



A Normative Legal Analysis of Crypto Assets as Collateral for Debt in Indonesia

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Abstract

Cryptocurrency, or crypto assets, are virtual commodities emerging from technological advancements in commodity futures trading. To strengthen regulatory frameworks, it is essential to examine their characteristics as property, particularly their eligibility for property rights and use as collateral. This normative legal study employs a dogmatic approach, utilizing secondary data analyzed qualitatively. The findings indicate that crypto assets constitute intangible movable property with economic value, fulfilling property criteria in both Islamic and civil law. As such, property and ownership rights can be attached to crypto assets, allowing them to serve as collateral akin to shares. In cases of debtor default, execution through the sale of pledged crypto assets on an exchange is legally feasible.

A. Introduction

Advancements in information and communication technology have profoundly impacted the economy, particularly financial transactions. In addition to physical currency, virtual currencies have emerged as an alternative medium of exchange. Virtual currency, developed by private entities, lacks official government issuance and regulation.¹ Among these, cryptocurrency has gained prominence as a digital currency leveraging cryptographic technology and blockchain.

Cryptocurrency serves two primary functions: as a medium of exchange, akin to fiat currency, and as a digital asset or commodity. The Indonesian government, through Ministry of Trade Regulation No. 99 of 2018, classifies cryptocurrency as an asset or commodity rather than a payment instrument.² Article 1 of this regulation outlines general policies governing crypto asset futures trading.

The legal recognition of crypto assets highlights their growing significance in investment markets, with crypto investors now outnumbering traditional stock market participants. The rapid expansion of Indonesia's cryptocurrency market has fueled public interest and trading activities. According to Bappebti, the number of cryptocurrency users in Indonesia increased from 11.2 million at the end of 2021 to 16.55 million by November 2022, marking a 48.7% surge.

Cryptocurrency is a cryptographic-based digital currency that employs mathematical algorithms to generate secure codes and ciphers. It serves two primary functions: as a medium of exchange, akin to fiat currency, and as a digital asset or commodity leveraging cryptographic technology and blockchain.³

The Indonesian government, through Ministry of Trade Regulation No. 99 of 2018, classifies cryptocurrency as an asset or commodity rather than a payment instrument, as outlined in Article 1 of the regulation on crypto asset futures trading.⁴ The legal recognition of crypto assets reflects their growing prominence in investment markets, with crypto investors now outnumbering traditional stock market participants. Public interest in cryptocurrency trading has surged, with the number of users in Indonesia rising from 11.2 million at the end of 2021 to 16.55 million by November 2022—a 48.7% increase, according to Bappebti data.

¹ IMF Staff, *Virtual Currencies and Beyond: Initial Considerations*, International Monetary Fund (2016), 7. (Disertai dengan terjemahan bebas dari Penulis)

² Dhanu Prayogo, *Mengenal Hukum Aset Kripto*, Yogyakarta: Budi Utama, (2022), 57.

³ Shabrina Puspasari, "Perlindungan Hukum Bagi Investor pada Transaksi Aset Kripto dalam Bursa Berjangka Komoditi", *Juris-Diction* 3, No. 1 (2020), 303. <https://doi.org/10.20473/jd.v3i1.17638>

⁴ Maria Arbina Tambun, "Tata Kelola Pembentukan Regulasi Terkait Perdagangan Mata Uang Kripto (*Cryptocurrency*) sebagai Aset Kripto", *Mahadi: Indonesia Journal of Law* 1, No. 1 (2022) 34. <https://doi.org/10.32734/mah.v1i1.8314>

In response to this rapid growth, the Commodity Futures Trading Regulatory Agency (Bappebti) authorized the trading of 501 crypto assets in the physical market through Regulation No. 4 of 2023. Recognizing the increasing impact of crypto asset transactions on financial system stability, Law No. 4 of 2023 on the Development and Strengthening of the Financial Sector (UUP2SK) reassigns the regulatory and supervisory authority for crypto assets from Bappebti to the Financial Services Authority (OJK), as stipulated in Article 6.

The legal recognition of crypto assets highlights their growing significance in investment markets, with the number of investors surpassing those in the traditional stock market. The rapid expansion of cryptocurrency as a commodity in Indonesia has fueled public interest, driving a surge in trading and investment. According to Bappebti data, the number of cryptocurrency users in Indonesia increased from 11.2 million at the end of 2021 to 16.55 million by November 2022, marking a 48.7% rise.⁵

In response to this growth, the Commodity Futures Trading Regulatory Agency (Bappebti) authorized the trading of 501 crypto assets in the physical market through Regulation No. 4 of 2023. Recognizing the increasing impact of crypto transactions on financial stability, Law No. 4 of 2023 on the Development and Strengthening of the Financial Sector (UUP2SK) reassigns regulatory and supervisory authority over crypto assets from Bappebti to the Financial Services Authority (OJK), as stipulated in Article 6.

