

Investigative Audit Analysis in Uncovering Financial Fraud: A Literature Review Based on the Fraud Tree Approach

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ARTICLE INFO

Keywords: Investigative Audit, Fraud Tree, Fraud Detection, Financial Fraud, Literature Review

Received : 20 September

Revised : 20 October

Accepted: 25 November

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ABSTRACT

This research aims to analyze the role of investigative audits in detecting and uncovering financial fraud using the Fraud Tree approach developed by the Association of Certified Fraud Examiners (ACFE). This research uses a qualitative method with a literature review approach, which involves examining previous research findings, publications, and relevant audit institution reports. The study results indicate that investigative audits play a strategic role in uncovering evidence of fraud, particularly within the three main categories of the Fraud Tree: corruption, asset misappropriation, and financial statement fraud. Effective implementation of investigative audits requires competent auditors, support from digital audit technology, and a transparent reporting system. This article also recommends strengthening auditor capacity and implementing risk-based internal control systems as preventive measures against fraud in both the public and private sectors.

INTRODUCTION

Cases of financial fraud remain a major issue in financial management across various sectors, both public and private. In Indonesia, a report by the Audit Board of Indonesia (BPK, 2023) indicates that many local governments still have significant findings related to financial management irregularities. Meanwhile, the Corruption Eradication Commission (KPK) also noted that the majority of corruption cases stem from budget misuse and manipulation of financial statements (KPK, 2022). This condition illustrates that weak internal control systems, a lack of integrity among personnel, and weak oversight functions are the main factors causing fraud in the public sector (Tuanakotta, 2014).

Conventional audits are often unable to detect or uncover complex fraud schemes, especially those involving financial statement manipulation, asset misappropriation, or hidden corruption practices. According to Rahmawati and Ananda (2021), regular financial audits tend to focus on the fair presentation of financial statements, rather than on proving the existence of fraudulent elements. Therefore, a deeper and more investigative approach is needed, namely an investigative audit.

An investigative audit is a process of examination conducted to prove the existence of fraudulent activity by collecting valid, relevant, and legally accountable evidence (Tuanakotta, 2014). This audit not only verifies the figures in the financial statements but also traces the flow of funds, examines motives, and identifies the perpetrators and the impact of the losses incurred.

In the context of professional practice, the Association of Certified Fraud Examiners (ACFE) developed the Fraud Tree model, which is a classification framework that explains forms of fraud based on three main categories:

1. Corruption - including abuse of office, bribery, gratuities, and conflicts of interest.
2. Asset Misappropriation - includes embezzlement of cash, asset manipulation, or fictitious claims.
3. Financial Statement Fraud - includes manipulation of financial statements, recognition of fictitious income, or elimination of liabilities.

This model helps investigative auditors systematically understand the root causes and patterns of fraud occurrence (ACFE, 2022). With the Fraud Tree approach, auditors can classify findings, identify modus operandi, and determine effective proof steps.

Previous research has shown the importance of investigative audits in improving financial accountability and transparency. Wati and Sinarwati (2020) found that the implementation of investigative audits significantly affects the ability of internal auditors to uncover fraud in local government agencies. Mulyadi and Sarwono (2023) also emphasize that the ability of investigative auditors to use fraud analysis techniques in depth can reduce the risk of corruption that goes undetected by regular audits.

Additionally, Meliana et al. (2024) found thru a literature review that investigative audits, when combined with whistleblowing systems and forensic audits, are capable of increasing the effectiveness of fraud prevention by up to

40% in public organizations. This result is supported by Pratiwi and Rely (2024), who state that strengthening the competence of investigative auditors and implementing good corporate governance principles play a strategic role in reducing the potential for fraud in government institutions and state-owned enterprises.

Thus, investigative audits not only aim to find the perpetrators and methods of fraud, but also serve as a means of prevention and organizational learning to make the financial management system more transparent, accountable, and integrated.

