

# The Regulation of Cryptocurrency Investation in Indonesia

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**Abstract-** In the era of the industrial revolution 4.0, besides fiat currency virtual currency were circulating globally which began to be used as commodity tools. Indonesian monetary policy has not granted permission to use medium of exchange other than fiat currency which has been approved in trade and payments, are no exception cryptocurrency. Different with the domestic market, cryptocurrency has been widely invested by investors. The Cryptocurrency has been rapidly developed and has become preferred medium of exchange among investors, due to its advantages which are not appeared in fiat currency. Because of the universal nature of cryptocurrency, it must have a backup of guarantees and a legal basis to protect customers and regulations related to the circulation and supervision. This research will trace how national and international legal instruments govern and control cryptocurrency transactions on the Futures Exchange. The research method is normative, the problem raised is focused on applying the rules or norms in positive law, using the statute approach and conceptual approach, with the legal material used is the primary and secondary legal material. The data collection technique used is literature study. The analysis technique used is the deductive method. The result of this study is Cryptocurrency can be invested as a commodity subject in the Futures Trading Exchange by using a permissible cryptocurrency technology called distributed ledgers technology, which is a decentralized system to maintain the integrity of the ledger in accordance with the protocol. While the prefer type of cryptocurrency is a cryptocurrency utility that has a speculative value in accordance with supply and demand than a security crypto.

**Keyword -** Cryptocurrency , Investation , Indonesia

## I. INTRODUCTION

In the 4.0 industrial revolution and current digital era, the presence of innovation and technology cannot be denied. The growth of the digital economy era is arguably fast. Each transaction will use a technology to create variations in the model of digital economy business. In the financial sector, marked by the emergence of crypto currency as a universal commodity tool. One of the most popular cryptocurrency nowadays is Bitcoin. Bitcoin and other cryptocurrency (AltCoins) received significant attention in 2013 due to the sharp rise in the price of Bitcoin when transacted in fiat currency. On 29 November 2013, bitcoin recorded the highest transaction history up to US \$ 1,124.76.[1] Until now, on the Indonesian futures, bitcoin investment value tends to be stable and higher than other cryptocurrency. This can be seen in the table below [2]:

TABLE 1. INDONESIA FUTURES TRADING VIEW

Name 304 compatible	Basic Cap	FD Mkt Cap	Closing	Provided Coins	Coin Total	Trading Volume	% Change
Bitcoin	110.758B	135.051B	6431.0	17.222M	21M	3.75B	2.80%
Ethereum	28.397B	28.397B	279.88	101.462M	101.462M	1.259B	3.39%
Ripple	13.016B	33.059B	0.33059	39.372B	100B	293.677M	4.98%
Bitcoin Cash	9.271B	11.251B	535.750	17.305M	21M	319.587M	3.34%
EOS	4.358B	4.839B	4.8092	906.245M	1.006B	435.261M	2.26%
Stellar	4.096B	22.742B	0.21820383	18.773B	104.224B	63.039M	3.04%

This is in line with the popularity of cryptocurrency which is beginning to be demanded by Indonesian people. A survey on the use of cryptocurrency in Indonesia conducted by DailySocial.id from 28-29 September 2017, in collaboration with the JakPat Mobile Survey Platform to measure how the Indonesian market currently sees Bitcoin and cryptocurrency in general. The survey was distributed to a panel of 1024 respondents who were sampled proportionally from smartphone users located throughout Indonesia. The results of the survey shows that:

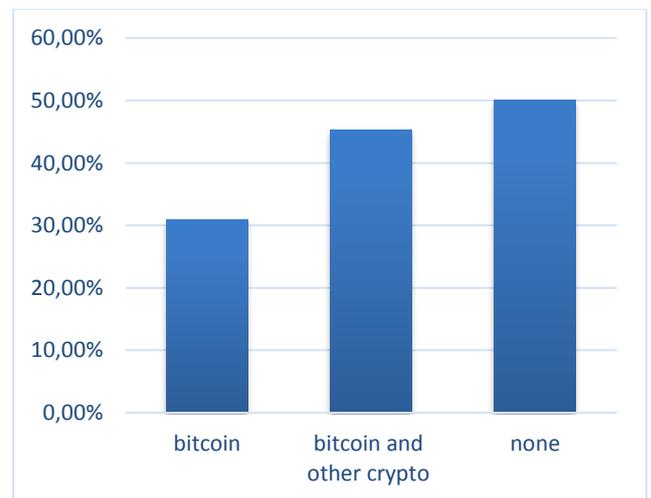


Fig. 1 Percentage of Cryptocurrency Ownership by 1024 Indonesian Respondents (survey on 28-29 September 2017 by Daily-Social Cryptocurrency)

