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Reformulation of Digital Financial Asset Management by Adopting the Principle of Prudential Banking

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ABSTRACT: This study aims to reformulate the implementation of digital financial asset management by adopting the prudential banking principle based on the 5Cs (Character, Capacity, Capital, Collateral, and Condition), as well as to formulate a model of digital financial asset management reformulation that is adaptive to the dynamics of modern finance. The research method used is normative legal research with statutory (statute approach) and conceptual (conceptual approach) approaches. The data sources consist of primary and secondary legal materials analyzed qualitatively and descriptively. The research findings indicate that OJK Regulation No. 27/2024 has accommodated part of the prudential principles, particularly in the aspects of capacity and capital, through provisions regarding governance, risk management, and the capital adequacy of digital asset providers. However, the aspects of collateral and condition have not yet been regulated in detail, resulting in a normative gap concerning the mechanism of digital collateral and market resilience assessment. The reformulation of regulations should be directed toward integrating the prudential principles based on the 5Cs into a risk-based supervision system, utilizing blockchain technology as an instrument for safeguarding asset value. This approach is expected to strengthen legal protection, enhance financial system stability, and create a balance between digital innovation and legal certainty.

KEYWORDS: Digital Financial Assets; Prudential Principle; Digital Financial Law; Banking

I. INTRODUCTION

The development of digital technology has significantly influenced the global financial system. Digitalization not only brings transactional efficiency but also introduces new virtual financial instruments such as crypto assets, digital tokens, and blockchain-based instruments.[1] The existence of digital financial assets creates opportunities for economic growth as well as new risks, including vulnerability to market volatility, systemic risk, and the potential for cybercrime.[2] Therefore, the existence of regulations capable of anticipating these dynamics has become an urgent necessity within Indonesia's financial legal system.[3]

In Indonesia, the Financial Services Authority (OJK) plays an important role in overseeing the development of the financial services sector, including digital assets.[4] The issuance of OJK Regulation (POJK) Number 27 of 2024 represents a progressive step in filling the legal gap concerning the governance of digital financial assets. This regulation aims to maintain market integrity, consumer protection, and the stability of the national financial system. However, the implementation of this new regulation requires critical analysis, particularly regarding whether the supervisory instruments applied are sufficiently adaptive to the unique nature of digital assets.

The regulatory challenge of digital financial assets in Indonesia lies in the tension between innovation and legal certainty. Digital innovation requires regulatory flexibility to keep pace with rapid technological developments, while legal certainty demands clear norms to provide legal protection for the public. An imbalance between the two may create legal gaps, causing existing regulations to lag behind practical developments. This aligns with the theory of responsive law, which emphasizes the importance of adaptive regulation in addressing social change.[5]

In the banking sector, the prudential principle serves as an essential foundation implemented through the 5C-based credit analysis (Character, Capacity, Capital, Collateral, Condition). This principle is universally applied to assess credit risk and feasibility. However, when applied to digital financial assets, methodological issues arise because digital assets do not always have physical collateral and are influenced by unpredictable global market conditions. Thus, the question arises as to whether the 5C principle remains relevant or needs to be reformulated in the context of digital assets.[6]

In the context of applying the 5C principle to the regulation of Digital Financial Assets, OJK Regulation No. 27/2024 indeed contains several relevant provisions but still leaves normative gaps that need attention. For instance, the aspect of capacity can be implemented as an obligation for providers to have adequate internal control systems, technology, and human resources, as reflected in Articles 20–24 concerning governance, risk management, and the adequacy of information technology systems. Furthermore, the capital principle relates to the fulfillment of minimum capital or financial requirements for providers, as regulated in Articles 12–13 regarding the amount of minimum paid-up capital and the obligation to separate customer assets.

However, the collateral principle has not been explicitly regulated, although it is briefly mentioned in Articles 25–26 regarding user asset protection. Nevertheless, there is no detailed explanation concerning digital guarantees or collateral as instruments for securing transactions, which creates a significant normative gap. As for the principle of condition of economy, it can be found in Articles 30–34, which regulate the relationship between providers and market conditions, financial system stability, and reporting obligations to the OJK. However, technical mechanisms such as stress testing or the assessment of providers' resilience to global fluctuations have not yet been accommodated in detail.[7]

Legal facts show that many digital financial assets experience extreme price volatility, such as the fluctuating prices of Bitcoin, Ethereum, and other cryptocurrencies. In addition, several digital asset instruments lack intrinsic value that can be used as collateral within the financial system. This condition complicates the application of the 5C-based prudential principle, which requires the existence of collateral. OJK Regulation Number 27 of 2024 does attempt to establish new standards, yet questions remain regarding its effectiveness in mitigating systemic risk.[8]

