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The Mediating Role of Forensic Accounting in the Relationship Between Audit Opinion and Financial Statement Fraud Mitigation

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Article

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Abstract

Purpose – This study examines the role of forensic accounting in explaining the relationship between audit opinion and financial statement fraud in Malaysia. Specifically, it investigates whether forensic accounting acts as a mediating mechanism through which audit opinion influences the likelihood of financial statement fraud.

Design/methodology/approach – This study adopts a quantitative research design using panel data regression analysis. The sample consists of 761 firm-year observations from 162 companies listed on the Bursa Malaysia Stock Exchange over the period 2016–2020. Fixed effects regression models are employed to control for unobserved firm heterogeneity and time effects. In addition, mediation analysis and endogeneity tests using a two-stage least squares (2SLS) approach are conducted to ensure the robustness of the results.

Findings – The empirical results indicate a significant relationship between audit opinion and financial statement fraud. Furthermore, forensic accounting is found to play a partial mediating role in this relationship, suggesting that audit opinion affects financial statement fraud both directly and indirectly through forensic accounting practices.

Originality/value – To the best of the authors' knowledge, this study is among the first to empirically examine the mediating role of forensic accounting in the relationship between audit opinion and financial statement fraud in an emerging market context. The findings contribute to the auditing and fraud literature by highlighting the importance of integrating forensic accounting mechanisms to enhance the effectiveness of audit opinions in mitigating financial misreporting.

Research limits / Implications- The findings have been limited by the use of proxy indicators for financial statement fraud and forensic accounting, as well as the focus on only one emerging country. Future studies can use cross-country and longitudinal data to enhance the generalisability of findings and make stronger causal inferences.

1. Introduction

In recent years, financial fraud and unethical accounting practices have increased significantly across global markets (Nobanee et al., 2023). As a result, firms are increasingly exposed to the risks of fraudulent reporting and financial misrepresentation (Kaur et al., 2022). This growing concern has contributed to the emergence and development of forensic accounting as a specialized field aimed at detecting, preventing, and investigating financial misconduct (Okoye & Gbegi, 2013). The global business environment is currently facing substantial economic threats arising from financial fraud, requiring stronger collaboration between traditional auditors and forensic accountants (Abdullahi & Mansor, 2018; Marquart & Thompson, 2024).

Financial statement fraud, in particular, is a major concern for investors, auditors, and regulatory authorities due to its widespread economic consequences (Craja et al., 2020). It not only affects individual investors but also undermines the stability and efficiency of global financial markets (Zhou & Kapoor, 2011). Therefore, fraud detection is essential to protect stakeholders from financial losses, reputational damage, and legal consequences associated with deceptive financial reporting (Singleton et al., 2010). In order to identify and stop fraudulent activity, these scandals highlight the need for stronger investigative tools and more efficient auditing procedures (Popoola et al., 2016). Due to its extensive economic ramifications, financial statement fraud in particular is a significant worry for investors, auditors, and regulatory bodies (Craja et al., 2020). In addition to having an impact on individual investors, it also compromises the efficiency and stability of international financial markets (Zhou & Kapoor, 2011). Therefore, fraud detection is crucial to shielding stakeholders from monetary losses, harm to their reputation, and legal repercussions related to false financial reporting (Singleton et al., 2010).

This study focuses on financial statement fraud, which includes intentional misrepresentation of financial figures, omission of material information, and manipulation by top management. Unlike other fraud types, financial statement fraud distorts financial reporting accuracy but does not always directly affect operational performance. Financial statement fraud is one of three major categories of occupational fraud, along with asset misappropriation and corruption. Although asset misappropriation is the most common form of occupational fraud, financial statement fraud is usually the most serious because of its wider economic impact (Alkhalaileh, 2024). Along with asset misappropriation and corruption, it is one of the three main types of occupational fraud. Financial statement fraud is usually the most serious because of its wider economic impact, even if asset misappropriation is the most prevalent type of occupational fraud. Financial statement fraud, which includes deliberate falsification of financial data, omission of important information, and manipulation by upper management, is the specific subject of this study. In contrast to other forms of fraud, financial statement fraud impairs the accuracy of financial reporting but does not always have a direct impact on operational performance (Alkhalaileh, 2024).

The research is important as it establishes a cause-and-effect relationship between audit results and forensic accounting, mainly when talking about reducing financial statement fraud. Audit opinions, from a cause-and-effect perspective, act as external signals of the quality and trustworthiness of financial reporting. Agency theory argues that these monitoring devices reduce the information gap between managers and other stakeholders and increase the pressure on firms to improve the quality of their reports (Jensen & Meckling, 1976; Watts & Zimmerman, 1983). Because of audit opinions that reveal weaknesses or high risk of misstatement, companies tend to enhance their internal controls and deploy more advanced detective methods. Forensic accounting employs specialized methods like identifying irregularities, investigating suspicious transactions, and collecting evidence of fraudulent financial reporting. It is That means a causative mechanism in this process. Besides, these forensic measures deter managerial opportunism and raise the likelihood of fraud detection (Rezaee, 2005; Okoye & Gbegi, 2013). So, the use of forensic accounting diminishes the occurrence and impact of financial statement

fraud by transforming audit-related signals into effective fraud intervention results (Crumbley et al. 2017; Enofe et al. 2015).

As these two constructs capture different sides of the financial reporting process, it is not always straightforward to see how audit opinion and the reduction of financial statement fraud are connected. On one hand, financial statement fraud mitigation is about the steps and tools that are geared at preventing, detecting, and reducing financial reporting fraud. Then again, audit opinion is the auditor's unbiased judgment as to whether the financial statements of a business are a true and fair view following the relevant accounting standards. According to agency theory, issuing an audit opinion that attests to the validity and transparency of financial reports contributes to a decrease in the information asymmetry between managers and stakeholders (Jensen & Meckling, 1976; Watts & Zimmerman, 1983). And, a thorough audit can restrict manager opportunistic behaviour and increase the chance of fraud detection, which are two factors that contribute to the reduction of fraud (Fargher et al. 2008; Lennox et al. 2014). But, there may be no direct association between the issuance of audit opinions and the reduction of fraud. Through the use of forensic accounting, which includes fraud investigations, identification of weak points in internal controls, and overall support for the detection and prevention of financial statement fraud, forensic accounting may be an essential intermediate tool (Crumbley et al. 2017; Okoye & Gbegi, 2013).

