



FORENSIC ACCOUNTING AND WHISTLEBLOWING IN FRAUD: A LITERATURE STUDY

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Abstract

This study analyzes the role of forensic accounting and whistleblowing in uncovering fraud amidst high corruption challenges. Using a literature review approach, data was collected from 50 research articles. The results indicate that forensic accounting is effective in detecting and uncovering fraud through in-depth analysis, while whistleblowing serves as a crucial reporting mechanism for prevention and mitigation. The combination of these two approaches creates more comprehensive oversight, particularly in the public and banking sectors, in preventing fraud. This study also recommends further study to explore the influence of new technologies in forensic accounting.

Keywords: Forensic Accounting, Whistleblowing, Fraud, Literature Review

INTRODUCTION

Corruption has become a social cancer that is eroding the foundations of economic growth and harming the sense of social justice in Indonesia. This phenomenon is not merely an administrative problem, but has developed into a serious threat to the welfare of the people and the future of the nation. According to the latest report from Transparency International, Indonesia's position remains very concerning in the Corruption Perception Index (CPI), where it only managed to score 34 out of 100 in 2023 using a scale ranging from 0-100 (0 being perceived as highly corrupt, 100 being very clean of corruption) and ranked 115th out of 180 corruption-free countries.(Panggabean & Pesudo, 2023). Not only that, based on the KPK's 2023 annual report, the KPK has arrested 8 suspects with various types of corruption in various sectors, ranging from budget cuts, bribes by State Officials within the DJKA environment, acceptance of bribes by State Officials in CCTV and ISP procurement projects, Procurement of goods and services at Basarnas in 2021-2023, to the crime of corruption in accepting gifts or promises(Nuzulia, 2023)Indonesia's corruption statistics over the past 11 years show a fluctuating pattern with a tendency to stagnate. The CPI data illustrates the long journey of corruption eradication efforts, starting with a score of 32 in 2012, gradually increasing to a peak of 40 in 2020, and then declining again to 34 in 2023. This fluctuation reflects the significant challenges still faced in eradicating corruption, where every advance is often followed by setbacks.

Corruption practices in Indonesia, especially in the state-owned enterprise sector, are a major focus (IWC, 2022)One of the most prominent cases involved PT T, which caused state losses of Rp 300 trillion, including HM, who was suspected of involvement in the illegal management of tin and collusion related to the IUP.(Indonesian Attorney General's Office, 2024)HM was accused of causing Rp 300 trillion in state losses related to PT T's tin trading system for the 2015-2022 period.(Binekasari, 2024)Forensic accounting is a solution to uncover and prevent fraud.(Yulistianingsih et al., 2020). With advanced data analysis

techniques and comprehensive investigations, forensic accounting has successfully uncovered fraud cases.(Edy & Am, 2025)This approach is capable of tracing suspicious cash flows, identifying odd transactions, and uncovering hidden corruption schemes.(Hanafiah et al., 2023)Tuanakotta (2012: 196) states that corruption is the most common and detrimental form of occupational fraud in Indonesia (Edy & Am, 2025). This act involves the abuse of a position of trust within an organization, negatively impacting the company's long-term financial performance and reputation.(Christian & Resnika, 2022)Therefore, it is important for organizations to implement preventive measures such as forensic accounting and whistleblowing mechanisms to reduce the risk of fraud.

This study aims to provide recommendations for the development of more effective anti-fraud policies by reviewing related literature. This study will identify best practices, constraints, and potential developments to increase the effectiveness of both instruments.

Based on the description above, the researcher is interested in conducting a study entitled: "Forensic Accounting Whistleblowing System In Fraud Disclosure: Literature Review" This study is expected to contribute to the development of forensic accounting and whistleblowing theory in preventing fraud effectively and sustainably. By analyzing the role of these two systems through previous research, this study will enrich the existing literature and provide new insights into how forensic accounting and whistleblowing can function synergistically in the development of anti-fraud science that is useful for further research.

