

I Gusti Ayu Tresna Gita<sup>1\*</sup>  
 Rini Anggriani<sup>2</sup>  
 Restu Alpriansah<sup>3</sup>  
 Wira Hendri<sup>4</sup>  
 Stevany Hanalya Dethan<sup>5</sup>

<sup>1-5</sup> Bumigora University,  
 Faculty of Economic and  
 Business, Indonesia

# External pressure, ineffective monitoring and change in auditor on financial fraud in mining subsector companies

## Abstract

This study aims to rigorously examine and analyze the partial and simultaneous effects of external pressure, ineffective monitoring, and auditor changes on financial statement fraud. Employing a quantitative research approach, the study focuses on mining sub-sector companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 period. The sample was selected using purposive sampling, resulting in 30 companies that met the predefined research criteria. Data were analyzed using multiple linear regression to determine the influence of each independent variable on the dependent variable. The empirical findings reveal that, individually, external pressure, ineffective monitoring, and changes in auditor do not exert a statistically significant effect on financial statement fraud. Furthermore, the results of the simultaneous test demonstrate that these three variables, when considered collectively, also do not have a significant impact on the occurrence of financial fraud. These results suggest that the examined factors are not principal determinants in driving fraudulent financial reporting within the mining sub-sector during the specified period.

**Keywords:** Change in auditor, external pressure, financial fraud, ineffective monitoring.

## Abstrak

Penelitian ini bertujuan untuk menguji dan menganalisis pengaruh parsial dan simultan dari *external pressure*, *ineffective monitoring*, dan *change in auditor* terhadap kecurangan laporan keuangan (financial fraud). Studi ini menggunakan pendekatan kuantitatif dengan populasi berupa perusahaan subsektor pertambangan yang terdaftar di Bursa Efek Indonesia (BEI) selama periode 2021–2023. Teknik pengambilan sampel dilakukan melalui metode purposive sampling, yang menghasilkan 30 perusahaan sebagai sampel yang memenuhi kriteria penelitian. Analisis data dilakukan dengan menggunakan regresi linier berganda untuk menguji pengaruh masing-masing variabel independen terhadap variabel dependen. Hasil penelitian menunjukkan bahwa secara parsial, ketiga variabel—*external pressure*, *ineffective monitoring*, dan *change in auditor*—tidak memiliki pengaruh yang signifikan terhadap kecurangan laporan keuangan. Selain itu, hasil uji simultan juga mengindikasikan bahwa ketiga variabel tersebut secara bersama-sama tidak berpengaruh signifikan terhadap terjadinya kecurangan laporan keuangan. Temuan ini mengindikasikan bahwa faktor-faktor tersebut tidak menjadi determinan utama dalam mendorong terjadinya financial fraud di perusahaan subsektor pertambangan selama periode yang diamati.

**Keywords:** *Change in auditor, external pressure, financial fraud, ineffective monitoring.*

## 1. Introduction

Fraud constitutes a systemic issue that has long shadowed the business landscape in Indonesia. This form of white-collar crime not only inflicts substantial financial losses on corporations and the state but also undermines the certainty of the business environment and damages the credibility of financial reporting, which should serve as a cornerstone

<sup>1</sup>Corresponding author: I Gusti Ayu Tresna Gita  
 Email: [itatresna77@gmail.com](mailto:itatresna77@gmail.com)



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

for strategic decision-making. On a national scale, the Indonesian Association of Certified Fraud Examiners ([ACFE Indonesia, 2019](#)) reports that corruption remains the most dominant form of fraud, accounting for 69.9% of total cases with considerable potential losses (See Figure 1). Fraud is not confined to the public and financial sectors alone; it also permeates other critical industries such as mining. According to ACFE Global ([2020](#)), the mining sector experiences higher average losses per fraud case than other sectors, reaching USD 475,000 per incident. These findings highlight the high exposure to fraud risk in strategic sectors characterized by complex financial structures and long-term projects. They also underscore the fundamental weaknesses in both internal and external oversight systems in Indonesian companies—vulnerabilities that can be exploited by perpetrators. Consequently, fraud must not be viewed merely as a technical accounting issue, but rather as a serious threat to sound corporate governance.



**Figure 1.** Fraud in Indonesia according to a survey ACFE 2019

The mining sector, in particular, presents unique and complex characteristics that inherently render it highly susceptible to fraudulent practices. This industry is capital-intensive, heavily reliant on natural resources and global market fluctuations, and operates within extensive supply chains and long-duration projects. These characteristics pose significant challenges for comprehensive monitoring of financial and operational activities, especially in the context of financial reporting, which often involves estimation and projection. Additionally, the high value of transactions and the involvement of multiple stakeholders—including government entities, contractors, and foreign investors—create external pressures for companies to demonstrate strong financial performance. For instance, the case involving PT Aneka Tambang Tbk (ANTAM), accused of manipulating import codes to evade import duties and income taxes, illustrates how external pressures and operational complexity can create opportunities for fraudulent behavior, potentially resulting in state losses amounting to trillions of rupiah ([Putra, 2023](#)). Such incidents affirm that fraud risk in the mining sector arises not only from individual misconduct but also from systemic vulnerabilities that compromise oversight and accountability. This reinforces the need for a deeper understanding of the driving factors behind fraud in this high-risk sector.

