

The Legal Status of Cryptocurrency Assets as Inherited Property from the Perspective of Positive Law and Islamic Law in Indonesia

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Abstrak. The digital economy has established crypto assets as a new form of wealth, yet conventional inheritance regulations have not fully accommodated their digital characteristics. This study aims to analyze the legal standing of crypto assets as inheritance objects under the Civil Code and Islamic Law, as well as their distribution mechanisms. The research employs a normative juridical method using statutory and conceptual approaches. The findings reveal that crypto assets are legally classified as intangible movable property under the Civil Code and qualify as *māl* (wealth) eligible for inheritance under Islamic Law, provided they possess clear economic value and utility. However, technical constraints related to private key confidentiality and extreme value volatility remain primary obstacles in their distribution process. The study concludes that while crypto assets have a solid legal foundation to be recognized as inheritable property in Indonesia, sectoral regulatory harmonization and the development of digital will instruments are essential to ensure legal certainty and protect heirs' economic rights over decentralized digital assets. Furthermore, the valuation of crypto assets for inheritance purposes should ideally be conducted at the time of distribution rather than at the time of the testator's death, or alternatively through direct transfer of asset units, to uphold the principle of justice and safeguard heirs' absolute rights amid the extreme price volatility characteristic of these digital assets.

Keywords: Crypto Assets; Inheritance Law; Digital Inheritance.

INTRODUCTION

The emergence of blockchain technology has transformed the way the global community perceives wealth, including in Indonesia. Crypto assets are no longer considered mere experiments but have become major investment instruments. However, this development poses a challenge for the inheritance law system, which was originally designed to regulate physical assets such as buildings or cash. In Indonesia, although crypto assets have been recognized as trading commodities through Bappebti regulations and have become tax objects with economic value, the rules on family law and inheritance are still not aligned and have not undergone adequate harmonization.

Serious problems arise when the owner of a crypto asset dies. Legally, both in civil and Islamic law, property should automatically transfer to the heirs. However, the technical reality of cryptocurrencies, which are anonymous and secured by private keys, makes these legal principles difficult to implement. Without access to the private key, digital assets become inaccessible and are effectively trapped permanently in the blockchain network, which risks harming the heirs because the assets they should receive become completely unusable (Marditia & Kuncoro, 2025).

This condition of legal uncertainty is highlighted by Constitutional Court Decision Number 51/PUU-XXIII/2025. In its ruling, the Court refused to expand the interpretation of the ITE Law to include specific rules on "digital heritage." The Constitutional Court stated that existing civil law is still considered sufficient to define digital assets as objects, and thus Indonesia will likely not have a special law on digital asset inheritance in the near future. This

situation requires legal experts to work more deeply in interpreting existing regulations (the Civil Code and KHI) so that they can still be applied in this modern era (Constitutional Court, 2025).

Significant technological developments in recent decades have given rise to unprecedented digital currency assets, or cryptocurrencies. It began in 2008, during the global economic crisis, when an individual under the pseudonym Satoshi Nakamoto created Bitcoin, which is believed to have the characteristics of a secure, transparent, and decentralized asset. Subsequently, innovations in digital currencies emerged with various new altcoins such as Ethereum with smart contracts, Solana with fast transactions, Binance Coin for the Binance ecosystem, XRP for cross-border transfers, and stablecoins such as Tether whose value is pegged to fiat currencies. These innovations demonstrate significant progress in the world of digital currencies (Widyastuti & Hermanto, 2021).

Cryptocurrencies function not only as transaction instruments but also as digital assets because they rely on blockchain technology to maintain information and transaction security. Blockchain offers a decentralized system, meaning that data is not stored on a central server but is distributed across interconnected computers in a peer-to-peer (P2P) network, each node serving to verify and record transactions. Blockchain is also inherently transparent, allowing transaction histories to be viewed by anyone, even though the information is securely stored and cannot be unilaterally altered (Raharjo, 2022).

The increase in crypto asset ownership in society has triggered an urgent need to address legal issues that have not been clearly accommodated in domestic law, particularly from the perspective of inheritance law. The unique characteristics of crypto assets—decentralization, anonymity, and reliance on blockchain technology—create distinct complexities when viewed through a conventional legal lens. To date, positive legal instruments such as the Civil Code (KUHPerdata), as well as customary and Islamic law in Indonesia, do not contain explicit regulations regarding the legal status and inheritance mechanisms of digital assets. The absence of such norms results in legal uncertainty and ambiguity in the execution of inheritance after the heir's death (March, 2022).

