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# The Concept of Digital Asset Inheritance in the Perspective of Faraid Science (A Study of the Application of Blockchain-Based Crypto)

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**Abstract:** This normative legal research aims to analyze the legal standing of crypto assets in Islamic inheritance law and to formulate an adaptive faraid approach capable of addressing their non-custodial characteristics. The study employs qualitative doctrinal analysis using the methods of qiyas (analogical reasoning) and maqashid sharia (objectives of Islamic law) to examine the inheritance implications of crypto assets stored on blockchain systems. In the analytical process, locked digital assets are analogized to buried treasure (rikaz) to establish their proprietary status, while reference to Law No. 4 of 2023 concerning the Financial Sector Development and Strengthening (PPSK Law) is utilized to reinforce their legality as recognized inheritance objects within the national legal framework. The findings confirm that crypto assets can be validly categorized as māl mutaqawwim (legally valuable property) because they fulfill the elements of hiyazah (legitimate control) and intifa' (beneficial use), thereby making them subject to inheritance distribution. However, their dependence on private keys presents significant technical barriers to execution and transfer. To address this issue, the study proposes the implementation of Wasiyyah al-Isya' (testament of access) as a preventive mechanism aligned with the principle of hifz al-mal (protection of wealth), ensuring heirs' access to digital assets. Additionally, for indivisible or technically complex assets, the application of the at-takharuj (peaceful settlement) mechanism is recommended, whereby ownership is transferred to technologically competent heirs who provide equitable compensation (iwadh) to other heirs. This adaptive framework ensures legal certainty, distributive justice, and alignment with the objectives of Sharia in the digital era.

**Keywords:** Faraid, Digital Assets, Cryptocurrency, Wasiyyah al-Isya', Takharuj Service, Education

## Introduction

In today's modern developments, the emergence of digital assets has brought major changes in the form of new wealth, especially in commodity instruments that are non-physical but have significant economic value, one of which is Crypto assets (Huda & Amin, 2025). The technological foundation that allows these non-physical assets to have transaction value and security, and makes them difficult to manipulate, is technology *blockchain* (Rohman Fathnur, 2022). This important phenomenon has changed the global financial paradigm in recent years.

Digital assets are representations of value or ownership rights that exist in digital form and can be traded (Hanafi & Firdaus, 2023). One of the prominent digital asset classes is *crypto assets*, which leverages Cryptography to create and manage asset units and secure its transactions within the platform *blockchain*. *Cryptoassets* it comes in many forms, including Crypto currencies (*cryptocurrency*), digital tokens (such as *utility token, security token,* and *natural asset token*), and *Non-Fungible Token* (NFT) (Herman et al, 2024).

History of digital assets, specifically Cryptocurrencies and technology *blockchain*, starting with its introduction *bitcoin* in 2008 by an individual or group under the pseudonym Satoshi Nakamoto (Hutagalung et al, n.d.). *Bitcoin* to be a pioneer that paved the way for thousands of other cryptocurrencies such as *ethereum* and *litecoin*, all of which rely on technology *blockchain* to ensure its security and validity (Herman et al, 2024). Blockchain itself is a crucial backbone in the digital asset ecosystem. This technology is a secure and transparent asset transaction data recording and storage system (Ducrée, 2020). It integrates the sophistication of Cryptography, which allows data to be stored in a distributed manner within the infrastructure *blockchain*. Transaction data is organized in the form of interconnected blocks through cryptographic algorithms, forming a chain of blocks that cannot be changed and can be verified by all parties involved in the network (Santoso, 2021). More than just decentralized data storage, *blockchain* It also serves to store information securely and encrypted, while forming a network *peer-to-peer* (P2P) which allows direct transactions between users without the need for intermediaries (Herman et al, 2024). Transaction reliability and data manipulation prevention are maintained through consensus processes such as *Proof of Work* (PoW) or *Proof of Stake* (PoS). Thus, technology *blockchain* It is a strong foundation in the digital world, combining data storage security, network decentralization, and a reliable consensus process. Some of the leading blockchain infrastructures include *blockchain*, *Bitcoin* For value transfer, Ethereum supports *smart contracts* and decentralized applications (*DApps*), *Binance Smart Chain* as a low-cost alternative, as well as *Polkadot* which connects various blockchains. This variety of infrastructure provides a dynamic and innovative platform for the development of decentralized technology.