To aid in fraud detection and prevention, the American Institute of Certified Public Accountants (AICPA) has developed the Statement on Auditing Standards (SAS) No. 99,

which outlines three primary elements that contribute to financial statement fraud: pressure, opportunity, and rationalization. In this framework, external pressure stemming from shareholder demands, creditor expectations, or regulatory requirements can compel management to manipulate financial reports to maintain a favorable financial appearance. Inadequate internal oversight—or ineffective monitoring—creates significant opportunities for individuals within the organization to commit fraud undetected. Furthermore, a change in auditor is often regarded as a red flag, potentially signaling an attempt by management to avoid the discovery of ongoing fraudulent activities. While prior studies have explored these three factors, their findings remain inconsistent. For example, Lestari & Jayanti (2021) found that external pressure significantly influences fraud, whereas Larasati et al. (2020) reported otherwise. Similar discrepancies are evident in research on ineffective monitoring and auditor changes. These inconsistencies suggest a need for further investigation using more specific contexts and methodological approaches—particularly in high-risk sectors such as mining in Indonesia.

Despite the growing body of literature on the antecedents of financial statement fraud, most studies adopt a general cross-sectoral focus or concentrate on the banking and public sectors. There is a notable scarcity of research specifically examining fraud dynamics within Indonesia's mining industry, despite its distinctive operational and financial attributes. The lack of sectoral context in previous studies represents a critical limitation that may obscure a true understanding of fraud determinants. Moreover, the divergent findings across existing studies indicate that the roles of external pressure, ineffective monitoring, and auditor change are not yet fully understood within specific industrial contexts. For instance, Junus et al. (2025) found that management pressure, proxied by financial targets, significantly affects fraudulent financial reporting in Indonesia's mining sector, while opportunities related to the nature of the industry have a negative effect. Similarly, Wicaksono and Suryandari (2022) reported that external pressures positively influence fraudulent financial reports, whereas factors like ineffective monitoring and auditor changes do not have a significant impact. The absence of studies that examine the interaction of these factors simultaneously further contributes to a significant research gap. Given the urgency and impact of fraud in the mining sector, a more tailored and context-sensitive research approach is essential to generate accurate and actionable insights for policy and governance improvements.

In response to the empirical phenomena and literature gaps identified, this study aims to examine the effects of external pressure, ineffective monitoring, and auditor change on the occurrence of financial statement fraud among mining sub-sector companies in Indonesia. By focusing on firms listed on the Indonesia Stock Exchange, this study seeks to provide contextually relevant empirical evidence concerning the relationships among these variables and fraudulent financial reporting. The findings are expected to contribute to the advancement of forensic accounting and auditing literature while offering practical implications for strengthening internal controls and corporate governance frameworks. The study's outcomes can serve as a foundation for regulators, external auditors, and corporate management to better understand and anticipate the distinct drivers of fraud in the mining industry. Ultimately, this research aspires to support the development of a more transparent, accountable, and fraud-resilient financial reporting system—particularly within strategic sectors that are inherently vulnerable to fraudulent practices.

## 2. Literature review

### *2.1 Agency theory dan signaling theory*

In the context of managing publicly listed companies, particularly within the mining sector, the relationship between company owners (principals) and management (agents) is comprehensively explained by Agency Theory. Jensen and Meckling (1979) argue that agency conflicts arise due to divergent interests between shareholders and corporate managers. As agents, managers often tend to prioritize their personal interests, which may include manipulating financial statements—especially when under pressure from owners or investors to demonstrate favorable performance. This assertion is further reinforced by Eisenhardt (1989), who emphasized that the risk of opportunistic behavior increases significantly in situations where monitoring mechanisms are weak or ineffective. Recent studies have provided empirical support for these theoretical perspectives. For instance, Anggraeni et al. (2024) found that financial pressures and weak monitoring mechanisms significantly contribute to fraudulent financial reporting in Indonesian mining companies. Similarly, Arum et al. (2023) highlighted that external pressures during the COVID-19 pandemic increased the likelihood of financial statement fraud, particularly in companies with inadequate corporate governance structures. Riskiyadi (2024) employed machine learning models to detect financial statement fraud and identified that high debt levels and ownership structures are significant predictors, aligning with Agency Theory's emphasis on information asymmetry and conflicting interests. Furthermore, Hidayattullah et al. (2023) demonstrated that financial distress and management's opportunistic behaviors are key factors in fraudulent reporting, especially in sectors like mining where external financing is crucial.

Simultaneously, Signaling Theory (Ross, 1997) offers insight into how companies strategically use financial reporting as a means of signaling to the market. When firms face external pressure or declining performance, management may deliberately convey overly optimistic signals, even at the expense of manipulating financial data. In such situations, pressure from investors, creditors, and regulators may incentivize management to commit financial statement fraud in order to maintain market confidence and preserve corporate reputation. The studies by Arum et al. (2023) and Hidayattullah et al. (2023) support this notion, indicating that companies under significant external scrutiny are more likely to engage in financial misreporting to project stability and attract investment. Together, these theoretical frameworks provide a robust foundation for understanding the motivations behind managerial engagement in financial reporting fraud, particularly in the mining sector, which is highly sensitive to market perceptions and reliant on external financing.

### *2.2 The concept of financial statement fraud and detection models*

Financial statement fraud is defined as the deliberate manipulation of accounting information presented in financial reports to misrepresent the actual condition of a company (ACFE, 2019). In the mining sector—recognized as a capital-intensive industry—the risk of fraud is significantly heightened due to the high value of transactions, involvement of external parties, and the inherent complexity of financial reporting. To identify potential indicators of fraud, Dechow et al. (1996) developed the

F-Score model, which integrates two primary components: accrual quality and financial performance. Skousen et al. (2008) further emphasized that the F-Score model is particularly effective in detecting anomalies in financial statements that may signal fraudulent activities. Therefore, in this study, the F-Score is employed as a quantitative approach to objectively and measurably assess financial statement fraud. This method has been widely applied in various empirical investigations related to financial fraud, including those conducted in the energy sector and natural resource extraction industries.