Given Indonesia's predominantly Muslim population, the rise of cryptocurrencies has also raised questions about their compatibility with Islamic principles. While Islamic jurisprudence does not inherently prohibit crypto technology, it mandates clear underlying asset value in financial transactions. The intangible and largely unregulated nature of cryptocurrencies has thus sparked concerns over their potential to encourage speculative activities akin to gambling.⁶

An asset is any item or commodity with economic and exchange value that can be owned and utilized by individuals or corporations. Beyond generating economic benefits, assets also serve as collateral for debts, granting creditors the right to ensure debt repayment.⁷ A guarantee, in this context, refers to a property right granted to a creditor as security, ensuring the debtor fulfills their financial obligations under a contractual agreement.⁸

⁵ Kementerian Perdagangan RI, "Bulan Literasi Aset Kripto 2023", Diakses pada 7 Februari 2023, <https://www.kemendag.go.id/berita/siaran-pers/bulan-literasi-aset-kripto-2023-mendag-zulkifli-hasan-masyarakat-harus-semakin-paham-perdagangan-aset-kripto>

⁶ Candrika Arivia Apriliani dkk, "Legalitas Transaksi Aset Kripto Menurut Perspektif Hukum Islam", *Jurnal Ilmiah Mahasiswa Perbankan Syariah (JIMPA)* 3, No. 1 (2023), 120. <https://doi.org/10.36908/jimpa.v3i1.161>

⁷ *Ibid.*

⁸ Elisabeth Nurhaini Butarbutar, *Hukum Harta Kekayaan*, Bandung: Refika Aditama (2012), 67.

This discussion motivates a normative inquiry into the status of crypto assets as collateral under Indonesian positive law and Islamic principles. This study will examine the legal characteristics of cryptocurrency as property, including its classification as a tangible or intangible asset and the associated property rights. Additionally, it will assess the legal framework governing the use of cryptocurrency as collateral for debt instruments.

This research was primarily conducted to analyze the legal implications of recognizing crypto assets as property within the frameworks of Islamic law and the Civil Code. By examining their material nature, property rights, and security interests, the feasibility of crypto assets as collateral for debts could be determined.

B. Discussion

1. Cryptocurrency as an Asset

Technology has profoundly influenced nearly all aspects of human life, including the evolution of investment instruments. Investment, defined as a business transaction undertaken by individuals or legal entities to grow and preserve capital, encompasses various assets, including cash, equipment, real estate, intellectual property, and skills.⁹

Rapid technological advancements have introduced new financial instruments, notably cryptocurrencies, which have gained widespread adoption. Recognizing their growing significance, Indonesia has officially classified cryptocurrencies as commodities under the jurisdiction of the Commodity Futures Trading Regulatory Agency (Bappebti). According to Article 1, Paragraph 7 of Bappebti Regulation No. 5 of 2019, cryptocurrencies are intangible digital assets secured by cryptography and operate on a peer-to-peer network using blockchain technology. This decentralized system facilitates the creation of new units and transaction validation, ensuring security without the need for intermediaries.

Crypto assets differ significantly from traditional commodities such as agricultural products, minerals, industrial goods, and fisheries. Unlike physical commodities, which rely on centralized record-keeping systems managed by regulatory bodies like Bappebti, crypto assets are decentralized and recorded on blockchain technology, following the location of their respective investors.¹⁰

Beyond the recording process, a key distinction between cryptocurrency investments and traditional commodity futures contracts lies in pricing. Cryptocurrencies lack an inherent base price, with their value fluctuating

⁹ Ana Rakhmatussadyah, *Hukum Investasi dan Pasar Modal*, Jakarta, Sinargrafika (2017), 3.

¹⁰ Alhidami Wildan dkk, "Problematika Hukum Aset Digital Era Disrupsi 5.0 di Indonesia Melalui Pendekatan Legislasi", *Jurnal MAHUPAS* 1, No. 2 (2022), 74. <https://journal.unpas.ac.id/index.php/mahupas/article/view/5720>

freely in the market. In contrast, traditional commodities are typically priced based on a specific underlying asset, which serves as a valuation benchmark.¹¹

Islamic legal scholars define commodities as a form of currency, encompassing both fiat money and customary currencies (*al-thaman al-'urfy*). In Islamic law, a commodity functions as a medium of exchange while also possessing intrinsic value for other uses. Thus, it can serve as both money and a commodity, provided it holds monetary value (*thamaniyyah*).¹²

Within Indonesia's legal framework, crypto assets are classified alongside other commodity assets such as mining products, livestock, agricultural produce, and minerals. However, despite this classification, they are primarily used as investment instruments, akin to stocks.¹³

Within Indonesia's regulatory framework, sharia-compliant contracts such as *taukîl*, *murabahah*, and *tawarruq* can be utilized to structure cryptocurrency investments in commodity futures. However, al-Ma'ayir al-Shar'iyah stipulates that *tawarruq* is primarily intended to address liquidity issues rather than serve as a conventional investment or financing mechanism. Its application is subject to specific conditions and is limited to temporary financial difficulties.¹⁴

