

## Transactions of Cryptocurrency in the Perspective of Islamic Finance and Economics

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### Abstract

Cryptocurrency is a growing fintech trend frequently encountered in various modern economic activities. Therefore, this research aimed to provide knowledge and understanding of cryptocurrency, particularly from the perspective of Islamic finance and economics using secondary data obtained from literature. As a digital financial transaction system, cryptocurrency fundamentally uses relatively new technology. However, the legal nature still needs further examination without constituting a form of violation. In Indonesia, the government has yet to adopt a definitive stance on the presence of cryptocurrency, thereby permitting its usage. The results showed that cryptocurrency investment includes substantially greater risk compared to others due to the inherent challenge of predicting the value. From the perspective of Islamic finance and economics, the transactions are considered to lack clarity in terms of quality and quantity, containing elements of uncertainty (*gharar*). Moreover, the concept of Bitcoin as a transaction tool is forbidden (*haram*) by the Indonesian Ulama Council since the project contains uncertainty and does not comply with the existing regulations. The implications of the research emphasize the necessity of avoiding dubious activities, such as cryptocurrency, as well as transactions leading to higher harm (*madharat*) compared to benefits, particularly from the perspective of Islamic finance and economics.

**Keywords:** bitcoin, cryptocurrency, Islamic finance and economics

## INTRODUCTION

The continuous advancement and development of information technology are assisting societies, specifically in the fields of economy and commerce. These advancements are in the form of alternative instruments for national and international payment methods, evolving with traditional cash and electronic money to trigger more efficient innovations as well as provide security and convenience. In this context, information technology permeates and influences all human activities, including economic aspects and others. The development of information technology affects the dynamics of social lives, particularly concerning transactions conducted by the public (Brown & Duguid, 2017). Moreover, cryptocurrency has been developed as the first implementation of blockchain technology, and the use is not limited to payment systems (Joo, et al., 2020). Decentralized applications can impact all areas of society such as economics, education, science, and art, including cultural and other fields (Shovkhalo & Idrisov, 2021).

Cryptocurrency or digital currency has become a global phenomenon in several countries, such as the United States, Japan, and China, with the People's Bank of China (PBoC) innovating the payment system by conducting large-scale trials of e-RMB. In Indonesia, the presence faces pros and cons in terms of regulation and legality of the usage. However, the government, particularly the Commodity Futures Trading Regulatory Agency (BAPPEBTI), continues to assess and issue several regulations regarding the assets, protecting investors. Due to the evolution of time, regulations regarding buying and selling transactions need to be promptly addressed since there are numerous transactions taking place.

Global data up to the end of 2020 recorded that the number of active cryptocurrency users had reached 4 Million. In July 2021, data from the Ministry of Trade reported that the number of users had reached 7.4 Million (Wang, 2018). According to Tempo magazine, there are already 6.5 Million active users of crypto exchanges and bitcoin, with transaction values reaching 370 Trillion rupiahs due to the increasing value of exchange sales, such as bitcoin, Ethereum, doge, tron, bittorent, and others (Abu-Bakar, 2018). However, in June 2021, the value of Bitcoin experienced a decline and this was caused by a tweet from Elon Musk on Twitter stating a lack of interest with the hashtag Bitcoin. Subsequently, in another tweet, Elon Musk declared that Tesla would no longer accept payment for purchases using Bitcoin (Aufima, 2018). This certainly sparked speculation among the public that

the value is highly dependent on the flexibility of use, specifically as a method of payment. The fluctuation of cryptocurrency values depends on various factors, including developmental progress and the impact of global economic influencers. For instance, the instability of Bitcoin, exemplified by fluctuations triggered by tweets from figures like Elon Musk, shows the susceptibility of the markets to external stimuli.

The mechanism for selling cryptocurrencies operates similarly to the sale of virtual currencies used as a business field through speculation to obtain price differences. Traders profit from selling cryptocurrencies purchased when the value is low and reselling when the price rises since the value fluctuates every second (Hayes, 2017; Azizah & Irfan, 2020). Even though cryptocurrency users are increasing and have become a business alternative developed by influencers, regulations regarding the investment are not fully established. Bank Indonesia (BI) has explicitly stated that cryptocurrency was not allowed as a payment transaction tool. This is because the exchanges contradict Law No. 7 of 2011 concerning currency, which only recognizes the rupiah in financial transactions. Additionally, BI has issued Regulation No. 18/40/PBI/2016 regarding the implementation of payment transaction processing and PBI No. 19/12/PBI concerning the implementation of financial technology, where current regulations affirm that cryptocurrency is not a legal payment tool.