The phenomenon of users as well as owners of Crypto assets is also reflected in the Indonesian context which shows significant growth in the adoption of digital assets. According to a report by State of Mobile, a research company from the United States, Indonesia occupies the second position globally with a 54% increase in the growth of Crypto application users (*year on year*) compared to the previous year (vritimes, 2025). This data confirms that the use and ownership of digital assets among Indonesian people is no longer exclusive, but has become part of a widespread digital economy trend that needs attention in legal aspects, including Islamic inheritance law.

Currently, Crypto assets in Indonesia have been recognized by the state under Law Number 10 of 2011 concerning Commodity Futures Trading (Putri, 2024). However, the inheritance of Crypto assets as an inheritance object does not yet have clear regulations, causing a legal vacuum in the field of inheritance (Marsanti & Urbaniasi, 2025). Based on

the Statement, efforts are needed to examine more deeply the inheritance in the form of Crypto assets and the laws attached to the inheritance object.

Awareness of the importance of regulation of digital assets can be seen in the realm of national law. This is reflected in the trial at the Constitutional Court of the Republic of Indonesia on May 7, 2025, where the Court received an application for a test of Law Number 19 of 2016 concerning Amendments to Law Number 11 of 2008 concerning Information and Electronic Transactions (ITE Law) related to the clarity of the legal position of digital assets in inheritance law (RI, n.d.). In the hearing, the applicant said that there is a legal vacuum related to the mechanism of inheritance law and protection of Digital Assets such as Crypto, which can harm the heirs when the asset owner dies without leaving clear access.

This situation implies that Crypto and other digital assets not only pose challenges in technological and economic aspects, but also raise legal issues that have not been fully answered. The regulatory vacuum in terms of inheritance has the potential to cause many heirs to lose access to Crypto assets. This happens because of the security system *Blockchain* is closed and only the owner of the asset can access it (Julitiarni & Giska, 2025). If the owner of the asset dies without or forgets to leave a will regarding access, the fundamental question arises: will the asset be lost? In fact, these assets will not be lost because *blockchain* has a high level of security. However, the absence of access information can create new problems in inheritance, such as potential disputes between heirs in terms of proof of ownership.

The need to review how the concept of ownership and transfer of rights in digital assets can be studied legally is very urgent, including within the framework of Islamic Law, namely Faraid Science, which has special principles in the regulation of inheritance (Lathifah & Gspita, 2024). Traditionally, in Faraid Science, inheritance is assumed to be physical (visible), clear ownership, and can be divided proportionally according to the provisions of sharia. However, the presence of digital assets such as *Cryptocurrency* Challenging the Original Definition of Property (*Al-Maal*) and requires an expansion of the meaning of Tirkah (relics) and *Milkiyyah* (ownership). Characteristics of Crypto are anonymous, not tied to financial institutions, and can only be accessed through private keys (*private Key*), making it difficult for heirs to reach if the owner dies without leaving clear access. If this problem is not responded to scientifically and systematically, there is potential *Mudharat* (loss) in the form of loss of inheritance that should be the right of the heirs.

Therefore, the study of the position and mechanism of digital asset inheritance from an Islamic perspective is very urgent. It is hoped that this research can provide legal certainty, maintain justice, answer the needs of the ummah, and criticize the gap between digital reality and Islamic law in the ever-growing digital era. In Indonesia, heritage is considered very important because it is related to family harmony. In fact, there have been many examples of cases of inheritance disputes between family members. It is hoped that this research will be able to increase public understanding of inheritance related to Crypto assets that are growing rapidly in Indonesia, considering that in the future, the use of Crypto assets may not be avoided by anyone.

## Methodology

This study uses a normative legal approach (juridical-normative) with a descriptive-analytical nature, because the object of study is in the form of a new phenomenon, namely digital assets (cryptocurrencies) that have not been regulated in detail in the classical literature. The analysis was carried out by examining literature and secondary data related to the principles, rules, and legal systematics in Faraid science as well as positive regulations in Indonesia, including PPSK Law No. 4 of 2023 and Bappebti regulations. Three main approaches are applied: a conceptual approach to understanding the concepts of property (al-māl) and ownership (milkiyyah) in digital assets, an Islamic legal approach based on the postulates of naqli, ijtihad, Qiyas, and Maqashid Sharia, and a legislative approach to assess the legality of digital assets.