Cryptocurrency was first introduced in 2008 by Satoshi Nakamoto through the whitepaper Bitcoin: A Peer-to-Peer Electronic Cash System, which proposed Bitcoin as a payment system operating on a peer-to-peer (P2P) network, eliminating the need for third-party intermediaries.¹⁵ A P2P network is a decentralized system of interconnected devices that operate on an equal footing, enabling direct transactions without reliance on centralized authorities such as banks.¹⁶

Cryptocurrency transactions utilize cryptographic technology and blockchain, a distributed ledger system that records and secures all transactions. Blockchain is decentralized, with a digital ledger distributed across a network, ensuring a chronological, transparent, and immutable transaction record.¹⁷ Embedded within blockchain networks are smart

¹¹ Anak Agung Ngurah Wisnu dkk, "Legalitas Investasi Aset Kripto di Indonesia Sebagai Komoditas Digital dan Alat Pembayaran", *Jurnal Kertha Wicara* 1, No. 11 (2021), 73. <https://jurnal.harianregional.com/kerthawicara/id-79336>

¹² Mufti Faraz Adam, *Bitcoin: Syariah Compliant?*, Amanah Finance Consultancy Ltd (2017), 12. (Disertai dengan terjemahan bebas dari Penulis)

¹³ *Op.Cit.*, Alhidami Wildan dkk, "Problematika Hukum Aset Digital Era Disrupsi 5.0 di Indonesia Melalui Pendekatan Legislasi", 76.

¹⁴ Fatwa Dewan Syariah Nasional-Majelis Ulama Indonesia No:82/DSN-MUI/ VII/2011, Tentang Perdagangan Komoditi Berdasarkan Prinsip Syariah di Bursa Komoditi

¹⁵ *Op.Cit.*, Dhanu Prayogo, *Mengenal Hukum Aset Kripto*, 21.

¹⁶ Raafi Ghania Razzaq, "Legalitas Mata Uang Virtual dalam Perspektif Hukum Indonesia", *Lontar Merah* 1, No. 2 (2018) 112. <https://jom.untidar.ac.id/index.php/lontarmerah/article/view/346>

¹⁷ Mohammad Hashemi Joo et.al, "Cryptocurrency: A Successful Application of Blockchain Technology", *Managerial Finance* 46, No. 6 (2022), 715-733. <https://doi.org/10.1108/MF-09-2018-0451>

contracts—electronic contract programs that automate cryptocurrency transactions without intermediaries. These contracts encode terms in cryptographic code, enabling self-execution upon the fulfillment of predetermined conditions.¹⁸

Islamic economics mandates that all transactions comply with Sharia law, classifying them as halal (permissible) or haram (prohibited). Halal transactions must involve lawful objects and adhere to ethical principles, while haram transactions include *riba* (interest), *gharar* (uncertainty), *maisir* (gambling), fraud, and hoarding.¹⁹

Cryptocurrency is considered halal if it qualifies as a commodity under Islamic law—meeting the conditions of *sil'ah*, having an underlying asset, and providing clear utility.²⁰ Prohibited transactions in Islam include the sale of impure goods, transactions involving interest (*riba*), uncertainty (*gharar*), gambling (*maisir*), as well as fraudulent practices and hoarding. Moreover, the trade must be conducted in a manner that is fair and equitable, ensuring that both parties benefit from the transaction. In essence, a cryptocurrency that is backed by an underlying asset and meets these Shariah requirements can be deemed permissible for trading.²¹

The value of cryptocurrencies in peer-to-peer transactions is highly volatile and inherently unpredictable²², as it is primarily influenced by market dynamics of supply and demand.²³ Bitcoin, one of the most widely recognized cryptocurrencies, reached an approximate value of Rp. 440,000,000.00 per coin in July 2023.²⁴ The substantial price fluctuations of cryptocurrencies have incentivized investors to engage in short-term trading strategies aimed at capitalizing on market movements. In some instances, investors can achieve significant capital gains, ranging from tens to hundreds of percent within a single day.²⁵ This inherent volatility underpins the legal classification of cryptocurrencies as commodities, as stipulated in Article 3 of Law No. 10 of 2011 on Commodity Futures Trading, which defines commodities as goods

¹⁸ Marcelo Corrales, *Legal Tech, Smart Contracts, and Blockchain*, Singapore: Springer Nature Singapore Pte Ltd, (2019), 20.

¹⁹ Nur Kholis, Amir, *Transaksi dalam Ekonomi Islam*, Yogyakarta: Pascasarjana FIAI Universitas Islam Indonesia (2018), 43.

²⁰ Romansyah, Dadang, “Bertransaksi Sesuai Syariah”, Diakses pada tanggal 29 Juli 2024, <https://bmitqan.org/detail/10/bertransaksi-sesuai-syariah.html>

²¹ *Op.Cit.*, Candrika Arivia Apriliani dkk, “Legalitas Transaksi Aset Kripto Menurut Perspektif Hukum Islam”, 121.

