

UNAUTHORIZED TRANSFERS OF FIDUCIARY COLLATERAL IN DIGITAL COMMERCE: A COMMERCIAL LAW ANALYSIS OF DEBTOR MISCONDUCT AND THIRD-PARTY PROTECTION

Yeni Triana *, Iriansyah **, Yalid **, Azwar **

* Corresponding author, Lancang Kuning University, Pekanbaru, Indonesia
Contact details: Lancang Kuning University, Km 8 Road Yos Sudarso, 28265 Pekanbaru, Indonesia
** Lancang Kuning University, Pekanbaru, Indonesia



Abstract

How to cite this paper: Triana, Y., Iriansyah, Yalid, & Azwar. (2026). Unauthorized transfers of fiduciary collateral in digital commerce: A commercial law analysis of debtor misconduct and third-party protection. *Corporate Law & Governance Review*, 8(2), 177–189.
<https://doi.org/10.22495/clgrv8i2p16>

Copyright © 2026 The Authors

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0).
<https://creativecommons.org/licenses/by/4.0>

ISSN Online: 2664-1542

ISSN Print: 2707-1111

Received: 15.12.2025

Revised: 24.02.2026; 12.03.2026; 04.04.2026

Accepted: 28.04.2026

JEL Classification: K15, K24, K220

DOI: 10.22495/clgrv8i2p16

This article examines the governance and regulatory challenges arising from the unauthorized transfer of fiduciary collateral in digital commerce, a phenomenon that destabilizes creditor protection, market integrity, and the functional reliability of secured transactions systems. The study addresses the gap between fiduciary security doctrine and high-velocity digital marketplaces. Using a normative juridical method, this research analyses Indonesia's Law No. 42 of 1999 alongside a qualitative sample of relevant judicial precedents and statutory frameworks, comparing them with the Uniform Commercial Code (UCC) Article 9 and the Personal Property Securities Act 2009 (PPSA). The findings demonstrate that unauthorized transfers constitute direct violations under Article 23(2), yet the limited accessibility of the fiduciary registration system stifles enforcement and increases systemic risk. Unlike prior studies focused on execution procedures, this research identifies the closed registration architecture as a governance deficiency that fosters debtor opportunism. Comparative analysis indicates that transparency-based notice-filing systems reduce informational asymmetry and enhance certainty. This study concludes that strengthening fiduciary protection requires integrating registry accessibility and technology-enabled verification protocols to restore systemic stability within the digital economy.

Keywords: Fiduciary Collateral, Digital Market Governance, Unauthorized Transfer, Secured Transactions, Registry Transparency, Creditor Protection

Authors' individual contribution: Conceptualization — Y.T.; Methodology — Y.; Validation — A.; Formal Analysis — I.; Investigation — Y.; Resources — A.; Data Curation — Y.T.; Writing — Original Draft — Y.T.; Writing — Review & Editing — Y.; Supervision — Y.T.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

The expansion of digitally mediated commerce has fundamentally transformed the circulation of

movable assets, altering transactional behavior and redistributing legal risk across market actors. Digital marketplaces facilitate accelerated exchanges and high asset mobility, intensifying the structural

complexity of secured transactions (Haentjens & Lehmann, 2023; Wilson et al., 2019). Globally, secured transactions reform emphasizes transparency-based collateral registries and digital verification systems as critical components of credit market stability (United Nations Commission on International Trade Law [UNCITRAL], 2007; World Bank, 2010). While digital platforms enhance economic efficiency, they simultaneously expose vulnerabilities in traditional legal mechanisms designed to regulate asset encumbrance and creditor protection.

Within this evolving landscape, fiduciary security remains central to Indonesia's secured transactions regime. Law No. 42 of 1999 on Fiduciary Security establishes a proprietary (*in rem*) security right over movable assets, granting creditors priority rights (*droit de préférence*) and the right to follow the collateral (*droit de suite*) upon debtor default. Article 23(2) explicitly prohibits debtors from transferring, pawning, or leasing fiduciary collateral without prior written consent from the creditor. This prohibition reflects the protective logic of proprietary security: although physical possession remains with the debtor, legal control over disposition is restricted to preserve creditor priority. As emphasized in comparative commercial law scholarship, proprietary security regimes rely not only on contractual obligations but also on institutional structures that ensure enforceability and public notice (Goode, 2010; UNCITRAL, 2007).

However, the migration of commercial transactions into digital marketplaces complicates the operational effectiveness of this statutory design. In digital environments characterized by anonymity and fragmented information flows, unauthorized transfers of fiduciary collateral frequently bypass immediate detection. Although fiduciary security is registered electronically in Indonesia, the current system lacks the functionality of a fully accessible public notice mechanism. This institutional limitation contrasts with transparency-based regimes, such as Uniform Commercial Code (UCC) Article 9¹ and the Personal Property Securities Act 2009 (PPSA), which utilize publicly searchable notice-filing systems to reduce hidden security interests (Wilson et al., 2019; World Bank, 2010).

This configuration generates a structural tension between statutory clarity and enforcement effectiveness. On one hand, the legal prohibition against unauthorized transfer is doctrinally unambiguous. On the other hand, digital marketplaces amplify informational asymmetry and moral hazard risks, diluting the functional strength of proprietary protection. This dynamic reflects classical theories of information asymmetry and agency costs (Akerlof, 1970; Jensen & Meckling, 1976), where unequal access to information fosters opportunistic behavior. In digital consumer markets, such asymmetry is intensified by platform-based contracting and limited verification mechanisms (Ben-Shahar, 2009; Organisation for Economic Co-operation and Development [OECD], 2016).

Despite growing scholarship on secured transactions reform, limited attention has been directed toward the intersection of fiduciary security enforcement and digital marketplace governance in Indonesia. Existing analyses tend to focus either on doctrinal interpretation or broader e-commerce

challenges, without sufficiently integrating proprietary theory with digital governance dynamics (Haentjens & Lehmann, 2023). Consequently, it remains unclear whether Indonesia's fiduciary security regime remains institutionally effective in the era of digital asset circulation.

Against this theoretical background, the present study addresses the following research question:

RQ: To what extent does Indonesia's fiduciary registration architecture effectively protect creditors and good-faith third parties within high-velocity digital marketplaces?

This study addresses the aforementioned gap by examining unauthorized transfers of fiduciary collateral through a normative doctrinal and comparative legal approach. Moving beyond a purely textual interpretation, the analysis situates fiduciary security within broader debates on proprietary protection and digital governance. The central argument is that while Law No. 42 of 1999 provides conceptual certainty, institutional design limitations, particularly regarding registry accessibility, constrain enforcement efficacy and generate systemic vulnerability in digitally mediated transactions.

By articulating the relationship between proprietary security rights and digital governance, this research contributes to the academic discourse on adaptive regulatory design. It also provides a conceptual foundation consistent with international reform guidance emphasizing registry accessibility and digital integration (UNCITRAL, 2020).

The rest of the paper is structured as follows. Section 2 develops the theoretical framework. Section 3 explains the research methodology. Section 4 presents the research findings. Section 5 provides an analytical discussion. Section 6 outlines limitations and directions for future research and concludes the study.

2. LITERATURE REVIEW

2.1. Secured transactions theory and the characteristics of fiducia

Scholarly discussions on fiduciary security in Indonesia have traditionally focused on creditor enforcement, execution procedures, and the formal validity of agreements under Law No. 42 of 1999. However, broader secured-transactions scholarship emphasizes that the effectiveness of non-possessory security rights depends not only on formal validity but also on robust institutional publicity and enforceability frameworks (Gilmore, 1990; Goode, 2010; UNCITRAL, 2007). Furthermore, empirical and comparative analyses suggest that deficiencies in registration mechanisms alter legal risk, potentially undermining creditors' effective control over collateral (World Bank, 2010; Warren & Walt, 2010).