LITERATURE REVIEW

Fraud Triangle Theory (Donald R. Cressey, 1953)

According to Cressey, 1953, in the fraud triangle theory, "A trusted person becomes a trust violator when he conceives of himself as having a financial problem which is non-shareable, is aware this problem can be secretly resolved by violation of the position of financial trust, and is able to apply to his own conduct in that situation verbalizations which enable him to adjust his conceptions of himself as a trusted person with his conceptions of himself as one who uses the entrusted funds or property." According to Cressey (1953), a person will commit fraud when facing financial pressure that cannot be shared with others (non-shareable financial pressure), finding an opportunity to commit fraud without being detected (opportunity), and having a moral justification or acceptable personal reason for taking such action (rationalization).

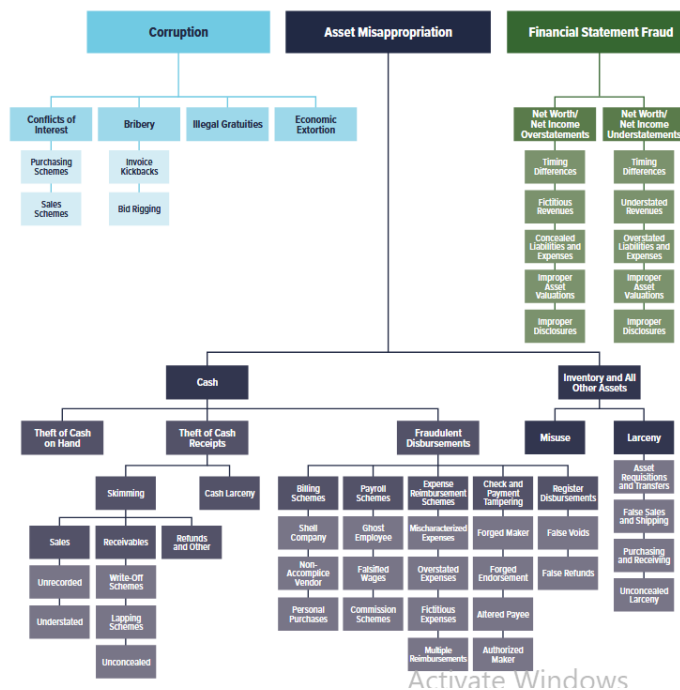


Figure 2.1. Fraud Tree Framework

This theory explains that fraud occurs due to three main elements: pressure, opportunity, and rationalization. These three elements form the triangle of causes

of fraud, known as the fraud triangle. Pressure often stems from individuals' internal factors, such as economic needs, excessive lifestyles, or debt. Opportunity arises due to weak internal control systems, lack of supervision, or organizational procedural weaknesses. Meanwhile, rationalization is an individual's attempt to justify their actions in order to avoid feeling guilty, for example, by thinking that the action is only temporary or because they feel undervalued by the organization.

Additionally, Tuanakotta (2010) states that understanding the Fraud Triangle helps auditors design more effective investigative audit procedures. By identifying existing pressures, opportunities, and rationalizations, auditors can estimate areas of fraud risk and take appropriate preventive measures. Therefore, the Fraud Triangle Theory has become one of the main theories used in research on fraudulent behavior, both in the private and public sectors. This theory asserts that fraud prevention does not solely rely on oversight systems, but must also consider psychological and organizational environmental factors that can create pressure and justification for fraudulent actions.

Agency Theory (Jensen & Meckling, 1967)

Jensen & Meckling (1976) classified agency theory as a contract between the company's owners (the principal) and management (the agent). Shareholders or investors act as principals, while company management acts as agents. Agency theory is a work contract that divides tasks and rewards while evaluating results (Subroto & Endaryati, 2024). The company owner (principal) always wants information related to all company activities, including the management of invested funds. Therefore, thru the accountability reports prepared by management as the agent, the principal obtains the necessary information and a means to assess the agent's performance over a certain period (Purba, 2023). Agency theory emerged due to the conflict of interest between the two parties (Halim & Abdullah, 2006).

Therefore, agency theory is used in the research discussing investigative audits to explain the motivation behind the occurrence of fraud, as well as the need for oversight and accountability mechanisms such as internal audits, external audits, and investigative audits. Auditing serves as a control tool that can reduce information errors and improve the transparency and quality of financial statements. In line with this, Tuanakotta (2010) emphasizes that investigative auditing is one form of implementing agency theory in practice, where the auditor acts as an independent party assisting the principal in detecting and preventing deviations committed by the agent. Thus, agency theory provides a theoretical basis for understanding the importance of audits and internal control systems in preventing fraud and maintaining public trust in government financial statements.

