

Unqualified Opinions and Integrity Flaws: A Systematic Examination of Fraud Patterns and Investigative Approaches

M. Irsan Nasution, Mutia Riska Faridani

Abstract

An Unqualified Audit Opinions are widely regarded as indicators of transparency and sound financial management in the public sector. However, numerous corruption cases involving local governments that previously received unqualified opinions suggest a disconnect between audit status and actual integrity. This study conducts a Systematic Literature Review (SLR) using the PRISMA protocol to examine the relationship between unqualified audit opinions, the types of fraud committed in local government financial management, and the investigative techniques used to uncover them. A total of 52 peer-reviewed articles published between 2019 and 2024 were analyzed thematically. The findings reveal that unqualified opinions tend to reflect administrative compliance rather than substantive financial integrity. Fraud schemes such as capital expenditure mark-ups, fictitious procurement, and grant misappropriation were commonly reported in regions with unqualified audit status. Investigative techniques including forensic accounting, e-procurement monitoring, whistleblowing systems, and data analytics have proven more effective in detecting fraud than conventional audits. The study concludes that unqualified audit opinions should not be used in isolation as indicators of clean governance. Instead, an integrated audit framework, combining financial, performance, and investigative audits, is needed to enhance fraud detection and accountability in the public sector.

Keywords: *Unqualified Audit Opinion, Public Sector Fraud, Forensic Accounting, Investigative Audit, Local Government, Systematic Review.*

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Introduction

Fraud in the public sector has increasingly become a global concern due to its far-reaching implications on institutional accountability and the erosion of public trust. The Association of Certified Fraud Examiners (ACFE, 2024) estimates that organizations, including public entities, lose approximately 5% of their annual revenue to fraudulent activities. This figure underscores the magnitude of the problem and the inadequacy of traditional administrative safeguards in fully addressing it. In the context of public financial management, integrity must transcend procedural compliance, incorporating mechanisms that ensure transparency, accountability, and effective oversight throughout the budget cycle.

In Indonesia, this issue takes on a more complex dimension. While public sector reforms and audit mechanisms have been progressively institutionalized, a striking paradox remains: many regional governments that receive the highest audit rating, Unqualified opinion (Wajar Tanpa Pengecualian/ WTP), from the Audit Board of Indonesia (BPK) have subsequently been implicated in high-profile corruption cases. Indonesia Corruption Watch (ICW, 2018) and Kompas (2022) reveal that WTP status has often been exploited as a political branding instrument rather than serving as a valid indicator of financial integrity. The contradiction between official audit recognition and actual integrity performance has raised doubts regarding the true effectiveness of the Unqualified opinion in signaling good governance.

The problem becomes even more evident when supported by empirical data. Between 2004 and 2018, at least 104 regional leaders, comprising 22 governors and 82 regents or mayors, were named corruption suspects by the Corruption Eradication Commission (KPK), despite having received unqualified audit opinions from BPK (Detik, 2018; ICW, 2018; Kompas, 2022). Prominent examples include the cases of Irvan Rivano Muchtar (Cianjur), Tasdi (Purbalingga), and Rita Widyasari (Kutai Kartanegara), who were prosecuted for crimes such as bribery, fictitious procurement, and misuse of grants (RM.id, 2018; ICW, 2018). These cases illustrate the gap between audit outcomes and the detection of underlying financial irregularities.

Table 1. Discrepancy Between Unqualified Audit Opinions and the Integrity of Regional Leaders

No.	Name & Position	Year of Unqualified Award	Year of Corruption Case	Type of Case
1	Irvan Rivano Muchtar, Bupati Cianjur	2017	2018	Bribery related to Special Allocation Funds (DAK) in education
2	Tasdi, Bupati Purbalingga	–	2018	Bribery in procurement of goods and services
3	Rita Widyasari, Bupati Kutai Kartanegara	–	2018	Misuse of regional budget funds
4	Ikmal Jaya, Wali Kota Tegal	–	2014	Procurement of goods and services
5	Fuad Amin Imron, Bupati Bangkalan	–	2018	Bribery in official position auctions

Source: Compiled from ICW (2018), ICW (2022), and various online media reports including Detik.com, Kompas.com, and RM.id (2018–2022).

The table clearly illustrates that an unqualified opinion does not guarantee the absence of fraud in local financial management. Despite having undergone financial audits and receiving the highest audit rating, several regional heads have been implicated in corruption cases. This indicates that hidden fraudulent practices may still occur even after formal certification. These findings are supported by studies from Pradika and Rachmawati (2021) and Maulida & Novianti (2023), which conclude that an unqualified opinion does not necessarily

reflect a low level of fraud risk. This reinforces the argument that financial audits tend to be administrative in nature and lack the capacity to detect substantive irregularities without the application of more in-depth investigative techniques.

Academically, multiple studies confirm that conventional audit opinions are structurally limited in identifying systemic or concealed fraud. Research by Hikam et al. (2021), Mappisabbi et al. (2023), and Kassem & Higson (2016) emphasizes that Unqualified opinions focus on the formal aspects of financial reporting, such as completeness and presentation, rather than the substance of transactions. These limitations are further compounded by the insufficient use of forensic tools and investigative techniques. Although the Fraud Triangle (Wolfe, 2004) and Fraud Diamond (Wolfe & Hermanson, 2004) provide theoretical foundations to understand fraudulent behavior, few studies link these frameworks to digital or analytical detection methods such as e-procurement analysis, whistleblower systems, or forensic accounting.