Indonesia is predominantly made up of Muslims and almost all events are based exclusively on contracts related to halal quality. Therefore, these activities are regulated and warned to be accessible to the entire population. Understanding the paradigm of Islamic research is an absolute necessity and basic assumptions about the object of investigation (Islam) influence problem-solving analysis. Without understanding the paradigm and assumptions, the research process lacks direction, increasing the difficulty of acknowledging the results scientifically (Bakri, et al., 2019).

This is in line with the fatwa issued by the National Sharia Council regarding currency, where various activities require the use of the same or different types of currencies as transaction tools. Buying and selling with currencies are known in various forms, and the legal status of cryptocurrency transactions varies according to Islamic teachings.

A research by Fatarib and Meirison (2020) which focused on the nature of money and the characteristics in the view of Islamic law, correlated with the role or

function of gold as an intrinsic value issued by the government legally concluded that the currency recognized and valid in the view of Islamic economics is issued by the authority or government. Therefore, Bitcoin and other types of cryptocurrencies are not recognized as currency from the perspective of Islamic law due to uncertainty and the potential for significant harm to the country or individual users.

The following research conducted by Nurhisam (2017) where the result focuses more on the increasing use of Bitcoin as a transaction tool by society in the modern era. The prohibition of using Bitcoin is reported as a transaction tool from the perspective of Islamic law, specifically for Muslims.

The negative publicity, high risks, speculative issues, and legality from the perspectives of Islamic and national law issues constitute a unique and interesting phenomenon worthy of in-depth analysis. This promotes further research based on the views of Islamic finance and economics.

## **Cryptocurrency**

Cryptocurrency originates from the word “cryptography,” derived from the Greek language, meaning hidden writing (Rosen, 2018). “Crypto” means hidden or secret, while “graphy” means writing. The daily applications include ATM transactions, electronic trading, and computer passwords. Currently, cryptography is also used as the code or secret key for virtual currencies, such as Bitcoin, in the implementation of blockchain technology. The task is to work based on encryption algorithms specifically designed to validate and verify transactions (Ausop & Aulia, 2018; Corbet & Yarovaya, 2020; Alonso et al., 2021).

According to BAPPEBTI (Commodity Futures Trading Regulatory Agency), cryptocurrency is a commodity in the form of assets that are intangible due to digital nature, operate on a peer-to-peer network, use cryptography, and consist of distributed ledgers aimed at controlling the creation of new units and verifying transaction activities. This transaction system is highly secured without the need for external assistance (BAPPEBTI, 2019). Cryptocurrency serves as the foundation for existing digital currencies, such as Bitcoin, to be used as a method of payment (Darmawan, 2014). This virtual or intangible digital currency is built with encryption in the usage system. The existence is widespread and popular in almost all countries. Furthermore, it serves almost the same function and purpose as other currencies, namely as a medium of exchange. However, the main difference

is the lack of physical form, unlike fiat currencies. Cryptocurrency only exists as data blocks bound by hashes responsible for conducting the validation. Examples of cryptocurrencies include Lisk, Ether, Ripple, Litecoin, StorjCoinX, MaidSafeCoin, Bitcoin, and others (Campbell-Verduyn, 2018; Ausop, & Aulia, 2018).

## **METHOD**

This analysis uses secondary data obtained from literature sources, commonly known as library research, which includes studying existing books, journals, legislative regulations, and other scholarly writings. A descriptive qualitative method is used in this research through information collection from literary sources and books as the main objects. The qualitative method includes gathering information in real time and generating data in the form of notes and descriptions. Literature used for data collection includes previous research such as journals, reference books, the Qur'an, the Hadith of the Prophet Muhammad, Bank Indonesia Regulation No. 18/40/PBI/2016, and the Indonesian Ulama Council's perspective on cryptocurrency in the context of Islamic finance and economics.

## **RESULT AND DISCUSSION**

### **Transactions of Buying and Selling Cryptocurrency in the Perspective of Islam**

Cryptocurrency in its usage from the perspective of Islamic economics can be evaluated based on a hadith where the Prophet Muhammad (peace be upon him) said, "Gold for gold, silver for silver, wheat for wheat, barley for barley, dates for dates, and salt for salt, like for like, equal for equal, hand to hand. If the types differ, sell as you wish, as long as it is hand to hand." From this hadith, gold and silver are subject to Sharia law, namely *riba* (interest), because these products serve as a medium of exchange and a measure of value against other goods. Therefore, the issue is not about the intrinsic value but the utility and usefulness. According to the statement of Shafi'i, a prominent economist, money is not always suitable as a store of value due to fluctuation. From the perspective of Islamic law, Bitcoin as an electronic (digital) currency may be permissible even though the project lacks legality.

