studies and investigations have been done on this phenomenon, and measures are being taken to identify and legislate it, so that the country's economy can benefit from the opportunities of cryptocurrencies with proper and prudent regulation. minimize its risks. Currently, the Central Bank of Iran has not yet taken a specific position on cryptocurrencies and has only announced warnings to buy cryptocurrencies. In the case of virtual currency miners, even though there is no law to prevent their activity, their activity is prevented only because of the existing instructions.

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