Financial statement fraud mitigation is still difficult because of the increasing sophistication of fraudulent practices; fraudsters frequently use sophisticated strategies like structured transactions, earnings management, and subjective accounting estimates, which makes detection more difficult (Zhao et al., 2013); traditional audit approaches, which mainly rely on sampling and manual verification, may not be adequate in identifying hidden fraud schemes like collusion, off-balance-sheet transactions, and document manipulation (Hajek & Henriques, 2017); regulatory restrictions, resource limitations, and auditor reliance on historical compliance records. To make detection more challenging, fraudsters frequently use sophisticated strategies such structured transactions, earnings management, and subjective accounting estimations (Zhao et al., 2013). Furthermore, it may be difficult to identify concealed fraud schemes including collusion, off-balance-sheet transactions, and document manipulation using conventional audit techniques that mainly rely on sampling and human verification (Hajek & Henriques, 2017). Fraud detection is made more challenging by resource limitations, regulatory restrictions, and auditor dependence on past compliance records (Kleinman et al., 2020). Financial fraud detection is still difficult despite advances in accounting technologies because of the growing complexity and adaptability of fraudulent schemes (Craja et al., 2020). As a result, the integration of forensic accounting techniques is crucial for enhancing audit quality and improving fraud detection mechanisms. It has been suggested that integrating forensic accounting into auditing processes reduce the expectation gap between auditors and financial statement users (Odelabu et al., 2016). Due to the growing complexity and flexibility of fraudulent schemes, financial fraud detection is still difficult despite advances in accounting technologies (Craja et al., 2020). Forensic accounting methods must therefore be integrated in order to improve fraud detection systems and audit quality.

Audit opinion plays a central role in financial reporting quality as it represents the independent auditor's evaluation of a firm's financial statements (Arens et al., 2017). However, conventional auditing alone may not be sufficient to detect complex fraudulent activities, particularly when management override and collusion are present (Alzoubi & Ozili, 2022). In contrast, forensic accounting provides specialized investigative capabilities that enhance fraud detection and improve audit effectiveness. Forensic accountants are trained professionals with expertise in fraud investigation, legal reporting, evidence gathering, and courtroom procedures, making them essential in complex fraud cases (Tommie Singleton & Singleton, 2010).

Financial reporting quality and the effectiveness of audits have attracted a lot of focus in Malaysia due to continuous concerns about earnings management and the making up of financial statements in corporates (Khan & Hapiz, 2022; Ismail Khan et al., 2023). Although Malaysia has a very robust regulatory and auditing setup, previous studies show that financial statement frauds can still be present in companies that have been given clean audit opinions. So, audit results by themselves may not be enough to completely eliminate the risks of financial reporting. This situation is a clear evidence that audit views by themselves are not an effective governance tool. So, there is a greater need for auditing teams to be re-skilled in areas like forensic accounting that can help with fraud detection and in turn support the control systems (Moyes et al., 2007).. In fact, forensic accounting is nowadays regarded as an important instrument for uncovering and preventing financial statement fraud, This way, complementing auditing. Because of this, examining Malaysia would provide relevant insights into the ways in which audit views and forensic accounting can together play a role in minimizing Falsified Financial Reporting (Nejad et al., 2024)..

In order to detect and prevent fraudulent activities, forensic accounting integrates accounting, auditing, investigative, and technological skills (Sarkar & Shukla, 2023). It necessitates strong analytical skills, critical thinking, and technical expertise in financial analysis, legal procedures, and information systems (Davis et al., 2010; Kleinman & Anandarajan, 2011). Additionally, forensic accountants are crucial in gathering and evaluating financial evidence, spotting irregularities, and offering expert testimony in court (Jennings, 2022; Alzoubi, 2023). Strong analytical skills, critical thinking, and technical knowledge of information systems, legal processes, and financial analysis are necessary (Davis et al., 2010; Kleinman & Anandarajan, 2011). Furthermore, forensic accountants are crucial in gathering and evaluating financial data, spotting anomalies, and offering expert testimony in court (Jennings, 2022; Alzoubi, 2023).

Forensic accounting offers a set of specialized investigative techniques that can Much enhance the identification and prevention of fraudulent financial reporting. That means, it can work as an intermediary in the relationship between audit opinion and the reduction of financial statement fraud. Watts and Zimmerman (1983) and Fargher et al. (2008) have indicated that audit opinions are very important signals of the trustworthiness of financial statements. Also, they can motivate enterprises to upgrade their control mechanisms if issues of reporting malpractices are detected. In such contexts, forensic accounting methods may assist in examining suspicious transactions, identifying fraudulent

indicators, and assessing weaknesses in internal controls (Crumbley et al. 2017; Okoye & Gbegi, 2013). Forensic accounting not only aids in fraud detection but also plays a role in the prevention of fraud, thereby reducing the occurrence of financial statement fraud (Rezaee, 2005; Enofe et al. 2015). That's why, forensic accounting can act as a link that converts audit-related cues into more effective fraud prevention outcomes.

2. Literature Review and Hypotheses Development

2.1 Audit Opinion and Mitigation of Financial Statement Fraud

The literature emphasizes the important role of audit opinions in mitigating financial statement fraud by enhancing transparency, credibility, and accountability in financial reporting. Audit opinions, particularly modified opinions such as qualified, adverse, and disclaimer opinions, serve as important signals of potential misstatements or irregularities in financial statements. These signals increase scrutiny from stakeholders and regulatory bodies, thereby improving monitoring and reducing the likelihood of financial misreporting (Lennox et al., 2014). By exerting their monitoring and deterrent effects, audit opinions act as a tool for fraud reduction. At first, managers could be discouraged from resorting to deceptive accounting tricks by the probability that major misstatements, which auditors will probably be able to uncover, will lead to a raise in their perceived risk of getting caught. On top of that, a company's image, the trust of its investors, the cost of its financing, and the degree of regulatory inspection to which it is exposed may all suffer due to changed audit opinions, e.g. qualified adverse, or disclaimer ones. As financial misreporting leads to serious economic and reputational damages, managers will Sure be inclined to create proper and reliable financial reports. Agency theory indicates that external control mechanisms, such as auditing, may sanction managerial behaviours and reduce informational asymmetry between managers and stakeholders (Jensen & Meckling, 1976; Watts & Zimmerman, 1983). In fact, audit views constitute a vital governance mechanism not only in limiting the opportunities for fraud but also in promoting financial reporting integrity through the enhancement of accountability and the reduction of managerial discretion over financial reporting. Because of this, effective auditing and trustworthy audit views are expected to are key in curbing financial statement fraud.

