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The Regulatory Vacuum Regarding the Use of Cryptocurrencies as Collateral in Indonesian Banking Law

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Abstract

This study examines the normative vacuum in the regulation of crypto assets as collateral objects under Indonesian banking law. As digital assets gain traction in the financial ecosystem, the legal framework governing their use as collateral remains underdeveloped and fragmented. Indonesian banking law anchored primarily in Law No. 10 of 1998 on Banking and the Fiduciary Guarantee Law No. 42 of 1999 does not explicitly recognize intangible digital assets such as crypto assets as permissible collateral objects. This legal gap creates uncertainty for both creditors and debtors engaging in crypto-backed lending arrangements. Using a normative legal research approach with statutory, conceptual, and comparative analyses, this study identifies two core issues: first, the extent of the normative gap in existing Indonesian banking law regarding crypto assets as collateral; and second, the legal reconstruction needed to bridge that gap. The findings reveal that current regulations are inadequate to accommodate the dynamic nature of crypto assets and that reform whether through legislative amendment or regulatory issuance by the Financial Services Authority is urgently needed. This study contributes to the growing body of scholarship on digital asset law and provides policy recommendations for Indonesian regulators.

Keywords: Crypto Assets, Collateral, Banking Law, Normative Gap, Legal Reconstruction

INTRODUCTION

Advances in financial technology over the past decade have given rise to a number of new instruments that challenge the conventional boundaries of financial and banking law. One of the most striking phenomena is the emergence of crypto assets—ranging from Bitcoin and Ethereum to various other digital tokens—which are not only traded extensively in global markets but are also beginning to be considered as collateral in lending transactions. Amid this euphoria, one fundamental question is often overlooked: is Indonesian banking law ready to accommodate cryptocurrencies as collateral?

This question is not merely academic rhetoric. In modern banking practice, collateral plays a crucial role in protecting creditors' interests when debtors fail to meet their obligations. Indonesian banking law, as set forth in Law No. 10 of 1998 on Banking and various subsidiary regulations, has indeed regulated various forms of collateral ranging from mortgages on land,

pledges of movable property, to fiduciary arrangements. However, the entire legal framework is built upon an understanding of physical and tangible assets, or at most intangible assets already recognized within the conventional legal system, such as securities and receivables.

Cryptocurrencies exist as entirely distinct entities. They are intangible, not issued by a centralized authority, have no physical form, and their value is determined by highly volatile market mechanisms. From the perspective of property law, the legal status of cryptocurrencies in Indonesia remains in a gray area: they are not movable property in the traditional sense, nor are they securities, nor are they ordinary claims. This situation creates what is known in legal science as a "normative vacuum"—a state where a real-world phenomenon exists in society, but positive law has not yet provided adequate rules to regulate it.

This normative vacuum is no trivial matter. Without clear legal certainty, banks and other financial institutions will hesitate to accept cryptocurrency as collateral. On the other hand, business entities holding significant crypto asset portfolios cannot utilize these assets to access capital through formal banking channels. Consequently, crypto-based lending practices emerge outside the banking ecosystem, which are not subject to financial authority oversight, thereby potentially posing greater systemic risks.

Several previous studies have addressed specific aspects of this issue. Hernoko (2019) examined the status of intangible assets under Indonesian security law and concluded that the Civil Code still leaves room for the development of the concept of digital assets, even in the absence of explicit regulations. Prasetyo and Marzuki (2021) specifically analyzed the potential of crypto assets as fiduciary objects and found that the provisions of the Fiduciary Law do not explicitly rule out this possibility, but also do not provide sufficient certainty. Meanwhile, from a comparative perspective, several jurisdictions such as Switzerland, Singapore, and Liechtenstein have taken concrete steps by issuing regulatory frameworks that recognize the legal status of digital assets, including their use as collateral (Zetzsche et al., 2020).

In Indonesia itself, the Financial Services Authority (OJK) has issued a number of regulations regarding crypto assets in the context of trading, particularly after oversight authority over crypto assets was transferred from the Commodity Futures Trading Regulatory Agency (Bappebti) to the OJK in 2023 pursuant to Law No. 4 of 2023 on the Development and Strengthening of the Financial Sector (P2SK Law). However, these regulations remain focused on trading and investment aspects and have not substantively addressed the issue of using cryptocurrency as collateral in the context of banking credit.

Based on this background, this study is formulated around two interrelated main research questions. First, to what extent does a regulatory gap exist in Indonesian banking law regarding the regulation of cryptocurrency as a form of collateral? Second, what legal reconstruction is necessary to fill this regulatory gap so that cryptocurrency can be legally recognized as collateral in the Indonesian banking system? This study employs a normative legal research approach with the aim of making a tangible contribution to the development of Indonesian banking law and security law in the digital era.

RESEARCH METHODOLOGY

This study employs the normative legal research method, an approach that focuses primarily on written legal materials as the subject of analysis. This methodological choice is driven

by the nature of the issue under investigation—namely, a gap in positive law—an issue that is inherently legal-normative in nature and cannot be resolved solely through empirical or socio-legal approaches.

