JOURNAL OF ACCOUNTING RESEARCH, UTILITY FINANCE AND DIGITAL ASSETS (JARUDA) | 2962-973X
Website: https://jaruda.id/index.php/go | Volume 4 No. 4 (2026)

Economic Analysis of Crypto Asset Regulation in Indonesia: Market Impact, Investor Behavior, and Islamic Economic Perspective

Nanda Nur Sofyana
Universitas Islam Negeri Ar-Raniry Banda Aceh
Email korespondensi: nanda.nursofyana@ar-raniry.ac.id

Received: 25//02/2026 | **Revised:** 01/03/2026 | **Accepted:** 15/04/2026 | **Published:** 25/04/2026

Abstract

The transfer of crypto asset regulatory authority from Bappebti to the Financial Services Authority (OJK) in 2025 represents a policy transformation with significant economic consequences for Indonesia's digital financial market. This article presents a narrative literature review analyzing three economic dimensions of this regulatory change: (1) the impact of regulation on market dynamics and crypto asset price volatility; (2) the response and behavior of crypto investors in Indonesia amidst the changing regulatory landscape; and (3) the implications of regulation from an Islamic economic perspective based on the 2021 Ijtima Ulama. The review results indicate that: first, regulations that increase legal certainty have the potential to suppress short-term volatility while encouraging long-term institutional adoption, although empirical evidence suggests that the announcement of regulations was initially responded negatively by market players; second, the growth of Indonesian crypto investors, reaching more than 21 million by 2024, is driven by digital financial literacy, risk perception, and speculative motives, which require a policy approach based on economic education; Third, the 2021 Ijtima Ulama fatwa places crypto assets in a conditional position from an Islamic economic perspective, namely, they are forbidden as a medium of exchange but offer opportunities as conditional investment assets. Therefore, OJK regulations need to accommodate the evolving needs of Muslim investors. This article identifies a research gap in the form of a lack of empirical studies on the macroeconomic impact of crypto regulations in Indonesia and the need for a regulatory model that integrates Islamic economic principles.

Keywords: crypto assets; digital economy; financial regulation; investor behavior; Islamic economics

1. INTRODUCTION

The Indonesian crypto asset ecosystem has undergone a dramatic structural transformation in recent years. On the demand side, the number of registered crypto asset investors surged from 4.2 million in 2021 to over 21 million in 2024, surpassing the number of domestic stock investors (Bappebti, 2024a). This development positions Indonesia as one of the largest crypto markets in Southeast Asia and reflects the deepening integration of crypto assets with public investment behavior. On the supply and regulatory side, the enactment of Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector (UU P2SK) brought about the most fundamental change: the full transfer of regulatory and supervisory authority for crypto assets from the Commodity Futures Trading Regulatory Agency (Bappebti) to the Financial Services Authority (OJK). This took effect on January 10, 2025, and was finalized by the end of July 2025.

This regulatory change is not simply an institutional shift. From an economic perspective, the shift in regulatory authority has far-reaching implications: the reclassification of crypto assets from commodities to financial instruments under OJK Regulation No. 27 of 2024 alters the incentive framework for market participants, impacts asset prices and volatility, and reshapes investor expectations regarding risk and return. International economic literature shows that regulatory policies have a measurable and significant impact on crypto market dynamics (Chokor & Alfieri, 2021; Griffith & Clancey-Shang, 2023; Zhang et al., 2023). However, studies specifically analyzing the economic impact of crypto regulatory changes in the Indonesian context are still very limited.

The Islamic economic dimension adds complexity to Indonesia's crypto regulatory landscape. As the world's largest Muslim-majority country, Muslim investor preferences and behaviors carry substantial economic weight. The 2021 Ijtima Ulama Fatwa issued by the Indonesian Ulema Council (MUI) declared crypto assets haram as a medium of exchange, but opened the possibility of conditional permissibility as commodities/investment assets.

This ruling not only has a theological dimension but also has a real economic impact on the demand and behavior of Muslim investors, who dominate the Indonesian crypto market. Meera (2018) emphasized that evaluating crypto assets from an Islamic perspective must consider their function as money and their impact on socio-economic well-being.

Based on this urgency, this article aims to: (1) analyze the economic impact of crypto asset regulations in Indonesia on market dynamics and price volatility; (2) examine the characteristics and behavior of Indonesian crypto investors in the context of regulatory changes; and (3) evaluate the implications of crypto regulations from an Islamic economic perspective. By integrating these three dimensions, this article seeks to contribute to the development of a more comprehensive and inclusive digital economy policy framework in Indonesia.

