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Regulatory Disharmony of NFTs and the Problematics of Smart Contract Validity: Implications for the Law of Obligations and Fiduciary Security

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Abstract. *This study analyzes the fundamental regulatory disharmony concerning Non-Fungible Tokens (NFTs) and smart contracts within the Indonesian Civil Law system. The root of the problem is identified as a rechtsvacuüm (legal vacuum) and the "ontological silence" of the Indonesian Civil Code (KUHPerdata), which fails to provide a definitive property status (zaak) for digital assets. This failure of the lex generalis triggers a "Regulatory Trilemma," wherein the status of NFTs is fragmented among the commodity regime (Bappebti), property law (KUHPerdata), and Intellectual Property Rights (Copyright Law). This normative-juridical research finds that such disharmony creates a domino effect in two realms. First, it threatens the substantive validity of smart contracts regarding the objective requirement of "a certain subject matter" (Article 1320 of the KUHPerdata) and confronts the adage 'code is law' with the principle of "good faith" (Article 1338 of the KUHPerdata). Second, the potential of NFTs as objects of fiduciary guarantee (UUJF) becomes practically paralyzed due to fundamental obstacles in valuation, registration (centralization vs. decentralization), and execution (private keys). Through a comparative law approach utilizing the Singaporean ruling of Janesh v. Chefpierre, this study recommends the adoption of "functional reasoning" through judicial rechtsvinding and legislative reform of the KUHPerdata to fill the legal void.*

Keyword*: Fiduciary; Non-Fungible Token (NFT); Smart Contract; Validity.*

1. INTRODUCTION

The acceleration of the digital economy, underpinned by blockchain technology, has given rise to fundamental new juridical instruments, primarily smart contracts and Non-Fungible Tokens (NFTs). This phenomenon is no longer marginal; in Indonesia, its adoption and economic potential have been confirmed, notably through the viral "Ghozali Everyday" phenomenon, which drew public and regulatory attention to the commercial

value of NFTs (V M Putri, 2022). The presence of these instruments constitutes a disruption that fundamentally challenges established conventional legal paradigms.

This challenge becomes exponential and highly problematic within the civil law system. The Civil Law system positions written law (codification) as the primary source of law. Meanwhile, the foundation of Indonesian civil law—the Civil Code (Kitab Undang-Undang Hukum Perdata or KUHPerdata)—is a codification inherited from the 19th-century colonial era. Philosophically and doctrinally, this codification was never designed to anticipate or regulate assets that are immaterial (digitally intangible), decentralized, and self-executing. Consequently, an unavoidable clash occurs between fast-moving technological innovation and rigid classical legal doctrines, creating significant legal uncertainty (M E Situmorang and A Salam, 2024).

The problematic issue lies with smart contracts. Through Law No. 11 of 2008, as amended by Law No. 1 of 2024 regarding Electronic Information and Transactions (ITE Law), formal recognition has been granted (Sudarto, 2025). Smart contracts can be classified as "Electronic Contracts" as defined in Article 1 point 17 of the ITE Law. Nevertheless, this recognition by the ITE Law is merely the surface layer of a much deeper problem. The substantive validity of an agreement in the Indonesian legal system is tested based on four cumulative conditions stipulated in Article 1320 of the Civil Code (S Fakhriah, S W P Hans, 2025). Civil law interprets an agreement as a subjective, dynamic, and contextual meeting of minds between parties. Conversely, smart contracts operate based on rigid, deterministic, and automatic (self-executing) binary logic.

Agreement is translated into lines of computer code that will be executed automatically and immutably when predetermined conditions are met. The prevailing adage is 'code is law'. This automation inherently negates, or at least complicates, the application of other fundamental principles in Indonesian contract law that demand flexibility and interpretive space, namely the principles of "good faith" (Article 1338 of the Civil Code) and "propriety" (Article 1339 of the Civil Code).