### *2.3 Fraud triangle theory*

The Fraud Triangle is a theoretical framework developed by Cressey (1953) that seeks to explain the underlying causes of fraudulent behavior. It identifies three key components—pressure, opportunity, and rationalization—as the primary factors that drive individuals to commit fraud. These elements form the foundation of what is widely known as the Fraud Triangle, a concept that remains highly relevant in understanding fraudulent practices across various sectors, including the mining industry (Ardianingsih, 2021).

Empirical studies have consistently demonstrated the explanatory power of the Fraud Triangle in identifying the root causes of fraud. For instance, Sihombing and Rahardjo (2023) found that external pressure significantly influences fraudulent behavior, while Anggraeni (2024) highlighted that ineffective monitoring systems increase the likelihood of fraud by failing to adequately oversee management activities. The lack of effective oversight creates greater opportunities for the abuse of authority and manipulation of both operational and financial data.

Furthermore, Suryani (2019) showed that auditor turnover has a significant impact on the incidence of fraud. Frequent changes in auditors can weaken institutional knowledge and reduce the effectiveness of audit functions, thereby creating gaps that may be exploited for fraudulent purposes. In the mining sector, the high capital investment involved in projects and the intense pressure from stakeholders to meet short-term profitability targets exacerbate these risks. Such pressures often compel management to make unethical decisions, particularly in financial reporting, in an effort to preserve the company's image and satisfy investor expectations.

#### *a. Pressure*

Pressure is the first and most fundamental component of the Fraud Triangle, serving as a primary driving force that motivates individuals to commit fraud. This pressure may manifest in various forms and is generally categorized into two types: financial pressure and non-financial pressure. In financial contexts, pressure can stem from personal lifestyle demands or economic hardships faced by the individual. In organizational settings, pressure is often reflected in the form of external pressure, which refers to the intense burden placed on management to meet regulatory requirements or satisfy expectations from third parties, such as investors, creditors, or regulators (Setiawati & Baningrum, 2018). In this study, external pressure is operationalized using the Debt to Equity Ratio (DER), a commonly used financial metric that reflects a company's level of financial leverage. A high DER indicates greater financial obligations, which may compel management to manipulate financial statements in order to appear more financially stable and compliant with stakeholder expectations (Lestari & Jayanti, 2021).



$$\text{Debt to Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Total Equity}} \times 100\% \quad (1)$$

b. Opportunity

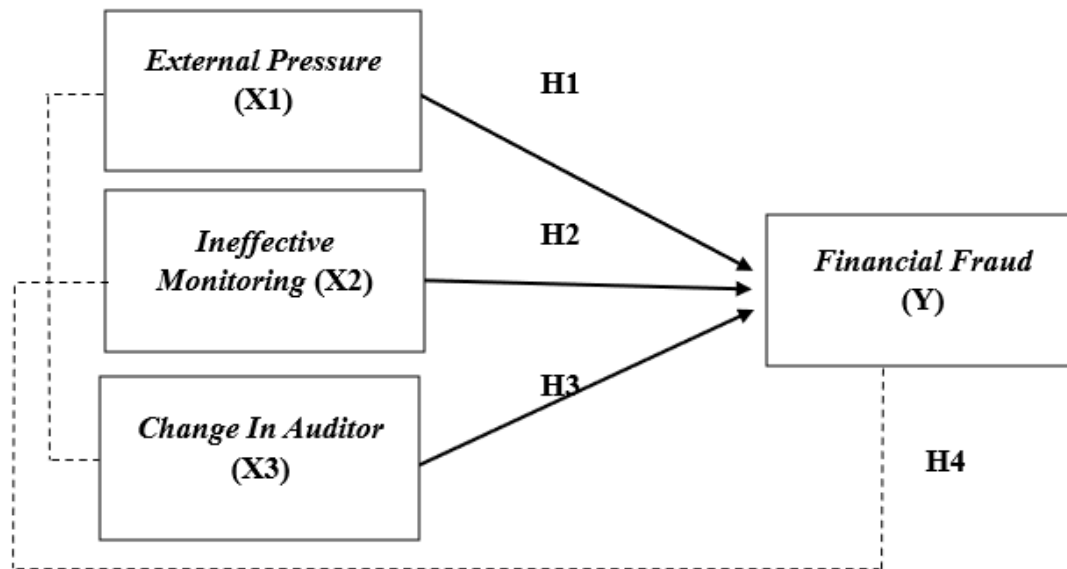
Opportunity represents the second critical element of the Fraud Triangle theory. It refers to the conditions or circumstances that enable fraudulent behavior to occur, particularly in the context of financial reporting. The broader the opportunity, the greater the likelihood that fraudulent activities will be perpetrated ([Wahyuni & Budiwitjaksono, 2017](#)). Unlike pressure, which serves as a motivating force, opportunity provides the means through which fraud can be executed, often arising from weaknesses or gaps in internal controls, oversight, or governance structures. In this study, the variable opportunity is proxied by ineffective monitoring, which reflects a weakened supervisory environment within the organization. Ineffective monitoring occurs when the company's internal oversight mechanisms fail to adequately supervise or assess management's performance and compliance. This research utilizes the proportion of independent commissioners—denoted as BDOUT (Board of Directors Out)—as a proxy for ineffective monitoring. A lower proportion of independent commissioners is generally considered indicative of weak corporate governance, thereby increasing the opportunity for fraudulent financial reporting ([Kurnia & Asyik, 2020](#)).

