

Legal Governance of State Financial Losses in Corruption Cases

Figgi Agrimiandra^{1*} , Muhammad Apdiza Mahdafiqia² , Dyan Pratama Asintya Sakti³ , Dippo

Alam⁴ 

^{1,2,3,4}Faculty of Law, Universitas Islam Syekh Yusuf, Indonesia

¹2507020001@students.unis.ac.id, ²apdiza26@gmail.com, ³saktipratama816@gmail.com, ⁴dippoalam0811@gmail.com

*Corresponding Author

Article Info

Article history:

Submission April 23, 2026

Revised July 06, 2026

Accepted July 13, 2026

Published July 28, 2026

Keywords:

Corruption

State Financial Loss

Legal Certainty

Institutional Accountability

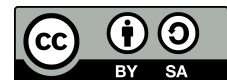
Criminal Code



ABSTRACT

The enactment of Law Number 1 of 2023 concerning the Indonesian Criminal Code has reformed the regulation of corruption offenses, particularly the legal construction of state financial loss under Articles 603 and 604. **Although previous** studies have extensively examined state financial loss under the Corruption Eradication Law, limited attention has been devoted to the doctrinal implications of the new Criminal Code for legal certainty, evidentiary standards, and institutional accountability. This study aims to analyze the legal construction, doctrinal developments, and regulatory implications of state financial loss within Indonesia's reformed corruption law framework. **A normative legal** research method is employed using statutory, conceptual, and limited comparative approaches, supported by the analysis of primary, secondary, and tertiary legal materials. The findings demonstrate that Articles 603 and 604 reaffirm state financial loss as a fundamental element of corruption offenses while shifting the evidentiary focus toward actual, objectively measurable losses. **This doctrinal development** strengthens legal certainty, promotes more consistent judicial interpretation, and enhances institutional accountability through clearer evidentiary standards. However, effective implementation remains constrained by inconsistent audit methodologies, overlapping institutional authority, and divergent legal interpretations among law enforcement agencies. **This study contributes** to Indonesian corruption law by providing an integrated doctrinal analysis of the reconstruction of state financial loss and emphasizing the importance of legal harmonization, standardized audit mechanisms, and stronger institutional coordination to ensure transparent, accountable, and effective corruption law enforcement under the 2023 Criminal Code.

This is an open access article under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license.



This is an open access article under the CC BY license (<https://creativecommons.org/licenses/by/4.0/>)

©Authors retain all copyrights

1. INTRODUCTION

Corruption remains one of the most significant threats to the rule of law, public governance, and sustainable development, particularly in developing countries such as Indonesia. Beyond causing substantial economic losses, corruption undermines institutional accountability, erodes public trust in government, distorts market competition, and impairs the effective delivery of public services [1]. Consequently, combating corruption requires not only effective criminal sanctions but also a coherent legal framework that ensures legal

certainty and institutional accountability. Within this framework, state financial loss constitutes a fundamental legal element in establishing criminal liability for corruption offenses because it directly relates to the protection of public resources and the accountability of state financial management [2]. The enactment of Law Number 1 of 2023 concerning the Criminal Code *Undang-Undang Hukum Pidana* (KUHP) represents one of the most significant reforms in Indonesia's criminal justice system since independence [3]. Unlike the previous fragmented legislative structure, the new Criminal Code codifies various criminal provisions into a unified legal framework, including corruption offenses under Articles 603 and 604 [4]. This reform is expected to improve consistency in the application of criminal law while strengthening legal certainty through clearer statutory provisions. Nevertheless, incorporating corruption offenses into the new Criminal Code raises important doctrinal questions regarding the interpretation of state financial loss, particularly whether criminal liability should continue to encompass potential state losses or instead focus on actual, measurable, and objectively verifiable losses [5]. These doctrinal developments have significant implications for criminal prosecution, evidentiary standards, judicial reasoning, and institutional coordination among law enforcement agencies and state audit institutions.

The urgency of addressing this issue is further demonstrated by empirical evidence [6]. According to Transparency International's Corruption Perceptions Index (CPI), Indonesia scored only 34 points in 2023, indicating that corruption remains a persistent governance challenge. Moreover, annual statistics published by the Corruption Eradication Commission (KPK) consistently show that corruption cases involving state financial losses continue to dominate criminal investigations and prosecutions [7]. These findings indicate that the regulation of state financial loss is not merely a doctrinal issue but also a practical legal concern affecting the effectiveness of corruption law enforcement, public financial accountability, and institutional governance. At the international level, strengthening anti-corruption mechanisms is closely aligned with Sustainable Development Goal (SDG) 16, which promotes peace, justice, strong institutions, transparency, and accountable governance as fundamental pillars of sustainable development [8]. Despite the growing body of literature on corruption law and state financial loss, existing studies have primarily focused on interpreting the Corruption Eradication Law, the institutional authority to calculate state financial losses, or judicial practices prior to the enactment of the 2023 Criminal Code [9]. Comparatively little attention has been devoted to examining how Articles 603 and 604 reconstruct the legal concept of state financial loss, reshape evidentiary standards, and influence institutional accountability within Indonesia's evolving anti-corruption framework. Furthermore, previous studies generally examine state financial loss from either a criminal law or a public finance perspective without integrating doctrinal interpretation, legal certainty, and governance implications following the enactment of the new Criminal Code [10]. A significant research gap remains regarding the doctrinal implications of Articles 603 and 604 within Indonesia's reformed criminal law framework. This study addresses that gap by providing an integrated doctrinal analysis that combines legal certainty, evidentiary standards, institutional accountability, and governance perspectives, offering a novel contribution beyond previous legal studies.

Rather than focusing solely on the normative formulation of state financial loss, this study examines its implications for legal certainty, evidentiary standards, institutional accountability, and the effectiveness of corruption law enforcement [11]. Unlike previous studies, which primarily address the existence of state financial loss as an element of corruption offenses, this research critically evaluates how the doctrinal transition introduced by the new Criminal Code reshapes legal interpretation and influences the relationship between criminal law, regulatory governance, and state financial oversight [12]. By positioning corruption law within the broader context of governance reform and regulatory development, this study also contributes to ongoing academic discussions on institutional accountability and legal policy in Indonesia. Based on these considerations, this study addresses three principal research questions [13]. This study addresses three principal research questions. The question examines how the concept and legal scope of state financial loss are formulated under Articles 603 and 604 of Law Number 1 of 2023. The study also analyzes how the new Criminal Code modifies legal interpretation and evidentiary requirements compared with the previous corruption legislation. The final question investigates the broader implications of these doctrinal developments for legal certainty, institutional accountability, and the effectiveness of corruption law enforcement in Indonesia. To answer these questions, this study provides a comprehensive normative and conceptual analysis of the legal construction of state financial loss under the new Criminal Code while offering recommendations for strengthening legal harmonization, regulatory consistency, and institutional coordination in corruption law enforcement [14]. Ultimately, the findings are expected to contribute not only to the development of Indonesian criminal law scholarship but also to broader discussions on governance reform, regulatory frameworks, and sustainable legal institutions that

support transparent, accountable, and integrity-based public administration.