Legal complexity continues regarding the object of the agreement, namely the NFT. The juridical status of NFTs in Indonesia currently stands at the intersection of three different and unharmonized laws, creating fundamental ambiguity regarding the nature or ontology of what is actually owned and traded (H A Wahyuni, Y T Naili, 2025). This fragmentation can be synthesized as the "NFT Regulatory Trilemma." The fundamental uncertainty regarding the ontological status of NFTs as 'objects' (benda) creates a domino effect spreading to other legal realms, one of which is the law of security (guarantees). Theoretically, there is juridical potential to utilize NFTs as objects of fiduciary security. The legal basis is Law No. 42 of 1999 concerning Fiduciary Security (UUJF), which defines objects of fiduciary security as movable goods, both tangible and intangible (H A Wahyuni, Y T Naili, 2025).

However, this juridical potential faces immense practical and conceptual problems. The valuation problem; the value of NFTs is highly fluctuating, speculative, and heavily dependent on market sentiment which is difficult to predict. Conventional financial institutions accustomed to collateral with stable market values (such as land or vehicles) will face extraordinary difficulties in determining an accurate and reliable appraisal value for an NFT. The problem of registration and execution. Fiduciary security law in Indonesia requires the registration of security objects at a centralized Fiduciary Registration Office to provide legal certainty to creditors. This centralized and national

mechanism is philosophically and technically contrary to the decentralized and global nature of blockchain.

Amidst legal gaps (rechtsvacuüm) and doctrinal rigidity, jurisprudence from other jurisdictions can function as a mirror to reflect the weaknesses of the domestic legal system while offering alternative reasoning models. The case of Janesh s/o Rajkumar v Unknown Person ("CHEFPIERRE") SGHC 264 from the Singapore High Court serves as a highly relevant paradigmatic case study (ajah & Tann Asia, 2022). This case is important not because of factual similarity, but because it offers a different and adaptive legal reasoning from the Common Law system to resolve similar ontological problems. In the Janesh case, which centered on a dispute over the ownership of a Bored Ape Yacht Club (BAYC) NFT, the Singapore court had to decide whether an NFT constitutes 'property' that can be protected by an interlocutory proprietary injunction (C M S LawNow, 2022). This approach represents a conceptual leap demonstrating legal pragmatism. The focus shifts from the formalistic-positivistic approach of Indonesian Civil Law to the pragmatic approach of Common Law.

Previous studies on this topic tend to be partial and fragmented. A number of studies examine smart contracts only from the perspective of the ITE Law (A B Korengkeng, 2023), while other studies analyze NFTs solely as objects of copyright or examine them in isolation as objects of fiduciary security. There is a significant research gap in analyzing the doctrinal friction and regulatory disharmony that arises when these instruments are integrated into the broader civil law framework. The novelty of this research lies in its attempt to conduct a comprehensive juridical-synthetic analysis. This study does not merely examine one law in isolation, but critically analyzes how the law of obligations (Civil Code), property law (Civil Code), commodity trading law (Bappebti regulations), intellectual property law (Copyright Law), and security law (UUJF) clash and fail to interact harmoniously. This research fills that gap by utilizing Singaporean jurisprudence as an analytical comparative lens.

This research stems from the urgent need to analyze the ontological status of Non-Fungible Tokens (NFTs) within the civil law framework. The primary focus of the juridical analysis is to test how NFTs can be qualified as 'a specific matter' (object of agreement) and simultaneously as an 'object' (zaak) according to the provisions of the Civil Code (KUHPerdata). This problematic issue becomes increasingly complex given the partial regulatory fragmentation by Bappebti, which categorizes it as a crypto asset, and the Copyright Law, which touches on its intellectual property aspects. Such fundamental legal status uncertainty carries direct implications for the validity of smart contracts executing NFT transactions on the blockchain. Therefore, this research will deeply investigate the impact of the ambiguity of NFT status on the fulfillment of the substantive validity requirements of agreements.

Furthermore, this research will explore the aspect of practical utilization of NFTs in the security law system. By analyzing crucial problems surrounding valuation, registration mechanisms, and execution challenges, this article will map the juridical potential and obstacles of utilizing NFTs as objects of fiduciary security in Indonesia. To offer solutions to the existing normative deadlock, this research will turn to comparative analysis. By examining the decision of the Singapore High Court in the case of Janesh s/o Rajkumar v Unknown Person, this study aims to draw normative lessons from the application of functional legal reasoning by Common Law judges.

