

Analysis of cryptocurrency as collateral from the perspective of Indonesian positive law and Islamic law: A comparison

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ABSTRACT

Current technology has significantly impacted several sectors, including the financial sector. Cryptocurrency is one of the financial technology phenomena currently being widely discussed. Cryptocurrency is a digital currency that holds value and can become a promising asset for its holders. This study focuses on cryptocurrency as collateral from Indonesian and Islamic legal perspectives. This research method emphasizes a rules-based approach, namely, through laws and other legal sources. The findings indicate that Indonesian legal support for cryptocurrency as collateral is valid because it is a movable asset. However, from an Islamic legal perspective, collateral is known as al-Rahn. The use of cryptocurrency as an object in an al-rahm contract is considered invalid. This is because, from an Islamic perspective, cryptocurrency does not fulfill Shariah principles. This asset contains elements of gharar (uncertainty), dharar (potential harm), and maysir or qimar (elements of speculation or gambling), so it is considered unfit to be used as goods (sil'ah) in transactions that comply with sharia.

Keyword: Cryptocurrency; Collateral Object; Indonesian Positive Law; Islamic Law; Digital Assets

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1. INTRODUCTION

During the Industrial Revolution 4.0, with the development of various technologies such as computers, smartphones, and the Internet, many parties have transformed their production and lifestyle systems from manual and physical systems to systems based on digital technology. The change in human processes from manual to digital is very natural owing to the increasingly advanced developments of the times created by human intelligence.

As time passes, human thinking continues to advance, particularly in the field of technology, which influences various aspects of life (Kuswarno, 2015). Digital technology also plays an essential role in creating financial services. For example, in the banking world, mobile banking is used, in non-cash financial transactions, digital wallets are used, and there are many other examples of the application of digital technology in the financial services industry.

An example of the application of digital technology is the blockchain system. The development of blockchain systems has become a factor influenced global finance. The influence of blockchain is not limited to one country but extends to almost every country in the world because the blockchain system is essentially independent of any institution. Blockchain is essentially a digital transaction storage system, and one of the most well-known blockchain products is digital currency or cryptocurrency, such as Bitcoin.

Cryptocurrency is a type of digital asset technology created to function as a method of exchange using cryptography. Cryptography protects financial transactions, verifies asset transfers, and oversees the creation of additional units. Cryptocurrency is a technology whose security relies on blockchain. Blockchain protects cryptocurrencies using secret codes that are difficult for others to access. The use of a blockchain platform in digital currencies is intended to enable transactions and identify anyone who can access or open it. Cryptocurrency is a digital currency that exists only on the Internet. Because the internet has a very wide reach covering all countries, cryptocurrency can be available in any part of the country as long as there is an internet network. In cryptocurrencies, payments are made through a peer-to-peer (P2P) network. This means that payments are made from the sender to the recipient. The cryptocurrency system network stores all cryptocurrency transactions (Candra et al., 2024).

Cryptocurrency is a form of digital money with its own system that is not tied to any financial institution. This presents obstacles for some countries in developing legislation related to cryptocurrencies. While on the one hand, cryptocurrency is inherently entrenched in people's lives, on the other, it is not tied to any financial institution. Therefore, it would be difficult for the state to perform its social oversight function. However, Indonesia has supported electronic currencies through the enactment of regulations, such as Bank Indonesia Regulation Number 11/12/PBI/2009 concerning Electronic Money, which has contributed to the increasing popularity of cryptocurrencies (Syamsiah, 2017).

With the rapid development of Internet technology, the legal system needs to adapt to provide protection and ensure security for Internet users in Indonesia (Pitaloka, 2022). Nowadays, Indonesians cannot live without this digital currency in their lives. Therefore, the Indonesian government has issued the Bappebti Regulation, the primary regulation governing cryptocurrencies in Indonesia. Therefore, all legal regulatory issues related to cryptocurrencies will refer to Bappebti provisions. This regulation was drafted to oversee various activities of Indonesian citizens, including the management of crypto assets. This regulation was born from a positive legal perspective, which is still relatively new (Agustina & Amboro, 2019). In addition to regulations issued by the country's positive law, given that Indonesia is a predominantly Muslim country, the perspective of Islamic scholars or religious scholars is needed to address the cryptocurrency phenomenon.