The use of crypto assets as legal instruments for trading on futures exchanges has been recognized in Indonesian law. This legality is grounded in Article 15 paragraph (1) of Law Number 11 of 2008 concerning Electronic Information and Transactions (ITE Law), which obliges every electronic system operator to operate its system reliably, securely, and responsibly. This recognition is specifically reinforced by the Letter of the Coordinating Minister for Economic Affairs Number S-302/M.EKON/09/2018, dated 24 September 2018, which classifies crypto assets as commodities tradable on the futures exchange (Muhammad, 2022). Nevertheless, regulations in Indonesia expressly limit the function of crypto solely as an investment asset, not as a means of payment, consistent with national monetary policy, which stipulates that the Rupiah is the only legal tender in Indonesia.

With the shift in investment forms toward digital assets, crypto asset holders need to consider the possibility of transferring ownership of these assets to the next generation. Issues arise regarding the legal status and inheritance mechanisms from the perspective of Islamic inheritance law. Islamic law stipulates that all forms of property lawfully owned and beneficial at the time of death may be inherited. Several fatwas state that cryptocurrencies, if acquired through halal means and possessing beneficial value, may be inherited like other assets.

However, other scholars argue that cryptocurrencies are not categorized as wealth in Islam because they are speculative and highly volatile (Suryaman et al., 2024).

Several previous studies have examined the relationship between crypto assets and inheritance law from various perspectives. Research by Amalia, Alfiyah, and Hami (2024) discussed the legal provisions of inherited assets in the form of crypto in Islam, focusing on the halal and haram aspects of crypto assets as objects of inheritance under Islamic law. Their study found differing opinions among scholars regarding the status of crypto assets, with some considering them permissible as long as they meet the criteria of property (māl) and have clear benefits, while others prohibit them due to elements of gharar (uncertainty) and maysir (gambling). Meanwhile, research by Duwalang and Yustiawan (2025) explained the urgency of establishing regulations to ensure the protection of heirs' rights in the distribution of crypto assets, highlighting the legal vacuum in Indonesian positive law concerning digital inheritance and the need for regulatory reform to accommodate technological developments.

Research by Marditia and Kuncoro (2025) developed a regulatory model for digital inheritance of cryptocurrency assets from the perspective of Indonesian law, proposing a framework that combines civil law principles with technical mechanisms for accessing and transferring digital assets. Their study emphasized the importance of harmonizing sectoral regulations to provide legal certainty for heirs. Additionally, research by Wijaya, Purnama, and Dian (2025) analyzed the legal status of digital assets as property in Indonesian law, concluding that digital assets qualify as objects of property rights under the Civil Code, despite their intangible nature, because they possess economic value and can be controlled by legal subjects.

Research by Ananda and Irsan (2025) examined the influence of cryptocurrency development as an object of inheritance from the perspective of contemporary scholars, finding that the majority of contemporary ulama recognize crypto assets as māl (property) that can be inherited as long as they meet the criteria of having economic value and benefits. However, they also noted the importance of considering the volatile nature of crypto assets when determining valuation methods for inheritance distribution (Dwijayanti & Irawan, 2023). Furthermore, research by Aprilia, Januardy, and Wulandari (2025) analyzed the development of inheritance law in the Indonesian civil law system with a focus on digital inheritance and digital assets, concluding that there is a significant gap between technological developments and legal regulations that must be addressed through comprehensive legal reform.

The importance of an in-depth study of the legal status and mechanisms of crypto inheritance in Islamic inheritance law lies in the fact that the absence of clear legal guidelines can cause confusion in practice and may lead to unlawful practices. The lack of guidance can also result in assets being abandoned and raise the potential for conflicts between heirs in the future. Therefore, it is necessary to adapt Islamic inheritance law to modern assets such as crypto, and to develop fatwas and regulations that clarify the law and mechanisms for distributing crypto assets in inheritance.

