

(Research/Review) Article

Implications of Whistleblowing and Internal Audit on Fraud Prevention in Corporate Governance in Indonesia: A Systematic Literature Review

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Abstract: Fraud remains a crucial issue in corporate governance practices in Indonesia, both in the public and private sectors. Various efforts have been made through strengthening internal control systems, optimizing the role of internal audit, and implementing whistleblowing systems. However, corruption, financial statement manipulation, and misuse of funds still occur frequently. This condition indicates that corporate oversight mechanisms are not yet functioning optimally, especially because internal audit and whistleblowing systems are often implemented separately. This study aims to systematically examine the implications of whistleblowing and internal audit in preventing fraud in corporate governance in Indonesia. This study uses the Systematic Literature Review (SLR) method with a qualitative approach to relevant scientific articles. The results of the study show that internal audit plays an important role in assessing the effectiveness of internal controls and risk management, while whistleblowing serves as an early disclosure mechanism for fraudulent practices that are difficult to identify through conventional audit procedures. In addition, the literature also confirms that the integration of internal auditing and violation reporting systems can increase transparency, strengthen accountability, and support the realization of more effective corporate governance. Thus, the synergy between these two mechanisms is an important strategy in strengthening fraud prevention in Indonesia.

Keywords: corporate governance; fraud; internal audit; whistleblowing;

1. Introduction

Various cases of violations and fraud that have occurred in companies in Indonesia, including the manipulation of financial reports at PT Garuda Indonesia and corrupt procurement practices at PT Pos Indonesia, reflect the still weak effectiveness of corporate oversight mechanisms. This phenomenon emphasizes the urgent role of internal audit and violation reporting systems as instruments in preventing fraud and strengthening corporate governance. The literature shows that these two mechanisms function as primary oversight instruments in detecting and mitigating fraud risks, particularly in organizations with complex structures and transactions (Putra et al., 2022; Nadirsyah et al., 2024). However, their effectiveness is often hampered by weak internal controls, limited competence and independence of internal auditors, time and resource constraints, and low leadership commitment to governance with integrity. These conditions lead to the recurrence of fraudulent practices, especially in the banking and financial sectors that have high levels of risk and governance pressures (Nindito et al., 2024).

Fraud continues to be a major concern in corporate governance practices, both in the public and private sectors. Fraud not only causes financial losses but also seriously impacts an organization's reputation, stakeholder trust, and broader economic stability. In Indonesia, various forms of fraud, such as corruption, financial statement manipulation, asset misappropriation, and related party transactions, remain prevalent despite continued strengthening of

Received: November, 20 2025

Revised: December, 20 2025

Accepted: January, 26 2026

Published: January, 28 2026

Curr. Ver.: January, 28 2026



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the regulatory framework and oversight mechanisms (Nindito et al., 2024). This phenomenon demonstrates that the existence of regulations alone is insufficient to ensure effective fraud prevention without the support of a robust and integrated internal oversight system.

Various studies have shown that weak corporate governance is a major factor driving fraud. Ineffective corporate governance opens up opportunities for conflicts of interest, information asymmetry, and abuse of authority by internal parties (Nasir et al., 2024). In this context, the role of internal oversight mechanisms is crucial to ensure that company activities are conducted in accordance with the principles of transparency, accountability, and integrity. Internal audits and whistleblowing systems are two important instruments widely recognized as capable of supporting fraud prevention and detection within organizations.

Internal audit serves as an assurance and consulting mechanism aimed at evaluating the effectiveness of internal controls, risk management, and organizational governance processes. Previous research has shown that effective internal audit can contribute significantly to reducing the risk of fraud through continuous, risk-based oversight (Nadirsyah et al., 2024. Stein & da Cunha, 2024). In both the public and private sectors, internal audit also plays a role in improving the quality of management decision-making and strengthening compliance with applicable regulations (Yanuarisa et al., 2025). However, the effectiveness of internal audit often depends on the independence, competence of auditors, and support from top management.

On the other hand, the whistleblowing system is seen as one of the most effective mechanisms for uncovering fraud that is difficult to detect through conventional audit procedures. It allows individuals within an organization to report violations early before they cause greater harm. Several studies have shown that the existence of a reliable whistleblowing system can increase the probability of uncovering fraudulent practices, especially those involving upper management (Putra et al., 2022. Hastuti et al., 2023). However, the effectiveness of whistleblowing is greatly influenced by organizational culture, protection for whistleblowers, and individual perceptions of the risks and benefits of reporting.

