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A STUDY ON THE FATWA OF THE INDONESIAN ULEMA COUNCIL (MUI) REGARDING CRYPTOCURRENCY AND ITS IMPLEMENTATION IN INDONESIA

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ABSTRACT

This study analyzes the Indonesian Ulema Council's (MUI) fatwa on cryptocurrency and its implementation in Indonesia. Using a qualitative approach with content analysis, we examined official documents, articles, and research reports, and conducted interviews with experts in Islamic economics and information technology. We also collected quantitative data on cryptocurrency users and transactions from reliable sources. Our findings show that MUI has prohibited cryptocurrency due to its uncertainty and potential harm, as per the 2021 fatwa. However, despite this prohibition, many Indonesians continue to use cryptocurrency, with 60% of survey respondents reporting ownership or investment experience.

Keywords: *Fatwa, Indonesian Ulema Council (MUI), Cryptocurrency, Islamic Perspective, Digital Assets.*

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1. INTRODUCTION

The rise of technology-based payment systems has revolutionized traditional payment methods, reducing reliance on physical cash. While cash remains widely used, the growing adoption of digital payment systems is driving a shift towards non-cash transactions. Today's payment landscape is shaped by the evolution of currency, from physical cash to electronic payments, enabled by advancements in technology that make life more convenient and efficient. The widespread adoption of technology, especially the internet, has transformed business transactions, making them faster, easier, and more efficient. This modern lifestyle has led to the rise of non-cash payment methods, including credit cards, debit cards, ATMs, and e-money. Electronic money functions similarly to traditional money, serving as a means of payment (Anam & Ei, 2018). To be widely accepted, money must fulfil three key functions: medium of exchange, unit of account, and store of value (Priyatno & Atiah, 2021). From an Islamic perspective, electronic money is deemed *ḥalāl*, based on the principle that transactions are permissible unless explicitly prohibited (Anam & Ei, 2018). The evolution of money has seen various forms, from coins and paper to digital and electronic forms, reflecting technological advancements.

Digital currency serves as a means of payment and exchange for online transactions. Its intangible nature defines its digital form (Narayanan, 2020). Over time, payment methods have transformed significantly, from physical commodities to precious metals like gold, and eventually to coins and paper bills. Technological advancements have driven the emergence of new forms of currency, such as e-money (including debit cards, smart cards, and e-cash) and cryptocurrency (Jati & Zulfikar, 2021). The concept of cryptocurrency was pioneered by David Chaum, a PhD in computer science and business administration from the University of California, USA, who developed a secure algorithm for encrypted electronic transactions in the 1980 (Gupta & Gupta, 2025). Around 2010, cryptocurrency experienced a resurgence in popularity, thanks to the work of Satoshi Nakamoto, a mysterious figure or group. Nakamoto's design of open-source software and a peer-to-peer network enabled cryptocurrency to offer a decentralized solution for economic transactions (Budish, 2025). Cryptocurrency operates independently, recording transactions directly without intermediaries. Unlike traditional currencies, cryptocurrency is not controlled or issued by a central authority, and its decentralized nature shields it from government manipulation.

Cryptocurrency was initially met with scepticism as a digital currency. However, its rapid growth soon garnered widespread recognition. Bitcoin, launched by Satoshi Nakamoto on January 3, 2009, pioneered the peer-to-peer network model. Other cryptocurrencies, such as Ethereum (ETH), Bitcoin Cash, and Litecoin, have since emerged. Cryptocurrency distribution often relies on mining. As its popularity grows, regulatory challenges arise. Countries worldwide have varying stances on cryptocurrency regulation, ranging from openness to outright bans due to concerns about illicit activities and its legitimacy as a currency. Cryptocurrency, a digital currency utilizing blockchain technology, has become a global phenomenon in recent years. In Indonesia, the popularity of cryptocurrency has surged, with many individuals and institutions investing in digital assets. According to CoinMarketCap data, the total market capitalization of cryptocurrency reached over $2 trillion in 2021, with Bitcoin dominating the digital asset landscape. A report by the Indonesian Blockchain Association (ABI) estimated that the number of cryptocurrency users exceeded 7 million people in 2022, indicating high public interest despite regulatory uncertainty.