2. RESEARCH METHODS

This research is categorized as normative legal research, which focuses the analysis on written legal norms, doctrines, legal principles, and jurisprudence (A S Lubis and M A Nasution, 2020). This normative approach was selected because the core research problem lies in the existence of a legal vacuum (*rechtsvacuüm*) and regulatory disharmony in responding to new technological instruments, namely smart contracts and Non-Fungible Tokens (NFTs). The nature of this research is both descriptive-analytical and prescriptive.

The descriptive-analytical nature is realized through efforts to systematically expose, elaborate, and analyze the doctrinal friction and regulatory fragmentation that is occurring. This analysis specifically dissects the conflict between the Civil Code (*Kitab Undang-Undang Hukum Perdata* or *KUHPerdata*) as the *lex generalis* of private law, and various partial sectoral regulations, such as Law No. 1 of 2024 concerning the Second Amendment to Law No. 11 of 2008 regarding Electronic Information and Transactions (ITE Law), the Commodity Futures Trading Regulatory Agency (Bappebti) regulations concerning crypto assets, Law No. 28 of 2014 regarding Copyright (UUHC), and Law No. 42 of 1999 regarding Fiduciary Guarantees (UUJF). Furthermore, this research is also prescriptive; it does not merely stop at the analysis of *das sein* (the law currently in force) but moves to offer arguments and normative recommendations regarding *das sollen* (how the law ought to be) to overcome the identified legal impasse (R Hidayat, 2023): 201–15).

To dissect the complexity of the problem holistically, this research adopts a multi-aspect approach. The primary approach is the statute approach, used to examine in depth the substance, hierarchy, and synchronization—or rather, the lack thereof—of the relevant legal instruments. This approach is supported by the conceptual approach. The conceptual approach is essential for analyzing the meaning, evolution, and relevance of doctrines and civil law concepts (A Manullang, 2023).

Furthermore, to offer solutions to the normative deadlock in Indonesia, a comparative approach is employed. This approach critically compares the Indonesian Civil Law system, which is based on codification and tends to be rigid, with the Singaporean Common Law system, which is jurisprudence-based and has proven to be more adaptive. The Singaporean legal system is used not only as a comparison but also as a normative benchmark to evaluate the effectiveness of legal approaches in responding to technological innovation pragmatically(D P Sari and G M Putra, 2023). This comparative approach is executed specifically through a case approach. This research will conduct an in-depth analysis of the judge's legal reasoning in the Singapore High Court decision, *Janesh s/o Rajkumar v Unknown Person ("CHEFPIERRE")* SGHC 264. The focus of this case analysis is on the application of the *Ainsworth criteria* by Common Law judges to recognize NFTs as 'property' through functional reasoning—a method focusing on the asset's economic function rather than its physical form—as a precedent that can offer normative lessons (E Simanjuntak, 2022).

This research relies on three types of legal material sources. Primary legal materials consist of binding laws and regulations (*KUHPerdata*, ITE Law, Copyright Law, UUJF, and a series of Bappebti Regulations related to Crypto Assets) as well as jurisprudence (The *Janesh v. Chefpierre* SGHC 264 decision). Secondary legal materials include materials

providing explanations and critical analysis of primary legal materials, such as articles in reputable international and national legal journals, research reports, textbooks, theses, and dissertations relevant to the study topic. Tertiary legal materials are used as support to provide accurate technological context, such as legal dictionaries, legal encyclopedias, and technical non-legal articles explaining the workings of blockchain, smart contracts, and NFT ontology.

