Regulatory Issues of Digital Currencies

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Authors’ contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/ARJOM/2020/v16i530188

Editor(s):
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(1) Dr. Jaya Bishwal, University of North Carolina at Charlotte, USA.
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(5) Gajendra Sharma, Kathmandu University, Nepal.
(6) David Lizcano, Madrid Open University, Spain.

Complete Peer review History: http://www.sdiarticle4.com/review-history/55783

Received: 11 February 2020
Accepted: 17 April 2020
Published: 22 April 2020

Abstract

With the rapid development of the Internet and electronic payment, digital currencies with blockchain as the underlying technology have gradually entered people's horizons and have also received the attention of governments around the world. Due to the convenience and decentralization of digital currency transactions that are not limited by time and region, it has a significant impact on traditional commercial systems around the world, and its core blockchain technology may trigger changes in many areas. At present, different countries have different views on the legal status of bitcoin digital currencies, but digital currencies circulate across borders and regions. Once problems arise, it is difficult to have a unified regulatory measure to deal with them.

Keywords: Regulatory issues; digital currencies; bitcoin; blockchain.

1 Introduction

Recently, some media reported that a domestic Bitcoin trading platform was suspected to be running away, and the news immediately attracted widespread attention. It is reported that an institution called Bitcoin
Asian Lightning Trading Center (referred to as "Asian Flash"), which has been established for only 9 months, has already encountered a payment crisis and is suspected of running away.

The platform has traded bitcoin investments on behalf of customers and promised to give investors fixed dividends and withdrawals at any time. However, on January 5th, "Asian Flash" not only stopped paying dividends, but even its website was closed, and it was suspected that it had fled with investors' billions of dollars of funds. Some lawyers believe that the current fund raising fraud on the "Asian Flash" platform is very obvious. It is understood that the number of investors affected by the "Asian Flash" incident has approached 440 and the amount involved has exceeded at least 100 million.

In this regard, some investors believe that the system failure of the two Bitcoin trading sites, in addition to system and hardware problems, does not rule out the existence of moral hazard. Because in the bitcoin investment circle, a type of arbitrage commonly known as "moving bricks" is very common, that is, the platform uses the spread between different bitcoin trading platforms to buy and sell for resale profits, and these are usually computers Covert programmatic trading, and the platform's use of leverage to amplify arbitrage profits, so the trading platform itself does not rule out this type of moral hazard.

With regard to the various chaos of the bitcoin trading platform, some investors, especially those with increased leverage, have suffered large losses. On Saturday, the central bank urgently interviewed the heads of the three major domestic bitcoin trading platforms and began to study the issue of requiring the bitcoin platform to set up third-party escrow.

2 Current Domestic Legal Practice on Bitcoin

From the current state of judicial practice in China, the court's validity of the Bitcoin transaction contract is still controversial. For invalid contracts in violation of mandatory regulations in China, the court should be cautious on the premise of fully respecting the effective exercise of its supervisory functions by the supervisory authority. Type analysis of attitudes to prevent misuse of invalid judgments [1].

Contracts involving illegal activities such as pyramid schemes, illegal fund raising and money laundering, and financing activities in the form of ICOs shall be deemed invalid. Drawing on the regulations on the supervision of illegal fundraising, according to the "Opinions on Several Issues Concerning the Handling of Criminal Cases of Illegal Fundraising" jointly issued by the Supreme People's Court, the Supreme People's Procuratorate and the Ministry of Public Security on January 30, 2019, "the case-handling authority determined that fundraising was illegal "Sexuality" should be based on national financial management laws and regulations [2]. For those that are made only in principle, they can be determined by referring to the departmental regulations or regulatory documents formulated by the administrative department in charge such as the central bank, the China Banking Regulatory Commission and other regulatory agencies. According to the nature of such contracts, the validity of the creditor's rights of bitcoin transactions can be determined according to relevant guiding regulatory documents [3]. If a criminal offence is involved, it should be transferred to a public security agency and other departments for processing [4].

For the service contract relationship established between the individual subject and the exchange, due to the true expression of the parties, the validity of their claims should be recognized. The exchange shall bear the main fault liability for losses arising from the contract, and individuals shall bear the corresponding investment risks according to their obligations of attention [5].

For entrusted bitcoin trading investment, the entrusted contract relationship should be established, but the investment risk arising from the entrusted investment behavior shall be borne by the entrusting party. If there is any fraud or illegal fund-raising caused by the commission, it shall be determined in accordance with the relevant provisions of the Criminal Law [6].