The emergence of cryptocurrency has sparked debates, particularly regarding its legal and Sharia implications. Research by Anam and Ei (2018) titled "*E-Money in the Perspective of Sharia Law*" found that Bitcoin does not fully meet the criteria of money due to elements of *gharar* (uncertainty) and *maisir* (gambling). Another study by Jati and Zulfikar (2021) titled "*Cryptocurrency Transactions in the Perspective of Islamic Economic Law*" highlighted that cryptocurrency transactions are not officially recognized by Indonesian authorities, making them the responsibility of individuals. The Indonesian Council of Ulama (MUI), as the authority on Islamic fatwas, has provided guidance on the legitimacy of cryptocurrency in Islamic law. This study aims to analyze the MUI's fatwa on cryptocurrency and its implementation in Indonesia.

2. REVIEW OF LITERATURE

This literature review examines existing research and theories related to cryptocurrency and Sharia law in Indonesia. Previous studies have explored cryptocurrency from various angles, including Sharia law, economics, and technology. However, few have investigated the MUI's fatwa on cryptocurrency and its impact on usage in Indonesia. This study aims to contribute to the existing literature and provide deeper insights into cryptocurrency and Sharia law in Indonesia.

2.1 Overview of Cryptocurrency

Cryptocurrency is a digital currency that can be transacted online, differing from physical currency that requires storage and is often associated with problems related to paper money. Cryptocurrency is designed to solve complex mathematical problems through cryptography during transactions. Ownership is secure, and transfer requires access to the currency. Cryptocurrency operates without a central authority, instead relying on a decentralized system that promotes transparency among users (Chaum, 2017). The peer-to-peer system enables users to share files without a central server. Cryptography ensures data security, making it difficult for unauthorized parties to access the information. Another definition describes cryptocurrency as an internet-based financial transaction using cryptographic functions. Cryptocurrency utilizes blockchain technology, offering advantages in transparency and data security. Decentralization, transparency, and immutable transaction data are key benefits over traditional banking transactions. Cryptocurrency transactions are efficient and online, facilitating transactions with strangers. According to Ausop and Aulia (2018), cryptocurrency is a digital currency that exists only in the virtual world, without physical form like paper or electronic money. The rapid pace of technological progress has transformed the digital landscape, forcing various sectors to adapt. The economy has been particularly affected, with online transactions becoming increasingly common. Payment methods have undergone significant changes, evolving from bartering to digital currencies.

For a payment method to be viable, it must function as a medium of exchange, unit of account, and store of value. However, fiat currency systems are often constrained by government regulations, leading to potential problems. Cryptocurrency has emerged as a potential solution to these issues, offering a decentralized alternative to traditional financial systems. Cryptocurrency comes in various forms, such as Bitcoin, Ethereum, XRP, Tether, Binance Coin, and Cardano. Bitcoin is the most well-known cryptocurrency worldwide, boasting a market capitalization of $731.46 billion, far surpassing Ethereum's $272.99 billion (Guo & Naseer, 2025).

2.2 Indonesian Council of Ulama (MUI) Fatwa

The term "fatwa" refers to a ruling or legal opinion. In Islamic terminology, fatwa has various meanings that generally refer to its linguistic sense. For instance, Al-Qarafi states that fatwa is an "explanation of Allāh's law regarding matters that are permissible and forbidden." Al-Jurjani believes that "issuing a fatwa means providing a legal explanation for a specific issue." Meanwhile, Ibn Hamdan Al-Harani Al-Hanbali defines fatwa as "a Sharia legal explanation based on evidence for those seeking guidance on a particular matter" (Al-Bakry, 2017). Modern scholars like Macdonald (2012) define fatwa as "a formal legal opinion given by a mufti or competent canon lawyer in response to a question posed by a judge or private individual." This means judges can make legal decisions based on this opinion, and individuals can regulate their personal lives accordingly. When issuing a fatwa, muftis must also refer to existing legal precedents (Macdonald, 2012). Fatwa is one option for making legal decisions in Islamic jurisprudence, recognized by all Islamic schools of thought through competent muftis. Fatwas can cover religious, ethical, or legally binding matters *(Kuske, 2006)*. In the Sunni tradition, those capable of issuing fatwas are called muftis, while in the Shia tradition, they are known as *mujtahids*. If a person seeks a fatwa but finds the answer insufficient, they can seek another opinion from a different mufti or *mujtahid (Kuske, 2006)*. Islamic finance, a rapidly growing industry globally, has expanded to various countries, each with its own jurisdiction. These jurisdictional differences pose challenges to developing Sharia-compliant financial products that operate seamlessly across countries (Sundararajan, 2011). One consequence is the presence of various official authorities governing Islamic finance in different countries, sometimes under central banks or stock exchanges, with varying positions. In Indonesia, the Indonesian Council of Ulama (MUI) is the official authority that can issue fatwas.