Stewardship Theory

In an organization, managers or administrators act as stewards responsible for managing resources with the organization's interests above personal interests (Donaldson & Davis, 1991). This theory explains that a manager acts as a steward

when they fulfill their responsibilities as an administrator by prioritizing the organization's and stakeholders' interests (Utami et al., 2024).

The implementation of a good internal control system is one form of embodying stewardship theory, where employees act as stewards in maintaining the accountability and reliability of financial reports. In addition, adequate human resource competency will strengthen the role of stewards in producing financial reports that are of high quality and comply with Government Accounting Standards (GAS). Thus, the higher the integrity and competency of employees, the better the quality of the financial reports produced, which ultimately increases public trust in local governments.

METHODOLOGY

This research uses a qualitative approach with the type of research being a literature review. This approach is carried out by reviewing and analyzing various library sources relevant to the research topic. Data was collected from various references such as books, scientific journals, encyclopedias, reports, magazines, and other documents related to the research problem.

The selection of the literature review method aims to provide an in-depth understanding of the research problem within certain boundaries, by utilizing a variety of credible information sources. The type of data used in this study is secondary data, which is data obtained indirectly from a review of previous sources.

Data collection was carried out by searching using the Google Scholar search engine (<https://scholar.google.com>) to obtain relevant literature. The data sources analyzed come from journals and scientific publications that discuss auditor independence, the application of computer-assisted audit techniques, and the effectiveness of investigative audits in detecting fraud.

RESEARCH RESULT

Hasil Literature

Based on the results of the literature review, it shows that the fraud tree developed by the Association of Certified Fraud Examiners (ACFE) plays an important role in supporting the effectiveness of investigative audits. The fraud tree is a conceptual framework that classifies fraud into three main categories: fraudulent financial reporting, misappropriation of assets, and corruption. This structure helps investigative auditors systematically recognize fraud patterns and determine relevant audit procedures to find evidence of irregularities (ACFE, 2020; Tuanakotta, 2017). In the context of investigative auditing, the fraud tree serves as an analytical tool for identifying the root causes of fraud. The study by Prasetiyo et al. (2023) confirms that understanding the fraud tree structure allows auditors to detect forms of financial irregularities from the early stages of examination. With this mapping, auditors can link each fraud mode to transaction evidence, perpetrator behavior, and internal control weaknesses that allowed the fraud to occur. This aligns with research by Albrecht et al. (2012), Pratiwi and Rely (2024), and Teng and Hakiman (2024), which states that understanding the fraud tree classification can improve audit efficiency.

Additionally, the fraud tree also provides added value in terms of prevention. According to (Najmuddin & Pamungkas, 2021) in research cited by Teng & Hakiman (2024), familiarization with the three main branches of the fraud tree helps auditors understand potential fraud risks at various organizational levels, allowing investigative audits to be directed not only at detecting but also at mitigating the likelihood of future fraud.

