Legal Review of the Implementation of the Regulatory Sandbox by the Financial Services Authority: A Case Study of GORO

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Abstract

Technological innovation in the financial services sector necessitates a legal framework that is adaptive while ensuring legal certainty and consumer protection. The Financial Services Authority (Otoritas Jasa Keuangan/OJK) has introduced the regulatory sandbox mechanism as a controlled testing environment for financial innovations prior to full licensing. This study aims to analyze the legal framework governing the regulatory sandbox in Indonesian positive law, its implementation, and the legal gaps that arise. The research employs a normative juridical method with statutory and case approaches, relying on secondary data sources. The findings indicate that regulatory strengthening through OJK Regulation Number 3 of 2024 has enhanced supervisory functions and improved consumer protection standards. However, significant legal gaps remain, including the unclear legal status of participants during the testing phase, overlapping institutional authority, and the absence of standardized technological security measures. These gaps have implications for weakened legal certainty and increased risks to consumers. Therefore, regulatory harmonization and stronger inter-institutional coordination are required to ensure that the regulatory sandbox effectively supports secure and sustainable digital financial innovation.

Keywords: Regulatory Sandbox; Digital Financial Innovation; Legal Certainty; Consumer Protection.

Introduction

The advancement of digital technology in the financial services sector has introduced various innovations that promise greater efficiency, financial inclusion, and accessibility of financial services for the broader community (Indri, 2024; Sugiarto & Disemadi, 2020). This phenomenon is known as financial technology (fintech), which has experienced rapid growth in Indonesia over the past decade (Disemadi & Regent, 2021; Maula & Santi, 2025). For example, data indicate that the fintech lending industry has continued to expand, as demonstrated by the number of providers reaching 95 companies as of December 2025, with total assets amounting to IDR 11.269 trillion and total equity of IDR 7.134 trillion. The dominance of conventional providers, comprising 88 companies with assets of IDR 11.147 trillion, along with the presence of 7 Sharia-compliant providers, indicates that the fintech ecosystem in Indonesia has become increasingly extensive, resilient, and capable of fostering market confidence.

Tabel 1 Overview Penyelenggara *Fintech Lending*

Table 1 Fintech Lending Company Overview

Uraian *Description*	Jumlah Penyelenggara (Unit) *Number of Companies (Units)*	Total Aset (miliar Rp) *Total Assets (IDR billion)*	Total Liabilitas (miliar Rp) *Total Liabilities (IDR billion)*	Total Ekuitas (miliar Rp) *Total Equities (IDR billion)*
1. Penyelenggara Konvensional	88	11.147	4.122	7.025
2. Penyelenggara Syariah	7	121	12	109
Total	**95**	**11.269**	**4.134**	**7.134**

Periode : Desember 2025
Period: December, 2025

Source: Statistics LPBBTI December 2025 (Otoritas Jasa Keuangan, 2025b)

However, the rapid advancement of these innovations requires an adaptive policy approach while maintaining financial system stability and consumer protection (Disemadi, 2022; Sudirman & Disemadi, 2022). One form of digital technology development in the financial services sector is the Sandbox, which serves as a testing facility facilitated by the Financial Services Authority (OJK) to

ensure that innovations and technologies in the financial sector develop effectively and responsibly through proper risk management (Stevani & Sudirman, 2021; Yamani, 2025). Regulatory Sandbox is a testing mechanism conducted by the Financial Services Authority to assess the reliability of business processes, business models, financial instruments, and the governance framework of providers. The Financial Services Authority implements the Regulatory Sandbox with the objective of ensuring that Digital Financial Innovation (IKD) meets the following criteria: being innovative and forward-looking; utilizing information and communication technology as the primary means of delivering services to consumers in the financial services sector; supporting financial inclusion and literacy; providing benefits and being widely applicable; being integrable with existing financial services; adopting a collaborative approach; and considering aspects of consumer protection and data protection (Karo & Luna, 2019).

One of the participants in the 2024 Regulatory Sandbox is Goro, a technology-based platform that provides specific services in the financial services sector (for example, e-commerce integrated with digital financing features). Goro's participation in the OJK Regulatory Sandbox is significant for further research because it provides a concrete illustration of how innovative regulations are implemented, how platform performance and risks are assessed, and how policy recommendations can be formulated based on the results of the trial process. This approval was granted through OJK Letters No. S-548/IK.01/2024 and S-549/IK.01/2024, dated November 7, 2024, referring to the eligibility requirements and criteria stipulated in OJK Regulation (POJK) No. 3 of 2024 concerning the Implementation of Financial Sector Technological Innovation and OJK Circular Letter No. 5/SEOJK.07/2024 concerning the Mechanism of Testing Space and Innovation Development (Kompas.com, 2024).

GORO is one of the companies operating in the field of fractional property investment and is registered as a participant in the Regulatory Sandbox program organized by the Financial Services Authority (OJK). Through this program, GORO has become a pioneer in the development of a real asset tokenization business model based on property in Indonesia. The fractional property

investment model represents the first real asset tokenization-based property business model to participate in the sandbox facility organized and/or facilitated by the Financial Services Authority (OJK) (Naibaho & Utomo, 2020). This approval was granted through OJK Letters No. S-548/IK.01/2024 and S-549/IK.01/2024, dated November 7, 2024, with reference to the eligibility requirements and criteria stipulated in OJK Regulation (POJK) No. 3 of 2024 concerning the Implementation of Financial Sector Technological Innovation and OJK Circular Letter No. 5/SEOJK.07/2024 concerning the Mechanism of Testing Space and Innovation Development. The requirements and eligibility criteria established for participation in the Sandbox are more stringent compared to the previous provisions based on POJK No. 13/POJK.02/2018 concerning Digital Financial Innovation in the Financial Services Sector.

Operationally, GORO represents an innovative fractional property investment platform that focuses on real asset tokenization (the utilization of property ownership benefits through blockchain-based or digital assets). Its performance can be measured based on the following aspects: a) Accessibility and Inclusion GORO has successfully reduced the entry barriers to the property market, enabling the public to invest with an initial capital of only IDR 10,000. This provides an inclusive alternative, particularly for younger generations and first-time investors (GORO, 2025);b) Competitive Returns GORO records an estimated rental yield of approximately 8% to 10% per year. These returns are distributed monthly to investors as passive income; and c) Liquidity Compared to conventional property investments, which are generally difficult to liquidate, investment tokens on GORO are designed to be more liquid, allowing users to purchase, hold, or resell (repurchase) their property units flexibly through the application (Nasution et al., 2025).

Although the Regulatory Sandbox is designed as an innovation framework to support the development of technology in the financial services sector, its implementation is not free from various legal issues (Marsudi, 2025). One of the main concerns relates to legal certainty for fintech providers participating in the Sandbox. During the testing period, the business activities conducted by these providers are not yet fully subject to permanent regulations, which may create

legal uncertainty in the event of disputes between providers and consumers. Furthermore, consumer protection remains a significant issue because the mechanisms implemented within the Sandbox have not yet reached the same level of protection as those applied to fully licensed financial institutions (Novianto, 2024). The risk of financial losses may arise if the tested business model or technology fails to operate as intended, such as in the case of real asset tokenization based on property conducted by GORO, where potential losses related to the value of digital assets do not yet have clear legal guarantees (Alifardani, 2024).