2.3 Principles of Islamic Finance

Islamic finance refers to a financial model that upholds Sharia values (Islamic teachings). The entire Islamic finance model must comply with Sharia-compliant financial requirements, services, and products, or be consistent with Islamic law based on the primary sources of Sharia, namely the Qurʾān and the Sunnah of the Prophet Muhammad (ﷺ). In essence, Islamic finance is formulated to always be tied to the real economy in several ways and represents a kind of idealism in the socio-economic model (Hegazy, 2007). The concept of Islamic finance is not a goal for individuals or exploitative companies that

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generate wealth and enrich themselves. Islamic finance must be based on material and spiritual growth and promote a model of social harmony (Tacy, 2006).

There are at least three core principles and guidelines of Islamic finance that are generally accepted:

(a) Financial investments, products, or transactions should not be too speculative or uncertain, or contain risks that make them similar to gambling. (b) Financial investments, products, or transactions should not attract or generate interest, as this is not connected to the real economy and is not productive in the real economic sense (Ahmad & Hassan, 2006). (c) Partners in investment should share risks and efforts, as well as potential profits, in an investment. It is a challenge for Islamic finance to innovate in financial technology (fintech) while ensuring that everything complies with Sharia principles. This requires ongoing analysis and study to ensure that Islamic finance can continue to innovate without violating Sharia values. Here are the Quranic verses and Ḥadīth related to the concept of Islamic finance principles:

يَـٰٓأَيُّهَا ٱلَّذِينَ ءَامَنُوا۟ لَا تَأْكُلُوٓا۟ أَمْوَٰلَكُم بَيْنَكُم بِٱلْبَـٰطِلِ إِلَّآ أَن تَكُونَ تِجَـٰرَةً عَن تَرَاضٍۢ مِّنكُمْ ۚ وَلَا
تَقْتُلُوٓا۟ أَنفُسَكُمْ ۚ إِنَّ ٱللَّهَ كَانَ بِكُمْ رَحِيمًۭا ٢٩

Meaning:

"O you who have believed, do not consume one another's wealth unjustly but only [in lawful] business dealings by mutual consent. And do not kill yourselves [or one another]. Indeed, Allāh is to you ever Merciful." *(QS. An-Nisā: 29)*

نهي رسول الله عن بيع الحصاة وعن بيع الغرر

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Meaning:

"The Messenger of Allāh (ﷺ) forbade the sale of al-hashah (by throwing stones) and the sale of gharar." (Narrated by Muslim).

The opinions of Islamic scholars include:

Among them is the opinion of Imām Ghazali in *Ihya Ulum al-Din*, p. 74, that permissible transactions are those validated by a mufti or the government:

اعلم أن المعاملة قد تجري على وجه يحكم المفتي بصحتها ، وانعقادها ولكنها تشتمل على ظلم يتعرض به المعامل لسخط الله تعالى إذ ليس كل نهي يقتضي فساد العقد وهذا الظلم يعني به : ما استضر به الغير وهو منقسم إلى : ما يعم ضرره وإلى : ما يخص المعامل.

3. RESEARCH METHODOLOGY

This research uses a qualitative approach with content analysis, gathering data from official MUI fatwa documents, articles, research reports, and expert interviews. Quantitative data on cryptocurrency users and transactions in Indonesia were sourced from the Indonesian Blockchain Association and CoinMarketCap. The study compares the MUI's stance with real-world practices and explores how Indonesian Muslims respond to the fatwa, analyzing the data to identify patterns and trends that reveal the impact of the fatwa on cryptocurrency adoption.

3.1 Survey Method

This survey begins with mapping the focus of the study according to needs, followed by questionnaire development, and then questionnaire distribution. The survey research method was chosen because it is the most suitable method for obtaining public opinion (Morrison, 2019). The survey was conducted directly with 100 respondents over a period of one week, from April 5-10, 2025.

3.2 Scale Level Determination

The scale levels are determined as follows: - Below 25%: categorized as low, - 26%-50%: categorized as moderate, - 51%-75%: categorized as high, - 76%-100%: categorized as very high.