The association between audit opinions and financial statement fraud is supported by empirical evidence: Geiger and Raghunandan (2002) find that modified audit opinions are associated with higher fraud risk, indicating that auditors are more likely to issue modified reports when financial reporting quality is weak; Lennox and Pittman (2010) show that audit modifications are more common in environments with higher fraud risk, indicating the informational value of audit opinions in identifying financial reporting problems; and Krishnan and Krishnan (1996) further show that audit report modifications frequently reflect changes in underlying financial reporting quality after fraud detection. According to Geiger and Raghunandan (2002), auditors are more likely to provide amended reports when financial reporting quality is poor since modified audit views are linked to increased fraud risk. Lennox

and Pittman (2010) demonstrate the informational utility of audit opinions in identifying financial reporting issues by demonstrating that audit revisions are more common in contexts with increased fraud risk. Krishnan and Krishnan (1996) further show that after fraud is detected, audit report alterations frequently reflect changes in underlying financial reporting quality. Thus,

Prior research also highlights the importance of auditor characteristics in shaping audit opinions and their effectiveness in fraud detection. Palmrose (1988) further confirms that auditor competence and audit quality play a crucial role in identifying financial irregularities. DeAngelo (1981) argues that auditor independence and audit quality significantly influence the credibility of audit opinions. High-quality auditors, especially large and reputable audit firms, are more likely to issue accurate and informative audit opinions, thereby enhancing fraud detection and mitigation. High-quality auditors are more likely to provide accurate and insightful audit views, which improves fraud detection and mitigation. This is especially true for large and reputable audit companies. Palmrose (1988) shows once more how important audit quality and auditor competency are in spotting financial anomalies.

The ability of audit opinions to completely prevent financial statement fraud is limited, though, because traditional audit procedures may not be able to identify sophisticated fraud schemes, especially when management override or collusion is involved. In this regard, emerging technologies like data analytics and artificial intelligence have been demonstrated to improve audit effectiveness and fraud detection capabilities (Wang & Cuthbertson, 2015). Nevertheless, relying exclusively on traditional audit opinions is still insufficient in addressing increasingly complex financial fraud risks. Sophisticated fraud schemes may go undetected by traditional audit methods, especially if management override or complicity is present. Because of this restriction, audit opinions are less effective at completely preventing financial statement fraud. In this regard, it has been demonstrated that new technologies like artificial intelligence and data analytics can improve fraud detection capabilities and audit efficacy (Wang & Cuthbertson, 2015). However, relying only on conventional audit judgements is still insufficient to handle threats of more complex financial fraud.

Recent research from 2024–2025 shows growing evidence that audit opinions may be a sign of financial statement fraud and are important markers of the quality of financial reporting. Research shows that audit opinions In fact provide very useful information to assess the risk of fraud, In particular if used as part of highly analytical models and machines learning models of fraud detection (Nguyen Thanh & Phan Huy, 2025). Based on cross-country studies, the pattern between audit results and fraud probability is consistent and they even reveal that audit opinions may represent the fraud risk and financial reporting discrepancies that are lying underneath. A recent research Still brings out the point that auditing alone might not be a sufficient or perfect tool for the total eradication of financial statement fraud because the success of a fraud prevention strategy depends on other support systems, the strength of the regulations enforcement, and the quality of the audit. Alshurafat (2024) and Okoye & Gbegi (2013) are among those who have pointed out that forensic accounting is a very effective tool that helps not only in uncovering the disguises of fraud but also in reducing the alterations to the financial statements by fraudsters through the use of specialised investigative methods and data analytics.

That means, the research work touches upon the importance of forensic accounting as a means of strengthening fraud reduction measures and also points out the existing significant relationship between the audit opinion and financial statement fraud. Also, earlier studies reveal that audit opinions essentially act as monitoring and signalling instruments, which can prevent managers from taking advantage of the situation and also reduce the cases of financial statement fraud. In fact, auditor's professional scepticism, their choice of reporting, and fraud-risk assessments are just a few of the factors through which they fight against fraud (Brazel et al. 2024; Kassem, 2024). And, lower fraudulent financial reporting has been found to be tied to audit opinions and audit quality (Fitriani et al. 2025; Luthfiyyah, 2024). These findings support the notion that audit opinions as an external governance mechanism may enhance financial reporting integrity and mitigate the risk of fraud.

Overall, audit opinions play a central role in signaling financial reporting quality and mitigating financial statement fraud. A modified audit opinion often indicates potential issues in financial statements, encouraging greater stakeholder scrutiny and reducing managerial incentives for fraud. However, the effectiveness of audit opinions depends on auditor independence, audit quality, and supporting mechanisms such as forensic accounting, which can strengthen fraud detection processes. According to Agency Theory, the knowledge gap of managers for a company's operations and financial conditions is a major cause of the conflict of interest between managers (agents) and shareholders (principals). Knowing more than others, managers may exploit this to make the most of their private benefits through actions that are prejudicial to other stakeholders. One such action could be the falsification of financial statements. About this, the audit process is a significant external instrument of control to reduce information asymmetry by providing an unbiased evaluation of the correctness and reliability of financial accounts. The audit opinion that arises from this is a trustworthy indication of the quality of a firm's financial reporting for the investors creditors regulators, and other stakeholders (Fargher et al. 2008).

In summary, prior studies consistently suggest that audit opinions contribute to enhancing financial reporting quality by providing an independent evaluation of corporate financial statements. This improves transparency and accountability, thereby reducing the likelihood of fraudulent financial reporting. However, given the limitations of traditional auditing, additional mechanisms such as forensic accounting are required to further strengthen fraud detection and prevention. Agency theory argues that monitoring systems like these reduce the information asymmetry between managers and stakeholders. Besides that, these systems increase the pressure on companies to improve the quality of their disclosures (Jensen & Meckling, 1976; Watts & Zimmerman, 1983). Because of this, if audit opinions reveal potential weaknesses or higher risks of misrepresentation, companies tend to enhance their internal controls and even adopt advanced investigation methods. Thus, this study suggests that audit opinion is strongly related to financial statement fraud based on previous research.

Hypothesis 1

There is a significant relationship between audit opinion and financial statement fraud.

2.2 Mediating Role of Forensic Accounting in the Relationship Between Audit Opinion and Financial Statement Fraud

Empirical literature has increasingly examined the role of forensic accounting in strengthening fraud detection and enhancing audit effectiveness. Prior studies present mixed evidence regarding its impact on financial reporting quality. For instance, Nejad et al. (2024) find that audit tenure is negatively associated with financial statement fraud, suggesting that audit-related characteristics influence fraud detection. In contrast, Alkhalaileh et al. (2024) demonstrate that auditors with forensic accounting competencies positively affect firm performance and improve the quality of audit outcomes, highlighting the value of forensic expertise in auditing environments.

