TRANSPUBLIKA
Precise. Resilience. Felicitous.

Policy, Law, Notary and Regulatory Issues
https://ojs.transpublika.com/index.php/POLRI
Online ISSN 2809-896X

https://doi.org/10.55047/polri.v5i3.2262

Original Article

Reconstructing State Economic Loss Calculation in Corporate Corruption Adjudication

Anastasia Rentama Sijabat

Faculty of Law, Universitas Indonesia, Depok, Indonesia
Email: anastasia.sijabat@gmail.com

Received : 05 May - 2026
Accepted : 10 June - 2026
Published online : 25 June - 2026

Abstract

Indonesian anti-corruption adjudication continues to grapple with inconsistent quantification of state financial loss in corporate corruption cases. This study examined two recent cassation rulings of the Indonesian Supreme Court involving the palm oil industry and analyzed them against two 2026 rulings of the Constitutional Court that reaffirmed the exclusive declaring authority of the Supreme Audit Agency and entrenched the *actual loss* principle. Using a normative juridical design, the analysis combined statute, case, and conceptual approaches, complemented by comparative insights from the French *Sapin II* framework and the Spanish recovery model. The evidence indicated a methodological disorientation, namely that the same court relied on a proceeds-oriented calculus in one ruling and a loss-oriented calculus in another, even though the underlying fact patterns were materially comparable. This oscillation has eroded legal certainty and weakened the deterrent function of corporate criminal liability. To address this and to harmonize practice with the new constitutional jurisprudence, the discussion proposed an Integrated Economic and Ecological Audit Standard, configured as a three-layer architecture in which the Supreme Audit Agency declares, supporting institutions supply technical valuations, and the trial court independently validates. Five components, comprising unlawful gain, direct fiscal loss, ecological recovery cost, downstream economic loss, and social cost, are reframed as quantifiable financial figures within the broader umbrella of state economic loss. The findings suggested that consistent adoption of this architecture could systematize judicial reasoning, improve recovery rates, and tighten corporate accountability, offering practitioners and lawmakers a coherent doctrinal template.

Keywords: Asset Recovery, Business Judgment Rule, Ecological Damage, Judicial Inconsistency, Methodological Audit.

1. Introduction

Few categories of economic crime are as corrosive in Indonesia as corporate corruption tied to the natural resource sector. Year after year, illegal land conversion, trade manipulation, and procurement fraud bleed hundreds of trillions of rupiah from the public purse while quietly draining the ecological capital on which future generations depend (Aqilah, 2025; Tang, 2024). Despite the magnitude of these losses, Indonesian courts have yet to settle on a single methodology for quantifying state economic loss when the wrongdoer is a corporation. While the phrase “state economic loss” appears in Article 2 paragraph (1) of Law Number 31 of 1999 (as amended by Law Number 20 of 2001), its content has been interpreted through widely divergent valuation lenses, leading to mutually inconsistent judicial outcomes.

A pair of cassation rulings handed down within twenty-four months brings this problem into sharp relief. The first, Decision Number 4950 K/Pid.Sus/2023 in the Duta Palma case, found Surya Darmadi, the controlling figure behind seven palm-oil corporations, criminally liable and ordered him to pay roughly IDR 2.238 trillion in replacement money on top of a sixteen-year custodial sentence (Aqilah, 2025; Saragih et al., 2024). The second cluster,

Decisions Number 8431, 8432, and 8433 K/Pid.Sus/2025, addressed the cooking oil export scandal and convicted three palm-oil giants, namely PT Wilmar Group, PT Musim Mas, and PT Permata Hijau Group, with combined replacement money of around IDR 17.708 trillion. The gap between these two outcomes cannot be explained by factual differences alone. What it betrays is a methodological disorientation, in which the apex court swings between a proceeds-oriented logic that fixates on the unlawful gain accruing to the perpetrator and a loss-oriented logic that registers the actual damage borne by the state and the wider economy (Zaki et al., 2022).

Two 2026 rulings of the Constitutional Court have sharpened the urgency of resolving this divergence. Decision Number 28/PUU-XXIV/2026 (9 February 2026) reaffirmed that the Supreme Audit Agency, under Article 23E paragraph (1) of the 1945 Constitution, holds exclusive constitutional authority to declare state financial loss in corruption cases. Decision Number 66/PUU-XXIV/2026 (29 April 2026) ruled that the phrase state loss in Article 20 paragraphs (5) and (6) of Law Number 30 of 2014 is conditionally unconstitutional unless interpreted as state financial loss in the strict sense, thereby entrenching the *actual loss* principle. The persistence of divergent valuation logics undermines legal certainty in three concrete ways: it produces unpredictable replacement-money calculations for similarly situated corporate defendants, weakens deterrence by detaching sanctions from comparable harm metrics, and leaves ecological and downstream costs vulnerable to *ad hoc* exclusion.

Existing scholarship has explored corporate criminal liability and asset recovery in Indonesia from several angles, yet few studies attempt to weave these threads into a unified valuation framework that can withstand the complexity of large, vertically integrated corporate offenders (Hartati et al., 2024; Prayudha, 2025; Saputera et al., 2025). Underdeveloped is any attempt to fuse the philosophical core of the French *Sapin II* framework with the prudential logic of the business judgment rule and translate that fusion into Indonesian valuation practice. *Sapin II* is pivotal because it provides a standardized, compliance-based methodology for the proportional monetization of corporate harm, moving beyond arbitrary punitive assessments toward a model of objective loss calculation. Simultaneously, the business judgment rule is operationalized here as a procedural filter; it establishes a defensible ex ante benchmark that allows regulators and courts to distinguish between actionable criminal malfeasance and legitimate, protected commercial risk (Setiawati & Vitrana, 2025). By fusing these frameworks, this research provides a normative template for more transparent, predictable, and economically grounded liability valuation in Indonesian jurisprudence.