Other studies address legal protection concerning unauthorized asset disposition, focusing primarily on contractual and procedural dimensions. Law-and-economics theory posits that when monitoring and verification mechanisms are weak, opportunistic behavior and moral hazard increase (Posner, 2007; Landes & Posner, 1987). While these contributions clarify the doctrinal aspects of fiduciary enforcement, they largely frame disputes as issues of breach, execution delay, or administrative compliance, often overlooking broader systemic vulnerabilities.

¹ <https://www.law.cornell.edu/ucc/9>

2.2. Digital assets and emerging collateral governance

The evolution of digital commerce has introduced new forms of movable property, including digitally mediated consumer goods and crypto assets, which challenge traditional secured-transactions frameworks. Comparative scholarship on digital assets demonstrates an increasing tension between technological innovation and existing statutory categories (Haentjens & Lehmann, 2023).

In the broader comparative context, digital asset governance is closely linked to transparency mechanisms and registry accessibility. Digitally transferable assets require regulatory architectures capable of reducing informational asymmetry and ensuring legal traceability (Haentjens & Lehmann, 2023; Hillman & Rachlinski, 2002).

These developments suggest that secured transactions systems must adapt to digitally networked markets where speed and anonymity amplify risk exposure, particularly in platform-based consumer environments (OECD, 2016; Mackenzie-Gray Scott, 2025).

2.3. Transparency-based registration models and systemic risk allocation

Comparative legal analysis emphasizes the importance of notice-filing systems and publicly searchable registries in reducing transaction costs and moral hazard. Transparency-based regimes, such as those established in UCC Article 9 and the PPSA, allocate risk through public information accessibility rather than relying solely on private documentation (Cuming et al., 2022; Akseli, 2011).

Such systems aim to balance creditor protection with third-party certainty by minimizing hidden security interests. International reform frameworks further assert that registry transparency is a structural prerequisite for market-wide credit reliability (UNCITRAL, 2020; World Bank, 2010).

Recent international scholarship highlights that governance design, not merely enforcement intensity, determines the resilience of secured credit markets in digital environments. Where registration systems are closed or inaccessible, systemic risk tends to shift toward market participants lacking verification capacity (Kozolchyk, 2014; DiMatteo, 2016).

2.4. Identified gap and theoretical positioning

Despite substantial literature on fiduciary enforcement, electronic registration, and digital assets, existing studies rarely integrate these disparate strands into a unified governance analysis. Specifically, there is a lack of scholarship examining how Indonesia's closed fiduciary registration architecture interacts with high-velocity digital marketplaces to reallocate systemic risk among creditors, debtors, and third parties (UNCITRAL, 2007; OECD, 2016).

Therefore, this study advances the literature by conceptualizing unauthorized transfers of fiduciary collateral not merely as procedural or contractual violations, but as systemic manifestations of governance-level deficiencies embedded in institutional design. By integrating doctrinal analysis with digital market governance theory and comparative transparency-based models, this

research addresses the structural lacuna identified in prior scholarship and directly informs the research question articulated in Section 1.

3. RESEARCH METHODOLOGY

This study employs a normative legal research design grounded in doctrinal analysis and comparative legal methodology. Normative legal research examines law as a coherent system of norms, principles, and institutional structures, focusing on statutory interpretation, conceptual clarification, and systematic legal reasoning rather than empirical measurement (Dworkin, 1986; McConville & Chui, 2007). This approach is particularly appropriate for evaluating regulatory architecture and governance design within secured transactions systems, where structural coherence and risk allocation are determined primarily by normative frameworks rather than behavioral data (Samuel, 2013; Smits, 2014).

The research utilizes three categories of legal materials:

- Primary legal sources, including Law No. 42 of 1999 on Fiduciary Security, implementing regulations, and relevant Indonesian court decisions addressing unauthorized transfers of fiduciary collateral.

- Secondary legal sources, comprising peer-reviewed journal articles, scholarly monographs, and doctrinal commentaries on fiduciary law, secured transactions reform, and digital asset governance (2021–2026).

- Comparative legal materials, particularly statutory frameworks and scholarly analyses concerning UCC Article 9 and the PPSA (Kraakman et al., 2017; Cuming et al., 2022).

To ensure contemporary relevance, legal materials were collected and analyzed from January 2024 to February 2026, incorporating recent scholarship and regulatory developments pertaining to digital commerce and electronic registration systems.

Analytically, this study applies a multi-dimensional approach: First, statutory interpretation is used to examine the scope of Article 23(2) of the Fiduciary Security Act and its implications for debtor-initiated collateral transfers (Dworkin, 1986). Second, conceptual analysis evaluates the coherence between fiduciary doctrine and digital market governance structures (Smits, 2014; Samuel, 2013). Finally, comparative analysis assesses how transparency-based notice-filing systems allocate systemic risk and reduce informational asymmetry in digitally mediated markets (Kraakman et al., 2017; UNCITRAL, 2007).

Rather than measuring enforcement outcomes empirically, this methodology evaluates whether Indonesia's closed fiduciary registration architecture structurally generates governance vulnerabilities. The focus is consequently institutional and systemic: identifying whether regulatory design itself contributes to moral hazard and third-party exposure in high-velocity digital marketplaces (Posner, 2007). This methodological orientation directly supports the study's central research question concerning systemic risk allocation and governance-level deficiencies within Indonesia's fiduciary security framework.

4. RESEARCH RESULTS

The findings reveal a disjunction between the formal strength of fiduciary security as a proprietary or in rem security right and the operational constraints encountered within digitally mediated markets. While the statutory prohibition of unauthorized transfer is normatively explicit, enforcement in practice is mediated by institutional transparency mechanisms that remain structurally limited (UNCITRAL, 2007; World Bank, 2010). Consequently, the effectiveness of creditor protection depends not only on legislative clarity but also on the capacity of the registration system to function as a credible public notice infrastructure (Cuming et al., 2022; Warren & Walt, 2010).

4.1. Debtor liability and the concept of active breach

Article 23(2) of Law No. 42 of 1999 on Fiduciary Security expressly prohibits debtors from transferring, pawning, or leasing fiduciary collateral without prior written consent from the creditor. This prohibition reflects the proprietary nature of fiduciary security, where ownership of the collateral remains formally with the debtor, but control and disposal rights are legally restricted (Gilmore, 1990; Goode, 2010).

Unauthorized transfer, therefore, constitutes not only a contractual non-performance but also an active breach of a statutory obligation. Comparative secured-transactions scholarship recognizes that unauthorized disposition undermines the security function and priority structure of proprietary rights (Cuming et al., 2022; Akseli, 2011). From a doctrinal standpoint, the statutory framework provides a clear normative basis for debtor liability; however, practical enforcement is complicated by the emergence of digitally mediated marketplaces (Haentjens & Lehmann, 2023).

4.2. Legal implications for creditors: proprietary rights and enforcement constraints

Fiduciary security in Indonesia grants creditors proprietary rights comparable to the *droits de préférence* and *de suite* (Goode, 2010). These rights entitle creditors to priority satisfaction and the right to follow the collateral even after transfer (Gilmore, 1990).

However, enforcement effectiveness depends on the institutional environment. Although fiduciary guarantees must be registered electronically, the registration database is not publicly searchable. As a result, third parties cannot independently verify encumbrance status prior to acquisition. International reform guidance emphasizes that registry accessibility is essential to ensure the practical enforceability of proprietary security rights (UNCITRAL, 2020; World Bank, 2010).

Doctrinal evaluations of electronic registration systems indicate that limited transparency weakens the practical enforceability of proprietary rights, particularly in transactions involving remote digital sales (Warren & Walt, 2010; Cuming et al., 2022). In digital marketplaces characterized by rapid circulation of goods, creditors face significant barriers in tracing and repossessing collateral (Haentjens & Lehmann, 2023). Thus, while fiduciary

law formally protects creditor rights, operational enforcement constraints reduce their practical effectiveness in digital commerce environments.