The approach employed encompasses three complementary dimensions of analysis. First, the statutory approach, which involves systematically examining all relevant legislation, ranging from the Civil Code, the Banking Law, the Fiduciary Law, to the latest OJK regulations regarding crypto assets. Second, the conceptual approach, in which this study explores legal doctrines regarding property, security interests, and digital assets to construct a coherent conceptual framework. Third, the comparative approach, by studying how other jurisdictions—specifically Switzerland, Singapore, and the United States—have resolved similar issues through regulatory updates.

The legal materials used in this study are divided into three categories. Primary legal materials include laws and regulations in force in Indonesia, relevant court decisions, and financial authority regulations. Secondary legal materials include legal literature, academic journals, textbooks, and previous research discussing security law, banking law, and digital asset law. Tertiary legal materials consist of legal dictionaries, encyclopedias, and glossaries used to clarify technical concepts.

The analysis was conducted qualitatively using legal interpretation techniques, including grammatical, systematic, historical, and teleological interpretations. In addition, this study also utilizes the legal construction method to propose the normative reconstruction necessary to fill the regulatory gaps identified. Thus, this study is not only descriptive-analytical but also has a prescriptive dimension aimed at providing input for the formulation of legal policy.

RESULTS

The results of this study are presented in two sections corresponding to the two research questions identified. The first section presents findings regarding the legal vacuum in Indonesian banking law concerning cryptocurrency as collateral, while the second section outlines the necessary legal framework for addressing this issue.

Identifying Gaps in Positive Law

An analysis of Indonesian positive law reveals that there are at least four overlapping layers of regulatory gaps in the regulation of cryptocurrency as collateral.

First, there is no legal definition of cryptocurrency in property law. The Indonesian Civil Code classifies property into tangible and intangible property, as well as movable and immovable property. Cryptocurrency, as a digital entity that exists solely within the blockchain network, cannot be seamlessly categorized under any of these classifications. Although some legal scholars argue that cryptocurrency can be categorized as an intangible movable property (roerende zaak onlichamelijk), there are no provisions in positive law that explicitly affirm this view, leaving its legal basis weak.

Second, the existing legal regime for security interests does not accommodate the unique characteristics of crypto assets. Law No. 42 of 1999 on Fiduciary Security Interests, which in theory is best suited to cover intangible movable property, requires that the collateral have clear identification and be transferable. Crypto assets meet the transferability requirement, but the

fiduciary registration procedure based on physical documents conflicts with the digital nature of crypto assets, which are anonymous and decentralized.

Third, OJK regulations on crypto assets remain sector-specific and have not yet been integrated with security interest law. OJK Regulation No. 27 of 2024 on the Conduct of Trading in Digital Financial Assets, Including Cryptocurrencies, for example, only regulates trading aspects and does not address the issue of using cryptocurrencies as collateral for loans. Consequently, regulatory fragmentation makes it difficult for banks to find a solid legal basis for accepting cryptocurrencies as collateral.

Fourth, the lack of clarity regarding the stance of Bank Indonesia and the OJK on the use of crypto assets as collateral for loans. No authority has yet issued a circular letter or technical regulation that specifically governs the valuation, management, and enforcement of crypto assets as banking collateral. This situation creates a scenario in which, even if banks are commercially willing to do so, they lack clear operational guidance from regulators.

Regulatory Mapping: A Comparison of Regulatory Completeness

Table 1. Mapping the Regulatory Framework for Cryptocurrency Assets as Collateral

Regulatory Aspects	Indonesia's Regulatory Environment	Best Practice Jurisdictions
Legal definition of digital assets	Not yet included in positive property law	Switzerland (DLT Act 2021): explicit definition of digital assets
Use as collateral	Not explicitly regulated	Singapore (MAS Guidelines): permitted subject to certain conditions
Security interest registration procedures	Physical document-based fiduciary system	Liechtenstein (Token Act): blockchain-based registration
Enforcement of security interests	No specific mechanism yet	U.S. (UCC Article 9 Revision): digital enforcement is regulated
Valuation of collateral	No specific standards	EU (MiCA Regulation): standards for the valuation of crypto assets

Source: Author's Analysis, 2026

DISCUSSION

The Anatomy of a Regulatory Vacuum: Why the Law Lags Behind Technology

The regulatory vacuum regarding the treatment of cryptocurrency as collateral is not merely a technical issue that can be resolved with one or two new regulations. The root of the problem runs much deeper and relates to the Indonesian civil law system's perspective on the concepts of property and ownership. Indonesian civil law, which inherits the Dutch legal tradition through the Burgerlijk Wetboek, fundamentally understands ownership as a relationship between a legal subject and a thing possessing a verifiable physical existence. The concept of dominium

in the civil law tradition requires that the object of ownership be definable, identifiable, and transferable in a concrete manner.