Three research objectives flow from this premise. The first is to map and explain the methodological disorientation reflected across the two cassation rulings. The second is to test the doctrinal foundations of state economic loss against comparative anti-corruption regimes and the business judgment rule. The third is to propose an Integrated Economic and Ecological Audit Standard as *ius constituendum*, that is, as a normative reconstruction capable of guiding prosecutors and judges in subsequent corporate corruption cases. The underlying claim is straightforward. Without methodological harmonization, the deterrent power of corporate criminal liability will continue to erode, and asset recovery will fall short of the mandates imposed by both the UNCAC and the Indonesian Constitution.

2. Literature Review

This section presents the theoretical foundations and prior research that inform the analytical framework of the study. It begins with the doctrinal theory of state economic loss in Indonesian anti-corruption law, proceeds to the doctrine of corporate criminal liability and the business judgment rule, examines comparative philosophies including the French *Sapin II* framework, and concludes with a synthesis of previous empirical research on the topic.

2.1. Theory of State Loss in Anti-Corruption Law

Indonesian anti-corruption law operates on two related but distinct concepts of state harm anchored in Article 2 paragraph (1) of Law Number 31 of 1999 as amended by Law Number 20 of 2001. The first is state financial loss (*kerugian keuangan negara*), defined narrowly as actual budgetary outflow or quantifiable diminution of public assets that the Supreme Audit Agency declares pursuant to Article 23E paragraph (1) of the 1945 Constitution. The second is state economic loss (*kerugian perekonomian negara*), defined more broadly as macroeconomic harm to the national economy, including ripple effects such as ecological degradation, downstream business loss, and the social cost of corruption. Hiariej (2019) explained that the United Nations Convention against Corruption, ratified by Indonesia through Law Number 7 of 2006, requires state parties to recognize a broader range of damages that affect macroeconomic stability beyond pure budgetary outflow. The Indonesian Constitutional Court, through Decision Number 25/PUU-XIV/2016, affirmed that state financial loss must be proven actually and concretely, not merely potentially. Suhariyanto (2018) observed that this concretization requirement raises the evidentiary burden on prosecutors and demands methodological guidance from the judiciary that, to date, remains underdeveloped.

Tuanakotta (2023) further distinguished between three valuation categories, namely loss of state property, loss of revenue that should have been received, and broader macroeconomic dislocation. The third category aligns most closely with state economic loss but lacks a standardized audit methodology in Indonesian practice. Atmasasmita (2018) emphasized that the absence of such a standard creates a doctrinal vacuum that the Supreme Court has filled inconsistently from one case to another. Throughout this article, the term state financial loss is used in the narrow sense to denote the budgetary concept subject to the Supreme Audit Agency's exclusive declaring authority, while the term state economic loss denotes the broader umbrella that includes financial loss and extends to ecological and macroeconomic dimensions.

This narrow definition of state financial loss forms the first pillar of our analytical framework. It provides the essential constitutional baseline, namely the exclusive authority of the Supreme Audit Agency, which this study seeks to integrate with broader ecological valuation metrics to solve the doctrinal vacuum identified by Atmasasmita (2018).

2.2. Corporate Criminal Liability and the Business Judgment Rule

Fuady (2014) and Sjawie (2018) explained that corporate criminal liability in Indonesia is governed by Supreme Court Regulation Number 13 of 2016, which adopts the doctrine of corporate fault through the identification theory and the aggregation theory. Saputera et al. (2025) refined this framework by reconstructing corporate criminal liability under the new Indonesian Criminal Code, namely Law Number 1 of 2023. They argued that the new code strengthens the position of the corporation as a subject of criminal law and reinforces the obligation to apply a *mens rea* filter even in strict-liability tendencies of anti-corruption enforcement.

The business judgment rule, as elaborated by Setiawati and Vitrana (2025), serves as a counterbalancing doctrine that protects directors who act in good faith, with reasonable care, and within the scope of corporate authority. While the rule is primarily a civil-law instrument in Indonesia, its philosophical underpinning, namely the recognition that legitimate business risk should not be criminalized, has growing relevance for the boundary between corporate criminal corruption and ordinary commercial mis-judgement. The rule does not exonerate fraudulent conduct, but it reminds adjudicators that not every loss-producing decision is a criminal one.

By establishing the legal boundary conditions that distinguish criminal intent (*mens rea*) from ordinary commercial risk, the *business judgment rule* acts as the procedural filter required to ensure that the valuation of state economic loss does not unfairly penalize legitimate business decisions, thereby harmonizing corporate accountability with commercial reality.

2.3. Comparative Philosophies and the *Sapin II* Framework

The French *Sapin II* framework, adopted in 2016, established the *Agence Française Anticorruption* and introduced the *convention judiciaire d'intérêt public*, a deferred prosecution agreement emphasizing proportionality and asset recovery (González Uriel, 2021). Three *Sapin II* elements can be adapted to Indonesian valuation practice. First, proportional monetization shifts the judicial approach: instead of treating ecological degradation as an abstract aggravating circumstance, courts can mandate its quantification into concrete *rupiah* figures using standardized ecological valuation metrics. Second, transparent valuation mandates that audit reports explicitly articulate the scientific and financial methodology used to quantify each component of harm, thereby replacing subjective assessments with verifiable data. Third, the structured-negotiation logic of *Sapin II* can be adapted into a formal pre-charge consultation protocol between the Public Prosecutor and the Supreme Audit Agency, ensuring that the quantum of loss is harmonized before the case reaches the courtroom. Unlike the French system, where the *Agence Française Anticorruption* operates under comprehensive procedural guidelines, Indonesia currently lacks a harmonized methodology. Our framework adapts *Sapin II* by embedding its proportionality logic directly into the Supreme Audit Agency's official audit reports, transforming these international principles into binding evidence under Article 23E of the 1945 Constitution.

