

Legal Risks and Regulation of Virtual Currency

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Abstract: Virtual Currency is a new thing active in the currency field in recent years. Because of its decentralized characteristics and the convenience and anonymity caused by the unique block chain technology, it is sought after by the majority of believers. However, everything has its two sides. Anonymity, as a significant advantage of Virtual Currency, also brings a series of problems: for example, difficulties in legal supervision and facilitating economic crimes. With the rapid development of Virtual Currency, the exposed legal problems and market risks are increasing day by day. Without effective regulation, the crisis contained in Virtual Currency will be very huge. In legislation, we should clearly base on reality and clarify the principle of responsibility distribution. Also, we should strengthen the regulation of economic crimes, improve the electronic evidence system in combination with the characteristics of Virtual Currency.

Keywords: Virtual currency; Bitcoin; Financial supervision; Anti money laundering

1. Introduction

Bitcoin as one kind of Virtual currency is the ramification of the development of the Internet Economy, and it is the new development of manifestation of the currency in the network background. It has played an irreplaceable role in promoting development of internet economy and financial innovation, and it is the representation of the activity of market. However, virtual currency also causes many social problems. It is necessary to further analyze the legal status of virtual currency, understand the impact of the development of virtual currency on the traditional financial market, and supervise against the legal risks it brings.

This article will analyze the legal risks brought by the characteristics of virtual currency, including the challenge to the authority of the national banks, the impact on financial supervision, the risk to investors and the illegal and criminal activities brought by virtual currency, etc[1].

2. Definition of the legal nature of virtual currency

At present, there is no clear and unified definition of the legal nature of virtual currency. There are mainly three views: the theory of creditor's rights, the theory of intellectual property rights and the theory of property rights. I am more inclined to the viewpoint of property right theory. The following will comment on these three view points one by one.

2.1. Creditor's rights theory^[2]

This view holds that virtual currency is essentially the creditor's right established by contract between Internet service providers and consumers. The consumer obtains the creditor's right to receive the service by paying the consideration, while the operator has the obligation to provide the service and guarantee the service quality according to the agreement. But there are some limitations in the theory of creditor's rights: creditor's rights are not exclusive, which is difficult to explain that no one can infringe the rights of consumers to virtual currency, and the theory of creditor's rights is not conducive to the protection of consumers' legitimate rights and interests.

2.2. Intellectual property theory

This theory holds that "players spend a lot of time and energy in the process of acquiring virtual currency (digging goods), and do creative work. Therefore, players' rights to virtual property can be regarded as intellectual property rights." The theory has the following shortcomings: 1. The method of obtaining virtual currency is based on block chain technology, and the user has no creativity. 2.

Intellectual property is time-consuming and can only be protected by law within the legal time limit. The duration of virtual currency depends on the operation status of network operators and the wishes of users.

2.3. Property right theory

According to this theory, virtual currency should be regarded as a generalized "thing" together with other intangible and technically controllable things. Because virtual currency is obtained by users paying time and money for consideration, and can be disposed according to the intention of Internet users, it can naturally become the object of property rights. I agree with the theory of real right that virtual currency has the basic attributes of civil law: (1) Objective existence. From the perspective of physical properties, virtual currency exists in a certain digital form, and also needs a certain amount of actual storage space (2) Dominance. Network operators can add, modify and delete the virtual currency in the form of electronic data in various ways, and users can also possess, use, benefit and dispose of the virtual currency they enjoy (3) Value. Virtual currency can meet people's needs, not only for speculation appreciation. At the same time, more and more merchants support the use of virtual currency to pay, so it has value (4) Scarcity. The quantity of virtual currency is certain, so virtual currency is also scarce. It can be seen that virtual currency has the characteristics of "property" in civil law, and it is more reasonable to explain the essence of virtual currency with the theory of real right.^[3]

3. Legal risks and causes of decentralized virtual currency

3.1. Virtual currency may challenge the authority of the central bank

Based on the gradual recognition of bitcoin online and offline, bitcoin can be used to pay in the process of circulation. At this level, bitcoin and fiat money both have the monetary function as the means of circulation. Bitcoin does not need to be issued by the central bank. At the same time, the central bank can not adjust the circulation process of bitcoin just like legal tender. For bitcoin without national credit endorsement, after entering the actual circulation field, it poses a certain challenge to the management authority of the central bank. Bitcoin's potential challenges to the central bank's functions and powers are reflected in the following three aspects:

3.1.1. Foreign exchange market supervision

According to the global and anonymous characteristics of bitcoin, the existing regulatory order shows the risk of losing control when it is used to purchase foreign exchange, engage in foreign exchange business or hold overseas assets.