3.3 Respondent Profile

The respondent profile presents information about the distribution of respondents, including gender, occupation, age, and domicile. This profile is used to examine the characteristics of the respondents.

3.3.1 Distribution of Respondents

The survey respondents are from the general public, consisting of 40% private employees and entrepreneurs, and 60% state-owned enterprise (BUMN) employees (see Figure 1).

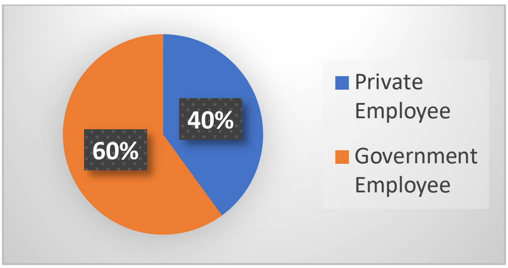

Figure 1. Employment type

3.3.2 Respondent's Gender

The respondents' gender consists of 65% male and 35% female (see Figure 2).

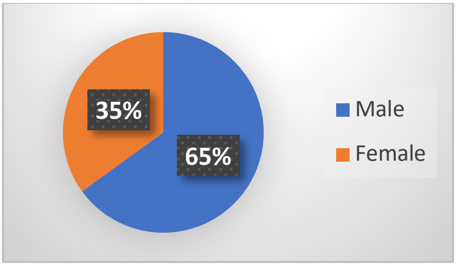

Figure 2. Respondent's Gender

3.3.3 Age

Regarding the respondents' age, the majority are in the productive age group of 26-45 years, accounting for 52.4%. The second largest group consists of young respondents, under 25 years old, making up 33%. The remaining 14.6% are adults aged 46-65 years (see Figure 3.3).

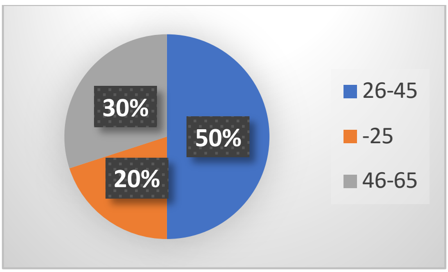

Figure 3. Age

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3.3.4 Domicile

The majority of respondents (70%) are domiciled in the Jakarta area, while the remaining 30% are from outside Jakarta (see Figure 4).

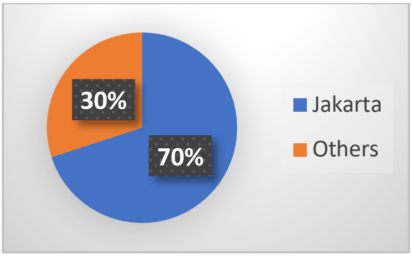

Figure 4. Domicile

4. RESULTS AND DISCUSSION

The current global financial system is mostly based on conventional economics. Countries focus on balancing their economies using interest rates. This makes interest a key factor in monetary and fiscal policies. Globally, interest-based economies create a specific type of financial interaction. However, this has led to global financial imbalances. Developed countries struggle with debt addiction, while poor and developing countries are trapped in growing debt (Chamid, 2013). The Islamic financial system must be able to respond to the challenges of the times, because Islam is a religion that is always relevant to the demands of time and place. As explained by the scholar Dr. Yusuf al-Qaradawi (الاسلام دين صالح لكل زمان ومكان), "Islam is a religion that is valid for all times and places." Including in the development of cryptocurrency, Islam has its own perspective, viewed from the aspects of benefit (*maṣlaḥat*) and harm (*mafsadat*) (Qaradawi, 1997).

4.1 Analysis the MUI's Fatwa 2021 on Cryptocurrency

4.1.1 Fatwa on Cryptocurrency

One of the most spectacular technological advancements in the economic sector is the creation of cryptocurrency, a virtual currency operating in the digital realm. This concept has given rise to digital currencies like Bitcoin, Ethereum, and Dogecoin. Bitcoin, launched in January 2009, achieved parity with the US dollar in 2011 and is now recognized as legal tender in El Salvador. It also circulates in various countries, including the United States, Canada, the United Kingdom, Australia, Turkey, and Brazil.