Another issue arises regarding supervision by the Financial Services Authority (OJK), which remains limited because the primary function of the Sandbox is testing rather than full licensing. Consequently, the allocation of legal responsibilities between OJK and providers becomes unclear if the tested innovations have broader impacts on society. Furthermore, regulatory overlaps still exist among OJK, Bank Indonesia, the Ministry of Communication and Informatics, and the National Cyber and Crypto Agency, particularly in the areas of data protection, cybersecurity, and digital transactions (Novianto, 2024). This situation highlights the need for institutional harmonization to ensure that the Sandbox does not create new legal gaps. On the other hand, the legality of digital products and asset tokenization also presents a separate issue, as there are currently no regulations that explicitly recognize digital tokens as valid proof of ownership of real assets under Indonesian law. The Regulatory Sandbox enables fintech business actors to test their products, services, or new business models under direct supervision from regulators before obtaining full authorization to operate commercially (Saragih et al., 2019). Through the Sandbox, OJK seeks to establish a safe and responsible financial innovation ecosystem (Saragih et al., 2019).

Therefore, although the Regulatory Sandbox plays an important role in encouraging digital financial innovation, from a legal perspective, this mechanism still faces significant challenges in terms of legal certainty, consumer protection, and inter-institutional coordination. Accordingly, regulatory improvements and synergy among relevant authorities are required to ensure that

the results of Sandbox trials can be implemented sustainably and supported by a strong legal foundation (Firdaus & Panjaitan, 2024). As a basis for understanding various legal aspects and the implementation of the Regulatory Sandbox in Indonesia, it is necessary to examine several previous studies that have discussed similar topics. The review of previous studies aims to determine the extent to which the Regulatory Sandbox concept has been implemented, its effectiveness in supporting financial technology (fintech) innovation, and the legal issues arising from its implementation (Kholifah et al., 2024).

The relevant studies that serve as references for this research are described as follows: (Naibaho & Utomo, 2020), in their study entitled *"Juridical Review of Regulatory Sandbox on Financial Technology (Fintech) Mechanisms in Indonesia"*, compared the implementation of the Regulatory Sandbox in Indonesia with that of the United Kingdom through the Financial Conduct Authority (FCA). The study found that the effectiveness of the Sandbox largely depends on the indicators of the business models being tested and the coordination between supervisory institutions, particularly between Bank Indonesia (BI) and the Financial Services Authority (OJK) (Naibaho & Utomo, 2020). (Saragih et al., 2019) through their article entitled *"Analysis of the Regulatory Sandbox Mechanism in the Implementation of Financial Technology in Indonesia"* published in *Diponegoro Law Journal*, explained the operational mechanism of the Sandbox and the distribution of authority between BI and OJK in the implementation of fintech in Indonesia (Saragih et al., 2019). (Indri, 2024), in her study entitled *"Regulatory Sandbox and Its Implementation in Financial Technology (Fintech)-Based Innovation"*, evaluated the effectiveness of OJK Regulation (POJK) No. 13/2018 and Bank Indonesia Regulation (PBI) No. 19/2017. The findings indicate that although these regulations are relatively adaptive to technological developments, challenges remain in their implementation, particularly in terms of coordination and supervision practices in the field (Indri, 2024).

Martiniasih & Saravistha, (2022) through their study entitled "Harmonization of the Authorities of Bank Indonesia and the Financial Services Authority Regarding the Implementation of the Regulatory Sandbox",

examined the relationship between financial supervisory institutions. The study found the existence of overlapping authorities between Bank Indonesia (BI) and the Financial Services Authority (OJK), indicating the need for regulatory harmonization to clarify the boundaries of responsibility between the two institutions in implementing the Sandbox (Martiniasih & Saravistha, 2022). (Ibrahim & Hawin, 2021), in his thesis entitled "Comparison of the Implementation of the Regulatory Sandbox System by Bank Indonesia and the Financial Services Authority", compared the Sandbox systems of both institutions using a normative-empirical approach. The study concluded that OJK places greater emphasis on consumer protection aspects, while BI focuses on the stability of the national payment system (Ibrahim & Hawin, 2021). (Novianto, 2024), in the article entitled "Analysis of Consumer Protection from Illegal Fintech Companies through the Regulatory Sandbox Mechanism as an Effort to Accelerate MSMEs" published in UNES Law Review, highlighted the weaknesses in the follow-up mechanisms for fintech companies that are not recommended by OJK. The researcher emphasized the importance of reassessment and recovery stages within the Sandbox regulation to strengthen consumer protection and support the growth of MSMEs in Indonesia (Novianto, 2024).

This research is relevant within the context of Indonesia, which is currently accelerating digital transformation in the financial sector while still requiring a balance between innovation, consumer protection, and financial system stability. Although various studies have examined the Regulatory Sandbox in Indonesia, most of them have focused on conceptual aspects, general mechanisms, and comparisons of authority among supervisory institutions such as OJK and Bank Indonesia. Previous studies have generally not examined in depth the legal implications regarding the legal status of providers during the testing phase, particularly in situations where business activities have not yet been fully placed under a formal licensing regime. In addition, studies concerning the legal consequences of Sandbox evaluation results, including potential legal disputes between providers, regulators, and consumers, remain limited. Furthermore, there has been no specific research analyzing the impact of the regulatory

transition from Digital Financial Innovation (IKD) to Financial Sector Technology Innovation (ITSK) on legal certainty in the implementation of the Regulatory Sandbox. This transition phase may potentially create ambiguity in legal norms, disharmony in institutional authority, and uncertainty regarding supervisory standards.

Research Method

The research method employed in this study is the normative juridical method (Michael & Kleden, 2018). Normative juridical research is a type of research conducted by examining legal materials or secondary data as the primary basis of analysis. The research approaches applied in this study are the statutory approach and the case approach, which involve examining relevant regulations and the implementation of the Regulatory Sandbox by GORO as a participant in 2024 (Hamid, 2022). In accordance with the normative juridical research method, the types of legal materials used in this study are classified into two categories, namely: Primary Legal Materials, which refer to legally binding materials in the form of positive laws and regulations applicable in Indonesia. The primary legal materials in this study include regulations related to fintech and financial sector technological innovation, including the Law concerning the Financial Services Authority, POJK No. 13/POJK.02/2018, POJK No. 3 of 2024 concerning the Implementation of Financial Sector Technological Innovation, OJK Circular Letter No. 5/SEOJK.07/2024, as well as official OJK documents regarding the designation of GORO as a Regulatory Sandbox participant (Otoritas Jasa Keuangan, 2024a). Secondary Legal Materials, which consist of legal materials that provide explanations of primary legal materials and assist in analyzing the legal issues. The secondary legal materials were collected through the library research method (Disemadi & Prananingtyas, 2020), using sources such as journals, books, legal literature, academic works, and other relevant official publications related to the Regulatory Sandbox mechanism.