Cryptocurrency challenges every element of these prerequisites. Its existence is virtual; it exists only as an entry in a distributed ledger that is not owned by any single party. Ownership is determined by control of a private cryptographic key, not by documents, certificates, or official state records. Transfers occur through software protocols that run autonomously without the intervention of a central authority. Furthermore, their value can fluctuate extremely within hours—a characteristic that contradicts the requirement for value stability implicitly expected of credit collateral.

From a legal theory perspective, this situation can be explained through the concept of "legal lag" proposed by Friedmann (1959), which refers to the phenomenon where technological developments and social practices advance faster than the legal system's capacity to respond. In the Indonesian context, this legal lag is exacerbated by a fragmented legislative structure: rules regarding property are found in the Civil Code, rules regarding collateral are scattered across various sectoral laws, while crypto-asset regulations fall under the authority of the OJK, which is more oriented toward capital market aspects and consumer protection than property law.

Legal Reconstruction: From Diagnosis to Normative Solutions

In response to the identified regulatory gap, this study proposes a legal reconstruction framework built upon three pillars. The first pillar is the legal recognition of crypto assets as property within the Indonesian legal system. This recognition can be achieved through two avenues: the legislative route by revising the provisions on property in the Civil Code or by enacting a special law on digital assets, and the regulatory route by issuing OJK regulations that explicitly define the legal status of crypto assets as intangible movable property that can serve as collateral.

The second pillar is the development of a specialized collateral regime for digital assets. This regime must include at least four essential elements: (1) a collateral encumbrance mechanism tailored to the digital nature of crypto assets, including the possibility of encumbrance via smart contract protocols; (2) a collateral registration procedure that can be conducted electronically and integrated with a DLT system; (3) collateral valuation standards that account for the price volatility of crypto assets, including margin call obligations when the collateral value falls below a certain threshold; and (4) efficient collateral enforcement mechanisms, including the possibility of enforcement via smart contracts.

The third pillar is cross-agency regulatory harmonization. Given that crypto assets lie at the intersection of civil law, banking law, and digital financial market regulations, close coordination is needed between the OJK, Bank Indonesia, and the Ministry of Law and Human Rights. Establishing a digital asset regulatory coordination forum involving all these stakeholders—similar to what the Monetary Authority of Singapore (MAS) did in developing Singapore's digital asset regulatory framework—could be a crucial strategic step.

Comparative jurisdictional experiences offer valuable lessons. Switzerland, through the Distributed Ledger Technology Act that took effect in 2021, successfully integrated digital assets into its existing property law system by creating a new category of "DLT rights" (DLT-Rechte) that can serve as objects of property rights. Singapore has adopted a more pragmatic approach by

issuing guidelines from the Monetary Authority of Singapore that provide certainty for financial institutions wishing to accept crypto assets as collateral, while still leaving room for innovation. Liechtenstein is even more progressive with its Token Act, which recognizes digital tokens as sui generis objects with their own legal framework.

From Indonesia's perspective, a gradual approach that combines the issuance of short-term OJK regulations with efforts to revise the Civil Code and security laws in the long term appears to be the most realistic strategy. OJK regulations can immediately provide an operational legal framework for the banking sector, while more fundamental legislative reforms can be prepared more thoroughly within the framework of the ongoing national civil law reform process.

It must also be emphasized that this proposed legal restructuring must take into account aspects of consumer protection and financial system stability. The high volatility of crypto assets poses its own risks: if banks are too lenient in accepting crypto assets as collateral without adequate valuation standards and risk management, the potential losses arising from a sharp decline in the value of collateral could threaten the health of individual banks and even the stability of the financial system as a whole. Therefore, any regulatory framework established must incorporate adequate prudential provisions, including a more conservative loan-to-value ratio for crypto-asset-backed loans compared to conventional asset-backed loans.

CONCLUSION

This study successfully addresses the two research questions that were identified. First, the regulatory vacuum in Indonesian banking law regarding crypto assets as collateral is fundamental and multi-layered: there is no legal definition of crypto assets in property law; the existing collateral regime cannot accommodate the digital characteristics of crypto assets; OJK regulations remain sector-specific and are not yet integrated with collateral law; and there are no operational guidelines from banking authorities. This situation creates legal uncertainty that hinders the development of a digital asset-based financial ecosystem in Indonesia.

Second, the necessary legal reconstruction encompasses three pillars: the legal recognition of crypto assets as property within the Indonesian legal system; the development of a specialized security regime for digital assets that accommodates their unique characteristics; and the harmonization of regulations across authorities. In the short term, the issuance of comprehensive OJK regulations is the most urgent and realistic step. In the long term, the integration of digital asset regulations into updates to national civil law and security law must be prioritized.

The theoretical implication of this study is the need to expand the concept of property within Indonesia's civil law system to accommodate the increasingly dominant reality of digital assets. In practical terms, this study provides policy recommendations that can serve as a reference for the OJK, Bank Indonesia, and the Indonesian House of Representatives in developing a more comprehensive regulatory framework. Further research is recommended to examine in greater depth the technical aspects of smart contract-based collateral mechanisms and legal protections for creditors in scenarios where a debtor holding crypto assets as collateral declares bankruptcy.

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