Normatively, the legal basis for the OJK's authority to regulate the digital financial sector originates from Law Number 21 of 2011 concerning the Financial Services Authority, which grants broad authority to oversee financial service activities. In addition, Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector (P2SK Law) provides a new foundation regarding digital financial innovation. However, the integration of classical banking principles, such as the 5C, into digital asset regulations is still rarely stipulated explicitly. This opens up research opportunities to evaluate the synchronization between the old legal framework and emerging financial phenomena.[9]

Historically, the regulation of digital assets in Indonesia began with the role of the Commodity Futures Trading Regulatory Agency (Bappebti), which, since 2019, has designated crypto assets as tradable commodities. However, as the relevance of digital assets within the financial ecosystem increased, regulatory authority began to shift to the OJK. This shift reflects a change in the state's paradigm—from viewing digital assets as speculative commodities to recognizing them as instruments with direct implications for national financial stability.[10]

The social context also places pressure on digital asset regulation. Data show that the adoption of digital assets in Indonesia has grown rapidly, particularly among younger generations. However, the high level of public participation has been accompanied by the rise of scams, price manipulation, and failures of digital investment platforms. These cases have caused significant losses to the public, thus emphasizing the importance of regulations that protect consumers without hindering innovation.[11]

Previous studies generally focus on aspects of consumer protection, the governance of digital financial institutions, or international comparative regulations on digital assets. For instance, some studies emphasize the need for digital transaction security standards, while others discuss cross-border supervision mechanisms. However, few studies have linked digital asset regulation with the 5C-based prudential banking principles. Yet, this perspective is important to enrich the body of literature on Indonesian financial law.[12]

At the global level, international institutions such as the Bank for International Settlements (BIS) and the International Monetary Fund (IMF) have issued various reports emphasizing the importance of a digital asset regulatory framework based on risk mitigation. Both institutions highlight the need for a more comprehensive risk assessment of digital assets, covering aspects of financial stability, market integrity, and investor protection.[13] Nevertheless, Indonesia is still in the early stages of adopting these principles into its national regulations. This raises considerations regarding the relevance of the 5C principles in the context of digital assets; for instance, collateral may be interpreted as blockchain technology or the credibility of digital asset provider platforms, thus indicating a conceptual space that has not yet been fully resolved.

Thus, the reformulation of OJK Regulation Number 27 of 2024 through the 5C principle approach becomes highly relevant to study. This reformulation not only aims to evaluate the feasibility of the existing regulation but also offers a theoretical contribution by bridging the paradigm of classical banking law and the reality of digital finance. Normative research with this perspective can produce more responsive policy recommendations while maintaining the prudential principle as the main pillar of banking.

Therefore, this study focuses on a normative analysis of the reformulation of OJK Regulation Number 27 of 2024 by adopting the prudential banking principle. This focus is expected to provide answers to the legal challenges in the implementation of digital financial assets in Indonesia. Based on the background described above, two problems are formulated: first, how does the regulation in OJK Regulation Number 27 of 2024 concerning the Implementation of Digital Financial Assets align with the 5C-based prudential banking principles from the perspective of legal norms and legal principles within Indonesia's financial system? Second, how can the implementation of digital financial assets be reformulated by adopting the prudential banking principle?

II. RESEACRH METHODOLOGY

This study employs a normative legal research method, which focuses on the examination of various formal legal provisions such as laws and regulations, as well as literature containing theoretical concepts, which are then connected to the main issues under discussion.[14] Normative legal research is conducted by examining literature or secondary data, and therefore it is often referred to as library-based legal research.[15] This study employs two main approaches, namely the statutory approach and the conceptual approach. The data sources in this research are categorized into two types: primary data sources and secondary data sources.[16] The data analysis method applied is qualitative descriptive, which involves classifying and interpreting primary and secondary data in accordance with the focus of the issues being studied. This approach is carried out juridically while adhering to the applicable legal provisions to ensure that the research results are comprehensive and measurable. Through qualitative analysis, all collected data are examined in depth to draw logical conclusions that are relevant to the research objectives.

III. RESEARCH FINDINGS AND DISCUSSION

1. Conformity of OJK Regulation Number 27 of 2024 with the 5C-Based Prudential Principle

The analysis of OJK Regulation Number 27 of 2024 shows that the regulation reflects a partial application of the prudential banking principle. The capacity principle can be seen in the provisions of Articles 20–24, which require providers to have an internal control system, risk management, and competent human resources.[17] This aligns with banking practices that assess an institution's ability to comprehensively manage financial risks. The capital principle is also accommodated through Articles 12–13, which require providers to maintain a minimum paid-up capital and to separate user assets as a risk mitigation measure against systemic losses.