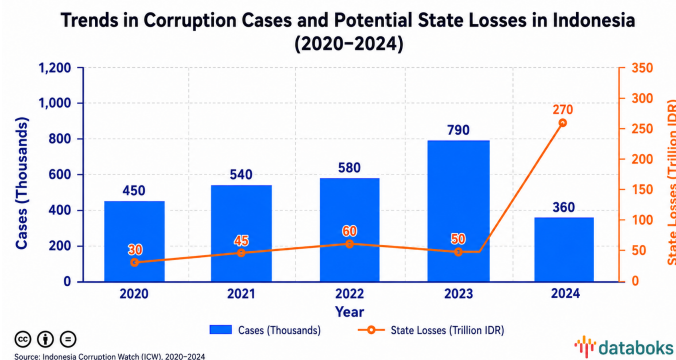


Figure 1. Trends in Corruption Cases and State Financial Losses in Indonesia (2020–2024)

Figure 1 According to Indonesia Corruption Watch (ICW), 364 corruption cases were recorded in 2024, resulting in estimated state financial losses of approximately Rp279.9 trillion, the highest recorded loss during the past five years. In contrast, approximately 791 corruption cases were documented in 2023, with estimated losses of Rp28.4 trillion, indicating that the number of cases does not necessarily correspond to the magnitude of state financial losses. The extraordinary increase in losses during 2024 was primarily driven by several large-scale corruption cases in the mining sector, highlighting the growing importance of effective legal mechanisms for determining, proving, and recovering state financial losses. Therefore, not only illustrates recent corruption trends but also underscores the practical importance of establishing clear legal standards for interpreting and proving state financial loss under the 2023 Criminal Code.

From the perspective of sustainable development, this study also contributes to the implementation of Sustainable Development Goal (SDG) 16, particularly Targets 16.3, 16.5, and 16.6, which emphasize the promotion of the rule of law, the reduction of corruption, and the development of effective, accountable, and transparent institutions [15]. The legal reconstruction of state financial loss under Articles 603 and 604 of Law Number 1 of 2023 is expected to strengthen legal certainty, improve evidentiary standards, and enhance institutional coordination among law enforcement agencies and state audit institutions. By clarifying the legal framework governing the determination of state financial loss, the study supports more consistent and accountable anti-corruption enforcement while reinforcing public trust in legal institutions and public financial governance [16]. Consequently, the findings provide not only a doctrinal contribution to Indonesian criminal law scholarship but also practical policy insights that support the achievement of SDG 16 through stronger institutional integrity, transparent governance, and sustainable legal reform.

2. LITERATURE REVIEW

2.1. The Concept and Legal Doctrine of State Financial Loss

State financial loss constitutes a fundamental legal element in prosecuting corruption offenses in Indonesia, serving as both evidence of economic harm and a basis for establishing criminal liability while safeguarding public resources. Consequently, it has evolved into a key component of legal certainty, public accountability, and good governance, reflecting the broader impact of corruption on institutional integrity and public trust [17]. Legal scholarship identifies two complementary dimensions of state financial loss: the normative dimension, which provides a clear statutory basis for consistent judicial interpretation, and the evidentiary dimension, which concerns the identification and verification of losses through legally recognized audit mechanisms. Recent scholarship emphasizes actual and objectively measurable losses over broadly interpreted potential losses to strengthen legal certainty and ensure that criminal liability is supported by credible evidence [18]. Accordingly, state financial loss represents the intersection of criminal law, public financial accountability, and institutional governance, forming the theoretical basis for evaluating the legal reforms introduced by Law Number 1 of 2023 concerning the Criminal Code.

2.2. Institutional Accountability and Legal Frameworks in Corruption Law

Institutional accountability is essential for ensuring the effective enforcement of corruption law, particularly in determining and proving state financial losses. Indonesia's anti-corruption framework involves several institutions, including the Supreme Audit Agency (BPK), the Financial and Development Supervisory Agency (BPKP), the Corruption Eradication Commission (KPK), and other law enforcement agencies [19]. Although these institutions share the common objective of safeguarding state finances, differences in legal authority and audit methodologies frequently produce inconsistent assessments of state financial losses. Such inconsistencies may affect judicial reasoning, reduce legal certainty, and complicate corruption prosecutions. Recent legal scholarship emphasizes that strengthening the regulatory framework requires not only clarifying institutional authority but also establishing uniform standards for calculating and verifying state financial losses [20]. From a governance perspective, effective coordination among relevant institutions promotes transparency, accountability, and public confidence in anti-corruption policies. Therefore, legal reform should be accompanied by greater harmonization among criminal law, public financial management, and audit regulations to ensure that evidentiary processes remain objective, consistent, and legally reliable.

Previous studies have examined state financial loss from various legal and institutional perspectives. Research by Mulyadi emphasizes methods for calculating state financial losses in corruption cases but does not discuss the implications of Law Number 1 of 2023 concerning the Criminal Code. Similarly, Sihombing focuses on evidentiary standards for proving state financial loss before the courts while providing only limited discussion of institutional coordination. Meanwhile, the National Legal Development Agency (BPHN) explains the legal implications of incorporating corruption offenses into the new Criminal Code but primarily concentrates on statutory interpretation rather than broader governance issues. From an international governance perspective, the OECD highlights the importance of institutional accountability and transparent regulatory frameworks in combating corruption, although its analysis does not specifically address Articles 603 and 604 of the Indonesian Criminal Code [21]. These studies have substantially advanced the understanding of state financial loss from legal, institutional, and governance perspectives. Nevertheless, they generally examine each dimension independently. Furthermore, little scholarly attention has been given to assessing how recent criminal law reforms reshape the legal construction of state financial loss within the broader objectives of anti-corruption governance and public accountability. As a result, limited attention has been devoted to explaining how the 2023 Criminal Code integrates doctrinal interpretation, institutional accountability, and regulatory governance into a coherent legal framework. This gap provides the primary justification for the present study, which offers an integrated doctrinal analysis of Articles 603 and 604 and evaluates their implications for legal certainty and the effectiveness of corruption law enforcement.