Regarding the contract relationship for sale, according to Article 52 of the Contract Law, the contract should not be deemed invalid. The buyer and seller shall agree to bear corresponding responsibilities when signing the transaction contract [7].
3 How to Regulate Digital Currency in the Future

According to the analysis above, the “chaotic phenomenon” of Bitcoin transactions is caused by the absence of the current higher-level method and the unclear nature of Bitcoin. By further improving the object attributes, regulatory rules, subject cognitive education, and transaction dispute resolution mechanisms in the digital currency transaction process such as Bitcoin, it will help standardize the digital currency transaction market order [8].

3.1 Clarify the essential attributes of Bitcoin

According to the "Notice on Preventing Bitcoin Risk", Bitcoin does not have the attributes of a currency and should be identified as a specific virtual commodity. Bitcoin is generated through the "mining" of "miners", condensing the abstract labor of the holder and the power consumed for "mining" [9]. At the same time, Bitcoin can carry out transaction circulation and generate the actual monetary benefits. As an exchangeable labor product with value and use value, Bitcoin conforms to the attributes of commodities [10]. Article 127 of the General Principles of the Civil Law, implemented since October 2017, clearly protects data and network virtual properties. Professor Yang Lixin, who participated in the drafting of the General Principles of the Civil Law, believes that virtual currencies such as bitcoin are virtual of network virtual property movable property [11].

As the current laws and regulations of our country have not clearly stipulated the attributes of Bitcoin, we should learn from the general viewpoints of the US regulatory agencies on the attributes of Bitcoin. On June 14, 2018, Jay Clayton, chairman of the US Securities and Exchange Commission (SEC), said that Bitcoin is not a security. The US Commodity Futures Trading Commission (CFTC) also considers Bitcoin as a commodity under its jurisdiction [12]. CFTC compares the nature of Bitcoin and believes that it is more like gold, without government and debt support, and gains value through widespread social recognition. On September 26, 2018, Rya W. Zobel, a senior judge in the Massachusetts District Court, also recognized the CFTC's right to sue on matters involving digital currencies and determine the commodity attributes of Bitcoin. In fact, in 2017, the CFTC approved the Chicago Futures Exchange and the Chicago Mercantile Exchange (CME) to launch cash-settled Bitcoin futures; in June 2019, the CFTC approved LedgerX's physical settlement Bitcoin futures license application. Jerome Powell, chairman of the Federal Reserve System (FED), also attended a U.S. Senate hearing, saying that Bitcoin, as a method of speculative value storage, is increasingly replacing gold in the global economy. In summary, we believe that Bitcoin has a gold-like value storage property and should be identified as a virtual commodity for regulation [13].

As a virtual commodity, Bitcoin also enjoys certain data rights. At present, related scholars mainly have the following views on data rights: Professor Long Weiqiu believes that under the premise of distinguishing personal information from data assets, data rights are divided according to different subjects (1) users enjoy personal data and data. Personality rights and property rights; (2) data management rights and corresponding property rights enjoyed by data operators. According to the unique attributes of data, Professor Li Aijun believes that data rights are civil rights that have both property rights, personality rights and national sovereignty. Associate Professor Long Jun believes that from personal information to data property rights, there is a gradual decline in personality and a gradual increase in property [14]. This article believes that the data rights enjoyed by Bitcoin should be classified according to its nature and practical use. Firstly, bitcoin has economic value and can be transferred. Its data have the property rights property. Secondly, the use of bitcoin involves personal data such as name, certificate number, and phone number. Data rights also have the right to name and privacy. And other attributes of personality rights. At the same time, because Bitcoin is different from intellectual property and trade secrets, its data rights can be regarded as a kind of civil rights that should be protected and have multiple attributes of property rights and personality rights [15].

As a virtual commodity, Bitcoin has property attributes. If the currency is more subject to state supervision, then the transfer of property should follow the principles of autonomy of will and freedom of contract, on the
premise that it does not constitute illegal crimes and does not violate national mandatory regulations. In view of the particularity of emerging digital assets such as Bitcoin and the typical analysis of disputes involving Bitcoin transactions, buyers are in a weaker position than sellers who have more information, and there is more uncertainty in Bitcoin transactions [16]. Sex and changes, and even involve illegal activities such as fraud and illegal fundraising. If the contract is found to be invalid, it will directly result in the buyer's inability to rely on the contract to safeguard its loss of interest, let alone the fact that the two parties should be held liable based on the specific circumstances of the transaction and fault measurement. Under the circumstances that the current legal system is still not perfect, we should, under the guidance of the current regulations of the regulatory authorities, uphold the spirit of civil law of contract freedom and integrity, properly handle the relationship between the system and civil activities, "make the system an umbrella for the protection of citizens' rights, Not a stumbling block".

