

The Economic Impact of Cryptocurrencies in Indonesia

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Abstract

In this era of global economic development, especially in Indonesia, it is inseparable from elements of high technology such as information. The development of information technology considers all fields, including the financial sector. Cryptocurrency, often called virtual/digital currency, results from the evolution of financial technology. Digital currency is widely used as a payment method on the Internet. This currency was created to provide convenience and security when making payments—with the included blockchain technology, reducing transaction costs. However, in this case, Bank Indonesia, the government has banned digital/cryptocurrency transactions because it hurts the Indonesian financial system, currency stability, and payment system. This study explains the impact of cryptocurrencies on the Indonesian economy and the government's attitude towards the technology it contains. In terms of the technology offered, cryptocurrency is an evolution of financial technology and will allow financial transactions to replace paper money with digital money in the future. The government will study more deeply the technology contained in cryptocurrencies. The policies made later will not prohibit the technology contained in cryptocurrencies. In general, it provides knowledge to gain a deeper understanding of cryptocurrencies. You will be able to do it.

Keywords: Blockchain, Cryptocurrency, Virtual/Digital Money, Financial Technology, Internet.



1. Introduction

Today, most people know the global phenomenon of digital money (cryptocurrency). While most consumers, banks, governments, and many other businesses are unaware of the significance of cryptocurrencies[1]. It will be challenging to find a large bank, accounting firm, credible software business, or government in 2016 that does not examine cryptocurrencies, publish papers, or initiate so-called blockchain initiatives[2]. "Virtual currencies, probably most notably Bitcoin, have grabbed the imagination of some, frightened others, and perplexed us all[3]." (US Senator Thomas Carper)

Most individuals, including bankers, consultants, scientists, and developers, are unfamiliar with cryptocurrencies[4]. They frequently need help to grasp fundamental ideas. Only some people know that cryptocurrency arose as a byproduct of another technology. Satoshi Nakamoto, the anonymous creator of Bitcoin, the first cryptocurrency, had no intention of creating a currency[5]. Satoshi stated in his Bitcoin announcement in late 2008 that he made a "Peer-to-Peer Electronic Cash System." Many people need help to produce digital money because their purpose is to build anything. The initial release of Bitcoin, new electronic money that employs a peer-to-peer network to avoid duplicate spending, was announced. There is no central server or authority. Hence it is fully decentralized[6].

Many people need help to produce digital money because their purpose is to build anything[7]. The initial release of Bitcoin, new electronic money that employs a peer-to-peer network to avoid duplicate spending, was announced. There is no central server or authority. Hence it is fully decentralized[8]. The rate of growth of cryptocurrencies from year to year is considerable. The development of one type of cryptocurrency, bitcoin, which has the highest value today, is not only rife abroad. If the non-IT community can already accept the technology and understand the implementation technique, the development of cryptocurrency in Indonesia will certainly increase significantly[9]. Currently, most cryptocurrency users in Indonesia utilize their currencies for investment, transaction or payment reasons, remittances, or transfers to other nations. However, in addition to the growing enthusiasm of Indonesians in investing in bitcoin, various barriers can dampen public interest in cryptocurrencies[10]. One of the most significant barriers to the growth of cryptocurrencies in Indonesia is Bank Indonesia, which has refused to recognize and has even blocked all bitcoin transactions since bitcoin is not legal cash in Indonesia[11]. It is clear from the Indonesian government's official interpretation of currency, as stated in Article 1 paragraph 1 of Law No. 7 of 2011, that "currency is money issued by the Unitary State of the Republic of Indonesia, referred to as Rupiah."

In addition to the preceding, there are several more issues to consider while investing in cryptocurrencies:

1. Cryptocurrencies lack a precise classification. It is unclear if bitcoin is money or merely a commodity.
2. The existence of a scam is fraudulent conduct that causes people's faith in something to alter. In Indonesia, for example, individuals are used to being persuaded to get rich quickly through an MLM or Multi-Level Marketing that is unclear and ends up being a fraud. People are also skeptical about cryptocurrencies as a result of this.
3. The general public's comprehension of cryptocurrencies remains hazy. It leads to a lack of cryptocurrency acceptability in Indonesian culture.

Based on the previous description, the problem may be stated as follows:

1. How do cryptocurrencies affect the Indonesian economy?
2. What is the government's position on cryptocurrency technology?

This research aims to generalize the influence of cryptocurrencies on the Indonesian economy and investigate the technologies involved.

1. The application of the Tri Dharma PT, namely education, research, and community service, at AMIK Royal Kisaran is one of the benefits of this research for researchers.
2. This research is meant to give feedback to the government on the impact of cryptocurrencies on the Indonesian economy and technology.
3. The public should expect this research to know the influence of cryptocurrencies on the Indonesian economy and technology.