Based on the elements of buying and selling transactions, Bitcoin has fulfilled several specific criteria. This is because the transactions also require registration, account verification, or registrant biodata, as well as rules and conditions for

acknowledgment during the transfer or at the time of the transaction. In Islamic teachings, the transaction (*al-u'qud*) refers to the connection of two matters, forming a unity as a connecting medium that is held and solidified. The elements affecting the transaction are valid delivery and acceptance in writing or orally to exchange goods or services. According to the Qur'an and the Sunnah of the Prophet Muhammad (peace be upon him), scholars generally state unequivocally that the original ruling of commercial transactions is permissibility (*ibahah*) as long as the conditions and pillars are fulfilled (Alonso, Jorge-Vázquez, Fernández, & Forradellas, 2021).

A transaction is considered valid when all parties have fulfilled respective obligations, including the inherent consequences. A sales contract can proceed smoothly when a seller fulfills an obligation by delivering goods, and the buyers pay a certain amount for the goods purchased through a mutually understood mechanism. Transactions under Sharia law should meet the following requirements, (1) The parties are competent and understand the transaction. In this context, the buying and selling process should not be conducted by someone who is not of sound mind, immature, forced, or insane, (2) The transaction is automatically considered invalid when prohibited under Sharia law, (3) The benefits are felt by all parties.

Islam has different sources (foundations) and methods for determining or establishing the law of cryptocurrency. The primary source is the Quran, while the secondary source is hadith or Sunnah. These sources are analyzed by *mujtahids* (Islamic scholars) to determine the existing law. In addition, *mujtahids* have other methods such as *qiyas* (analogy), *ad-zariah* method, *maslahah mursalah*. Every transaction activity must be free from wrongful acts in line with the values of Islamic teachings and should not include prohibited actions. Additionally, transactions should not include damaged, futile, useless, or counterfeit items. Most users of cryptocurrency mainly engage in speculation activities, aiming to profit from trading and investment. In Islam, such activities contain elements of gambling (*maysir*), uncertainty (*gharar*), and interest (*riba*) (Uddin, 2015; Alam, et.al, 2017; Kuyateh, 2022).

Cryptocurrency is analogized or equated with exchanges between gold and silver. In terms of currency, it can be exchanged with yen, dollars, ringgit, rupiah, and others. In Islamic jurisprudence discussions, this is often known as “*sharf*,” and the concept is popularized in the world of finance. The prominent Imam Ibn Taymiyah explains in *Majmu' Fatwa* that money is tangible and used as a valid

method of exchange. From the definition, the use of cryptocurrency is allowed and valid. This opinion is reinforced and emphasized by Imam Ghazali with the main condition being the official issuance and circulation. Moreover, the government must provide certainty as an official and valid transaction tool in terms of payment. There are differing views and debates in several countries, including Indonesia. Therefore, the use of cryptocurrency as a method of payment in buying and selling transactions is not valid from the perspective of Islamic Sharia law.

Electronic/digital currency, known as cryptocurrency, has been a significant concern for the international community. Some communities are in favor of cryptocurrency, and the differences are mainly from the legality of usage, both from the perspective of religious teachings and positive law. The fluctuating price volatility and uncertainty have prevented cryptocurrency from being officially recognized by governments. In principle, Islam views all forms of transactions, including buying and selling, as permissible (*ibahah*) provided there is no evidence prohibiting the process. However, cryptocurrency contains elements of uncertainty because the concept is often used as a trading tool that includes gambling (*maysir*) and falls into usurious practices. Investors flock to buy the cryptocurrency at low prices with the main goal of selling at a significant price. Therefore, digital cryptocurrency is primarily used for speculation purposes and not as an investment.

Some of the drawbacks of using cryptocurrency include susceptibility to the risk of economic inflation, which can harm the wider community. This virtual currency is not supervised by the country's financial authority institutions and has not been fully endorsed by the central government, posing significant risks such as money laundering, criminal activities, corruption, and other crimes. The Indonesian Ulema Council (Majelis Ulama Indonesia) has issued a fatwa regarding the trading and electronic money with Number: 116/DSN-MUI/IX/2017. The fatwa states that transactions including currency exchange are essentially permissible (*ibahah*) or allowable with several provisions, such as not comprising speculation for profit, being for saving purposes, the transaction amounts should be equivalent for the same currency, the inclusion of different currencies should adhere to the exchange rate system and the process must be carried out in cash. Besides the conditions, electronic money transactions must also avoid elements of interest (*riba*) and uncertainty (*Gharar*) (Masruron & Faozan, 2021).