4.3. Legal implications for good-faith third parties and moral hazard risks

The interaction between debtor possession and limited registry transparency creates legal uncertainty for good-faith third parties. Purchasers in digital marketplaces typically rely on visible possession and platform-based assurances rather than independent registry verification (Hillman & Rachlinski, 2002).

This situation generates a moral hazard risk, where debtors can exploit informational asymmetry to dispose of encumbered assets without immediate detection. Law-and-economics scholarship explains that informational asymmetry structurally increases opportunistic behavior in market transactions (Akerlof, 1970; Posner, 2007). Comparative scholarship further emphasizes that transparency mechanisms are essential to mitigate such risks in secured transactions systems (Haentjens & Lehmann, 2023).

In the absence of publicly accessible verification tools, good-faith third parties may acquire collateralized goods without knowledge of existing security interests, potentially exposing them to future repossession claims. This tension illustrates the friction between proprietary protection and transactional certainty in digital markets.

4.4. Comparative observations and digital governance implications

Comparative secured-transactions regimes provide alternative institutional models. Under UCC Article 9 and the PPSA, notice-filing systems are publicly searchable and function as mechanisms for risk distribution and market transparency (Cuming et al., 2022; Akseli, 2011).

International guidance, including the UNCITRAL Legislative Guide on Secured Transactions (2007), underscores the importance of accessibility and transparency in promoting systemic stability.

Compared to these models, Indonesia's fiduciary registration system remains institutionally limited regarding public verification. In digital commerce contexts, where asset mobility and transactional speed are significantly increased, such limitations amplify enforcement challenges and risk exposure (OECD, 2016).

These findings demonstrate that the effectiveness of fiduciary protection in digital markets depends not only on statutory prohibitions but also on registry design, transparency, and regulatory governance.

5. DISCUSSION OF THE RESULTS

5.1. The juridical construction of debtor liability in the unauthorized transfer of fiduciary collateral

5.1.1. Normative analysis of the prohibition on transferring fiduciary collateral

The prohibition against transferring fiduciary collateral without the creditor's consent, as prescribed in Article 23(2) of Law No. 42 of 1999 on

Fiduciary Security, is an expression of fundamental principles governing proprietary security rights in Indonesian law rather than an ordinary contractual clause. As Goode (2010) explains, proprietary security regimes are characterized by mandatory rules designed to protect the stability of credit markets and the integrity of secured transactions. This view is consistent with comparative scholarship, which recognizes that mandatory limitations on debtor disposition are central to preserving the functional reliability of collateralized credit (Kozolchyk, 2014; UNCITRAL, 2007). Consequently, Article 23(2) performs a dual normative function: 1) a private-law limitation on party autonomy (*autonomie de la volonté*), and 2) a public-law instrument safeguarding the credit system by securing creditors' expectations.

Doctrinally, Article 23(2) imposes two complementary obligations upon the debtor: the duty to preserve the physical and economic integrity of the collateral, and the prohibition against any act that diminishes the collateral's ability to serve as a source of repayment. These obligations are mandatory because they relate to the proprietary rights of secured creditors, whose priority position is obtained through the fiduciary agreement and registration. This aligns with the principle of *bona fides*, which requires parties exercising possessory control over encumbered assets to act consistently with good faith and not impair secured rights (Goode, 2010; Satrio, 2018).

A proper interpretation of Article 23(2) requires employing established methods of normative legal reasoning, including textual, systematic, historical, and teleological interpretation. A textual reading highlights the imperative nature of the clause, while a systematic interpretation links it with other provisions in the Fiduciary Law, the Civil Code, and the rules governing electronic contracting under Law No. 11 of 2008 (as amended by Law No. 19 of 2016). Historically, the fiduciary system emerged to accommodate modern financing needs where borrowers retain physical possession of movable assets. Teleologically, the provision aims to ensure creditor protection and legal certainty. As Kozolchyk (2014) emphasizes, secured transactions law exists to maintain an equilibrium between credit access, commercial fluidity, and systemic reliability.

Despite the mandatory character of the prohibition, it interacts with the principle of freedom of contract. While Indonesian private law recognizes party autonomy, such autonomy cannot override public-order norms or mandatory provisions protecting the credit system (Goode, 2010; Satrio, 2018). Clauses attempting to weaken or eliminate the prohibition in Article 23(2) are unenforceable, as they contradict the protective purpose of fiduciary security.

In digital contracting environments, the practical effectiveness of the prohibition is often diminished. Standard-form electronic contracts are typically unread or poorly understood by debtors, creating significant information asymmetry (Ben Shahr, 2009; Hillman & Rachlinski, 2002). Thus, the debtor's awareness of the prohibition may be low even though its legal validity remains intact. This underscores the need for stronger disclosure requirements, clearer warnings within electronic agreements, and enhanced validity standards, as recommended in international digital commerce governance frameworks (OECD, 2016).

From a remedial perspective, violations of Article 23(2) generate layered legal consequences. Civil consequences include breach of contract, claims for damages, and the invalidation of subsequent transfers. Proprietary consequences arise because the creditor retains the right to reclaim or execute the collateral under *droit de suite* (Goode, 2010). In addition, criminal liability may arise if the debtor's conduct satisfies the elements of misappropriation under national criminal law (Satrio, 2018).

Normatively, these remedies require evidentiary mechanisms capable of addressing digital transactions, where transfers often occur through online platforms and leave limited verifiable records. These challenges highlight the global need for secured transactions law to adapt to digital commercial environments through enhanced verifiability and technological integration (UNCITRAL, 2007).

Ultimately, Article 23(2) should be understood as a normative cornerstone for broader reform. As international best practices show, including UCC Article 9 in the United States and the PPSA in Australia, effective fiduciary systems must be supported by publicly accessible registries and integrated verification tools (UNCITRAL, 2007; World Bank, 2010). Without these mechanisms, the prohibition remains merely symbolic, failing to provide the creditor security and market stability it was intended to ensure.

5.1.2. Conceptual analysis: Active breach and debtor moral hazard

The transfer of fiduciary collateral without the creditor's consent constitutes a form of active breach of contract—a violation arising not from omission but from deliberate affirmative conduct directly contradicting contractual obligations. As Goode (2010) explains, active breaches are inherently more serious than passive breaches, such as delayed payment, because they attack the structural integrity of secured credit arrangements. This distinction is consistent with general contract theory, which recognizes intentional interference with agreed risk allocation as a fundamental violation (McKendrick, 2020). In the fiduciary context, the debtor's intentional disposal of collateral not only violates a contractual duty but also undermines the risk-mitigation function upon which secured lending is based.

From the standpoint of secured transactions theory, the debtor's disposition of the collateral represents a direct assault on the creditor's proprietary security interest. Fiduciary security is designed to ensure that the creditor retains a preferential and continuing right over the collateral. When the debtor transfers the collateral unlawfully, the creditor's priority position becomes practically unenforceable, turning a structured secured credit relationship into an unsecured one. This aligns with Kozolchyk's (2014) observation that secured credit systems depend on the reliability of collateral as a continuous asset base. Similarly, the economic analysis of secured credit emphasizes that collateral functions as a risk-reduction device whose impairment increases systemic lending costs (Posner, 2007).

The complexity of the problem increases significantly in digital transaction ecosystems. Online marketplaces and peer-to-peer (P2P) trading

services enable rapid and often anonymous transfers of movable goods. As Ben-Shahar (2009) notes, electronic environments lower both transaction costs and verification barriers, thereby amplifying opportunities for opportunistic behavior. In this environment, the debtor can dispose of collateral within minutes without leaving meaningful administrative traces. Behavioral scholarship further demonstrates that digital contracting reduces perceived “legal salience”, encouraging strategic non-compliance where detection risk is low (Hillman & Rachlinski, 2002).

This phenomenon is closely linked to moral hazard arising from information asymmetry. Akerlof’s (1970) seminal analysis explains how markets deteriorate when one party possesses superior knowledge regarding asset status. In secured lending, debtors possess full knowledge of the collateral’s fiduciary status, whereas creditors and subsequent buyers lack real-time information. Asymmetric information intensifies in digital financing settings, where approval and signing occur electronically without face-to-face interaction. Such processes often reduce the debtor’s perception of “contractual seriousness” (Ben-Shahar, 2009).