In contrast to traditional money such as rupiah, dollars, or others, cryptocurrency is virtual money or digital money that exists in cyberspace and does not have physical items.

According to Altucher, our forefathers changed the shape of currency countless times[12]. They began with gold, which supplanted the barter system and was eventually superseded by paper money. As a result, it is feasible that digital currencies such as cryptocurrency will eventually replace paper money as a transaction instrument[13].

According to the CoinMarketCap website, there were 1568 different types of cryptocurrencies globally at the time of writing. The figure is continuously tracked and growing as ICOs (Initial Coin Offerings) occur in numerous nations, including Indonesia[14]. Not many cryptocurrencies are well-known, particularly in Indonesia. Here is the order of gains based on the most significant market cap (market cap), with Bitcoin currently leading the crypto industry:

A. Bitcoin (BTC) Benefits and Drawback

Benefits

Defining the benefits and drawbacks of Bitcoin would effectively reflect cryptocurrencies in general[15]. The first benefit of Bitcoin is that it is crypto money. With an increasingly sophisticated Hash Rate (the amount of complexity of cryptographic algorithms), public trust is also ensured, avoiding concerns such as counterfeiting[16]. This confidence contributes to developing a worldwide community, which reinforces the currency's position as a currency that is not easily influenced by societal factors. Cryptocurrencies, like gold, can reduce inflation.

Deficiency

When studied closely, Bitcoin is speculative (in terms of value). The amount of people or businesses who accept Bitcoin determines its worth[16]. The more people who utilize it, the more valuable it becomes. If there are fewer, the conclusion is that the selling price will decline.

B. Ethereum (ETH)

Advantages

Very similar to Bitcoin but intended to be an open smart contract. Transactions on the blockchain can execute a smart contract in various ways, such as delivering digital money or data to the contract address. If the smart contract is successfully completed, it can process more transactions or execute other smart contracts[17]. The Ethereum Virtual Machine (EVM) is software that allows developers to design numerous apps based on crypto transactions quickly[18].

Deficiency

Various factors become flaws behind the ease provided by the development process[19]. The first is a problem of access speed, which is not totally guaranteed due to the usage of dispersed servers. Application development on the Ethereum platform is akin to leasing web-hosting services; when the server goes down, so does the system that runs on it.

C. Ripple (XRP)

Advantages

The complaints of Bitcoin users appear to have been heeded by Ripple creators, as one of the benefits it provides is the ease with which it may be converted to local money[20]. Ripple technology makes it possible to swap XRP for numerous currencies worldwide, including Bitcoin. This is due to Ripple's integration with global financial services. It is currently one of the pillars of the remittance revolution or transfers between nations[21].

Deficiency

Purdue University's research results have revealed a Ripple loophole. The network's openness causes the gap. Nodes in the network structure may be attacked, resulting in the loss of user access to transmitted cash[22].

D. Litecoins (LTC)

Advantages

Litecoin is also here to enhance Bitcoin; one improvement is connected to the generation time of the constructed blocks[23]. The average time for Litecoin is 2.5 minutes, whereas Bitcoin's average duration is 10 minutes. The mining method is simple so that miners do not need to operate with super-powerful machines[24]. Litecoin also employs Segregated Witness, which speeds up currency transactions and reduces costs. The Swap Atom functionality has also been enabled to make it easy for other crypto coin owners to transact with Litecoin without a specialized site[25].

Deficiency

The risk of Litecoin is projected to arise if the market is uninterested. Because the mining procedure is quite simple, it is possible to accumulate Litecoin stock. If it cannot develop convincingly in the long run, the "bubble" will most likely burst. As a result, inflation fell dramatically.

Technology is available.

It is not easy to replicate the properties of paper money or coins in digital form. What properties must digital currency have? First and foremost, digital payment must include security safeguards that ensure its validity, just as banknotes and coins are created with certain physical qualities that make them impossible to counterfeit. Technically, one approach is to employ a digital certificate. Second, digital cash must be anonymous, which means it must not leave a digital trace that reveals the transaction actor's identity.

Digital currency will be significantly different from other electronic transactions by moving a particular amount of money from the sender's account to the recipient's account with the owner of each of these accounts identified. Third, digital cash must be protected against reusing the same money for different transactions, sometimes known as double-spending. When someone spends money on another party with banknotes or coins, the money physically moves into the hands of a second party, ensuring that the original party cannot use the same money again. This is in contrast to digital currency, which does not have a physical form.

2. Research Method

Methodology of Research

This study employs an analytical method with a normative approach to examine the influence of cryptocurrencies on the Indonesian economy.

Specific

The study parameters are analytical descriptive since the research data collected can offer an overview of how cryptocurrencies affect the Indonesian economy. This analytical description starts by categorizing the same material and information into sub-aspects and then interprets it to mean to each sub-aspect and its relationship to the others. Following that. An inductive analysis of all aspects is performed to grasp the significance of the link between one feature and the other and other elements that are the topic of the research problem to present a complete picture of the results. As a result, it is feasible that future research may be more concentrated and targeted toward specific challenges.