Although internal audit and whistleblowing both play strategic roles in fraud prevention, previous research tends to discuss the two mechanisms separately. In Indonesia, studies on whistleblowing still focus largely on regulatory aspects, reporting intentions, and individual psychological factors, such as personality characteristics and the organizational environment (Hastuti et al., 2023). Meanwhile, internal audit research is more often associated with the effectiveness of internal controls, audit quality, and risk management without directly linking them to the whistleblowing system (Yazid et al., 2025). As a result, understanding of how the synergy between internal audit and whistleblowing can strengthen fraud prevention remains relatively limited.

Several recent studies have begun to highlight the importance of an integrative approach to fraud prevention. Integration between various oversight mechanisms, including internal audit, risk management, and whistleblowing, is considered capable of increasing the effectiveness of the overall control system (Putra et al., 2022. Boufounou et al., 2024). Furthermore, technological developments and new analytical approaches in auditing and fraud detection indicate that fraud prevention requires a more comprehensive and collaborative strategy (Lu et al., 2025. Chen et al., 2025). However, studies specifically examining the integration of internal audit and whistleblowing in the context of corporate governance in Indonesia are still very limited and have not been systematically synthesized.

Based on these conditions, a study is needed that can summarize, analyze, and synthesize previous research findings related to the role of internal audit and whistleblowing in fraud prevention. A systematic literature review approach is relevant to provide a comprehensive overview of research developments, remaining gaps, and opportunities for developing an integrative conceptual framework. Such a study is expected to provide theoretical contributions to the development of corporate governance literature, as well as practical contributions for regulators, internal auditors, and company management in designing more effective fraud prevention systems.

Based on these conditions, this study aims to systematically examine the role of internal audit and the whistleblowing system in fraud prevention and the contribution of integrating these two mechanisms to strengthening corporate governance in Indonesia. To achieve this objective, this study is designed to answer two main research questions:

RQ1: What is the role of internal audit and whistleblowing systems in fraud prevention in Indonesia?

RQ2: How does the integration of internal audit and whistleblowing systems contribute to strengthening fraud prevention and corporate governance in Indonesia?

2. Literature Review

Agency Theory

Agency theory explains the contractual relationship between principals (owners or shareholders) and agents (management) who are authorized to manage organizational resources. This theory is based on the assumption that agents do not always act in the principal's best interests due to information asymmetry, conflicts of interest, and opportunistic motivations (Jensen & Meckling, 1976). These conditions create the potential for fraud, such as financial statement manipulation, asset misappropriation, and other corrupt practices.

Within the framework of agency theory, internal audit is viewed as a monitoring mechanism designed to reduce agency costs by increasing transparency, evaluating internal controls, and monitoring management performance. Internal audit functions to provide assurance to principals that organizational activities are carried out in accordance with the policies and interests of the owners (Nadirsyah et al., 2024; Stein & da Cunha, 2024). However, internal audit's limitations in accessing hidden information and collusive practices necessitate additional monitoring mechanisms.

The whistleblowing system complements the role of internal audit by providing an information channel from internal parties in the organization who have direct knowledge of violations. From an agency theory perspective, whistleblowing acts as a mechanism that reduces information asymmetry between agents and principals and increases the probability of fraud being uncovered, especially those involving top management (Putra et al., 2022; Hastuti et al., 2023). Therefore, the integration of internal audit and whistleblowing is a supervisory strategy that aligns with agency theory in strengthening corporate governance and fraud prevention in Indonesia.

Fraud and Corporate Governance Challenges in Indonesia

Fraud is one of the most complex issues in corporate governance because it involves individual behavior, organizational systems, and oversight weaknesses. Fraud can be defined as an intentional act of deviation to obtain personal or group gain by violating the law or organizational ethics. In the corporate context, fraud encompasses various forms, such as corruption, financial statement manipulation, asset misappropriation, and irregular related party transactions. Research Nindito et al. (2024) shows that weak corporate governance and high levels of conflicts of interest increase the risk of fraud, particularly in companies with complex ownership structures in Indonesia.