$$\text{BDOUT} = \frac{\text{Independent Board of Commissioner}}{\text{Total Board of Commissioner}} \quad (2)$$

c. Rationalization

Rationalization constitutes the third element of the Fraud Triangle and refers to the internal justification employed by individuals to legitimize fraudulent behavior. Although inherently subjective and difficult to quantify, rationalization plays a critical role in enabling individuals to morally disengage from the unethical nature of their actions, allowing them to perceive fraud as acceptable under certain circumstances. In this study, rationalization is proxied by auditor change (AUDCHANGE). This variable is measured using a dummy coding system, whereby a value of 1 is assigned if there is a change in the public accounting firm ( $\Delta\text{CPA}$ ) during the observation period of 2021–2023, and 0 if no change occurs during the same period. Auditor changes may indicate attempts by management to seek more lenient audit partners or to avoid scrutiny, thereby serving as a potential signal of rationalized fraudulent behavior ([Hammersley et al., 2021](#)).

Several previous studies have examined the factors contributing to financial statement fraud; however, the findings have been varied, depending on the sector and the methodology used. Lestari & Jayanti ([2021](#)) found that external pressure has a significant impact on the occurrence of fraud, whereas Larasati et al. ([2020](#)) found no meaningful relationship. Anggraeni ([2024](#)) demonstrated that ineffective monitoring contributes to an increased risk of fraud, but this was not supported by the study by Kurnia & Asyik ([2020](#)). Similarly, Rachmania ([2017](#)) identified a relationship between auditor change and fraud, while Larasati et al. ([2020](#)) found the opposite. Most of these studies have been conducted in sectors such as banking, manufacturing, or government, while research within the mining sector remains relatively limited. The mining industry, however, possesses unique characteristics, such as a high dependence on investors and commodity price fluctuations, which may intensify the pressure on management. Therefore, this study is crucial for addressing gaps in the literature by focusing on the specific context of mining companies in Indonesia. The conceptual framework is illustrated in Figure 2.



**Figure 2.** Conceptual framework

Based on the theoretical review and previous research findings, it can be concluded that financial statement fraud is influenced by a combination of external pressure, ineffective monitoring, and rationalization. Agency Theory and Signaling Theory provide a robust foundation for understanding managerial motivations in manipulating financial statements, particularly when faced with the expectations of capital owners and market pressures. The Fraud Triangle Theory further elucidates the mechanism through which fraud can occur, linking the three primary factors of pressure, opportunity, and rationalization.

The conceptual model in this study illustrates the relationships between external pressure, ineffective monitoring, and auditor change on financial statement fraud, which is measured using the F-Score. By adopting this approach, the study aims to make both theoretical and practical contributions to the prevention of fraud in the mining sector. The following hypotheses are proposed:

*Hypothesis 1:* External pressure has a significant impact on financial statement fraud.

*Hypothesis 2:* Ineffective monitoring has a significant impact on financial statement fraud.

*Hypothesis 3:* Auditor change has a significant impact on financial statement fraud.

*Hypothesis 4:* External pressure, ineffective monitoring, and auditor change collectively have a significant impact on financial statement fraud.

### 3. Research methods

This study adopts a quantitative approach with a causal associative design, aimed at examining the effects of external pressure, ineffective monitoring, and auditor change on financial statement fraud in mining subsector companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 period. To measure financial statement fraud, this study utilizes the F-Score model, which combines accrual quality and the financial performance of the companies. The study tests four hypotheses regarding the impact of external pressure, ineffective monitoring, and auditor change on financial statement

fraud, both individually and collectively. Prior research has highlighted that external pressure and ineffective monitoring significantly increase the likelihood of fraudulent financial reporting ([Anggraeni et al., 2024](#); [Lestari & Widiyati, 2023](#)). Moreover, the role of auditor change remains debated, with studies suggesting that frequent changes may disrupt the continuity and effectiveness of audit processes, potentially allowing fraudulent activities to go undetected ([Honesty et al., 2024](#)). The relationships between variables are analyzed using multiple regression to determine the influence of each independent variable on the dependent variable.

The population of this study consists of mining subsector companies listed on the IDX from 2021 to 2023. A purposive sampling method was used to select the sample, with the criteria being companies that have complete financial statements, are not in bankruptcy or liquidation status, and have data related to auditor changes and external audit reports during the research period. The use of USD in financial data presentation aims to standardize reports across companies, particularly for those engaged in international transactions, and to minimize the impact of fluctuations in the local currency exchange rate on the analytical results.

Data for this study were obtained through documentary analysis, which involved accessing annual reports of companies listed on the Indonesia Stock Exchange (IDX), external audit reports, and publications related to fraud in the mining sector. Additionally, the ACFE (Association of Certified Fraud Examiners) database was used to acquire data pertaining to fraud in this sector. The data analysis technique employed is multiple regression, after conducting normality and multicollinearity tests to ensure the analysis model is free from violations of classical assumptions.

The external pressure variable is measured using the Debt to Equity Ratio (DER), which reflects the financial pressure faced by the company. The ineffective monitoring variable is measured by the ratio of the number of independent commissioners to the total number of commissioners (BDOUT). Auditor change is measured using a dummy variable, with a value of 1 if there is a change in auditor and 0 if there is no change in auditor during the 2021–2023 period. With this approach, the study is expected to contribute to a better understanding of the factors influencing financial statement fraud in Indonesia's mining sector and provide a foundation for more effective fraud control policies.