In the preparation of scientific research, the theoretical foundation serves as a relevant frame of reference for the topic under discussion and is directly related to the issues examined. The appropriate use of theory is crucial to strengthening the rigor of research analysis. Referring to Sugiyono, the function of theory in a study can be classified into three strategic aspects: clarifying and sharpening the operational definitions and scope of the variables studied; serving as a basis for formulating hypotheses and developing valid research

instruments; and guiding the discovery of empirical facts related to the phenomenon under investigation.

This research adopts Legal Certainty Theory as its main theoretical framework to analyze the problems raised. The use of this theory is based on the argument that substantive justice can only be achieved when supported by legal certainty. In this perspective, law functions as an instrument that regulates societal behavior patterns through positive norms. Thus, the compliance of legal subjects with laws and regulations (the rule of law) is an absolute prerequisite to ensuring legal protection, order, and security for every citizen.

The urgency of legal certainty for society lies in its function as a guarantee for all forms of legal acts and events in daily life. Laws and regulations function as normative instruments providing behavioral guidelines, while legal certainty acts as a constitutional guarantee that protects the rights of the community in carrying out their activities in accordance with applicable norms. Without legal certainty, legal norms cannot provide effective protection for legal subjects.

This journal differs from previous studies in that it examines the position of crypto assets as objects of inheritance from the perspectives of both the Civil Code and Islamic Law, as well as the methods for distributing crypto inheritances that experience extreme price volatility, in order to uphold the absolute rights of heirs and ensure fair distribution. While other studies discuss the legal provisions of inherited crypto assets in Islam (Amalia, Alfiyah, & Hami, 2024), this journal specifically addresses the position of crypto assets as inheritance objects in the views of civil law and Islamic law. Other research explains the urgency of establishing regulations to protect heirs' rights in the distribution of crypto assets (Duwalang & Yustiawan, 2025), whereas this journal focuses on how to maintain the value of digital assets to be inherited, given their volatile nature.

Based on the background and problems described above, this study aims to analyze the legal position of crypto assets as objects of inheritance under the Civil Code and Islamic Law in Indonesia, as well as to examine the mechanisms for distributing crypto inheritances to heirs. Specifically, the study seeks to determine whether crypto assets qualify as inherited property under both legal systems, analyze legal obstacles and technical challenges in the inheritance process, and propose appropriate mechanisms for asset valuation and distribution that ensure the protection of heirs' absolute rights and achieve fair distribution, while accounting for the unique characteristics of crypto assets, including their decentralized nature, private key security requirements, and extreme price volatility. This research is expected to provide both theoretical and practical benefits by contributing to the development of inheritance law and digital asset regulation through a comprehensive analysis of the legal status of crypto assets from the perspectives of positive law and Islamic law, and by offering practical guidance for crypto asset owners in planning digital inheritances, for heirs in understanding their rights and claims, for legal practitioners in drafting digital wills and handling inheritance cases, for regulators in formulating comprehensive regulations on digital asset inheritance, and for religious authorities in issuing fatwas that provide clear sharia guidelines, ultimately aiming to protect heirs' economic rights and ensure justice in the distribution of digital wealth in accordance with both positive law and Islamic principles.

MATERIALS AND METHODS

This research employs a normative legal (doctrinal) method, which positions law as a system of norms consisting of principles, rules, and legislation (Marzuki, 2017). The research specification is descriptive-analytical, using secondary data as the main source, including primary legal materials in the form of laws and regulations and secondary legal materials in the form of scientific literature and the works of legal scholars (Soekanto & Mamudji, 2015). The approaches used are a statutory approach, to examine regulations related to crypto assets and inheritance, and a conceptual approach, which departs from the views and doctrines developed in legal science to build legal arguments regarding the status of digital assets as objects of inheritance. The analysis is conducted qualitatively using a deductive method, drawing conclusions from general issues to specific problems related to the mechanism for distributing crypto asset inheritance in Indonesia.

RESULTS AND DISCUSSION

The Position of Crypto Assets as Objects of Inheritance Reviewed from the Civil Code and Islamic Law

The inheritance law system in Indonesia, which functions to regulate the transfer of rights and obligations to a person's wealth after death, is now facing issues that have not been accommodated in the existing rules. There is a gap between positive legal frameworks such as the Civil Code and the Compilation of Islamic Law (KHI) and the technical characteristics of crypto assets, which are decentralized and anonymous. A fundamental issue arises when a person dies leaving behind high-value digital assets, namely whether strings of cryptographic code can be fully recognized as an "object" or "property" according to state and religious law.