2. RESEARCH METHOD

This article was compiled using a narrative literature review approach oriented towards the economic analysis of crypto asset regulation in Indonesia. This review synthesizes literature from three source categories: (1) relevant laws and official regulations (P2SK Law, Government Regulation Number 49 of 2024, POJK Number 27 of 2024, PMK Number 50, 53, and 54 of 2025, and Bappebti Regulation Number 8 of 2021 and Number 11 of 2022); (2) articles from reputable international scientific journals indexed by Scopus and national journals accredited by Sinta 1–2, which specifically discuss the economics of crypto regulation, digital asset market dynamics, investor behavior, and Islamic economic perspectives, with publication coverage for the 2018–2025 period; and (3) official documents from international institutions (IMF, BIS) and religious fatwas (2021 MUI Ulama Meeting). A literature search was conducted using the Scopus, Google Scholar, and Garuda (Digital Reference Library) databases. The analysis was conducted thematically, grouping the findings into three main themes: the economic impact of regulation on the market, crypto investor behavior, and Islamic economic perspectives.

3. DISCUSSION

3. 1. Relevant Economic Theory

Before examining the specific impact of regulations on the Indonesian crypto market, this review needs to be supported by fundamental economic theories that are directly relevant to the three dimensions discussed in this article: information asymmetry theory that underlies the analysis of the impact of regulations on the market, behavioral economics that explains the behavior of Indonesian crypto investors, and Islamic economic epistemology based on *the maqasid sharia* that underlies the evaluation of crypto from an Islamic perspective.

The information asymmetry theory formulated by Akerlof (1970) in "The Market for Lemons" explains how information asymmetry between market participants can lead to adverse selection and market failure. This framework underpins the argument that stricter disclosure requirements under POJK No. 27 of 2024 could theoretically reduce information asymmetry between trade organizers and investors. The assumption that market prices reflect available information (Fama, 1970) also underpins the event study methodology used by Chokor and Alfieri (2021) and Griffith and Clancey-Shang (2023) to measure abnormal returns around regulatory announcements so that changes in the level of information asymmetry resulting from new regulations can be captured through price movements surrounding the event.

The behavior of Indonesian crypto investors is also explained by behavioral economics, particularly prospect theory developed by Kahneman and Tversky (1979). This theory suggests that individuals do not always make rational decisions, as assumed by expected utility theory. Instead, they tend to assess gains and losses asymmetrically (loss aversion) and overreact to extreme probabilities, the patterns consistent with the FOMO behavior and price momentum-driven decision-making commonly found among retail crypto investors in Indonesia.

Finally, the evaluation of crypto assets from an Islamic economic perspective in this article is based on the *maqasid al-shariah* (objectives of sharia) framework as elaborated by Chapra (2008), which places the protection of wealth (hifz al-mal) as one of the five primary objectives of sharia, which must be aligned with the protection of life, intellect, religion, and progeny. This *maqasid* framework serves as an analytical basis for understanding why the 2021 Ulama Conference (Ijtima Ulama) conditionally placed crypto assets: instruments with the potential to generate *maslahah* (benefit) are acceptable as long as they avoid *gharar, dharar, and maysir,* which contradict these primary objectives of sharia.

3.2. Development of Crypto Asset Regulations Post-Transition to OJK

The Indonesian crypto regulatory landscape is divided into two eras by the P2SK Law. In the Bappebti era (before 2025), crypto assets were classified as commodities and regulated through Bappebti Regulations No. 8 of 2021 and No. 11 of 2022, with a futures-based supervisory approach. The OJK era officially began on January 10, 2025, through the Minutes of Handover between Bappebti, the OJK, and Bank Indonesia. This was finalized through an addendum on July 30, 2025, expanding the scope of supervision to include crypto asset derivatives. This fundamental reclassification was operationalized through POJK No. 27 of 2024, which classifies crypto assets as digital financial instruments and assets.

From a regulatory economics perspective, these changes have several important implications. First, the transition from a commodity regime to a financial instrument regime increases the scope of disclosure and governance obligations that trade organizers must fulfill, which in theory should increase market transparency and reduce information asymmetry between market participants. Second, changes in fiscal treatment through Minister of Finance Regulations Numbers 50, 53, and 54 of 2025 which remove VAT on crypto asset transactions but maintain a 0.21 percent final income tax rate for domestic PPMSE change the transaction cost structure and potentially increase trading volume. Third, the Financial Services Authority (OJK) has issued the 2024-2028 IAKD Development Roadmap, which sets a target for the digital financial asset sector's significant contribution to the national economy, reflecting a regulatory orientation that goes beyond supervision to the development of the digital economy ecosystem.