Cryptocurrency can be considered a form of collateral given its established legal basis and high economic value (Puspasari, 2020). Therefore, in this research, the cryptocurrency phenomenon is examined from the perspective of collateral law. Collateral law itself is a branch of law that regulates the provision of collateral for debts between debtors and creditors. According to Article 1131 of the Civil Code (KUHPPerdata), all of a debtor's assets, both movable and immovable, existing and future, essentially serve as collateral for his or her personal obligations. This provision is reinforced by Article 1132 of the

Civil Code, which stipulates that all of a debtor's assets serve as joint collateral for his or her creditors, and the proceeds from the sale of such assets are then distributed proportionally among the creditors.

In Islamic law, there is also the term sharia collateral law. Collateral law that complies with sharia law in Islam is known as al-rahn. The concept of al-rahn emphasizes the process of securing debt based on the principle of mutual assistance, so that al-rahn collateral does not contain any element of usury and is merely a form of assistance. In writing, there are few hadith records discussing this sharia collateral.

This study on cryptocurrency has been analyzed in previous studies. Previous studies focused primarily on the legal aspect, including discussions of the legal status of cryptocurrency under Indonesian positive law and from an Islamic legal perspective. Furthermore, many studies have examined how Indonesian law regulates cryptocurrency as collateral. This study differs from previous studies by examining the comparison of cryptocurrency as collateral from the perspectives of Indonesian positive law and Islamic law. It is hoped that this research will help understand and compare the regulations governing cryptocurrencies as collateral in both contexts.

2. METHOD

The method used in this research is the method of exploring regulations regarding positive law and Islamic law. The main approach is by using statutory regulations, the Qur'an, and Hadith. The secondary approach is by reviewing journals related to crypto assets, national guarantee law, and Islamic law. Both primary and secondary legal sources will be examined in depth to become an engaging discussion to present. This research also applies a conceptual approach, which is to study all regulations and opinions of legal experts, thereby forming a basic understanding for conducting research.

3. RESULT AND DISCUSSION

3.1 Cryptocurrency as Collateral from a Positive Legal Perspective

Article 1, paragraph 2 of Law Number 7 of 2011 concerning Currency states that money is a legal tender in Indonesia. Furthermore, Article 2, paragraph 1 of Law Number 7 of 2011 concerning Currency states that the legal tender is the rupiah. Therefore, it can be concluded that currencies other than the rupiah are not legal tender in Indonesia. Therefore, crypto, as a digital currency, is not a rupiah. Therefore, cryptocurrencies are not legally legal tender in Indonesia and cannot be used as a medium of exchange.

The Indonesian legal system actually regulates crypto assets. Crypto assets in Indonesia are regulated under the Regulation of the Commodity Futures Trading Supervisory Agency (Bappebti), which has issued numerous regulations regarding crypto assets in Indonesia. For example, Regulation of the Commodity Futures Trading Supervisory Agency No. 13 of 2022, which discusses guidelines for crypto asset trading, and Regulation of the Commodity Futures Trading Supervisory Agency No. 4 of 2023, which discusses which crypto asset products can be traded. The Commodity Futures Trading Supervisory Agency Regulation also states that crypto is an intangible asset in digital form. This is based on the definition of "asset" here, implying that crypto has value and can be owned like an object. Given the digital nature of crypto, which can be transferred from one block to another, crypto can be categorized as movable property, but with an invisible physical or digital form.