In addition to their legal status, the mechanism for asset transfer is a crucial issue. Non-custodial crypto asset technology relies heavily on the ownership of confidential private keys. Without firm and detailed regulation regarding digital inheritance, legal uncertainty arises that risks eliminating the rights of heirs. If this issue is not promptly regulated, the potential for future civil disputes will increase, given that current law is not fully prepared to address the realities of digital assets.

With the emergence of new forms of property ownership in the form of digital assets, including digital instruments such as cryptocurrencies, Non-Fungible Tokens (NFTs), social media accounts, and e-wallet-based financial instruments that have economic and privacy value, the nature of ownership has shifted. The presence of these digital assets transforms conventional ownership, which was originally oriented toward physical objects, into ownership of intangible objects. Although they do not have a physical form, these assets have globally recognized exchange values and can be traded on international markets (Wijaya et al., 2025).

The current existence of cryptocurrencies has gained broad global recognition as one of the significant classes of digital assets. In recent years, rapid growth in user numbers and market capitalization has demonstrated massive expansion, indicating a shift in how people view wealth and investment instruments. The use of crypto assets in Indonesia shows a positive trend, with the number of users reaching 22.9 million accounts by early 2025. In addition, transaction volume reaching Rp650.6 trillion in the same period affirms the high level of public trust in digital assets as part of the modern wealth portfolio (Rizki, 2025).

Bitcoin is the pioneer crypto asset with the most significant level of global recognition. Its distinguishing characteristic is scarcity, as the network protocol limits the maximum supply to only 21 million units. This attribute of scarcity gives rise to the analogy of "digital gold," given its function as a store of value that is resistant to inflation because its supply is systemically fixed. Increasing market demand for Bitcoin, which is not matched by a

proportional increase in supply, has driven price appreciation and strengthened Bitcoin's legitimacy as a valuable and prospective investment asset (Yaldi et al., 2024).

Despite their potential, crypto assets face challenges that include extreme value volatility, vulnerability to market manipulation, and the absence of clear regulatory frameworks in various countries. This phenomenon creates divergence in global policy: on the one hand, countries such as El Salvador have taken progressive steps by designating these assets as legal tender, yet on the other hand, most of the world's monetary authorities still classify crypto assets as high-risk and limit their function to investment commodities to prevent risks to national financial stability (IMF, 2023).

In Indonesian positive law, crypto assets are classified as commodities or investment assets, not as payment instruments (Sutedi, 2022). Based on Law Number 7 of 2011 concerning Currency, the Rupiah is the only legal tender within Indonesia's jurisdiction. Therefore, the use of crypto in domestic commercial transactions is prohibited because it contradicts the mandatory requirement to use Rupiah for every transaction intended as payment.

Under Article 499 of the Civil Code, "material" includes everything that can be controlled by legal subjects and has economic value. Crypto assets are qualified as intangible goods that meet the elements of ownership. Although they lack physical form, their characteristics as assets that can be valued in money and transferred make them legitimate objects of ownership in civil law. The position of crypto assets as tax objects in Indonesia is based on their legal recognition as commodities with economic value. Strict restrictions imposed by the Financial Services Authority (OJK) prohibit banking institutions and financial service providers from facilitating crypto transactions as a medium of exchange. Therefore, although crypto is a futures trading object under BAPPEBTI's supervision, its function remains limited to an investment instrument (a speculative asset) and not as legal tender (Hadjon, 2022).

Crypto assets as tradable objects on the futures exchange are affirmed through the Letter of the Coordinating Minister for Economic Affairs Number S-302/M.EKON/09/2018. This designation classifies crypto assets as intangible movable objects, which has implications for their civil aspects. As legitimate objects of property, crypto assets can be used as objects whose ownership rights are transferred, whether through inheritance mechanisms, grants, or written contractual agreements in accordance with applicable legal provisions (Dhoga, 2024).