3.1.2. Currency issuing right of national sovereignty

The right to issue legal tender belongs exclusively to the central bank. The state can obtain the economic income needed by the state by exercising the right to create and issue money. The state may levy currency issue tax after granting the right to issue currency. Although bitcoin circulates in a small range at present and cannot be realized in a short time, bitcoin is recognized as the currency equivalent to legal tender all over the world. However, bitcoin can be directly used to purchase goods or services in an appropriate scale. In fact, it represents the emergence of unregulated trading media in real economic life that occupy the applicable space of legal tender, In essence, it will reduce the scale of legal tender.^[4]

3.1.3. Effectiveness of monetary policy

In the real economic and financial environment, combined with specific policy tools and policy means, through different transmission mechanisms, it can affect the economic and financial operation, guide the flow of social funds, and improve the effectiveness of resource allocation. The adjustment of the central bank's monetary policy is based on clarifying the total amount of money and supervising the flow of money. If bitcoin is used as a means of payment and circulation in economic and financial life, the authenticity and objectivity of the basic information of the central bank's monetary policy formulation and implementation will be affected. For example, bitcoin is widely used in real economic and financial life, and it is used as money to increase the total amount of money in society, and then affect the money supply of a country.^[7]

3.2. Protection of consumers' rights and interests

The security problem of bitcoin is difficult to be solved by digital currency using block chain technology. According to the operation mechanism of bitcoin, owning bitcoin is actually that the owner holds a large number of random strings. Because it is in digital form, users usually store the strings in computer equipment or online storage space. The loss or non use of storage devices means the loss of bitcoin. In the scenario of transferring bitcoin through the trading platform, in addition to being attacked by hackers, the trading platform also has the risk of absconding with money.

In addition, the price fluctuation of bitcoin depends on the price perception and expectation of market participants. The price of bitcoin in the financial market once showed a state of sharp rise and fall. For financial consumers of bitcoin, they will not be able to obtain investment income in a healthy financial investment market. If this state continues and intensifies for a long time, it will affect the financial security. During this period, bitcoin did not set the entry threshold in the investment process, and did not make corresponding requirements for the economic affordability of investors.^[5]

3.3. Virtual currency makes supervision difficulty

Although block chain digital currency has strong authenticity, security risks still exist. The value fluctuation of digital currency itself affects the regulation and control under the normal financial mode. At the same time, bitcoin may be used for illegal activities because of its anonymity and inter-nationality. Although bitcoin is not completely anonymous in fact, and each transaction information is recorded on the block chain and cannot be tampered with, the transaction information cannot match the real identity of the participants, which makes the digital currency represented by bitcoin difficult to be completely controlled. Represented by bitcoin, the digital currency transactions built on the block chain are not concentrated in any central institutions. Different from the traditional financial industry, regulators can not take the transaction records recorded in banks as the basic information of regulatory programs. If so many transaction processes are regulated, it is bound to be far beyond the regulatory capacity and scope of regulatory agencies.

In fact, many digital currencies operating on block chain technology have the same characteristics as bitcoin, which bring similar risks to economic life. Therefore, regulators should form a digital currency supervision system with integrated supervision to supervise a large number of types of digital currencies, rather than waiting for risks to make up for loopholes. At this point, it is too late to recover. Although it is still a problem whether the real-time computing capability of supervision can meet the needs of the financial market in the face of tens of millions of transaction data, we believe that with the continuous development of block chain technology and information technology, this problem will eventually be overcome.^[5]

3.4. Illegal and criminal activities (especially "money laundering")

Although the use of block chain technology in the financial field has brought a variety of advantages, such as decentralization makes the data can not be tampered with to solve the credit problem, global reduces the transaction cost problem, anonymity protects the privacy of personal property, but these characteristics also provide convenient conditions for money laundering crimes. Unlike legal tender, the flow of bitcoin is not regulated by any institution, and this kind of risk can spread abroad. This makes it very convenient for bitcoin to "launder money". According to the trading principle of bitcoin, for the owners of "black money", they can use bitcoin trading platform to mix personal payment with other legal payments. In this way, bitcoin tracing can be avoided.^[6]

At the same time, because the bitcoin account has unlimited access to multiple accounts, this kind of people can disperse the funds on the account, and then mix with other legal transactions, which significantly improves the difficulty of tracing. Moreover, the above operations can be repeated many times, which greatly increases the cost of tracing. Finally, when tracking down illegal transactions, it is necessary to check a large number of legal accounts. However, the people who have accounts are scattered in all corners of the world and can not continue to track. As a result, the illegal payment will not be settled. At present, there are several ways to use bitcoin to launder money:

3.4.1. Black market trading

Bitcoin is widely used in black market transactions because it does not need to input personal real information when registering, but also can produce anti tracking effect to meet people's "money

laundering" needs. For example, bitcoin is used as the main trading tool in the world-famous network black market "Silk Road" and "bazaar".