LITERATURE REVIEW

Fraud

Fraud is a term that refers to fraudulent acts carried out by individuals, with the aim of gaining personal gain at the expense of the company or organization where they work. (ACFE, 2024). Based on a journal written by Cressey (1953) in Nusantara & Kuntadi (2023), fraud consists of various practices such as embezzlement of funds, abuse of authority, and manipulation of a company's financial reports.

Fraud is a complex issue because it involves various aspects such as ethics, law, economics, and social as formulated by Davia et al., in Tuanakotta (2012: 272), namely: fraud that has entered the legal prosecution process, regardless of the results of the court decision (prosecution), fraud that has been identified but has not been legally processed, and fraud that has not yet been detected. Zimbelman (2014: 12) in his book also states that there are many ways that can be used to group various forms of fraud, and one of the most frequently used and considered the most efficient methods is to divide fraud into two large categories, namely, the first category includes fraud committed to harm or exploit the organization, while the second category includes fraud committed by individuals or groups on behalf of the organization, usually with the aim of obtaining certain benefits for the organization. Another alternative in classifying fraud is to refer to the definition given by the Association of Certified Fraud Examiners (ACFE) regarding "fraud related to position or work (occupational fraud)." According to the ACFE, this type of fraud refers to the actions of individuals who exploit their position in an organization for personal gain, by misusing or intentionally using the organization's assets or resources improperly.(ACFE Global, 2020). There is also another term that is often used to describe a type of fraud, namely white-collar crime (Tuanakotta, 2012; 195).

Association of Certified Fraud Examiners The ACFE (Accounting for the Occupational Fraud Association) depicts occupational fraud in the form of a fraud tree. This tree depicts the branches of fraud in employment relationships, along with their branches and sub-branches.

The occupational fraud tree consists of three main branches: corruption, misappropriation of assets, and fraudulent financial statements.(Arifin, 2020).

Forensic Accounting

Meriam Webster's Collegiate Dictionary, (10th edition) Tuanakotta (2012, p. 3), states that forensic accounting is a translation of forensic accounting in English, where the word "forensic" (forensik) is an adjective derived from the Latin "forensic" which means "public" which is derived from the word "forum" (a place for public discussion in Roman times). This word was first used around 1659(Maulitasari & Passarella, 2020). Referring to the meaning of the term "forensic" in the English dictionary, forensic accounting can be defined as the application of accounting discipline in the context of legal issues.(Aristianto, nd)Based on the explanation above, forensic accounting can be defined as the application of accounting principles in a broader scope, including the audit process, to handle various legal problems.(Rohmah et al., 2023)This application aims to provide relevant solutions or evidence that can be used in resolving legal cases, both those taking place in court and outside court.(Ramlan et al., 2023).

Forensic accounting is not limited to a particular sector, but can be applied in both the public and private sectors (Tuanakotta, 2012). According to M. Tuanakotta (2012), forensic accounting is systematically divided into two main types, namely: FOSA (Fraud Oriented System Audit) is a type of forensic accounting that focuses on handling fraud cases with two main areas, namely illegal asset taking such as skimming (looting), lapping (theft), and kitting (embezzlement), as well as fraud in financial reports such as the presentation of false data or material misstatements. Meanwhile, COSA (Corruption Oriented System Audit) is a form of forensic accounting that specifically highlights corruption cases, so COSA is used to detect and analyze fraud directly related to criminal acts of corruption.

Whistleblowing

Whistleblowing which in Indonesian is known as disclosure of secrets, is the act of informing other parties outside the organization of the internal conditions or secrets of an organization.(Izza & Hariyanto, 2022). Disclosure of violations committed must be confidential in accordance with applicable provisions in good faith, based on the conscience of the reporter, and not because of personal complaints against certain company policies or driven by bad intentions or elements of slander.(Rohmah et al., 2023).