This disjunction suggests a serious methodological and practical gap. Traditional financial audits tend to rely heavily on administrative documentation and rarely uncover fraud schemes such as budget mark-ups, fictitious procurement, or fabricated grant reports (Nurhajati et al., 2023; Ogbaini et al., 2024). Consequently, investigative efforts often remain reactive rather than preventive. Despite a growing interest in fraud detection within the literature, a comprehensive classification that links specific types of fraud, the presence of Unqualified audit status, and the corresponding investigative methods remains largely unexplored.

The lack of such integrative frameworks has critical implications, especially in developing countries where audit outcomes are used not only for accountability but also for political legitimacy. As emphasized by Pradika & Rachmawati (2021) and Maulida & Novianti (2023), an Unqualified opinion does not guarantee a low risk of fraud, especially when there is insufficient application of forensic or technology-based detection mechanisms. This raises fundamental questions about the reliability and predictive value of such audit opinions. Moreover, the persistence of fraud even in “cleanly audited” entities reveals the need for a paradigm shift in how audits and investigative methods interact within governance systems.

To address this research gap, the present study conducts a Systematic Literature Review (SLR) guided by the PRISMA protocol, focusing on academic publications from 2019 to 2024. The study aims to synthesize insights on the intersection between audit opinions, fraud schemes, and investigative techniques within the local government context. Specifically, it seeks to answer the following research questions: (1) *What types of fraud have been documented in local governments that received Unqualified audit opinions?*, (2) *What investigative techniques have proven effective in detecting such fraud?*, (3) *To what extent does the Unqualified opinion function as a reliable indicator of financial integrity, and what are its limitations in fraud detection?* By systematically mapping and analyzing the literature, this research aspires to provide a more nuanced understanding of the limitations of Unqualified audit opinions and to inform the development of more robust, investigative-based fraud detection frameworks in the public sector.

This study is expected to make a theoretical contribution to the advancement of literature on public sector auditing and investigative approaches to fraud detection. In practical terms, it offers relevant insights for auditors, inspectorates, and oversight bodies to strengthen the effectiveness of fraud detection mechanisms, particularly within local government environments.

Theoretical Framework and Hypotheses

2.1 Fraud Triangle dan Fraud Diamond Theory

This study employs the Fraud Triangle Theory as its primary conceptual foundation, complemented by the Fraud Diamond Theory to strengthen the analysis of factors contributing to fraud in the public sector. The Fraud Triangle, introduced by Wolfe & Hermanson (2004), posits that fraud occurs when three key elements are present: pressure, opportunity, and

rationalization. In the context of local government, pressure may stem from political demands or budget realization targets, opportunity arises from weak oversight systems, and rationalization is often shaped by an organizational culture that tolerates unethical behavior (Wolfe, 2004; Sari & Muid, 2023).

Although the Fraud Triangle has become a widely adopted framework in audit research and practice, several scholars argue that it is insufficient to explain all dimensions of fraudulent behavior, particularly in cases involving high-level bureaucratic collusion. Therefore, the Fraud Diamond Theory, developed by Wolfe and Hermanson (2004), is integrated to enhance the analytical framework. This theory introduces a fourth element: capability, which refers to the personal traits or positional power that enable an individual to actually commit fraud. A fraud perpetrator not only experiences pressure and sees opportunity but also possesses the authority, skills, or access needed to carry out fraudulent acts. This concept is particularly relevant in local government settings, where regional heads or procurement officials often have significant control over public budgets (Mappisabbi et al., 2023; Kassem & Higson, 2016).

The integration of these two theories is instrumental in understanding the various fraud schemes identified in the literature, such as fictitious procurement, inflated expenditures, and the misuse of grant funds. The Fraud Triangle helps explain the motivational drivers behind fraudulent acts, while the Fraud Diamond offers insight into how structural and personal capabilities facilitate the execution of systemic fraud. In this study, the combined theoretical framework is used to categorize findings from the literature based on the psychological, institutional, and technical dimensions of the fraud cases analyzed.

2.2 Audit Opinions and Their Relevance in the Public Sector

An audit opinion is a professional auditor's declaration regarding the fairness of a financial statement's presentation based on applicable accounting standards. In Indonesia, the Unqualified Opinion (Wajar Tanpa Pengecualian, WTP) represents the highest level of assurance issued by the Audit Board of Indonesia (BPK) when the financial statements are deemed to present information fairly in all material respects (BPK RI, 2023). This opinion indicates that the statements have been prepared in accordance with Government Accounting Standards (SAP) and that no material misstatements were detected. In the public sector, the Unqualified opinion is often equated with successful financial governance and is widely used as a key performance indicator for institutions, including in political and public evaluations.

However, several studies contend that the Unqualified opinion merely reflects administrative and formal accounting compliance and cannot guarantee an entity's freedom from fraud or corruption (Sari & Muid, 2023; Hikam et al., 2021). In other words, a "clean" audit opinion does not preclude the existence of hidden budgetary irregularities. This limitation arises because a financial statement audit is confined to assessing conformity with standards rather than detecting illegal acts or fraud directly. Sari and Muid (2023) found that some regions with Unqualified opinions exhibited persistent budget deviations in capital expenditures and the procurement of goods and services. Consequently, investigative audits or forensic examination techniques are required to uncover fraud that conventional financial audits may overlook.