Fraud phenomenon not only occurs in the public sector, but also spreads to the private sector and public companies. Nasir et al. (2024) revealed that the quality of corporate governance is closely related to company performance and the risk of managerial misconduct. When internal oversight mechanisms are ineffective, the opportunity for fraud increases due to information asymmetry between management and stakeholders. Therefore, strengthening corporate governance is a crucial prerequisite for fraud prevention.

According to Cressey's (1953) theory Tuanakotta (2010), fraud occurs due to three main factors known as the fraud triangle : pressure , perceived opportunity , and rationalization . Every organization inherently has a risk of fraud that can have serious consequences, ranging from financial losses and legal sanctions to the loss of public and market trust. In the Indonesian context, fraud and corruption cases involving organizational leaders have damaged the reputation, brand, and image of the institution. Therefore, effective corporate governance and a strong tone at the top are the main foundations in preventing fraud , where the board and management are responsible for ensuring the implementation of ethical values and consistent enforcement of policies.

Various studies also confirm that fraud is not only caused by individual factors, but also by weaknesses in internal control systems and organizational culture. Boufounou et al. (2024) states that a weak internal control system creates opportunities for abuse of authority and corruption. Therefore, fraud prevention requires a comprehensive approach through the integration of various oversight mechanisms within corporate governance.

Internal Audit as a Mechanism for Monitoring and Preventing Fraud

According to The Institute of Internal Auditors (2024), internal audit is an independent and objective assurance activity designed to add value and improve an organization's operations. Internal audit supports an organization in achieving its objectives through a systematic and disciplined approach to evaluating and improving the effectiveness of risk management, control, and governance processes. The role of internal audit is increasingly strategic in the context of fraud prevention because internal auditors have direct access to a company's business processes and control systems. Nadirsyah et al. (2024) emphasized that effective internal audits contribute significantly to strengthening internal control and preventing fraud, particularly in the public sector.

Internal audit's value proposition is reflected in three core concepts: assurance , insight , and objectivity, which collectively add value to an organization. Assurance plays a role in providing assurance to management and stakeholders regarding the effectiveness of internal controls, risk management, and governance processes, thereby helping minimize the opportunity for fraud. Insight reflects internal audit's ability to produce in-depth analysis and strategically valuable recommendations for improvement, particularly in identifying the root causes of control weaknesses that could potentially trigger fraud. (Nadirsyah et al., 2024) Meanwhile, objectivity emphasizes the importance of the independence and impartiality of internal auditors in carrying out audit assignments, so that the results of the supervision can be trusted and used as a basis for accountable decision-making (Stein & da Cunha, 2024). Thus , these three elements emphasize the role of internal audit as a supervisory mechanism that is not only oriented towards compliance, but also contributes significantly to fraud prevention and strengthening corporate governance.

In addition, the professional skepticism of internal auditors is an important factor in detecting fraud risks. Stein & da Cunha (2024) found that internal auditors with a high level of professional skepticism were better able to identify control weaknesses and potential fraud . Internal audit also plays a role in ensuring regulatory compliance and evaluating the effectiveness of company policies and procedures. In the context of procurement and complex business processes, internal audit has proven to play a crucial role in reducing the risk of irregularities. (Yanuarisa et al., 2025). However, internal audit has limitations in detecting fraud involving collusion or top management. Ehrmann & Prinz (2025) highlighted that conflicts of interest and institutional pressure can impact audit independence. Therefore, internal audit requires the support of other mechanisms capable of providing early information regarding violations occurring within the organization.

Whistleblowing as a Means of Early Fraud Detection

Whistleblowing is the process of reporting relevant, timely, and credible information about actions that violate regulations or are potentially detrimental to an organization (Kagias et al., 2024). The whistleblowing system is considered one of the most effective tools for

detecting fraud because the reporter has direct knowledge of the deviant practices occurring. Putra et al., (2022) found that whistleblowing systems have a positive effect on preventing financial crime, especially when supported by risk management and internal audit.

However, the effectiveness of whistleblowing is highly dependent on psychological factors and the organizational environment. Hastuti et al. (2023) shows that an individual's intention to whistleblow is influenced by personality characteristics, perceptions of the organizational environment, and the level of protection provided to the whistleblower. In addition, Maulidi et al. (2024) emphasized that the success of whistleblowing is also influenced by ethical culture, religiosity, and the overall organizational control system.