In accordance with Article 830 of the Civil Code, it is emphasized that the transfer of rights and obligations occurs automatically by operation of law upon the death of the heir. In this context, crypto assets qualify as inheritance objects because they have economic value that can be converted into fiat currency. The position of crypto as intangible movable property provides legitimacy for heirs to control these assets, provided that the technical requirement of access to the private key is fulfilled. Although recognized as inheritance objects, the transfer of crypto assets faces obstacles due to their decentralized nature. Unlike conventional assets, which involve intermediary institutions such as banks or land offices for verification, crypto assets rely entirely on control over digital credentials. Therefore, the effectiveness of inheritance is largely determined by the availability of access to the private key or recovery phrase for the heirs; without such access, there is a risk of permanent loss of the assets (BAPPEBTI, 2022; Wijaya, 2021).

Although the Civil Code has not yet specifically addressed digital aspects, its inheritance law principles remain relevant. Based on Article 833 of the Civil Code, the principle of *saisine* applies, which stipulates that heirs automatically acquire all the rights and obligations of the deceased by operation of law at the time of death. This provision can be extended to cover digital assets, whereby ownership rights over such assets pass to the heirs without the need for additional legal acts, as long as the assets qualify as property. The effectiveness of digital asset inheritance significantly depends on the existence of a will containing instructions and mandates from the deceased. A will can guide heirs in taking legal

actions in the form of possession, management, and transfer of assets (Muzaki, 2025). In addition, a will-based division of assets serves as a preventive measure to reduce the potential for legal disputes among heirs, given that rights and obligations have been distributed in advance in a fair manner.

In the absence of regulations explicitly governing digital asset inheritance, legal uncertainty arises. This situation creates a legal vacuum that hinders heirs from accessing or claiming their rights, given the intangible nature of crypto assets and the need for special private keys. Ambiguity in legal status not only triggers technical difficulties but also opens space for potential disputes among heirs and uncertainty for third parties connected to these assets (Aprilia et al., 2025).

Despite gaps in positive inheritance law, the legal certainty of crypto assets as lawful objects can be traced through regulations in other digital economy sectors. Based on Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector (P2SK Law), crypto assets are recognized as part of digital financial assets under the supervision of the Financial Services Authority. In civil law theory, the legal certainty of these assets relies on the concept of intangible objects as stipulated in Article 499 of the Civil Code, whereby digital assets are qualified as property because they have economic value and can be transferred. This normative recognition is an initial basis for crypto assets to be juridically classified as inheritance objects (relics) whose ownership can be accounted for (Sudiyatna, 2022). Legal certainty does not depend only on written regulations, but must also be supported by technological security systems that ensure the effective exercise of rights. The use of instruments such as smart contracts provides a new dimension of legal certainty through transparent and objective automatic execution, thereby minimizing the risk of default in asset allocation (Mere, 2023). Therefore, to achieve comprehensive legal certainty, harmonization is needed between reforms of inheritance regulations in the Civil Code and the strengthening of personal data protection and standardization of digital technology in Indonesia.

There is a difference in the concept of property in conventional and Islamic perspectives. Conventionally, property is defined as an object that satisfies human needs, both material and non-material. In contrast, in Islamic law, wealth is positioned as an instrument of worship to achieve obedience to Allah. In addition, the majority of scholars expand the scope of property (māl) not only to tangible objects, but also to everything that has economic value and provides benefits, for which damage gives rise to an obligation to provide compensation. In this way, there is value and responsibility attached to property that provides economic benefit to the owner (Suryaman et al., 2024).

In Islamic law, there are two main views on what can be called property. The first group, the Hanafiyah School, argues that something is considered property if it has a real physical form and can be stored. However, the majority of other scholars have a broader view, stating that property does not have to be a visible or tangible object as long as it has economic value and provides benefits to the owner. According to this majority view, the right or monetary value attached to an object is sufficient to make it legitimate property in the eyes of the law (Ananda & Irsan, 2025).

Crypto assets can be grouped based on their main functions, starting with payment tokens such as Bitcoin, which act as a digital medium of exchange and are recognized as assets by the majority of scholars because of their real economic value. In addition, there are utility tokens such as Ethereum that provide benefits in the form of access to services on the blockchain network, so that the clarity of their use meets the element of property in Islamic law. There are also security tokens that represent digital ownership of company shares or assets, which have strong legality because they possess measurable value and are legally protected. Furthermore,

asset-backed tokens offer higher certainty because their value is backed by physical assets such as gold or property, making them the most acceptable type under sharia principles. Lastly, stablecoins emerge as a solution to price fluctuations by using fiat currency reserves as collateral, so that their value stability and transaction function are recognized as having substantial benefits in modern economic activities (FINMA, 2018).