The research data sources include primary, secondary, and supporting data in the field. Primary materials include the Qur'an, Hadith, Ijma', Regulation of the Minister of Trade, Bappebti regulations, MUI Fatwa, and Compilation of Islamic Law (KHI), while secondary materials consist of classical and contemporary fiqh books, scientific journals, law books, as well as research articles related to blockchain and inheritance law. Supporting data is in the form of interviews with competent sources regarding digital security (private key/seed phrase) and transaction documentation to assess the benefits (intifa') and efficiency of crypto assets. The selection of sources is carried out based on relevance, credibility, and publication in the last five years so that the analysis remains up-to-date and accountable.

Data collection was carried out through literature studies, semi-structured interviews, and digital documentation, while data analysis was qualitative, descriptive-analytical. The analysis process includes the classification of legal materials and technical facts, systematic decomposition to find the compatibility between positive law and Islamic law, and the application of deductive methods. In legal discovery, Qiyas is used for assets without key access such as hidden assets (rikaz), and Maqashid Syariah is used as a reference to ensure that digital asset inheritance solutions are in line with the principles of property protection (hifz al-mal) and justice for heirs.

## Result and Discussion

**Tabel 1.** Research References Supporting the Legal Status of Crypto Assets as Inheritable Property (Tirkah)

| Title | Method | Author (s) | Year | Conclusion |
|---|---|---|---|---|
| Legal Status of Crypto Assets under Indonesian Commodity Futures Law | Normative juridical (statutory and conceptual approach) | Balqis & Utami | 2024 | Crypto assets possess legal legitimacy as commodities under Commodity Futures Trading Law and Bappebti regulations, and fall within OJK supervision following the P2SK Law. |
| Analysis of the MUI Fatwa on the Legality of Cryptocurrency as a Commodity Asset | Normative-analytical using ushul fiqh approach | Adab & Aflah | 2023 | Cryptocurrency may be categorized as *sil'ah* (tradable commodity) that is legally permissible provided it fulfills the |

| Title | Method | Author (s) | Year | Conclusion |
|---|---|---|---|---|
| | | | | requirements of underlying assets and clear utility. |
| The Position of Crypto Assets in the Perspective of Islamic Commercial Law | Library research based on maqashid sharia approach | Habibi et al. | 2023 | Crypto assets qualify as *māl mutaqawwim* because they possess recognized exchange value and utility ('urf), making them valid objects of ownership and transaction. |
| Cryptocurrency Regulation and Market Volatility: Evidence from Emerging Markets | Quantitative (statistical market volatility analysis) | Meng & Chen | 2023 | Crypto assets demonstrate high volatility yet remain recognized as digital investment instruments operating through market mechanisms. |
| Financial Inclusion through Blockchain-Based Digital Assets | Mixed methods (policy analysis and empirical study) | Nuraini et al. | 2022 | Blockchain-based crypto assets enhance financial inclusion through efficient cross-border transactions without intermediaries. |
| The Recognition of Digital Assets as Taxable Objects in Indonesia | Normative juridical (analysis of fiscal regulation) | Ministry of Finance of Indonesia | 2022 | The imposition of VAT and income tax on crypto transactions affirms their status as economically valuable and legally recognized taxable assets. |
| Cybercrime Risk in Digital Wallet Transactions under the ITE Law | Normative statutory approach | Al-Azis et al. | 2024 | Unauthorized access to digital wallets and crypto fraud are subject to criminal sanctions under the amended ITE Law. |
| Concept of Māl and Tamawwul in Shafi'i Jurisprudence | Classical jurisprudential (turath) analysis | Razak et al. | 2026 | The Shafi'i concept of *māl* includes intangible assets possessing value and utility, making it adaptable to contemporary digital assets. |

1. Position of Crypto Assets as Heirs (*Tirkah*)

*Cryptocurrency* is a form of digital currency that is decentralized and technology-based *blockchain* (*The Future Of Money - Will Crypto Replace Fiat*, 2025). This asset leverages Cryptographic technology, network *peer-to-peer*, as well as distributed ledger systems (*distributed ledger*) which functions to regulate the process of creating new units, verifying transactions, and ensuring transaction security without involving third-party authorities (Huda & Amin, 2025). Crypto assets such as Bitcoin, Ethereum, and the like not only present new alternatives in transaction mechanisms, but also reflect a paradigm shift in the global monetary and financial system (Huda & Amin, 2025).