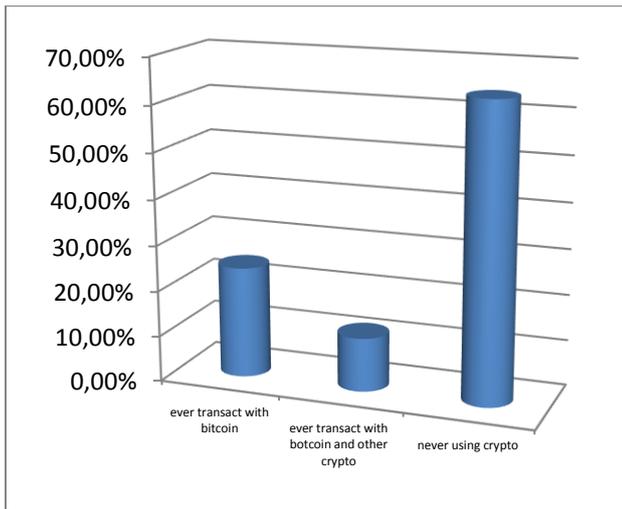


Fig 2. survey from 1024 Indonesia respondents who had transacted cryptocurrency (survey on 28-29 September 2017 by Daily-Social Cryptocurrency)

According to the result of the survey, it tracked that 50% of the total respondents have had Cryptocurrency and 40% of the total respondents had transacted using cryptocurrency. Therefore, it can be concluded that the Indonesian people are familiar with cryptocurrency. There are different opinions and confrontations about the future of cryptocurrency in general and bitcoin in particular. The optimistic notion of using cryptocurrency is supported by several advantages that cryptocurrency makes it easy to transfer money between two parties in a transaction and with minimal processing fees, enabling users to avoid the high fees charged by most banks. In addition, many countries have begun to accept cryptocurrency as a valid currency as well as merchants have begun to accept cryptocurrency as a means of payment. This is still developing especially in countries that aim to dismiss the use of cash, they claim that the cryptocurrency market has become very large and strong, therefore the idea of banning cryptocurrency will cause high cost for any country. [3]

However, on the one hand cryptocurrency has significant deficiencies namely, (1) Strong volatility which may create problems in the short term. (2) Large risks in cryptocurrency investment that must be considered in the medium and long term, (3) Money laundering risks, terrorist and other illegal financing activities, lack of central institutional reserves, which means there is no official legal entity to guarantee in the event a bankruptcy exists etc., (4) The hacking risk. Aside from the pros and cons, there are currently several countries that certify cryptocurrency as a legal currency for digital transactions including the United States, Japan, Denmark, etc. On the other hand, there are some countries which prohibit the use of cryptocurrency as a currency for trade, such as China, Taiwan, South Korea, etc. [4] According to this condition, Indonesia should be wise in making decisions including determining policies by considering the advantages and disadvantages of cryptocurrency. Based on the foregoing background of the problem, a study related to how the

government of Indonesia regulates cryptocurrency transactions on the domestic Futures Exchange is necessary.

## II. RESEARCH METHOD

This research is a normative legal research on the basis of secondary data, namely: primary legal materials, secondary, and tertiary. The data obtained from the research literature and field research by collecting document or statistical data. The results of analysis were presented descriptively. Data collection instruments in this study are secondary data from local and international literature. data analyze by qualitative that provides an overview of how cryptocurrency regulated in domestic Futures Exchange.

## III. DISCUSSION

Cryptocurrency is a pure online virtual currency, which is not supported by any physical commodity or the obligations of a sovereign country, on the contrary, it relies on a combination of cryptographic protection and peer-to-peer protocols for shelter of witness. As a result, Bitcoin has non-intuitive property and the ownership is implicitly anonymous, the consensus chain of transaction records of cryptocurrency owners is recorded and can be seen globally. [5] Making cryptographic-based payment methods was first discovered by an American computer scientist and cryptographer, David Lee Chaum, which was famous for developing e-cash, an electronic money application that aims to maintain user anonymity by using cryptography as a basis for electronic cash transfers.