Whistleblowing is a mechanism that is considered effective in preventing and overcoming various forms of deviation, including fraud, organizational losses, and abuse of authority or position.(Hertati & Puspitawati, 2023)Through reporting by internal or external parties who are aware of unethical or illegal actions, whistleblowing allows organizations to take immediate corrective action before the problem becomes bigger.(Daurrohmah et al., 2022). Thus, the whistleblowing system becomes an important tool in maintaining integrity, accountability, and transparency in the work environment.(Ardiansyah, 2023).

METHODS

Research Approach

This study employed a qualitative method with a literature review approach focused on evaluating research findings related to forensic accounting and whistleblowing in fraud disclosure. This study employed a scoping review, a research approach that searches and reviews literature from various sources, such as books, journals, and related publications (Widiasih et al., 2020). Unlike a systematic review, which requires critical appraisal, a scoping review allows for more flexible yet systematic exploration and mapping of the literature (Jambi, 2020).

In this study, the objects of study are forensic accounting and whistleblowing systems in uncovering workplace fraud. This study limits its discussion to a predetermined scope of questions, with a number of answers that align with the problem formulation. This allows researchers to delve deeper into how forensic accounting and whistleblowing systems can help uncover fraud in organizations. By limiting the research focus, the results obtained will be more relevant and useful for developing knowledge on fraud detection.(Fasieh & Fahrurrozi, 2023)This approach also ensures that the research does not stray into other topics.

The data for this study were obtained through an intermediary or indirect channel, meaning the researcher did not directly collect the data from the source. This study employed a literature search strategy through online media, including Google Scholar, Elsevier, and Science Direct. However, the researcher also utilized the Publish and Perish 8 tool to facilitate the search, as it already includes all three online media. The following are the search site addresses that the researcher will use in conducting the literature review:

Table1. List of research site addresses

Site Name	Website Address
Google Scholar	https://scholar.google.co.id/
Elsevier	https://www.elsevier.com
Science Direct	https://www.sciencedirect.com/

Source: *Literature Review Thesis Guide*, UIN Maulana Malik Ibrahim Malang, (2020)

Keywords serve to help users find information that is more accurate, faster, and suits their needs.(Rochani & Noerida, 2022). and Boolean operators. The keywords include: Forensic accounting, Forensic accounting, Forensic audit, Whistleblowing, Whistleblowers, and Fraud. Boolean operators (AND, OR, NOT) were used to optimize the literature search process, with clear inclusion and exclusion criteria:

Table 2. Literature Selection Criteria

Inclusion	Exclusion
1. Articles published on designated websites	1. Articles that are not published on the specified website
2. Articles in the 2020-2025 period (last 5 years)	2. Research articles published before 2021
3. Articles written in Indonesian or English	3. Articles that use both English and Indonesian
4. Articles that focus on research topics in accordance with research objectives	4. Articles that are review-based without empirical data
5. The research results are published with full access (full text) from the sites that have been used as sources of literature data.	5. Articles with limited access that cannot be accessed in full (not full text or paid)

Source: *Literature Study Thesis Writing Guidebook*, University of Jambi (2020).

Data Analysis Techniques

This study used the expository method to analyze the data. Expository text is a text that contains an explanation of information or knowledge.(Badriyah, 2021). Exposition serves to provide a clear and comprehensive understanding of a topic to the reader, without any element

of persuasion or invitation to follow a particular opinion. (Maelasari, 2020) The analysis process begins with data collection and curation according to the specified research method, then summarized narratively based on the outcome categories. After being curated and grouped according to inclusion criteria and methods, the data will be presented in a descriptive table format that includes researcher information, publication year, journal name, article title, and a summary of the research results.

Next, the researcher will review the summary table, focusing on the methodology, process, and research results based on the full articles. The final stage includes coding and comparative analysis to identify similarities and differences between the articles. The results of this analysis will then be synthesized into conclusions and discussed comprehensively.