Viewed from an economic point of view, *cryptocurrency* It is often seen as a speculative asset instrument with a relatively high level of volatility (Meng & Chen, 2023). In contrast to fiat currencies that gain legitimacy and support from governments and central banks, the value of Crypto assets is formed through market mechanisms, i.e. the interaction between demand and supply (Kusumo & Daim, 2024). Nonetheless, the existence of Crypto

assets also offers the potential to drive financial inclusion (*financial inclusion*) because its application is used for cross-border without intermediaries which is often considered more efficient (Nuraini et al, n.d.).

Based on the Letter of the Coordinating Minister for Economic Affairs Number S-302/M.EKON/09/2018 dated September 24, 2018 regarding the follow-up to the coordination meeting on the regulation of Crypto assets as commodities traded on the futures exchange, it is emphasized that Crypto assets are not allowed to be used as a means of payment (Sadig, 2025). Nevertheless, Crypto assets can be categorized as investment instruments and designated as a tradable commodity on the futures exchange.

The legal legitimacy of crypto asset trading in Indonesia is based on a strong and layered regulatory foundation. Fundamentally, Law Number 10 of 2011 concerning Commodity Futures Trading is the main legal umbrella that defines commodities as rights and interests that can be the object of futures contracts, including their derivatives. The derivatives of this law are strengthened by the Regulation of the Minister of Trade Number 99 of 2018 which stipulates general policies for the implementation of crypto asset trading, and is technically detailed through a series of Bappebti Regulations (starting from Number 5 of 2019, the amendment in Number 9 of 2019, to Number 13 of 2022) which regulates the mechanism of the physical market, the list of legal assets, and the implementation of anti-money laundering programs.

In addition to the legality aspect of trading, the recognition of the economic value of crypto assets is also reflected in the latest fiscal regulations and financial sector supervision. Minister of Finance Regulation Number 68/PMK.03/2022 explicitly regulates the imposition of VAT and income tax on crypto transactions, which confirms its status as a taxable asset (Indonesia, 2021). The determination of this regulatory landscape is further strengthened by the enactment of Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector (P2SK Law), which gives a new mandate to the Financial Services Authority (OJK) to participate in the regulation and supervision of digital financial assets, signaling deeper integration into the national financial system (Balqis & Utami, 2024).

Referring to the applicable technical provisions, especially Bappebti Regulation Number 5 of 2019, Crypto assets are defined as intangible commodities in the form of digital assets that use Cryptography, *peer-to-peer* networks, and distributed ledger systems to regulate unit creation, verify, and secure transactions without the involvement of other parties. What is meant by a commodity is all goods, services, rights, and other interests, including derivatives of commodities that can be traded and are the object of futures contracts and other derivative contracts.

The consequences of this high economic value make crypto assets vulnerable to cybercrime (*cyber crime*), such as digital wallet access theft (*Wallet*) as well as transfer fraud that harms investors. Against this violation, Indonesia's positive law applies strict sanctions based on Law Number 1 of 2024 concerning the Second Amendment to Law Number 11 of 2008 concerning Information and Electronic Transactions (UU ITE) in the form of prison sentences and fines. The enforcement of these criminal sanctions is very crucial considering

that all transaction activities take place in the digital realm which is highly dependent on the security of the system (Al-Azis et al, n.d.).

Regarding the digital infrastructure, this is related to the definition of 'Electronic System' Article 15 paragraph (1), and Article 16 letter (e) of Law Number 11 of 2008 concerning Information and Electronic Systems (UU ITE) "Every system operator is obliged to operate an electronic system responsibly and responsibly for the running of the electronic system", then what is meant is a series of devices and procedures that function to process and disseminate electronic information (Graphic, 2024).