²² Majelis Ulama Indonesia, “Keputusan Fatwa Hukum Uang Kripto atau Cryptocurrency”, Diakses pada tanggal 29 Juli 2024, <https://mirror.mui.or.id/berita/32209/keputusan-fatwa-hukum-uang-kripto-atau-cryptocurrency>

²³ Unggul Dwi Pamungkas, “Bagaimana Pengaturan Kepemilikan Cryptocurrency Oleh Perusahaan Berdasarkan Standar Akuntansi Keuangan”, *Jurnal Ilmiah Akuntansi Kesatuan* 9, No. 3 (2021), 489-502. <https://doi.org/10.37641/jiakes.v9i3.895>

²⁴ https://www.tokocrypto.com/trade/BTC_BIDR, Diakses pada 15 Juli 2023.

²⁵ *Op.Cit.*, Dhanu Prayogo, *Mengenal Hukum Aset Kripto*, 44.

with fluctuating prices. Given this volatility, it can be inferred that cryptocurrency ownership provides economic benefits to holders, establishing crypto assets as a form of wealth for both individuals and corporations.

2. Properties of Crypto Assets as a Form of Wealth

Tangible asset is governed by property law under the Civil Code.²⁶ Article 499 defines a *zaak* as any object or right subject to ownership, further classified in Book II. Article 504 distinguishes between immovable property (attached to land) and movable property (capable of being moved), while Article 503 introduces intangible property, referring to assets without physical form.²⁷

In Islamic law, *maal* (property) encompasses anything that can be owned. Scholars debate whether intangible assets, such as usufructs, qualify as *maal*. The Hanafi school generally limits *maal* to tangible objects, though some variations exist. However, most jurists recognize intangible assets with value and compensability, a view increasingly accepted in modern economic contexts.²⁸

Hanafi jurists define *maal* as "something generally desired and storable for future needs," emphasizing desirability and storability. The term *maal* derives from a root meaning inclination or desire, with Mufti Taqi Uthmani linking desirability to benefit.²⁹ In Islamic jurisprudence, property is any object or right that can be owned, preserved, and lawfully utilized.

Crypto assets are recognized as digital assets and commodities that align with Islamic principles due to their inherent economic value, which enables storage and retrieval. Their digital nature, consisting of numerical data and public transactions, does not affect their permissibility. Moreover, crypto assets represent digital value that can be exchanged with other crypto assets. While they lack a traditional underlying asset, their intrinsic value as a commodity remains.³⁰

For an asset to be exchangeable and tradable in Islamic law, it must be *mutaqawwim* (legally valid), ensuring the legitimacy of transactions. *Mutaqawwim* refers to an object or subject whose use is permissible under Islamic law. Ali Haydar emphasizes that for a good to be tradable, it must fulfill the criteria of *tamawwul* (having economic value) and *taqawwum* (being lawful).³¹

²⁶ Abdulkadir Muhammad, *Hukum Perdata Indonesia*, Bandung: Citra Aditya Bakti (2019) 127.

²⁷ Rachmadi Usman, *Hukum Kebendaan*, Jakarta: Sinar Grafika, 2011, 35.

²⁸ *Op.Cit.*, Mufti Faraz Adam, *Bitcoin: Syariah Compliant*, 23.

²⁹ *Ibid.*, 24.

³⁰ Imam Mabruur, "Cryptocurrency Dalam Kacamata Hukum Islam dan Negara", *Islamijah: Journal of Islamic Social Sciences* 3, No. 3 (2023), 221, <http://dx.doi.org/10.30821/islamijah.v4i3.13637>

³¹ *Op.Cit.*, Mufti Faraz Adam, *Bitcoin: Syariah Compliant*, 27.

The classification of cryptocurrency as a commodity or asset depends on the presence of *thamaniyyah*, meaning "value" or "worth," which allows an asset to function as a unit of account. *Thamaniyyah* serves as the basis for distinguishing currency from other assets and is fundamental to monetary systems. Thus, assessing whether cryptocurrency possesses *thamaniyyah* is essential for its classification within Islamic finance.³²

An object qualifies as money if it functions as a medium of exchange and is widely accepted within a community for transactional purposes. Historically, various items, including stones, wood, and animal skins, have served this role, emphasizing that value and transactional applicability determine what is considered money.³³

The hadith of Ubadah bin Shamit r.a. provides a framework for understanding the use of crypto assets in transactions: "Gold for gold, silver for silver, wheat for wheat, barley for barley, dates for dates, and salt for salt [must be exchanged] in equal measure and on the spot." This principle of equivalence can be applied to crypto assets as a medium of exchange.³⁴ Crypto assets are analogous to the exchange of gold and silver, and their trade with fiat currencies such as the dollar or rupiah aligns with the Islamic jurisprudential concept of *sharf* (currency exchange).³⁵

However, the value of crypto assets is highly volatile, fluctuating in response to market dynamics. This price instability raises concerns about the presence of *gharar* (uncertainty), a concept in Islamic law that prohibits transactions involving excessive ambiguity, speculation, or gambling-like elements.³⁶ A scholarly discussion on the permissibility of crypto transactions, organized by the Islamic Law Firm and the Wahid Foundation under the title "Discussing the Halal and Haram of Crypto Transactions," concluded that despite price volatility, crypto assets may be traded as commodities rather than currencies, provided that *gharar* is minimized.³⁷

A commodity is a standardized product that can be bought and sold on a commodity exchange, interchangeable with others of the same type, storable, and physically deliverable. Commodities are often traded by investors in futures markets.³⁸ Given this definition, crypto assets can be considered

³² *Ibid.*, 28.