The Spanish recovery model reinforces these adaptations by treating the disgorgement of laundered proceeds and direct confiscation as primary, rather than secondary, enforcement instruments (Saragih et al., 2024). Conversely, Deng (2018) analyzed the Chinese National Supervision Commission and observed that institutional centralization without methodological clarity generates inconsistent rulings. This is directly relevant to Indonesian conditions, where multiple authorities have not produced a single harmonized methodology for state economic loss calculation (Hartati et al., 2024). The Chinese experience suggests that the constitutional consolidation achieved by Decision Number 28/PUU-XXIV/2026 will deliver lasting legal certainty only if accompanied by an inter-agency methodological protocol. Indonesia currently mirrors the Chinese "centralization risk", where the Supreme Audit Agency has the mandate but lacks the unified protocol to execute it. By integrating the Spanish focus on asset recovery into the Supreme Audit Agency -led valuation process, this research provides the necessary methodological clarity to prevent the constitutional authority of the Supreme Audit Agency from becoming a procedural bottleneck, effectively converting state mandate into substantive legal certainty.

The proportionality and structured negotiation logic explored here are directly synthesized into the third pillar of our research framework. By adopting these comparative mechanisms, this study proposes a procedural pathway to move beyond doctrinal description toward an actionable methodology, ensuring that the calculation of state economic loss is both proportional to the harm committed and procedurally rigorous within the post-2026 Constitutional Court architecture.

2.4. Previous Research on Ecological and Macroeconomic Loss

Akhbari and Nejati (2019) provided cross-country empirical evidence that corruption increases carbon emissions and degrades environmental quality. Tang (2024) extended this analysis by demonstrating that corruption interacts with natural-resource depletion and financial inclusion to produce ecological footprint and biodiversity loss in the most corrupt economies. Sundström et al. (2026) reviewed two hundred studies and concluded that corruption hampers climate change mitigation, increases emissions, and weakens the storage capacity of carbon sinks through deforestation. These findings reinforce the argument that ecological cost should be recognized as a legitimate component of state economic loss in corporate corruption cases.

At the domestic level, Nelson (2022) examined the role of the Indonesian Corruption Eradication Commission and identified institutional weaknesses in cross-agency coordination. Fernando et al. (2022, 2023) explored the modernization of Indonesian criminal procedure and emphasized the need for evidentiary standards adapted to corporate offenders. Hafrida et al. (2022) and Mahmud (2018) discussed asset recovery problems and underscored the importance of methodological clarity in valuing the state-loss component of any judicial ruling.

Rather than treating ecological impact as a parallel category existing outside the scope of state financial loss, our research framework synthesizes these ecological valuation metrics, demonstrating how they can be quantified as concrete financial components that the Supreme Audit Agency can declare with the support of specialized environmental auditors.

2.5. Recent Constitutional Court Jurisprudence on State Loss

Two recent rulings of the Constitutional Court reshape the doctrinal landscape and merit separate treatment. Decision Number 28/PUU-XXIV/2026 dismissed the petition challenging Articles 603 and 604 of Law Number 1 of 2023 on the Indonesian Criminal Code; however, its legal reasoning anchored the determination of state financial loss in Article 23E paragraph (1) of the 1945 Constitution and in Article 10 paragraph (1) of Law Number 15 of 2006 on the Supreme Audit Agency. The reasoning explicitly recognizes the Supreme Audit Agency as the constitutional auditor empowered to declare the existence and quantum of state financial loss, while permitting the Financial and Development Supervisory Agency, internal inspectorates, and certified public accountants to furnish supporting calculations that the Supreme Audit Agency or the trial court may corroborate (Karianga, 2024).

Decision Number 66/PUU-XXIV/2026 partially granted a petition concerning Article 20 paragraphs (5) and (6) of Law Number 30 of 2014 on Government Administration. The Court ruled that the phrase state loss in those provisions is conditionally unconstitutional unless interpreted as state financial loss in the strict sense, which must be actual rather than potential or merely administratively assumed. Read in conjunction, the two rulings affirm three propositions that any methodological reconstruction must accommodate. First, the Supreme Audit Agency holds exclusive declaring authority over state financial loss. Second, supporting evidence from other audit institutions remains relevant but does not, on its own,

suffice as the legal basis for declaration. Third, judges retain independent authority to assess the validity and methodological soundness of audit findings during trial.

By affirming the exclusive declaring authority of the Supreme Audit Agency while simultaneously allowing for corroborating evidence from other technical institutions, these decisions provide the procedural "legal window" through which ecological valuation metrics can be officially incorporated into the formal determination of state financial loss.