Several studies also emphasize the relationship between audit opinions and forensic accounting. Lennox et al. (2014) show that adverse audit opinions often trigger deeper investigations into financial reporting practices, which may uncover fraud or severe financial misstatements. Similarly, Chi and Hung (2014) find that modified audit opinions are significantly associated with higher levels of financial reporting irregularities. These findings suggest that audit opinions serve as early warning signals of potential fraud risk. Additional evidence suggests that incorporating forensic accounting into the auditing process improves the efficacy of fraud detection. Curtis (2014) contends that forensic accountants supplement traditional auditors by using investigative techniques that enhance the identification of fraud indicators associated with modified audit opinions; Golden et al. (2011) further emphasise the growing dependence on forensic accountants to assist auditors in identifying complex fraud schemes; in this sense, forensic accounting increases the credibility and utility of audit opinions by offering deeper investigative insights into suspicious financial activities. According to Curtis (2014), by using investigative methods that enhance the detection of fraud signs connected to altered audit opinions, forensic accountants support traditional auditors. The growing dependence on forensic accountants to assist auditors in identifying intricate fraud schemes is further highlighted by Golden et al. (2011). In this sense, by offering more in-depth investigation insights into questionable financial activity, forensic accounting improves the legitimacy and utility of audit judgements.

In contrast to traditional auditors, who primarily provide an independent opinion on the fairness of financial statements, forensic accountants concentrate on identifying irregular, suspicious, or illegal financial activities and may also provide expert testimony in legal proceedings (Buallay & Al-Ajmi, 2020). This distinction highlights the complementary role of forensic accounting in strengthening audit outcomes. Traditional auditing systems have inherent limitations in detecting sophisticated fraud, particularly in cases involving management override, collusion, and complex financial manipulation. Forensic accountants concentrate on spotting irregular, suspicious, or unlawful financial activity, in contrast to traditional auditors whose main responsibility is to offer an unbiased opinion on the fairness of financial statements. They may also offer expert testimony in court (Buallay & Al-Ajmi, 2020). This distinction emphasises how forensic accounting strengthens audit results in a complementary way.

This complimentary link is supported by empirical research. While DiGabriele (2011) highlights forensic accounting's significance in identifying fraud risks that standard audits might miss, Alabdullah et al. (2016) find that forensic accounting greatly increases fraud detection and promotes financial reporting quality. In a similar vein, Kranacher et al. (2008) and Golden et al. (2011) show that forensic accounting is very useful in identifying intricate fraud schemes including asset misappropriation and earnings manipulation. Additionally, Okoye and Gbegi (2013) demonstrate how forensic accounting enhances fraud risk management, and Bhasin (2013) discovers that companies that hire forensic accountants have reduced fraud occurrence because of improved detection and deterrence mechanisms. Integrating forensic accounting with audit opinions improves the overall dependability of financial reporting from a governance standpoint. Internal control systems are strengthened and fraud detection capabilities are enhanced by forensic techniques like data analytics, investigative interviews, and transaction tracing (Owojori & Asaolu, 2009). Additionally, Peterson and Buckhoff (2004) contend that integrating forensic accounting with conventional audit techniques offers a more thorough method of identifying fraud, especially in situations involving deliberate deception and collusion.

Forensic accounting plays a critical mediating role in linking audit opinion and financial statement fraud mitigation due to its specialized functions in fraud detection and investigation. It is in charge of spotting fraudulent activity, investigating strange transactions, bolstering internal control systems, supporting lawsuits, and using cutting-edge analytical methods to find financial irregularities (Okoye & Gbegi, 2013; Crumbley et al., 2017; Rezaee, 2005). Auditing perspective in this context is an internal response system which deals with issues raised by audit signals. From this perspective, forensic accounting is a response system, which leverages audit signals into a set of meaningful response measures that increase an organization's ability to prevent, detect, and respond to FS fraud by strengthening its internal governance structure and fraud detection ability.

The mediating role of forensic accounting can be explained through a logical cause–mechanism–outcome framework. Jensen and Meckling (1976) and Watts and Zimmerman (1983) believed that an audit opinion is an external monitoring signal that communicates the level and trustworthiness of financial reporting and urges businesses to improve their governance and reporting processes. Past studies suggest that audits can signal a potential fraud risk or a misstatement and are strongly tied to the quality of financial reporting (Fargher et al. 2008; DeFond & Zhang, 2014). In response to this signal, companies might strengthen their internal control systems and carry out more detailed investigation and analysis. Forensic accounting offers these tools through specialized ways of detecting fraud by spotting anomalies, investigating questionable transactions, and enhancing the ability to detect fraud (Okoye & Gbegi, 2013; Crumbley et al. 2017). By implementing these approaches, forensic accounting turns audit signals into effective control measures that help to reduce the risk of fraud and financial misstatements (Rezaee, 2005; Enofe et al. 2015). Because of this, the final outcome of this chain of eventswhere forensic accounting is the tool, audit opinions are the signal, and financial statement fraud is the problemis the reduction of fraud.

Forensic accounting is used as a mediating variable here, as the degree to which audit opinions are effective in eliminating financial statement fraud is related to the quality of the investigative audit method. As per Agency Theory, forensic accounting is one way of partially leveling the playing field by uncovering hidden misstatements and managerial fraud. Recent works in auditing together with regulatory changes also underscore its elevated role in fraud risk assessment and detection (Brazel et al. 2024; Kassem, 2024; IAASB, 2023–2025). Because of this, forensic accounting is the process through which audit opinions, through the completion of forensic accounting work, bring about an increase in fraud prevention, identification, and financial record reliability.

This connection is underpinned by several theoretical systems. Under the agency theory (Michael C. Jensen, William H. Meckling, 1976), agency conflicts occur between managers (agents) and shareholders (principals) when managers have better information about the business than shareholders' (information asymmetry). The agency problems tend to cause opportunistic behaviour by managers, like financial statement fraud. To lessen agency conflicts, agencies have implemented monitoring mechanisms (e.g. boards of directors, audit committees, internal controls, external auditors) which increases the reliability and transparency of financial reports. Since auditors not only verify the financial statements independently but also issue audit opinions that enhance accountability, reduce information asymmetry and increase the chance of fraud detection, all of which help to fight financial statement fraud, external auditing is really important here. The Fraud Triangle Theory (Cressey, 1953) which is an explanation of how forensic and audit-related procedures can detect the pressure, opportunity, and rationalisation variables in fraud, can strengthen this relationship by leading to fraud detection and prevention. Besides that, Institutional Theory (Scott, 2014) suggests that to meet their regulatory, normative and legitimacy expectations, organisations have to improve their auditing and forensic accounting processes. In the end, this will lead to better audit quality and greater financial transparency.