Standard-form electronic financing agreements further exacerbate the problem. Debtors frequently fail to read or understand the prohibition against transferring collateral, while creditors lack visibility into how the debtor uses or advertises the asset in digital markets. This weakens the practical effectiveness of legal prohibitions not because the norms lose legal force, but because the institutional environment enables circumvention with minimal detection risk. Comparative scholarship emphasizes that transparency and public notice mechanisms are central to reducing opportunistic transfers (UNCITRAL, 2007; World Bank, 2010).

The absence of a publicly searchable collateral registry in Indonesia heightens this structural vulnerability. In jurisdictions operating under UCC Article 9 (United States) or the PPSA (Australia), notice-filing systems are essential to reducing information asymmetry (UNCITRAL, 2007). Without such a mechanism, Indonesian third-party buyers cannot verify whether an item is encumbered, and creditors cannot track unauthorized transfers, thereby magnifying the incentive for debtor misconduct.

Accordingly, the debtor’s unauthorized transfer should be conceptualized as a multidimensional breach: a contractual violation through active breach, an impairment of the proprietary security interest, and a behavioral-economic phenomenon amplified by digital market structures. This conceptualization underscores the need for strengthened debtor duties and the development of technological verification mechanisms. Without such reforms, digital ecosystems will continue to elevate the risk of moral hazard and erode the reliability of fiduciary security as a foundation of the Indonesian secured credit market.

5.1.3. Proprietary analysis: *Droit de préférence* and *droit de suite*

In the architecture of secured transactions law, the rights held by a fiduciary creditor possess

the character of proprietary or in rem rights, distinguishing them fundamentally from personal contractual rights. As Goode (2010) emphasizes, proprietary security rights grant the secured creditor a legally protected position against all third parties and impose corresponding limitations on the debtor’s exercise of ownership. This distinction is central in comparative doctrine, which recognizes that security interests operate as rights in the asset itself rather than merely as contractual claims (Bridge, 2015; Kozolchuk, 2014). Within this framework, two principles, *droit de préférence* and *droit de suite*, constitute the core foundations of fiduciary security in Indonesia.

The first principle, *droit de préférence*, entitles the secured creditor to priority satisfaction from the proceeds of the collateral ahead of unsecured creditors. This principle reflects the essential risk-allocation function of secured credit. As the UNCITRAL (2007) notes, priority rules are indispensable to ensuring creditor confidence, lowering borrowing costs, and stabilizing the credit market. Economic analyses similarly explain that predictable priority structures reduce systemic uncertainty (Posner, 2007). Without preferential rights, fiduciary security would lose its economic significance because execution proceeds could be diluted among general creditors.

The second principle, *droit de suite*, grants the creditor the right to follow the collateral into the hands of any subsequent possessor. This continuation of proprietary rights is the defining hallmark of a security interest: the encumbrance “runs with the asset”, not with the person. Bridge (2015) and Goode (2010) both emphasize that the persistence of the security right despite unauthorized transfer differentiates proprietary security from purely contractual undertakings. Kozolchuk (2014) further affirms that modern secured transactions frameworks rely on the continuity of the security interest, irrespective of debtor misconduct, to ensure that the collateral remains an effective credit support.

In the context of Indonesian fiduciary law, *droit de suite* is particularly crucial when the debtor transfers collateral without consent. Such a transfer does not extinguish the creditor’s proprietary right; the creditor remains entitled to reclaim or execute the asset, even from a bona fide third-party purchaser. This doctrinal position reflects classical civil law principles governing encumbered ownership (*eigendom met bezwaring*), as recognized in Indonesian property scholarship (Satrio, 2018). Although many jurisdictions temper this approach by protecting good-faith purchasers within transparent notice-filing systems, Indonesia’s current regime maintains the supremacy of the creditor’s in rem right.

The debtor’s unauthorized transfer has significant legal implications. Since the debtor’s ownership is encumbered, the debtor is not free to dispose of the collateral as though it were unencumbered property. Any attempt to do so constitutes an unlawful exercise of ownership incompatible with the creditor’s prior proprietary right. Consequently, the debtor’s liability is dual in nature: contractual liability for breach and proprietary liability for interference with a right that binds the asset itself (Goode, 2010).

Moreover, *droit de suite* plays a decisive role in determining the legal position of third parties. Because the creditor's right continues regardless of possession, third-party purchasers, even those acting in good faith, may be exposed to execution risks. Comparative scholarship explains that such outcomes may generate commercial inefficiencies in markets for movable goods unless supported by transparent public notice systems (Bridge, 2015; UNCITRAL, 2007).

In digital ecosystems, these proprietary doctrines become even more salient. Online marketplaces enable rapid transfers of vehicles and other movable assets. Without a searchable public collateral registry, neither creditors nor third parties can ascertain the legal status of the asset in real time. As the World Bank (2010) recommends, effective collateral registries are essential to reconciling the doctrine of *droit de suite* with commercial practicality. Systems operating under UCC Article 9 (United States) and the PPSA (Australia) demonstrate how transparent notice-filing mechanisms mitigate the tension between proprietary continuity and transactional fluidity.

This proprietary analysis demonstrates several key points:

- *Droit de préférence* ensures that the creditor's priority claim remains superior to competing claims.
- *Droit de suite* guarantees the continuity and enforceability of the security interest against any subsequent holder.
- The debtor's unauthorized transfer, therefore, constitutes a serious interference with a proprietary right, not merely a breach of contract.
- In digital marketplaces, the absence of a public verification system heightens the practical challenges of enforcing these principles.

Accordingly, *droit de préférence* and *droit de suite* are operational mechanisms that directly shape debtor responsibility and the enforceability of fiduciary security in modern digital environments.

5.1.4. Criminal law analysis of the unauthorized transfer of fiduciary collateral

The unauthorized transfer of fiduciary collateral does not merely constitute a civil breach of contract but may also give rise to criminal liability when the debtor's conduct fulfils the elements of intentional unlawful appropriation. Under Indonesian law, Article 372 of the Indonesian Criminal Code (*Kitab Undang-Undang Hukum Pidana*) governs such acts, criminalizing the deliberate and unlawful appropriation (*penggelapan*) of property belonging, wholly or partially, to another person. Although the debtor remains the formal legal owner, this ownership is encumbered by the fiduciary security right, which grants the creditor a superior in rem proprietary interest. Thus, the debtor's disposal of the collateral without consent infringes upon this interest (Satrio, 2018).

From a doctrinal standpoint, criminal liability hinges on intentionality (*mens rea*) and unlawfulness (*wederrechtelijkheid*). General principles emphasize that criminal appropriation requires intentional control over property coupled with awareness of its unlawful character (Scalia & Garner, 2012). Indonesian courts consistently interpret the debtor's knowledge of the fiduciary encumbrance as evidence of intent,

as the debtor explicitly signs a financing agreement containing a non-transfer clause. Judicial reasoning confirms that the deliberate sale or concealment of collateral to avoid repayment satisfies the element of unlawful intent.

This approach is reflected in decisions such as District Court Decision No. 38/Pid.B/2020/PN Jbg and District Court Decision No. 18/Pid.B/2020/PN Cbi, where courts held that transferring a fiduciary-encumbered vehicle without consent constituted embezzlement. In these rulings, the courts emphasized that possession was legally limited by the encumbrance established under Law No. 42 of 1999. In practice, courts evaluate several indicators to determine criminal intent: a) the debtor's awareness of the fiduciary security; b) the existence of an explicit contractual prohibition on transfer; c) the act of transferring or concealing the asset to evade execution; and d) the failure to notify the creditor or the active concealment of the transaction.