This rapid regulatory change also poses transition risks that require attention. Entities previously operating under Bappebti permits must adapt to OJK licensing requirements within a limited timeframe, potentially creating temporary uncertainty for users and investors. Consumers using platforms that fail to obtain OJK permits face risks to the legal status of their assets, a negative externality of the regulatory transition process that must be addressed through adequate consumer protection mechanisms.

3.3 Economic Impact of Regulation on Crypto Asset Market Dynamics

International economic literature consistently shows that regulation has a measurable and complex impact on crypto asset markets. Using an event study methodology on daily data from 2015–2019, Chokor and Alfieri (2021) found that regulatory announcements that increase the probability of crypto restrictions are correlated with negative abnormal returns on the affected crypto assets. Another important finding is that the negative impact of regulation is relatively smaller on less liquid crypto assets, as investors factor in the higher risk of asymmetric information in these assets. The implication for Indonesia is that OJK regulations that restrict or tighten requirements tend to be negatively responded to by the market in the short term.

Zhang, Xu, and Qi (2023) extended this analysis to include the context of the COVID-19 pandemic, finding that the impact of regulation on crypto volatility is asymmetric: strict prohibitionist policies (such as those implemented in China) result in sharp short-term volatility spikes, while gradual, permit-based regulation results in more gradual market adjustments. Griffith and Clancey-Shang (2023) reinforced this finding: regulations that improve market quality through increased transparency and investor protection ultimately correlate positively with crypto market prices and liquidity in the long run, despite initial short-term pressures.

In the Indonesian context, the transition from the Bappebti (Trade Commodity Futures Trading Regulatory Agency) to the OJK (Financial Services Authority) regime has the potential to produce patterns consistent with the findings above. Improved governance standards, stricter disclosure requirements, and more comprehensive investor protection under POJK 27/2024 are positive signals for institutional investors who have previously avoided crypto due to regulatory uncertainty. This is consistent with the argument that mature regulation is a prerequisite for crypto to transition from a speculative instrument to a legitimate investment asset in institutional portfolios. However, the lack of empirical studies directly measuring the impact of POJK 27/2024 on crypto price volatility and trading volume in the Indonesian market represents an important research gap that needs to be addressed.

3.4. Investment Dynamics and Crypto Investor Behaviour in Indonesia

The growth of Indonesian crypto investors, which surpassed 21 million by 2024 more than quadrupling in three years, is an economic phenomenon that requires in-depth analysis from both the supply and demand sides as well as its implications for financial system stability. From a demographic perspective, official data from the Indonesian Commodity Futures Trading Regulatory Agency (Bappebti) notes that 75 percent of crypto asset customers in Indonesia are aged 18–35 (Bappebti, 2024b), indicating the dominance of millennials and Gen Z, who grew up in a digital ecosystem and have a higher tendency to allocate a portion of their savings to high-risk assets. This pattern reflects a shift in investment preferences driven by ease of access to technology, rather than solely by fundamental economic considerations.

Studies on crypto investor behavior have identified several dominant economic-psychological factors. Digital financial literacy has been shown to be positively correlated with the quality of crypto investment decisions: investors with a better understanding of blockchain technology and crypto risk profiles tend to have longer investment horizons and are more resilient to short-term volatility. Conversely, limited financial literacy encourages FOMO (Fear of Missing Out) behavior, which results in investment decisions based solely on price momentum.

This pattern aligns with general findings in behavioral economics that retail investors tend to overreact to price information without adequate fundamental analysis.

OJK regulations have the potential to significantly change the landscape of investor behavior through two channels. First, stricter risk disclosure requirements and more comprehensive investor education standards can improve the quality of retail investment decisions. Second, regulatory clarity reduces institutional uncertainty, which has historically hindered institutional investors, pension funds, insurance companies, and investment managers from allocating funds to crypto assets. The entry of institutional investors should theoretically increase market efficiency and reduce volatility, as they generally have longer investment horizons and conduct more rigorous fundamental analysis. The OJK's 2024–2028 IAKD Roadmap, which explicitly targets institutional investor participation, reflects the regulator's understanding of these dynamics.