2.3 Fraud in Local Government

Fraud in the public sector, particularly at the local government level, is a complex issue that directly undermines service delivery effectiveness and public trust. According to Haurissa and Dewi (2021), common forms of public-sector fraud include misuse of state assets, budget manipulation, corruption in goods and services procurement, and gratification practices involving public officials. Such frauds are often concealed within bureaucratic processes that are both intricate and protracted. Moreover, weaknesses in internal control systems and limited external oversight further increase opportunities for misconduct.

Duy & Nam (2022) report that the most prevalent fraud schemes in local governments include inflated capital expenditures, price gouging in procurement projects, and the fabrication of accountability documents for grants and social assistance funds. These schemes are frequently orchestrated by internal actors, such as department heads or treasurers, but may also involve third parties through collusion during tender or contract award processes. Data from the Corruption Eradication Commission (KPK) confirm that public procurement remains the most corruption-prone sector over the past five years, especially at district and municipal levels.

This phenomenon demonstrates that conventional financial audits, which focus on the fairness of reporting, are insufficient to detect hidden or systemic irregularities. There is thus a critical need for more in-depth investigative approaches responsive to evolving fraud modalities in the field, such as forensic auditing, red-flag detection, whistleblowing systems, and data-driven analytics for anomaly detection. Without strengthening the investigative audit function, fraud in local governments risks becoming a structural problem that persists despite consistently receiving unqualified opinions.

2.4 Investigative Techniques for Fraud Detection

As fraud schemes in the public sector grow increasingly sophisticated, a range of investigative techniques have been adopted to reinforce audit processes and detect irregularities beyond the reach of standard financial audits. Forensic accounting is one of the most widely developed approaches: it relies on evidentiary procedures to identify, analyze, and document fraud in a legally admissible manner. Nurhajati et al. (2023) demonstrate that forensic audit methods can reveal concealed transactions not captured in formal financial reports.

At the same time, whistleblowing systems have proven effective as an internal reporting mechanism that facilitates early detection of wrongdoing. Waromi et al. (2024) find that a trusted whistleblowing framework significantly increases fraud disclosures, particularly in local governments that are otherwise resistant to external scrutiny.

Technology also plays a pivotal role in data-driven fraud detection. E-procurement analysis, for example, enables the digital examination of procurement patterns to identify anomalies or indications of collusion in government contracts (Wardani et al., 2019). Similarly, data analytics and machine learning applications are being deployed to map unusual transaction patterns and detect red flags in public budgets (Kang & Thosuwanchot, 2024). Underpinning all these techniques is the professional skepticism of auditors: Maulida and Novianti (2023) emphasize that auditors who maintain a high degree of skepticism are more attuned to fraud indicators and more adept at critically assessing evidence. The synergy of technology, internal reporting, and professional judgment is therefore believed to create a more robust fraud-detection system within local government environments.

2.5 Related Research

Several systematic reviews and empirical investigations have pointed out that conventional financial audits have inherent limitations in detecting fraud, particularly when the fraudulent activity is complex, concealed, or systemically embedded. These audits are primarily designed to evaluate the material accuracy and compliance of financial statements, rather than uncovering deliberate irregularities or unethical behavior. As a result, structured fraudulent practices, such as inflated budgets, procurement fraud, or falsified accountability documentation, often go undetected. In their literature review, Lestari (2024) and Supriadi et al. (2024) emphasize the need to broaden the scope of financial audits by integrating them with performance and investigative audits, thereby enhancing the overall effectiveness of public sector financial oversight.

This assertion is corroborated by Georgiou et al. (2024), whose international study shows that countries employing cross-functional audit synergies achieve higher fraud detection rates than those relying solely on conventional financial audits. Furthermore, Maulida and

Prabowo (2023), along with Hapsari and Sari (2023), in their Systematic Literature Review (SLR) of 40 journal articles from 2013–2022 finds that over 60% of studies conclude regular audits are insufficient for fraud detection when not supplemented by investigative or forensic procedures. Kassem and Higson (2016) further reveal that, despite auditors' technical expertise, they often lack systematic training in identifying fraud red flags, allowing large-scale fraud to persist undetected for years. At the national level, Astuti & Adrison (2021) found no significant correlation between unqualified opinions and regional bribery cases, reinforcing the need for risk-based audit approaches. Collectively, these studies underscore the importance of cross-audit collaboration, integrating data analytics, forensic accounting, and structured whistleblowing systems, to bolster the effectiveness of public-sector oversight.

Research Methodology

3.1 Research Approach and Design

This study employs a Systematic Literature Review (SLR) approach guided by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol as the primary framework for the identification, selection, and analysis of relevant scholarly sources. SLR was chosen for its ability to generate a comprehensive, structured, and replicable synthesis of prior research findings, while minimizing the subjective bias often found in conventional literature reviews (Snyder, 2019; Page et al., 2021).

In this context, the SLR method is used to examine the relationship between Unqualified Audit Opinions (WTP), the occurrence of fraud in local government financial management, and the investigative techniques employed to uncover such fraud. This approach has been widely adopted in public policy and public sector accounting research due to its capacity to identify literature gaps and propose new conceptual frameworks (Hapsari & Sari, 2023; Georgiou et al., 2024).