Kedudukan *cryptocurrency* as a legitimate object of property has also gained legitimacy in positive legal regulations in Indonesia (Razak et al, 2026). The Commodity Futures Trading Supervisory Agency (Bappebti) through Bappebti Regulation Number 5 of 2019 and its amendments has determined Crypto assets as commodities that can be used as the subject of futures contracts. A total of 229 types of Crypto assets have been recognized for their legality to be traded as commodities/investment assets, although they are prohibited from being used as a means of payment in lieu of Rupiah.

In terms of sharia, this status is strengthened by the decision of the Ijtima Ulama of the 7th Fatwa Commission of the Indonesian Ulema Council (MUI) in 2021. The fatwa stipulates that *cryptocurrency* as a commodity/asset that qualifies as a *Sil'ah* (merchandise), having *underlying asset*, as well as clear benefits, the law is legal to trade (Adab & Aflah, 2023). Bahtsul Masail Nahdlatul Ulama (NU) also affirms that Crypto assets are wealth (*São Paulo*) according to Fiqih, so that if it is stolen, it must be sanctioned and if it is damaged, it must be replaced (Habibi et al, 2023).

2. Crypto Assets as Property in the perspective of Islamic law

Crypto assets meet the elements of being property based on:

a. It has economic value.
b. Legally ownable.
c. Manageable.
d. Transferable and utilizable.

The majority of Shafi'iyah scholars, the main reference of fiqh in Indonesia, define property (māl) as not limited to physical form. Imam As-Suyuthi, quoting Imam Shafi'i, stated that māl is something that is owned, valuable, and can be compensated if it is damaged. Az-Zarkasyi's opinion emphasizes that wealth includes physical objects and benefits (manfa'ah).

Cryptocurrencies meet the criteria of mutamawwal, which is something that is owned and valuable, even without a physical form. The value of crypto assets is recognized by the community of its users ('urf khash) and is interchangeable, in line with At-Tahanawi's view that the status of property depends on the ability to be stored and utilized (tamawwul). Crypto assets can be controlled through digital wallets and private keys, have a recognized exchange rate, and can be transacted, so that they meet the elements of hiyazah and intrinsic value as assets according to the Shafi'i madhhab.