The technique for collecting legal materials is carried out through comprehensive library research (N Azizah and F Rahman, 2023). This includes online documentary research on international legal journal databases (such as HeinOnline, Westlaw, Scopus) and national ones (SINTA, Garuda), court decision portals (Supreme Court of the Republic of Indonesia and Singapore Courts), and official regulator websites (Bappebti and the Directorate General of General Legal Administration of the Ministry of Law and Human Rights). All collected legal materials are analyzed qualitatively. Legal norms in primary materials are analyzed using the systematic interpretation method, connecting one norm with another to precisely identify the location of regulatory disharmony and conflicts between existing legal regimes (A Pratama, 2025). The results of this entire analysis will be presented in a descriptive-analytical manner in the discussion chapter to answer the established problem formulation.

3. RESULTS AND DISCUSSION

3.1. The Regulatory Disharmony and the Ontological

NFTs into the Indonesian legal realm is through their designation as Crypto Assets by the Commodity Futures Trading Regulatory Agency (Bappebti). Through a series of regulations, such as Bappebti Regulation Number 11 of 2022 jo. Bappebti Regulation Number 4 of 2023, Bappebti categorizes Crypto Assets—including NFTs therein—as Commodities that can be legally traded on the Physical Market for Crypto Assets.

This recognition by Bappebti provides legal legitimacy for NFT trading activities in Indonesia. However, an in-depth analysis indicates that this recognition is highly partial and functional. The focus of Bappebti's regulation is purely administrative-transactional, limited to trade governance, licensing for physical crypto asset traders, transaction mechanisms, and consumer protection on the exchange. This regulation does not touch upon, let alone define, private ownership status or the ontological nature of NFTs as 'objects' (benda) within the realm of civil law (F Muhammad, 2021). Bappebti, therefore, only legitimizes the transaction, not its material status.

This partial legitimacy will undergo a significant transition following the promulgation of Law Number 4 of 2023 on the Development and Strengthening of the Financial Sector (UU P2SK). The regulatory and supervisory authority for crypto assets (including NFTs) will shift from Bappebti—which holds a "technical and commercial" approach—to the Financial Services Authority (OJK), whose approach is identified as more "legal and systemic." This transition is expected to shift the focus from mere commodities to more integrated digital financial instruments. Nevertheless, this transfer of administrative authority still does not resolve the fundamental ontological problem of NFTs within the Civil Code (KUHPerdata).

For NFTs in Indonesia's Civil Law system, the question is whether they can be qualified as 'objects' (*zaak*) as referred to in Article 499 of the Civil Code. Interpretatively, a pro-argument can be constructed. Article 499 of the Civil Code defines 'objects' as "every

good and every right that can be mastered by ownership rights." Legal experts define an object as something that can be owned, can be perceived (whether by the five senses or not), possesses value, and is viewed by the law as a single entity.

Functionally, NFTs meet these criteria: they can be exclusively owned (via a private key), possess economic value, and are transferable. Based on their characteristics, NFTs can be classified as 'intangible objects' in accordance with the provisions of Article 503 of the Civil Code and, furthermore, as 'intangible movable objects.'

Although this interpretative argument is logical, the Civil Code is a 19th-century codification legacy that was philosophically never designed to accommodate purely digital assets that are immaterial and decentralized. Without explicit legislative recognition (for example, through an amendment to Book II of the Civil Code), the status of NFTs as *zaak* remains in a "legal grey area." A number of juridical analyses explicitly state that there is currently a legal vacuum (*rechtsvacuüm*) regarding the status of NFTs in Indonesian property law.

The complexity of the "Regulatory Trilemma" peaks at the intersection of NFTs with Law Number 28 of 2014 on Copyright (UUHC). Herein lies the fundamental confusion for the public and market participants: the distinction between (1) ownership of the NFT token (as a unique digital certificate on the blockchain), and (2) ownership of the Copyright (moral rights and economic rights) of the digital work (image, music, etc.) represented by said token.

Firm juridical analysis confirms that the purchase of an NFT does not automatically imply a transfer of economic rights or moral rights over the underlying work. In many cases, what is traded is merely the token itself. The buyer may only acquire a limited license for non-commercial use, or even acquire no rights whatsoever other than the right to resell the token.