3.4.2. Criminal payment

Criminals like to choose bitcoin as a means of payment mainly based on two considerations. On the one hand, this transaction mode is not easy to track, and it is also difficult to cancel; In addition, such accounts cannot be frozen and deprived. According to relevant reports, bitcoin payment is more common in the following forms of crime.

The first is blackmail. The first is bitcoin extortion virus, which can be used to extort bitcoin from victims by invading their computers. For example, wannacry extortion virus broke out in the world this year. The second is to use network attacks to obtain bitcoin. For example, many enterprises or research institutions have to pay bitcoin ransom for cyber attacks.

The second is kidnapping. Because bitcoin is not easy to be tracked and frozen, and can be exchanged all over the world, most of the current kidnappers require the victim to use bitcoin to pay the ransom, resulting in the cancellation of the collection link which is very easy to capture the criminal during the kidnapping, which not only increases the difficulty of the police to solve the case, but also reduces the risk of crime. If Huang Kun, a businessman in Hongkong and chairman of the Oriental Pearl oil company, was kidnapped in Taiwan in September 2015, the ransom demanded by the kidnappers was a bitcoin worth 11 million yuan.

The third is the drug trade. At present, bitcoin payment has been integrated into the drug trade. From the initial drug production to drug trafficking, it is very easy for criminals to use bitcoin as the main payment channel. For example, in June 2015, Zhang, an associate professor of a university in Wuhan, was arrested by the judicial authorities for developing drugs. Zhang sent the drugs to other countries through the method of "anonymous package", and the payment method was bitcoin, thus avoiding the police's tracking.^[8]

The fourth is terrorist activities. On June 15th, 2015, the United States issued the financial risk assessment of American terrorists, in which the risks and threats to the national financial system and market security caused by the financial methods adopted by terrorists were summarized for the first time. The report made it clear that "Islamic state" might use a new payment situation to transfer funds, before which an article had proposed that bitcoin should be used to support Islamic jihadist activities.

3.4.3. Capital transfer

Because bitcoin is not a sovereign currency, at the same time, it does not have to be restricted by various countries. It only needs to have the network to operate. In fact, currency exchange can be realized only by having a trading platform. Therefore, many people use bitcoin for capital transfer. Because of its low handling charge and fast speed, and foreign exchange control can hardly work on it, it is likely to replace underground banks in recent years.

3.4.4. Bitcoin gambling

Bet and lottery are online gambling methods that use bitcoin to pay. The typical representative of this kind of network platform is "Nakamoto Satoko". This website uses bitcoin's "blockchain technology" to develop a kind of public computing method, which makes people who bet on the network platform have no chance to cheat and effectively improves fairness. Therefore, it is favored by everyone.

3.5. Impact of virtual currency on the original financial regulatory system

The supervision of the financial industry in various countries is relatively strict, and the attitude on the currency issue is also tough. Therefore, whether a set of effective laws and regulations system can be formed for digital currency will have a huge impact on the application of blockchain technology. How to meet the requirements of the financial system for monetary regulatory rules while ensuring the advantages of the blockchain itself is to promote the legislation in the financial field in a timely manner, especially for the legislative regulation of emerging blockchain digital currency, so that the operators of blockchain digital currency "have laws to follow". As a new technology, blockchain, the underlying technology of virtual currency, is bound to be compatible with the original financial system. Blockchain technology has many innovative factors, and its promotion and application will bring changes to many industries. If the existing financial system is fully applicable to the application scenario of blockchain, it may bring uncomfortable results, hinder innovation, and increase the cost of

the whole society. Take bitcoin as an example, with the decrease of the speed of money supply, the total scale of money supply remains unchanged, which will directly lead to deflation. It is not difficult to see that digital currency may impact the traditional monetary system, not only affect the macro-control ability of the central bank, but also affect the government revenue, and even impact the original financial regulatory system.^[9]

4. Conclusion

With the development of Internet economy and e-commerce, the application of virtual currency has been expanded gradually. This paper is to explain the impact and risk of the appearance of virtual currency represented by bitcoin on the national economic system, financial supervision system, investors, consumers, illegal and criminal activities supervision. Facing these risks, countries have also appeared relevant laws and regulations to regulate virtual currency. Throughout the legislation of various countries, the main purpose of supervision is anti money laundering and anti terrorist financing, and the object of supervision is only convertible virtual currency. Therefore, it is necessary to define the legal nature of virtual currency and make perfect laws and regulations to regulate the virtual currency market.

The causes and purposes of decentralized virtual currency enable it to rise rapidly in the process of rapid transformation of the global economy. The adverse impact of decentralized virtual currency on the implementation of monetary policy by the central bank will hinder its future development. At the same time, due to its own defects, the development prospect of decentralized virtual currency is not optimistic. There is still a long way to go to find an appropriate positioning for the standardization of virtual currency in the future.

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