

Legal Protection for Bitcoin Users in E-commerce Transactions

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Abstract. E-commerce in the internet is growing rapidly, ranging from e-banking, pay pal, to virtual currencies, like Bitcoin. Bitcoin transactions are considered very profitable; therefore, it can be considered as a transaction method. However, in some countries, bitcoin has not gained legality, and it triggers Bitcoin users to get legal protection in transactions. Similarly, in Indonesia, any transactions using bitcoin are increasing well, but there has not been any legality. Even from the officials of Bank Indonesia prohibits the use of Bitcoin with the consideration that it is not a legal currency or payment instrument in Indonesia. The issues that arise are identified as follows; what legal aspects can be used as the basis for bitcoin users in e-commerce transactions and what is the role of the state in providing legal protection for bitcoin users. The method used is normative juridical which means testing the existing legislation associated with the discussion of legal protection of Bitcoin users in e-commerce transactions and analyzed juridically qualitative. The conclusion is that the legal basis used in the use of Bitcoin as an e-commerce transaction is considered private law because it involves relationships between individuals and public law because it involves the role of the state. The role of the state in providing legal protection to their citizens is an obligation.

1. Introduction

Globalization of the technology is developing rapidly in society, nation and state. The presence of technology has brought about a major change in economy, especially in transactions, thus conventional transactions have begun to be abandoned and switched to electronic transactions or e-commerce. E-commerce (electronic commerce) is a form or model of contemporary trade that deserves to be referred to as the pioneer of trade development in the 21st century. The issue of globalization, the century of high-technology information and developments that change lives, especially in economics that has an uncontrollable impact because it offers efficiency, effectiveness and convenience and other benefits that cannot be obtained in conventional trade-based on conventional-traditional practices and devices. This tool is used in transactions or electronic commerce/e-commerce through Electronic Data Interchange (EDI), telex, fax, Electronic Fund Transfer (EFT), and internet. One of the electronic transactions or trade that has taken world's attention is trading through internet, new payment methods that are no longer paperless. Starting from e-banking, internet banking, paypal, to virtual currencies like Bitcoin. Bitcoin is referred as cryptocurrency, which is a form of payment instrument that uses cryptography or a special security algorithm to control the management and manufacture of Bitcoin. Bitcoin is used in several countries such as the United States, Germany, Japan, New Zealand, Finland, South Korea, China, Hong Kong, Denmark, Russia, Taiwan, and also in Asia such as Singapore, Bangladesh, Thailand and including Indonesia. This is even more interesting because it offers a new concept of payment without relying on the trust of each bank or decentralization [5].

As the use of Bitcoin as payment keeps increasing, users' concern on making every transaction is increasing as well because there is no regulation about Bitcoin. Therefore, for those who use bitcoin, the protection for them is still weak as there is no legality. Moreover, these transaction activities only involve programmer, Bitcoin users with computer network without any interference from the government or the central bank, it has been also reaffirmed by the prohibition to use Bitcoin, including Indonesia. The purpose of writing this paper is intended to provide an understanding and description of whether the rules free about Bitcoin can fully function the private law, public law and state administration law as protection for Bitcoin users. How the state overcomes the problems that arise as a result of the transaction of bitcoins as payment, it relates to the obligation to citizens, because it can pose a threat to country's economy.

2. Theoretical Framework

Some literature research that analyzes Bitcoin is used as a source of literature and theory in the writing of this paper.

2.1. Bitcoin description

Satoshi Nakamoto, in a paper written in November 2008, entitled "Bitcoin: A Peer-to-Peer Electronic Cash System", explains the system and way Bitcoin works as a peer-to-peer online electronic payment [6]. With that system, Bitcoin allows one to transfer directly without third party intermediaries or any financial institution. The online payment will be able to minimize all possible errors and security risks, including minimizing double transactions. To proceed that, it can only be done with a peer-to-peer system that is equipped with a digital signature, a transaction time recorder that has been changed with a hash, thus that it cannot be changed and many other cryptographies used in it.