This creates a significant contradiction in law enforcement. The UUHC adheres to the declarative principle, where copyright protection arises automatically when a work is created, without a registration obligation. However, practices in NFT marketplaces are quite the opposite. Anyone (including parties who are not the creators) can perform minting (token printing) of another person's work and be "considered the owner" on the blockchain as long as there is no complaint. This practice triggers rampant copyright infringement and fraud, while simultaneously demonstrating a legal void in the IPR enforcement mechanism on decentralized blockchain platforms.

The synthesis of this Regulatory Trilemma is: an individual in Indonesia can "legally" trade NFTs (according to Bappebti), yet their ownership status over the "object" is "uncertain" (according to the Civil Code), and they "most likely do not" possess any commercial rights over the image they have purchased (according to the UUHC). This is a tangible manifestation of fundamental regulatory disharmony.

3.2. Implications of Ontological Uncertainty on the Validity of Smart Contracts

The objective requirement of Article 1320 of the Civil Code is the existence of "a specific subject matter" (*een bepaald onderwerp*). This requirement mandates that the object of the agreement must be clear, determinable, and be a legally valid object. Here occurs the propagation of the first causality problem from property law to contract law.

As analyzed in depth in the previous sub-chapter, the ontological status of the NFT as an 'object' (*zaak*) itself remains in a *rechtsvacuüm* and a "legal grey area." If the fundamental legal status of the object of the agreement itself (the NFT) is uncertain or not even definitively recognized by the *lex generali* (Book II of the Civil Code on Property), then the "specific subject matter" requirement is substantively threatened with non-fulfillment. The failure of ontological definition in property law directly threatens the validity of transactions in contract law. The juridical consequence of the non-fulfillment of this objective requirement is that the smart contract agreement potentially becomes null and void by law (*van rechtswege nietig* or *void ab initio*).

The threat to the validity of smart contracts comes not only from objective requirements but also fundamentally threatens subjective requirements. First, regarding the "competency" (*bekwaamheid*) requirement of the parties. In smart contracts, the parties generally do not know each other's real identities. They interact through digital wallet addresses which are pseudo-anonymous. This raises a crucial problematic: how can the legal system verify that the party behind the wallet address is a competent legal subject (of age and not under conservatorship)? Transactions conducted anonymously or pseudo-anonymously face serious validity challenges due to the "absence of identifiable legal capacity." Second, and fundamental, is the challenge to the "agreement" (*toestemming* or *consensus ad idem*) requirement. Indonesian civil law interprets agreement as a meeting of minds that is subjective, dynamic, and contextual between the parties. Conversely, smart contracts operate based on the adage 'code is law'—a rigid, deterministic binary logic that is executed automatically (self-executing). The agreement is translated into lines of computer code.

Herein lies a deep doctrinal friction. The rigid automation of 'code is law' is inherently in direct opposition to the fundamental principles that form the spirit (*ruh*) of Indonesian contract law, namely:

1. Principle of Good Faith (Article 1338 Civil Code): This principle demands that agreements be executed with honesty and good intentions, providing room for flexibility and interpretation in the event of unfair or unforeseen circumstances. The deterministic and immutable nature of smart contracts inherently negates the space for the application of good faith.

2. Principle of Propriety (Article 1339 Civil Code): This principle states that agreements bind not only to what is written but also to what is required by propriety according to the nature of the agreement. Smart contracts lack the ability to assess "propriety." They will only execute code mechanistically, even if the result of such execution (e.g., due to a bug or code error) deviates from the initial intent of the parties and causes unjust loss.

3.3. Juridical Potentials and Obstacles of NFTs as Objects of Fiduciary Guarantee

Theoretically, the positive legal foundation for the utilization of NFTs as credit collateral is available. First, Law Number 42 of 1999 on Fiduciary Guarantee (UUJF) explicitly defines the object of fiduciary guarantee as "movable objects, whether tangible or intangible." Given that NFTs can be argued as 'intangible movable objects,' they can conceptually be included within the scope of UUJF objects.