3.2 Data Sources and Search Procedure

The data for this study were collected from five major academic databases, Scopus, Web of Science, DOAJ, SINTA, and Google Scholar, selected for their multidisciplinary coverage and reputability in providing peer-reviewed scholarly literature. A systematic search was conducted between April and May 2025 using keyword combinations in both Indonesian and English, such as "WTP AND fraud," "investigative audit," "forensic accounting," "fraud detection in local government," and "public sector accountability." These keywords were designed to capture the diversity of terminology used in the literature, in line with the keyword strategy recommended by Page et al. (2021) in PRISMA 2020.

The initial search yielded 134 articles. Each article was screened based on its title and abstract to assess its preliminary relevance. Non-peer-reviewed sources and articles lacking direct alignment with the research focus were excluded. A set of inclusion and exclusion criteria was then applied to ensure the credibility and relevance of the selected studies. The inclusion criteria were: (1) publications from 2019 to 2024; (2) peer-reviewed journal articles, both nationally accredited (minimum SINTA 3) and internationally indexed; (3) full-text availability in English or Indonesian; and (4) main topics addressing audit opinions, public sector fraud, and investigative techniques such as forensic accounting, whistleblowing systems, or technology-based audits. Articles that were editorial in nature, lacked peer review, or were unrelated to the study's core themes were excluded (Supriadi et al., 2024; Nurhajati et al., 2023).

3.3 Inclusion and Exclusion Criteria

This study applied clear inclusion criteria to ensure that only credible and relevant articles were analyzed. Eligible articles included peer-reviewed scholarly journal articles published between 2019 and 2024, written in either Indonesian or English, available in full-text format, and published in nationally indexed journals (SINTA 1–4) or internationally reputable

journals. Furthermore, the articles had to explicitly address audit opinions (specifically WTP), public sector fraud, or investigative auditing techniques.

Exclusion criteria were applied to remove opinion pieces, editorials, unverifiable conference proceedings, or institutional reports lacking scientific validation. Articles that focused solely on fraud in the private sector or did not address investigative techniques directly were also excluded from the analysis. These criteria align with the principles of systematic literature review, as emphasized by Snyder (2019), particularly the importance of transparency and consistency in literature selection.

3.4 Review Procedure and Data Synthesis

This study followed the PRISMA framework (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), as developed by Moher et al. (2009) and updated by Page et al. (2021), to ensure transparency, rigor, and replicability in the literature selection process. The review was carried out in four structured stages. In the first stage, identification, a systematic search was conducted across five major academic databases, Scopus, Web of Science, DOAJ, SINTA, and Google Scholar, using keyword combinations such as “UNQUALIFIED AND fraud,” “investigative audit,” “fraud detection in local government,” “forensic accounting,” and “public sector corruption.” Boolean search strategies were adjusted to fit each platform, resulting in a total of 134 initial documents.

In the second stage, screening, duplicate records were removed, and the remaining articles were assessed based on their titles and abstracts to determine initial relevance. This process reduced the selection to 81 articles. The third stage involved a full eligibility assessment, in which the articles were thoroughly reviewed to evaluate their alignment with the inclusion criteria, focusing on relevance to WTP audit opinions, fraud in public sector financial management, and the investigative techniques applied. Methodological quality and theoretical contributions were also considered. As a result, 52 articles were deemed suitable for in-depth analysis.

The final stage, inclusion and synthesis, involved categorizing the selected articles thematically to identify prevailing issues and research gaps. Using a thematic analysis approach supported by NVivo software, the articles were grouped according to recurring themes such as types of fraud (including capital expenditure mark-ups, bribery, and fictitious procurement), the effectiveness and limitations of Unqualified audit opinions, and the application of investigative techniques such as forensic accounting, whistleblowing mechanisms, e-procurement monitoring, and data analytics. To complement the thematic analysis, a bibliometric analysis using VOSviewer version 1.6.19 was conducted to visualize keyword co-occurrence, author collaboration patterns, and emerging research trends. Together, these methods provided a comprehensive mapping of the scholarly landscape and helped identify both empirical gaps and conceptual developments in the study of fraud detection within local public sector governance.

3.5 Data Analysis Techniques

This study employed two complementary analytical techniques, thematic analysis and bibliometric analysis, to deepen the synthesis of findings obtained through the Systematic Literature Review (SLR) process. Thematic analysis was conducted using NVivo 14 software to identify conceptual patterns across the selected articles. Through this method, the literature was categorized into several major themes, including types of fraud (such as capital expenditure inflation, fictitious procurement, and misappropriation of grants), investigative techniques (such as forensic analytics, whistleblowing systems, and data mining), and the role of Unqualified Audit Opinions (WTP) in fraud detection. NVivo facilitated accurate and consistent coding of themes and the tracking of narrative patterns throughout the literature (Braun & Clarke, 2006).

To complement the thematic synthesis, a bibliometric analysis was carried out using VOSviewer version 1.6.19. This tool enabled the visualization of keyword frequency, co-occurrence networks, and author collaboration patterns across the 52 reviewed articles. Key terms such as “fraud,” “audit opinion,” “forensic accounting,” and “public sector” were mapped to reveal conceptual linkages. The bibliometric mapping highlighted strong associations between forensic accounting, e-procurement monitoring, and fraud detection, findings that are consistent with the observations made by Judijanto and Defitri (2024). Moreover, the visualization of keyword clusters and research trends over the past five years (Mappisabbi et al., 2023) provided valuable insights into thematic convergence and helped identify critical gaps in the literature.