In 2008, "Satoshi Nakamoto" defined cryptocurrency as Bitcoin. Bitcoin is the first modern cryptocurrency that gives incentives to those who are willing to participate in completing cryptographic quizzes. [6] Blockchain technology is the technology that underlies the operation of Cryptocurrency without relying on centralized servers and thus avoids the risk of downtime. [7] The blockchain system uses decentralized. In principle, blockchain technology conditions each server that runs this software to form a consensus network automatically to mutually replicate data transaction and mutually verify existing data. [7]

Cryptocurrency has various deficiencies and shortages, some of which are safe from inflation. When inflation increases, the value of fiat currencies decreases, for instance the decrease of money purchasing power. In a sense, with the same amount of money each person can afford to buy a smaller number of goods and services than before. Unlike the case with virtual money, it is not affected by inflation due to low circulation and is also not influenced by domestic factors. [8] In addition, transactions can be faster and costs less than fiat currency transactions because there is no official or intermediary authority as the administrative intermediaries to complete transactions.

Transactions are carried out peer-to-peer from sender to recipient (decentralized).

Anonymity means that the address side of Cryptocurrency such as bitcoin as an example consists of a series of numbers that might be difficult to trace behind the owner. Although the series of number do not include the owner's identity, the transaction history will be neatly recorded, the value can be known, and it can be transacted anywhere. Transparent or open source because everyone can read the blockchain code by verifying the written code so that it can be seen how much Crypto is circulating and how many cryptocurrency requests which make the accuracy of cryptocurrency inflation rates can be seen.

Immutable means that every transaction that has occurred cannot be canceled or repeated again. How the Immutable cryptocurrency works can be explained as follows, the blockchain is divided into subsheets of data, each called a block. At the end of each block, there is a summary (digest) which summarizes the contents of the block. The summary is repeated in the first row of the next block. If there is a change in the previous block, then the summary/digest in the block will change and do not match the first row in the next block. When the network detects the inconsistency, it will remove the damaged block and replace it with the original block. In this case, the database is immutable. Such structure (for example, data compiled in the latest block on the blockchain will be added according to the consensus relationship mechanism), it is very impossible to change the previous data. Summary data at the end of a block and at the beginning of the next block are generated through a mechanism called a cryptographic hashing function. [9] Furthermore, the nature of cryptocurrency is almost impossible to hack because it is supported by many users who come to secure the network (miners). Attackers (hackers) need to compete with an honest long chain blockchain validated by a validator (miner). Hacker costs will be very expensive, and require sophisticated computing power and are devoted to fighting the validator block.

However, behind these advantages there are disadvantages. Such as volatility/strong market mood which makes the price of cryptocurrency can jump sharply or even fall decrease free in a minute which may generate problems in the short term. The anonymous nature of cryptocurrency creates the risk of money laundering, terrorism and financing other illegal activities. As a result of the centralized nature of cryptocurrency, no official legal entity guarantees in the event of bankruptcy occurs.

In Indonesia, as well as Australia and Canada and Singapore, cryptocurrency has not been recognized as a legal payment tool but is permitted as an investment tool. Prohibition related to payment transactions using cryptocurrency contained in Article 34 letter a of Bank Indonesia Regulation Number 18/40/PBI/2016 concerning the Implementation of Payment Transactions for Payment System Service Providers jo Article 8 paragraph 2 of Bank

Indonesia Regulation Number 19/12/PBI/2017 concerning The Implementation of Financial Technology states that Payment System Service Providers are prohibited from processing payment transactions using virtual currency. "Virtual currency" is a digital money issued by parties other than monetary authorities obtained by mining, purchasing, or transferring rewards, including Bitcoin, BlackCoin, Dash, Dogecoin, Litecoin, Namecoin, Nxt, Peercoin, Primecoin, Ripple, and Ven. In Indonesia, legal currency which can be used as a payment is only Rupiah, according to Article 1 number 2 of Law Number 7 of 2011 concerning Currency (Law on Currency).

The violation of Article 34 letter a Bank Indonesia Regulation Number 18/40/PBI/2016 concerning the Implementation of Payment Transaction Processing, among others: a. reprimand; b. fine; c. temporary suspension of part or all payment system service activities; d.) revocation of license as a Payment System Service Provider.