This potential is significantly strengthened by the issuance of Government Regulation Number 24 of 2022 on the Implementing Regulation of the Law on Creative Economy

(PP Ekraf). This regulation is a progressive step by the government that explicitly recognizes that Intellectual Property Rights (IPR)—which are often attached to or represented by NFTs—can be used as objects of financing by both bank and non-bank financial institutions. Thus, IPR-based NFTs (specifically Copyright) have a dual potential to be used as objects of fiduciary guarantee.

Although this theoretical potential appears promising, in practice, it becomes totally paralyzed when confronted with three functional and fundamental obstacles that remain unsolved (Kurniawan, 2025).

1. Valuation Problem: This is the biggest obstacle. The value of NFTs is highly volatile, speculative, and heavily dependent on market sentiment which is difficult to predict. Conventional financial institutions (banking) accustomed to stable collateral (such as land or vehicles) do not possess reliable and standardized appraisal methodologies for digital assets that are intangible and volatile. As revealed by legal practitioners and the OJK, the banking sector "tends to reject" IPR (and its derivatives like NFTs) as pure fiduciary collateral due to "valuation issues."

2. Registration Problem: Indonesian fiduciary guarantee law (UUJF) requires the registration of the collateral object at the Fiduciary Registration Office of the Ministry of Law and Human Rights. This registration is national and centralized, aiming to provide legal certainty (*droit de suite*) and preferential rights for creditors. This centralized and national system is philosophically and technically contrary to the nature of blockchain which is global, decentralized, and pseudo-anonymous.

3. Execution Problem: Even if valuation and registration can be overcome, the execution mechanism (*parate executie*) becomes the final hurdle. Practitioners themselves question, "how is the execution upon copyright?" How can a bailiff "seize" or "execute" a digital asset whose absolute control is protected by the debtor's private key which is confidential and private?

Analysis of these various obstacles shows that all functional problems (valuation, registration, and execution) ultimately lead to the same root problem discussed at the beginning of this chapter: the uncertainty of the ontological status of NFTs as 'objects.' Because NFTs are "not a common thing" and there is still "low awareness" among the public and financial institutions regarding their legal status, the entire structure of guarantee law (which is an accessory property right attached to the main property right) cannot stand firmly on a fragile ontological foundation. Consequently, PP Ekraf becomes a regulation that is theoretically potent yet practically impotent.

3.4. Singapore Jurisprudence (Janesh v. Chefpierre): Lessons for Indonesian Civil Law Reform

The paradigmatic case study used is the decision of the Singapore High Court, Janesh s/o Rajkumar v Unknown Person ("CHEFPIERRE") SGHC 264. This case centered on a dispute over the ownership of a rare NFT from the Bored Ape Yacht Club (BAYC) collection used as collateral in a loan agreement on a decentralized lending platform. The court was faced with a fundamental question: is an NFT a 'property' capable of being protected by an interlocutory proprietary injunction? Instead of getting trapped in formalistic-doctrinal debates regarding the definition of 'object' in legislation (as is the

case in Indonesia), the Singapore judge applied a functional approach. The court's focus shifted from the question "what is the physical form of this asset?" to "does this asset function like property?" To answer this functional question, the court adopted criteria from the English case, National Provincial Bank Ltd v Ainsworth AC. The Court concluded that NFTs are property because they meet these four functional criteria:

1. Definable (Can be uniquely defined via metadata, hash, and specific token ID on the blockchain).

2. Identifiable by third parties (Ownership can be identified by third parties via public records on the blockchain showing which wallet address controls it).

3. Capable of assumption by third parties (Can be assumed/transferred, because the owner of the private key has exclusive control to transfer it, and the market recognizes such transfer).

4. Degree of permanence (Possesses a degree of permanence and stability equivalent to electronic data representing money in bank accounts).

The Janesh case highlights an "irony of legal certainty" when comparing the Indonesian Civil Law system with the Singapore Common Law. The Indonesian Civil Law system, legally philosophically designed to create legal certainty through codification (Civil Code), actually produces significant uncertainty and legal vacuums (*rechtsvacuüm*) when dealing with new technological innovations. This paradigmatic contrast is summarized in the following table.