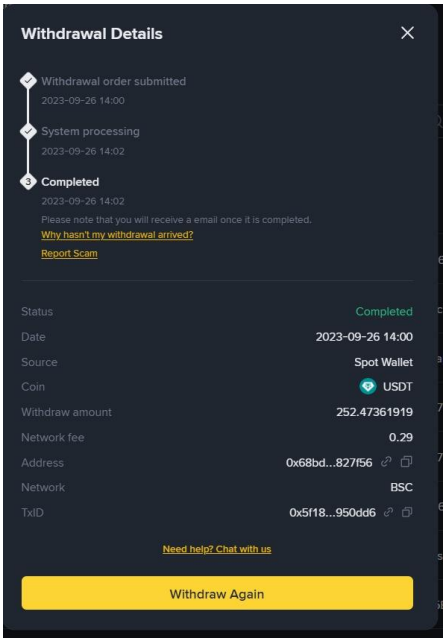


**Figure 1.** Proof of Transaction using Binance App

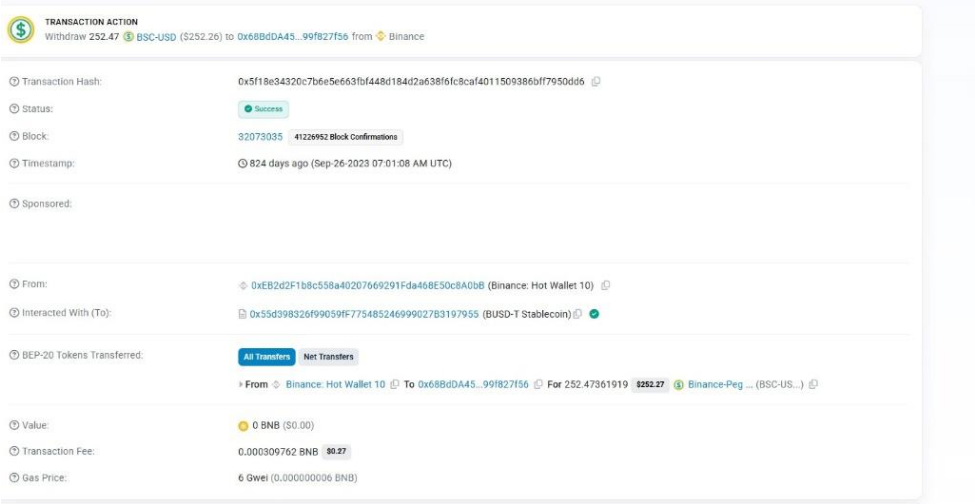


**Figure 1.** Proof of transfer view successfully using a TokoCrypto account

This cost efficiency is much cheaper than conventional methods, proving that this asset has real utility (*manfa'ah*) that facilitates muamalah, not just an object of speculation.

## Discussion

### 1. The Concept of Faraid Knowledge Approach in Digital Asset Inheritance

Before formulating the technical method of distribution, the fundamental analysis that needs to be affirmed is regarding the status of Crypto assets that have lost key access.

In the rules of Fiqh it is stated (Al-Asqalani, 2004):

مَا لاَ يَتِمُّ الوَاجِبُ إِلاَّ بِهِ فَهُوَ وَاجِبٌ.

*"Something that is obligatory will not be perfect except with it, then something is obligatory by law."*

The heir's obligation to divide the property fairly cannot be fulfilled without access to the asset. As an illustration, if an heir dies with a billion rupiah worth of Bitcoin assets in a Cold Wallet without handing over the Seed Phrase to the family, the property remains recorded on the Blockchain Ledger, but the heirs cannot manage it (Tasharruf). Because the division of inheritance (taksimal-tirkah) is a commandment of Allah, access to assets is a condition for inheritance obligations to be carried out (Al-Jaziri, 2003). Therefore, providing private key documentation for crypto asset owners is mandatory by law as a means of perfecting inheritance obligations

Negligence in this case is not just a technical problem, but a violation of the trust of the property (An-Nawawi, n.d.). Crypto assets that lose their access keys are not only lost to the heirs, but also macroly disappear from the economic turnover of the ummah, which is contrary to Surah Al-Hasyr verse 7 (Al-Asqalani, 2004):

...كَيْ لَا يَكُونَ دُولَةً بَيْنَ الْأَغْنِيَاءِ مِنكُمْ...

*"... So that the wealth does not circulate only among the rich among you..."*

In the context of Crypto digital assets, the author offers three adaptive approaches to ensure that the property does not become useless (*idha'at al-mal*) and can be distributed fairly to the rightful heirs.

a. From Will of Property to Will of Access

One of the classic debates in Islamic law is the prohibition of giving a will to the heirs, as the Prophet PBUH said (Al-Bukhari, n.d.):

إِنَّ اللَّهَ قَدْ أَعْطَى كُلَّ ذِي حَقٍّ حَقَّهُ فَلاَ وَصِيَّةَ لِوَارِثٍ

*"Indeed, Allah has given to everyone who has the right to his own rights, so there is no will for the heirs."* HR. Abu Daud, Tirmidhi, Nasai, and Ibn Majah.

Hadith prohibits the heir from giving certain property through a will because it can damage the heir's share (furudh). However, in the context of digital assets, sharing a Private Key or Seed Phrase is different from a will of property; this is more appropriately called Wasiyyah al-Isha', which is the delegation of authority to access and manage property after death, without transferring ownership (Al-Ghazali, 1993). Providing access to this key can be Sunnah if it aims to avoid conflicts and ensure asset management, and becomes mandatory if there are sharia obligations such as debts or zakat that have not been resolved. Thus, this action does not violate the distribution of Allah's inheritance, but ensures that digital assets can still be used according to the principles of Maqashid Sharia, especially hifz al-mal (property protection).

b. Application of the *At-Takharuj* Mechanism for Undivided Assets

The technical characteristics *of cryptocurrencies* often make it difficult to divide literally. An example of a case that the author found is when an asset in the form of *a Non-Fungible Token* (NFT) that is unique (non-fungible), or an asset that is being locked in a long-term *Staking* scheme where early disbursement will lead to a large fine. If it is forced to be divided according to the fraction of faraid (e.g., wife 1/8, mother 1/6), then the asset may have to be forcibly sold at a low price or split which damages its value.