RESULTS

This literature study was conducted to determine the role of forensic accounting and whistleblowing in fraud and the impact of implementing forensic accounting and whistleblowing systems on fraud. Using existing literature on forensic accounting and whistleblowing, the study was conducted. All literature collected in this study was then analyzed using the analysis table method, with the aim of comprehensively answering all measurement objectives established in the research framework. The results obtained from this analysis were then compared with those obtained using simple measurement methods.

The Role of Forensic Accounting in Fraud

The knowledge that an organization has strong forensic accounting capabilities and will use them to follow up on any indication of fraud can create a substantial deterrent effect on would-be fraudsters. Mr Nileshbhai M. Gamit (2022) In their study, they explicitly stated that forensic accounting is effective in detecting and preventing corporate fraud, particularly in the banking sector. This suggests that a robust detection function inherently contributes to deterrence, as potential fraudsters will think twice if they know their fraud will be detected. CA Hardik Patwa & Dr. Purvi Dipen Derashri (2023), also emphasized that forensic accounting contributes significantly to building a more reliable and secure banking sector by preventing fraud, as its presence increases credibility and trust. This prevention also occurs indirectly through recommendations for improving internal control systems resulting from previous forensic investigations. For example, the study Muhammad Isa Alamsyahbana et al., (2022), shows that companies that implement forensic accounting effectively have strong internal control systems, which are a key foundation for fraud prevention. In other words, past experience in uncovering fraud through forensic accounting can lead to strengthened controls that prevent future fraud. Andi Sopyan et al., (2023), found that forensic accounting proved effective in preventing fraud in the Bandung City Government, with internal controls acting as a moderator. This demonstrates the proactive role of forensic accounting in the context of goods/services procurement.

Forensic accountants use a variety of sophisticated investigative techniques, such as complex transaction analysis, asset tracing, structured interviews, and digital forensics to gather evidence. (Jarnawansyah, 2023). Susi Rahmayanti et al., (2023), empirically proves that the application of forensic accounting and investigative audits has a positive and significant effect on the detection of fraud in the procurement of goods/services at the BPKP of South Sumatra Province, both partially and simultaneously. Likewise Eucharist Isowati Sinaga & Mulia Rahmah (2023), found that forensic accounting has a positive effect on the disclosure of financial statement fraud at the South Jakarta Public Accounting Office, demonstrating its superior ability to detect complex fraud. Mohd. Idris Dalimunthe et al., (2024), asserts that the use of forensic accounting can improve the detection and prevention of tax manipulation. Khofidah Pujilestari & Nera Marinda Machdar (2024), found that forensic

accounting has an impact on fraud disclosure. However, there is an important nuance to note: forensic accounting does not have a significant impact on fraud detection due to its limitations in identifying fraud early.(Ardiansyah, 2023)These findings suggest that forensic accounting may be more effective in post-fraud investigations (reactive) than as a proactive early detection tool, and that early detection may rely more heavily on other mechanisms such as whistleblowing.Ezekiel Oluwagbemiga Oyerogba (2022), emphasized that adequate knowledge of economic loss calculation and financial statement valuation, as well as the skills and techniques of forensic auditors, are significant predictors of fraud detection in the Nigerian public sector. This suggests that the competence and expertise of forensic accountants are crucial to the effectiveness of detection.Longji Jan Ishaku et al., (2023), confirms the existence of a significant positive relationship between persuasive and investigative skills in forensic accounting and fraud detection.Madukwe Jude Uchechukwu et al., (2024), highlights how AI and Predictive Analytics have revolutionized Forensic Accounting by proactively improving the accuracy, efficiency, and speed of fraud detection.