Method of data collecting

The data from this study was collected through library search technology, a secondary data search. According to Ronny Hanitijo Soemitro, the two types of secondary data that can be analyzed are private and public secondary data. The authors of this study used public secondary data such as abstracts, findings, academic journals, textbooks, economics, law, and other disciplines.

Method of data analysis

The data collected during the survey will be surveyed using qualitative data analysis methods. The material analysis approach uses a qualitative description method by providing detailed explanations based on systematically recorded materials. H. Classify the acquired data to simplify analysis and design.

2.2 Literature Review

According to some research, when it comes to Bitcoin. Cryptocurrency Technology in business transactions according to Islamic law. It concluded that while Bitcoin technology with Blockchain can be recognized as an outstanding revolutionary technology, there are elements of gharar and maysir in it, so it is classified as a gambling transaction. The legal position is haram lighairihi.

On the other hand, other researchers determined that the usage of Bitcoin in terms of expenses is reasonably inexpensive but has the danger of unpredictable pricing, and the process of integrating Bitcoin with online businesses, particularly WordPress, is extremely straightforward to achieve by following the approach outlined above.

In terms of legal research, further research concludes that bitcoin virtual currency in Indonesia has increased. However, there is no legal recognition from the Indonesian government against bitcoin virtual currency as a payment instrument in commercial transactions.

3. Result and Discussions

The Economic Impact of Cryptocurrencies in Indonesia The economic impact of adopting virtual money or cryptocurrencies in Indonesia should not be underestimated. Currently, Indonesia has a strong economic link with the leading nations that allow the usage of virtual money. The current state of the reduction in the value of virtual money must be monitored. This is because it can have an impact on the home economy. Japan and Korea are the two most active users. Indonesia may be damaged if its currency suffers a currency crisis due to cryptocurrency.

The transmission of the impact of the cryptocurrency crisis is undoubtedly protracted, even far. Among the indicators is that the market capitalization of cryptocurrencies is relatively modest in comparison to stock indexes such as the Jakarta Composite Index (JCI), the South Korean Stock Exchange (KRX), and the Tokyo Stock Exchange (JPX). According to Bitcoinity.org figures, as of 5 February 2018, the cryptocurrency market capitalization was US\$153.36 billion on 4 February 2018. JPX had a market size of \$5.12 trillion, KRX had a market cap of \$1.33 trillion, and JCI had Rp7,390.39 trillion. The most crucial aspect to consider is the hazards of virtual money, both as a means of payment and as a commodity. Bank Indonesia (BI) has once again warned bitcoin users and owners in Indonesia to refrain from using or investing in virtual currency. According to the Head of the BI Payment System Policy Department, the increased circulation and volatility of the bitcoin exchange rate would undermine the stability of Indonesia's monetary, financial, and payment systems.

BI is also concerned about bitcoin's volatility in financial system stability. This is similar to the idea of gravity; if the ball is hoisted very high, it will be exceedingly painful to fall. We do not want the crisis to reoccur because of a bubble. If it falls unexpectedly, the people will bear the brunt of the consequences.

Furthermore, regulatory arbitrage is potential because transactions can be conducted from other nations with more favorable regulations. The most problematic component is producing Bitcoin as a currency or transaction instrument regarded as excessive, both in terms of nominal and agreed-upon price values, particularly in light of the economic crisis. As the origin of Bitcoin, blockchain technology provides a chance for the government to compete with other countries in terms of technical innovation. We are already outdated with the internet; do not fall behind in the next generation of technology.

The Government's Position on Cryptocurrency Technology The perspectives of the United States and South Korea The United States will most likely follow Japan's lead. Currency manager Keith Noreika claimed that he was open to the notion of Bitcoin at a Federal Reserve Bank of Philadelphia event. He also stated that he would make changes available to bitcoin firms that desire to seek a special license. On the other hand, South Korea shares a similar stance toward the Chinese government. A few weeks ago, the South Korean government banned token sales and Initial Coin Offerings (ICO). They further indicated that firms that continue to engage in these operations might face financial fraud charges. **The Government's Position on Cryptocurrencies** Looking at some of the examples above, governments worldwide appear to have two options. They can provide infrastructure and laws for cryptocurrencies or outright prohibit them.

4. Conclusion

According to the explanation given in the Research Results and Discussion Chapter, it is certain that most of them are impressed by the decentralized quality of cryptocurrencies, which means that they are not controlled by one central government (central bank). The text implies that the value of cryptocurrencies is not affected by inflation or other economic changes generated by banks or even governments. Blockchain technology is very useful in

cryptocurrency, which will be considered a financial technology in the future.

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