3.2 Constructing a digital currency regulatory framework under the existing legal and regulatory system

The legislator is the scholar's summary and summary of legal factors, and the law's generation process is the legal scholar's summary and research of legal factors that have played a role in the history of the nation [17]. Therefore, for new financial things that are changing and may have a strong impact, in addition to the institutional requirements for more stable elements, a pilot combination of supervision sandbox mechanism can be selected to take into account the stability of the law and the operability of new technical specifications. In the research summary of adjustment and innovation, we will gradually improve the regulatory requirements and further formulate relevant laws and regulations. At this stage, the following methods can be used:

3.2.1 Compliance with existing laws and regulations

Bitcoin and other digital currency transactions should first follow the compulsory provisions of existing laws and regulations. The existing laws and regulations involving digital currencies mainly include the Criminal Law of the People's Republic of China, General Principles of the Civil Law of the People's Republic of China, Contract Law of the People's Republic of China, and China. Securities Law of the People's Republic of China, "Regulations on the Management of Blockchain Information Services" and regulatory documents of relevant ministries and commissions. First of all, blockchain-related service providers and users should conduct registration audits in accordance with relevant regulations of the Cyberspace Office, and must not conduct illegal and criminal activities involving illegal fundraising, pyramid schemes, fraud, money laundering, etc., and ICO financing and other violations of existing laws and regulations are not allowed. Under this premise, for the transaction behavior of digital currencies such as bitcoin, the basic principles of voluntary civil and commercial affairs should be followed to ensure that the contract subject conducts transactions based on autonomy of will. Contracts are the main manifestation of market-oriented resource allocation, and should respect the creativity of the subject of the market and be based on the autonomy and true expression of the parties' will. However, attention should be paid to complying with the regulatory system, avoiding the use of blockchain technology in the name of financial innovation, or through changes in the form of “packaging” or propaganda and dissemination (such as the WeChat group to promote the development of the offline line), in order to substantially circumvent regulatory policies. At the same time, we should be careful to avoid evading supervision by obtaining an alien's identity through an individual or changing the company's registered place to a more relaxed overseas regulatory policy. In addition to providing territorial jurisdiction, China also has the provisions of personal jurisdiction, protective jurisdiction, and universal jurisdiction [18].

3.2.2 Combining the regulatory sandbox to construct a digital currency classification regulatory model

Regarding the regulation of digital currency transactions such as Bitcoin, we must not only see their commonality, but also pay attention to their differences. First, in the current financial mixed industry, it should be improved in the existing regulatory framework through a combination of functional supervision and behavioral supervision. Regulatory agencies should classify digital currencies with more complex nature
according to their essential attributes and functional uses. Digital currencies can be divided into commodity (functional) and securities (investment) types. According to Article 2 of China’s “Securities Law”, digital currencies are currently not included in the scope of supervision. The scope of "securities" is unclear. Before the higher law has been revised to include digital currency in the scope of securities, the relevant regulatory system of digital currency in the United States can be used for reference and differentiated in the following ways: 1. The four conditions that pass the Howe test are distinguished. If the conditions are met, they should be identified as Securities; 2. Through the US SEC "Framework Analysis of Digital Asset" Investment Contracts", to explain the specific application of Howe Test; 3. By analyzing whether digital currency has functional attributes or is used for investment (expect to rely on others to make profits), whether it has been circulated in the complete system and has actual uses for use or has not been established. Real projects are only financed by a token financing premium. If it has a functional attribute and is mainly used in the system and is not used for investment, it can be regarded as a commodity attribute. Currently, Bitcoin and Ethereum have been identified as digital currencies with the nature of virtual goods.

Based on the classification and supervision of digital currencies according to their substantive functions, the regulatory authorities shall conduct behavior supervision on license approval in financial activities, anti-money laundering, fraud, information disclosure, consumer rights protection, etc. Effective regulation of digital currencies. At the same time, under the existing regulatory system, consideration should be given to setting up some pilot areas in the form of a regulatory sandbox to allow some enterprises to conduct innovative exploration in a "relatively relaxed" regulatory environment, which not only reduces the scope of market regulation, reduces risks, but also provides Practical operability, effectively coordinating the balance between innovation and supervision, and finally adjusting and improving the relevant legislative provisions as the mechanism gradually matures, taking into account the stability of the legislation and the operability of new technical specifications.

3.3 Strengthening cognitive education and protection of financial consumers

In order to maintain the order of digital currency trading markets such as Bitcoin, in addition to clarifying the nature of trading objects and trading rules, the cognitive education for one party's subject, the financial consumer, needs to be further strengthened. On the one hand, as a new type of digital asset, Bitcoin and other digital currencies have both financial investment and cryptogaphic concealment. Combined with its cross-border, networked features and tempting and deceptive risks, consumers should be strengthened Popular education through public channels such as official department education and media promotion to increase consumer awareness of digital currencies, establish correct currency and investment concepts, proactively raise awareness of financial risks, and clearly analyze rational commitments to high returns. On the other hand, financial consumers, as one of the subjects of bitcoin transactions, are themselves a vulnerable group. In view of the asymmetry of information in their trading relationships, they should tilt their policies towards them to maintain substantial equality among the subjects of the transactions; Secondly, consumers should be provided with a convenient channel for safeguarding their rights when they encounter problems, and ensure that they seek due protection and corresponding compensation through litigation and diversified dispute resolution mechanisms.