Once fraud is detected or indicated, the role of forensic accounting continues at the crucial stage of uncovering fraud comprehensively and systematically.(Suhartono, 2021)This involves collecting strong, valid, relevant, and legally accountable evidence to prove the occurrence of fraud, identify all parties involved (perpetrators, facilitators, beneficiaries), and accurately measure the financial losses incurred.(Sumarsono et al., 2024)Forensic accountants prepare highly detailed investigative reports, often serving as the basis for legal action, and they can also provide expert testimony in court.Husnul Khatimah et al., (2024), explicitly states that the better the application of forensic accounting, the better the level of fraud disclosure that an auditor has, showing a direct correlation between forensic quality and the ability to disclose.(Aris Dianto, 2023), also proves that forensic accounting has a positive and significant influence on fraud disclosure at the Indonesian Audit Board (BPK RI), where all indicators show very good performance.Dedi Ramlan et al., (2023), found that forensic accounting had a positive and significant effect on the disclosure of fraud in regional financial management at the BPKP South SulawesiIsrafil Munawarah et al. (2025), although qualitative, identified systemic weaknesses in investigative audits and oversight, implying that robust forensic accounting is necessary to uncover fraud in major cases. Methodologically, most studies addressing forensic accounting use a quantitative approach, as seen in 33 of the 34 journals that employed direct field research or observation. This approach allows for statistical measurement of the impact and relationships between variables, providing strong empirical evidence. Some qualitative studies, such asAtang Hermawan (2022)This paper discusses the four driving factors of fraud (Greed, Opportunity, Need, and Entitlement, or GONE theory), providing a deep conceptual understanding of the root causes of fraud, which can form the basis for developing more effective prevention strategies. Overall, forensic accounting serves as a key pillar in modern anti-fraud systems. Its ability to forensically analyze financial and non-financial data, identify hidden anomalies, and gather strong, legally accountable evidence makes it an irreplaceable instrument in uncovering fraud. The importance of forensic accounting is also emphasized in the public sector context, whereSuhartono & Raodahtul Jannah (2021)stated that its implementation has proven significant in detecting and reducing fraud in procurement of goods/services, while increasing prevention efforts, so that it is increasingly needed to support clean and transparent economic development in Indonesia.

The Role of Whistleblowing in Fraud

Achyarsyah (2022), firmly emphasized that a whistleblowing system equipped with strong whistleblower protection is very significant in preventing fraud, especially in the context of misuse of operational funds.Periansya et al., (2023)Empirically, the whistleblowing system

effectively prevents fraud by increasing anti-fraud awareness among local government employees. This demonstrates that whistleblowing not only serves as a detection tool but also proactively prevents fraud by fostering awareness and a culture of integrity. Dwi Aprilia Sakinah et al., (2023), found that the whistleblowing system had a significant effect in reducing the potential for fraud in BUMN. Made Yessi Puspitha et al., (2024), in, proving that the whistleblowing system has proven effective in reducing fraud in the management of village funds.

The most direct and often most vital role of whistleblowing is to detect fraud as described. Andi Priyadi et al., (2022), explains that the implementation of a whistleblowing system can effectively encourage employee participation in preventing fraud, which indirectly means detecting fraud through their reports. Rahmahdita et al., (2024), in explicitly stating that WBS plays a significant role in fraud detection and prevention. Ahmad Johan et al., (2022), found that the whistleblowing system has a significant effect on fraud prevention, which indicates its ability in detection. Fityan Izza Noor Abidin & Wiwit Hariyanto (2022), found that both academics and practitioners have a good understanding of the role of whistleblowing as a fraud detection effort.

Although whistleblowing itself doesn't conduct in-depth investigations or gather forensic evidence, the information it provides is vital in uncovering fraud. Aris Dianto (2023) empirically demonstrated that whistleblowers have a positive and significant impact on fraud disclosures at the Indonesian Supreme Audit Agency (BPK RI). This suggests that whistleblower reports can provide a strong foundation for forensic or investigative auditors to gather further evidence and ultimately uncover the entire fraud scheme. Faruqi et al., (2025), found that the Whistleblowing System acts as a significant negative moderator for Financial Pressure, Opportunity, and Rationalization, as well as a significant positive moderator for Capability and Arrogance in Asset Misappropriation, which indirectly contributes to disclosure. Febry Wahyu Setiawan & Novita Sari (2024), proving that whistleblowing individually has a significant positive effect on the disclosure of financial report fraud.