The integration of these two methods allowed for a richer, more structured interpretation of the data while also bridging empirical evidence from various contexts, including Indonesia, where issues of accountability in local governance remain acute. Previous studies that adopted similar SLR-PRISMA approaches have proven effective in formulating more adaptive audit models by integrating financial, performance, and investigative auditing functions (Purwohedi et al., 2022; Georgiou et al., 2024; Supriadi et al., 2024). Therefore, this study not only aims to consolidate and map prior research but also contributes by proposing a theoretical-practical framework that enhances the role of public sector auditing as a more responsive and effective tool for fraud detection.

3.6 Data Analysis And Discussion

This chapter presents the findings of a systematic review conducted using the Systematic Literature Review (SLR) approach guided by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) methodology. The review aims to identify the various fraud schemes that persist in local governments receiving Unqualified audit opinions, examine the investigative techniques employed to detect them, and evaluate the effectiveness of the Unqualified opinion as an indicator of fraud-free financial management. The article selection process followed a rigorous four-stage protocol: identification, screening, eligibility assessment, and inclusion, with primary sources drawn from Scopus, Web of Science, DOAJ, Google Scholar, and SINTA. The review encompassed 52 relevant articles published between 2019 and 2024. Data analysis was conducted using both thematic and bibliometric approaches, enabling the development of a comprehensive intellectual map and identification of prevailing research trends in the field (Moher et al., 2009; Snyder, 2019).

PRISMA Flow Diagram

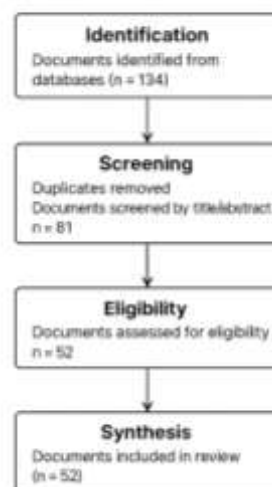


Figure 1. PRISMA Flow Diagram

Source: Processed Data, 2025

The results of this study indicate that although the Unqualified opinion serves as a symbol of administrative compliance in financial reporting, it does not guarantee the absence of fraudulent practices, including corruption, budget manipulation, or fictitious procurement (Hikam et al., 2021; Sari & Muid, 2023). This is supported by empirical evidence showing that several local governments with Unqualified audit opinions were later involved in corruption scandals or problematic budget management (Pradika & Rachmawati, 2021; Kompas, 2022). Accordingly, the main focus of this chapter is to present the key findings from the reviewed literature through thematic synthesis, graphical visualization of publication trends, classification of fraud schemes, mapping of investigative techniques, and term co-occurrence mapping using VOSviewer. These findings are expected to address the research questions and provide both theoretical and practical contributions to strengthening audit functions and fraud detection in the public sector.

3.7 Distribution of Reviewed Articles

A total of 52 articles published between 2019 and 2024 were selected through the stages of identification, screening, eligibility, and inclusion. The distribution of publications by year indicates a growing research interest in Unqualified opinions and fraud following 2020. The following is a graph of publication trends from 2019 to 2024, showing a steady increase in the number of studies related to Unqualified opinions and fraud in the public sector.

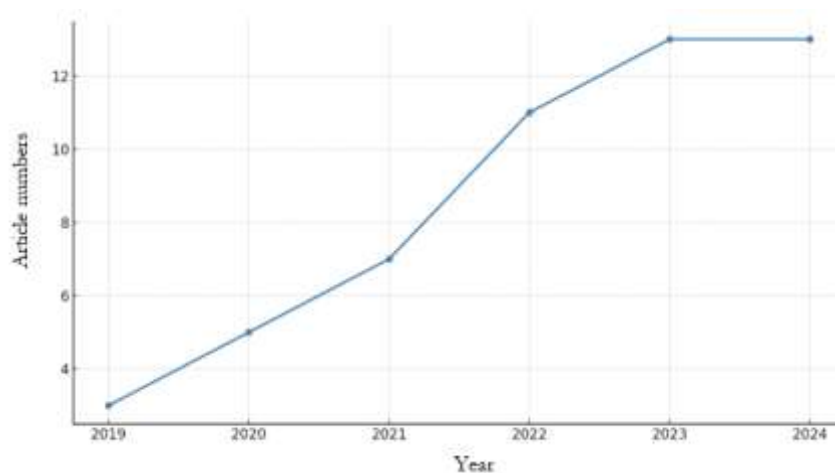


Figure 2. Publication Trend of Reviewed Articles (2019–2024)

Source: Processed Data, 2025

3.8 Classification of Fraud Schemes

The literature review revealed various types of fraud that commonly occur in local governments, even after receiving an Unqualified audit opinion. The following table presents a classification of the fraud schemes identified:

Table 2. Classification of Fraud Schemes and Supporting Studies

No	Fraud Scheme	Brief Description	Source(s)
1	Capital Expenditure Mark-Up	Artificial inflation of physical project budgets	Duy & Nam (2022); Maulida & Novianti (2023)
2	Fictitious Procurement	Goods/services not matching specifications or nonexistent	Nurhajati & Rachman (2023); Wardani & Nugroho (2019)
3	Grant and Social Aid Manipulation	Funds redirected to unauthorized parties	Haurissa & Dewi (2021); ICW (2022)
4	Gratuities and Bribery	Undue rewards to facilitate project approval	Hikam et al. (2021); ICW (2022)

Source: Compiled from various studies, 2019–2024

3.9 Investigative Techniques Utilized

Most research indicates that standard audits alone are inadequate for effectively uncovering fraud. Various investigative approaches have been recognized as more effective substitutes, as outlined in the following table.