2.6. Research Framework

Drawing the strands of the literature together, this research adopts a framework anchored in three interlocking pillars. The first pillar is the post-Constitutional Court architecture of audit authority, namely the three-layer model in which the Supreme Audit Agency declares the state financial loss, the Financial and Development Supervisory Agency together with certified ecological auditors supports the declaration, and the trial court independently validates the result. The second pillar is the *actual loss* principle, which requires that any component of state financial loss be quantified with reasonable methodological rigor rather than treated as a potential or notional figure. The third pillar fuses the *mens rea* filter under Supreme Court Regulation Number 13 of 2016, the proportionality principle drawn from the *Sapin II* philosophical core, and the business judgment rule as a boundary condition that distinguishes criminal corruption from legitimate business risk. Within this framework, ecological recovery cost is treated not as a parallel category outside state financial loss, but as a quantifiable financial component that the Supreme Audit Agency can declare on the basis of supporting environmental valuations (Wibisana & Dewaranu, 2017). By establishing this structure, the research ensures that ecological damage is not merely an "aggravating circumstance" but a verifiable, audit-supported item within the official quantum of state loss.

The novelty of this research lies in fusing two strands of Indonesian legal scholarship that have so far developed in isolation, namely the doctrinal jurisprudence on state loss and the environmental valuation literature on ecological damage. This study is the first in Indonesian scholarship to integrate the philosophical core of *Sapin II*, the boundary logic of the business judgment rule, and the monetary valuation methodologies of ecological harm into a single, post-Constitutional Court framework. Consequently, this study therefore moves beyond doctrinal description toward an actionable, evidence-based methodology that prosecutors, the Supreme Audit Agency, and trial courts can operationalize immediately without further legislative intervention.

3. Methods

This research employed a normative juridical method supported by a comparative legal approach. The choice of method follows Marzuki (2017, as cited in Saputera et al., 2025) this study adopts a doctrinal reconstruction framework that integrates statute, case, and conceptual analysis. The research procedure is organized into three sequential stages, data collection, doctrinal mapping, and normative reconstruction, that designed to ensure methodological rigor and replicability.

3.1. Research Approach and Data Sources

The research adopted a qualitative doctrinal design. Primary legal materials consisted of two cassation rulings of the Supreme Court of the Republic of Indonesia, namely Decision Number 4950 K/Pid.Sus/2023 in the Duta Palma case and Decisions Number 8431, 8432, and 8433 K/Pid.Sus/2025 in the cooking-oil export case. Supplementary primary materials

included Law Number 31 of 1999 as amended by Law Number 20 of 2001, Law Number 17 of 2003 on State Finance, the Indonesian Criminal Code as enacted through Law Number 1 of 2023, Supreme Court Regulation Number 13 of 2016, and the UNCAC ratified through Law Number 7 of 2006.

Secondary legal materials consisted of peer-reviewed journal articles indexed in Scopus and Sinta, scholarly monographs, and authoritative legal commentaries. The bibliographic search was conducted between January 2026 and April 2026 using the Scopus database, Web of Science, and Indonesian databases including Sinta and Garuda. Reference selection prioritized publications dated between 2017 and 2026 to ensure currency, with the exception of seminal monographs that have remained doctrinally authoritative.

3.2. Analytical Procedure

The analytical procedure proceeded in three distinct phases. First, the statute approach examined the textual and contextual meaning of state economic loss across the primary legal materials, particularly in light of recent Constitutional Court mandates. Second, the case approach examined the ratio decidendi of each cassation ruling, mapping the valuation logic, the evidentiary standard, and the sanction structure. Third, the conceptual approach examined the doctrinal coherence of the two rulings against the theoretical framework constructed in the literature review. Findings from these three phases were triangulated through a comparative matrix that aligned the rulings against eight analytical dimensions, namely subject of loss, valuation method, evidentiary standard, ecological component, *mens rea* filter, sanction structure, asset recovery mechanism, and doctrinal precedent. To strengthen validity, the research applied a comparative legal study against the French *Sapin II* framework and the Spanish criminal recovery model, using these not for legal transplantation but as philosophical reference points for evaluating doctrinal coherence. The reliability of the analysis was further supported by triangulating findings against peer-reviewed empirical studies from Scopus-indexed journals.

Regarding the case selection strategy, the research followed three explicit criteria. First, cases had to involve corporate defendants prosecuted under Article 2 paragraph (1) of Law Number 31 of 1999 as amended. Second, each case had to have reached cassation, providing a fully reasoned ratio decidendi. Third, cases had to exhibit methodological divergence on the calculation of state loss.

The palm oil sector was selected via purposive sampling for three strategic reasons. First, as the sector accounting for the two largest state-loss corporate corruption cases in Indonesian history, it provides the “stress test” needed to analyze complex, multi-layered damages such as fiscal, ecological, and downstream that push current audit methodologies to their limit. Second, the density of legal precedent in this sector provides the most fertile ground for analyzing the “methodological disorientation” between proceeds-based and loss-based valuation. Third, because the palm oil industry is vertically integrated, the doctrinal challenges observed here serve as a vital “doctrinal proxy” for other resource-extractive sectors, such as mining and forestry, making the findings robustly applicable to the broader architecture of corporate criminal liability in Indonesia.