## **4. Results and discussion**

In this study, several steps were undertaken to analyze the model and test the hypotheses. The first step involved model selection, using the Chow test to determine the most appropriate model between the Common Effect Model (CEM) and the Fixed Effect Model (FEM). The results from the Chow test (Table 1) showed a probability value of 0.0046, which is smaller than the significance level of 0.05, indicating that the Fixed Effect Model (FEM) should be accepted. The next step was the Hausman test, conducted to decide between the FEM and the Random Effect Model (REM). The results of the Hausman test (Table 1) yielded a probability value of 0.5275, which is greater than 0.05, suggesting that the Random Effect Model (REM) is more appropriate. Lastly, the Lagrange Multiplier (LM) test was used to compare the REM with the CEM. The results from the Breusch-Pagan test (Table 1) showed a probability value of 0.0071, which is smaller than 0.05, indicating that the REM is the more appropriate model in this case.



**Table 1.** Chow test results, hausman test results and lagrange multiplier test results

<b><i>Chow test results</i></b>			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.244674	(29,57)	0.0046
Cross-section Chi-square	68.557738	29	0.0000
<b><i>Hausman test results</i></b>			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.334533	3	0.5059
<b><i>Lagrange multiplier test results</i></b>			
Null (no rand. effect)	Cross-section	Period	Both
Breusch-Pagan	7.235659 (0.0071)	1.265131 (0.2607)	8.500789 (0.0035)
Honda	2.689918 (0.0036)	-1.124780 (0.8697)	1.106719 (0.1342)
King-Wu	2.689918 (0.0036)	-1.124780 (0.8697)	-0.404652 (0.6571)
GHM	--	--	7.235659 (0.0103)

Source: data processed by researchers (2024)

Following model selection, the classical assumption tests were conducted, including the multicollinearity test and the heteroscedasticity test. The multicollinearity test (Table 2) showed that the Variance Inflation Factor (VIF) values for all independent variables were below 10, indicating no significant multicollinearity among the variables. The heteroscedasticity test (Table 2) produced a probability value of 0.8437, which is greater than 0.05, suggesting that there is no heteroscedasticity in the model. This implies that the residual variance is consistent across the data.

**Table 2.** Multicollinearity and heteroscedasticity test results

<b><i>Multicollinearity Test Results</i></b>			
Variables	Coefficient	Uncentered	Centered
C	136.2298	2.920913	NA
X1	22.86036	1.677846	1.019436
X2	4.060789	1.071552	1.015720
X3	197.0834	2.488456	1.023032
<b><i>Heteroscedasticity Test Results</i></b>			
F-statistic	0.264965	Prob. F(3,86)	0.8505
Obs*R-squared	0.824248	Prob. Chi-Square(3)	0.8437
Scaled explained SS	1.699955	Prob. Chi-Square(3)	0.6369

Source: data processed by researchers (2024)

**Table 3.** Hypothesis Test (partial and simultaneous) and determinant coefficient

<b>Partial test</b>				
Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	8.049070	11.67175	0.689620	0.4923
X1	-3.258209	4.781251	-0.681455	0.4974
X2	-0.757654	2.015140	-0.375981	0.7079
X3	3.727202	14.03864	0.265496	0.7913
<b>F Test</b>		Results		
F-statistic	0.197269			
Prob(F-statistic)	0.897989			
<b>Determinant Coefficient</b>		Results		
R-squared	0.006834			
Adjusted R-squared	-0.027811			

Source: data processed by researchers (2024)

The hypothesis test (Table 3) indicated that the variables external pressure, ineffective monitoring, and change in auditor did not have a statistically significant effect on Financial Fraud (with p-values > 0.05). This result suggests that other factors, not included in the model, might be influencing financial fraud, or that the limited data available may have affected the outcomes. The panel data regression equation using the REM model was as follows:

$$\text{Financial Fraud} = 8.049070 - 3.258209 \text{ External Pressure} - 0.757654 \text{ Ineffective Monitoring} + 3.727202 \text{ Change in Auditor}$$

Based on this equation, the coefficient for external pressure is negative (-3.258209), suggesting that an increase in external pressure decreases financial fraud. The coefficient for ineffective monitoring is also negative (-0.757654), indicating that ineffective monitoring reduces financial fraud. However, the coefficient for change in auditor is positive (3.727202), meaning that a change in auditor is associated with an increase in financial fraud. The F-test (Table 3) results showed that the variables did not jointly affect financial fraud, as indicated by the p-value of 0.897989, which is greater than 0.05. Finally, the determinant coefficient test (Table 3) showed a negative adjusted R-squared value of -0.027811, suggesting that the model does not adequately explain the variability in financial fraud, indicating the need for further research with additional variables or a different model.

## 5. Discussion

This study reveals that there is no significant effect of external pressure on financial statement fraud. This finding suggests that external pressures faced by companies—such as obligations to creditors—are not necessarily the primary drivers of financial statement manipulation. Companies demonstrate the capacity to meet their obligations using capital or operational profits, indicating that external pressures can be effectively managed through sound financial and asset management. Moreover, companies that adhere to the principles of good corporate governance tend to maintain the integrity of their financial reporting even under considerable external pressure. These findings are consistent with

previous research by Kusumosari (2020), Ulfah et al. (2017), Muchran et al. (2023), and Lestari & Jayanti (2021), which concluded that external pressure does not significantly influence financial statement fraud.