Table 3. Investigative Techniques and Their Relevance

Investigative Technique	Common Application	Key Strengths	Source(s)
Forensic Accounting	Procurement and capital spending audits	Detailed, evidence-based analysis	Nurhajati et al. (2023)
E-Procurement Analysis	Goods and services procurement	Detects pricing anomalies and conflicts of interest	Wardani et al. (2019)
Whistleblowing System	Various types of violations	Rapid, based on direct insider reporting	Waromi et al. (2024)
Data Analytics	Transaction anomaly detection	Large-scale, automated pattern recognition	Kang & Thosuwanhot (2024)

Source: Compiled from various studies, 2019–2024

3.10 The Relationship between Unqualified Audit Opinions and Fraud

From the reviewed studies, the majority conclude that Unqualified Audit Opinions (WTP) tend to represent compliance with administrative and governmental accounting standards rather than an assurance of freedom from corruption or substantive fraud. An unqualified opinion is issued when financial statements are deemed fairly presented in all material respects, in accordance with Government Accounting Standards (SAP), and when there are no significant scope limitations for the auditor. However, many studies reveal that receiving an unqualified opinion does not guarantee that local government financial management is genuinely accountable and free from corruption (Pradika & Rachmawati, 2021; Sari & Muid, 2023).

The paradox between receiving an unqualified opinion and the occurrence of corruption at the local level has been widely reported and examined academically. For example, Kompas (2022) reported several cases where regional heads were implicated in bribery, fictitious procurement, and misappropriation of grant funds, despite their local governments receiving unqualified opinions from the Audit Board of Indonesia (BPK). This highlights the procedural nature of conventional financial audits, which are not explicitly designed to detect hidden fraud. A study by Hikam et al (2021) also found that unqualified opinions are not significantly

correlated with lower fraud potential, especially in regions with low transparency and weak internal oversight.

Furthermore, Mappisabbi, Batti, and Natsir (2023) argue that fraud can still thrive in environments with top-tier audit opinions if not accompanied by strong internal audit functions and the application of adequate investigative techniques. In many cases, deeper risk-based audits or forensic accounting methods are rarely utilized in the issuance of unqualified opinions, as the focus tends to be on conformity to accounting principles rather than the substance of transactions. This aligns with the findings of Kassem and Higson (2016), who state that traditional external audits are limited in their ability to detect complex fraud and thus require forensic investigative support.

Therefore, the relationship between unqualified opinions and fraud is complex and non-causal. An unqualified opinion cannot be used as a standalone indicator of effective public financial management. In this context, a triangulated audit approach, combining financial, performance, and investigative audits, is essential to provide a more comprehensive picture of financial integrity at the local government level (Supriadi et al, 2024). This review underscores the urgency for local governments not merely to pursue unqualified opinions as a formality but also to build oversight and reporting systems capable of substantively detecting and preventing fraud.

3.11 Keyword Mapping and Term Relationships

The bibliometric mapping results generated using VOSviewer software, from 52 relevant articles published between 2019 and 2024, identified several dominant keywords in the academic literature. Terms such as "*fraud*," "*audit opinion*," "*forensic accounting*," and "*public sector*" appeared with high frequency and centrality in the co-occurrence network visualization. This confirms that current scholarship is strongly focused on issues of public financial integrity and the audit function's capacity to identify and prevent irregularities.

Further cluster analysis divided the keyword map into several thematic clusters. The first cluster shows a close relationship between *fraud*, *audit opinion*, and *unqualified opinion*, reflecting the ongoing discourse about the paradox between positive audit reports and real-world corruption (Judijanto & Defitri, 2024). The second cluster links *forensic accounting*, *investigative audit*, and *fraud detection*, representing the methodological strengthening of audit practices through forensic and technological approaches (Nurhajati et al., 2023). Meanwhile, the third cluster connects *e-procurement*, *data analytics*, and *whistleblowing systems*, highlighting the integration of information systems in digital fraud detection efforts (Kang & Thosuwanchot, 2024; Waromi et al., 2024).

These term relationships also illustrate a transition from traditional audit methods to more data- and technology-driven approaches. The literature increasingly emphasizes the importance of leveraging big data, artificial intelligence (AI), and robust internal reporting mechanisms to enhance fraud detection effectiveness, especially within the complex and morally hazardous landscape of the public sector (Georgiou et al., 2024; Kassem & Higson, 2016). In the Indonesian context, this is particularly critical given the strong institutional pressure on local governments to achieve unqualified opinions without necessarily strengthening substantive controls over fraudulent behavior.