These indicators align with comparative scholarship recognizing that intentional concealment of collateral to defeat a security interest may justify criminal sanctions (Twomey & Jennings, 2020). In secured transactions theory, such conduct is considered a deliberate interference with a legally protected proprietary right (Goode, 2010). The distinction between civil breach and criminal wrongdoing is therefore functional; while unauthorized transfer is an active breach (*wanprestasi aktif*), it escalates into criminal liability when accompanied by fraudulent intent. This reflects the principle of last resort (*ultimum remedium*), where criminal law operates when civil remedies are insufficient (Scalia & Garner, 2012).

In digital transactional ecosystems, the risk of criminal conduct is more pronounced. Online marketplaces enable rapid, anonymous transfers, facilitating the concealment of collateral. Behavioral scholarship demonstrates that digital environments may reduce perceived accountability (Ben Shahr, 2009). The absence of an integrated public registry further exacerbates this gap, as third parties cannot verify encumbrance status. International guidance underscores that transparency is essential to prevent fraudulent asset circulation (UNCITRAL, 2007; World Bank, 2010).

In sum, the application of criminal liability serves multiple functions: a) deterrence against exploiting digital platforms for unlawful disposal; b) protection of the creditor's proprietary interest; c) reinforcement of systemic stability in secured lending; and d) preservation of market integrity. Thus, criminal law functions as a necessary complement to civil remedies. While fiduciary doctrine provides normative clarity, enforcement in digital environments requires layered protection combining contractual sanctions, proprietary enforcement, and criminal deterrence.

The foregoing doctrinal, proprietary, and criminal analyses demonstrate that debtor liability is normatively robust. However, the persistence of violations indicates that doctrinal clarity alone does not guarantee compliance. The effectiveness of fiduciary protection must be evaluated not only regarding statutory prohibitions but also in relation to institutional transparency and governance architecture. Where registry accessibility remains limited, proprietary protection may remain formally

intact yet operationally diluted, thereby enabling opportunistic conduct and amplifying systemic moral hazard.

5.2. Legal Implications of the Unauthorized Transfer of Fiduciary Collateral for Creditors

5.2.1. Loss of control and barriers to enforcement

The Constitutional Court's landmark ruling in Decision No. 18/PUU-XVII/2019 (*Putusan Mahkamah Konstitusi*) fundamentally altered the enforcement architecture of fiduciary security in Indonesia. Prior to the ruling, the fiduciary certificate carried enforcement title (*titel eksekutorial*), enabling creditors to execute collateral unilaterally. Following the ruling, execution requires either a) the debtor's express acknowledgment of default or b) a judicial determination of default. This doctrinal shift reinforces due process of law but significantly reduces the creditor's ability to promptly recover collateral (Hernoko, 2014; Satrio, 2018).

The problem becomes more acute when the collateral has been transferred to third parties—often through fast-moving digital channels such as online marketplaces and P2P platforms. Unauthorized transfers deprive creditors of physical control, as the collateral is no longer in the debtor's possession, and administrative control, because no centralized database records ownership changes. The absence of such monitoring tools is inconsistent with modern secured transactions regimes, which emphasize transparency and traceability (Kozolchyk, 2014; UNCITRAL, 2007).

Unlike jurisdictions governed by UCC Article 9 (United States) or the PPSA (Australia and New Zealand), Indonesia does not provide a fully accessible public collateral registry. Under the UCC and PPSA systems, creditors and third parties may search publicly accessible databases to confirm security interests, thereby enhancing enforcement efficiency (Bridge, 2015; Wilson et al., 2019). The lack of such a mechanism in Indonesia creates structural vulnerability, especially in digital markets characterized by rapid and low-documentation transfers.

Practically, creditors face additional barriers because digital sales often involve multilayered resale chains. A vehicle may be sold to multiple buyers within days, leaving limited documentation. By the time the creditor discovers the transfer and seeks judicial recognition of default, the collateral may be untraceable. Comparative literature emphasizes that enforcement should be efficient and minimally obstructive to preserve the economic function of collateral (Goode, 2010; UNCITRAL, 2007).

Furthermore, litigation imposes evidentiary burdens that creditors did not face under the previous system. To obtain judicial confirmation of default, creditors must prove: a) the breach of the contractual non-transfer clause; b) the fact of unauthorized transfer; and c) the debtor's refusal or inability to return the collateral. In digital transactions, where communications occur via private messaging, obtaining admissible evidence is a substantial challenge. This procedural hurdle contrasts with the core principle that enforcement mechanisms must remain simple, predictable, and efficient (Goode, 2010).

In effect, unauthorized transfer, amplified by digital commerce, diminishes the practical enforceability of the creditor's proprietary right (*zakelijk recht*). The combination of judicial procedural requirements, lack of systemic integration, and digital opacity weakens the operational force of fiduciary security within the Indonesian credit market.

5.2.2. Risk of depreciation and legal uncertainty

Unauthorized transfer not only deprives creditors of control but also exposes them to significant risks of depreciation. Collateral, such as vehicles or electronics, can deteriorate rapidly when resold multiple times or modified without oversight. Secured transactions scholarship emphasizes that the economic viability of collateral-based credit depends on maintaining stable collateral value relative to outstanding debt (Posner, 2007; White et al., 2018).

In digital markets, depreciation risk is magnified because online platforms generally do not require physical inspections or verification of encumbrance status prior to listing. Misrepresentations and incomplete disclosures are common, while creditors lack mechanisms to monitor asset condition once control is lost. This situation is inconsistent with international best practices emphasizing creditor visibility and monitoring capacity (UNCITRAL, 2007; World Bank, 2010).

Legal uncertainty further compounds these risks. Informal digital communications and undocumented cash-based sales complicate evidentiary verification. Following the Constitutional Court Decision No. 18/PUU-XVII/2019, judicial confirmation of default requires structured proof; however, digital transfers often lack reliable documentary traces.

Moreover, Indonesian law provides no fully developed "good-faith purchaser" protection framework comparable to systems operating under UCC Article 9 (Harris & Mooney, 2011). In jurisdictions with public notice systems, registry transparency justifies protecting good-faith purchasers. In Indonesia, however, the absence of an accessible registry means third parties cannot verify encumbrance status, yet creditors retain the right to follow the collateral (*droit de suite*). This asymmetry creates dual vulnerability: creditors face complex enforcement, and third parties risk losing lawfully purchased goods.

The resulting instability increases transaction costs and undermines confidence in digital movable-goods markets.

5.2.3. The necessity of reforming fiduciary enforcement

The structural weaknesses inherent in unauthorized digital transfers necessitate a comprehensive reform of Indonesia's fiduciary enforcement regime. The post-2019 judicialization of enforcement proceedings requires modernization through technological and institutional integration.

1) *Electronic enforcement.* Digital notices of default, electronic writs, and integrated enforcement portals could preserve due process while accelerating asset recovery. Comparative analyses of the PPSA in Australia demonstrate that digitalized enforcement reduces administrative delays and enhances transparency (Bridge, 2015; Wilson et al., 2019).

2) *Inter-institutional data integration.* Indonesia's fiduciary registry currently lacks integration with vehicle registration (*Sistem Administrasi Manunggal Satu Atap*, SAMSAT), police databases, or digital marketplaces. Modern secured transactions systems emphasize registry interoperability and searchable notice databases as essential components (UNCITRAL, 2007; World Bank, 2010).

3) *Digital tracking of collateral.* Vehicle identification number (VIN) tracking and automated ownership alerts are standard features in UCC and PPSA jurisdictions. Such mechanisms mitigate moral hazard and facilitate rapid recovery, whereas their absence in Indonesia allows digital platforms to serve as concealment channels.

4) *Automated verification systems.* UNCITRAL's Practice Guide on Secured Transactions highlights automated verification and electronic registry integration as preventative enforcement tools (UNCITRAL, 2020). API-based integration between registries and marketplaces is essential to reduce unauthorized listings.