Bitcoin has two functions. First, as a digital currency, means that bitcoin is a legitimate payment tool [7]. Second, Bitcoin, according to Hayek, is described as "private currency": that is, "the currency provided by private companies aims to confront government's monopoly on the money supply" [6]. Conventional financial actors, such as central banks or government agencies, who are not involved with Bitcoin transactions [7]. As a result, there are only a few legal regulations or supervision of the use of Bitcoin. The interaction between Bitcoin from providers to the user is controlled entirely by the user. Hayek argues that conventionally supported currencies are vulnerable to various weaknesses, vulnerability to inflation and politics [6]. According to Hayek's suggestion, private currency is more stable than conventional currencies because they do not have the same weakness.

2.2 The legal relationship of bitcoin users in e-commerce

As stated in the function of bitcoin that transactions are conducted by peer-to-peer, which is decentralized. Bitcoin consists of three parts; block chain, mining network, and wallet. Block chain is a list of every bitcoin transaction that is carried out, the block chain records all transactions and is a proof of each transaction. This block chain has no manager, both individuals and organizations, but it is hold by every computer that mines Bitcoin. People who mine Bitcoin (miners) are people who maintain old transactions and ensure new transactions are recorded. Wallet is a part of Bitcoin that is always known by users. Actually, the wallet does not store Bitcoin but only stores the private key which allows the owner to add transactions to the block chain in an address in the form of a public key. Bitcoin is only stored as a transaction record in the block chain. Bitcoin security comes mostly from hashing, its function is to link one block to another block in the block chain. Each block stores the previous hash block, and the block hash value is now (which also needs to be changed in the next block, etc.) everyone can check that no transaction has ever changed the hash value because if it is done, the next hash value will be affected and no longer linked. Legal actions carried out will be featured in private law, the legal relationship is only binding on the parties involved in Bitcoin transactions.

2.3 Bitcoin regulation and legal protection

Legal protection is a subjective right that must be possessed by legal subjects. E-commerce activities that use Bitcoin as a payment tool have involved parties, including the bitcoin users. In order

for his actions to be protected there should be a legal instrument. However, in reality, there are no specific arrangements. Some countries are trying to anticipate Bitcoin users, as the following:

The Japanese Financial Services Agency (FSA) analyzes technology and develops clear and fair legislation to regulate virtual currency exchange. Bitcoin exchange is a good way for the adoption of bitcoin and the future of virtual currencies. The setting agenda is a good thing in building trust in Bitcoin, so the world can understand, accept Bitcoin and other digital currencies. This FSA regulation successfully revealed 669 Suspicious Financial Transaction Reports (STRs), the result showed that the crypto was represented only 0.16% of money laundering activity and Japan planned to bring it to G 20 meeting to start making efforts to combat cryptocurrency, but G 20 refused because the cryptocurrency is still less than 1% of the world economy.

Europe, France and the German Finance Minister have agreed to start general oppression in digital currency market, as the cryptocurrency ban is inevitable, as stated by Marcon and Merkel, which is about dissatisfaction with Bitcoin, while other EU governments continue to reject the boom. One of the keys is to control currencies and taxes. If the cryptocurrency disrupts a decentralized regime, it is considered as a real threat to sovereignty. Therefore, the government will response in seeing the non-controlled than technological evolution. The European Union previously proposed to impose a cryptocurrency market as a security threat related to money laundering and terrorists. The French and German Finance Ministers will submit a joint proposal to regulate the bitcoin cryptocurrency at the next G20 summit. However, the President of the European Central Bank issued a statement about cryptocurrency, that the ECB does not have the power to ban or regulate Bitcoin. At ECB, we follow this evolution, but this technology is not firm to be considered in ECB monetary policy or as a payment system.

Singapore's Deputy Prime Minister and Chair of the Singapore Monetary Authority (MAS), stressed that MAS, Singapore's financial regulator and the Central Bank, would not distinguish transactions conducted in fiat and cryptocurrency in an effort to enforce Singapore Anti-Money Laundering (AML) law. In addition, all financial institutions will be subjected to the same rules. The MAS Chairman also stated that the Department of Commercial Affairs would be empowered to investigate and solve cases related to money laundering and terrorism financing. Furthermore, regulation of virtual currency transactions can pose challenges that are not related to currency circulation monitoring.