However, the status of cryptocurrency is debated, with some considering it a currency and others a commodity. Those who view it as a currency argue that it serves as a medium of exchange and store of value. In contrast, those who see it as a commodity point to its intrinsic virtual value and potential as a public good. In Indonesia, cryptocurrency is not recognized as a currency by the government but is acknowledged as a digital asset through regulations. Despite this, it poses risks, including threats to national sovereignty and vulnerability to money laundering. The lack of official regulation and transaction guarantees also raises concerns. From a Sharia perspective, cryptocurrency usage involves elements of *gharar* (speculation) and *qimar* (gambling) due to its extreme price volatility. Therefore, the Indonesian Council of Ulama (MUI) has issued a fatwa to address these issues and provide guidance on the use of cryptocurrency.

4.1.2 Legal Provisions

(a). The use of cryptocurrency as a currency is *ḥarām* (forbidden) due to the presence of *gharar* (uncertainty), *ḍarar* (harm), and its contradiction with Law No. 7/2011 on Currency and Bank Indonesia Regulation No. 17/2015 on the Obligation to Use Rupiah in the Republic of Indonesia. (b). Cryptocurrency as a commodity/digital asset is not permissible for trading due to the presence of *gharar*, *ḍarar*, *qimar* (gambling), and failure to meet Sharia-compliant commodity requirements, namely: physical existence, value, known quantity, ownership, and delivery to the buyer. (c). If cryptocurrency as a commodity/asset meets Sharia-compliant requirements and has underlying assets without *gharar*, *ḍarar*, and *qimar*, it is permissible for trading.

Based on the discussion and study, as well as examining the legal basis of the Indonesian Ulema Council (MUI) in determining fatwas, the MUI uses evidence that supports the prohibition of cryptocurrency as a medium of exchange. Two issues arise regarding the practice of cryptocurrency as a medium of exchange: cryptocurrency clearly contains *gharar* (uncertainty) and *ḍarar* (harm), despite the notion that its practice involves mutual agreement. Therefore, Islam has clearly provided guidance on how Muslims can utilize their wealth to benefit their worldly and hereafter lives while avoiding harm on earth.

4.2 Analysis of Implementation of the MUI's Fatwa on Cryptocurrency in Indonesia

4.2.1 Statistical Data and Facts about Cryptocurrency in Indonesia

The cryptocurrency market in Indonesia has grown significantly in recent years, reaching 18.51 million registered crypto investors by the end of 2023. With a population of over 275 million people and high digital trade penetration, there is still much room for expansion in the country's financial sector, especially in blockchain. Despite a fatwa prohibiting cryptocurrency, it has not deterred crypto investors. They have varying views, even among those who are Muslim.

Knowledge of Cryptocurrency Law based on MUI Fatwa

The majority of respondents are aware of the MUI fatwa that deems Cryptocurrency products haram, accounting for 75%. A small portion, 25%, are not aware of it (see Figure 5).

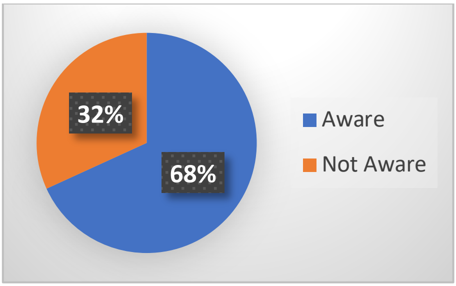

Figure 5. Knowledge of Cryptocurrency Fatwa

Knowledge of Authority regarding MUI as Fatwa Issuer

As many as 85% of respondents know, and 15% do not know that MUI is the institution that issues fatwas on ḥalāl / ḥarām products (see Figure 6)

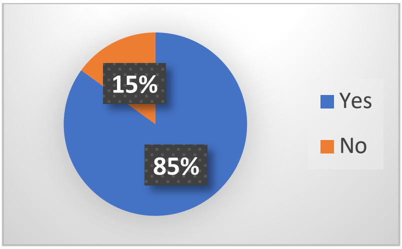

Figure 6. Knowledge of Authority

Source of Knowledge

As many as 50% of respondents learned about the prohibition of Cryptocurrency products from the internet/social media. 34% obtained this knowledge from Muslim Scholars and others. Meanwhile, 16% acquired this knowledge through self-study/self-learning (see Figure 7)

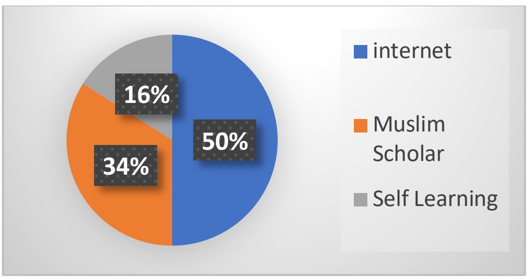

Figure 7. Source of Knowledge

Investment Decision After Knowing the Fatwa

After learning about the MUI fatwa prohibiting cryptocurrency, respondents' decisions on investment are as follows:

- 60% of respondents would still invest, citing promising future returns.