3.5. Crypto Assets in An Islamic Economic Perspective

Evaluating crypto assets from an Islamic economic perspective is not simply a matter of what is halal or haram, but rather addresses fundamental questions regarding the theory of money, market functions, and socio-economic welfare. Meera (2018) argues that conventional cryptocurrencies like Bitcoin do not qualify as legitimate money from an Islamic perspective because they lack intrinsic value to support their function as a stable store of value. Furthermore, without central bank oversight, cryptocurrencies are vulnerable to market manipulation that could potentially create systemic instability a macroeconomic *dharar* (harm) that contradicts the goal of Islamic economics to achieve collective well-being.

The 2021 Indonesian Ulema Council (MUI) Fatwa Meeting (Ijtima Ulama) held by the Indonesian Ulema Council (MUI) affirmed this position: crypto assets are declared haram (forbidden) to be used as currency or a medium of exchange because they contain three elements prohibited in Islamic transactions which is gharar (extreme uncertainty of value), *dharar* (potential loss due to volatility), and *maysir/qimar* (speculation resembling gambling). However, the same forum opened up the possibility of conditional permissibility if crypto assets are treated as commodities or investment assets that meet the criteria of sil'ah sharia: having a clear underlying value, tangible benefits, and being transferable. This dual position creates an interesting economic space for further study.

Rabbani, Hassan, Hudaefi, and Shaikh (2022) asserted that conventional cryptocurrencies generally do not meet Sharia-compliant criteria, but identified the potential of asset-backed crypto assets (asset-backed tokens) as more Sharia-compliant candidates. From an economic perspective, the implications of the 2021 MUI fatwa on the market can be measured through at least two indicators. First, the survey found that despite the fatwa declaring crypto haram, some Muslim investors continued to participate in the crypto market indicating that economic considerations (potential profits) still outweigh religious adherence for some. Second, the potential market segment for Sharia-compliant crypto (halal crypto) in Indonesia is enormous given the proportion of the Muslim population and increasing awareness of Sharia finance. However, to date, no specific crypto asset has received formal halal certification from the DSN-MUI.

The OJK's regulatory challenge in accommodating an Islamic economic perspective lies in the need to develop a supervisory framework that allows Sharia-compliant crypto innovation to thrive within a secure ecosystem. This includes the development of Sharia certification criteria for specific crypto assets, transaction purification mechanisms proposed by several scholars, and the development of crypto derivative products free from usury and excessive speculation. Without this framework, the economic potential of Indonesia's vast Muslim investor population cannot be optimized in an inclusive manner.

3.6. Challenges and Opportunities for Cryptoeconomic Research in Indonesia

This literature review identifies several research gaps relevant to the development of economics and public policy in Indonesia. First, there is an urgent need for empirical studies measuring the causal impact of the transfer of authority from Bappebti to the OJK on Indonesian crypto market indicators such as price volatility, trading volume, bid-ask spread, and investor participation. The event study methodology used by Chokor and Alfieri (2021) and Griffith and Clancey-Shang (2023) can be adapted to the Indonesian context.

Second, research is needed on the impact of crypto regulations on financial inclusion in Indonesia. Crypto has served as an investment channel for groups previously excluded from conventional financial services. Overly stringent regulations could potentially hinder this access, while overly lax regulations increase the risk of losses for less protected retail investors. Finding this balance is an economic policy challenge that requires empirical analysis based on Indonesian data.

Third, studies on the interaction between the crypto market and Indonesia's macroeconomic indicators such as the Rupiah exchange rate, inflation, Bank Indonesia's benchmark interest rate, and capital flows are still very limited. As the crypto market's integration with the formal financial system increases, understanding the spillover effects between the two markets becomes increasingly crucial for financial system stability. Fourth, economic research on the impact of the 2021 MUI fatwa on the investment behavior of Muslims in Indonesia including whether the fatwa effectively changes asset allocation decisions or encourages the search for alternative Sharia-compliant products is a promising area for the development of applied Islamic economics.

4. CONCLUSION

The transfer of crypto asset regulatory authority from Bappebti to the Financial Services Authority (OJK) in 2025 represents a structural change with multidimensional economic implications. From a market economic perspective, regulations that increase legal certainty and governance quality have the potential to reduce long-term volatility and encourage institutional investor participation, although in the short term, regulatory announcements tend to be negatively responded to by the market. From an investor behavior perspective, the massive growth of the crypto investor base in Indonesia requires intensive financial and economic education-based policies to ensure risk-aware, rather than merely speculative, participation.