To overcome this rigidity, Islam offers the *mechanism of At-Takharuj*. This mechanism is comprehensively defined by contemporary scholars as a middle ground solution. Prof. Dr. Wahbah Az-Zuhaili in his monumental book, *Al-Fiqh al-Islamy wa Adillatuhu*, explains the definition of *takharuj* as follows:

التَّخَارُجُ: هُوَ أَنْ يَتَصَالَحَ الْوَرَثَةُ عَلَى إِخْرَاجِ بَعْضِهِمْ مِنَ الْمِيْرَاثِ، فِي مُقَابِلِ شَيْءٍ مَعْلُوْمٍ مِنَ التِّرْكَةِ أَوْ مِنْ غَيْرِهَا وَهَذَا الْعَقْدُ جَائِزٌ عِنْدَ التَّرَاضِي

*"At-Takharuj i.e. the heirs reconcile so that some of them are excluded from receiving inheritance in exchange for something known to be taken from the property of tirkah or other property, this contract can be done if they are pleased with each other."*

Wahbah Az-Zuhaili emphasized that the shulh mechanism allows one party to release ownership of inherited shares with iwadh (reward) whose value is known, both from the inheritance and the personal property of other heirs, as long as there is at-taradhi (mutual pleasure). A historical example of this occurred during the time of Caliph Uthman bin Affan r.a., when Abdurrahman bin 'Auf died leaving behind a large fortune and four wives, where each wife was entitled to 1/32 of the property according to the faraid. One of the wives, Tumadhir bint al-Ashbagh, chose takharuj, relinquished her rights to the intricate divided assets, and received compensation in the form of dinar from other heirs (Asy-Syathibi, 1997).

In the history it is mentioned:

صَالَحُوْهَا عَنْ رُبُعِ الثُّمُنِ عَلَى ثَلَاثَةٍ وَثَمَانِيْنَ أَلْفًا

*"The other heirs reconciled with him (Tumadhir) to replace a quarter of one-eighth (of his inheritance) with money of **83,000 (Dinar)**."*

The agreement of the value of 83,000 Dinars was witnessed by the senior Companions without any denial, so that it became *Ijma' Sukuti* that replacing inheritance rights in the form of assets with a monetary value (or vice versa) was valid for the common good. This

event was agreed upon by his companions, including Uthman bin Affan who was the caliph at that time.

In the context of digital assets, *Takharuj* can be applied with the following scenarios (al-Zuhayli, 1989):

1) If one of the heirs (e.g. the eldest son) has good technology literacy and is able to manage *private keys*, while the other heirs (e.g. mother or sister) stutters technologically (*gaptek*), then it can be *agreed upon by Takharuj*.
2) Furthermore, the tech-savvy heirs take over all ownership of the Crypto assets.
3) Instead, he provides compensation (*iwadh*) in the form of cash or physical assets (land/gold/other inheritance rights) to other heirs worth a portion of their inheritance.

The foundation of this ability is the principle *of Ash-Shulhu* (peace), as Allah SWT says in Surah An-Nisaa' verse 128:

...وَالصُّلْحُ خَيْرٌ...

*"And peace is much better."*.

Referring to the opinion of Wahbah Az-Zuhaili and the precedent (final decision) of Tumadhir bint Al-Ashbagh above, the *mechanism of Takharuj* is very relevant applied to digital assets that are difficult to divide (*ghairu qabil lit-tajzi'ah*) (Al-Zuhayli, 1985).

In NFT inheritance or locked Staking accounts, physical divisions risk damaging or depriving the asset of value. The implementation of Takharuj is a sharia solution by handing over full control of digital access (Private Key) to technically competent heirs, while other heirs receive compensation (iwadh) equivalent to their share of their inheritance, either in the form of money, gold, or physical assets. With this mechanism, the principle of justice (al-adl) is maintained without causing the risk of asset loss due to digital mismanagement.

c. The Application of *Shamir's Secret Sharing* Technology and the Role of Third Parties

Given the high security risk if *private key* submitted openly during life, the authors found that the modern Faraid approach needs to adopt technological instruments and trusted intermediaries (*Trustee*). Based on the literature that the author reviewed, there is a technical method called *Shamir's Secret Sharing* (Kalvin et al, 2025).