- 40% would not invest due to reasons such as fear of sin, lack of capital, and insufficient understanding of cryptocurrency. (see Figure 8)

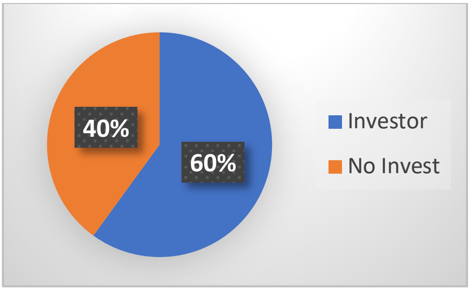

Figure 8. Investment Decision

4.2.2 Trends in Cryptocurrency in Indonesia

In November 2023, cryptocurrency transactions in Indonesia reached around 17 trillion rupiah, up from 8 trillion rupiah in September 2023. The surge in crypto transactions is partly due to the Indonesian regulator's decision to allow cryptocurrency trading as a commodity in 2019, followed by the launch of the world's first state-backed crypto exchange in July 2023. Currently, Bitcoin is the most popular cryptocurrency in the country and remains the digital currency with the highest transaction value among Indonesian investors. Other popular cryptocurrencies include Ethereum, Dogecoin, Binance, and Shiba. The Crypto Adoption Index ranked Indonesia 7th out of 146 countries in 2023. Indonesia outperformed most countries in terms of retail services for centralized and decentralized finance (DeFi), confirming the country's adoption of digital payment trends. The popularity of cryptocurrency among Indonesian investors as a new source of income is also influenced by the positive trend in the global cryptocurrency market. Another factor contributing to the success of cryptocurrency in the country is the mobile-first strategy with easily accessible applications (Guo & Naseer, 2025).

4.2.3 Challenges Facing the Indonesian Cryptocurrency Market

As an emerging market, many investors are still new to financial investments and are more vulnerable to dubious exchanges and assets. Indonesian consumers have been heavily affected by crypto scams, with hundreds of thousands of retail investors caught up in an app-based trading scandal in March 2023. To address this, Bank Indonesia has held discussions on digital currency cybersecurity issues to educate Indonesian investors. In 2024, the Commodity Futures Trading Regulatory Agency (Bappebti) is considering a tax assessment that would require investors to bear only half of the current tax burden. The cryptocurrency market in Indonesia is expected to continue growing, driven by the increasing number of transactions, traders, and exchanges. The cryptocurrency industry is expected to perform positively in 2024, driven by the sharp increase in Bitcoin prices since January 2023. The market is also expected to become more attractive with the Bitcoin halving event in April 2024.

5. CONCLUSION AND RECOMMENDATION

Based on the above description, the researcher can conclude that:

The ruling on Cryptocurrency based on the MUI fatwa in 2021 is *Ḥarām* because it contains elements of *Gharar* (uncertainty) and *Ḍarar* (harm) as per the Quranic verses, Ḥadīth of the Prophet Muhammad (ﷺ), and the views of Islamic scholars. Some of the evidence for the prohibition of Cryptocurrency includes:

- Quranic verses (QS. An-Nisā: 29).

- Ḥadīth of the Prophet (ﷺ), (Narrated by Muslim).

- and statements from Islamic scholars as al Imām Al Ghazālī.

The implementation of Cryptocurrency in Indonesia, despite the MUI fatwa declaring it *Ḥarām*, many people still invest in Cryptocurrency. According to the survey conducted by the researcher, 60% of respondents have invested in Cryptocurrency, citing reasons that Cryptocurrency is a promising asset for future investment.

For MUI, as the authority in Indonesia that issues fatwas on *ḥalāl* and *ḥarām* products, including digital financial products, it is recommended to widely circulate its fatwas, so that the fatwas issued can be used as a reference and guideline in the lives of Muslim communities.