2.3. Reform of Articles 603 and 604 of the 2023 Criminal Code

The enactment of Law Number 1 of 2023 concerning the Criminal Code represents a significant milestone in Indonesia's criminal law reform, particularly in regulating corruption offenses under Articles 603 and 604 [22]. Unlike the previous legal framework, which addressed corruption primarily through the Corruption Eradication Law, the new Criminal Code incorporates corruption offenses into a unified criminal law system. This codification is intended to improve legal consistency while reducing overlapping interpretations among criminal law, state financial law, and administrative law [23]. The codification also reflects the government's broader effort to modernize Indonesia's criminal justice system by integrating corruption offenses into a more coherent and systematic legal framework. This reform seeks to reduce normative fragmentation that previously created inconsistencies in the interpretation and application of corruption law across different legal regimes. In addition, a unified regulatory structure is expected to strengthen coordination among law enforcement agencies and state audit institutions in determining the legal consequences of corruption offenses. Consequently, the new Criminal Code provides a stronger foundation for developing more consistent evidentiary standards and reinforcing institutional accountability in corruption law enforcement. A major doctrinal development introduced by Articles 603 and 604 is the stronger emphasis on objectively identifiable and measurable state financial losses. This approach marks a departure from the broader interpretation that previously permitted potential state losses to serve as the basis for criminal liability. By requiring more objective standards of proof, the revised provisions seek to enhance legal certainty, strengthen evidentiary reliability, and promote fairness in judicial proceedings [24]. Nevertheless, the effectiveness of these reforms ultimately depends on consistent judicial interpretation and harmonized implementation among law enforcement agencies and state audit institutions.

Table 1. Doctrinal Comparison Between Previous Corruption Legislation and the 2023 Criminal Code

Aspect	Previous Law	Corruption Criminal Code 2023 (Articles 603–604)	Legal Implication
Legal approach	Regulated separately under the Corruption Eradication Law	Integrated into the national Criminal Code	Greater systematic consistency in criminal legislation
State financial loss	Broader interpretation, including potential loss	Greater emphasis on actual and measurable loss	Improved legal certainty in criminal prosecution
Evidentiary standard	Multiple interpretations in judicial practice	Objective proof supported by authorized audit institutions	Stronger evidentiary consistency
Institutional perspective	Limited integration between criminal law and audit mechanisms	Greater harmonization between criminal law and public financial accountability	Enhanced institutional coordination

Table 1 highlights the principal doctrinal differences between the previous corruption legislation and the 2023 Criminal Code. Beyond reorganizing corruption provisions within a unified statutory framework, the reform establishes a clearer legal basis for determining state financial losses through objective evidentiary standards [25]. These changes are expected to improve legal certainty and institutional coordination. Moreover, the doctrinal shift reflects a broader regulatory effort to align criminal law enforcement with the principles of transparency, accountability, and evidence-based governance, thereby reinforcing public confidence in the integrity of Indonesia’s anti-corruption legal system. However, their practical effectiveness will largely depend on consistent judicial interpretation, standardized audit methodologies, and effective implementation by law enforcement agencies and state audit institutions.

2.4. Research Gap and Analytical Framework

The existing literature demonstrates that state financial loss has been examined from various perspectives, including criminal law, public financial management, evidentiary standards, and institutional authority. While these studies have significantly advanced the understanding of corruption law, most were conducted before the enactment of Law Number 1 of 2023 or primarily focused on the Corruption Eradication Law [26]. Consequently, limited attention has been devoted to evaluating the doctrinal implications of Articles 603 and 604 within Indonesia’s reformed criminal law framework. Another limitation of previous studies is their tendency to examine legal doctrine, institutional authority, and governance separately, providing only limited insight into the interaction among these dimensions. As a result, the relationship between the legal reconstruction of state financial loss, evidentiary standards, institutional accountability, and regulatory governance remains insufficiently explored [27]. To address this gap, the present study adopts an integrated analytical framework that combines doctrinal legal analysis with governance and regulatory perspectives. This framework facilitates a comprehensive evaluation of how Articles 603 and 604 redefine the legal construction of state financial loss, reshape evidentiary standards, and strengthen institutional accountability in corruption cases [28]. By integrating these perspectives, the study contributes to the development of Indonesian corruption law while providing policy recommendations for improving legal harmonization and enhancing the effectiveness of anti-corruption law enforcement.

3. RESEARCH METHOD

3.1. Research Design

This study employs a normative legal research approach to examine the legal construction of state financial loss in corruption offenses under Law Number 1 of 2023 concerning the Criminal Code, particularly Articles 603 and 604. A normative approach is appropriate because the analysis focuses on statutory provisions, legal doctrines, and legal principles governing corruption law and state financial accountability [29]. Rather than investigating empirical behavior, the study evaluates the consistency, interpretation, and legal implications of statutory norms within Indonesia’s criminal justice system. The research is designed to assess whether the doctrinal developments introduced by the 2023 Criminal Code enhance legal certainty in determining state

financial loss while strengthening institutional accountability in corruption law enforcement [30]. To achieve this objective, legal interpretation is integrated with governance perspectives to evaluate the effectiveness of the current regulatory framework.

3.2. Research Approaches

To address the research objectives comprehensively, three complementary legal research approaches are employed. the statutory approach examines legislation governing corruption and state financial loss, including Law Number 1 of 2023 concerning the Criminal Code, Law Number 31 of 1999, Law Number 20 of 2001 concerning the Eradication of Corruption, and related regulations [31]. This approach is used to identify changes in legal norms and compare the regulation of state financial loss before and after the enactment of the 2023 Criminal Code. Another important approach is the conceptual approach, which analyzes legal concepts derived from criminal law doctrine, public financial law, legal certainty theory, and institutional accountability. These concepts provide the theoretical basis for interpreting the legal meaning and function of state financial loss within Indonesia's anti-corruption framework [32]. A limited comparative approach is applied to compare the legal construction of state financial loss under the previous corruption regime with the provisions introduced by Articles 603 and 604. This comparison facilitates the identification of doctrinal developments and their implications for legal interpretation and corruption law enforcement.