The analysis suggests that fiduciary protection in digital marketplaces extends beyond doctrinal compliance; it must be assessed through institutional architecture and informational distribution. Where registry transparency is constrained, proprietary protection remains formally intact yet functionally diluted. This institutional gap reflects the dynamics of information asymmetry (Akerlof, 1970) and agency-cost exposure (Jensen & Meckling, 1976), where monitoring limitations incentivize opportunistic conduct. Without structural reform, digital marketplaces will continue to amplify moral hazard and weaken the enforcement capacity of fiduciary security.

5.3. Legal implications for good-faith third parties

5.3.1. The absence of legal protection for good-faith purchasers

Third parties who purchase fiduciary collateral through digital platforms, including online marketplaces and P2P transaction sites, are subject to significant legal vulnerability due to the absence of a public mechanism for verifying perfected security interests. Indonesia currently lacks a publicly searchable collateral registry that would enable buyers to conduct due diligence to determine whether an asset is subject to a fiduciary security interest. Comparative secured transactions scholarship emphasizes that public notice systems are essential to protect both creditors and bona fide purchasers (Bridge, 2015; Harris & Mooney, 2011; UNCITRAL, 2007).

Digital transactions exacerbate this vulnerability, as online sales often occur rapidly and without formal documentation. Because fiduciary collateral remains burdened by the creditor's proprietary right under the principle of *droit de suite*, the creditor may reclaim the asset even after a purportedly lawful purchase by a good-faith third party (Goode, 2010). Courts consistently uphold the creditor's superior proprietary rights, often leaving third parties without effective legal recourse. This trend is exemplified in Decision No. 38/Pdt.G.S/2020/PN Jbg by the Jepara District Court and Decision No. 18/Pdt.G.S/2023/PN Cbi by the Cibinong District Court.

This situation creates a significant regulatory gap between fiduciary law, digital commerce, and consumer protection norms. Indonesian law does not recognize a structured "good-faith purchaser for value" exception comparable to the protections developed under Article 9 of the UCC or the PPSA (Wilson et al., 2019). In many modern legal systems, such exceptions operate as risk-allocation devices grounded in registry transparency and commercial practicality (Bridge, 2015). Consequently, the Indonesian regime reflects a traditional civil-law orientation that prioritizes proprietary continuity at the expense of the informational realities of contemporary digital trade.

5.3.2. Case analysis: Jepara and Cibinong District Courts

Two judicial decisions illustrate the judicial trend of prioritizing creditors' proprietary rights over the interests of bona fide third parties:

1) *Jepara District Court Decision No. 38/Pdt.G.S/2020/PN Jbg.* The court affirmed that the creditor retains the right to enforce the encumbered vehicle even after it was purchased by a third party in a legitimately conducted transaction. The ruling emphasized that *droit de suite* ensures the creditor's right follows the collateral regardless of subsequent transfers. This reasoning aligns with classical property doctrine, which recognizes that proprietary encumbrances bind the asset itself rather than the possessor (Bridge, 2015; Goode, 2010).

2) *Cibinong District Court Decision No. 18/Pdt.G.S/2023/PN Cbi.* The court held that the unauthorized transfer of fiduciary collateral constitutes an unlawful act, rendering subsequent transactions ineffective against the creditor. The third party's good faith was deemed legally irrelevant because no statutory mechanism exists to extinguish the creditor's registered proprietary right under Law No. 42 of 1999 on Fiduciary Security.

These cases demonstrate a consistent jurisprudential pattern anchored in traditional proprietary theory. While doctrinally coherent, this paradigm does not reflect the informational structure of digital markets, where buyers lack access to the verification tools necessary for self-protection. Comparative scholarship cautions that rigid proprietary continuity without transparency mechanisms generates transactional inefficiency (Kozolchik, 2014; UNCITRAL, 2007).

5.3.3. Conceptual analysis: The need for digital consumer protection

Conceptually, good-faith purchasers of fiduciary collateral in digital environments should be categorized as digital consumers entitled to protection consistent with modern commercial practices. Consumer law theory suggests that market fairness requires balancing property rights with reasonable expectations formed under conditions of asymmetric information (Akerlof, 1970; Ben Shahr, 2009):

1) *Global trends in purchaser protection:* Jurisdictions operating under UCC Article 9 or PPSA frameworks recognize "buyer-in-the-ordinary-course" or "good-faith purchaser" protections (Wilson

et al., 2019; Harris & Mooney, 2011). These mechanisms represent deliberate policy choices to allocate risk to the party best positioned to prevent harm—typically the secured creditor, who controls the registration of security interests. International reform guidance similarly supports balancing creditor protection with third-party reliance interests through transparent registries (UNCITRAL, 2007; World Bank, 2010).

2) *The absence of equivalent protection in Indonesia:* Indonesia's fiduciary regime provides no statutory basis for shielding good-faith buyers. In the absence of a publicly searchable registry, buyers cannot verify encumbrances, yet they bear the full risk of asset reclamation. This doctrinal rigidity creates tension between proprietary orthodoxy and digital commercial reality. From a law-and-economics perspective, inefficient risk allocation increases transaction costs and reduces market participation (Posner, 2007).

3) *Regulatory vacuum in digital consumer protection:* Digital commerce introduces anonymity, rapid transaction velocity, and minimal documentation. Consumer-protection scholarship emphasizes that digital buyers require enhanced informational safeguards to mitigate asymmetric information (Ben-Shahar, 2009). Without technological integration between fiduciary registries and digital marketplaces, Indonesian consumers remain structurally exposed to hidden encumbrances. This dynamic mirrors the classic asymmetric-information failure identified by Akerlof (1970), in which a lack of transparency undermines market trust.

4) *Implications for market stability:* If left unaddressed, the absence of buyer protection will: reduce consumer trust in digital marketplaces; increase collateral-related litigation; discourage legitimate secondary-market transactions; undermine predictability in secured credit markets.

From an institutional perspective, secured transactions law cannot operate effectively where third-party reliance interests are systematically disregarded. Modern reform frameworks stress that registry transparency and digital integration are prerequisites for balancing proprietary enforcement with consumer fairness (UNCITRAL, 2020).

5.4. Comparative analysis with other jurisdictions

5.4.1. The UCC Article 9 system (United States)

The United States implements one of the most advanced systems for secured transactions through Article 9 of the UCC, which relies on a public notice-filing system accessible online. Searches are conducted using either the debtor's name or asset identifiers. This system enhances transparency, reduces debtor moral hazard, and provides robust protection for both creditors and buyers (Harris & Mooney, 2011; Kozolchik, 2014; Wilson et al., 2019).

Article 9 adopts a notice-filing regime designed to minimize informational asymmetry while preserving transactional efficiency (Goode, 2010). It also recognizes the "buyer in the ordinary course of business" doctrine, which limits the reach of proprietary claims under defined conditions (Harris & Mooney, 2011). Key features with implications for Indonesia include: a) a public, real-time collateral registry; b) broad protection for buyers in the ordinary course of business; c) efficient digital

enforcement mechanisms; and d) clear priority rules that enhance predictability (Kozolchik, 2014).

5.4.2. The PPSA system (Australia and New Zealand)

Australia and New Zealand employ the PPSA, which established a single registry for all types of security interests over personal property. Searches may be conducted via VIN, engine numbers, debtor identity, or collateral categories.

The PPSA framework offers several advantages: a) strong legal protection through notice filing (Wilson et al., 2019); b) an accessible online database (the Personal Property Securities Register [PPSR]); c) mandatory due diligence expectations for both creditors and purchasers (Bridge, 2015); and d) marketplace verification integrations and digital compliance infrastructure (UNCITRAL, 2007). The PPSA model demonstrates that integrating registries with digital marketplaces is crucial to prevent fraudulent transfers and reduce opportunistic asset disposition (World Bank, 2010).

5.4.3. Comparative implications for Indonesia

The comparative analysis yields three major implications:

1. Indonesia must develop a public collateral registry to enable consumers to verify encumbrances (UNCITRAL, 2007; World Bank, 2010).

2. Good-faith purchaser protection must be strengthened to balance creditor dominance in fiduciary law (Harris & Mooney, 2011; Wilson et al., 2019).