Methodologically, 26 of the 32 articles discussing whistleblowing conducted direct empirical research, using either quantitative or qualitative methods, to assess its impact and effectiveness. The remainder used non-empirical or conceptual approaches. Empirical research provides concrete, measurable, data-based findings, while non-empirical approaches present comprehensive conceptual analyses based on existing literature and theories, such as the Theory of Planned Behavior (TPB) used by Mesra Amalia Ramadhani & Sri Trisnaningsih (2023) to analyze whistleblowing intentions in fraud prevention. However, there are significant challenges in implementing whistleblowing, especially in developing countries. Okafor et al., (2020), in their study in Nigeria, found that although whistleblowing is supported as an accountability mechanism, a lack of awareness of whistleblowing laws, high risks for whistleblowers (including the risk of physical elimination), and institutional and operational challenges conducive to venality significantly undermine the efficacy of whistleblowing. This suggests that the success of whistleblowing depends not only on the existence of a system, but also on a conducive environment, strong legal support, and an organizational culture that rejects fraud. Overall, whistleblowing is a highly effective reporting mechanism in fraud detection and prevention, provided it is supported by strong protections for whistleblowers, high awareness among employees, and a transparent and accountable organizational environment. The role of social media as a whistleblowing channel is also beginning to be recognized, as noted by Arianto (2021), which shows the adaptation of whistleblowing to technological developments.

Application of Forensic Accounting and Whistleblowing in Fraud

The combination of forensic accounting and whistleblowing creates a much more powerful and comprehensive deterrent effect.(Mahsita & Mahmudi, 2021)The existence of an effective whistleblowing system, supported by forensic accounting capabilities to follow up reports with credible investigations and tangible consequences, will significantly increase the perception of risk for potential fraud perpetrators.Aswandi et al., (2023), found that proactive fraud audits and whistleblowing systems have a positive effect on fraud prevention in regional financial management. Although forensic accounting is not always proactive in terms of early detection, its ability to thoroughly uncover fraud and provide a basis for law enforcement will strengthen the deterrent effect of whistleblowing, thus indirectly contributing to prevention. Vierina Clyde & Imam Abu Hanifah (2022) showed that the whistleblowing system partially has a significant positive effect on forensic and investigative audits, where both types of audits have also been proven effective in fraud prevention. This indicates that the synergy between whistleblowing and forensic audits contributes to prevention.

The synergy between forensic accounting and whistleblowing is optimal in detecting fraud. Whistleblowing is often a vital initial trigger, providing "clues" or "red flags" that direct an investigation. Information from whistleblowers can be highly specific, allowing forensic accountants to focus on specific areas or transactions of interest, saving time and resources.Ulimsyah et al., (2021), shows that the whistleblowing system plays a crucial role in reporting indications of fraud, which are then followed up through forensic and investigative audits. Dekar Urumsah et al. (2023) empirically demonstrated that whistleblowing significantly increases the effectiveness of forensic audits, investigations, and fraud detection. This means that whistleblowing accelerates the detection process by providing relevant initial information, while forensic accounting provides the validation and analytical depth necessary to confirm and accurately identify fraud.Daurrohmah et al., (2022), found that forensic audits are effective in detecting bribery, and whistleblowing plays a crucial role as a first step in uncovering bribery by providing preliminary evidence. The combination of the two can reduce bribery practices.