Although theoretically various types of crypto assets qualify as *māl* (property) in contemporary *fiqh*, their practical implementation in *muamalah* transactions still requires in-depth study by scholars and religious authorities. Therefore, the urgency of examining the *fatwas* of the *ulama* is crucial to provide guidance for the *ummah*. This legal instrument does not rely solely on normative texts, but also integrates the principle of prudence regarding the risks and impacts that may arise.

There are three main foundations that classify crypto assets, with Bitcoin as an example, as objects of wealth. First, Bitcoin meets the criteria as something that can be controlled and provides benefits to humans, as evidenced by the high market interest in this asset as an investment instrument and in business transactions. Second, Bitcoin's economic value is driven by its scarcity, as the maximum supply is permanently limited to 21 million units by its protocol. Third, the characteristics of cryptographic-based blockchain technology and peer-to-peer schemes ensure the exclusivity of ownership, so that access to these assets is private and transparently recorded in decentralized databases.

Islam is a religion that prioritizes the principle of prudence in responding to the dynamics of the times, including the phenomena of globalization and digitalization. The development of society toward a more dynamic and competitive digital era, marked by the emergence of crypto assets such as Bitcoin, demands an appropriate legal response. Although social realities have undergone significant changes, the basic and permanent principles of sharia remain the main foundation. However, Islamic law has the flexibility to make contextual adjustments to new problems through *ijtihad*, while still referring to established evidences in order to maintain the relevance of the law amid technological developments.

There are several views on the permissibility or prohibition of crypto or Bitcoin as legal currency in Islam. There are three main conditions that must be met: it must be recognized as property (*māl*), have value acknowledged by the sharia (*taqawwum*), and function as a real medium of exchange (*thamaniyyah*). If the public already uses and widely recognizes Bitcoin for transactions, then these criteria are considered fulfilled (Adam, 2021). Conceptually, Bitcoin can be classified as property, given that it meets the criteria by which an object is recognized for its beneficial value and ownership by the wider community. However, Bitcoin's capacity as a currency cannot be determined solely based on public recognition. In Indonesian regulation, this crypto asset has two legal positions. On the one hand, Bank Indonesia expressly prohibits the use of Bitcoin as legal tender. On the other hand, the government, through the Ministry of Trade in September 2018, officially approved Bitcoin as a tradable commodity. Thus, the legal status of Bitcoin in Indonesia is not as a currency, but as a crypto asset categorized as a legal investment instrument or digital commodity on the futures exchange.

Meanwhile, in the view that declares crypto assets unlawful, from the perspective of *muamalah fiqh* the use of cryptocurrencies as legal currency is considered *haram* because it contains elements of *gharar* (ambiguity), *dharar* (potential harm), and *qimar* (speculative gambling). As digital assets, they are often considered not to qualify as valid *sil'ah* (commodities) under sharia due to the absence of physical form and an absolute value standard. However, there is a legal opening in Islamic law if a crypto asset is able to qualify as a *sil'ah* that has an underlying asset and clear economic benefits. Thus, the legal status of crypto assets in Indonesia is currently that of an investment commodity supervised by the state, but they have not been recognized as a lawful medium of exchange, either constitutionally or in terms of *fiqh* (MUI, 2019).

The opinion that permits the use of crypto assets is based on the fiqh principle that the original ruling in muamalah matters is permissibility, as long as there is no specific evidence prohibiting it. According to this view, as long as a cryptocurrency has value, benefits, and is widely used in transactions, it can be categorized as legitimate property, although the risks of price fluctuations must still be treated with caution. On the other hand, the opinion that prohibits crypto assets strongly emphasizes concerns about gharar (ambiguity), excessive speculation (qimar), and potential dharar (harm) for users. The Indonesian Ulema Council (MUI) prohibits the use of cryptocurrencies as a medium of exchange or currency. However, MUI remains open to the possibility of allowing crypto assets as tradable commodities, provided they have clear underlying assets and benefits and are under government regulation.