Empirical support from international studies further strengthens these results. For instance, Barros & Sarmento (2022) found that corporate reputation and a commitment to transparency can mitigate the influence of external pressure on earnings management. Similarly, Norlia et al. (2021) and Haji & Hossain (2022) argued that stakeholder pressure does not necessarily lead to financial manipulation when companies have strong accountability systems in place.

Furthermore, ineffective monitoring—proxied by the proportion of independent commissioners—was also found to have no significant effect on financial statement fraud. This indicates that the presence of independent commissioners, as mandated by the Indonesian Financial Services Authority (OJK), which requires at least 30% of the board of commissioners to be independent, is generally effective in ensuring objective oversight. In this context, firms appear to comply with these regulations substantively, thereby supporting sound corporate governance practices. These findings are in line with those of Suryani (2019), Azizah et al. (2022), and Aulia & Afiah (2020), who similarly found that ineffective monitoring does not automatically lead to fraud.

Internationally, Al-Matari & Al-Swidi (2021) also emphasized that the effectiveness of board oversight depends on contextual factors such as organizational culture, ownership structure, and compensation systems. Moreover, studies by Obaidat et al. (2023) and Shiri et al. (2022) found that monitoring becomes more effective in deterring financial fraud when accompanied by an ethical climate and robust internal control systems.

As for the variable change in auditor, the analysis also found no significant effect on financial statement fraud. Auditor rotation in public companies is generally a form of compliance with regulatory requirements, such as Government Regulation No. 20 of 2015, which sets limits on the term of auditor engagements. Consequently, changes in auditors reflect efforts to maintain continuous objectivity in the audit process rather than attempts to conceal fraudulent behavior. This finding aligns with the studies of Rahman et al. (2021), Septriani & Handayani (2018), and Aulia & Afiah (2020), which found no significant relationship between auditor change and financial fraud.

Similarly, international research by Rashid et al. (2021) and Irfan & Mirza (2022) noted that while auditor rotation may enhance audit quality, it does not necessarily correlate with a reduction in fraudulent financial reporting. Further, Suhardi et al. (2023) emphasized the importance of compliance with professional auditing standards in maintaining the credibility of financial statements.

When the three variables—external pressure, ineffective monitoring, and change in auditor—were tested simultaneously, the analysis also found no significant effect on financial statement fraud. This suggests that companies have sufficiently robust internal mechanisms to uphold financial transparency, despite facing various pressures, whether from external environments, internal oversight structures, or auditor changes. Factors such as financial stability, sound corporate governance, and effective independent oversight contribute to minimizing the risk of fraud.

In the mining sector in particular, companies generally operate within a highly regulated environment and under intense public scrutiny, which fosters adherence to sound financial reporting principles. These findings are consistent with Pramurza (2024) and are further corroborated by international studies such as Khlif et al. (2022) and

Mgbame & Eyenubo (2023), who underscore the importance of strong oversight structures and regulatory pressure in deterring fraud within the extractive industries.

## 6. Conclusion

This study provides a significant contribution to the understanding of financial statement fraud dynamics within the mining sub-sector, particularly through the examination of three key factors: external pressure, ineffective monitoring, and auditor changes. The findings reveal that these three variables, both individually and simultaneously, do not have a significant effect on the occurrence of financial statement fraud. The insignificance of external pressure suggests that mining companies generally possess sufficient financial capacity, enabling them to meet debt obligations without resorting to financial misstatement. Moreover, these companies often rely on alternative sources of financing beyond debt, thereby reducing the potential impact of external financial pressure as a driver of fraud.

Similarly, ineffective monitoring does not appear to influence fraudulent financial reporting, likely due to widespread compliance with the Financial Services Authority (OJK) regulations, which require that independent commissioners constitute at least 30% of the board of commissioners. This governance structure enhances internal oversight and mitigates the risk of misreporting. In addition, auditor changes were also found to have no effect on fraudulent practices, indicating that such rotations are primarily conducted in compliance with Government Regulation No. 20 of 2015 concerning Public Accountant Practices, rather than as a strategic effort to conceal fraud. Auditor changes take place within a regulated framework and do not compromise the quality or integrity of financial reporting.

Taken together, the results of this study reinforce the conclusion that the combination of external pressure, ineffective monitoring, and auditor change does not collectively influence the incidence of financial statement fraud. This underscores the importance of good corporate governance, regulatory compliance, and financial stability as critical elements in preventing fraud within Indonesia's mining sector.

## 7. Theoretical and practical implications

The results of this study have significant theoretical implications for the development of Fraud Triangle Theory and Agency Theory within the context of the mining industry. The finding that external pressure, ineffective monitoring, and auditor changes do not significantly affect financial statement fraud suggests that contextual factors such as regulatory compliance, the financial health of the company, and good corporate governance can mitigate the risk of fraud, even when the classical elements of these theories are present. This finding broadens the perspective that fraud is not solely triggered by pressure and weak oversight, but also depends on institutional factors, organizational ethics, and the effectiveness of governance policy implementation. Therefore, this study reinforces the importance of considering contextual and institutional variables in studies of fraud in both the public and private sectors.

From a practical perspective, these findings provide valuable insights for management, regulators, and auditors. For company management, the results highlight the importance of maintaining compliance with governance principles and financial transparency as the primary strategy for fraud prevention, even when facing external

pressures. For regulators such as the Financial Services Authority (OJK), the results indicate that policies such as the requirement for independent commissioners and auditor rotation rules are effectively implemented, but should be supported by ongoing oversight. Meanwhile, for auditors and investors, it is crucial not to automatically assume that financial pressure or auditor changes are primary indicators of fraud, as the context of regulatory compliance and financial stability also plays a significant role in maintaining financial reporting integrity. By understanding these findings, stakeholders can take more measured, evidence-based steps in detecting and preventing financial fraud.