Once fraud is detected or indicated, the role of forensic accounting and whistleblowing becomes very powerful in uncovering fraud comprehensively and thoroughly.(Setiawan & Sari, 2024). Whistleblowing reports provide vital initial direction, and forensic accounting then conducts in-depth investigations to gather strong, valid, and legally accountable evidence.(Arianto, 2021). Forensic accountants will analyze data, conduct interviews, and compile detailed reports to prove the occurrence of fraud, identify all parties involved (perpetrators, facilitators, beneficiaries), and measure the losses incurred.(Suhartono, 2021)Yasa & Haq (2023) found that the whistleblowing system has a significant influence on fraud detection, both directly and indirectly through forensic and investigative audits as intervening variables, which ultimately contribute to fraud disclosure. Aris Dianto (2023) proved that forensic accounting and whistleblowing each have a positive and significant influence on fraud disclosure at the Indonesian Audit Board (BPK RI). Febry Wahyu Setiawan & Novita Sari (2024) proved that investigative audits and whistleblowing individually have a significant positive influence on the disclosure of financial statement fraud.S. Muhammad & A. Muhammad, (2025)found that investigative audits had a positive and significant impact on whistleblowing and fraud detection in the inventory cycle, while forensic accounting had no significant impact. These findings underscore the importance of optimizing investigative audits and strengthening whistleblowing mechanisms to improve the effectiveness of fraud detection and prevention. However, it's important to acknowledge the nuances and variations in the findings.(Riadi & Aprilian, 2024)found that forensic accounting significantly impacted fraud prevention, but investigative auditing and whistleblowing system effectiveness did not. Limitations of this study, such as the location and limited number of respondents, may have

influenced the results. This suggests that while there is potential for synergy, the effectiveness of each component may vary depending on the specific context, organizational characteristics, and other factors that are not always measurable. Ramadhan & Mulyati, (2022), highlighting that forensic auditors require a high level of objectivity and professional skepticism to effectively detect fraud, especially during the Covid-19 pandemic. They emphasized that ability, experience, and the application of whistleblowing are key factors in uncovering fraud. Therefore, audit institutions such as the Supreme Audit Agency (BPK) and the Financial and Development Supervisory Agency (BPKP) need to improve their performance by strengthening auditor independence and competence, and optimizing whistleblowing systems to support audit effectiveness.

Overall, the combination of forensic accounting and whistleblowing creates a more robust, comprehensive, and proactive mechanism for combating fraud. Whistleblowing provides crucial initial information and encourages participation, while forensic accounting conducts in-depth investigations to gather accurate and credible evidence. This synergy enables faster and more effective fraud detection and provides a solid foundation for prevention and law enforcement.

The Impact of Forensic Accounting and Whistleblowing on Fraud

Periansya et al. (2023) empirically demonstrated that the whistleblowing system effectively prevents fraud by increasing anti-fraud awareness among local government employees. Furthermore, the results of forensic investigations that successfully uncover fraud can be used to identify fundamental weaknesses in the internal control system, which can then be corrected to prevent similar fraud in the future. Muhammad Isa Alamsyahbana, Budi Zulfachri, Nurfitri Zulaika, Andres Putranta Sitepu, & Tommy Munaf (2022) demonstrated that companies that implement forensic accounting effectively have strong internal control systems, which are the main foundation for fraud prevention. Thus, this synergy-driven cycle of detection-disclosure-improvement continuously strengthens the prevention mechanism. C. Wijaya & J.Gultom (2025), demonstrating that the digitization of tax oversight, forensic accounting, and technology systems has a positive and significant impact on preventing tax evasion through increased transparency, fraud detection, and efficient data analysis. The combined impact on fraud prevention is substantial and proactive. The existence of an effective, transparent, and trusted whistleblowing system, supported by forensic accounting capabilities to follow up reports with credible investigations and tangible consequences, will significantly improve the risk perception of potential fraud perpetrators. They will realize that not only is there a safe channel to report fraud, but also that there is a team of experts capable of uncovering and proving the fraud thoroughly. This creates a strong deterrent effect, reduces incentives to commit fraud, and encourages compliance with applicable regulations.