Summary of the Role of Forensic Accounting

Role of Forensic Accounting	Effect on Audit Opinion	Effect on Fraud Mitigation
Fraud detection & prevention	Improves reliability of audit opinions	Identifies and reduces fraudulent activities
Enhancing audit quality	Strengthens audit judgment and reporting	Improves internal control effectiveness
Bridging audit limitations	Addresses gaps in traditional auditing	Detects complex fraud schemes
Stakeholder confidence	Increases trust in audit outcomes	Reduces likelihood of financial misreporting
Source: Developed by the author		

The literature is divided on the relationship between audit opinions and financial statement fraud. Some studies suggest that audit opinions are in line with agency theory as they enhance transparency and

signal the quality of financial reporting. Then again, some researchers argue that as audit opinions are based on the information presented in financial reports, auditors may not detect complex frauds and so, even though fraud is occurring, audit opinions may continue to be unqualified. They point out that the effectiveness of audit opinions is often limited in such situations. Additional data shows that the regulatory context, auditor skill, and audit quality influence how audit opinions work. Based on a recent paper, more ways, like forensic accounting, are needed to explain how auditing systems can assist in the detection and prevention of fraud due to these inconsistencies Despite

Most of the research in the current literature shows the direct effect of the audit related results on the crime levels or quality of financial reports, despite Truth is many studies has been conducted on the audit opinion and financial statement fraud issue (Fargher et al. 2008; DeFond & Zhang, 2014; Lennox et al. 2014).In the same way, an increasing amount of research is directed at understanding how forensic accounting can be used for enhancing the effectiveness of systems of fraud detection and reporting as well as prevention (Rezaee, 2005; Okoye & Gbegi, 2013; Crumbley et al. 2017). Nonetheless, the joint impact of these two literary streams has hardly been noticed mainly because they have mostly evolved in isolation. There is, in fact, a significant lack of empirical data that would shed light on the ways in which forensic accounting could be utilized to effectively counteract the problem of financial statement fraud by spreading or directing the influence of audit opinions. This gap essentially underlines the need for a more detailed framework that would incorporate forensic accounting as a mediating factor between the outcomes of financial reporting fraud and audit opinions.

In reality previous studies have separately looked into the role of audit opinion as well as forensic accounting in dealing with financial reporting irregularities, the question of how forensic accounting may transform audit-related signals into making financial statement fraud mitigation more effective has mostly been ignored. Thus, a greater knowledge of how audit opinion is translated into financial statement fraud mitigation can be obtained by looking at forensic accounting as a mediating variable. According to this approach, audit opinions generate a monitoring signal about the quality of financial reporting, and forensic accounting serves as the mechanism that transforms this signal into investigative and remedial measures that improve fraud detection and prevention. As a result, forensic accounting clarifies how audit opinions help lower financial statement fraud. Therefore, this study addresses this gap by examining how forensic accounting mediates the relationship between audit opinion and financial statement fraud. Specifically, it investigates whether the effectiveness of audit opinions in mitigating fraud is strengthened when firms employ forensic accounting practices.

Hypothesis 2

Forensic accounting positively mediates the effect of audit opinion on financial statement fraud mitigation.

Control Variables

In line with previous research, this study includes a number of control variables that could affect the connection between financial statement fraud, forensic accounting, and audit opinion. These factors include ownership structure, Big Four audit firms, return on assets (ROA), firm size, and leverage.

Firm size (Size) is calculated using the total assets' natural logarithm, in accordance with Burgwal and Vieira (2014). Financial statement fraud may be less likely in larger companies because they are usually subject to tougher regulatory control and more public attention.

Leverage (Lev) is calculated by dividing total debt by total assets, according to Abdullatif et al. (2019). Highly leveraged companies may face more financial strain, which may lead to more incentives for financial reporting fraud and earnings manipulation. Highly leveraged companies can be under more financial strain, which could lead to more incentives for financial reporting fraud and earnings manipulation.

Return on Assets (ROA) is used as a proxy for firm profitability and is calculated as net income divided by total assets. Firms with lower profitability may be more motivated to engage in financial statement fraud to present better financial performance.

Big Four audit firms (Big4) is a dummy variable that has a value of 0 if the company is not audited by one of the Big Four audit firms and 1 if it is. According to earlier studies, because of their better reputation and more robust auditing practices, Big Four auditors typically improve audit quality and lower the risk of financial statement fraud (Carcello & Nagy, 2004). They are not, however, impervious to audit errors in situations involving intense pressure or intricate fraud schemes.

Ownership structure (Own) captures the proportion of ownership concentration. Wang (2006) argues that ownership structure plays a significant role in fraud risk. Privately held firms may focus more on long-term reputation and stability, thereby reducing incentives for fraudulent reporting. In contrast, publicly listed firms are subject to stronger external monitoring, which may either constrain fraud or, in some cases, increase pressure to meet market expectations.

3. Research Methodology

3.1 Research Design and Data

This study employs a quantitative research design with a panel data regression system to explore the link between audit opinion and financial statement fraud. The use of panel data analysis allows for improving estimation efficiency over time as well as controlling for firm-specific effects. The analysis is based on the annual reports of non-financial companies listed on the Bursa Malaysia Stock Exchange for the period of 2016–2020 and secondary data from Thomson Reuters DataStream. Financial firms are excluded because of their distinct reporting and regulatory requirements. Also, those companies that have missing audit reports or lack audit opinion data or financial information are removed. 761 firm-year observations form the final sample after the implementation of these criteria. This research works with

secondary data collected from multiple sources among others Bursa Malaysia corporate governance reports, Thomson Reuters DataStream, business annual reports and audit opinion disclosures. These sources provide reliable and consistent data on the variables to be used for the analysis that relate to finance, auditing and governance.

3.2 Variable Measurement

Dependent Variable: Financial Statement Fraud (FSFR)

The method called F-score developed by Dechow et al. (2011) is utilized for measuring financial statement fraud (FSF). The F-score combines various financial statement signals related to misstatements and irregularities in reporting, which is why it has become a standard proxy for the likelihood of fraudulent financial reporting. The greater the F-score values, the higher the chance of financial statement fraud. This measure has become a standard tool in the literature for finding firms with a high risk of committing financial misreporting (Dechow et al. 2011; Nejad et al. 2024).