Turning to Article 499 of the Civil Code, an object is defined as something that can be owned and becomes property for the person who owns it. Therefore, the definition provided by the Regulation of the Commodity Futures Trading Supervisory Agency (Bappebti), which defines cryptocurrency as an intangible digital asset, has the same meaning as Article 499 of the Civil Code. This is because: (1) Crypto assets have the ability to be transferred from one digital wallet to another, similar to the mechanism for transferring funds between bank accounts. Thus, in accordance with the provisions stipulated in Article 509 of the Civil Code, crypto assets meet the criteria for movable property; (2) According to Article 503

of the Civil Code, crypto assets are categorized as intangible assets because their ownership cannot be physically or tangibly seen. Ownership of these assets is recorded in a digital transaction system stored in a distributed ledger spread across the internet (Fadhali & Sewu., 2024).

In civil law, collateral law stipulates that crypto can be considered collateral because it has economic value. This collateral has a calculable exchange value which is basically an assecoir (additional) agreement, it is very important to provide a guarantee which is usually done after signing the debt (Siregar et al., 2024).

One can classify cryptocurrency assets as collateral for intangible movable property. Therefore, it is concluded that cryptocurrency can serve as collateral in the Indonesian legal system. This statement is also supported by The Civil Code's Article 1338 Paragraph 1 states that a valid agreement becomes law for both parties. This article also recognizes the idea of contract freedom, which permits parties to enter into any agreement, including those related to crypto assets. Therefore, legally, there is no prohibition on using crypto assets as collateral in Indonesia.

In this case, the most suitable types of collateral for crypto assets are fiduciary and pawn. This is because these two types of collateral are intended for movable property, such as crypto assets.

In the realm of fiduciary law, Law Number 42 of 1999 states the fiduciary is a form of transfer of an object's ownership rights depending on the principle of trust, where the object remains in the possession of the party providing the collateral. Furthermore, this law also explains that fiduciary guarantees include rights to protection for both tangible and intangible property that can be moved, as well as over immovable property, particularly buildings that are exempt from the mortgage rights specified in Law Number 4 of 1996 respecting Mortgage Rights. Therefore, crypto assets, classified as movable and intangible property, can be included in the category of objects that can be pledged through the fiduciary mechanism as stipulated in this law. Therefore, Legally, cryptocurrency assets may be utilized as fiduciary collateral.

Provisions regarding pledges are governed by the Civil Code's Book II, specifically Articles 1150 to 1160. Article 1150 explains that A creditor's right over movable property is known as a pledge surrendered by the debtor, or by another party serving as collateral for a debt on behalf of the debtor. Through this right, the creditor has the privilege of obtaining repayment from the proceeds of the mortgaged property before other creditors in the event of default. However, there are exceptions: auction costs and salvage costs must be prioritized (Fadhali et al., 2024).

The explanation of Article 1150 of the Civil Code (KUHP) concludes that crypto assets can be used as collateral for a pledge. This is due to two main criteria: (1) Because crypto assets are intangible movable assets, they fall within the elements of Articles 503 and 509 of the Civil Code. By categorizing crypto assets as movable assets, they can be used as collateral for a pledge; (2) The collateral must, in principle, be in the possession of the pledgee or creditor. This aligns with the transferable nature of crypto assets from one digital wallet to another, thus fulfilling this requirement. (Fadhali et al., 2024).

Essentially, crypto assets can be used as collateral for both fiduciary and collateral for a pledge. In addition to the clear regulations regarding crypto assets as collateral, this is also taken into consideration by Article 1338 paragraph 1 of the Civil Code, which essentially gives parties the freedom to enter into any agreement they wish, so parties are free to make any agreement they wish as long as it does not conflict with the law. Article 1338 paragraph 1 of the Civil Code also applies the principle of *pacta sunt servanda*, meaning that an agreement that has been made will become law for the parties, and therefore cannot be violated. However, in general, there are no specific regulations specifically governing crypto assets for fiduciary collateral or pawned collateral. This is because there is currently no specific regulation explicitly governing this matter, leaving room for interpretation of positive law that explicitly encumbers crypto assets as collateral in Indonesia. This clearly violates the principle of legal protection in material collateral. Legal protection is a crucial part of strengthening law enforcement in a country. The state provides this protection to its citizens as an effort to create stability in various sectors, including the economic and legal spheres (Dimiyati 2014).