Crypto assets thus have a sufficiently strong legal foundation to be recognized as objects of inheritance in Indonesia, even though the rules are still dispersed across various sectors. From the perspective of the Civil Code, crypto assets are classified as intangible movable objects that have economic value, so they automatically become part of the inheritance that passes to the heirs when the owner dies. Meanwhile, in Islamic Law, crypto assets are recognized as assets (māl) and commodities (sil'ah) that are lawful to be inherited (tirkah) according to the rules of farā' id, as long as the assets have clear underlying assets and are free from elements of gharar (uncertainty) and maysir (gambling).

However, the strength of this legal foundation is still constrained by major obstacles in implementation. There are technical problems such as the confidentiality of the private key and complex exchange administration procedures that risk causing these digital assets to be permanently lost if not properly planned from the outset. In addition, differences of opinion among scholars regarding the halal status of crypto also pose challenges for Muslim heirs in determining the status of such property. Therefore, legal recognition alone is not sufficient. A combination of technological understanding, the use of legal instruments such as digital wills, and compliance with service provider rules is needed to ensure that the economic rights of heirs are sustainably protected.

Mechanism for Distributing Crypto Asset Inheritance to Heirs

The development of the digital economy has given rise to crypto assets as a new form of wealth that exhibit far higher price volatility than conventional assets such as gold or land. This drastic change in value over a short period of time poses a serious legal challenge when such assets become part of an estate. Within the framework of the Civil Code, protection of the absolute rights of heirs (legitime portie) may be threatened if asset valuation is rigidly conducted only at the time of the deceased's death. This is because the value of these assets may decline sharply due to market dynamics before distribution actually takes place. In line with this, Islamic law, which prioritizes the principle of justice in the distribution of tirkah, also faces the risk of uncertainty and potential conflict among heirs if the distribution method does not take into account extreme price changes. Therefore, a clear solution is needed regarding the most appropriate method and timing of valuation—whether based on value at death, value at distribution, or by agreement (ṣulḥ) among the heirs.

In the Compilation of Islamic Law (KHI), inheritance law is defined as the set of rules governing the transfer of ownership rights to inherited property (tirkah) from the deceased to the heirs, including determining who is entitled to inherit and the share of each heir. Based on Article 171 letter a of the KHI, inheritance is the law that regulates the transfer of ownership rights over inherited property, determines the rightful heirs, and stipulates each heir's portion. This process aims to ensure justice within the family and maintain a lawful distribution of property in accordance with the provisions of sharia.

Assets that may be inherited according to the KHI include all property owned by the deceased at the time of death, both in the form of tangible objects and other material rights, after deduction of burial expenses, settlement of debts, and execution of wills. Based on Article 171 letters d and e of the KHI, inheritance consists of property left by the deceased, both assets and rights. In contemporary legal developments, this definition of property in the KHI can be extended to include digital assets such as cryptocurrencies, as long as the assets have economic value, are legally owned, and their benefits can be passed on to the heirs.

The recognition of crypto assets as inherited property requires a clear transfer procedure so that these digital assets can be received by the heirs. Given their non-physical nature and the fact that they can only be accessed through digital keys (private keys or seed phrases), asset owners need to undertake careful inheritance planning. This includes secure recording and storage of access data, to later be handed over to the rightful heirs. Without proper documentation, such digital assets risk being permanently lost, which conflicts with the basic sharia principle of safeguarding wealth. Therefore, it is imperative to develop a digital inheritance mechanism that combines the principles of Islamic inheritance law with secure technical procedures (Feliks, 2022).

Given the opinion that recognizes Bitcoin as property, it can also be categorized as inheritance (*tirkah*). Because it is digital and non-physical, the inheritance process requires a robust technical mechanism, such as secure private key management. Asset owners need to take strategic steps, starting from drafting wills in accordance with sharia limitations, using regulated official exchanges to facilitate legal administration, and securing access information for the heirs. These measures are essential to ensure asset security and protect heirs' rights in line with the principles of property protection.