## **The Concept of Cryptocurrency in The Scope of Islamic Economics**

In Islamic economics, etymologically, money is referred to as *al-naqdu*, which means cash. The word “nuqud” is not found in the Quran or Hadith since the people or nations in the Arab world did not use the term “nuqud” in daily lives to denote prices. However, dinar and dirham were more popular as gold and silver currencies. In principle, money serves as a unit of account and a standard measure of value, in addition to other functions such as a medium of exchange, a store of value, and a standard of deferred payment. However, the types of money are evolving, including digital currencies such as Bitcoin. The development of Bitcoin based on cryptography supports and facilitates electronic currency-based trading activities.

Currently, cryptocurrency is not regulated by the government from the perspective of payment. The concept is considered unofficial or not recognized according to BI Regulation No. 16/40/PBI/2016. Bitcoin embodies absolute privacy as its advantage, allowing each user full sovereignty over ownership without the obligation to rely on the banking system. Electronic money is considered official and legitimate as a method of payment after meeting certain aspects or requirements. The money can be used to support societal activities when these aspects are fulfilled by various parties (Chaira, Furqani, & Amanatillah, 2021).

Bitcoin differs from digital or electronic money because the project is continually produced through several mining steps. The legal foundation is outlined in Law No. 7 of 2011 concerning Currency (hereinafter referred to as the Currency Law). Article 1 paragraph 1 of the Currency Law states that currency is money issued by Indonesia where money is a legal method of payment acknowledged by the state and valid in the territory.

As a method of payment in trade transactions in Indonesia, Bitcoin cannot be recognized as legitimate. However, Article 21 paragraph 2 of the Currency Law contains exceptions, where the use of rupiah is not mandatory for certain transactions, namely (1) the implementation of the State Budget, (2) the receipt or grant of aid from or to foreign countries, (3) import-export transactions, and (4) foreign exchange deposits in banking, or LC. Based on the explanation of legal material, the transactions can be used or have legality complying with Article 21 paragraph 2 of Law Number 7 of 2011 concerning Currency (Jati & Zulfikar, 2021).

Bank Indonesia responded to the circulation in a statement declaring that Bitcoin and other virtual currencies are not recognized as official and legal method



of payment. The public is advised to be cautious because all associated risks are personal. However, the regulation regarding the operation of its physical market on futures exchanges allows transactions as subjects of crypto or digital assets. Currently, cryptocurrency only serves as an investment instrument, but the legal status is not recognized as a legitimate and official transactional tool. Bitcoin is considered legitimate and official only when treated as a crypto asset within commodity futures exchanges.

Different views are also expressed by the Indonesian Ulema Council (Majelis Ulama Indonesia), where differing opinions are reported on the legal status of bitcoin. During the 7th Fatwa Commission MUI Meeting held on November 9-11, 2021, an analysis and research were conducted regarding cryptocurrency from a legal perspective. This resulted in the following decisions: (1) The use of cryptocurrency is unlawful (haram), (2) the digital or electronic commodity is not valid for trading, (3) The commodity meets the criteria of ownership and underlying assets and has clear benefits, hence the trading is lawful. Based on the analysis and results, cryptocurrency is religiously forbidden (haram) because the transactions include elements of uncertainty and harm. *Gharar* exists because Bitcoin was created by an unknown person, known only by the pseudonym Satoshi Nakamoto. This name is mentioned in the Whitepaper, and the identity of the inventor remains a mystery (Hamin, 2020).

Bitcoin operates as a peer-to-peer payment system with a decentralized network concept, supported by the users without intermediaries or central authorities. The system is suitable and relevant for certain internet users but the implementation requires authority appointed by the state or government with the right to validate various transactions. Without responsible authority, these transactions automatically include high risks of uncertainty. Furthermore, cryptocurrency does not exist physically, and cannot be held since the value lies within the network. Additionally, this type of currency lacks intrinsic value and has long been circulating in the market.

The government does not explicitly recognize or authorize Bitcoin due to a lack of specific assets or guaranteed value. Therefore, the operation of this type of currency is unclear from an Islamic perspective, specifically concerning financial matters. According to the regulations, Bitcoin does not fall under the category of legitimate official currency issued by state-owned authorities. Therefore, the status under Indonesian law is considered illegal according to BI Law (Stevani & Disemadi, 2021; Sari, Ishaq, & Sa'adah, 2023).