The most immediate and crucial impact is a significant improvement in fraud detection capabilities. A whistleblowing system serves as the organization's widespread "eyes and ears," enabling early detection of fraud that may otherwise go undetected through routine internal audits or traditional controls due to its covert, collusive nature, or the involvement of upper management. Information provided by whistleblowers, often insiders with direct knowledge of the fraud, provides a valuable starting point and is often the only way to uncover hidden fraud. Once initial information is obtained through whistleblowing, forensic accounting takes over the role of in-depth investigation. With specialized expertise in analyzing financial and non-financial data, identifying complex anomalies, and gathering valid evidence, forensic accountants are able to confirm suspected fraud and identify patterns. Urumsah et al. (2023) empirically demonstrated that whistleblowing significantly improves the effectiveness of forensic audits, investigations, and fraud detection. This suggests that whistleblowing

accelerates the detection process by providing relevant initial information, while forensic accounting provides the validation and analytical depth necessary to accurately confirm and identify fraud. Sumarsono et al., (2024), analyzed the factors that influence bribery detection and the results of statistical tests proved that all research hypotheses were empirically proven, indicating the combined effectiveness of these two mechanisms.

The impact of forensic accounting and whistleblowing is powerful in comprehensively and thoroughly uncovering fraud. Whistleblowing reports provide vital initial guidance, often containing specific details about the fraud scheme, the perpetrator's identity, the time period in which it occurred, and even the location of physical or digital evidence. This information is crucial in directing and expediting the investigation process. Forensic accountants then conduct in-depth investigations to gather strong, valid, and legally accountable evidence. Forensic accountants analyze data, conduct interviews, and compile detailed reports to prove the fraud, identify all parties involved (perpetrators, facilitators, beneficiaries), and quantify the losses incurred. Aris Dianto (2023) concluded that forensic accounting and whistleblowing overall have a positive and significant impact on fraud disclosure at the Indonesian Supreme Audit Agency (BPK RI). Forensic accounting's ability to uncover fraud in detail and systematically is crucial for law enforcement, asset recovery, and the imposition of fair sanctions. Yasa & Haq (2023) found that the whistleblowing system significantly influences fraud detection, both directly and indirectly through forensic and investigative audits as intervening variables, ultimately contributing to the overall disclosure of fraud. F.W. Setiawan & Sari (2024) proved that investigative audits and whistleblowing individually have a significant positive effect on the disclosure of financial statement fraud. Despite their significant positive impact, the combined effectiveness of forensic accounting and whistleblowing can be limited by several factors. The lack of adequate whistleblower protection, limited resources and competencies of forensic auditors, and a lack of consistent support from top management can hinder the success of these two mechanisms. Several studies, such as those conducted by Sugeng Riadi & Puja Aprilian (2024), indicate that the effectiveness of whistleblowing is not always significant in fraud prevention, which may be due to contextual factors, organizational culture, or research methodology. Furthermore, Okafor et al. (2021) highlight that in developing countries, endemic institutional and operational challenges can seriously undermine the effectiveness of whistleblowing.

Overall, forensic accounting and whistleblowing have a very positive and mutually reinforcing impact in combating fraud. Whistleblowing provides vital initial information and encourages active participation, while forensic accounting provides in-depth investigative and analytical capabilities. This synergy enables organizations to effectively prevent, detect, and uncover fraud.

CONCLUSIONS

Based on a literature review of fifty research articles, forensic accounting and whistleblowing have been shown to complement each other in fraud prevention, detection, and disclosure. Forensic accounting serves as an effective investigative tool to uncover fraud through data analysis and evidence collection, while whistleblowing serves as an early detection mechanism by providing vital information. Although forensic accounting is more reactive, its deterrent effect and recommendations for system improvements contribute to indirect prevention. The combined impact includes significant improvements in transparency, accountability, and organizational integrity, as well as strengthening internal controls to prevent future fraud. This synergy not only increases the effectiveness of fraud disclosure but also creates a more fraud-resistant work environment through its deterrent effect and systemic improvements.

This study is limited by its scope, methodological variation, and lack of longitudinal data, which impact the generalizability of the findings. Future research could employ a mixed-methods approach, explore the role of technologies such as AI and blockchain, conduct cross-cultural studies, develop predictive models, and conduct longitudinal research to assess the long-term effectiveness of forensic accounting and whistleblowing on fraud, thereby creating a more transparent and accountable organizational environment.

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