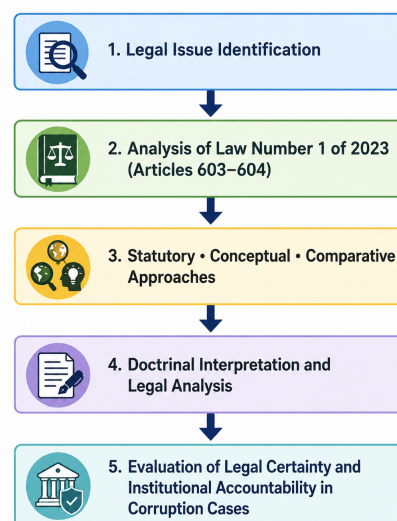


Figure 2. (Research Framework of the Study)

Figure 2 illustrates the analytical framework adopted in this study. The framework begins with the examination of statutory provisions governing corruption offenses and state financial loss under the Indonesian legal system. These legal norms are subsequently analyzed through doctrinal and conceptual perspectives, including criminal law doctrine, legal certainty theory, public financial accountability, and institutional governance [33]. The framework further incorporates a comparative analysis between the previous corruption legislation and the provisions introduced by Articles 603 and 604 of the 2023 Criminal Code. This process enables the identification of doctrinal developments concerning the interpretation and evidentiary requirements of state financial loss. The analysis ultimately evaluates the implications of these developments for legal certainty, institutional accountability, and the effectiveness of corruption law enforcement [34]. Through this integrated approach, the study provides a comprehensive assessment of the legal reconstruction of state financial loss within Indonesia's contemporary anti-corruption framework.

3.3. Types and Sources of Legal Materials

This study relies exclusively on secondary legal data, which are classified into primary, secondary, and tertiary legal materials [35]. These materials provide the doctrinal and conceptual foundation for examining the legal construction of state financial loss under the 2023 Criminal Code. Primary legal materials establish

the normative basis of the analysis, while secondary and tertiary materials support the interpretation, contextualization, and systematic evaluation of the relevant legal provisions. The legal materials were selected based on their relevance, authority, and consistency with the research objectives to ensure a comprehensive assessment of the applicable legal framework. Particular emphasis was placed on statutory regulations, judicial doctrines, and contemporary legal scholarship addressing corruption law, state financial accountability, and evidentiary standards following the enactment of Law Number 1 of 2023. Reports published by recognized national and international institutions were also utilized to provide broader institutional and governance perspectives that complement the doctrinal analysis. The integration of these legal materials enables a systematic evaluation of statutory provisions while strengthening the reliability and analytical depth of the study’s legal interpretation.

Table 2. Classification of Legal Materials Used in the Study

Type of Legal Material	Sources	Purpose in the Research
Primary Legal Materials	Law Number 1 of 2023 concerning the Criminal Code; Law Number 31 of 1999; Law Number 20 of 2001; and related regulations	To identify and interpret legal norms governing corruption offenses and state financial loss.
Secondary Legal Materials	Scientific journals, books, previous legal studies, and reports published by KPK, BPK, BPKP, OECD, and other relevant institutions	To examine legal doctrines, scholarly opinions, and institutional perspectives supporting the analysis.
Tertiary Legal Materials	Legal dictionaries, encyclopedias, legal terminology references, and academic databases	To clarify legal concepts and ensure the consistent interpretation of legal terminology.

Table 2 summarizes the legal materials used in this research. The combination of primary, secondary, and tertiary sources enables a comprehensive examination of statutory provisions, legal doctrines, and institutional perspectives [36]. Such integration strengthens the doctrinal analysis while ensuring that the interpretation of legal norms is supported by authoritative and contemporary legal scholarship. The legal materials were collected through systematic library research involving the identification, selection, classification, and critical evaluation of sources relevant to the research objectives. This process ensures that the analysis is grounded in authoritative legislation and supported by current legal scholarship.

3.4. Data Collection and Analysis Techniques

The data were collected through library research by identifying, reviewing, classifying, and evaluating legal materials relevant to the research objectives. This approach is appropriate because normative legal research relies primarily on authoritative legal sources rather than empirical data [37]. The analysis employed a qualitative descriptive analytical approach to examine the consistency between legislation, legal doctrines, and law enforcement practices, with particular emphasis on the interpretation of state financial loss in relation to legal certainty and institutional accountability [38]. The analytical process consisted of four stages: identifying relevant statutory provisions and legal doctrines; comparing Articles 603 and 604 with the previous Corruption Eradication Law to identify doctrinal developments [39]; interpreting the relevant provisions; and evaluating their implications for corruption law enforcement, legal certainty, and institutional governance. To ensure analytical consistency, each legal material was critically examined by considering its normative relevance, legal authority, and relationship to the research questions. Cross-referencing among statutes, legal doctrines, and scholarly literature was conducted to identify convergent and divergent legal interpretations concerning state financial loss. This analytical procedure also facilitated the systematic evaluation of doctrinal developments introduced by Law Number 1 of 2023 within Indonesia’s evolving anti-corruption legal framework. Furthermore, the integration of multiple legal sources strengthened the reliability of the legal analysis by minimizing interpretative bias and supporting well-founded legal reasoning. Consequently, the analytical framework provided a comprehensive basis for assessing the implications of the legal reform for institutional accountability and regulatory harmonization. This systematic approach enabled the study to formulate well-founded legal arguments and provide comprehensive recommendations for strengthening regulatory harmonization, institutional accountability, and the effectiveness of corruption law enforcement.

Table 3. Legal Interpretation Techniques Applied in the Research

Interpretation Technique	Purpose	Application in This Study
Grammatical Interpretation	To examine the ordinary meaning of statutory language.	Interpreting the wording of Articles 603 and 604 concerning state financial loss.
Systematic Interpretation	To understand legal provisions within the broader legal system.	Comparing the Criminal Code with the Corruption Eradication Law and related regulations.
Teleological Interpretation	To identify the legislative purpose and policy objectives of legal norms.	Evaluating how the 2023 Criminal Code strengthens legal certainty and supports effective corruption law enforcement.

Table 3 presents the legal interpretation techniques adopted in this study. Combining grammatical, systematic, and teleological interpretation enables a comprehensive analysis of both the textual formulation and the underlying objectives of the relevant legal provisions [40]. This methodological approach ensures that statutory interpretation remains consistent with broader legal principles and the policy objectives of corruption law reform.