From an Islamic economic perspective, the conditional position resulting from the 2021 Ijtima Ulama (Islamic Conference) prohibiting crypto as a medium of exchange but opening up opportunities as a conditional investment asset creates space for the development of a potentially significant Islamic crypto ecosystem in Indonesia. However, this potential can only be maximized if the Financial Services Authority (OJK) regulations operationally accommodate the sharia framework through clear certification and product criteria. Moving forward, the integration of the OJK regulatory framework, Islamic economic principles, and empirical evidence on market impacts is a prerequisite for developing a mature, inclusive, and sustainable Indonesian crypto policy.

REFERENCES

Akerlof, G. A. (1970). The market for “lemons”: Quality uncertainty and the market mechanism. The Quarterly Journal of Economics, 84(3), 488–500. https://doi.org/10.2307/1879431

Commodity Futures Trading Regulatory Agency. (2024a). Indonesian crypto asset customer data 2024. Bappebti, Ministry of Trade.

Commodity Futures Trading Regulatory Agency. (2024b, November 21). Press release: Bappebti records crypto asset transactions in Indonesia reaching IDR 475.13 trillion in January–October 2024. Bappebti Public Relations Bureau. https://bappebti.go.id/resources/docs/siaran_pers_2024_11_21_4jnshaph_id.pdf

Chapra, M. U. (2008). The Islamic vision of development in the light of maqasid al-shariah. Islamic Research and Training Institute (IRTI), Islamic Development Bank.

Chokor, A., & Alfieri, E. (2021). Long and short-term impacts of regulation in the cryptocurrency market. The Quarterly Review of Economics and Finance, 81, 157–173. https://doi.org/10.1016/j.qref.2021.05.005

Fama, E.F. (1970). Efficient capital markets: A review of theory and empirical work. The Journal of Finance, 25(2), 383–417. https://doi.org/10.2307/2325486

Griffith, T., & Clancey-Shang, D. (2023). Cryptocurrency regulation and market quality. Journal of International Financial Markets, Institutions and Money, 84, 101744. https://doi.org/10.1016/j.intfin.2023.101744

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decisions under risk. Econometrica, 47(2), 263–291. https://doi.org/10.2307/1914185

Ministry of Trade of the Republic of Indonesia. (2025). Bappebti, Ministry of Trade, officially transfers the regulatory and supervisory duties of crypto assets and financial derivatives to the Financial Services Authority (OJK) and Bank Indonesia (BI). Ministry of Trade.

Indonesian Ulema Council. (2021). Decision of the Indonesian Ulema Council Fatwa Commission on cryptocurrency law. MUI.

Meera, AKM (2018). Cryptocurrencies from Islamic perspectives: The case of Bitcoin. Bulletin of Monetary Economics and Banking, 20(4), 475–492. https://doi.org/10.21098/bemp.v20i4.902

Financial Services Authority. (2024). Financial Services Authority Regulation Number 27 of 2024 concerning the Implementation of Digital Financial Asset Trading, Including Crypto Assets. OJK.

Financial Services Authority. (2024). Roadmap for the Development and Strengthening of Financial Sector Technology Innovation, Digital Financial Assets, and Crypto Assets (IAKD) 2024–2028. OJK.

Financial Services Authority. (2025). Financial Services Authority Regulation Number 23 of 2025 concerning Amendments to POJK Number 27 of 2024. OJK.

Commodity Futures Trading Supervisory Agency Regulation Number 8 of 2021 concerning Guidelines for the Implementation of Crypto Asset Trading on Futures Exchanges.

Commodity Futures Trading Regulatory Agency Regulation Number 11 of 2022 concerning Amendments to Bappebti Regulation Number 8 of 2021.

Minister of Finance Regulation Number 50 of 2025 concerning Value Added Tax and Income Tax on Crypto Asset Trading Transactions.

Government Regulation Number 49 of 2024 concerning the Transfer of Duties for the Regulation and Supervision of Digital Financial Assets, Including Crypto Assets and Financial Derivatives.

Rabbani, MR, Hassan, MK, Hudaefi, FA, & Shaikh, ZH (2022). Islamic finance and cryptocurrency: A systematic review. In MK Hassan, M.R. Rabbani, & M. Rashid (Eds.), FinTech in Islamic financial institutions (pp. 279–306). Springer. https://doi.org/10.1007/978-3-031-14941-2_14

Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector.

Zhang, P., Xu, K., & Qi, J. (2023). The impact of regulation on cryptocurrency market volatility in the context of the COVID-19 pandemic—evidence from China. Economic Analysis and Policy, 80, 222–246. https://doi.org/10.1016/j.eap.2023.08.015