However, the collateral aspect has not been adequately regulated. Articles 25–26 only mention user asset protection without establishing clear standards for digital collateral.[18] In the context of digital finance, collateral should be interpreted more broadly, for instance, through the use of smart contracts or tokenization technology that automatically and transparently guarantees asset value. The lack of clarity in this regulation has the potential to create legal uncertainty in the resolution of digital asset disputes.[19]

Furthermore, the principle of the condition of the economy is reflected in Articles 30–34, which regulate reporting and the relationship of the provider with market conditions.[20] However, this regulation has not yet regulated the stress test and market resilience assessment mechanisms, which are important for assessing the provider's endurance against global market volatility.[21] In fact, the precautionary principle demands institutional preparedness for digital economy fluctuations that can impact national financial stability.

From the perspective of legal norms, the regulation in POJK 27/2024 is already within a legitimate framework of authority in accordance with Law Number 21 of 2011 concerning OJK and Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector. However, in terms of legal principles, this regulation still requires the strengthening of the prudential principle and legal certainty principles in order to balance legal protection and the needs of financial innovation.[22] The limitations of this regulation show the need for reformulation to clarify the relationship between traditional banking legal instruments and the unique characteristics of digital assets.

Overall, POJK 27/2024 shows a high consistency in transposing the essence of the 5C Prudential Principles from the traditional banking credit framework into the Digital Financial Asset trading framework. This regulation successfully bridges the gap between conventional finance and FinTech.[23] Prudential strengthening is supported by comprehensive provisions, covering broad consumer protection, including strict requirements related to personal data protection,[24] maintenance of data confidentiality, and the obligation to obtain explicit consumer consent before data use. OJK also emphasizes the active role of Providers in increasing consumer literacy as part of protection. Implementation support is strengthened through legal enforcement, namely the existence of detailed administrative sanctions. These sanctions can be in the form of a daily fine of up to Rp200,000.00 and a maximum fine of up to Rp2,000,000.00, which can be imposed without a prior written warning, especially for severe violations.

Although POJK 27/2024 provides a strong framework, its implementation faces several challenges. First, the very high minimum capital requirements (Rp100 billion) and strict Capacity technical standards (certified systems) can become major obstacles for small and medium-sized Providers. Second, the operational technical details to strengthen the Collateral pillar still require further implementing regulations. Specifically, details regarding the calculation of the Guarantee Fund, specific Margin requirements for crypto assets, and the liquidation mechanism of consumer assets in a Provider bankruptcy scenario (which supports Collateral protection) need to be immediately regulated through an OJK Circular Letter (SEOJK).

2. Reformulation of Digital Financial Asset Management by Adopting the Prudential Principles of Banks

The reformulation of digital financial asset regulation needs to be carried out through the integration of the 5C principles into a more flexible and risk-based legal framework. The principle of character can be interpreted as a fit and proper test for providers, which not only assesses ethical and reputational aspects but also the integrity of the technological systems used. The principle of capacity needs to be strengthened through the obligation to implement a risk management framework that aligns with the characteristics of digital assets and their potential cyber risks.[25]

For the principle of capital, the reformulation can lead to the implementation of a minimum capital adequacy ratio based on the level of operational risk (operational risk-weighted capital). Meanwhile, collateral can be expanded with the concept of technology-based guarantees (digital collateral), such as storing digital assets in custodian wallets verified by OJK or through smart contract escrow mechanisms. The principle of the condition of the economy should be accommodated in the form of real-time data-based supervision supported by regulatory technology (RegTech), which enables dynamic analysis of market conditions and provider behavior. [26]

Conceptually, this approach aligns with Nonet and Selznick's theory of responsive law, which emphasizes that the law must be adaptive to social and technological changes. The law no longer serves merely as an instrument of control but also as a facilitator of responsible innovation. Thus, the reformulation of digital financial asset management that adopts the prudential principles of banking will strengthen Indonesia's position in facing the complexities of the global digital economy without compromising legal certainty and public protection.[27]

To optimize the alignment and effectiveness of POJK 27/2024 with the 5C Prudential Principles, it is necessary to strengthen the Collateral (Fiduciary Protection) Pillar: OJK is advised to promptly issue an SEOJK detailing the technical obligations for the segregation of digital asset storage (between hot wallets and cold storage) managed by Custodians. This detailed regulation must establish transparent and adequate calculation and utilization of the Clearing Guarantee Fund to mitigate clearing default risks.

In addition, it is also necessary to harmonize the Condition of Economy Pillar: Providers should be required to conduct regular stress testing. This stress testing must be based on specific macroeconomic scenarios, such as regional recessions or global inflation surges, to test the adequacy of their Capital and Capacity in facing extreme market conditions. In addition to these two aspects, periodic digital capacity audits should also be conducted. OJK must strengthen its supervisory function over the resilience of Providers' security systems (Capacity). This can be achieved by requiring periodic independent third-party technology audits that meet international standards, not only during the licensing phase.