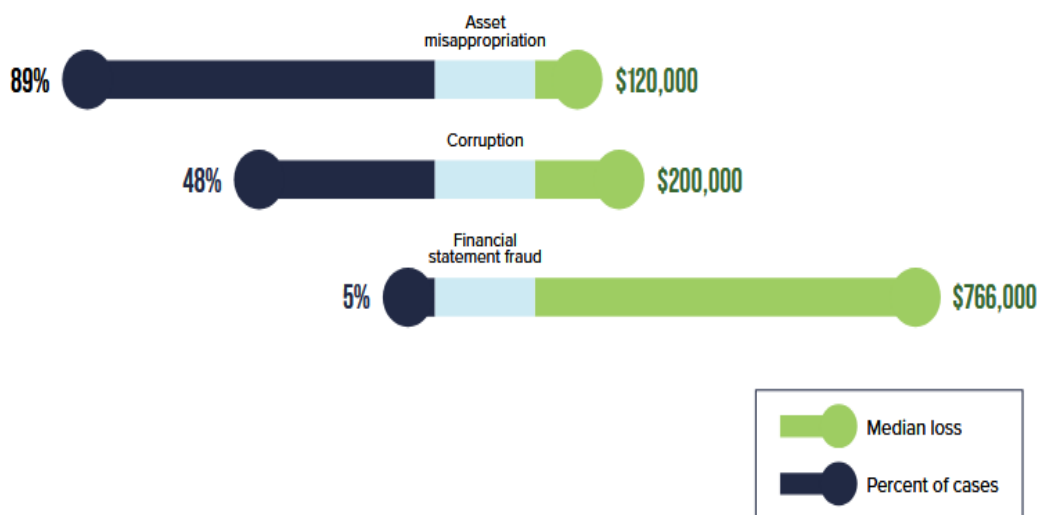


Figure 4.1. Diagram ACFE

Based on the Association of Certified Fraud Examiners (ACFE) diagram in "Occupational Fraud 2024: A Report To The Nations," three main categories of fraud are presented according to the fraud tree classification, which is explained as follows:

1. Asset Misappropriation

- Frequency of cases: 89% of all fraud cases.
- Median loss: 20,000.
- Meaning: This type of fraud is the most frequent (has the most cases), but the losses are relatively small compared to the other two types. Examples include cash theft, inventory manipulation, or using organizational assets for personal gain.

2. Corruption

- Case frequency: 48%.
- Median loss: \$200.000.
- Meaning: Almost half of fraud cases involve elements of corruption, such as bribery, conflict of interest, or extortion. The losses are greater than asset misappropriation because it usually involves positions of authority.

3. Financial Statement Fraud

- Case frequency: only 5%.

- Median loss: \$766,000.
- Meaning: This type of fraud is the least common, but it causes the greatest financial losses. This case involves manipulation of financial statements, such as inflating profits, concealing liabilities, or recognizing fictitious revenue.