Although they do not recognize bitcoin as a payment, China recognizes that digital currency cannot be avoided and is in no hurry to regulate cryptocurrency, according to the Central Bank Governor, People's Bank of China (PBoC). The use of Bitcoin in Indonesia, in fact, does not have a clear legal status, even Bank Indonesia issued a statement that cryptocurrency is illegal as money or as a payment, with the consideration that it does not fulfill the characteristics of money. The legal consideration refers to Law Number 7 of 2011 concerning Currency; state that every citizen must use rupiah in each transaction; PBI No 17/3/PBI/2015, that all transactions in Indonesia must use Rupiah; PBI No. 18/40/PBI 2016, prohibition of making payment transactions with virtual currency; PBI No. 19/12/PBI, that the implementation of Tek Fin is prohibited from doing SP activities with virtual currency. Based on the results of literature review relating to transactions using Bitcoin, some countries do not issue any regulations on bitcoin.

3 Method

Literature survey method employed in this research includes books, journals and regulations which are related to the topics discussed. Furthermore, library data were analyzed descriptively and qualitatively.

4 Discussion

4.2 *The functions of private law, public law and state administrative law in the setting of Bitcoin as a tool of payment*

Based on an inventory of literature data, both from literature in the form of books and journals, and also several regulations related to transactions, it was found that the payment system is a form of the Central Bank's duty to maintain economic stability. Singapore, several countries in Europe, China and Indonesia as samples for analysis. These countries determine their respective policies, including not officially regulating transactions using virtual currencies. The Central Bank of Indonesia regulates the payment system including payment instruments, banking procedures and also the interbank fund transfer system used in the payment process. The Central Bank has a power to consider bitcoin as a legal payment instrument in online transactions [8]. In the regulation, central bank does not regulate transactions using virtual money, but the realization of the practice of using virtual money in the form of bitcoin that has mostly been done in economic life, resulting in a legal vacuum (*rechts vacuum*). Private law, public law, and state administrative law must be functioned according to their needs. The use of Bitcoin in transactions that are decentralized, only involves peer-to-peer, it means that there is a legal relationship between parties involved.

In fact, based on inventory and observation through literature in several countries, the Bitcoin as a tool of payment has not been specifically regulated. On the other hand, Bitcoin settings are a problem and are always debated by the digital currency industry. This regulatory problem is important because bitcoin transaction activities involve technology. Technologically, Bitcoin has unique features, so it has the potential to cause impacts and disruption to various industries and institutions. As stated in the literature review, Bitcoin transactions involve three items; miners, wallets and blockchain, all of these are digital devices. Resolving this problem can be through the domain of private law because it involves the parties; public law can also be involved in this problem if it is related to economic stability; State administration law is also important to consider the framework of control, although the use of Bitcoin does not involve institutions formed by the state.

4.2. *The role of the state in providing legal protection*

The use of Bitcoin as a payment instrument based on regulations has not been specifically regulated due to various state policy considerations, such as European Central Bank, The Bank insists that as long as the use of Bitcoin does not cause economic stability, considering the regulation that have not met requirement must be prioritized, even though it is digital industry, the rules of one element must be omitted quickly. Indonesia has different considerations, that bitcoin as a virtual currency is not a tool of financing, even the Central Bank of Indonesia prohibits the use of bitcoin. However, in reality, it seems to allow Bitcoin users to make transactions. Considering the situation and conditions of the use of bitcoin and the availability of regulations to rule bitcoin has not been realized, Central Bank is the closest party. The Central Bank has duties and obligations, even supervision to maintain economic stability in their respective countries.

5. Conclusion

To occupy legal vacuum for electronic transactions using Bitcoin payment instruments, private legal and criminal law tools can be used as an alternative to resolve problems. The role of the state, especially the Central Bank, is a special institution that has responsibility as one of the obligations of the state in providing legal protection to its citizens.

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