3.5. Analytical Framework and Research Validity

The analytical framework integrates criminal law doctrine, legal certainty theory, and institutional accountability to evaluate the legal reconstruction of state financial loss under the 2023 Criminal Code. This framework recognizes that determining state financial loss involves not only statutory interpretation but also the interaction among legal norms, evidentiary standards, and institutional responsibilities [41]. Accordingly, the analysis examines how the doctrinal developments introduced by Articles 603 and 604 influence judicial interpretation, the authority of audit institutions, and the effectiveness of corruption law enforcement. The validity of the analysis is ensured through the systematic use of authoritative legal sources, including legislation, scholarly publications, judicial doctrines, and reports issued by recognized national and international institutions [42]. Cross referencing multiple legal materials enhances analytical consistency, strengthens doctrinal interpretation, and minimizes subjective bias. Consequently, the findings provide a reliable assessment of the legal implications arising from the reform of Indonesian criminal law. Furthermore, the methodological framework supports the objectives of Sustainable Development Goal (SDG) 16 by promoting transparent, accountable, and effective legal institutions [43]. Through the integration of doctrinal legal analysis with governance perspectives, the study offers evidence-based policy recommendations for strengthening legal certainty, institutional coordination, and the effectiveness of anti-corruption law enforcement in Indonesia.

4. RESULTS AND DISCUSSION

4.1. Legal Construction of State Financial Loss under the 2023 Criminal Code

The analysis indicates that Law Number 1 of 2023 reinforces the role of state financial loss as an essential element of corruption offenses within a more integrated criminal law framework [44]. Articles 603 and 604 strengthen legal harmonization by recognizing state financial loss as a legal element that must be supported by objective evidence, thereby enhancing judicial consistency, procedural fairness, and institutional accountability [45]. The findings also highlight the need for closer coordination between law enforcement agencies and state audit institutions to ensure objective and consistent determination of state financial loss [46]. However, the effectiveness of these reforms ultimately depends on harmonized evidentiary standards, consistent judicial interpretation, and stronger institutional coordination to achieve legal certainty and effective corruption law enforcement. The findings also suggest that a more integrated legal framework can reduce interpretative disparities among enforcement institutions and promote greater consistency in corruption case adjudication.

4.2. Doctrinal Shift from Potential Loss to Actual State Financial Loss

A major finding of this study is the doctrinal transition from recognizing potential state financial loss toward emphasizing actual and objectively measurable loss. Under the previous legal framework, the phrase may cause state financial loss permitted broad judicial interpretation, allowing criminal liability to arise even

when financial losses had not yet materialized [47]. Although this approach was intended to strengthen corruption prevention, it also generated significant debate concerning legal certainty and the proper limits of criminal liability. Articles 603 and 604 introduce a different legislative orientation by placing greater emphasis on objectively verifiable state financial losses supported by authorized audit findings. This doctrinal development reflects the principle that criminal liability should be established on the basis of credible evidence rather than speculative assessments of future financial consequences [48]. As a result, evidentiary standards become more transparent, objective, and predictable, thereby reducing inconsistent legal interpretation. From the perspective of criminal law theory, this development reinforces the principles of legality and proportionality. Criminal sanctions should be imposed only when every essential legal element of the offense has been established through reliable evidence. Accordingly, emphasizing actual and measurable losses strengthens legal certainty while reducing the risk of excessive criminalization arising from overly expansive interpretations of corruption law. This shift also aligns corruption law enforcement with modern principles of evidence-based criminal justice, ensuring that convictions are supported by verifiable legal and financial proof rather than assumptions of potential harm.

Table 4. Comparison of State Financial Loss Before and After the Enactment of the 2023 Criminal Code				
Legal Aspect		Previous Legislation	Corruption Criminal Code 2023 (Articles 603–604)	Legal Implication
Concept of state financial loss		Included both potential and actual losses	Greater emphasis on actual and measurable losses	Higher legal certainty
Standard of proof		Broader evidentiary interpretation	Objective evidence supported by authorized audit institutions	More reliable judicial decisions
Criminal liability		Relatively broad interpretation	More proportional interpretation based on measurable loss	Reduced risk of over-criminalization
Legal certainty		Potential for multiple interpretations	More systematic and consistent interpretation	Improved consistency in corruption law enforcement

Table 4 illustrates the principal doctrinal differences between the previous corruption legislation and the 2023 Criminal Code. The reform shifts the legal emphasis from broadly interpreted potential losses toward objectively measurable state financial losses supported by credible evidence. This transition not only improves the clarity of legal standards but also promotes greater consistency in judicial decision-making by providing more predictable evidentiary requirements [49]. Beyond its doctrinal significance, the reform also strengthens institutional accountability by encouraging greater coordination between audit institutions and law enforcement agencies in establishing state financial loss. Consequently, the legal reconstruction introduced by Articles 603 and 604 represents more than a legislative codification; it reflects a substantive effort to improve legal certainty, procedural fairness, and the overall effectiveness of corruption law enforcement in Indonesia.

4.3. Institutional Challenges in Determining State Financial Loss

The findings indicate that the effectiveness of Articles 603 and 604 depends not only on statutory reform but also on the institutional capacity to determine and verify state financial loss [50]. Indonesia’s anti-corruption framework involves the Supreme Audit Agency (BPK), the Financial and Development Supervisory Agency (BPKP), the Corruption Eradication Commission (KPK), and the Public Prosecutor’s Office, whose differences in legal authority, audit methodologies, and evidentiary practices continue to create challenges in corruption law enforcement. These institutional differences demonstrate that effective anti-corruption governance requires not only clear legal provisions but also coordinated operational mechanisms that ensure consistency in determining state financial loss. Inconsistent assessments of state financial loss may generate uncertainty during investigations and judicial proceedings, particularly when courts must evaluate conflicting audit reports. Although Articles 603 and 604 provide a stronger legal foundation, their effective implementation requires harmonized technical standards, standardized audit methodologies, clearer procedural guidelines, and stronger inter-agency coordination to ensure consistent and effective corruption law enforcement.

4.4. Legal Certainty and Corruption Law Enforcement

Legal certainty in corruption law enforcement depends not only on the substantive provisions of the 2023 Criminal Code but also on the consistent application of evidentiary standards and effective institutional coordination. Addressing institutional challenges through harmonized legal and administrative measures is therefore essential to ensure that the determination of state financial loss supports transparent, accountable, and predictable judicial processes.