The majority of crypto holders in Indonesia store their assets on registered Centralized Exchanges (CEX), where the exchange acts as a custodian or third party managing customers' digital wallets. The inheritance mechanism on these platforms is administrative in nature and follows user agreements that must comply with consumer protection laws. Based on analyses of major platforms such as Indodax, Tokocrypto, Pintu, and Luno, inheritance claim procedures are tightly regulated to mitigate legal risks arising from the irreversible nature of crypto transactions (Luno, 2024). The claim process generally begins with reporting the death for account freezing, followed by verification of legal documents such as identity cards, death certificates, and Certificates of Inheritance Rights (SKHW). Some platforms even implement facial biometric verification (liveness checks) to ensure the legitimacy of heirs before assets are converted to Rupiah or transferred to another digital wallet (Tokocrypto, 2025).

In contrast to centralized exchanges, non-custodial wallets require far more self-directed inheritance planning because control lies entirely in the hands of the asset owner. Some methods that have begun to be used include physical storage of secret codes (seed phrases) in bank vaults, using Shamir's Secret Sharing (splitting access codes among several trusted parties), and employing smart contracts that automatically transfer assets if the owner is inactive for a certain period (dead man's switch). However, this automated method still faces validity challenges under Indonesian civil law, especially when the death of the asset owner has not been legally verified by the state (Marsanti & Urbaniasi, 2025).

Notaries play a key role in providing legal certainty through the creation of authentic deeds that record digital asset inventories without revealing personal access codes, for security reasons. Notaries act as validators of lawful asset ownership, so the deeds they produce become strong legal bases for heirs when processing claims (Dinantara & Aminah, 2025). Along with the transfer of crypto asset supervision from Bappebti to the Financial Services Authority (OJK) in January 2025, consumer protection standards are expected to tighten in line with banking standards. Future regulations are expected to require the inclusion of an heir-

designation feature directly in applications to streamline the bureaucracy of digital inheritance management in Indonesia.

Based on an analysis of the relationship between changes in crypto asset prices and the principle of fairness in inheritance, it can be concluded that rigid application of traditional distribution rules risks harming heirs' rights. In the Civil Code system, and to protect absolute rights without harming other parties due to drastic value changes, the valuation of crypto assets should not be conducted solely at the time of the deceased's death. As a solution, valuation should ideally be carried out at the time of asset distribution, or by directly distributing the digital assets themselves without first converting them into conventional currency.

CONCLUSIONS

Based on the results of the research and discussions presented, it can be concluded that crypto assets have a sufficiently strong legal foundation to be recognized as objects of inheritance in Indonesia, even though the regulations remain sectoral. Juridically, crypto assets qualify as intangible movable objects within the framework of Article 499 of the Civil Code and are classified as investment commodities that possess real economic value. In line with this, Islamic law, through the lens of contemporary fiqh, views crypto assets as *māl* (property) and *sil'ah* (commodities) because of their *mutaqawwim* or valuable nature, so they are lawfully treated as inherited property (*tirkah*) that may be transferred to heirs through the *farā'id* mechanism. However, there is a significant gap between the recognition of the material law and the formal procedures for its execution, as the decentralized nature of crypto assets and their full reliance on private keys create a risk of permanent loss of access if they are not managed with careful digital planning. In addition, the extreme price volatility characteristic of crypto assets demands a shift in inheritance valuation; valuation is no longer ideal if it is fixed solely at the time of the deceased's death, but must instead consider the value at the time of distribution or be conducted through the direct allocation of asset units in order to uphold the principle of justice and the absolute rights (*legitime portie*) of the heirs.

From the above conclusion, and in order to provide legal certainty and maximum protection for heirs, strategic steps are needed as suggestions from the author for various parties. First, the government, through the OJK and relevant ministries, needs to promptly harmonize regulations by requiring crypto exchange operators to provide a heir-designation feature integrated with the national population data system, in order to simplify the claims bureaucracy. Second, for legal practitioners such as notaries, it is crucial to enhance digital literacy so they can draft digital wills that list digital asset inventories without compromising the security of personal access keys. Third, for asset owners, it is highly recommended to undertake independent digital estate planning using multi-layered security methods, such as storing backup access codes in physical safes or using legally verified smart contract schemes. Finally, religious authorities such as the Indonesian Ulema Council are expected to issue more detailed fatwas regarding the technical procedures for distributing digital asset inheritances, so that the public has clear sharia guidelines in navigating the emerging digital economy.

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