After the primary and secondary legal materials have been collected, the data are then organized and analyzed using a qualitative descriptive approach. The analytical techniques applied in this study include Legal Interpretation,

which refers to a technique used to identify and understand the meaning, interpretation, and objectives of statutory provisions (such as POJK and OJK Circular Letters) governing the Regulatory Sandbox. Normative Analysis, which refers to an analytical technique conducted by describing the applicable laws and regulations, followed by synchronizing and relating them to the legal issues concerning the research object. The case study of GORO's participation in this research is not based on direct field research but is analyzed purely from a normative perspective through official documents issued by the Financial Services Authority (OJK). By applying legal interpretation and normative analysis, this case study is examined to assess the level of legal certainty, the achievement of objectives, and the effectiveness of the implementation of the Regulatory Sandbox by OJK within the framework of positive law in Indonesia.

Results and Discussions

Analysis of Regulatory Sandbox Regulation by the Financial Services Authority under the Indonesian Legal Framework

a. The Urgency of Digital Financial Innovation in the Era of Financial Technology (Fintech)

The development of financial technology (fintech) over the past decade has transformed the way society interacts with financial services (Karo & Luna, 2019; Martiniasih & Saravistha, 2022). Fintech has introduced various innovations, such as digital payments, peer-to-peer lending, insurtech, digital banking services, robo-advisors, and asset tokenization, which improve transaction efficiency and expand access to financial services for communities that were previously underserved by formal financial institutions (Bimo & Tiyansyah, 2019). Indri stated that fintech plays an important role as an accelerator of economic digitalization because it is capable of providing financial services that are fast, affordable, and easily accessible (Indri, 2024). Furthermore, fintech also has a significant impact on increasing financial inclusion, particularly for the MSME sector, as explained by Novianto that fintech serves as an effective financing

alternative for small business actors who experience difficulties in obtaining credit from traditional banking institutions (Novianto, 2024). Therefore, fintech innovation not only promotes efficiency but also strengthens the foundation of the national digital economy.

When examined through the perspective of Satjipto Rahardjo's legal thought, the rapid development of fintech represents a concrete reflection of social dynamics that evolve much faster than written law. Satjipto Rahardjo, through his theory of Law and Social Change, emphasized that law does not exist in a vacuum but is continuously influenced and transformed by surrounding social forces. When the socio-economic needs of modern society demand financial services that are fast, affordable, and accessible, societal behavioral structures (*law in action*) will change first, surpassing the written legal framework (*law in books*). A gap emerges when rigid positive law struggles to respond to these new patterns of behavior. This highlights the importance of the Progressive Legal paradigm, a fundamental concept developed by Satjipto Rahardjo, which asserts that "law exists for humans, not humans for law." Based on this philosophy, the emergence of digital financial innovation should not be restricted or eliminated merely because there are no rigid positive legal provisions regulating it. Instead, the law must adapt to serve society's need for economic convenience while maintaining legal order and stability.

Nevertheless, the rapid development of fintech also brings significant challenges to the stability of the national financial system (Kholifah et al., 2024). Emphasized that financial technology carries potential risks that are difficult to map, including data security issues, uncertainty regarding the legality of business models, and potential consumer losses when an innovation does not yet have adequate supervisory instruments (Prastowo et al., 2024). (Saragih et al., 2019) also highlighted that many fintech innovations develop faster than the ability of regulations to adapt, creating a need for legal mechanisms capable of bridging this gap so that innovation remains within a safe legal framework. This is consistent with the official report of the Financial Services Authority (OJK), which emphasizes the importance of the Regulatory Sandbox as a limited testing environment to assess risks, governance, and the feasibility of innovations before

granting full authorization (Otoritas Jasa Keuangan, 2024b). Therefore, the urgency of fintech innovation must be balanced with adaptive regulations that are capable of ensuring consumer protection and financial system stability without hindering technological development.

b. The Development of Fintech and Its Implications for the National Financial System

The development of fintech in Indonesia over the past decade has brought significant changes to the structure of the national financial system. Innovations such as digital payments, peer-to-peer lending, digital onboarding, asset tokenization, and AI-based credit scoring have improved the efficiency of financial services and expanded access for unbanked and underbanked communities. Indri emphasized that the development of fintech serves as an accelerator of economic digitalization by providing financial services that are fast and easily accessible to the broader community (Indri, 2024). Furthermore, Novianto explained that fintech contributes to strengthening the MSME sector by providing more flexible alternative financing compared to conventional financial institutions (Novianto, 2024). Therefore, fintech innovation generates positive impacts in the form of increased efficiency, expanded access to financing, and accelerated digital transformation within the national financial system.

Although it provides positive impacts, the development of fintech also creates significant implications for national financial stability. Prastowo et al. stated that the rapid development of financial technology introduces new risks, such as data security vulnerabilities, default risks, and weak consumer protection if it is not accompanied by adequate regulatory frameworks (Prastowo et al., 2024). Similarly, (Saragih et al., 2019) argue that the pace of fintech development often exceeds the ability of regulators to prepare appropriate legal instruments, thereby creating regulatory gaps and legal uncertainty regarding the legality of certain business models.

In facing this dilemma, Satjipto Rahardjo's concept of Progressive Legal Theory becomes highly relevant as an analytical framework. Satjipto rejected the analytical-orthodox positivist view of law, which considers law as a static text that

is final, rigid, and absolute. From the perspective of Progressive Law, law is a continuous process of becoming (*law as a process, law in the making*) that must be continuously improved to achieve public welfare. If regulators insist on applying a conventional-positivistic legal approach amid the rapid wave of digitalization, the national financial system may become trapped in two extreme risks: excessive restriction that suppresses the digital economy, or excessive permissiveness that sacrifices consumer protection.

The implications of fintech development for the national financial system require Indonesian law to shift from a rigid regulatory model (*command and control*) toward a responsive and adaptive regulatory model through the institutionalization of the Regulatory Sandbox. The Financial Services Authority (OJK) emphasizes that without adaptive supervisory mechanisms such as the Regulatory Sandbox, the development of fintech may potentially disrupt financial system stability, increase the risk of consumer losses, and create inconsistencies with the prudential principles applicable to financial institutions. Therefore, fintech development must be accompanied by a regulatory framework that is responsive, collaborative, and capable of balancing the need for innovation with the protection of the financial system.

c. The Role of the Financial Services Authority in Regulating and Supervising Digital Financial Innovation

The role of the Financial Services Authority (OJK) in the digital financial innovation ecosystem is essential to ensure that the development of financial technology does not create systemic risks or cause losses to consumers (Balqis & Utami, 2024). Based on Law No. 21 of 2011 concerning the Financial Services Authority, this institution has the authority to regulate and supervise all activities within the financial services sector, including fintech, to ensure that they operate in accordance with the principles of prudential regulation, financial system stability, and consumer protection [1]. In the context of digital finance, OJK has established various regulations, such as POJK No. 13/POJK.02/2018 and POJK No. 3 of 2024, to ensure that every digital financial innovation provider

[1] Widjaja, P., & Wijaya, G., *The Role of OJK in Financial Technology Regulation*, 2022.

maintains proper governance, effective risk management systems, and secure technological infrastructure (Otoritas Jasa Keuangan, 2024b). OJK also conducts preventive and repressive supervision through reporting mechanisms, inspections, and legal enforcement actions against non-compliant providers.