Table 5. Institutional Challenges and Policy Recommendations for Determining State Financial Loss

Identified Challenge	Impact on Law Enforcement	Policy Recommendation
Different audit calculations between institutions	Inconsistent judicial decisions	Develop standardized national audit guidelines
Overlapping institutional authority	Delays in investigation and prosecution	Clarify institutional responsibilities through implementing regulations
Variations in evidentiary practices	Reduced legal certainty	Establish uniform evidentiary standards for corruption cases
Limited institutional coordination	Inefficient law enforcement processes	Strengthen cooperation among BPK, BPKP, KPK, and prosecution authorities

Table 5 summarizes the key institutional challenges identified in this study and the corresponding policy recommendations. The findings indicate that legislative reform alone is insufficient without institutional harmonization and standardized audit and evidentiary procedures. Strengthening coordination among audit institutions, investigators, prosecutors, and the judiciary would improve legal certainty, accountability, and the consistency of judicial decision-making, thereby reinforcing public confidence in Indonesia's anti-corruption legal framework.

4.5. Regulatory Implications for Corruption Law Enforcement

The doctrinal developments introduced by Articles 603 and 604 of the 2023 Criminal Code have significant implications for corruption law enforcement in Indonesia. By emphasizing objectively measurable state financial losses, the revised provisions provide a clearer legal basis for determining criminal liability and strengthen evidentiary guidance for investigators, prosecutors, auditors, and judges. However, fragmented implementing regulations and technical guidelines continue to create inconsistencies in audit methodologies and evidentiary practices across institutions. These findings suggest that legislative reform should be supported by regulatory harmonization and closer coordination between criminal law and public financial management to provide a stronger legal foundation for more consistent corruption law enforcement, while future reforms should focus on standardizing audit procedures, clarifying institutional responsibilities, and establishing uniform evidentiary standards.

4.6. Implications for Sustainable Development and Future Legal Reform

The findings demonstrate that strengthening the legal regulation of state financial loss supports the achievement of Sustainable Development Goal (SDG) 16 by enhancing legal certainty, governmental accountability, and public confidence in legal institutions. Their effective implementation, however, requires consistent judicial interpretation, standardized audit methodologies, and stronger coordination among law enforcement agencies, supported by implementing regulations that provide clear guidance on the calculation and evidentiary standards of state financial loss, while future research should evaluate judicial decisions following the implementation of the 2023 Criminal Code to assess the practical interpretation of Articles 603 and 604 and their impact on consistency in corruption law enforcement. In addition, strengthening institutional governance and promoting uniform legal interpretation across enforcement agencies will enhance the sustainability and effectiveness of Indonesia's anti-corruption legal reforms. Overall, the reform of state financial loss provisions establishes a stronger legal and institutional foundation for a transparent, accountable, and evidence-based anti-corruption framework while providing policy recommendations to strengthen legal harmonization and institutional coordination.

5. MANAGERIAL IMPLICATIONS

The findings of this study provide practical implications for policymakers, law enforcement agencies, and state audit institutions involved in corruption prevention and enforcement. The implementation of Articles 603 and 604 of Law Number 1 of 2023 requires harmonized regulatory frameworks, standardized audit methodologies, and uniform evidentiary procedures to ensure consistent determination of state financial loss. Strengthening institutional coordination, capacity building, and implementing regulations would improve legal certainty, judicial consistency, institutional accountability, and the overall effectiveness of the Indonesian anti-corruption legal framework. In addition, the findings encourage policymakers to formulate implementing regulations that clearly define institutional responsibilities and establish standardized procedures for determining state financial loss. Law enforcement agencies and state audit institutions are also expected to strengthen information sharing, technical collaboration, and professional training to minimize inconsistencies in evidentiary practices and audit outcomes. These measures would support more transparent and predictable corruption investigations while enhancing public confidence in the integrity of the criminal justice system. Ultimately, the practical recommendations offered by this study provide a strategic foundation for strengthening regulatory governance, improving institutional effectiveness, and ensuring the consistent implementation of corruption law under the 2023 Criminal Code.

6. CONCLUSION

This study concludes that state financial loss remains a fundamental legal element in establishing criminal liability for corruption offenses following the enactment of Law Number 1 of 2023 concerning the Criminal Code. The analysis demonstrates that Articles 603 and 604 reconstruct the legal interpretation of state financial loss by emphasizing actual and objectively measurable losses rather than broadly interpreted potential losses. This doctrinal development strengthens legal certainty through clearer evidentiary standards while promoting greater consistency in the application of corruption law. Accordingly, the study contributes to Indonesian corruption law by providing a comprehensive doctrinal analysis of the legal reconstruction of state financial loss and its implications for criminal law enforcement.

The analysis further indicates that the effective implementation of Articles 603 and 604 depends not only on statutory reform but also on institutional harmonization among law enforcement agencies and state audit institutions. Differences in audit methodologies, evidentiary practices, and institutional authority continue to present practical challenges in determining state financial loss. Therefore, strengthening technical guidelines, harmonizing audit standards, and improving coordination among the Supreme Audit Agency (BPK), the Financial and Development Supervisory Agency (BPKP), the Corruption Eradication Commission (KPK), the Public Prosecutor's Office, and the judiciary are essential for ensuring the consistent application of the new legal framework. These findings also demonstrate that the 2023 Criminal Code has broader implications for institutional accountability, regulatory governance, and the effectiveness of Indonesia's anti-corruption framework.

This study is limited to a normative legal analysis based on statutory provisions, legal doctrines, and relevant legal literature without examining post-enactment judicial decisions or empirical law enforcement practices. Future research should therefore investigate how Articles 603 and 604 are interpreted and applied by courts, prosecutors, and audit institutions following the implementation of the 2023 Criminal Code. Comparative analyses involving other jurisdictions, together with empirical studies on institutional coordination, would further enrich the understanding of state financial loss within corruption law. Such research is expected to support the continuous development of a transparent, accountable, and effective anti-corruption legal system while contributing to the achievement of Sustainable Development Goal (SDG) 16 on peace, justice, and strong institutions.

7. DECLARATIONS

7.1. About Authors

Figgi Agrimiandra (FA)  <https://orcid.org/0009-0008-8699-2042>

Muhammad Apdiza Mahdafiqia (MM)  <https://orcid.org/0009-0009-4042-1719>

Dyan Pratama Asintya Sakti (DS)  <https://orcid.org/0009-0007-6972-3214>

Dippo Alam (DA)  <https://orcid.org/0009-0003-5488-4710>

7.2. Author Contributions

Conceptualization: FA; Methodology: MM; Software: DA; Validation: DS, FA and MM; Formal Analysis: DS and DA; Investigation: FA; Resources: MM; Data Curation: MM and DA; Writing Original Draft Preparation: FA and DA; Writing Review and Editing: MM, DS and DA; Visualization: FA; All authors, FA, MM, DS and DA, have read and agreed to the published version of the manuscript.

7.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

7.4. Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

7.5. Institutional Review Board Statement

Not applicable.