The reformulation of digital asset regulation under POJK 27/2024 is driven by the mandate of Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector (P2SK Law). This reformulation fundamentally changes the state's perspective on crypto assets, from merely commodities supervised by Bappebti to Digital Financial Assets supervised by the Financial Services Authority (OJK).

This reformulation is not merely a change of supervisory authority but represents the adoption of a banking prudential framework to manage systemic risk and protect consumers in a volatile digital market. The 5C principles have traditionally been used by banks to assess creditworthiness (borrower counterparty risk). In this reformulation, the 5C principles undergo a transposition, where the focus of assessment shifts from the risk of individual debtors to the risk of institutional failure of Providers (Exchanges, Traders, Clearing Houses, Custodians) and the risk associated with consumer asset protection.

Traditional Principle (Credit Risk)	Reformulation Function (Digital Asset Risk)
Character (Debtor Integrity)	Institutional Integrity and Governance (Anti-Fraud)
Capacity (Repayment Ability)	Operational Technology Capability and Resilience
Capital (Debtor's Own Capital)	Institutional Loss-Absorbing Capital Buffer
Collateral (Loan Security)	Consumer Asset Protection and Segregation Mechanism
Condition of Economy (Debtor Market Conditions)	Volatility and Systemic Impact Risk Management

This reformulation binds Digital Financial Asset Providers to strict institutional, operational, and financial standards. The prudential reformulation ensures that digital asset institutions have an ethical leadership foundation and reliable operational capabilities.

Integrity and Net Capital (Character): POJK 27/2024 explicitly prohibits the Provider's paid-up capital from originating from loans, Money Laundering and Terrorism Financing activities (ML/TF), or other illegal activities. This is a strict application of the Character principle at the institutional level, ensuring that capital commitment is genuine (skin in the game) and does not create moral hazard risks. In addition, key management must pass the Fit and Proper Test and implement Good Corporate Governance (GCG).

Operational Resilience (Capacity): Capacity is measured through technical robustness. Providers are required to have certified systems, implement consumer data protection, ensure secure database management, and maintain a Business Continuity plan. These requirements are crucial for mitigating cyber and operational risks, which are the main risks in digital asset trading.

The most prominent reformulation is the creation of a financial safety net to absorb institutional losses and protect consumer assets. Loss Buffer (Capital): Digital Financial Asset Traders are required to have a high Minimum Paid-Up Capital of Rp100 billion and must maintain a Minimum Equity of Rp50 billion. This significant amount of capital serves as a large loss-absorbing buffer, similar to bank capitalization. OJK also has the authority to require Providers to increase their capital if they have the potential to create systemic impact based on market dominance or transaction volume.

Fiduciary Asset Protection (Collateral):[28] The Collateral principle is implemented not as a pledge but as asset segregation and guarantee. Institutional structures are required to separate the functions of the Exchange (trading), Clearing Institution (guaranteeing and settlement), and Custodian. This functional separation ensures that digital assets and consumer funds are stored separately and protected, so that if a Trader or Exchange goes bankrupt, consumer assets remain safe, a concept that is fundamental in the prudential framework of financial service institutions.

The implementation of the Condition of Economy is carried out through the obligation of internal risk management and active OJK intervention. Comprehensive Risk Management: Providers are required to prepare business plans and conduct operations by applying risk management and prudential principles. This obligation requires them to account for market risks (price volatility) and liquidity risks, which are heavily influenced by macroeconomic conditions. OJK, as the Gatekeeper, has the authority to evaluate and prohibit the trading of certain assets deemed high-risk or non-compliant with standards. [29]This authority positions OJK as the Market Gatekeeper, directly controlling the exposure of Indonesia's financial service ecosystem to unhealthy global market conditions, thus serving as a modern adaptation of the Condition of Economy principle. Overall, the reformulation through POJK 27/2024 represents OJK's effort to minimize the inherent risks of digital assets by adopting prudential standards of financial service institutions. The adoption of the 5C principles creates a supervisory regime focused on solvency, operational resilience, and integrity, which are the hallmarks of conventional financial institutions.

IV. CONCLUSION

The current formulation of digital financial assets in Indonesia already accommodates some banking prudential principles based on the 5C framework, particularly in terms of capacity and capital, yet there remain normative gaps in the aspects of collateral and condition of economy. To strengthen its effectiveness, a reformulation of digital financial asset management is needed, integrating prudential principles through a risk-based approach and the utilization of blockchain technology as an asset value guarantee instrument. This reformulation must be grounded in a responsive law paradigm to balance financial innovation, consumer protection, and national financial system stability. Thus, the implementation of prudential principles in the digital asset ecosystem can become a progressive, adaptive, and equitable legal foundation for the development of Indonesia's digital financial sector.

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