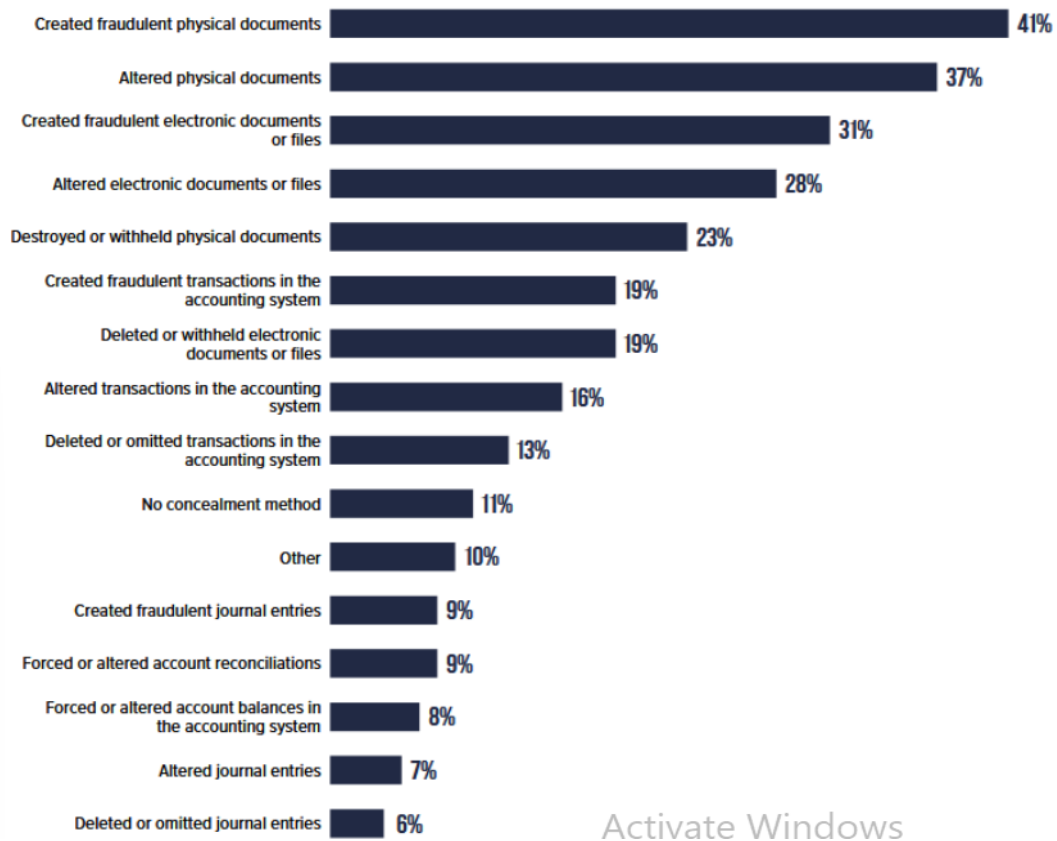


Figure 4.2. Fraud Concealment Scheme

According to the Association of Certified Fraud Examiners (ACFE, 2024) report, fraud perpetrators generally use various methods to conceal their actions so they are not detected by auditors or internal control systems. The data presented in the Report to the Nations 2024 shows that the most common form of concealment is thru document manipulation, both physical and electronic. The majority of fraud perpetrators attempt to conceal their actions thru document manipulation, both physical and electronic. A total of 41% of perpetrators created fake physical documents, and 37% altered existing ones. Additionally, 31% created fake electronic files, and 28% made changes to those digital files.

Other forms of concealment include destroying or hiding physical documents (23%), creating fictitious transactions in the accounting system (19%), and deleting or altering electronic transaction data (16–19%). This finding indicates that fraud perpetrators often exploit accounting systems and information technology to cover their financial tracks. Thus, investigative auditors need to focus on the forensic examination of digital documents and data,

as most fraud is committed thru the manipulation of records or transactions within systems. Understanding such concealment patterns is crucial for investigative audits to effectively identify, prove, and prevent fraud.

DISCUSSION

Based on various literature studies used as references, the relationship between the fraud tree and investigative auditing complements each other well. The fraud tree provides a conceptual framework for fraud, while investigative auditing serves as an operational tool to prove and uncover fraud based on the existing fraud framework (Prasetyo et al., 2023). As for (Arianto, 2021); (Teng & Hakiman, 2024) emphasize that investigative audits have unique characteristics in proving fraudulent acts, so the use of a fraud tree not only increases the effectiveness of investigative audits but also strengthens audit results.

This is also supported by the Fraud Triangle Theory (Cressey, 1953), which states that fraudulent acts tend to occur due to economic pressure, opportunity due to internal weaknesses, and rationalization of the fraudulent acts committed. By understanding the elements of the fraud tree, auditors can identify fraud patterns and determine the areas most prone to fraud. Then Agency Theory (Jensen & Meckling, 1976) explains who is likely to commit fraud, where the agent or party committing fraud tends to act in their own interest rather than in the interest of the principal or the general public, so investigative audits serve to ensure that agents act in the public interest.

The relationship between the fraud tree and investigative auditing is reflected in the research by Prasetyo et al. (2023), Arianto (2021), and Teng & Hakiman (2024), which found that using investigative auditing techniques with fraud classification can increase the effectiveness of fraud detection by up to 40%. This indicates that the more auditors understand the concept of the fraud tree, the greater their ability to detect early signs of fraud. This aligns with the research by AFCE (2024), which explains that the fraud tree is the foundation for fraud analysis, while investigative auditing is a tool for proving that fraud has occurred, thus helping auditors detect, prove, and prevent proven fraud, as supported by previous research.

CONCLUSIONS

Based on a literature analysis, it can be concluded that the fraud tree has a significant influence on improving the effectiveness of investigative audits, which can help auditors classify fraud types based on the main categories of financial statements, asset misappropriation, and corruption. Auditors can also determine risk areas and investigation priorities, and improve accuracy, efficiency, and focus in conducting investigative audits (ACFE, 2024). Therefore, understanding the application of the fraud tree is important and can strengthen auditors' competencies (Prasetyo et al., 2023); (Teng & Hakiman, 2024). Provide some conclusions and the implementation of the research results.

RECOMMENDATIONS

Based on the discussion and conclusions above, the author suggests that the prevention and detection of occupational fraud can be carried out by every

company and government agency in Indonesia. Then, it is hoped that in the future, other researchers can add other variables such as auditor competence and forensic accounting, which are able to strengthen the fraud tree relationship.

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