However, the implementation of whistleblowing in Indonesia still faces various obstacles, such as low trust in the reporting system, fear of retaliation, and weak legal protection for whistleblowers. These conditions have resulted in whistleblowing's potential as an early fraud detection mechanism being underutilized in corporate governance.

Integration of Internal Audit and Whistleblowing in Fraud Prevention

A number of studies have begun to emphasize the importance of integrating various oversight mechanisms in fraud prevention. Internal audit and whistleblowing have distinct but complementary functions. Internal audit focuses on evaluating systems and processes, while whistleblowing provides individual-based information that can uncover hidden violations. Putra et al. (2022) stated that the integration of internal audit, risk management, and whistleblowing can increase the effectiveness of fraud prevention and detection.

In the context of corporate governance, this integration contributes to increased organizational transparency and accountability (Nasir et al., 2024). Furthermore, technological advances and analytical approaches in auditing provide opportunities to strengthen the role of internal audit in following up on whistleblower reports in a more systematic and data-driven manner. (Lu et al., 2025; Chen et al., 2025).

3. Proposed Method

This study uses a qualitative approach with the Systematic Literature Review (SLR) method. Qualitative methods are methods based on the philosophy of postpositivism, used to research the natural conditions of objects, with data collection techniques carried out through triangulation (combined), inductive/qualitative data analysis, and the results emphasize meaning rather than generalization (Sugiyono, 2022). This approach was chosen because it aims to systematically and structuredly review, analyze, and synthesize relevant previous research findings, particularly regarding the role of whistleblowing and internal audits in preventing fraud in corporate governance in Indonesia. The SLR method allows researchers to gain a comprehensive understanding of the development of studies, patterns of findings, and existing research gaps.

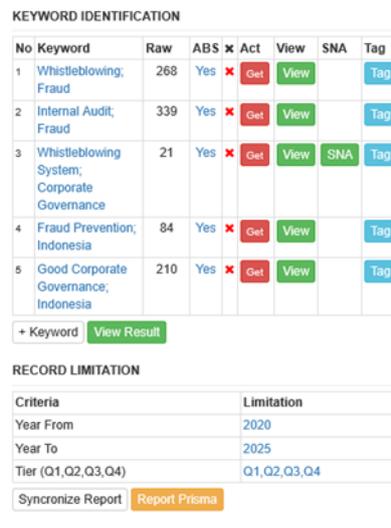
The research objects in this study are scientific articles discussing the topics of whistleblowing, internal audit, fraud prevention, and corporate governance. The literature reviewed includes reputable national and international journals relevant to the research context. The study focuses on research that discusses the role of internal audit and whistleblowing systems, both separately and within a broader corporate oversight framework. Data collection was conducted through searching and reviewing relevant scientific literature. Literature was selected based on established inclusion and exclusion criteria to ensure the quality and relevance of the sources. Inclusion criteria included articles discussing internal audit, whistleblowing, fraud prevention, and corporate governance, within the context of public and private organizations. Meanwhile, articles that were irrelevant to the research focus or did not explicitly address aspects of fraud oversight and prevention were excluded from the analysis. Data analysis was conducted by grouping and comparing key findings from the selected literature. This stage aimed to identify key themes, relationship patterns, and the roles of internal audit and whistleblowing in fraud prevention. Next, the results of the analysis are synthesized to build

an integrative understanding of how the two mechanisms can complement each other within a corporate governance framework.

Data Collection and Analysis Techniques

The data collection technique in this study was carried out through a systematic search of scientific literature using the Systematic Literature Review (SLR) method. To ensure the relevance and quality of the sources reviewed, the researchers utilized the WATASE–UAKE tools to assist in the identification, screening, and selection of scientific articles. The use of these tools allows the literature search process to be conducted in a structured, transparent, and traceable manner.

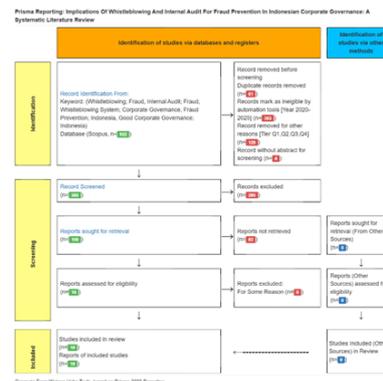
Picture 1. Keyword Identification Process and Criteria Limitation



Source: Watase UAKE (2025)

The literature identification process was carried out using a combination of keywords relevant to the research focus, namely whistleblowing, internal audit, fraud, fraud prevention, corporate governance, and Indonesia. Figure 1 shows the stages of keyword identification used in the WATASE–UAKE tool along with the initial number of articles detected from the Scopus database. The literature search was limited to the publication period of 2020–2025 and articles indexed in tiers Q1, Q2, Q3, and Q4, to ensure academic quality and research relevance.