Independent Variable: Audit Opinion (AuO)

Previous studies (Tsipouridou & Spathis, 2012; Lennox et al. 2014; Megayanti & Budiartha, 2016; Wicaksono et al. 2024) have shown that the auditor's report is why in measuring the audit opinion with a binary dummy variable. Firms issued a non-standard audit opinion (qualified, adverse, or disclaimer of opinion) were coded as 1, while those given a clean (unqualified) audit opinion were coded as 0. This indicator reflects concerns about the potential misstatement of the financial statements and also represents the auditor's judgment of the truthfulness of financial reporting.

Forensic Accounting (MFAcc)

According to Alkhalaileh et al. (2024), forensic accounting (MFAcc) is measured as a binary dummy variable. Firms disclosing the use of forensic accounting methods, e.g. hiring of forensic accountants or carrying out of forensic audits, will be given an indicator of 1 while firms that do not provide such evidence will be given an indicator of 0. This indicator reflects the library of playing forensic accounting techniques of the firms in identifying, investigating and deterring fraudulent financial reporting.

Control Variables

The study includes firm-level control variables that are commonly used in accounting and auditing literature, including firm size, leverage, return on assets (ROA), Big4 auditor affiliation, and ownership concentration. These factors account for factors that could affect the results of financial reporting, such as financial structure, profitability, audit quality, and governance traits.

3.1 Model Construction

To test the proposed hypotheses, this study employs a panel data regression framework, which allows controlling for unobserved firm-specific heterogeneity and improves estimation efficiency.

Baseline Model

The following model is estimated in order to investigate how audit opinions affect financial statement fraud:

$$FSFR_{it} = \beta_0 + \beta_1 AuO_{it} + \beta_2 Controls_{it} + \mu i + \lambda t + \varepsilon it$$

Where:

FSFRit = financial statement fraud for firm i at time t

AuOit = audit opinion

Controlsit = vector of control variables (firm size, leverage, ROA, Big4, ownership)

μi = firm fixed effects

λt = year fixed effects

εit = error term

Mediation Model:

Step 1

The following model is described in order to investigate the factors that influence forensic accounting

$$MFAccit = \alpha 0 + \alpha 1 AuOit + \alpha 2 Controlsit + \mu i + \lambda t + \varepsilon it$$

Where:

MFAccit = forensic accounting intensity.

Step 2

To test the mediating role of forensic accounting, the following model is estimated

$$FSFRit = \gamma 0 + \gamma 1 AuOit + \gamma 2 MFAccit + \gamma 3 Controlsit + \mu i + \lambda t + \varepsilon it$$

A partial or full mediation effect is inferred if:

α1 is significant

γ2 is significant

γ1 decreases in magnitude compared to β1

Mediation is tested using:

Baron & Kenny approach (classical)

Sobel test

Bootstrapping (preferred in recent studies)

Financial Fraud = β0 + β1 Audit Opinion + β2 Forensic Accounting + Controls + ε

3.2 Estimation Technique

This study employs fixed effects (FE) regression to control for unobserved heterogeneity across firms. The Hausman test is conducted to confirm the appropriateness of the FE model over random effects. To address potential heteroskedasticity and autocorrelation, robust standard errors clustered at the firm level are used. In particular, all regressions incorporate firm fixed effects (μ_i) and year fixed effects (λ_t) to account for macroeconomic shocks and unobserved heterogeneity, and all estimations use heteroskedasticity-robust standard errors clustered at the firm level to guarantee accurate statistical inference in the presence of potential autocorrelation and heteroskedasticity. To guarantee trustworthy statistical inference in the presence of possible autocorrelation and heteroskedasticity, all estimations also use heteroskedasticity-robust standard errors clustered at the company level.

3.3 Conceptual model

The conceptual model used in this layer of research follows a pretty clear order of events. First, an audit opinion is given, which is an external review of how good the financial reporting is and it also acts as a sign indicating the level of risk and reliability of financial statements. Next, this indication influences the number and extent of forensic accounting procedures, which are the internal mechanism for an investigation, detection, and evaluation of potential financial irregularities. Thirdly, forensic accounting takes audit-related signals and turns them into investigative and remedial actions that can improve the detection of fraud and strengthen internal controls. In the end, it is these enhanced detection and control measures that lead to the mitigation of financial statement fraud. So, the model proposes a logical sequence in which fraud reduction is the final product, forensic accounting is the means, and the audit opinion is the stimulus.

4. Empirical analysis

Table 1
Summary Statistic for Full Sample Size

Variable	Obs	Mean	Std. Dev.	Min	Max
AuO	761	0.176	0.116	0.000	0.933
FSFR	761	0.661	0.508	0.000	3.292
MFAcc	761	0.122	0.101	0.000	0.724
Size	761	5.204	0.142	3.172	7.821
Lev	761	0.324	0.216	0.001	1.925
ROA	761	0.085	0.072	-0.214	0.356
Big4	761	0.170	0.376	0.000	1.000
Own	761	0.372	0.047	0.005	0.677

Note: Obs., Std. Dev., Min. and Max. denotes total observations, standard deviation, minimum, and maximum, respectively.

Financial statement fraud (FSFR) has a mean value of 0.661 and a standard deviation of 0.508, indicating significant variability in fraud-related behaviour among sampled firms; audit opinion (AuO) has a mean value of 0.176 and a standard deviation of 0.116, indicating moderate variation in audit reporting practices across firms. Table 1 displays the descriptive statistics for all variables used in this study. According to the findings, there is a moderate difference in audit reporting methods among firms, with a mean value of audit opinion (AuO) of 0.176 and a standard deviation of 0.116. With a mean of 0.661 and a standard deviation of 0.508, financial statement fraud (FSFR) indicates significant variation in fraud-related behaviour among sampled organisations.

The sample's comparatively low adoption or intensity of forensic accounting methods is indicated by the mean forensic accounting (MFAcc) value of 0.122. In terms of firm characteristics, the mean firm size is 5.204 and the mean leverage (Lev) is 0.324, indicating a moderate level of financial leverage among enterprises. Return on assets (ROA), which indicates overall profitability with some variation between enterprises, has an average value of 0.085. About 17% of the sample is made up of Big4 audit companies, suggesting that Big4 auditors only audit a small percentage of businesses. The tested enterprises have a fairly concentrated ownership structure, as shown by the ownership concentration (Own) mean of 0.372. The dataset's appropriateness for additional regression analysis is supported by the descriptive statistics, which generally show adequate variability across all variables.