In addition to performing its regulatory function, OJK also acts as a facilitator of innovation through risk-based supervision of new business models in the digital financial sector. Prastowo et al. explained that fintech development requires adaptive supervision because new business models introduce risks that are difficult to identify through traditional regulatory instruments (Prastowo et al., 2024). From the perspective of Satjipto Rahardjo's sociology of law, the role of OJK in this context should not merely be limited to acting as the "mouthpiece of the law" (*bouche de la loi*) that operates mechanically and rigidly. Satjipto emphasized the importance of legal mobilization and progressive law enforcement, where law enforcers or regulatory institutions must have the courage to pursue legal breakthroughs (*rule-breaking*) when existing formal rules may hinder social justice and human welfare.

When OJK implements the Regulatory Sandbox, OJK is essentially practicing the aspects of progressive law enforcement. OJK does not remain passive by waiting for formal legislation to be enacted by the parliament in order to legalize or prohibit a new type of fintech that is not yet recognized by existing laws. Through its discretionary functions and regulatory authority, OJK establishes a flexible yet controlled testing environment that prioritizes the substance of public protection over the formalities of outdated legal procedures.

To address these challenges, OJK has developed the Regulatory Sandbox as a testing environment that allows regulators to assess the feasibility of innovations, control technological risks, and evaluate consumer protection aspects before such business models operate on a full scale (Saragih et al., 2019). According to OJK, the existence of the Sandbox is an essential part of the strategy to maintain a balance between innovation and the security of the national financial system, enabling regulators to grant approval, provide improvement recommendations, or even reject innovations that are considered legally or operationally unsuitable (Otoritas Jasa Keuangan, 2024b). Therefore, the role of

OJK is not merely limited to supervision but also extends to acting as a strategic partner in encouraging safe, sound, and sustainable digital financial innovation.

Analysis of the Process and Mechanism for the Implementation of the Regulatory Sandbox by OJK, Particularly in the Context of GORO's Participation as a Sandbox Participant in 2024

a. Regulatory Transition from Digital Financial Innovation (IKD) to Financial Sector Technology Innovation (ITSK)

The transition from the Digital Financial Innovation (IKD) regime to Financial Sector Technological Innovation (ITSK) represents one of the most significant regulatory reforms in the governance of digital financial innovation in Indonesia. At the initial stage, the Sandbox framework was regulated under OJK Regulation (POJK) No. 13/POJK.02/2018 concerning Digital Financial Innovation, which focused on supervising information technology-based fintech business models, particularly those offering alternative financial services such as peer-to-peer lending, payment services, aggregators, and similar innovation models (Otoritas Jasa Keuangan, 2024a).

However, over time, the scope of IKD was considered too limited and unable to accommodate the rapid acceleration of emerging technological innovations, including the use of artificial intelligence (AI), machine learning, big data analytics, robo-advisory, digital asset tokenization, and cross-industry financial integration (Makarim & S., 2024). OJK subsequently adjusted the regulatory framework through OJK Regulation No. 3 of 2024 concerning the Implementation of Financial Sector Technological Innovation (ITSK), which substantially expands the scope of regulation to reflect the latest developments in the digital financial industry (Otoritas Jasa Keuangan, 2024a). This change is not merely cosmetic but structural, as ITSK no longer positions financial innovation as a sub-product of fintech, but rather as a broader financial sector technology framework encompassing digital banking, insurance technology (insurtech), digital assets, open finance, and services utilizing complex electronic systems and

artificial intelligence in financial decision-making processes (AP Law Solutions, 2024). Therefore, the transition toward ITSK constitutes an important step in ensuring that Indonesia's financial system remains competitive and adaptive to global developments.

In the context of the Regulatory Sandbox, POJK No. 3 of 2024 introduces several fundamental improvements. First, it establishes an obligation for participants to prepare a testing plan containing testing parameters, risk mitigation measures, internal supervision plans, and projections regarding the impact of innovations on consumers (Makarim & S., 2024). This mechanism was not explicitly regulated under POJK No. 13/2018. Second, the regulation strengthens consumer protection principles, including obligations regarding information transparency, personal data security, and the availability of dispute resolution procedures. Third, POJK No. 3 of 2024 requires every Sandbox participant to comply with minimum technological standards, including cybersecurity requirements and the integrity of information systems. Fourth, the new regulation establishes a more relevant classification of ITSK categories, such as innovative credit scoring and aggregators, which have become dominant clusters within the OJK Sandbox during 2023–2024 (Rizki & Muhammad Nidhal, 2024).

Although POJK No. 3 of 2024 introduces structural improvements, the regulation is not free from several weaknesses and implementation challenges. First, the high standards related to technological requirements, cybersecurity, and governance may create significant entry barriers for small-scale startups with limited capital and infrastructure. Second, there remains a regulatory grey area concerning the technical assessment parameters for highly complex technologies (such as advanced artificial intelligence or asset tokenization), which ultimately rely heavily on OJK's discretion. Third, the transition burden from the IKD regime to ITSK requires adjustments that may consume additional time and costs for providers whose business models are already operating. Fourth, the capacity of human resources within the regulator may face bottlenecks when required to evaluate the volume and complexity of submitted testing plans

simultaneously, potentially slowing down the issuance process of final recommendations.

From Satjipto Rahardjo's perspective, Progressive Law requires transitional regulations not to burden society to the point of creating social stagnation or unnecessary disruption of economic activities. Legal uncertainty (*grey areas*) and OJK's administrative limitations must be addressed by policymakers through a spirit of liberation. Progressive Law demands that bureaucrats and law enforcers within OJK possess moral and intellectual commitment to overcome these bureaucratic bottlenecks in order to protect the rights of business actors. Therefore, when an entity such as GORO undergoes an assessment during this transitional period, the legal implications of the final evaluation status must be assessed carefully and appropriately. If the entity is declared "Recommended," this status provides legitimacy (socio-economic recognition) that supports human welfare by creating space for innovation to develop fully.

Conversely, if the entity is declared "Not Recommended," in order to minimize legal disputes and investment losses, Satjipto proposes a non-rigid approach to dispute resolution. If legal claims arise as a consequence of such a decision, the resolution should prioritize substantive and dialogical justice rather than merely relying on formal legal correctness based on written provisions. In this way, the balance of the ecosystem can be maintained without undermining the fundamental rights of the parties involved.