Picture 2. Prisma Diagram



Source: Watase UAKE (2025)

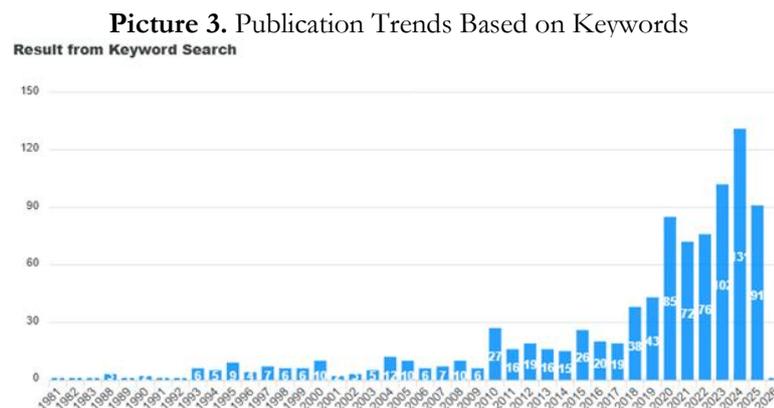
Next, articles identified through the initial search were screened using inclusion and exclusion criteria. Inclusion criteria included articles that substantially discussed internal audit and/or whistleblowing systems in the context of fraud prevention and corporate governance. Articles that were irrelevant to the research topic, did not meet indexing criteria, or lacked adequate abstracts were excluded from the selection process. The overall article screening and selection process is presented in the PRISMA diagram in Figure 2.

Based on the final results of the screening and feasibility evaluation process, 18 articles were found to meet all criteria and were subsequently used as the primary data sources in this study. The articles selected from the literature selection in this study include research conducted by Maulidi et al. (2024), Nadirsyah et al. (2024), Yanuarisa et al., (2025), Yazid et al. (2025), Ehrmann & Prinz (2025), Putra et al. (2022), Hastuti et al. (2023), Lu et al. (2025), Sari et al. (2022), Yangyan & Tingting (2025), Chen et al. (2025), Stein & da Cunha (2024), Herros-Martínez et al. (2025), Boufounou et al. (2024), Nindito et al. (2024), Nasir et al. (2024), Wahyudi et al. (2022), Tarjo et al. (2022).

4. Results and Discussion

The Role of Internal Audit and Whistleblowing Systems in Fraud Prevention in Indonesia

Research Trends Based on Keywords



Source: Watase UAKE (2025)

The literature review reveals a significant increase in the number of publications discussing internal auditing, whistleblowing, and fraud prevention over the past two decades. The research trend graph shows that the number of publications was relatively limited before 2010, then gradually increased, showing a sharper spike from 2018 to peak in the 2022–2024 period. This trend indicates growing academic attention to fraud prevention issues, along with the complexity of corporate governance and the rise in fraud cases across various sectors.

A content analysis of selected literature shows that internal audit is consistently positioned as the primary formal mechanism in fraud prevention. Internal audit plays a role in assessing the effectiveness of internal controls, identifying fraud risks, and providing recommendations for improvement to management. Several studies confirm that independent, competent, and risk-based internal audit can reduce the opportunity for fraud through continuous monitoring (Nadirsyah et al., 2024; Stein & da Cunha, 2024). In addition, internal audit also contributes to improving compliance and the quality of managerial decision-making (Yanuarisa et al., 2025).

However, the study also showed that internal audit has limitations in detecting fraud that is covert, collusive, or involves upper management. This situation reinforces the need for additional oversight mechanisms based on internal organizational information. In this

context, a whistleblowing system has emerged as an effective mechanism to support early fraud detection.