3.12 Empirical Study Synthesis: Fraud Modes, Investigative Techniques, and the Indonesian Context

This subsection presents a summary of empirical research findings that explicitly examine the relationship between audit opinions (particularly unqualified ones), the presence of fraud in the public sector, and the effectiveness of investigative techniques. The following table provides a comparative overview of studies based on research focus, geographic context, methodologies used, and key findings.

Table 4. Summary of Empirical Studies on Unqualified Opinion, Fraud, and Investigative Techniques

No	Reference (Year)	Study Focus & Context	Method	Key Findings
1	Wardani et al. (2019) – Yogyakarta	E-procurement, internal control systems, and whistleblowing in procurement	PLS-SEM (procurement service unit respondents)	All three variables positively influence fraud prevention
2	Haurissa & Dewi (2021) – National meta-analysis	Fraud factors (Fraud Triangle, etc.)	Meta-analysis (35 studies, 2012–2019)	Pressure, opportunity, and rationalization are significant; 17 variables robust
3	Hikam et al. (2021) – Indonesia [scholarhub.ui.ac.id]	Relationship between unqualified opinion & fraud in West Java local governments	Logistic regression (28 districts/cities, 2012–2017)	unqualified significantly reduces fraud risk; follow-up audits are crucial
4	Duy & Nam (2022)	Investigates how audit quality and public governance affect local government budget transparency in Vietnam.	Quantitative – Panel data regression (2015–2019), 112 Vietnamese local governments	Audit quality and good governance significantly increase budget transparency. Higher external audit activity improves public trust.
5	Maulida & Novianti (2023)	Auditor skepticism and fraud detection in Indonesia	Survey, regression (n=85 auditors)	Skepticism and experience improve detection; independence and time pressure do not.
6	Supriadi et al. (2024) – International [jicr.com]	Role of internal audit in the public sector	Qualitative descriptive	Strong internal control and integrity culture are vital in prevention
7	MDPI (2024) – Indonesia	Forensic accounting + GAS + whistleblowing systems	Quantitative, external auditors	High effectiveness when combining forensic methods, technology, and whistleblowing

Source: Compiled from various studies, 201–2024

Findings from these studies emphasize that traditional audit approaches are insufficient to uncover substantive fraud. Successful fraud detection is strongly influenced by auditor-related factors (such as professionalism and independence), active reporting systems (whistleblowing), strengthened internal controls, and the integration of forensic audit techniques and digital technology. These results support the main conclusion of the literature review that unqualified audit opinions are procedural in nature and must be complemented with more comprehensive and real-time investigative oversight mechanisms.



Figure 3. Infographic Synthesis of Empirical Studies on the Relationship between Unqualified Opinions, Fraud Risk, and Investigative Factors
(Source: Compiled from various studies, 2019–2024)

Discussion

This study reveals a misalignment between the Unqualified Audit Opinion and the presence of fraud in regional financial management. Based on a systematic review of 52 articles, the findings suggest that the unqualified opinion primarily reflects administrative compliance rather than substantive integrity and thus does not guarantee the absence of fraudulent practices in a given region. The review also indicates that investigative techniques such as forensic accounting, e-procurement analysis, whistleblowing systems, and data analytics are beginning to appear in recent studies as tools to uncover various fraud schemes in the public sector, although their implementation remains limited and unsystematic.

In general, the findings address the research question by identifying various types of fraud, including capital expenditure mark-ups, fictitious procurement, falsified grant accountability, and political bribery. Investigative methods such as forensic audits and enhanced digital monitoring systems have been proven effective in uncovering such fraud cases in both national and international studies. However, the unqualified opinion, which is expected to serve as an indicator of sound governance, has not been capable of detecting concealed or systemic fraud, particularly when involving high-level bureaucratic actors (Sari & Muid, 2023; Ginting et al., 2025).

Furthermore, while statistical data indicate a correlation between audit opinions and better financial management, the relationship is not universal (Hikam et al., 2021; Pradika & Rachmawati, 2021). The unqualified opinion tends to focus on the formal presentation of financial reports and administrative compliance, without providing deeper insight into the integrity of budget execution. This is reinforced by Kassem and Higson's (2016) findings that external audits often fall short in uncovering fraud designed to appear legitimate within formal reporting frameworks.

One key element that emerged from the discussion is the role of internal audit factors such as professionalism, professional skepticism, and auditor independence. A study by Maulida and Novianti (2023) found that auditors with higher levels of skepticism were more

capable of detecting fraud indications in documents that appeared administratively compliant. Professionalism and independence were also identified as critical in determining whether auditors can remain objective under pressure from management or local government leaders. In the context of local governance, the integrity and investigative capacity of internal audit teams (APIP) are fundamental components of the internal control infrastructure.

From the perspective of investigative techniques, forensic accounting emerged as the dominant method identified in the reviewed literature, particularly for detecting complex, transactional fraud (Ihfan, 2023; Mappisabbi et al., 2023). E-procurement monitoring was key in uncovering manipulation in the procurement of goods and services, especially when digital reporting systems lacked transparent audit trails. Whistleblowing systems also contributed significantly, although their effectiveness depends on the protection of whistleblowers and the prevailing organizational culture (Waromi et al., 2024). Meanwhile, digital analytics is increasingly used to detect financial transaction anomalies in real time, although its implementation in Indonesia's public sector remains partial (Kang & Thosuwanchot, 2024).