This regulatory transition has direct relevance to GORO's participation as a Sandbox participant in 2024. Since that year represents a transitional period from IKD to ITSK, GORO is required to undergo assessment based on the provisions of POJK No. 3 of 2024, even though its initial application was submitted under the IKD framework. This is in accordance with the transitional provisions emphasized by OJK, which state that all ongoing Sandbox participants will continue to be processed until obtaining recommendations but are required to adjust their business models, technological standards, and consumer protection mechanisms in accordance with the ITSK framework (Otoritas Jasa Keuangan, 2024a).

Furthermore, the results of the Regulatory Sandbox evaluation have significant legal implications for the sustainability of digital financial innovation business models. If GORO is declared "Recommended," such status serves as an initial legal basis for proceeding to the licensing or official registration stage in accordance with the classification of Financial Sector Technological Innovation (ITSK). The legal implications include initial recognition of the feasibility of the business model, increased legal legitimacy, and the opportunity to obtain access to operate fully within the financial system supervised by OJK. However, the "Recommended" status does not automatically grant a business license, as it still requires compliance with further licensing procedures in accordance with applicable legal provisions.

Conversely, if GORO is declared "Not Recommended," there are legal implications in the form of restrictions against continuing or operating the business model within Indonesia's financial system. This condition may create legal and economic consequences for the provider, including potential investment losses, termination of business activities, and obligations to resolve existing legal relationships with users or consumers. In addition, such status may also result in reputational consequences that affect business sustainability in other sectors. From a legal perspective, the results of the Sandbox evaluation also have the potential to give rise to disputes. In the event that certain parties suffer losses, such as consumers or investors, disputes may arise in the form of civil lawsuits concerning losses incurred during the testing period. On the other hand, decisions made by OJK as a public authority may also potentially become the subject of administrative disputes if they are considered inconsistent with the principles of good governance, such as the principles of legal certainty, transparency, and accountability. Therefore, the Regulatory Sandbox mechanism does not merely serve an evaluative function but also carries complex legal consequences that need to be anticipated through clearer and more comprehensive regulatory frameworks.

b. Mechanisms and Stages of the Implementation of the Regulatory Sandbox by OJK

The implementation of the Regulatory Sandbox by the Financial Services Authority (OJK) constitutes a series of processes designed to assess the feasibility, security, and benefits of a Financial Sector Technological Innovation (ITSK) before obtaining full authorization or legal recognition. This mechanism aims to ensure that tested innovations not only comply with technological and business principles but also align with consumer protection, financial system stability, and legal compliance. Under OJK Regulation (POJK) No. 3 of 2024, the Sandbox stages are structured systematically, beginning with the registration stage, eligibility assessment, testing period, supervision, and final evaluation of innovation providers participating in the Sandbox (Otoritas Jasa Keuangan, 2024a).

The first stage involves the submission of an application by an ITSK provider to OJK. At this stage, participants are required to submit application documents containing the provider's profile, business model, description of the technology used, risk analysis, and a testing plan containing the objectives, duration, testing parameters, risk mitigation measures, reporting mechanisms, and projected impacts of the innovation (Makarim & S., 2024). This stage represents a significant improvement introduced under POJK No. 3 of 2024, as the testing plan was not previously regulated in detail under POJK No. 13/2018. After the documents are assessed as complete, OJK proceeds to the second stage, namely the eligibility assessment.

At this stage, OJK assesses whether the innovation fulfills the elements of being innovative, provides social or economic benefits, utilizes accountable technology, has potential market value, and possesses technical and non-technical risks that can be mitigated (AP Law Solutions, 2024). The assessment also covers the legality of the business model, internal governance, readiness of data security systems, and the conformity of the innovation with the latest ITSK classifications. If deemed eligible, the provider will be designated as a "Sandbox Participant" and proceed to the third stage, namely the testing phase. POJK No. 3 of 2024 stipulates that the maximum testing period is one (1) year, with flexibility for OJK to adjust the duration based on the complexity of the innovation (Otoritas Jasa Keuangan, 2024b).

During this period, participants are required to conduct testing in accordance with the testing plan and provide OJK with access to carry out direct or indirect supervision (Otoritas Jasa Keuangan, 2024b). OJK examines operational aspects, technological integrity, cybersecurity, risk governance, personal data protection, as well as potential risks to consumers and the financial system (Rizki & Muhammad Nidhal, 2024). Participants are also required to report developments, disclose identified risks, and notify OJK of any significant changes to their business models. The final stage involves evaluation and the final decision. After the testing period concludes, participants are required to submit a final report no later than 20 working days before the end of the Sandbox period (Sanarta, 2023). OJK then conducts a comprehensive evaluation and determines one of three possible outcomes:

a. **Recommended**, if the innovation is considered feasible, secure, and compliant with ITSK standards, allowing it to proceed to the business licensing or registration process;
b. **Recommended with Improvements**, if there are deficiencies that can still be corrected within a specified period;
c. **Not Recommended**, if the innovation is considered unsafe, fails to meet the required standards, or poses significant risks to consumers and financial sector stability (Otoritas Jasa Keuangan, 2024a).

This decision carries direct legal consequences because it determines whether an innovation may be legalized or must be discontinued. In the context of 2024, this decision also reflects the implementation of transitional standards from IKD to ITSK, which serve as the basis for evaluating Sandbox participants.

From the perspective of Satjipto Rahardjo's sociology of law, the entire mechanism and gradual stages established by OJK essentially represent a concrete manifestation of a dynamic legal discovery method. The Regulatory Sandbox is, in essence, a living laboratory where law is directly applied in practice to observe social realities empirically before being formalized into positive law. Satjipto Rahardjo consistently emphasized the importance of honesty and moral sensitivity in the process of law-making and legal enforcement. Throughout the eligibility assessment process and direct testing phase, OJK must not become trapped in merely conducting formal administrative document examinations.

OJK supervisors are required to possess the sensitivity to understand whether the tested technology truly provides benefits for society (promotes human welfare) or instead has the potential to become exploitative. Therefore, the Regulatory Sandbox mechanism is not merely an administrative-bureaucratic instrument, but rather a means of collaborative learning between the state (OJK) and society (business actors such as GORO) to jointly formulate new positive law that is responsive, substantively just, and capable of maintaining a balance between innovation and financial stability.

c. The Position and Analysis of GORO's Participation as a Sandbox Participant in 2024

The position of GORO as a Regulatory Sandbox participant in 2024 has significant legal and regulatory implications because it occurs during the transitional period of regulatory development from the Digital Financial Innovation (IKD) regime to the Financial Sector Technological Innovation (ITSK) regime. Through POJK No. 3 of 2024, the Financial Services Authority (OJK) stipulates that all providers that have entered the Sandbox before the new regulation came into force may continue the testing process until obtaining a final outcome, while being required to adjust their business models, technological standards, and consumer protection parameters in accordance with the ITSK provisions (Otoritas Jasa Keuangan, 2024a).