³³ *Op.Cit.*, Imam Mabru, "Cryptocurrency Dalam Kacamata Hukum Islam dan Negara", 219.

³⁴ Denis Rachmaditya, "Transaksi Cryptocurrency Perspektif Ushul Fiqh", *Muamalat: Jurnal Kajian Hukum Ekonomi Syariah* 15, No. 2 (2023), 152.

³⁵ *Ibid.*, 153.

³⁶ *Op.Cit.*, Candrika Arivia Apriliani dkk, "Legalitas Transaksi Aset Kripto Menurut Perspektif Hukum Islam", 118.

³⁷ NU Online, 2021, "Hasil Bahtsul Masail Tentang Halal dan Haram Transaksi Kripto", Diakses pada 12 Februari 2025, <https://www.nu.or.id/amp/nasional/hasil-bahtsul-masail-tentang-halal-dan-haram-transaksi-kripto-lhUDC>

³⁸ *Op.Cit.*, Dhanu Prayogo, *Mengenal Hukum Aset Kripto*, 72.

tangible objects of legal rights, making them subject to property law principles.

Property, as the subject of various transactions—including sales, leasing, pawning, and partnerships—ultimately leads to ownership transfers. Ownership is a fundamental concept in property law. Under Article 499 of the Civil Code, property (*zaak*) encompasses anything that can be the object of ownership rights. Property law in civil law systems regulates both tangible and intangible assets, establishing legal relationships between individuals and property.³⁹

The classification of an object as movable property signifies its ability to be relocated without substantial change. Article 509 of the Civil Code defines movable property as anything that can be moved either by itself or through external forces. Cryptocurrencies, as digital assets stored on a blockchain, align with this definition. They exist digitally in user wallets and can be transferred between wallets, with all transactions permanently recorded on a blockchain ledger.⁴⁰

Thus, based on its characteristics, cryptocurrency satisfies the criteria of a movable asset under Article 509 of the Civil Code, as it can be transferred and recorded within a legal framework.

Article 503 of the Civil Code classifies objects as either tangible or intangible.⁴¹ Tangible objects can be perceived by the senses, while intangible objects represent rights or claims. Crypto assets, being intangible, exist solely within digital wallets and cannot be directly perceived. However, ownership rights are attached to them⁴², granting access and utilization to users possessing the corresponding private keys. Given these ownership rights and their economic value, crypto assets fulfill the criteria for intangible property as defined in Article 503 of the Civil Code.

The distinction between tangible and intangible property determines the appropriate method of ownership transfer. Article 613 of the Civil Code outlines mechanisms for transferring rights to intangible property, such as cession for nominative claims, delivery for bearer or order claims, and endorsement for claims requiring additional proof of transfer. As intangible movable property, cryptocurrencies are transferred between users through digital wallets and recorded on a blockchain, which serves as an immutable public ledger.⁴³

³⁹ *Ibid.*, 118.

⁴⁰ Abdul Saman Nasution, “Paradigma Harta (*Al-Mal*) dalam Perspektif Hukum Islam dan Hukum Nasional di Indonesia”, *Jurnal Cakrawala Ilmiah* 2, No. 9 (2023), 3524. <https://doi.org/10.53625/jcijurnalcakrawalailmiah.v2i9.5668>

⁴¹ *Op.Cit.*, Rachmadi Usman, 45.

⁴² *Op.Cit.*, Hariyanto, “Bitcoin Sebagai Aset Debitor Pailit dalam Hukum Kepailitan di Indonesia”, 302.

⁴³ *Op.Cit.*, Abdulkadir Muhammad, *Hukum Perdata Indonesia*, 129.

While blockchain technology ensures transparency in recording transactions, the identities of transacting parties remain confidential. In accordance with Article 613 of the Civil Code, a cryptocurrency custody and transfer certificate serves as legal proof of ownership or transfer. This document, issued by a custodian, may be in physical or digital form and attests to the lawful custody and transfer of the specified crypto assets.

As intangible movable property, cryptocurrencies are transferred via digital wallets and recorded on a blockchain, which serves as a decentralized, immutable ledger providing irrefutable proof of transactions. While blockchain ensures transparency, the identities of transacting parties remain confidential. Under Article 613 of the Civil Code, a cryptocurrency custody and transfer certificate, issued by a custodian in either physical or digital form, serves as legal proof of ownership or transfer.