These findings are consistent with earlier studies by Hikam et al. (2021), Kassem and Higson (2016), and Georgiou et al. (2024), which assert that standard audit opinions often provide only a surface-level assessment and are more concerned with compliance in report formatting than with probing substance and intent of misreporting. A bibliometric review by Judijanto and Defitri (2024) also highlights the growing interest in investigative and forensic audits, though it notes that theoretical models such as the Fraud Triangle and Fraud Diamond have yet to be fully integrated with technological innovations in auditing.

The implications of these findings are substantial both theoretically and practically. Theoretically, this study proposes an integration of the Fraud Triangle theory (Wolfe, 2004) with digital forensic techniques and data analytics to develop a hybrid audit framework that is more responsive to public sector fraud. Practically, it calls for oversight institutions such as the Supreme Audit Agency (BPK), Government Internal Supervisory Apparatus (APIP), and Corruption Eradication Commission (KPK) to go beyond merely pursuing the unqualified opinion and instead modernize their audit methods by adopting risk-based, technology-driven, and complaint-based approaches.

However, this study also has several limitations. First, the systematic review is limited to literature published between 2019 and 2024, which raises the risk of publication bias. Second, the study does not incorporate field data or interviews with auditors and oversight practitioners and thus cannot fully depict real-world conditions. Third, classifications of fraud types and investigative techniques across the reviewed studies are not entirely uniform and sometimes depend on individual researchers' terminology.

For future research, a mixed-methods approach is recommended, combining literature reviews with field data, such as case studies of regions that received unqualified opinions but whose leaders were later implicated in corruption. Further studies could also focus on developing predictive models using machine learning to identify red flags in regional financial reporting. Additionally, there is a need for more comprehensive testing of the effectiveness of integrating financial, performance, and investigative audits within the public governance context in Indonesia.

Conclusion, Implication, Suggestion, and Limitation

This study reinforces the finding that the Unqualified Audit Opinion issued by the Audit Board of Indonesia (BPK) does not always reflect a region's financial condition as being truly free from fraud. A systematic review of 52 national and international articles shows that fraud still occurs in many regions that have received unqualified opinions, with various schemes such as procurement inflation, capital expenditure mark-ups, and misuse of grants. In this context, conventional financial audits have proven to be limited in detecting hidden or structured fraud

and need to be complemented by investigative techniques such as forensic accounting, whistleblowing systems, e-procurement analysis, and data analytics.

Overall, the findings of this study emphasize that the unqualified audit opinion cannot stand alone as an indicator of public financial management integrity. The unqualified opinion must be combined with a strong internal control system and the application of investigative techniques based on technology and risk in order to function effectively in detecting fraud. A multidisciplinary integration of administrative auditing, behavioral approaches, and digital auditing is a strategic necessity for the financial oversight system in Indonesia.

Theoretical Implications

This study makes an important contribution to the development of public sector auditing literature by integrating the Fraud Triangle framework with the use of modern audit technology. The findings broaden the discourse that fraud detection cannot rely solely on administrative compliance indicators, but must also consider psychological, institutional, and information system sophistication aspects. Within this framework, a risk-based audit model should be designed more contextually, considering the dynamics of fraud schemes in the field and tailored to the institutional structure of local governments.

Practical Implications

From a policy and oversight practice perspective, this study recommends that BPK, Regional Inspectorates, and APIP reformulate the use of the unqualified opinion. Evaluation and strengthening of audit mechanisms should focus on implementing forensic audits, real-time digital financial data analysis, and enhancing reporting systems such as whistleblowing programs that are accessible to the broader public. Auditor capacity building should also prioritize the development of competencies in professional skepticism, technology-based auditing, and the investigation of electronic transactions. Universities and training institutions are also expected to adapt public audit curricula by incorporating materials on digital forensic accounting and red-flag analytics.

Limitations and Suggestions for Future Research

Like most studies based on a Systematic Literature Review (SLR), this study is limited by the availability and accessibility of scholarly publications. Not all regional fraud cases are published in reputable journals, so some important contexts may have been overlooked. In addition, this research approach does not include primary empirical data such as interviews with auditors, analysis of actual financial reports, or observation of local oversight systems. Therefore, future research is recommended to adopt a mixed-methods approach that combines literature studies with field research, such as case studies in regions that received unqualified opinions but were later found legally problematic. Quantitative cross-province studies would also be relevant to measure the relationship between audit opinions, internal controls, and fraud indicators using actual audit data and legal reports from the Corruption Eradication Commission (KPK) or prosecutors' offices. Additionally, future research agendas could develop predictive fraud detection models based on machine learning by leveraging government financial transaction datasets, procurement reports, and public complaints.

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Conceptualization: M.I.N. and M.R.F; Methodology: M.I.N.; Validation: M.I.N., M.R.F.; Formal Analysis: M.I.N.; Investigation: M.I.N.; Resources: M.I.N.; Data Curation: M.I.N.; Writing, Original Draft: M.I.N.; Writing, Review & Editing: M.R.F; Visualization: M.I.N.; Supervision: M.I.N.; Project Administration: M.I.N.; Funding Acquisition: M.I.N., M.R.F. All authors have read and agreed to the published version of the manuscript.

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Conflicts of Interest:

The authors declare no conflict of interest regarding this research.

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