3. Digital integration between registries and marketplaces is essential to ensure transparency in high-velocity digital transactions (Kozolchik, 2014).

Without reform, Indonesia will continue to experience high dispute volumes, weak creditor protection in digital environments, and persistent vulnerabilities for buyers. Comparative secured transaction regimes demonstrate that transparency is not merely procedural but constitutive of market reliability. Publicly searchable notice-filing systems do not eliminate transactional risk; rather, they recalibrate it by distributing informational burdens more equitably among creditors, debtors, and third parties (Goode, 2010; Harris & Mooney, 2011). In contrast, limited-access registration environments shift disproportionate enforcement risk to creditors while leaving good-faith purchasers exposed to post-acquisition proprietary claims (UNCITRAL, 2007). In high-velocity digital markets, such institutional asymmetry may lead to systemic instability (World Bank, 2010).

5.5. Reconstruction of legal protection in digital transaction ecosystems

Reconstructing Indonesia's legal framework governing fiduciary collateral requires a multi-layered reform approach aligning statutory law, institutional design, and technological infrastructure. The transformation must address structural weaknesses—specifically the absence of a public verification mechanism, the vulnerability of good-faith third parties, and practical obstacles to enforcement following the Constitutional Court's rulings. The following reconstruction framework

integrates comparative best practices, digital-era governance models, and contemporary secured transaction scholarship (Goode, 2010; UNCITRAL, 2007; World Bank, 2010).

5.5.1. Establishing a public digital collateral registry

A central component of this reconstruction is the establishment of a public digital collateral registry modeled after systems governed by UCC Article 9 or the PPSA. International experience shows that public notice systems significantly reduce unauthorized transfers, enhance transparency, and stabilize lending markets (Harris & Mooney, 2011; UNCITRAL, 2007; World Bank, 2010).

Such a registry would facilitate: a) real-time verification of collateral encumbrances prior to purchase (Kozolchyk, 2014); b) traceability of fiduciary objects across successive transfers; c) integration with digital marketplaces to enable automatic verification before an item is listed (UNCITRAL, 2020); and d) compliance with global secured transaction standards (World Bank, 2010). The absence of such a registry in Indonesia forces consumers and marketplaces to operate without transparency, exposing them to encumbered assets and preventable disputes. Furthermore, a digital registry aligns with Indonesia's broader digital governance agenda.

5.5.2. Strengthening legal protection for good-faith purchasers

To balance the interests of creditors and third parties, Indonesia must adopt a good-faith purchaser doctrine consistent with global secured transaction practices. Under UCC Article 9 and the PPSA, a "buyer in the ordinary course of business" generally takes goods free of security interests under defined conditions (Harris & Mooney, 2011; Wilson et al., 2019).

Indonesia can adapt this model by:

1. *Granting statutory protection:* Buyers purchasing through verified digital channels should be protected from post-sale claims. Risk allocation theory supports placing liability on the party best positioned to prevent harm—typically the secured creditor controlling registration (Kozolchyk, 2014).

2. *Requiring mandatory registration:* Failure to register encumbrances should result in a loss of priority against good-faith purchasers (Harris & Mooney, 2011).

3. *Integrating consumer protection principles:* Digital consumers face heightened informational asymmetry, requiring transparency mechanisms and verifiable disclosures (Ben-Shahar, 2009). These principles align with the OECD (2016) digital consumer protection framework.

Together, these reforms create a more equitable allocation of risk and bolster confidence in secondary markets for movable assets.

5.5.3 Enhancing creditor protection through digital monitoring tools

Digitalization must also strengthen creditor protection, consistent with the principle that

secured credit systems must remain efficient, predictable, and enforceable (Goode, 2010). Proposed enhancements include:

- *Mandatory digital tracking for high-value fiduciary objects,* as modern secured transaction systems increasingly rely on technological traceability (World Bank, 2010).

- *Automated alerts for changes in ownership or registration status.* Registry interoperability and cross-database integration are central features of effective secured-credit infrastructures (UNCITRAL, 2007).

- *Artificial intelligence-based risk scoring for potential unauthorized transfers,* using algorithmic monitoring tools to detect anomalous transaction patterns and reduce moral hazard (UNCITRAL, 2020).

These measures ensure that creditor rights remain enforceable in high-velocity digital markets.

5.5.4. Marketplaces as gatekeepers: Obligations and liability

Given their central role in facilitating digital transactions, online marketplaces must be regulated as gatekeepers responsible for preventing the circulation of encumbered fiduciary assets. Contemporary consumer-law scholarship recognizes platform accountability within digital markets (Ben-Shahar, 2009; OECD, 2016). A similar approach can be adopted for fiduciary collateral:

1. *Mandatory registry-check integration.* API-based registry verification prior to listing enhances transactional transparency (World Bank, 2010).

2. *Prohibition of anonymized or unverified listings.* Platform-based identity verification reduces fraud and enhances traceability (OECD, 2016).

3. *Platform liability for enabling unlawful sales.* Risk allocation toward intermediaries aligns with modern digital governance models (Ben Shahar, 2007).

This structural shift repositions marketplaces as regulatory nodes rather than neutral intermediaries.

5.5.5. Reforming judicial enforcement mechanisms

Following Constitutional Court Decision No. 18/PUU XVII/2019, judicial enforcement is mandatory where a default is disputed. To prevent systemic inefficiency, the following reforms are proposed:

- *Digital filing and fast-track procedures.* Efficient enforcement is a core principle of secured transaction reform (UNCITRAL, 2007).

- *Specialized commercial courts or dedicated chambers.* Comparative experience demonstrates the importance of judicial specialization in commercial matters (World Bank, 2010).

- *Clear evidentiary standards for digital transactions.* Uniform evidentiary frameworks are essential for predictability and legal certainty (Goode, 2010).

5.5.6. Toward an integrated digital fiduciary ecosystem

The reconstruction culminates in the promotion of an integrated fiduciary ecosystem that synchronizes substantive law, institutional design, and technological innovation. Integrated registry architecture and

interoperable digital infrastructure are widely recognized as pillars of modern secured transaction systems (UNCITRAL, 2007; World Bank, 2010).

Such an ecosystem ensures that: a) creditors can reliably enforce their rights; b) buyers can safely participate in digital markets; c) digital platforms operate as accountable gatekeepers; d) the state provides transparent verification infrastructure; and e) courts support efficient and fair dispute resolution. This approach aligns Indonesia's fiduciary regime with global secured transaction standards and contemporary digital governance models.

5. CONCLUSION

In light of the foregoing analysis, several structural conclusions emerge regarding the integrity of Indonesia's fiduciary security regime within digitally mediated markets.

Unauthorized transfers of fiduciary collateral in digital marketplaces constitute not merely a contractual breach but a direct infringement of in rem proprietary rights protected under Law No. 42 of 1999. Although the statutory framework explicitly prohibits such transfers and secures creditor priority through registration, the operational effectiveness of fiduciary protection in digital commerce is constrained by institutional limitations within Indonesia's electronic registration system.

The absence of publicly accessible verification mechanisms diminishes transparency and intensifies informational asymmetry among debtors, creditors,

and third parties. In high-velocity digital markets, these structural constraints increase enforcement barriers and moral hazard. Therefore, normative clarity, while conceptually robust, is insufficient to secure legal certainty and systemic stability without corresponding institutional transparency.

Comparative analysis of notice-filing regimes, particularly under UCC Article 9 and the PPSA, demonstrates that registry accessibility is a constitutive element of market reliability rather than a mere administrative feature. These insights underscore that the resilience of fiduciary protection depends on coherent institutional design, transparency architecture, and regulatory coordination rather than statutory prohibition alone.

This research is confined to normative doctrinal and comparative legal analysis; it does not incorporate empirical data on enforcement outcomes, technological interoperability, or quantitative assessments of dispute incidents. Accordingly, the findings illuminate the structural and conceptual dimensions of fiduciary governance rather than measurable enforcement performance.