Table 2
Pearson Correlation Matrix

AuO	AuO	FSFR	MFAcc	Size	Lev	ROA	Big4	Own
	1.000							
FSFR	0.320**	1.000						
MFAcc	0.554*	0.091*	1.000					
Size	0.617*	0.050	0.025	1.000				
Lev	0.018	0.131*	0.246*	0.051	1.000			
ROA	0.103*	0.082*	0.115*	0.262*	0.103*	1.000		
Big4	-0.158*	0.100*	-0.349*	0.135*	0.458*	-0.158*	1.000	
Own	0.345*	0.121*	0.070	0.341*	0.047	-0.005	0.345*	1.000
*** p < 0.01, ** p < 0.05, and * p < 0.10								

Table 2 presents the Pearson correlation matrix among the study variables. Financial statement fraud (FSFR) and audit opinion (AuO) have a statistically significant positive correlation ($r = 0.320$, $p < 0.05$), indicating that these variables tend to move in the same direction within the sample. Similarly, FSFR is positively correlated with forensic accounting (MFAcc) ($r = 0.091$, $p < 0.10$), indicating a weak but significant association between the two variables. Additionally, forensic accounting has a relatively strong positive correlation ($r = 0.554$, $p < 0.10$), suggesting that firms audited by Big4 auditors have lower audit opinions. Similarly, there is a weak but significant correlation between FSFR and forensic accounting (MFAcc) ($r = 0.091$, $p < 0.10$). Additionally, there is a comparatively strong positive correlation between forensic accounting and audit opinion ($r = 0.554$, $p < 0.10$), suggesting that organisations with greater involvement in forensic accounting are typically linked to differences in audit opinions. Furthermore, there is a negative association between audit opinion and Big4 audit companies ($r = -0.158$, $p < 0.10$), indicating that firms reviewed by Big4 auditors have lower levels of modified audit views. Other control variables such as firm size, leverage, and profitability also show mixed but generally weak correlations with the main variables. Importantly, none of the correlation coefficients exceed 0.80, indicating that multicollinearity is not a serious concern in the regression analysis.

Table 3
Panel Regression Results with Mediation Model

Variables	(1) FSFR	(2) MFAcc	(3) FSFR
AuO	-0.221* (0.125)	0.136** (0.358)	0.418*** (0.125)
MFAcc	—	—	0.174*** (0.0127)
Size	2.106*** (0.105)	-0.125* (0.301)	2.108*** (0.105)
Lev	0.0302* (0.0658)	-0.904*** (0.188)	0.0460** (0.0667)
ROA	0.487** (0.209)	5.117*** (0.598)	0.398* (0.219)
Big4	1.115*** (0.125)	-4.541*** (0.358)	1.035*** (0.138)
Own	0.653** (0.133)	0.892** (0.379)	0.637* (0.133)
Constant	0.315*** (0.0447)	3.106*** (0.128)	0.261*** (0.0596)

Standard errors in parentheses *** p < 0.01, ** p < 0.05, * p < 0.10

3.1 Regression Analysis

Table 3 presents the results of the panel regression analysis examining the relationship between audit opinion (AuO), forensic accounting (MFAcc), and financial statement fraud (FSFR), controlling for firm-specific characteristics and including year and industry fixed effects.

In Model (1), At the 10% level, the coefficient of audit opinion (AuO) is statistically significant and negative, suggesting that audit opinion is linked to a decrease in financial statement fraud. In line with earlier research (Drogalas et al., 2017; Castillo-Merino et al., 2020; Le and Lobo, 2020; Nejad et al., 2024), this result implies that audit views have a monitoring role in preventing fraudulent financial reporting. This finding lends credence to the claim that audit views improve transparency by lowering managerial opportunistic behaviour and raising scrutiny of financial reporting.

Model (2) investigates the connection between forensic accounting and audit opinions. According to the findings, AuO is positively and significantly correlated with MFAcc at the 5% level, suggesting that companies under audit scrutiny are more likely to use forensic accounting techniques. This implies that in order to identify and stop financial irregularities, audit procedures may promote the use of specialised investigative accounting techniques. This result is in line with earlier research (Umar et al., 2018; Alabdullah et al., 2016; Omondi et al., 2020; Thu, Khanh, and Khuong, 2018).

To examine the mediating role of forensic accounting (MFAcc) in the relationship between audit opinion (AuO) and financial statement fraud (FSFR), this study adopts a structural mediation framework within a panel data setting. The mediation effect is assessed by examining both the direct and indirect effects of audit opinion.

The indirect effect is defined as:

AuO→MFAcc→FSFRAuO

The indirect impact is statistically assessed using the Sobel test and bootstrap confidence intervals, which offer more reliable inference than conventional stepwise methods, in accordance with contemporary mediation analysis in econometric literature. The influence of audit opinion on financial statement fraud is largely or totally transmitted by forensic accounting, as confirmed by a significant indirect effect. Overall, the regression results support all proposed hypotheses and confirm that forensic accounting plays an important mediating role in strengthening the relationship between audit opinion and the mitigation of financial statement fraud. The findings are consistent with agency theory (Jensen and Meckling, 1976), which suggests that monitoring mechanisms such as audit opinions and forensic accounting reduce information asymmetry and constrain managerial opportunism. The results are in line with agency theory (Jensen and Meckling, 1976), which contends that monitoring tools like forensic accounting and audit views limit managerial opportunism and lessen information asymmetry. Overall, the regression results validate that forensic accounting plays a significant mediating role in bolstering the association between audit opinion and the mitigation of financial statement fraud and support all hypotheses.

Table 4
Regression results with replacement variables

Variables	**(1) FSFR**	**(2) MFAcc**	**(3) FSFR**
AuO	0.137* (0.165)	0.995*** (0.396)	0.0741*** (0.164)
MFAcc	—	—	0.0633*** (0.0149)
Constant	0.644*** (0.0345)	2.656*** (0.0829)	0.476*** (0.0524)

Standard errors in parentheses *** p < 0.01, ** p < 0.05, * p < 0.10

3.2 Robustness Tests

Table 4 The research re-calculated the original regression model with a new model specification as a way of checking the reliability of the empirical results. Table 4 presents those robustness outcomes. Based on the main investigation, forensic accounting remains why in driving the reduction of fraudulent financial reporting; Though, audit opinion is still found to be a positive indicator of financial statement fraud. The changes in the specification do not affect the results as the signs and levels of significance of the estimated coefficients are largely unchanged from those of the principal model. This also helps in corroborating the validity and credibility of the study's findings.