Research Trends Based on Word Cloud

Picture 4. Word Cloud



Source: Watase UAKE (2025)

The word cloud in Figure 4 shows that the terms internal audit, fraud prevention, fraud detection, and corporate governance emerged as dominant themes in the analyzed literature. The dominance of the terms internal audit and audit committee confirms that internal audit is viewed as a formal oversight mechanism that plays a critical role in assessing the effectiveness of internal controls, risk management, and the quality of financial reporting.

On the other hand, the emergence of the terms whistleblowing and whistleblowing system in the word cloud indicates that whistleblowing systems are also a significant focus in research related to fraud prevention. Whistleblowing is positioned as an early detection mechanism that enables the identification of fraudulent practices that are difficult to detect through formal audit procedures, particularly fraud that is collusive or involves upper management.

Furthermore, the connection between whistleblowing and internal audit is reflected in the emergence of terms such as accountability, transparency, ethics, and professional skepticism. These terms demonstrate that the effectiveness of whistleblowing is heavily influenced by an organization's ethical culture, whistleblower protection, and the support of a strong corporate governance structure. In this context, internal audit plays a role in systematically and objectively following up on reports of violations.

The word cloud also displays the terms corruption, financial fraud, risk management, and internal control, emphasizing that whistleblowing and internal audit are not standalone entities, but rather are part of an integrated corporate governance and control system. The simultaneous existence of these two mechanisms strengthens the fraud prevention process through a combination of formal oversight and internal participation.

Overall, the word cloud analysis confirms that whistleblowing and internal audit are viewed as two complementary mechanisms in fraud prevention. Internal audit serves as a formal, structured oversight mechanism, while whistleblowing serves as a crucial source of initial information. This finding reinforces the results of RQ1, which demonstrated that internal audit and the whistleblowing system significantly contribute to supporting fraud prevention and strengthening corporate governance in Indonesia.

Integration of Internal Audit and Whistleblowing Systems in Strengthening Fraud Prevention and Corporate Governance in Indonesia

The results of the literature synthesis indicate that the integration between internal audit and whistleblowing systems has a strategic role in strengthening fraud prevention and corporate governance. Various studies confirm that the effectiveness of fraud prevention does not only depend on the existence of each mechanism separately, but is greatly influenced by the extent to which both are connected and support each other within an integrated supervisory framework (Putra et al., 2022; Boufounou et al., 2024).

Within an integrative framework, internal audit serves as the primary manager and user of information sourced from the whistleblowing system. Reports of violations submitted by internal parties can provide important input for internal auditors in conducting risk assessments, risk-based audit planning, and conducting investigative audits. Several studies have shown that organizations that integrate their whistleblowing system with their internal audit function have a better ability to detect fraud early and minimize potential losses (Stein & da Cunha, 2024; Lu et al., 2025).

Furthermore, the literature also reveals that the existence of an independent and credible internal audit can increase reporters' trust in the whistleblowing system. When internal auditors are perceived to have integrity, objectivity, and support from top management, individuals are more likely to report violations because they feel their reports will be followed up professionally and fairly. Thus, internal audit functions not only as a monitoring mechanism but also as a supporting factor for the success of the whistleblowing system (Hastuti et al., 2023; (Yazid et al., 2025).

On the other hand, a whistleblowing system extends the scope of internal audit oversight by providing information that cannot always be obtained through formal audit procedures. Fraud involving collusion or manipulation by upper management is often difficult to detect through testing of internal controls or document review alone. In this context, whistleblowing serves as a complementary mechanism that strengthens the internal audit function in maintaining organizational integrity.(Putra et al., 2022).

However, the study also shows that the integration of internal audit and whistleblowing in Indonesia still faces several challenges. Several studies have noted obstacles such as weak whistleblower protection, an organizational culture that does not support transparency, and limited resources and authority for internal audit. Without top management commitment and strong regulatory support, the integration of these two mechanisms has the potential to remain a formality without significantly impacting fraud prevention (Nasir et al., 2024;) Nindito et al., 2024).

In addition to organizational factors, the literature also highlights the importance of a clear governance framework in regulating the relationship between internal audit and the whistleblowing system. Clarity in reporting procedures, mechanisms for escalating findings, and separation of functions to maintain independence are crucial aspects in ensuring effective integration. Without adequate arrangements, there is a risk of conflicts of interest or misuse of the whistleblowing system, which could undermine stakeholder trust.(Chen et al., 2025).