7.6. Informed Consent Statement

Not applicable.

7.7. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

- [1] R. Hamdan, A. Nuraya, and F. Syam, "The role of legal politics in the recovery of state financial losses due to corruption," *AL-MANHAJ: Jurnal Hukum dan Pranata Sosial Islam*, vol. 6, no. 1, pp. 25–38, 2024.
- [2] A. M. Rahman and M. Husnul, "Failure of criminal law in recovering state losses due to criminal acts of corruption," *Petita: Jurnal Kajian Ilmu Hukum dan Syariah*, vol. 9, no. 1, pp. 305–323, 2024.
- [3] O. Ferli, N. A. Achsani, T. Andati, and Z. Asikin, "Sustainable business innovation in Indonesian firms ESG disclosure profitability and greenwashing," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 8, no. 2, pp. 405–419, 2026.
- [4] A. Rahmadi, L. Karjoko, and H. Hartiwiningsih, "The concept of state economic loss in corruption crime cases," in *International Conference on Cultural Policy and Sustainable Development (ICPSD 2024)*. Atlantis Press, 2024, pp. 361–368.
- [5] H. Karianga and A. Rahman, "The attorney's authority in determining state financial losses in corruption crimes," *Russian Law Journal*, vol. 11, no. 3, pp. 1379–1386, 2023.
- [6] A. Y. Balogun, O. C. Metibemu, A. T. Olutimehin, A. J. Ajayi, D. C. Babarinde, and O. O. Olaniyi, "The ethical and legal implications of shadow AI in sensitive industries: A focus on healthcare, finance and education," *Finance and Education (February 13, 2025)*, 2025.
- [7] C. Caesar, H. Nugroho *et al.*, "Reconstructing the meaning of state losses in corruption crimes: A progressive legal perspective," *Architecture Image Studies*, vol. 6, no. 3, pp. 1823–1834, 2025.
- [8] R. P. da Cruz, A. M. Tilma, and A. C. da Silva, "Law enforcement of state losses through civil proceedings: Exploration of the role and analysis of alternative options in corruption cases," *UNES Law Review*, vol. 6, no. 4, pp. 9768–9780, 2024.
- [9] C. Lukita, A. K. Chandra, R. Fahrudin, N. M. Agatha, and D. P. Suci, "Maturity level measurement model of MSMEs for sustainable economic growth," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 8, no. 2, pp. 434–442, 2026.
- [10] M. Mulyono and E. Maryana, "Analysis of handling state losses in corruption crimes," *IJOSPOL-International Journal of Social, Policy and Law*, vol. 4, no. 2, pp. 1–9, 2023.

- [11] Z. Zulfina, B. Bahreisy, and M. Nur, "Return of state losses from the proceeds of corruption through civil lawsuits," in *Proceedings of Malikussaleh International Conference on Law, Legal Studies and Social Science (MICoLLS)*, vol. 4, 2024, pp. 00 005–00 005.
- [12] M. Z. Hossain, "Emerging trends in forensic accounting: Data analytics, cyber forensic accounting, cryptocurrencies, and blockchain technology for fraud investigation and prevention," *Journal of Artificial Intelligence and Technological Development*, vol. 2, no. 2, pp. 183–208, 2026.
- [13] B. S. Rukmono, P. Suwadi, and M. S. Islam, "The effectiveness of recovering losses on state assets policy in dismissing handling of corruption," *Journal of Human Rights, Culture and Legal System*, vol. 4, no. 2, pp. 299–330, 2024.
- [14] R. D. Agustanti, B. Waluyo, and A. P. Kurniawan, "Return of state financial losses resulting from corruption and money laundering crimes," *Jurnal Hukum Prasada*, vol. 10, no. 2, pp. 93–101, 2023.
- [15] S. D. Retnandari, K. Khaeroman, A. T. Winarni, and W. Busse, "Digital innovation and technology driven evaluation of maritime safety systems performance in indonesia," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 8, no. 2, pp. 551–564, 2026.
- [16] M. Fazekas, S. Sberna, and A. Vannucci, "The extra-legal governance of corruption: Tracing the organization of corruption in public procurement," *Governance*, vol. 35, no. 4, pp. 1139–1161, 2022.
- [17] N. R. Putra and R. Linda, "Corruption in indonesia: A challenge for social changes," *Integritas: Jurnal Antikorupsi*, vol. 8, no. 1, pp. 13–24, 2022.
- [18] E. J. A. H. Nasution, H. Latief, and R. Rukmana, "Transforming zakat fatwas to strengthen technopreneurship and governance in islamic organizations," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 8, no. 2, pp. 565–577, 2026.
- [19] B. Wahyuadi, M. Warka, and H. Hufon, "Return of state financial losses corruption criminal acts," *Technium Social Sciences Journal*, vol. 42, no. 1, pp. 86–91, 2023.
- [20] D. A. Yustia and F. Arifin, "Bureaucratic reform as an effort to prevent corruption in indonesia," *Cogent Social Sciences*, vol. 9, no. 1, p. 2166196, 2023.
- [21] A. Ruangkanjanases, A. Khan, O. Sivarak, U. Rahardja, and S.-C. Chen, "Modeling the consumers' flow experience in e-commerce: The integration of ecm and tam with the antecedents of flow experience," *Sage Open*, vol. 14, no. 2, p. 21582440241258595, 2024.
- [22] D. Derlina, S. Anggoro, R. T. Safariningsih, and C. Perez, "A digital business legal regulation model to create a safe and sustainable digital ecosystem," *Legal Autonomous Web-based Governance (LAW)*, vol. 1, no. 1, pp. 1–14, 2026.
- [23] A. Z. A. Shami, M. Saleem, and J. Ashraf, "Cybercrime and digital evidence: Investigating the challenges and opportunities in prosecuting cybercrime and handling digital evidence," *Research Consortium Archive*, vol. 3, no. 2, pp. 401–411, 2025.
- [24] A. C. Puspita and Y. M. Gultom, "The effect of e-procurement policy on corruption in government procurement: Evidence from indonesia," *International Journal of Public Administration*, vol. 47, no. 2, pp. 117–129, 2024.
- [25] U. Rahardja, N. Lutfiani, A. Rizky, Y. I. Tanjung, R. Evans *et al.*, "A framework for mining customer data in management information systems," *Journal of Computer Science and Technology Application*, vol. 3, no. 1, pp. 21–33, 2026.
- [26] E. M. Ali, F. Dirgantara, and D. Darmawan, "Legal protection of consumers in online transactions: A case study of online fraud in indonesia," *International Journal of Service Science, Management, Engineering, and Technology*, vol. 6, no. 3, pp. 27–38, 2024.
- [27] A. Jaya, S. Rusdian, A. Gunawan, and C. T. Hua, "Implications of the personal data protection law on digital platform business models in indonesia," *Legal Autonomous Web-based Governance (LAW)*, vol. 1, no. 1, pp. 15–28, 2026.
- [28] E. Saragih, M. A. Sahlepi, and M. A. Siregar, "Implementation of the law against fraud crimes in e-commerce-based electronic transactions," in *Proceedings of International Conference on Islamic Community Studies*, 2025, pp. 360–370.
- [29] A. Sugiyato, C. S. Bangun, F. Fauzi, M. Mulyati, and O. A. Al-Kamari, "Evaluating the effectiveness of ai in developing digital marketing content for certification service firms," *ADI Bisnis Digital Interdisiplin Jurnal*, vol. 6, no. 2, pp. 144–155, 2025.
- [30] R. Swandaru and A. Muneeza, "Can fraud in islamic financial institutions be prevented using high standards of shariah governance?" *International journal of law and management*, vol. 64, no. 6, pp. 469–485,