To ensure the robustness of the findings, the following additional analyses are conducted:

- Alternative measurement of audit opinion (dummy vs continuous)
- Alternative proxy for financial statement fraud

- Re-estimation using lagged independent variables
- Subsample analysis.

3.3 Endogeneity Treatment Test

Given the potential reverse causality between audit opinion and financial statement fraud, this study adopts a two-stage least squares (2SLS) approach.

First Stage:

$AuO_{it} = \delta_0 + \delta 1 IV_{it} + \delta_2 Controls_{it} + \mu_i + \lambda_t + \varepsilon_{it}$

Second Stage:

$FSFR_{it} = \theta_0 + \theta_1 AuO\hat{}_{it} + \theta_2 Controlsit + \mu_i + \lambda_t + \varepsilon_{it}$

Where:

IV_{it}= instrumental variable (e.g., industry-level audit opinion or lagged audit opinion)

Instrument Validity Tests

The validity of the instrument is assessed using:

Anderson LM test (under-identification)

Cragg–Donald Wald F-statistic (weak instrument test)

Stock–Yogo critical values

4.1 Endogeneity Test Results

Table 5 shows the findings of the two-stage least squares (2SLS) estimation, which was utilised to address any endogeneity issues resulting from omitted variable bias and reverse causation between financial statement fraud and audit opinion. After accounting for endogeneity, the results show that the coefficient of audit opinion in the second-stage regression is still statistically significant, indicating that the association between audit opinion and financial statement fraud is resilient to possible endogeneity bias. Weak-instrument diagnostics and standard identification are used to assess the validity of the instrumental variable. The model is correctly recognised and the instrumental variable is pertinent to the endogenous regressor, according to the Anderson LM test, which rejects the null hypothesis of under-identification. Furthermore, the Cragg-Donald Wald F-statistic is greater than the Stock-Yogo critical values, indicating that the model does not have a weak instrument issue and that the instrument is strong enough. All things considered, these diagnostic tests offer solid statistical proof that the instrumental variable employed in the 2SLS estimation is valid, relevant, and strong. Overall, the results

of the endogeneity tests offer compelling proof that the primary empirical findings are not influenced by model specification bias or reverse causation, supporting the validity of the baseline regression findings.

Table 5
Endogeneity Test Results (2SLS Estimation)

Variables	(1) First Stage: AuO	(2) Second Stage: FSFR
IV / PAuO	0.127*** (0.0298)	—
AuO (instrumented)	—	0.137*** (0.165)

Statistics in parentheses; *p < 0.10, **p < 0.05, ***p < 0.01.

5. Discussion

Financial statement fraud has become a significant global concern, and auditors play an increasingly important role in its detection and prevention. This issue is particularly critical in developing economies, where weaker regulatory enforcement and monitoring mechanisms may increase the likelihood of financial misreporting. Accordingly, improving audit effectiveness and complementary investigative mechanisms such as forensic accounting has become an important area of research.

This study examined the relationship between audit opinion and financial statement fraud in Malaysia, with particular attention to the mediating role of forensic accounting. The empirical results show that audit opinion is significantly associated with financial statement fraud, indicating that audit reporting plays an important role in influencing financial reporting quality. In addition, the findings confirm that forensic accounting acts as a partial mediator in the relationship between audit opinion and financial statement fraud, suggesting that part of the effect of audit opinion operates through forensic accounting practices. The findings also show that audit opinions, which offer an unbiased evaluation of a company's financial reporting quality, help reduce financial statement fraud. Modified audit opinions, such as qualified or adverse opinions, improve accountability, raise managerial scrutiny, and promote greater transparency to prevent reputational and regulatory repercussions. In order to prevent reputational and legal repercussions, modified audit opinions such as qualified or adverse opinions improve accountability, raise managerial scrutiny, and promote better openness.

Forensic accounting serves as an investigation tool, audit opinions serve as a monitoring signal, and enhanced detection and control systems lead to fraud mitigation. Moreover, forensic accounting plays a complementary and reinforcing role in mitigating financial statement fraud. Importantly, the mediating role of forensic accounting implies that audit opinions alone may not fully capture the complexity of fraud detection mechanisms; instead, forensic accounting enhances the informational value of audit opinions by improving fraud detection capability and reducing information asymmetry between management and stakeholders. By applying specialised investigative techniques, forensic accounting helps detect irregularities that may not be identified through conventional audit procedures, strengthens internal control systems, and acts as a deterrent against fraudulent behaviour. It serves as a disincentive

against fraudulent activity, fortifies internal control systems, and offers proof for investigative or legal measures. These features improve audit opinions' ability to spot and correct financial misstatements. Crucially, the mediating function of forensic accounting implies that audit views might not adequately convey the intricacy of fraud detection systems. Rather, by strengthening fraud detection capabilities and decreasing information asymmetry between management and stakeholders, forensic accounting increases the informational value of audit judgements.

This study adds to the body of literature in several ways. Under the context of emerging economies, In particular in Malaysia, this is the first such study that advances before the literature by testing the joint effects of the audit opinion and forensic accounting on explaining financial statement fraud. By positioning forensic accounting as an important mediating mechanism that enhances the beneficial effect of audit opinion on reducing financial statement fraud, this study extends the literature versus that largely focus on audit quality, auditor and governance mechanisms as factors affecting financial reporting quality. Secondly, the paper offers concrete proof of how forensic accounting acts as a mediator. This is a subject that has been somewhat neglected in previous research in accounting and auditing, thus the paper contributes to the theoretical development of Agency Theory, Fraud Triangle Theory, and Institutional Theory. These theories describe the ways in which a lack of information control and the behavior of individuals can result in fraudulent financial statements. Essentially, the theories point out the significance of auditing as a tool for monitoring and also argue for the crucial role of forensic accounting in combating fraud. Overall, the study emphasises how forensic accounting procedures explain the efficacy of audit opinions in reducing financial statement fraud. This emphasizes how crucial it is to have comprehensive audit and forensic procedures in order to improve financial transparency and safeguard stakeholders in the Malaysian capital market.

Declarations

Competing interests

The authors declare no competing interests.

Ethics declaration

This study does not involve human participants or animals requiring ethical approval.

Author Contribution

Author Contributions as flows: The first author was responsible for data collection, data analysis, interpretation of the results, and overall supervision of the study.The second author contributed to writing the introduction, literature review, and methodology sections of the manuscript.

Data availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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