3.2 Cryptocurrency as Collateral from an Islamic Legal Perspective

Islam has provisions regarding collateral. In the Hadith of Bukhari and Muslim, there is a narration stating that the Prophet Muhammad obtained food (wheat) by borrowing from a Jew and provided his own armor as collateral. Islamic jurists believe this was the first incident related to collateral law in Islam.

In Islamic teachings, collateral is referred to as *al-rahn*. Essentially, the concept of *al-rahn* involves holding an item owned by the borrower (*rahin*) and possessing economic value as a form of security so that the debt can be repaid to the lender (*marhun bih*). The primary value of *al-rahn* lies in the spirit of mutual assistance, which is a characteristic of the Sharia collateral system (Noor Hafidah 2013).

The concept of collateral in Indonesian positive law and Islamic law is fundamentally similar. Collateral implies the provision of an asset as a form of certainty and protection in a debt agreement. However, there are differences between the two: Indonesian positive law legalizes interest on debt, while Islamic law prohibits it. Therefore, in Islamic law, debt is merely a form of mutual assistance, not a means of profit.

Cryptocurrency represents a new technological breakthrough, and in Islam, this does not hinder technological progress (Apriliani et al., 2023). From the standpoint of Islamic law, the legal status of cryptocurrencies, is closely related to the interaction between sellers and buyers, the cryptocurrency's price, its physical form, elements of gambling or speculation, and the welfare of the community, as linked to Muslim activities in *muamalah* (transactions).

From an Islamic perspective, the use of crypto assets as collateral for debt is prohibited. This is based on the element of *gharar*, or uncertainty, due to the inherent fluctuating nature of crypto (Dwicaksana & Pujiyono, 2020). This fluctuating nature raises concerns about the potential for it to become a form of gambling. The Indonesian Ulema Council (MUI) has also expressed its view through a fatwa that crypto asset transactions are *haram*. The main reason is that cryptocurrency contains elements of *gharar* (uncertainty), *dharar* (possibility of loss), and *qimar* (speculation similar to gambling). Furthermore, these assets do not meet the criteria for *sil'ah*, or legitimate goods, according to Sharia, which must have a tangible form, clear value, a definite quantity, clear ownership, and the ability to be directly transferred to the buyer (Apriliani et al., 2023).

The Quran, the primary source of law for Muslims, addresses these issues, including Surah An-Nisa verse 29 and Surah Al-Maidah verse 90. In these verses, Allah SWT reminds believers not to take others' property unjustly, except through trade conducted with full agreement and mutual consent. Allah SWT also forbids actions that endanger oneself, as He is Most Merciful. Furthermore, Surah Al-Maidah emphasizes that alcohol, gambling (*maysir*), idol worship, and playing lotteries are considered reprehensible and prohibited acts, stemming from Satan's temptation. Therefore, Muslims are commanded to avoid these activities in order to attain good fortune (Hamin, 2020). Given that cryptocurrency has unpredictable and sudden price fluctuations, this is similar to speculation. From this speculation, some people gain profits and others suffer losses, so cryptocurrency can be compared to gambling, which clearly violates the provisions of Allah SWT. Given the risk of unstable and constantly changing cryptocurrency values, there is the possibility of loss for some people, so this is considered taking someone else's property without following applicable rules. As a result, this can cause suffering to those who are harmed, so this action is also something that is prohibited by Allah SWT.

Bitcoin is a type of cryptocurrency recognized for having a high degree of risk due to its inherent uncertainty and speculative nature. This is due to the lack of an underlying asset, its highly volatile exchange rate, and its unpredictable price, which can rise unreasonably. These conditions can be detrimental to society. According to Islamic jurisprudence (*fiqh*), this falls under the categories of *dharar* (harmful) and *gharar* (uncertainty), both of which are prohibited. The Prophet (peace and blessings be upon him) once said that he forbade transactions involving *gharar* (narrated by Muslim from Abu Hurairah, Umdatul Qari', 11/264). (Jannah, 2022). The Prophet's hadith indicates that the Prophet forbade acts that cause harm to others and *gharar* (uncertainty) in transactions.