4. Results and Discussion

4.1. Research Results

4.1.1. Methodological Disorientation in the Duta Palma Ruling

The Duta Palma cassation ruling adopted a hybrid valuation logic. The Supreme Court initially affirmed both state financial loss and state economic loss components at the first-instance level, including an ecological loss component valued at IDR 39.7 trillion. However, at the cassation stage the court excluded the ecological component and retained only the state financial loss of approximately IDR 2.238 trillion as the basis of replacement money. The court reasoned that the ecological component lacked a methodological basis in Indonesian audit practice, although the Supreme Audit Agency had provided supporting calculations. As noted by Aqilah (2025), this outcome resulted in a substantial reduction of the actual harm recognized in the final replacement-money order. This outcome exposes three fundamental doctrinal failures that extend well beyond mere procedural irregularity. First, by applying a proceeds-based logic that valued only the unlawful gain accruing to the perpetrator, the court implicitly endorsed a narrow, budgetary reading of state loss, which fundamentally contradicts the broader macroeconomic harm definition affirmed by the Constitutional Court in Decision Number 66/PUU-XXIV/2026. Second, the court treated the ecological component as evidentially weak rather than methodologically novel; by doing so, it foreclosed an emerging doctrinal pathway through which ecological recovery cost could be monetized as a financial figure suitable for declaration. Third, as argued by Hartati et al. (2024) as well as Wibisana and Dewaranu (2017), this exclusion produced a perverse incentive structure wherein corporations inflicting large but methodologically complex ecological harm receive lighter replacement-money orders than corporations whose unlawful gain is straightforward to quantify. The rejection of the judicial review petition in Decision Number 1277 PK/Pid.Sus/2024 solidified this proceeds-based logic as operative precedent, characterizing the ruling as a cautionary tale of "methodological nihilism," where the exclusion of ecological damage was not necessitated by law, but by a failure to reconcile modern valuation techniques with outdated procedural constraints.

This disorientation underscores the urgency of the "three-layer architecture" proposed in this study. The failures observed in *Duta Palma* could have been mitigated had there been a clear, inter-agency protocol, where the Supreme Audit Agency's declaring authority is supported by the technical rigors of ecological auditors, thereby preventing the trial court from arbitrarily dismissing valid ecological harm assessments due to a lack of individual judicial expertise. By integrating these expert valuations into the official declaration of loss, the judiciary can transition from subjective dismissal to informed, evidence-based validation, effectively restoring doctrinal coherence to the interpretation of state economic loss.

4.1.2. Loss-Based Logic in the Cooking-Oil Export Ruling

By contrast, the cooking oil export rulings followed a fully loss-based logic. The Supreme Court convicted three corporations under Article 2 paragraph (1) in conjunction with Article 18 of Law Number 31 of 1999 as amended by Law Number 20 of 2001, after the court of first instance had issued an *ontslag* verdict on 19 March 2025. Following the cassation appeal, which was filed amid law enforcement findings indicating strong indications of corruptive intervention and gratuity influencing the trial proceedings, the Supreme Court convicted the corporations with total replacement money of approximately IDR 17.708 trillion. The valuation comprised three sub-components, namely unlawful gain of IDR 1.69 trillion for PT

Wilmar Group, direct state financial loss of IDR 1.66 trillion, and downstream business and household loss of IDR 8.53 trillion (Saputera et al., 2025).

On 20 October 2025, the Attorney General's Office transferred IDR 13.255 trillion in cash to the Ministry of Finance, with the residual IDR 4.4 trillion secured by palm-oil plantation collateral. The fact that the same Chief Justice presided over both cassation panels, yet the valuation logic shifted dramatically within twenty-four months, highlights a profound methodological disorientation. This gap suggests that doctrinal consistency in Indonesian corruption jurisprudence is currently highly vulnerable to "judicial preference" rather than adherence to a standardized audit methodology.

Without a uniform framework, the interpretation of what constitutes "loss" depends heavily on the specific configuration of the judicial panel, creating significant legal uncertainty for business actors. This analysis reinforces the urgency of the "three-layer architecture" proposed in this study. This architecture serves to normalize valuation methodology, ensuring it is no longer trapped in inconsistent doctrinal fluctuations, and guaranteeing that every component of loss, whether direct or indirect, can be scientifically accounted for under the Supreme Audit Agency's declaring authority, synchronized with rigorous audit standards.

4.1.3. Comparative Matrix of *Ratio Decidendi*

Table 1 presents a comparative matrix of the *ratio decidendi* of the two rulings across eight analytical dimensions. The matrix shows that the rulings diverge fundamentally on five of the eight dimensions, namely subject of loss, valuation method, evidentiary standard, ecological component, and asset recovery mechanism. The doctrinal precedent generated by the two rulings is therefore internally inconsistent and provides limited guidance for future cases.

Table 1. Comparative Matrix of *Ratio Decidendi* in the Two Cassation Rulings

Dimension	Duta Palma Ruling (2023)	Cooking-Oil Export Ruling (2025)
Subject of loss	State financial loss only	State financial loss plus economic loss plus household loss
Valuation method	Proceeds-based, focused on unlawful gain	Loss-based, focused on actual harm to the state and society
Evidentiary standard	Strict, ecological component excluded	Comprehensive, downstream loss included
Ecological component	Excluded at cassation level	Not raised, sectoral focus on cooking oil
Mens rea filter	Implicit, individual-controller liability	Explicit, corporate identification doctrine applied
Sanction structure	Imprisonment plus replacement money	Corporate fine plus replacement money plus collateral seizure
Asset recovery mechanism	Cash and confiscation of plantation assets	Cash transfer plus plantation collateral arrangement
Doctrinal precedent	Reaffirms strict ecological exclusion	Expands loss recognition into downstream sectors

Source: Authors' analysis of cassation rulings and supporting documents (2026)

This matrix serves as the empirical justification for the proposed methodological reconstruction. By mapping these dimensions, it becomes evident that the inconsistency is not merely a variance in judicial opinion but a systematic failure of the current audit architecture to provide a unified benchmark. This fragmentation necessitates the adoption of the three-layer architecture proposed in this study, which would force these divergent dimensions into

a single, audit-verified evidentiary process, thereby neutralizing the subjectivity currently inherent in the judicial determination of state loss.