Whereas violation of Article 1 number 2 of the Currency Law shall be liable to a maximum imprisonment of 1 (one) year and a maximum fine of Rp. 200,000,000.00 (two hundred million rupiah). However Cryptocurrency can be invested as a commodity subject in the Futures Trading Exchange by complying the provisions in the Commodity Futures Trading Regulatory Agency, Regulation Number 5 of 2019 concerning Technical Provisions for the Implementation of the Crypto Asset Physical Market (Crypto Asset) on the Futures Exchange. Commodity Futures Trading Supervisory Agency, hereinafter referred to as Bappebti, is a government institution whose main task is to provide guidance, regulation, development and supervision of Futures Trade. Crypto assets can be traded if they meet the minimum requirements as follows: a. based on distributed ledger technology; b. in the form of utility Crypto assets (utility crypto) or Crypto Backed Assets; c. market capitalization value (market cap) is ranked in the 500 (five hundred) large market capitalization of Crypto Assets (coinmarketcap) for Crypto Utilities; d. entered in the largest Crypto Asset exchange transaction in the world; e. has economic benefits, such as taxation, growing the informatics industry and the competence of experts in the field of informatics (digital talent); and f. risk assessments have been carried out, including the risks of money laundering and financing of terrorism and the proliferation of weapons of mass destruction. In addition, Crypto Asset Trading can only be facilitated by the Futures Exchange which has obtained approval from the Head of Bappebti and meets the requirements stated in Bappetti regulations.

Cryptocurrency is based on the principle of two domains: cryptography-based asset disposal and distributed ledgers technology. Cryptography-based asset disposal means that the cryptographic key is used to sign transactions and verify ownership. The sending party signs the transaction with a secret private key, and the corresponding public key can be used to validate that the

transaction has been signed by the related party. For the first domain, digital assets are still possible to be copied and carry the risk of double expenditure. So the solution is to make a third party monitor or keeper of the records.

The Distributed Ledger Technology (DLT) protocol is designed to maximize incentives from decentralized operators to maintain the integrity of the ledger in accordance with the protocol that governs digital currencies.

As for the workings of crypto assets based on distributed ledger technology, all transactions are recorded on computers in the network, throughout the world, by a miner. Miners are those who help securing and recording transactions on the network. They dedicate their computing resources to secure and process various transactions within the blockchain network. They compete with one another to verify transactions and then put them in blocks arranged in a chronological order. Every miner who succeeds in entering a new block into the blockchain network will get a reward in the form of digital coins (bitcoin) which then can be used as a means of payment for buying goods and services or stored as digital assets - such as precious metals (gold) - that have value or are traded at cryptocurrency market. [10] The types of cryptocurrency are those that can be mined and those that cannot be mined. The examples of mined crypto are Bitcoin, Ethereum, Mon-ero, Litecoin, and Dash. Mining cryptocurrency is a prize for solving cryptographic algorithms through a process known as mining. Miners who first solve the cryptographic algorithm rithm generate blocks and receive prizes. The prize of the block is in each cryptocurrency unit. In the block mining process, miners verify transaction records into that block, which are then added (e.g. Chained) to the previous block, thus forming a blockchain. [11]

Based on Bapetti Regulation regarding the requirements crypto assets stated in letter d which prescribes that it shall include in the largest crypto asset exchange transaction in the world, which raises a a problem different than controlling trading on the Futures Exchange, when cryptocurrency becomes an investment object, there is no single public authority that is officially responsible for enforcing market manipulation. Indeed, cryptocurrencies are usually not registered as securities, derivatives and/or financial instruments and are therefore traded through various platforms spread throughout the world such as bitcoin, ethereum, mono-ero, litecoin, and dash. Many regulators will find it difficult to claim responsibility and law enforcement, where in reality the platform is located in a foreign jurisdiction, and actual violations are committed through the internet, using social platforms, such as slack, telegram, Twitter, and Facebook. [12]

#### IV. CONCLUSION

Although Indonesia prohibits Cryptocurrency as a means of payment, Cryptocurrency can be invested as a commodity subject in the Futures Trading Exchange by

complying the provisions in Regulation of the Commodity Futures Trading Regulatory Agency Number 5 of 2019 concerning Technical Provisions for the Implementation of the Physical Market for Crypto Asset in the Futures Exchange. The permissible cryptocurrency technology in Indonesia is distributed ledgers technology, which is a decentralized system to maintain the integrity of the ledger in accordance with the protocol. While the type of cryptocurrency prefer to a cryptocurrency utility that has a speculative value in accordance with supply and demand than a security crypto.

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