Therefore, the prohibition of cryptocurrency is related to its fluctuating exchange rate, uncertain price, unclear physical object, and potential harm to society. This places cryptocurrency in the category of

masyir or gambling due to the element of speculation, and is categorized as gharar due to the uncertainty in cryptocurrency value transactions.

The level of speculation or gambling in bitcoin commodity trading is quite high, especially since the number of bitcoins available will soon reach its maximum limit of 21 million units. However, despite the limited number, there is no guarantee that the value of bitcoin will continue to increase as all units circulate in the market, much like gold, which has a clear underlying asset. On the contrary, there is a possibility that bitcoin could become a bubble that could burst at any time and lose its value, especially now that other types of cryptocurrencies such as ethereum, altcoins, ripple, digicoi, and libre are becoming increasingly popular and sought after by the public (Kusuma, 2020).

Based on the Islamic sharia view that cryptocurrencies are considered haram, all muamalah activities related to cryptocurrencies are also considered prohibited in Islamic sharia, especially regarding sharia collateral or al-rahn. In addition to efforts to avoid cryptocurrencies in the practice of al-rahn due to the prohibition of collateral, this is also related to the principles of al-rahn which prioritize mutual cooperation, trustworthiness, and good faith. Because the value of cryptocurrencies is unstable and difficult to determine, this will undermine the essence of trustworthiness and good faith in the practice of al-rahn, and tend to fall into the categories of gharar (uncertainty), dharar (risk of loss), qimar/maysir (gambling) and does not satisfy the requirements of sil'ah in accordance with sharia requirements.

4. CONCLUSION

The rupiah is Indonesia's only form of legal tender, according to Law Number 7 of 2011 Governing Currency. This view also aligns with regulations from the Commodity Futures Trading Regulatory Agency (Bappebti), which categorizes. The commodity of cryptocurrency asset. Because it is categorized as movable property, Cryptocurrency holdings may be utilized as collateral in the form of pawns or fiduciary obligations. Article 1338 paragraph 1 also emphasizes that everyone is free to enter into any contract they wish, as long as it does not conflict with applicable laws. Therefore, crypto assets can be used as collateral for fiduciary and pledged assets. However, there are no specific regulations governing crypto assets as collateral, thus providing legal certainty and protection for fiduciary and pledged assets. Compared to Islamic law, in Sharia law, collateral is known as al-rahn. However, using crypto assets as collateral is haram in Islam. This is related to the status of crypto assets in Islam, which is haram. This is due to the elements of gharar, or uncertainty, inherent in crypto itself; dharar, or the potential for loss due to the fluctuating value of crypto; qimar/maysir, which creates a sense of chance or gambling in crypto; and not meeting the criteria of sil'ah according to Sharia.

Ethical Approval

Not Applicable

Informed Consent Statement

Not Applicable

Authors' Contributions

JAJ developed the research design, formulated the comparative legal framework, conducted the primary legal analysis from the perspective of Indonesian positive law, and prepared the initial draft of the manuscript. HAP contributed to the analysis of regulatory and doctrinal aspects of cryptocurrency within Indonesian law, validated the legal interpretation, and provided substantial revisions to strengthen the discussion and coherence of the manuscript. AM conducted the analysis of cryptocurrency as collateral from the perspective of Islamic law, including the assessment of al-rahn principles and Shariah compliance. EA contributed to refining the comparative analysis and finalizing the manuscript.

Disclosure statement

The authors declare that there are no relevant conflicts of interest related to this research.

Data Availability Statement

The data used and analyzed in this research are available upon request by the authors, with due regard to protecting the privacy of the participants.

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