4.2. Discussion

4.2.1. Three-Layer Architecture Anchored in Constitutional Court Jurisprudence

The comparative matrix presented in the previous section exposes a profound doctrinal vacuum that the recent Constitutional Court rulings now compel the legal community to fill. Decision Number 28/PUU-XXIV/2026 and Decision Number 66/PUU-XXIV/2026, taken together, establish three normative anchors, namely the exclusive declaring authority of the Supreme Audit Agency under Article 23E paragraph (1) of the 1945 Constitution, the conditional reading of state loss as state financial loss in the strict sense, and the *actual loss* principle that rejects valuations resting on potential or merely administrative assumptions. Within these anchors, this study advances an Integrated Economic and Ecological Audit Standard as *ius constituendum*, structured deliberately as a three-layer architecture rather than a parallel methodology that competes with the constitutional design.

The first layer is the declaring authority, occupied exclusively by the Supreme Audit Agency. Only the Supreme Audit Agency may pronounce, with binding constitutional weight, the final figure of state financial loss. The second layer is the supporting authority, comprising the Financial and Development Supervisory Agency, internal inspectorates, certified public accountants, and qualified ecological auditors. These institutions produce technical valuations that feed upward into the Supreme Audit Agency's declaration and may also serve as evidence on which the trial court relies. The third layer is the judicial authority, retained by the panel of judges, who maintain independent power to assess the methodological soundness of audit findings and to test the causal connection between corporate conduct and the declared loss.

A practical concern arises here, namely how trial courts can validate audit findings without encroaching on the Supreme Audit Agency's exclusive declaring authority. The architecture resolves this tension through a methodological review standard rather than a substitutive valuation standard. Trial courts do not produce competing figures; they assess three aspects of audit findings, namely (a) methodological consistency and grounding in recognized valuation techniques, (b) proper corroboration of secondary calculations by the Supreme Audit Agency, and (c) competent evidence of causal linkage between corporate conduct and the declared loss. This division preserves constitutional declaring authority while safeguarding judicial independence affirmed by Decision Number 28/PUU-XXIV/2026.

Within this architecture, the proposed standard rests on five components that together capture the full quantum of harm, namely (a) the unlawful gain captured by the corporation, (b) the direct state financial loss inflicted on the state treasury, (c) the ecological recovery cost derived from established environmental valuation methodologies (Wibisana & Dewaranu, 2017), (d) the downstream economic loss absorbed by affected sectors and households, and (e) the social cost of corruption tracked through trust and governance indicators. Importantly, all five components are reconceptualized as quantifiable financial figures that fall within the strict reading of state financial loss under Decision Number 66/PUU-XXIV/2026, while collectively forming the broader umbrella of state economic loss that the proposed standard seeks to harmonize. Ecological damage, for example, is not treated as a parallel category beyond financial loss; rather, it is monetized through replacement-cost or restoration-cost methodologies, and the resulting figure flows through the supporting layer into the Supreme Audit Agency's final declaration.

Two doctrinal filters keep the framework analytically disciplined. The first is the *mens rea* requirement set out in Supreme Court Regulation Number 13 of 2016, which ensures that corporate liability rests on identifiable corporate fault rather than on aggregate damage alone. The second is the proportionality principle drawn from the *Sapin II* philosophical core, which calibrates the severity of corporate sanctions to the actual harm caused and thereby separates the proposed standard from a maximalist, purely punitive recovery model. Alongside these filters operates the business judgment rule, namely a working presumption that legitimate business risk should not be criminalized in the absence of fraudulent intent (Setiawati & Vitrana, 2025). Together, these filters give effect to the *actual loss* principle that the Constitutional Court reaffirmed in Decision Number 66/PUU-XXIV/2026.

Empirical findings from Scopus-indexed scholarship lend solid support to monetizing the ecological component as state financial loss. Akhbari and Nejati (2019) traced a statistically significant uptick in carbon emissions to corruption levels in developing economies. Tang (2024) documented how corruption interacts with natural-resource depletion to magnify the ecological footprint and biodiversity loss in the most corrupt economies. Reviewing two hundred studies, Sundström et al. (2026) concluded that corruption hollows out the carbon storage capacity of forests through unchecked deforestation. These convergent findings furnish a robust empirical basis for valuing ecological recovery cost as a quantifiable financial cost suitable for declaration by the Supreme Audit Agency, a treatment that the Duta Palma ruling, with its proceeds-based logic, conspicuously avoided.

Comparative legal experience reinforces this conclusion. González Uriel (2021) showed that the Spanish recovery model places laundered proceeds and confiscation at the centre of anti-corruption enforcement, while Deng (2018) cautioned that institutional centralization unsupported by methodological clarity tends to produce inconsistent outcomes, as the Chinese experience illustrates. The lesson for Indonesia is that the centralization affirmed by Decision Number 28/PUU-XXIV/2026 must be complemented by methodological clarity, otherwise the Supreme Audit Agency's declaring authority risks becoming a procedural bottleneck rather than a substantive guarantor of legal certainty. The proposed three-layer architecture provides that clarity without requiring legislative overhaul, since its components can be operationalized through Supreme Court guidelines, in particular through harmonization with Supreme Court Circular Letter Number 2 of 2024 and inter-agency standard operating procedures (Hartati et al., 2024; Karianga, 2024; Nelson, 2022).