Overall, the results of the RQ2 study indicate that the integration of internal audit and whistleblowing systems significantly contributes to strengthening fraud prevention and corporate governance in Indonesia. This integration enables the creation of a more comprehensive, adaptive, and responsive oversight system to various forms of fraud. This finding confirms that effective fraud prevention efforts require a collaborative approach that combines formal oversight mechanisms and the active participation of individuals within the organization, in line with the principles of transparency, accountability, and integrity in corporate governance.

5. Conclusions And Suggestions

Based on a systematic literature review, it can be concluded that internal audit and the whistleblowing system play a significant role in fraud prevention in Indonesia. The discussion of RQ1 indicates that internal audit serves as a formal oversight mechanism that plays a role in evaluating internal controls, identifying fraud risks, and improving organizational compliance and accountability. Meanwhile, the whistleblowing system has proven effective as a means of early fraud detection, especially for cases that are difficult to uncover through conventional audit procedures.

Furthermore, the results of the RQ2 discussion confirm that integration between internal audit and the whistleblowing system provides a stronger contribution to strengthening fraud prevention and corporate governance. This integration enables the creation of a more comprehensive oversight system, where information from whistleblowing can be utilized as strategic input for internal audit in risk assessments and investigative audits. Furthermore, the existence of an independent and credible internal audit system also increases trust in the whistleblowing system.

However, this study also found that the effective integration of these two mechanisms still faces various challenges, such as limited protection for whistleblowers, an organizational culture that does not fully support transparency, and limited resources and independence of internal audit. Therefore, top management commitment, adequate regulatory support, and a strengthened governance framework are needed to ensure optimal synergy between internal audit and whistleblowing.

Overall, this study confirms that effective fraud prevention cannot rely on a single oversight mechanism but requires an integrative and collaborative approach. These findings are expected to provide theoretical contributions to the development of corporate governance literature and serve as a practical reference for internal auditors, management, and regulators in designing a more effective and sustainable fraud prevention system in Indonesia.

References

- Boufounou, P., Eriotis, N., Kounadeas, T., Argyropoulos, P., & Pouloupoulos, J. (2024). Enhancing Internal Control Mechanisms in Local Government Organizations: A Crucial Step towards Mitigating Corruption and Ensuring Economic Development. *Economies* , 12 (4). <https://doi.org/10.3390/economies12040078>
- Chen, L., Xiu, B., & Ding, Z. (2025). Finding Misstatement Accounts in Financial Statements Through Ontology Reasoning. *IEEE Access* , 13 , 124449–124462. <https://doi.org/10.1109/ACCESS.2020.3014620>
- Ehrmann, T., & Prinz, A. (2025). The auditing game: the dark side of the private provision of a public good. *European Journal of Law and Economics* , 59 (2), 329–376. <https://doi.org/10.1007/s10657-023-09785-6>
- Hastuti, TD, Indarto, SL, & Claudia, G. (2023). COULD PERSONALITY, CHARACTERISTICS OF VIOLATIONS, AND PERCEPTIONS OF THE ORGANIZATIONAL ENVIRONMENT BE A FACTOR DRIVING THE WHISTLEBLOWING INTENTION? *Business: Theory and Practice* , 24 (2), 360–370. <https://doi.org/10.3846/btp.2023.17371>
- Herrerros-Martínez, A., Magdalena-Benedicto, R., Vila-Francés, J., Serrano-López, A.J., Pérez-Díaz, S., & Martínez-Herráiz, J.J. (2025). Applied Machine Learning to Anomaly Detection in Enterprise Purchase Processes: A Hybrid Approach Using Clustering and Isolation Forest. *Information (Switzerland)* , 16 (3). <https://doi.org/10.3390/info16030177>
- Jensen, M. C., & M. W. H. (1976). theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure .
- Kagias, P., Garefalakis, A., Passas, I., Kyriakogkonas, P., & Sariannidis, N. (2024). Whistleblowing Based on the Three Lines Model. *Administrative Sciences* , 14 (5). <https://doi.org/10.3390/admsci14050083>
- Lu, Y., Hao, J., & Tang, X. (2025). Dual-model synergy for audit opinion prediction: A collaborative LLM agent framework approach. *International Review of Economics and Finance* , 104 . <https://doi.org/10.1016/j.iref.2025.104642>
- Maulidi, A., Girindratama, MW, Putra, AR, Sari, RP, & Nuswantara, DA (2024). Qualitatively beyond the ledger: unraveling the interplay of organizational control, whistleblowing systems, fraud awareness, and religiosity. *Cogent Social Sciences* , 10 (1). <https://doi.org/10.1080/23311886.2024.2320743>