- 2022.
- [31] U. Rahardja, M. T. D. S. Putri, N. Septiani, F. Amelia, A. Avandi, and R. Evans, "Human centered legal governance for autonomous ai in digital societies," *Legal Autonomous Web-based Governance (LAW)*, vol. 1, no. 1, pp. 29–41, 2026.
 - [32] A. Ahmad, "Analysis of abuse of authority by government apparatus in the state administrative legal system," *International Journal of Constitutional and Administrative Law*, vol. 1, no. 1, pp. 69–83, 2025.
 - [33] Q. Aini, S. H. Lase, A. Adiwijaya, F. I. Ningrum, D. A. Prabowo, and T. Green, "Adaptive legal architectures for governing autonomoustechnologies in sustainable digital societies," *Legal Autonomous Web-based Governance (LAW)*, vol. 1, no. 1, pp. 56–67, 2026.
 - [34] I. D. Kurniawan, P. Suwadi, and J. G. S. Soehartono, "An analysis of economic criminal actions of e-money theft case in e-commerce in indonesia," in *1st INTERNATIONAL CONFERENCE ON LAW, BUSINESS, AND GOOD GOVERNANCE 2024*, 2024, p. 1134.
 - [35] D. Cahyono, D. W. S. Rahayu, M. M. Siahaan, and J. Edwards, "Legal governance of personal data protection in indonesian digital business," *Legal Autonomous Web-based Governance (LAW)*, vol. 1, no. 1, pp. 95–108, 2026.
 - [36] O. G. Andini, N. Nilasari, and A. A. Eurian, "Restorative justice in indonesia corruption crime: a utopia," *Legality: Jurnal Ilmiah Hukum*, vol. 31, no. 1, pp. 72–90, 2023.
 - [37] S. Widada, S. T. S. Alfian *et al.*, "Utilizing blockchain for electronic wellbeing records," *Blockchain Frontier Technology*, vol. 1, no. 2, pp. 11–22, 2022.
 - [38] L. R. Helfer, C. Rose, and R. Brewster, "Flexible institution building in the international anti-corruption regime: Proposing a transnational asset recovery mechanism," *American Journal of International Law*, vol. 117, no. 4, pp. 559–600, 2023.
 - [39] S. Wibowo, I. A. Widjaya, J. Zanubiya, R. Evans, U. Rahardja *et al.*, "Orange technology for humanistic innovation in higher education," *Jurnal MENTARI: Manajemen, Pendidikan dan Teknologi Informasi*, vol. 4, no. 2, pp. 105–115, 2026.
 - [40] I. Purnamasari, "Consumer legal protection in indonesia's e-commerce transactions and efforts to improve security," in *Proceedings of Annual Conference on Scientific Writing*, vol. 2, 2025.
 - [41] S. Setiawan, M. Susan, and I. Istiharini, "Navigating e-commerce loyalty: The role of e-brand experience and mediating factors in indonesian millennial consumers," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 6, no. 3, pp. 357–368, 2024.
 - [42] D. Marsela, Y. Yudhistira, and B. Fawaid, "Legal protection of consumers in online business: a criminal law perspective in handling fraud and identity theft," *Research Horizon*, vol. 4, no. 3, pp. 99–106, 2024.
 - [43] P. Juanta, S. Syaifuddin, and M. Rodriguez, "Legal frameworks governing the use of artificial intelligence in the legal system," *Legal Autonomous Web-based Governance (LAW)*, vol. 1, no. 1, pp. 82–94, 2026.
 - [44] R. A. Mardiah, A. Ahmatnihar, and N. Harahap, "Analysis of judges' considerations in imposing sanctions for online fraud: A study of positive and islamic criminal law," *Musabab: Journal of Islamic Law and Social Practice*, vol. 1, no. 1, pp. 92–106, 2025.
 - [45] A. Rizky, U. Rahardja, M. Muhtarom, D. N. Ramadhan, S. Triandari, and R. F. Terizla, "Responsible ai governance in decentralized web systems," *Legal Autonomous Web-based Governance (LAW)*, vol. 1, no. 1, pp. 123–133, 2026.
 - [46] T. Akdemir and Ş. Yeşilyurt, "Corruption and bribery in ottoman tax management: An evaluation of the period 1876–1909," in *The ethics of bribery: Theoretical and empirical studies*. Springer, 2023, pp. 289–307.
 - [47] P. Celestin *et al.*, "How e-commerce law is evolving to address consumer protection and digital marketplace regulations," *Brainae Journal of Business, Sciences and Technology*, 2024.
 - [48] F. P. Wathan, "Legal effectiveness in providing consumer protection for online sales and purchase at ecommerce," *Journal Research of Social Science, Economics, and Management*, vol. 2, no. 11, pp. 2707–2718, 2023.
 - [49] M. A. Rashid, A. Al-Mamun, H. Roudaki, and Q. R. Yasser, "An overview of corporate fraud and its prevention approach," *Australasian Accounting, Business and Finance Journal*, vol. 16, no. 1, 2022.
 - [50] Organisation for Economic Co-operation and Development (OECD), *Harnessing Artificial Intelligence in Social Security: Use Cases, Governance and Workforce Readiness*, ser. OECD Digital Government Studies. Paris: OECD Publishing, 2025. [Online]. Available: <https://doi.org/10.1787/b52405c1-en>