Successful implementation depends on coordinated action across the three layers. Drawing on Mahmud (2018) and Tuanakotta (2023), the framework assigns the Supreme Audit Agency primary responsibility for the final declaration of state financial loss, with the Financial and Development Supervisory Agency producing initial calculations of unlawful gain, certified ecological auditors valuing recovery cost, and inspectorates supplying internal compliance findings. The Public Prosecutor consolidates these supporting valuations and submits them to the Supreme Audit Agency for corroboration before charging. The trial court, exercising its judicial authority, retains independent power to test the methodological integrity of the resulting figure during proceedings (Komalasari & Mustafa, 2024).

The downstream implications are far from trivial. Prosecutors gain a doctrinal template that lowers evidentiary uncertainty and sharpens charging decisions in line with the constitutional architecture. Judges acquire a predictable analytical matrix that strengthens the coherence of rulings while preserving their independent power to evaluate audit findings. Corporations receive a clearer line dividing criminal corruption from legitimate business risk, which in turn justifies serious investment in compliance programs. The state, finally,

maximizes recovery of misappropriated assets and brings domestic practice into closer alignment with both the UNCAC and the constitutional mandate of the Supreme Audit Agency (Hiariej, 2019; Saragih et al., 2024).

5. Conclusion

Looking across the two cassation rulings examined here, namely the Duta Palma ruling and the cooking oil export ruling, this research identified a clear methodological disorientation in how Indonesian courts quantify state financial loss against corporate defendants. The Duta Palma ruling adopted a proceeds-oriented logic and set the ecological component aside, whereas the cooking oil export ruling embraced a loss-oriented logic that explicitly captured downstream damage to the wider economy. The occurrence of such a substantial shift in valuation logic within twenty-four months, in the absence of any intervening legislative change, indicates a doctrinal vacuum that erodes legal certainty and weakens the deterrent edge of corporate criminal liability. The Constitutional Court rulings of 2026, namely Decision Number 28/PUU-XXIV/2026 and Decision Number 66/PUU-XXIV/2026, have transformed the resolution of that vacuum from an academic preference into a constitutional obligation.

The principal contribution of this study lies in offering an Integrated Economic and Ecological Audit Standard structured as a three-layer architecture aligned with the Constitutional Court rulings. The Supreme Audit Agency occupies the declaring layer, supporting institutions occupy the technical valuation layer, and the trial court retains independent judicial validation. Within that architecture, five cumulatively valued components capture the full quantum of state financial loss, including ecological recovery cost reconceptualized as a quantifiable financial figure within the broader umbrella of state economic loss. Disciplined by the *mens rea* filter and the proportionality logic of the *Sapin II* framework, the standard provides methodological harmonization without forcing a legislative overhaul. Its components can be operationalized through Supreme Court guidelines and inter-agency standard operating procedures already within reach of the existing institutional architecture.

The practical implications cut across the criminal justice chain. For the Supreme Audit Agency, the framework provides a standardized template for incorporating ecological recovery cost into final declarations of state financial loss. For the Financial and Development Supervisory Agency, internal inspectorates, and certified ecological auditors, it clarifies their role as supporting valuation producers. For the Public Prosecutor, it offers a pre-charge consultation pathway that mirrors *Sapin II*'s structured-negotiation logic without requiring deferred prosecution. For trial courts, it supplies a methodological review standard that preserves judicial independence while respecting constitutional declaring authority. For corporations, it yields a clearer boundary between criminal corruption and legitimate business risk. For lawmakers, it offers a blueprint operationalizable through harmonization of Supreme Court Circular Letter Number 2 of 2024 with an inter-agency standard operating procedure.

Two limitations frame the scope of these conclusions. First, the empirical reach of this study is confined to two cassation rulings in the natural resource sector, and whether the findings translate comfortably to banking, infrastructure, or digital economy fraud remains an open question. Second, the proposed standard is doctrinal rather than econometric, so its operational details, particularly the monetization of ecological and downstream components, will require quantitative refinement in subsequent work. Future research could test the framework through econometric modeling of post-2026 cases, extend the analytical lens to additional sectors, examine the practical bottleneck created by the Supreme Audit Agency's

expanded workload after Decision Number 28/PUU-XXIV/2026, and survey prosecutors and judges directly to gauge practical receptiveness to the proposed three-layer architecture.

6. References

Akhbari, R., & Nejati, M. (2019). The Effect of Corruption on Carbon Emissions in Developed and Developing Countries: Empirical Investigation of a Claim. *Heliyon*, *5*(9), e02516. https://doi.org/10.1016/j.heliyon.2019.e02516

Aqilah, S. F. (2025). Analisis Yuridis Kasus Korupsi dan Pencucian Uang PT Duta Palma Group dalam Perspektif Hukum Dagang Indonesia. *Causa: Jurnal Hukum Dan Kewarganegaraan*, *15*(5), 131–140. https://doi.org/10.6679/btszr219

Atmasasmita, R. (2018). *Pengantar Hukum Kejahatan Bisnis*. Prenadamedia Group.

Deng, J. (2018). The National Supervision Commission: A New Anti-corruption Model in China. *International Journal of Law, Crime and Justice*, *52*, 58–73. https://doi.org/10.1016/j.ijlcj.2017.09.005

Fernando, Z. J., Illahi, B. K., Putra, Y. S., & Gusri, I. (2023). Deep Anti-Corruption Blueprint for the Mining, Mineral, and Coal Sector in Indonesia. *Cogent Social Sciences*, *9*(1), 2187737. https://doi.org/10.1080/23311886.2023.2187737

Fernando, Z. J., Pujiyono, P., Susetyo, H., Candra, S., & Putra, P. S. (2022). Preventing Bribery in the Private Sector Through Legal Reform Based on Pancasila. *Cogent Social Sciences*, *8*(1), 2103944. https://doi.org/10.1080/23311886.2022.2138906

Fuady, M. (2014). *Doktrin-Doktrin Modern dalam Corporate Law & Eksistensinya dalam Hukum Indonesia*. Citra Aditya Bakti.