Cryptocurrency, as an intangible asset, falls under property rights, granting the owner absolute authority enforceable against all others. Property rights allow individuals or groups to derive economic benefits and protect their ownership against infringement.⁴⁴ Direct ownership grants the exclusive right to use, enjoy, and manage an asset, provided such actions do not violate the law.⁴⁵

Ownership rights over both movable and immovable property are protected under Article 570 of the Civil Code, which allows proprietors to utilize their property freely, as long as it does not infringe on public interests or third-party rights.⁴⁶ Cryptocurrency, being intangible personal property, forms part of an owner's assets, with ownership derived from proprietary rights over the stored amount in a digital wallet.⁴⁷ Crypto assets meet the criteria for ownership based on unrestricted possession and the ability to freely dispose of them, as long as such actions comply with legal and regulatory frameworks.

Possession (*bezit*) is a recognized property right that grants an individual physical control over an object, even without legal title. The law protects this state of affairs without requiring proof of ownership. Under Article 573 of the Civil Code, possession applies only to tradable objects, and Article 538 states that it is acquired by taking control of an object with the intent to retain it.⁴⁸

Cryptocurrency ownership can be established through mining, airdrops, giveaways, and transactions on Bappebti-regulated platforms. A

⁴⁴ *Op.Cit.*, Rachmadi Usman, 62.

⁴⁵ *Op.Cit.*, Elisabeth Nurhaini Butarbutar, 35.

⁴⁶ *Ibid.*, 42.

⁴⁷ *Op.Cit.*, Hariyanto, "Bitcoin Sebagai Aset Debitor Pailit dalam Hukum Kepailitan di Indonesia", hlm. 303.

⁴⁸ *Ibid.*, 40.

cryptocurrency wallet⁴⁹ serves as crucial evidence of ownership⁴⁹, granting users full access and control over their assets.⁵⁰

Crypto assets qualify as *maal* (property) based on their tangibility in a legal sense, despite being intangible as movable property. Their property rights arise from ownership acquired through blockchain mining and trading transactions. Possession is evidenced by storage in a digital wallet registered with a Bappebti-regulated platform, reinforcing their status as protected assets under property law.

3. Crypto Assets as Collateral in Debt Agreements

A debtor-creditor relationship, grounded in a debt obligation, often necessitates a guarantee to secure loan repayment. A guarantee is a proprietary right over a pledged asset, ensuring the debtor fulfills their contractual obligation.⁵¹ The collateral can include tangible assets or monetary value.⁵²

In Islamic law, a guarantee is referred to as *al-kafalah*, which encompasses *aldhaman* (guarantee), *hamalah* (burden), and *za'amah* (liability). *Al-kafalah* or *al-dhaman* merges two liabilities to fulfill an obligation, whether involving debt, money, goods, services, or even a person.⁵³ According to Hanafi scholars, *kafalah* requires only an offer and acceptance (*ijab* and *qabul*), while other scholars recognize five essential elements: (a) the declaration (*shighat*), (b) the guarantor (*dhamin* or *kafil*), (c) the creditor (*madhmun* or *makful lahu*), (d) the principal debtor (*madhmun* or *makful 'anhu*), and (e) the guaranteed object (*madhmun bih* or *makful bih*).⁵⁴

Kafalah is broadly categorized into two types, one of which is *Kafalah bi an-Nafs*. According to Sayyid Sabiq, this type of *kafalah* obligates a guarantor to present the guaranteed person (*makful*) before the creditor (*makful lahu*).⁵⁵ Essentially, *Kafalah bi an-Nafs* ensures that the guaranteed individual is physically delivered to fulfill their obligation.

In Islam, guarantees (*kafalah*) serve to provide comfort and security in transactions, ensuring fairness for all parties involved. In modern financial systems, *kafalah* plays an essential role, particularly in loan agreements and large-scale transactions, such as those facilitated by banks. The wisdom behind *kafalah* lies in its ability to promote mutual assistance, security, convenience, and certainty in interactions. Wahbah Zuhaili emphasizes that

⁴⁹ *Op.Cit.*, Elisabeth Nurhaini Butarbutar (dalam Subekti 1989: 64), 37.

⁵⁰ Indodax, “*Crypto Wallet*”, Diakses pada 23 Juni 2023, <https://indodax.com/academy/crypto-wallet/>

⁵¹ *Op.Cit.*, Elisabeth Nurhaini Butarbutar, *Hukum Harta Kekayaan*, 67.

⁵² *Op.Cit.*, Abdulkadir Muhammad, *Hukum Perdata Indonesia*, 171.

⁵³ Hendi Suhendi, *Fiqh Muamalah*, Jakarta: RajaGrafindo Persada, 2016, 189.

⁵⁴ Ahmad Wardi Muslich, *Fiqh Muamalah*, Jakarta: Amzah, 2017, 437.