Another consideration regarding the existence of Bitcoin is the potential harm (*madharat*), which tends to outweigh the benefits when used as a currency. The legal application shows that transactions using cryptocurrencies are similar to purchasing something with unclear quantity or quality, containing elements of uncertainty (*gharar*). In this context, business transactions fall under *muamalah* issues between human beings. The transactions are permissible (*mubah*) but may become forbidden (*haram*) when other factors are included. Currency issuance as a sign of the legitimacy of a payment tool shows that the issue falls under the general principles of Islamic law. This is because the determination of nominal value are fundamental matter related to the welfare of the people. Careless currency issuance can lead to significant harm to the community's economy and the welfare of the nation (Windiastuti, 2019; Wu et al., 2021).

Bitcoin serves as a transaction tool in digital or electronic form and the status is considered legal when recognized. From a legal perspective, the existence does not constitute a violation, and the usage is not punishable. However, there is a need for swift clarification regarding the permissibility or prohibition to reduce public uncertainty. Bitcoin should be evaluated based on the form, benefits, and utilities (Anwar, 2019). From a Sharia perspective, trading with the currency is not permitted when including speculation or gambling, specifically as a betting tool, resulting in more harm. The MUI continues to conduct various in-depth research and analyses on Bitcoin, without issuing a formal fatwa regarding the usage due to ongoing disagreements.

Numerous potentials can result from cryptocurrency, ranging from the advantages, ease of transactions, and disadvantages. However, every transaction conducted, specifically in *muamalah*, is expected to benefit the parties concerned. After further examination regarding the use as a digital currency, specifically when conducting online transactions, the project contains many harmful elements. Therefore, there are numerous risks associated with cryptocurrency with the capacity to harm the users. This practice is not in line with the Sharia law teachings of Islam, where transactions causing harm should be avoided, as stated in several verses of the Qur'an (Masruron & Faozan, 2021).

The concept provides an understanding that humans should be kept away from actions causing harm. All religious prohibitions are intended solely to prevent various forms of harm (*mafsadah*). This principle is a very important and fundamental

part of Islamic law in determining a law. Therefore, all forms of benefit should be maximized, while avoiding all forms of harm causing loss (*mafsadah*). To mitigate potential risks associated with digital currency, it is crucial to exercise vigilance and caution, particularly when engaging with novel financial instruments. The use of Bitcoin as a commodity or transaction tool needs to be carefully considered and weighed between the benefits gained and the risks borne.

Based on the provisions, cryptocurrency is not issued by the official authority of a specific country because a circular from BI as the authorized party states that the project does not receive recognition for circulation. The aspect considered is the harmfulness, which outweighs the benefits as a method of payment or transaction tool. The presence and use as a transaction tool for buying and selling activities fall into the category of doubtful matters (*syubhat*), where Islam commands to abstain from such practices (Darmawansyah, Firdaus, & Aguspriyani, 2021).

The increasing role of technology and information among humans has influenced the development of legal fatwas that urgently need to be issued. Even though these legal fatwas may not be entirely definitive in the position, when viewed from various aspects, such as legal principles summarized by observing various similarities in legal reasoning, the answer can be determined through the provisions found in the Qur'an and Sunnah. Currently, rupiah is the only recognized currency in Indonesia as a legal tender. Regarding the use of cryptocurrency, the responsibility and risk lie with the parties using the project. However, the government has not prohibited the circulation of the currency and is not responsible for the consequences of electronic money transactions.

## **CONCLUSION**

In conclusion, several results were outlined based on the discussion and analysis regarding cryptocurrency transactions from the perspective of Islamic finance and economics. As a digital financial transaction system, this digital project used relatively new technology, while the legal nature required further examination but did not constitute a violation. For instance, Bitcoin was also considered unofficial in Indonesia because BI and the Financial Services Authority (OJK) were not responsible for potential issues during the use as a method of payment. From the perspective of Islamic finance and economics, transactions using cryptocurrency were considered unclear in terms of quality and quantity, containing elements of

uncertainty (gharar). The concept of Bitcoin as a transaction tool according to Indonesian Ulema Council (Majelis Ulama Indonesia) was considered forbidden (haram) because the project contained gharar or uncertainty and did not comply with the existing laws and regulations.

The implications of the research showed the need to avoid anything doubtful, such as cryptocurrency. Since Bitcoin was forbidden (haram), containing uncertainty and not complying with regulations, the project was classified as an investment with very high risks. The subsequent implication was the necessity to avoid transactions resulting in higher harm than benefit.

The concept of Bitcoin served as a lesson for Muslims living in an increasingly advanced technological era to be more cautious in conducting business activities, specifically in the choice of transactional tools. Even though the fundamental legal ruling permitted or allowed (ibahah) the practice, abstaining from the activities was preferable in obtaining the pleasure of Allah SWT

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