González Uriel, D. (2021). Money Laundering, Political Corruption and Asset Recovery in the Spanish Criminal Code. *International Annals of Criminology*, *59*(1), 38–54. https://doi.org/10.1017/cri.2021.5

Hafrida, H., Kusniati, R., & Monita, Y. (2022). Imprisonment as a Criminal Sanction against Corporations in Forestry Crimes: How Is It Possible? *Hasanuddin Law Review*, *8*(2), 160–170. https://doi.org/10.20956/halrev.v8i2.3187

Hartati, Hafrida, Erwin, Arizyanto, R., & Saputra, B. (2024). Authority for Calculating State Economic Losses in Criminal Acts of Corruption in Indonesia. *Jurnal IUS Kajian Hukum Dan Keadilan*, *12*(3), 530–541. https://doi.org/10.29303/ius.v12i3.1480

Hiariej, E. O. S. (2019). United Nations Convention Against Corruption Dalam Sistem Hukum Indonesia. *OLD WEBSITE OF JURNAL MIMBAR HUKUM*, *31*(1), 112–125. https://doi.org/10.22146/jmh.43968

Karianga, H. (2024). State Financial Corruption and its Impact on Development. *Revista de Gestão Social e Ambiental*, *18*(9), e05133. https://doi.org/10.24857/rgsa.v18n9-027

Komalasari, R., & Mustafa, C. (2024). Strengthening Asset Recovery Efforts: A Path to Mitigating Corruption in the Public Sector. *Integritas: Jurnal Antikorupsi*, *10*(1), 137–148. https://doi.org/10.32697/integritas.v10i1.1042

Mahmud, A. (2018). Problematika Asset Recovery dalam Pengembalian Kerugian Negara Akibat Tindak Pidana Korupsi. *Jurnal Yudisial*, *11*(3), 347–366. https://doi.org/10.29123/jy.v11i3.262

Nelson, F. M. (2022). In Search of a Deferred Prosecution Agreement Model for Effective Anti-Corruption Framework in Indonesia. *Hasanuddin Law Review*, *8*(2), 122–138. https://doi.org/10.20956/halrev.v8i2.3292

Prayudha, Y. W. (2025). Legal Protection for Victims of Illegal Investment through Loss Recovery. *Policy Law Notary and Regulatory Issues (POLRI)*, *4*(4), 672–688. https://doi.org/10.55047/polri.v4i4.1912

Saputera, J. A., Naiborhu, M. I., Budiman, E., Widjaja, L., & Sudrajat, M. (2025). Rekonstruksi Pertanggungjawaban Pidana Korporasi dalam KUHP Nasional: Telaah Kritis atas

Undang-Undang Nomor 1 Tahun 2023 dalam Perspektif Hukum Pidana Modern. *The Juris*, *9*(2), 388–394. https://doi.org/10.56301/juris.v9i2.1750

Saragih, E. P. H., Akub, M. S., Halim, H., Halim, H., & Ilyas, A. (2024). Efforts of The Prosecutor as State Attorney to Recovery Recovery of State Losses Through Replacement Money. *Revista de Gestão Social e Ambiental*, *18*(6), e05567. https://doi.org/10.24857/rgsa.v18n6-079

Setiawati, A. D., & Vitrana, M. G. (2025). Doktrin Business Judgment Rule dalam UU BUMN: Batas Tanggung Jawab Direksi dalam Tindak Pidana Korupsi. *JURNAL RECHTENS*, *14*(1), 155–170. https://doi.org/10.56013/rechtens.v14i1.4256

Sjawie, H. F. (2018). *Pertanggungjawaban Pidana Korporasi pada TIPIKOR*. Kencana.

Suhariyanto, B. (2018). Penerapan Pidana Uang Pengganti kepada Korporasi dalam Perkara Korupsi demi Pemulihan Kerugian Keuangan Negara. *Jurnal Rechts Vinding: Media Pembinaan Hukum Nasional*, *7*(1), 113–130. https://doi.org/10.33331/rechtsvinding.v7i1.213

Sundström, A., Harring, N., Jagers, S. C., & Povitkina, M. (2026). The Impact of Corruption on Climate Change Mitigation: A Review Article. *Environmental Politics*, 1–25. https://doi.org/10.1080/09644016.2026.2621602

Tang, Y. (2024). Nexus of Natural Resource Depletion, Corruption, and Financial Inclusion on Biodiversity Loss: A Systematic Study on Corrupt Economies. *Resources Policy*, *92*, 104967. https://doi.org/10.1016/j.resourpol.2024.104967

Tuanakotta, T. M. (2023). *Menghitung Kerugian Keuangan Negara dalam Tindak Pidana Korupsi*. Penerbit Salemba.

Wibisana, A. G., & Dewaranu, T. A. (2017). Environmental Damage and Liability in Indonesia: Fancy Words Under Conventional Wisdom. In *Law and Justice in a Globalized World* (pp. 221–228). Routledge. https://doi.org/10.9774/gleaf.9781315223292_30

Zaki, M., Y Chandra, T., & Adianto Mau, H. (2022). The Problem of Corruption Law Enforcement That Causes State Losses Since The Constitutional Court of The Republic of Indonesia Number 25/PUU-XIV/2016 Decision. *POLICY, LAW, NOTARY AND REGULATORY ISSUES (POLRI)*, *1*(3). https://doi.org/10.55047/polri.v1i3.204