⁵⁵ Zenda Pratama dkk, “Tinjauan Hukum Enomi Syariah Terhadap Jaminan Pada Investasi Digital Digital *Cyronium Coin*”, *Jurnal Muamalah* 6, No. 2 (2020), 152. <https://doi.org/10.19109/muamalah.v6i2.7983>

the legal permissibility of kafalah strengthens rights, fosters cooperation, and facilitates financial transactions involving debt, property, and loans.⁵⁶

In civil law, guarantees are classified into two types: general guarantees and specific guarantees. A general guarantee applies to all creditors over all the debtor's assets, whereas a specific guarantee is created through an agreement between the debtor and creditor, securing a particular asset to ensure the fulfillment of the primary obligation. Specific guarantees include mortgages, fiduciary assignments, and mortgage liens.

The object of a property guarantee must possess a property right, as stipulated in Article 528 of the Civil Code. This article outlines two key attributes of property rights: (1) their absolute nature, meaning they are enforceable against anyone, and (2) the *droit de suite* (right of pursuit), which allows the property right to follow the asset regardless of its current possessor. The law recognizes both movable and immovable property as valid objects of guarantees.⁵⁷

Crypto assets are movable property that can be transferred through a blockchain using smart contracts. Smart contracts are electronic agreements written in computer code and operated on a blockchain or distributed ledger, enabling them to automatically execute and enforce the terms of the agreement.⁵⁸ The technological implementation of smart contracts is inextricably intertwined with the blockchain. Both smart contracts and traditional agreements share the characteristic of possessing legal effect. Blockchain, which provides the technological infrastructure, is defined as a distributed or decentralized database that facilitates autonomous data storage and retrieval.⁵⁹

As a form of agreement between parties, a smart contract, as stipulated in Article 1320 of the Indonesian Civil Code, must fulfill the following requirements for a valid agreement: consensus ad idem (meeting of the minds), legal capacity of the parties, a certain subject matter, and a lawful cause. These requirements encompass mutual consent, capacity to contract, a clearly defined subject matter, and a lawful purpose. This legal framework extends to electronic contracts, as specified in Article 46(2) of Government Regulation No. 71 of 2019 concerning the Implementation of Electronic Systems and Transactions, which supplements the ITE Law.⁶⁰

⁵⁶ Abdul Rahman Ghazaly dkk, *Fiqh Muamalat*, Jakarta: Prenadamedia, 2018, 210.

⁵⁷ *Ibid.*, 8.

⁵⁸ Eureka Inola Kadly, "Keabsahan Blockchain-Smartcontract Dalam Transaksi Elektronik: Indonesia, Amerika, dan Singapura", *Jurnal Sains Sosio Humaniora* 5, No. 1 (2021), 200.

⁵⁹ Korintus Wilson Horas Hutapea, "Keabsahan Smartcontract Dengan Teknologi Blockchain Menurut Kitab Undang-Undang Hukum Perdata", *Aliansi: Jurnal Hukum, Pendidikan Dan Sosial Humaniora* 1, No.3 (2024), 87. <https://doi.org/10.62383/aliansi.v1i3.177>

⁶⁰ *Op.Cit.*, Eureka Inola Kadly, "Keabsahan Blockchain-Smartcontract Dalam Transaksi Elektronik: Indonesia, Amerika, dan Singapura", 200.

The property right over crypto assets is grounded in the user's ownership of the quantity of crypto assets held in their digital wallet. Proof of ownership of crypto assets is evidenced by a storage certificate, a document issued by the storage custodian as proof of ownership of the stored crypto assets, as stipulated in Article 1 paragraph (11) of the BAPPEBTI Regulation No. 5 of 2019. Considering the nature and property rights inherent in crypto assets, a specific type of property security, namely a pledge, can be applied.

A pledge is a proprietary right over a movable object owned by the debtor or another party. Its primary purpose is to grant the creditor a preferential right to be paid first in the event of default, without conferring the right to enjoy or use the pledged object.⁶¹ The creditor's possession of the mortgaged asset results in a stronger position for the mortgagee compared to the fiduciare. This is because the mortgaged asset must not be in the possession (inbezitstelling) of the mortgagor at all, thus protecting the mortgagee from the mortgagor's bad faith (in terms of transferring the mortgaged asset).⁶²

The tangible security of pledge can be applied to crypto assets because the characteristics of crypto assets meet the elements of a pledge that protect the interests of the creditor. One of these elements is *inbezitstelling*, which means that the pledged asset is under the creditor's control. Since the proof of ownership of crypto assets is held by the custodian of the crypto asset storage, it does not contradict Article 1152 of the Civil Code if it is burdened with a pledge. The pledging of crypto assets is carried out after obtaining permission from the Commodity Futures Trading Regulatory Agency (Bappebti) to obtain consumer protection. The system for pledging crypto assets follows the mechanism of pledging shares, namely by using a new wallet that holds a certain amount of crypto assets pledged under the control of the creditor by mutual agreement.⁶³