For the Indonesian government, which has the authority to issue legal legitimacy, it is recommended to continue analyzing the positive and negative impacts of cryptocurrency investment and create regulations that can protect investors.

For academics, it is recommended to continue researching cryptocurrency so that any issues related to cryptocurrency can be analyzed scientifically and contribute to the scientific world, particularly in Islamic economics.

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REFERENCES

Aaoifi.com. (2018, Januari 01). *About AAOIFI (The Accounting and Auditing Organization for Islamic Finance Institutions)*. Retrieved from aaoifi.com: https://aaoifi.com/?lang=en Al-Ahram.

Al-Bakry, D. M. (2017). Al-Fatwa fi al-lughah wa al-isthilah (the meaning of fatwa) *[HTML]. Islamway. Net. https: //ar.islamway.net/article/74883/الفتوى-في-اللغة-و-الاصطلاح*

Ausop, A. Z., & Aulia, E. S. N. (2018). Teknologi cryptocurrency bitcoin untuk investasi dan transaksi bisnis menurut syariat Islam. *Jurnal Sosioteknologi*, *17*(1), 74-92.

Budish, E. (2025). Trust at scale: The economic limits of cryptocurrencies and blockchains. *The Quarterly Journal of Economics*, *140*(1), 1-62.

Chaum, D., Das, D., Javani, F., Kate, A., Krasnova, A., De Ruiter, J., & Sherman, A. T. (2017, June). cMix: Mixing with minimal real-time asymmetric cryptographic operations. In *International conference on applied cryptography and network security* (pp. 557-578). Cham: Springer International Publishing.

Chamid, N. (2013). Tantangan Sistem Keuangan Islam Sebagai Alternatif Sistem Keuangan Global. *Al-'Adl*, *6*(2), 110-127.

Anam, C., & Ei, M. (2018). E-Money (uang elektronik) dalam perspektif Hukum Syari'ah. *Qawãnïn Journal of Economic Syaria Law*, *2*(1), 95-112.

Guo, Y., Yousef, E., & Naseer, M. M. (2025). Examining the drivers and economic and social impacts of cryptocurrency adoption. *FinTech*, *4*(1), 5.

Gupta, Ayushi and Gupta, Anamika. (2025). The Evolution of Cryptocurrency: From Bitcoin to Advanced Blockchain Solutions. *International Journal of Innovation and Scientific Research, Vol 77, 116-128.*

Jati, H. S., & Zulfikar, A. A. (2021). Transaksi Cryptocurrency Perspektif Hukum Ekonomi Syariah. *Jurnal Al-Adalah: Jurnal Hukum dan Politik Islam*, *6*(2), 137-148.

Narayanan, H. (2020). Is future a rule of digital currency??? *International Journal of Research -Granthaalayah*, *8*(08), 96-106.

Ahmad, A. U. F., & Hassan, M. K. (2006). The time value of money concept in Islamic finance. *American Journal of Islamic Social Sciences*, *23*(1), 66.

Hegazy, W. S. (2006). Contemporary Islamic finance: From socioeconomic idealism to pure legalism. *Chi. J. Int'l L.*, *7*, 581.

Macdonald, D. B. (2012). Fatwa. In M. Th. Houtsma, T.W. arnold, R. Basset, & R. Hartmann (Eds.), Encyclopaedia of Islam, First Edition (1913-1936). Koninklijke Brill NV. https://doi.org/10.1163/2214-871X_ei1_SIM_2334.

Priyatno, Prima Dwi & Atia, Isti Nuzulul. (2021). Melirik Dinamika Cryptocurrency dengan Pendekatan Ushul Fiqh. *Jurnal ilmiah Ekonomi Islam, 7 (03), 1682-1688.*

Sundararajan, V. (2011). Profit sharing investment accounts--Measurement and control of displaced commercial risk (DCR) in Islamic finance. *Islamic Economic Studies*, *19*(1).

Tacy, K. J. (2006). Islamic finance: A growing industry in the United States. *NC Banking Inst.*, *10*, 355.

Morrison, MA. (2019). Anatomy of Research Poster #betterposter. Retrieved fromosf.io/ef53g. Morrisan

Qaradawi, Y. (1997). *The Lawful and the Prohibited in Islam.* Al Falah Foundation for Translation Publication and Distribution. Cairo Egypt.