Future research should advance the empirical investigation of fiduciary dispute patterns, assess technological integration between registration systems and marketplaces, and extend cross-jurisdictional analysis to digital asset governance frameworks. Such inquiry is essential to develop a secure transaction regime capable of adapting to the structural transformations of digital market ecosystems.

REFERENCES

- Akerlof, G. A. (1970). The market for "lemons": Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 84(3), 488–500. <https://doi.org/10.2307/1879431>
- Akseli, O. (2011). *International secured transactions law: Facilitation of credit and international conventions and instruments*. Routledge. <https://doi.org/10.4324/9780203831618>
- Ben-Shahar, O. (2009). The myth of the opportunity to read in contract law. *European Review of Contract Law*, 5(1). <https://doi.org/10.1515/ERCL.2009.1>
- Ben-Shahar, O. (Ed.). (2007). *Boilerplate: The foundation of market contracts*. Cambridge University Press.
- Bridge, M. (2015). *Personal property law* (4th ed.). Oxford University Press.
- Constitutional Court of the Republic of Indonesia. (2020). *Decision No. 18/PUU-XVII/2019* [Putusan Mahkamah Konstitusi]. https://aacc-asia.org/content/summarydecisions/75_18%20PUU%20XVII%202019.pdf
- Cuming, R. C. C., Wood, R. J., & Walsh, C. (2022). *Personal Property Security Law* (3rd ed.). Irwin Law.
- DiMatteo, L. A. (2016). *International contracting: law and practice* (4th ed.). Kluwer Law International. <https://prometheus.nsc.ru/acquisitions/17-10-31/cont01f.ssi>
- District Court of Jombang. (2020). *Decision No. 38/Pid.B/2020/PN Jbg*. Indonesian Supreme Court Decision Directory. <https://putusan3.mahkamahagung.go.id/direktori/putusan/zaec1b30c0a14be6b512303630373534.html>
- Dworkin, R. (1986). *Law's empire*. Harvard University Press. <https://www.filosoficas.unam.mx/~cruzparc/empire.pdf>
- Gilmore, G. (1990). *Security interests in personal property*. Foundation Press.
- Goode, R. (2010). *Goode on commercial law* (4th ed.). Penguin Books.
- Haentjens, M., & Lehmann, M. (2023). The law governing secured transactions in digital assets. In A. Bonomi, M. Lehmann, & S. Lalani (Eds.), *Blockchain and private international law* (pp. 456–478). Brill Nijhoff. https://doi.org/10.1163/9789004514850_018
- Harris, S. L., & Mooney, C. W., Jr. (2011). *Security interests in personal property: Cases, problems, and materials* (5th ed.). Foundation Press.
- Hernoko, A. Y. (2014). *Hukum perjanjian: Asas proporsionalitas dalam kontrak komersial* [Law of contracts: The principle of proportionality in commercial contracts]. Jakarta: Prenadamedia Group.
- Hillman, R. A., & Rachlinski, J. J. (2002). Standard-form contracting in the electronic age. *New York University Law Review*, 77(2), 429–495. <https://nyulawreview.org/issues/volume-77-number-2/standard-form-contracting-in-the-electronic-age/>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Jepara District Court. (2020). *Decision No. 38/Pdt.G/2020/PN Jpa*. Indonesian Supreme Court Decision Directory. <https://putusan3.mahkamahagung.go.id/direktori/putusan/zaec1b30c0a14be6b512303630373534.html>
- Jepara District Court. (2020). *Decision No. 38/Pdt.G/2020/PN Jpa*. Indonesian Supreme Court Decision Directory. <https://putusan3.mahkamahagung.go.id/direktori/putusan/zaec1b30c0a14be6b512303630373534.html>
- Kozolchik, B. (2014). *Comparative commercial contracts: Law, culture and economic development*. West Academic Publishing.

- Kraakman, R., Armour, J., Davies, P., Enriques, L., Hansmann, H., Hertig, G., Hopt, K. J., Kanda, H., Pargendler, M., Ringe, W.-G., & Rock, E. B. (2017). *The anatomy of corporate law: A comparative and functional approach* (3rd ed.). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198739630.001.0001>
- Landes, W. M., & Posner, R. A. (1987). *The economic structure of tort law*. Harvard University Press. <https://doi.org/10.4159/harvard.9780674864030>
- Law No. 11 of 2008 concerning Electronic Information and Transactions. (2008). <https://peraturan.bpk.go.id/Details/37589/uu-no-11-tahun-2008>
- Law No. 19 of 2016 concerning Amendments to Law No. 11 of 2008 concerning Electronic Information and Transactions. (2016). <https://peraturan.bpk.go.id/Details/37582/uu-no-19-tahun-2016>
- Law No. 42 of 1999 concerning Fiduciary Security. (1999). <https://shorturl.at/octhD>
- Mackenzie-Gray Scott, R. (2025). Supererogatory consumer choices grounded in the human right to privacy. *International Journal of Law and Information Technology*, 33, Article eaaf010. <https://doi.org/10.1093/ijlit/eaaf010>
- McConville, M., & Chui, W. H. (Eds.). (2007). *Research methods for law*. Edinburgh University Press.
- McKendrick, E. (2020). *Contract law: Text, cases, and materials* (9th ed.). Oxford University Press. <https://doi.org/10.1093/he/9780198855293.001.0001>
- Organisation for Economic Co-operation and Development (OECD). (2016). *OECD recommendation of the Council on Consumer Protection in E-Commerce*. OECD Publishing. <https://doi.org/10.1787/9789264255258-en>
- Personal Property Securities Act 2009. (2009). <https://www.legislation.gov.au/C2009A00130/asmade/text>
- Posner, R. A. (2007). *Economic analysis of law* (7th ed.). Aspen Publishers.
- PT Mandiri Tunas Finance v. Fiqri Kristiawan*, Decision No. 18/Pdt.G.S/2023/PN Cbi (Cibinong Dist. Ct. 2023). <https://meridianhukum.com/putusan/e5dedc67-1b34-43b0-910e-e509e5443d85>
- Samuel, G. (2013). *Law of obligations & Legal remedies* (2nd ed.). Routledge. <https://doi.org/10.4324/9781843141433>
- Satrio, J. (2018). *Hukum jaminan, hak jaminan kebendaan, hak tanggungan* [Law of guarantee, right of material guarantee, right of liability]. Citra Aditya Bakti.
- Scalia, A., & Garner, B. A. (2012). *Reading law: The interpretation of legal texts*. Thomson/West.
- Smits, J. M. (2014). *Contract law: A comparative introduction*. Edward Elgar Publishing.
- Twomey, D. P., & Jennings, M. M. (2020). *Business law: Principles for today's commercial environment* (5th ed.). Cengage Learning.
- United Nations Commission on International Trade Law (UNCITRAL). (2007). *UNCITRAL legislative guide on secured transactions*. United Nations. <https://shorturl.at/MU8n9>
- United Nations Commission on International Trade Law (UNCITRAL). (2020). *UNCITRAL practice guide to the Model Law on Secured Transactions*. United Nations. <https://doi.org/10.18356/43eab975-en>
- Warren, W. D., & Walt, S. D. (2010). *Secured transactions in personal property* (8th ed.). Foundation Press.
- White, J. J., Summers, R. S., Barnhizer, D. D., Barnes, W. R., & Snyder, F. G. (2018). *Principles of secured transactions* (2nd ed.). West Academic Publishing.
- Wilson, J. M., Sultanov, M., Maceachern, F. E., Salamina, L. M., & Chhabra, P. (2019). *Secured transactions, collateral registries and movable asset-based financing: Knowledge guide*. World Bank Group. <http://documents.worldbank.org/curated/en/193261570112901451>
- World Bank. (2010). *Secured transactions systems and collateral registries* (Working Paper No. 112645). World Bank Group. <https://documents1.worldbank.org/curated/en/755831486450371941/pdf/112645-WP-SecuredTransactionsGuideJan-PUBLIC.pdf>