Triv, an officially registered cryptocurrency trading platform under Bappebti, pioneered the implementation of crypto assets as collateral in Indonesia. The crypto collateral feature was first launched in January 2021. Cryptocurrency users on the Triv platform can pledge their crypto assets to obtain loans of up to 500 million rupiah. Several cryptocurrencies can be used as collateral on the Triv platform, including Bitcoin (BTC), Ethereum (ETH), and USD Tether (USDT). The process of pledging crypto assets on the Triv platform can be done by cryptocurrency users by accessing the user account dashboard and selecting the Crypto Collateral menu on the official Triv website (triv.co.id). Collateral requests are approved without a BI checking

⁶¹ Riky Rustam, *Hukum Jaminan*, Yogyakarta: UII Press, 2017, 82.

⁶² *Ibid.*, (dalam Mariam Darus Badruzaman), 84.

⁶³ LBH Pengayoman Universitas Katolik Parahyangan, "Penjaminan Utang dengan *Crypto Asset*", Diakses pada tanggal 1 Juli 2023, <https://lbhpengayoman.unpar.ac.id/penjaminan-utang-dengan-crypto-asset/>

within two minutes, and funds can be withdrawn directly to all 61 banks supported by the Triv platform system.⁶⁴

A mortgage is a collateral provided to a creditor as security for the repayment of a debt from the moment a debtor specifically surrenders their property to serve as a guarantee for the payment of the debt. In the event that the debtor defaults, the creditor may execute the mortgaged property to obtain repayment.⁶⁵ A creditor may exercise self-help repossession (*parate executie*) by selling, on their own authority, the debtor's assets that are in their possession when the debtor defaults on their contractual obligation to the creditor.⁶⁶ Under the principle of *parate executie*, a creditor or mortgagee can sell the mortgaged property as if it were their own property. With this right, the mortgagee has a simplified and expedited means of recovery. In fact, even after the debtor defaults, the parties may agree to sell the collateral privately.⁶⁷

Article 1155 of the Civil Code explicitly regulates the execution of mortgages, stipulating that the mortgaged property can be sold at public auction. For mortgaged goods that are tradeable assets or securities, the sale can be conducted through an exchange. Cryptocurrency is a digital commodity traded on cryptocurrency exchanges officially registered by Bappebti. In this context, the execution of a mortgage over crypto assets pledged by a debtor to a creditor can be carried out through the sale of those assets on a cryptocurrency exchange. The sale of crypto assets as collateral can be conducted based on an agreement where the debtor transfers the crypto assets to the creditor via a new wallet, followed by the liquidation of the crypto assets by the creditor.

Based on the foregoing, crypto assets, as intangible assets or digital commodities, can be used as collateral through a specific type of security interest known as a pledge. The first application of a pledge on crypto assets in Indonesia was introduced by the Triv platform in January 2021. As a pledged asset that is a tradable commodity, similar to shares, in the event of a default by the debtor who has pledged the crypto assets to the creditor, execution can be carried out through the sale of the assets on a cryptocurrency exchange.

C. Conclusion

The increasing acceptance of crypto assets as a viable form of collateral represents a significant shift in the global financial landscape. The legal framework, particularly in jurisdictions that have recognized the property-like nature of crypto assets, has facilitated this development. The concept of

⁶⁴ Altcoin, "Gadai Kripto di Triv Sampai 500 Juta, Bagaimana Caranya?", Diakses pada tanggal 1 Juli 2023, <https://altcoin.id/gadai-kripto-triv/>

⁶⁵ *Op.Cit.*, Riky Rustam, *Hukum Jaminan*, 82.

⁶⁶ *Ibid*, 107.

⁶⁷ *Ibid* (dalam J.Satrio, *Hukum Jaminan: Hak-Hak Jaminan Kebendaan*), 114.

kafalah, rooted in Islamic jurisprudence, provides a solid foundation for understanding the use of cryptocurrencies as collateral. While the legal and regulatory landscape surrounding cryptocurrencies is still evolving, the case of Indonesia demonstrates a proactive approach in accommodating these digital assets within traditional financial frameworks. The concept of pledge, a well-established form of security interest, has been successfully adapted to accommodate the unique characteristics of digital assets.

The use of cryptocurrencies as collateral not only offers new avenues for financing but also poses unique challenges. While challenges such as volatility, regulatory uncertainties, and technical complexities remain, the successful implementation of crypto-backed loans by platforms like Triv demonstrates the feasibility and potential of this asset class as collateral. By enabling borrowers to leverage their digital assets for financing, this practice not only expands access to credit but also contributes to the broader adoption and integration of cryptocurrencies into traditional financial systems.

As the global financial landscape continues to evolve, the interplay between Islamic finance and emerging technologies will shape the future of financial services. The convergence of technology and law has opened up new avenues for secured lending. As the regulatory landscape continues to evolve and technological advancements become more sophisticated, we can expect to see further innovation in the use of crypto assets as collateral, ultimately reshaping the future of finance.

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