Table 1: Comparison of NFT Legal Frameworks in Indonesia and Singapore

Aspect of Analysis	Indonesia (Civil Law System)	Singapore (Common Law System)
Status as Property/Object	Uncertain / Grey Area. Depends on rigid analogical interpretation of Article 499 of Civil Code and untested in court.	Recognized as Property. Through Jurisprudence (*Janesh v. Chefpierre*); meets *Ainsworth* functional criteria.
Main Legal Basis	Codification & Administrative Regulation. Fragmented (Civil Code, ITE Law, Copyright Law, Bappebti Reg.).	Jurisprudence (Judicial Decisions). Supported by Common Law principles regarding property.
Ownership Protection Mechanism	Unclear. Depends on general civil lawsuits (default, tort) with weak property foundations.	Clear & Applied. Proprietary Injunction (asset freezing order).
Legal Flexibility	Low. Tends to wait for slow legislative changes (Civil Code amendment). Judges are passive (*la bouche de la loi*).	High. Judges are adaptive, able to conduct legal finding (*judge-made law*) to respond to new technologies pragmatically.

The normative lesson that can be drawn from Singapore jurisprudence is not to adopt the Common Law system, but to adopt its functional reasoning method in responding to

innovation. Based on this comparative analysis, this research offers two normative recommendations (*das sollen*) to fill the legal void in Indonesia:

1. Legislative Reform (Long Term): The most ideal and comprehensive solution is through legislative reform. This demands an amendment to Book II of the Civil Code (or the ratification of a new Civil Law Bill) to explicitly recognize "digital assets" (*digitale activa*) as a new category of 'objects', namely intangible movable objects. This would provide the highest ontological legal certainty and resolve the existing root problem.

2. Legal Finding / *Rechtsvinding* (Short Term): Waiting for legislative reform will take a long time, while the market and technological disputes continue to move fast. The most urgent short-term solution is through the judiciary. Judges in Indonesia, when faced with disputes over the ownership of NFTs or other digital assets, are encouraged not to be passive as "mouthpieces of the law" (*la bouche de la loi*). Judges can and should conduct legal finding (*rechtsvinding*) by adopting functional reasoning (similar to the *Ainsworth* criteria) to fill the legal void. This progressive action is essential for the achievement of justice and legal certainty (*rechtssicherheit*) for digital economic actors in Indonesia.

4. CONCLUSION

Conclusion The root cause of all juridical problems regarding Non-Fungible Tokens (NFTs) and smart contracts in Indonesia is the *rechtsvacuüm* and "ontological silence" of the Civil Code (KUHPerdata). The failure of the *lex generalis* (Article 499 Civil Code) in providing a definitive property status for digital assets has triggered a "Regulatory Trilemma": the fragmentation of NFT status between the Bappebti commodity regime, property law, and IPR (UUHC). This ontological disharmony creates a direct domino effect on contract law. This research concludes that smart contracts for NFT transactions are in a fragile juridical position. The uncertainty of the object threatens the fulfillment of the objective requirement of "a specific subject matter" (Article 1320 Civil Code), resulting in being null and void by law (*void ab initio*). Furthermore, the rigid adage *code is law* proves to be in direct opposition to the flexible spirit of Indonesian contract law, namely the principle of "good faith" (Article 1338 Civil Code). This chain of causality continues into the realm of guarantee law. The theoretical potential of NFTs as fiduciary guarantee objects (based on UUJF and PP Ekraf) becomes totally paralyzed and "practically impotent." Three main functional obstacles are identified: (1) valuation problems of speculative assets; (2) registration problems, which create a conflict between the centralized Ministry of Law and Human Rights system and the decentralized blockchain; and (3) execution problems (*parate executie*) against assets protected by private keys. This research asserts that these three functional obstacles are merely symptoms. The root problem remains the same: the uncertainty of the ontological status of NFTs as 'objects.' It is impossible to build an accessory property right (guarantee) upon a main property right foundation (ownership) whose status is *in limbo*.

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