3.4 Clarify the uniform court rules

In view of the different judgments of the same case in the current Bitcoin transaction case, the determination rules for the settlement of bitcoin transaction disputes are not unified. It is mainly caused by the complexity of digital currencies represented by bitcoin. The refereeing also has certain regional and special characteristics. And temporal characteristics. For example, in the regional courts of more developed Internet industries such as Beijing, Hangzhou and Shenzhen, Bitcoin transactions are generally considered valid. No. 2641 of the Republic of China] and the "First Bitcoin Property Infringement Dispute Case" announced on the Internet on July 18, 2019, both determined that Bitcoin has commodity attributes, and China has not banned the production, holding, and legal circulation of Bitcoin. The Beijing Haidian District Court also included the contract dispute between Feng Yiran and Beijing Lekuda Network Technology Co., Ltd. ([2018]
Jing 0108 Minchu 24805] in the "8 Typical Cases Involving Internet Business" issued by it, as similar reference cases for bitcoin transaction disputes. In Hunan, Guizhou, and other places, there are many cases of pyramid schemes and illegal fundraising in which blockchain technology is used as packaging. The cases are usually organized and large-scale. Impact, it is generally believed that Bitcoin transactions are illegal. For areas with frequent financial disputes, such as Fujian and Jiangsu, different judgments will be generated for different cases. At the same time, we also recognize that with changes in regulatory attitudes and rich judicial cases, the rules of adjudication will also change.

In the current situation, the general and regular elements of the case should be summarized through continuous inductive analysis of the case, combined with the adjudication characteristics of different regional courts, and the changes in technology and regulatory rules, supplemented by the society's understanding and acceptance of new digital assets degree, further forming a more uniform refereeing rule. Among the courts in different regions, the on-the-job training and exchange mechanism of judges can be further improved. Aiming at the complexity and variability of digital currencies, strengthening the flow of judges in different regions and learning about more professional cases can help promote in-depth understanding of the rules of adjudication, and combine different geographical backgrounds and cases to further form a more complete and unified adjudication rule. At the same time, referring to the speech of the Supreme People's Court, establishing a comprehensive dispute resolution mechanism and litigation service mechanism, and establishing a regional financial trial center to further resolve the disputes over the adjudication of new types of financial assets, allowing them to conduct similar types of cases within the framework of the law. Useful exploration.

4 Conclusion

On June 18, 2019, Facebook's Libra project attracted the attention of world scholars, industry experts and regulators, and digital currency further moved towards a more open world. On July 8 and July 9, the People's Bank of China made successive statements. Faced with the impact of digital currencies on the existing monetary system and financial markets, "China should be prepared." Although the development of new financial services and asset classes in the regulatory gaps is extremely risky, the initial part affects financial stability. The chaos of the country will severely hinder the innovation and development of financial technology. Supervisors should adopt a more inclusive attitude under the current supervision system. Through the supervision of the sandbox method, some enterprises should try out first, and further improve and adapt to the domestic digital currency in the exploration of the attributes and related behaviors of digital currency. Regulatory path. At the same time, through the establishment of a judicial trial and consumer protection system for digital currencies, the coordination between the interests of all parties and the order of market transactions will be maintained.

Behind the rapid development of digital currency is the advancement of blockchain technology. As one of the underlying infrastructures, the blockchain builds a bridge between the virtual world and the real world. Blockchain is not an island. Under the guidance of the system, through the continuous combination and matching with other technologies such as artificial intelligence and big data, a distributed architecture based on real ideas is gradually ushered in to further promote the open sharing of data. From decentralized to centralized to distributed, the limitations in the evolution process will lead to further iteration through the guidance of technological progress.

5 Funding

This work was supported by the <China’s National Natural Science Foundation #1> under Grant <71472091>, the <China’s National Philosophy and Social Science Fund #2> under Grant <17ZDA037>, <China’s National Philosophy and Social Science Fund #3> under Grant <19BJL033>, <Jiangsu’s Philosophy and Social Science Fund #4> under Grant <18EYD005>, <Humanities and Social Sciences Research Youth Fund by Ministry of Education of China #5> under Grant <20YJC790194>. 
Competing Interests

Authors have declared that no competing interests exist.

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Peer-review history:
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