Accordingly, GORO occupies a transitional position, namely following the previous Sandbox mechanism (POJK No. 13/2018) in terms of its initial registration process, while being assessed and evaluated based on the new standards under POJK No. 3 of 2024, which provides a broader scope and stricter supervision (Otoritas Jasa Keuangan, 2024a). When examined through the lens of Progressive Law developed by Satjipto Rahardjo, GORO's transitional position within the Sandbox should not merely be viewed as a rigid administrative status, but rather as a form of legal protection that prioritizes human interests. When the regulatory framework shifted to POJK No. 3 of 2024, the law did not immediately terminate the operations of GORO, which had been registered under the previous regime.

This reflects the philosophy that law exists to serve the continuity of human life — in this context, business actors and consumers — rather than trapping society in a regulatory vacuum. The Regulatory Sandbox therefore functions as a legal instrument that rejects excessive rigidity in order to achieve distributive justice for local innovators. During the Sandbox process, GORO is assessed based on ITSK eligibility criteria, which include elements of business model innovation, the use of information technology, potential economic benefits, support for financial inclusion, technological security, and risk mitigation (AP Law Solutions, 2024).

If GORO adopts a business model such as an aggregator, innovative credit scoring, digital asset services, or other financial technology services relevant to the latest ITSK classifications, the assessment will be conducted by considering whether such innovation meets the minimum standards for technology and consumer protection (Rizki & Muhammad Nidhal, 2024). GORO is also required to submit a testing plan explaining the testing parameters, target users, risk mitigation obligations, and personal data protection strategies (Makarim & S., 2024). During the testing period, GORO must provide OJK with access to conduct direct or indirect supervision and submit progress reports in accordance with the provisions of OJK Circular Letter No. 5 of 2024 (Otoritas Jasa Keuangan, 2024c).

GORO's position within the 2024 Sandbox becomes increasingly important because the final evaluation results will determine whether its innovation can obtain legal recognition. After the testing phase, GORO may receive one of three types of final decisions: (1) Recommended, if the business model is considered feasible from the perspectives of technology, law, and risk management; (2) Recommended with Improvements, if there are deficiencies that can still be corrected; or (3) Not Recommended, if the innovation is considered high-risk or fails to comply with ITSK requirements (Otoritas Jasa Keuangan, 2024b). If recommended, GORO must subsequently apply for a business license or official registration in accordance with the classification of its innovation (such as aggregation, credit scoring, or other digital services licensing requirements). Conversely, if it is not recommended, GORO may not legally

continue operating the business model, as the "Not Recommended" outcome indicates that the innovation carries risks or fails to meet consumer protection and technological governance standards (Makarim & S., 2024).

Therefore, GORO's position as a Sandbox participant in 2024 demonstrates how the Regulatory Sandbox functions as a legal instrument for assessing the feasibility of innovation objectively and based on risk considerations. On the one hand, GORO is provided with the opportunity to test its business model within a legal framework without having to immediately obtain a business license. On the other hand, OJK obtains empirical data to evaluate whether such innovation is suitable for integration into Indonesia's financial system. This mechanism illustrates a symbiotic relationship between regulators and innovators, with the ultimate objective of creating financial innovations that are secure, adaptive, and consistent with Indonesia's positive law framework.

Analysis of Legal Challenges and Implications Arising from the Implementation of the Regulatory Sandbox on Digital Financial Innovation: A Case Study of GORO

a. Regulatory Challenges in the Implementation of the OJK Regulatory Sandbox

The implementation of the Regulatory Sandbox by the Financial Services Authority (OJK) faces several regulatory challenges, including normative, technical, and institutional aspects. The first challenge is legal uncertainty during the transition period from the Digital Financial Innovation (IKD) regime to the Financial Sector Technological Innovation (ITSK) regime. POJK No. 3 of 2024 introduces numerous fundamental changes, including the classification of business models, obligations of providers, technological security standards, and reporting requirements (Otoritas Jasa Keuangan, 2024a). However, these rapid regulatory changes create adaptation challenges for business actors and generate interpretative ambiguities, particularly for Sandbox participants who were registered before the new regulation came into force (Makarim & S., 2024). This

uncertainty directly affects the legal certainty of providers, including GORO, which must adjust its business structure and technology to comply with the new ITSK standards, even though its registration process was conducted under the IKD framework (Otoritas Jasa Keuangan, 2024d).

The second challenge concerns overlapping authority among supervisory institutions, which may hinder the effectiveness of the Sandbox. Digital financial technology often falls within the intersecting jurisdictions of OJK, Bank Indonesia (BI), the Ministry of Communication and Informatics (Kominfo), the Commodity Futures Trading Regulatory Agency (Bappebti), and the National Cyber and Crypto Agency (BSSN) (Rizki & Muhammad Nidhal, 2024). For example, services involving digital assets or cryptocurrencies fall under the supervision of Bappebti, while consumer data protection aspects fall within the domain of Kominfo and BSSN. Differences in mandates and technical standards among institutions result in the Sandbox assessment process not being fully integrated, thereby creating regulatory risks known as regulatory fragmentation (Rizki & Muhammad Nidhal, 2024).

Regulatory fragmentation, or institutional sectoral ego, from Satjipto Rahardjo's perspective reflects an approach of legal positivism that places excessive emphasis on the formal boundaries of statutory texts (*jurisdictional borders*). Progressive Law requires OJK and related institutions to be willing to break down these bureaucratic barriers for the broader public interest. Law enforcement in the digital economy era must take the form of holistic and solution-oriented cooperation rather than competition over formal authority, which may confuse society and hinder national innovation. If this fragmented regulatory condition is left unresolved, it may result in regulatory inconsistencies, delays in issuing recommendations, or different interpretations regarding the legality of certain business models.

The third challenge concerns the lack of uniform technical standards in assessing technological security and personal data protection. POJK No. 3 of 2024 regulates obligations related to technological security and data governance; however, it does not specify particular technical standards such as penetration testing, minimum encryption requirements, or cybersecurity architecture (AP

Law Solutions, 2024). The absence of clear standards creates room for subjectivity in the assessment process and may result in inconsistencies among Sandbox participants. Furthermore, personal data protection regulations in Indonesia remain at an early stage of implementation, causing supervision over potential misuse of data by ITSK providers to remain suboptimal (Kementrian Komuinikasi dan Digital, 2023). This risk becomes greater when innovations are based on artificial intelligence (AI) or big data, including technologies that may be implemented by GORO, without clear technical guidelines regarding data governance.

The fourth challenge relates to the limited supervisory capacity of regulators in monitoring rapidly evolving technologies. The development of fintech, AI-based scoring, robo-advisory, and digital assets often progresses faster than the regulator's ability to develop relevant supervisory instruments. This situation creates difficulties for OJK in assessing emerging systemic risks, verifying technological security, and identifying potential misuse of digital services. For participants such as GORO, this condition may create uncertainty in risk assessment because the evaluation parameters have not yet been fully established from a regulatory perspective.