## 8. Limitations and directions for future research

This study has several limitations that should be acknowledged. First, the research focuses exclusively on a single subsector within the mining industry, which may limit the generalizability of the findings to other industries. Future studies could consider broadening the scope by including multiple industries or regions to enhance the external validity of the results. Second, this research utilizes a limited set of independent variables—external pressure, ineffective monitoring, and change in auditor—which may not capture all the factors influencing financial fraud. Future research should examine additional variables such as the quality of internal controls, corporate culture, or management incentives to provide a more comprehensive understanding of the determinants of financial fraud.

Furthermore, the reliance on cross-sectional data in this study may limit its ability to capture the dynamic nature of financial fraud over time. Longitudinal studies could offer better insights into how changes in external pressures, monitoring mechanisms, or auditor rotations influence financial fraud over extended periods. Another area for future exploration is the examination of contextual factors, such as the level of enforcement of financial regulations, organizational culture, and the role of whistleblowers, which could significantly impact the occurrence of financial fraud. Additionally, future research could explore alternative methodologies, such as qualitative case studies or mixed-method approaches, to gain deeper insights into the complex factors contributing to financial fraud in the mining industry.

## 9. References

- ACFE Global. (2020). *Report to the Nations on Occupational Fraud and Abuse: 2020 Global Fraud Study*. Association of Certified Fraud Examiners, Inc., 1–88. <https://acfe-public.s3-us-west-2.amazonaws.com/2020-Report-to-the-Nations.pdf>
- ACFE. (2019). *Survei Fraud Indonesia 2019*. Indonesia Chapter, 53(9), 1–76. <https://acfe-indonesia.or.id/survei-fraud-indonesia/>
- Al-Matari, Y. A., & Al-Swidi, A. (2021). The effect of board of directors' characteristics on earnings management: Evidence from Gulf Cooperation Council countries. *Journal of Corporate Governance Studies*, 1(1), 1–15. <https://doi.org/10.1108/JCGS-06-2021-0004>
- Anggraeni, D., Sitompul, G. L., Hergani, A., & Ismail, T. (2024). Determinants of fraudulent financial statements through the fraud hexagon theory perspective: The empirical study of mining sector companies listed on the Indonesia Stock Exchange 2018–2022. *Futurity Economics & Law*, 4(4), 137–153. <https://doi.org/10.57125/FEL.2024.12.25.08>
- Ardiansih, A. (2021). *Audit Laporan Keuangan* (B. F. Sri, Ed.). Bumi Aksara.



- Arum, E. D. P., Wijaya, R., Wahyudi, I., & Brilliant, A. B. (2023). Corporate governance and financial statement fraud during the COVID-19: Study of companies under special monitoring in Indonesia. *Journal of Risk and Financial Management*, 16(7), 318. <https://doi.org/10.3390/jrfm16070318>
- Aulia, V., & Afiah, E. T. (2020). Financial stability, financial targets, effective monitoring, rationalization, and financial statement fraud. *Jurnal Revenue: Jurnal Ilmiah Akuntansi*, 1(1), 90–100. <https://doi.org/10.46306/rev.v1i1.9>
- Azizah, W., Murni, Y., & Utam, R. R. (2022). Pengaruh financial target, ineffective monitoring, pergantian auditor, dan perubahan direksi terhadap kecurangan laporan keuangan. *Widyakala: Journal of Pembangunan Jaya University*, 9(2), 99. <https://doi.org/10.36262/widyakala.v9i2.572>
- Barros, C. P., & Sarmento, E. M. (2022). Corporate governance and earnings management in listed firms: Empirical evidence from Portugal. *Journal of Applied Accounting Research*, 23(1), 124–142. <https://doi.org/10.1108/JAAR-01-2021-0008>
- Cressey, D. R. (1953). *Other people's money: A study of the social psychology of embezzlement*. Free Press.
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, 13(1), 1–36. <https://doi.org/10.1111/j.1911-3846.1996.tb00489.x>
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57–74.
- Haji, A. A., & Hossain, D. M. (2022). Political connections, audit quality and firm performance: Evidence from the resource sector in emerging markets. *Resources Policy*, 75, 102515. <https://doi.org/10.1016/j.resourpol.2021.102515>
- Hammersley, J. S., Myers, L. A., & Shakespeare, C. (2021). Market reaction to auditor changes: The influence of client and auditor incentives. *The Accounting Review*, 96(4), 281–308. <https://doi.org/10.2308/TAR-2019-0310>
- Hidayattullah, S., Surjandari, I., & Laoh, E. (2023). Financial statement fraud detection in Indonesia listed companies using machine learning based on meta-heuristic optimization. In *Proceedings of the International Conference on Industrial Engineering and Operations Management*. <https://scholar.ui.ac.id/en/publications/financial-statement-fraud-detection-in-indonesia-listed-companies>
- Honesty, H. N., Honesty, F. F., & Setiawan, M. A. (2024). Financial statement fraud analysis: Financial stability, external pressure and auditing quality. *Jurnal Riset Akuntansi dan Bisnis Airlangga*, 9(1), 45–58. <https://doi.org/10.20473/jraba.v9i1.57261>
- Irfan, M., & Mirza, S. S. (2022). Audit firm rotation, audit quality and earnings management: Evidence from Pakistan. *Journal of Accounting in Emerging Economies*, 12(1), 91–111. <https://doi.org/10.1108/JAEE-06-2020-0145>
- Jensen, M. C., & Meckling, W. H. (1979). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Handbook on the History of Economic Analysis*, 3, 553–562. <https://doi.org/10.4337/9781839109621.00008>
- Junus, A., Sundari, S., & Azzahra, S. Z. (2025). Fraudulent financial reporting and firm value: An empirical analysis from the fraud hexagon perspective. *Investment*