- Nadirisyah, Indriani, M., & Mulyany, R. (2024). Enhancing fraud prevention and internal control: the key role of internal audit in public sector governance. *Cogent Business and Management* , 11 (1). <https://doi.org/10.1080/23311975.2024.2382389>
- Nasir, A., Wan Ismail, WA, Kamarudin, KA, Zarefar, A., & Armadani. (2024). Examining the impact of corporate governance and family ownership on corporate performance: evidence from the Indonesian Stock Exchange. In *Cogent Business and Management* (Vol. 11, Issue 1). Cogent OA. <https://doi.org/10.1080/23311975.2024.2339546>
- Nindito, M., Afianti, I., Koeswayo, PS, & Tanzil, ND (2024). AGENCY EFFECTS: RELATED-PARTY TRANSACTIONS, CORPORATE GOVERNANCE, AND FINANCIAL STATEMENT FRAUD IN INDONESIA. *Economic Horizons* , 26 (2), 111–125. <https://doi.org/10.5937/ekonhor2402117N>
- Prof. Dr. Sugiyono. (2022). *Quantitative, Qualitative, and R&D Research Methods* (2nd Edition). Alfabeta Publisher.
- Putra, I., Sulistiyo, U., Diah, E., Rahayu, S., & Hidayat, S. (2022). THE INFLUENCE OF INTERNAL AUDIT, RISK MANAGEMENT, WHISTLEBLOWING SYSTEM AND BIG DATA ANALYTICS ON THE FINANCIAL CRIME BEHAVIOR PREVENTION. *Cogent Economics and Finance* , 10 (1). <https://doi.org/10.1080/23322039.2022.2148363>
- Sari, MP, Mahardika, E., Suryandari, D., & Raharja, S. (2022). The audit committee as moderating the effect of hexagon's fraud on fraudulent financial statements in mining companies listed on the Indonesia stock exchange. *Cogent Business and Management* , 9 (1). <https://doi.org/10.1080/23311975.2022.2150118>
- Stein, E., & da Cunha, P. R. (2024). Professional skepticism of internal auditors and perception of risks in internal controls. *Revista Contabilidade e Financas* , 35 (96). <https://doi.org/10.1590/1808-057x20241922.en>
- Tarjo, T., Vidyantha, HV, Anggono, A., Yuliana, R., & Musyarofah, S. (2022). The effect of enterprise risk management on prevention and detection of fraud in Indonesia's local government. *Cogent Economics and Finance* , 10 (1). <https://doi.org/10.1080/23322039.2022.2101222>
- The Institute of Internal Auditors. (2024). *Global Internal Audit Standards* . <https://www.theiia.org/globalassets/site/standards/editable-versions/global-internal-audit-standards-indonesian.pdf>
- Tuanakotta, MT (2010). *Forensic Accounting and Investigative Audit* . Salemba Empat.
- Wahyudi, S., Achmad, T., & Pamungkas, ID (2022). Prevention Village Fund Fraud in Indonesia: Moral Sensitivity as a Moderating Variable. *Economies* , 10 (1). <https://doi.org/10.3390/economies10010026>
- Yangyan, L., & Tingting, C. (2025). CRAFTIC Framework: Multi-Account Collaborative Fraud Detection, Efficient Feature Extraction and Relationship Modeling Combined with CNN-LSTM and Graph Attention Network. *IET Communications* , 19 (1). <https://doi.org/10.1049/cmu2.70014>
- Yanuarisa, Y., Irianto, G., Djamhuri, A., & Rusydi, MK (2025). Exploring the internal audit of public procurement governance: a systematic literature review. *Cogent Business and Management* , 12 (1). <https://doi.org/10.1080/23311975.2025.2485411>
- Yazid, H., Wiyantoro, LS, Ismail, T., & Ismawati, I. (2025). Performance determinants of higher education institutions and the mediating role of quality culture: internal auditors' perspectives. *Cogent Business and Management* , 12 (1). <https://doi.org/10.1080/23311975.2025.2455537>