Finally, another important challenge concerns consumer protection risks during the testing period. Sandbox participants do not always operate with fully stable systems, causing consumers to face potential risks such as system failures, data breaches, inaccurate credit scoring, or unclear dispute resolution mechanisms (Otoritas Jasa Keuangan, 2024b). In many cases, consumers may not fully understand that they are using products that are still in the testing phase, meaning that their protection must be ensured by the regulator. This becomes a significant reason why the Sandbox is often considered a potential area of legal risk if it is not accompanied by strong mitigation mechanisms. Therefore, regulatory challenges in the implementation of the Sandbox highlight the need for institutional harmonization, clarity of technical standards, enhancement of supervisory capacity, and improvement of consumer protection regulations. These aspects are particularly crucial in the case study of GORO, which is

positioned within a regulatory transition period and faces stricter assessment parameters under the ITSK framework.

b. Legal Implications of Sandbox Implementation on the Legality of Digital Financial Innovation

The implementation of the Regulatory Sandbox by the Financial Services Authority (OJK) has significant legal implications for the status and legality of digital financial innovations. In principle, innovations entering the Sandbox are not considered licensed financial services; rather, they are granted the status of a legal trial environment, namely a legally recognized testing space that does not yet provide full legal legitimacy (Otoritas Jasa Keuangan, 2024a). This means that participants such as GORO are permitted to operate within certain limitations but do not yet possess a business license or official registration status as applicable to financial sector providers in general. This implication places the innovation in a quasi-legal position, whereby it is permitted to operate but remains under strict supervision by OJK and subject to predetermined restrictions.

This quasi-legal condition raises fundamental legal debates, particularly regarding whether the Sandbox violates the principle of legal certainty. From the perspective of rigid legal positivism, granting temporary operational permission to entities that are formally unlicensed (*unlicensed entities*) may indeed blur legal certainty and appear to legitimize unlawful activities. However, within the context of modern administrative law, the Sandbox is not considered a violation of legal certainty, but rather a form of regulatory discretion and an embodiment of the principle of legal utility. Regulators provide temporary exemptions (*regulatory waivers*) within a limited scope in order to develop future regulations (*lex ferenda*) that are adaptive without eliminating innovation in the present.

This argument within the framework of administrative law is closely aligned with the core ideas of Satjipto Rahardjo, who emphasized that the primary purpose of law is to achieve human welfare and happiness, rather than merely ensuring compliance with the formal certainty of legal texts. If maintaining the rigidity of statutory provisions requires the elimination of national innovations such as GORO, then the law has failed to serve humanity. Conditional

regulatory liberation (*regulatory waiver*) through the Sandbox instrument represents a concrete form of Progressive Law: delaying rigid regulatory application in order to provide space for the emergence of new legal frameworks that are more just, responsive, and mature for society (*law in the making*).

One of the significant legal implications concerns the obligation to adjust business models in accordance with positive law, particularly following the enactment of POJK No. 3 of 2024. This regulation stipulates that Sandbox participants must comply with technological standards, risk governance, information transparency, and consumer protection requirements before they can be recommended to obtain official authorization (AP Law Solutions, 2024). Failure to meet these standards may result in a "Not Recommended" outcome, which directly affects the prohibition against operating such business models in Indonesia (Otoritas Jasa Keuangan, 2024b). This demonstrates that the Sandbox outcome is not merely an administrative evaluation but carries legal consequences affecting the sustainability of financial sector technological innovation business models.

Another legal implication relates to consumer protection and the legal liability of providers. During the testing period, Sandbox participants remain obligated to implement consumer protection principles, including information transparency, dispute resolution mechanisms, and personal data security (Otoritas Jasa Keuangan, 2024c). If consumers suffer losses, providers remain legally responsible in accordance with consumer protection provisions and financial sector regulations. The Sandbox does not provide legal immunity to participants; rather, OJK emphasizes that testing activities cannot be used as a justification to reduce the provider's responsibility toward consumers (Rizki & Muhammad Nidhal, 2024). Therefore, participants such as GORO must ensure that the technologies and services being tested do not create potential legal violations, particularly concerning misuse of personal data or system failures that may harm users.

Regarding legal liability, if financial losses are experienced by consumers during the testing period — such as those resulting from system breaches, asset governance failures, or insolvency — the responsibility based on the principle of

strict liability rests entirely with the innovation provider (GORO), rather than OJK. OJK, as the regulator, is only authorized to supervise and does not act as a guarantor of losses. Sandbox status does not provide any legal immunity for GORO against potential civil claims, whether in the form of breach of contract or unlawful acts, submitted by its investors.

The subsequent implication concerns the legalization process of innovation after the Sandbox period concludes. OJK stipulates three possible outcomes of the Sandbox evaluation:

1. Recommended, which provides participants with a basis to apply for an operational license or official registration;
2. Recommended with Improvements, which requires further refinement before a license may be granted; and
3. Not Recommended, which means the innovation cannot be legally operated in Indonesia (Makarim & S., 2024).

For participants such as GORO, a "Recommended" status does not automatically grant a license; rather, it constitutes a prerequisite for entering the formal licensing stage. This demonstrates that the Sandbox functions as a *pre-licensing tool*, not a licensing approval mechanism. Accordingly, the outcome of the Sandbox may enhance the legitimacy of an innovation, but it does not replace the formal licensing procedures within the financial sector legal framework.

In addition, Sandbox outcomes carry implications within the framework of administrative law, particularly in relation to the principles of legality, transparency, and accountability. The Sandbox evaluation process must be conducted in accordance with the provisions of POJK No. 3 of 2024; therefore, OJK's decisions may be subject to review through objection mechanisms or even administrative court proceedings if they are considered to violate the principles of good governance (Marbun, 2023). This demonstrates that the implementation of the Sandbox is not merely a technical process, but an act of public administration that produces legal consequences for industry actors.

Accordingly, the implementation of the Regulatory Sandbox generates broad legal implications, including the temporary legal status of innovation, the consequences of Sandbox evaluation outcomes, consumer protection

obligations, requirements for full legalization through licensing, and the position of the Sandbox within the administrative law framework. All of these implications determine whether digital financial innovations such as GORO can develop sustainably, comply with positive law, and obtain strong legitimacy within Indonesia's financial sector.

c. Specific Analysis of GORO's Business Practices and Legal Construction within the Regulatory Sandbox Framework

GORO's business practice as a fractional real estate asset tokenization platform presents a complex legal construction when confronted with Indonesian positive law, particularly the Law of Property (Book II of the Indonesian Civil Code) and the Basic Agrarian Law (UUPA). The analysis of GORO's practice within the Regulatory Sandbox can be examined from three main aspects: the construction of ownership rights, the governance mechanism of underlying assets, and the intersection of regulatory jurisdictions.