In the distribution of digital assets, Shamir's Secret Sharing is a relevant cryptographic solution. This method divides the master key/seed phrase into shards that are distributed to the heirs, so that the assets are not lost and cannot be controlled unilaterally. New property can be accessed if the minimum number of fractions is combined, in line with the principles of deliberation and the rules of Sadd ad-Dzari'ah to prevent fraud, while maintaining the protection of property (hifz al-mal).

In addition to technology, the role of Notaries as a neutral third party is very important. The owner of the asset can make a closed will (holographic) that contains the Private Key or the location where the key is stored, then stored in the Notary's office. The notary only opens the document if the owner is proven to have died through an official Death Certificate and the determination of heirs from the court. This mechanism bridges the gap in digital inheritance regulation in Indonesia, provides legal certainty, access security, and minimizes the risk of disputes or false claims.

With the combination of Shamir's Secret Sharing and Notary supervision, the inheritance of digital assets becomes secure, participatory, and in accordance with fiqh principles, where assets can only be accessed jointly by legitimate heirs, preventing unilateral control and ensuring transparency of distribution.

2. The Challenges of Blockchain-Based Digital Asset Inheritance

Although the cryptocurrency's status as a property (*māl*) has been validated in accordance with sharia, its inheritance process faces fundamental challenges not found in conventional assets. These challenges arise from the technical characteristics *of decentralized blockchains, Digital Literacy barriers, as well as regulatory loopholes that create legal loopholes in the execution of inheritance.*

a. Custodial and Non-Custodial Systems

The main difference lies in the storage mechanism: the custodial (banking) system has a third party in control, so that the legal authority can execute the funds for the heirs, in line with the principles of Wadi'ah Yad Dhaman. In contrast, non-custodial crypto assets are completely under the control of the owner through a Private Key (Milk at-Tam). Without inherited key access, the asset remains on the blockchain but is locked, so a death certificate or court order has no technical coercion.

b. Barriers to Inherited Technology Literacy

Many crypto asset owners keep digital wallet access secret from their families due to security reasons and the low technological literacy of the heirs. As a result, when the heir dies suddenly, the heir cannot access the property, so the status of the asset becomes mauquf (withheld). In fiqh, property still exists (maujud) but cannot be used (ghairu maqdur al-taslim), similar to the concept of Harta Mafqud or Maghsub.

c. Regulatory Void for Digital Asset Beneficiaries

Indonesia does not yet have special regulations related to non-custodial digital asset inheritance claims. Existing regulations focus on trade and money laundering prevention, so litigation often comes to a stalemate due to encrypted blockchains. Practical solutions are internal family mechanisms such as Takharuj, Access Wills, and Shamir's Secret Sharing

technology to guarantee access management, save asset value, and ensure Faraid law can be applied effectively in the digital age.

## Conclusion

Based on the results of the research, the author concludes that blockchain-based Crypto assets are legitimately categorized as inheritance (tirkah) in an Islamic perspective because they meet the criteria of māl mutaqawwim, namely having full control (hiyazah), economic benefits (intifa'), and legality recognized by Bappebti regulations and ulama fatwas. Consequently, these assets must be inventoried, assessed, and distributed to the heirs according to faraid provisions, not allowed to be lost. In addition, the application of Islamic inheritance law to digital assets requires an adaptive approach (Contemporary Faraidh), including through Wasiyyah al-Isya' (access will) to bequeath digital keys as a mandate to perfect inheritance obligations, as well as the At-Takharuj mechanism for assets that are difficult to divide, where technologically literate heirs take over assets while compensating other heirs according to their share. Based on the findings of regulatory and technical constraints, the authors suggest that the public and Crypto investors document Private Keys, Seed Phrases, or use Shamir's Secret Sharing methods to ensure inheritance access remains available and avoid permanent loss of property, as well as encourage academics to develop an automatic inheritance model based on Smart Contracts that are integrated with population data so that inheritance distribution can be carried out automatically and securely.

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