First, regarding the legal construction of fractional ownership. GORO's practice of offering real estate investment starting from IDR 10,000 through digital tokens does not, in essence, transfer absolute property rights (such as Freehold Title or Building Use Rights) over the underlying property to investors. Under the UUPA, the transfer of land rights must be conducted through a Land Deed Official (PPAT) and registered with the National Land Agency (BPN) (Badan Pemeriksa Keuangan, 1960, 1997). Considering that it is practically impossible to divide land certificates into fractional units for thousands of retail investors with minimal investment value, the actual legal mechanism in GORO's model is the transfer of beneficial ownership, namely the right to receive a proportion of rental income and potential capital gains from property appreciation.

Therefore, from the perspective of contract law, the tokens issued by GORO more closely represent participatory investment contracts (based on smart contracts) rather than legal proof of physical property ownership. The critical analysis within the Sandbox focuses on how GORO ensures transparency in this structure so that no misleading information arises that could lead

consumers to mistakenly believe they hold a legally recognized "land certificate" (Otoritas Jasa Keuangan, 2025a).

Second, regarding the governance of underlying assets and risk mitigation. In its operations, GORO acts as an arranger that selects, acquires, and manages real estate properties, and subsequently issues tokens representing such assets to users. In practice, the most critical legal risk faced by both GORO and its investors does not merely arise from digital system failure, but rather from disputes over the underlying asset itself. Given that investors only hold digital tokens representing a "right to economic benefits" (contractual rights under the law of obligations), and not "ownership rights over land" (property rights under the law of property), the legal position of investors is inherently weak. The actual risk emerges when the tokenized physical property is found to be subject to land disputes, unilaterally pledged as collateral to a bank by GORO's Special Purpose Vehicle (SPV), or seized through a court decision. In such circumstances, investors have no legal standing to assert ownership over the underlying property.

In the event of GORO's insolvency, token holders would only be classified as concurrent creditors (*kreditur konkuren*), sharing the remaining assets on a pari passu basis, rather than secured creditors (*kreditur separatis*) with priority rights. This creates a high risk of total loss of investment value. This structure raises concerns of conflict of interest, particularly where GORO simultaneously acts as token issuer, property manager, and secondary market provider. The OJK Sandbox evaluation under POJK No. 3 of 2024 highlights the importance of custody arrangements over the underlying real estate assets (AP Law Solutions, 2024). It must be ensured that the tokenized physical properties are not encumbered or pledged to third parties (e.g., banks) by the Special Purpose Vehicle (SPV) established by the platform. Furthermore, if the underlying asset becomes subject to legal disputes (e.g., civil litigation concerning land status), the GORO structure must provide a legal mitigation scheme ensuring that retail investors (token holders) are not exposed to asset seizure or loss as part of enforcement actions.

Third, regarding the intersection of regulatory jurisdictions (OJK versus Bappebti). The use of blockchain technology and tokenization by GORO raises

jurisdictional challenges. If GORO's tokens are classified as crypto-assets, their regulation would ordinarily fall under the Commodity Futures Trading Regulatory Agency (Bappebti). However, with GORO's inclusion in the "Exchanger – Tokenization of Property Ownership Benefits" cluster under the OJK Regulatory Sandbox, the regulator has taken a position that tokens backed by underlying real estate economic benefit rights are to be treated as financial technology instruments rather than pure commodities.

The liquidity mechanism offered by GORO—where users are able to trade tokens through an in-app repurchase system—also triggers strict supervisory scrutiny by OJK in relation to price discovery mechanisms. This is considered critical, as OJK must ensure that the secondary market within GORO's ecosystem genuinely reflects the fair value of the underlying property, rather than being driven by speculative token pricing manipulated by the platform's internal system. Through the analysis of these practices, GORO's successful completion of the Regulatory Sandbox process indicates that its digitally mediated contractual structure is considered legally valid (fulfilling the requirements of a valid contract under Article 1320 of the Indonesian Civil Code), and that its operational risks are deemed sufficiently mitigable. However, this still highlights the urgency of establishing a dedicated legal framework governing smart contract audit standards and providing absolute legal protection for holders of economic benefit rights within Indonesia's property law regime.

Conclusion

The regulatory framework for the Regulatory Sandbox established by the Financial Services Authority (OJK) within the Indonesian positive legal system has a clear legal basis through POJK No. 13/POJK.02/2018 concerning Digital Financial Innovation and is further strengthened by POJK No. 3 of 2024 concerning the Implementation of Financial Sector Technology Innovation (ITSK). The transition from the IKD regime to the ITSK regime reflects a legal reform that is more adaptive to the development of financial technology, expanding the scope of innovation, strengthening supervisory functions, and reinforcing consumer protection and technological security. However, the

current regulatory framework still contains legal gaps, particularly concerning the uncertainty of the legal status of actors during the testing phase and the overlapping jurisdiction among regulatory institutions, which may generate legal uncertainty in implementation.

The process and mechanism of implementing the Regulatory Sandbox by OJK are systematically conducted through several stages, namely application submission, eligibility assessment, testing phase, supervision, and final evaluation. In the context of GORO's participation as a Sandbox participant in 2024, this mechanism demonstrates that the Sandbox functions as a pre-licensing tool aimed at assessing the feasibility of innovation before obtaining full operational licensing. As a participant during the transition from IKD to ITSK, GORO is assessed under stricter standards, including obligations to adjust its business model, technological security, and consumer protection mechanisms. The final evaluation determines whether the innovation is eligible to proceed to the licensing stage, thereby positioning the Sandbox as a strategic mechanism in balancing innovation with financial system stability.

The legal challenges and implications arising from the implementation of the Regulatory Sandbox for digital financial innovations such as GORO include legal uncertainty during the testing phase, overlapping institutional authority, and the absence of standardized technical requirements in relation to cybersecurity and data protection. From a legal perspective, Sandbox participants are placed in a quasi-legal status, whereby they are permitted to operate within limited scope but do not yet possess full legal authorization. If the evaluation result is "Recommended," the innovation may proceed to the licensing stage and obtain further legal legitimacy. Conversely, a "Not Recommended" decision means that the innovation cannot be legally operated, resulting in business discontinuation and potential economic losses. In addition, there is a potential for legal disputes both in civil law between providers and consumers, as well as in administrative law concerning OJK decisions. Therefore, regulatory harmonization and strengthened legal protection are required to ensure that the Regulatory Sandbox provides legal certainty while simultaneously supporting sustainable digital financial innovation.

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Declaration of Generative AI Use

During the preparation of this manuscript, the author(s) used https://www.perplexity.ai/ to assist in improving the clarity, structure, and readability of the text. After using this tool, the author(s) thoroughly reviewed, edited, and verified the entire content to ensure it accurately represents their own ideas and interpretations. The author(s) take full responsibility for the integrity and originality of the published work.

Competing Interest

The author declares that there is no conflict of interest

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