- Management and Financial Innovations*, 22(1), 339–350. [https://doi.org/10.21511/imfi.22\(1\).2025.26](https://doi.org/10.21511/imfi.22(1).2025.26)
- Khlif, H., Guidara, A., & Souissi, M. (2022). Do audit committee characteristics mitigate earnings management? Evidence from MENA countries. *Journal of International Accounting Research*, 21(2), 35–54. <https://doi.org/10.2308/JIAR-19-085>
- Kurnia, N., & Asyik, N. F. (2020). Analisis fraud triangle sebagai pendeteksi kecurangan laporan keuangan pada perusahaan yang terdaftar di bursa. *Jurnal Ilmu dan Riset Akuntansi*, 9(2460–0585), 1–22.
- Kusumosari, L. (2020). Melalui fraud hexagon pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia tahun 2014-2018. *Journal of Akuntansi*, 1–204.
- Larasati, T., Wijayanti, A., & Maulana, A. (2020). Keahlian keuangan komite audit dalam memoderasi pengaruh fraud triangle terhadap kecurangan laporan keuangan. *Jurnal Syntax Transformation*, 1(8), 541–553. <https://doi.org/10.46799/jst.v1i8.128>
- Lestari, U. P., & Jayanti, F. D. (2021). Pendeteksian kecurangan laporan keuangan dengan analisis fraud pentagon. *Jurnal Proaksi*, 8(1), 38–49. <https://doi.org/10.32534/jpk.v8i1.1491>
- Mgbame, C. O., & Eyenubo, S. A. (2023). Corporate governance mechanisms and financial statement fraud in extractive firms: Evidence from sub-Saharan Africa. *Journal of African Business*, 24(1), 1–22. <https://doi.org/10.1080/15228916.2022.2029923>
- Muchran, M., Irawati, F., & Razak, L. A. (2023). The effect of pressure and opportunity in detecting financial statement frauds in consumer goods industry companies. *Asian Journal of Accounting Research*, 6(01), 53–73. <https://doi.org/10.35129/ajar.v6i01.398>
- Norlia, M., Hussain, M., & Yazdifar, H. (2021). External pressure, corporate governance and earnings management: Empirical evidence from an emerging economy. *Journal of Financial Crime*, 28(2), 420–437. <https://doi.org/10.1108/JFC-05-2020-0075>
- Obaidat, A. N., Alshaer, I. M., & Hussein, A. (2023). Board diversity, audit committee effectiveness and earnings management: Evidence from Jordan. *Journal of Financial Reporting and Accounting*, 21(3), 488–510. <https://doi.org/10.1108/JFRA-11-2021-0303>
- Pramurza, D. (2024). Pengaruh external pressure, financial target, ineffective monitoring, dan rationalization terhadap financial statement fraud pada industri food and beverages yang terdaftar di BEI tahun 2020-2022. *Jurnal Ilmiah Akuntansi*, 5(2), 627–642. <https://doi.org/10.30640/akuntansi45.v5i2.3385>
- Putra, A., & Mildawati, T. (2023). Pendeteksian kecurangan laporan keuangan menggunakan fraud triangle (Studi kasus pada perusahaan industri yang terdaftar di Bursa Efek Indonesia). *Jurnal Ilmu Dan Riset Akuntansi*, 12(1), 1–19.
- Rachmania, A. (2017). Analisis pengaruh fraud triangle terhadap kecurangan laporan keuangan pada perusahaan makanan dan minuman yang terdaftar di Bursa Efek Indonesia periode 2013-2015. *Jurnal Online Mahasiswa (JOM) Bidang Akuntansi*, 4(2), 1–19.
- Rahman, A., Deliana, D., & Gopas, D. (2021). Pendeteksian kecurangan laporan keuangan dengan analisis fraud triangle pada perusahaan perbankan yang terdaftar di Bursa Efek Indonesia. *Kajian Akuntansi*, 22(1), 9–19. <https://doi.org/10.29313/ka.v22i1.7787>

- Rashid, K., Hassan, M. K., & Mahmud, M. (2021). The impact of audit quality and auditor rotation on financial reporting quality: Evidence from an emerging economy. *Asian Review of Accounting*, 29(2), 237–255. <https://doi.org/10.1108/ARA-03-2020-0056>
- Riskiyadi, M. (2024). Detecting future financial statement fraud using a machine learning model in Indonesia: A comparative study. *Asian Review of Accounting*, 32(3), 394–422. <https://doi.org/10.1108/ARA-02-2023-0062>
- Ross, S. A. (1997). The determination of financial structure: The incentive-signalling approach. *CFA Digest*, 27(1), 5–7. <https://doi.org/10.2469/dig.v27.n1.2>
- Septriani, Y., & Handayani, D. (2018). Mendeteksi kecurangan laporan keuangan dengan analisis fraud pentagon. *Jurnal Akuntansi*, 11(1), 38–49. <https://doi.org/10.32534/jpk.v8i1.1491>
- Setiawati, E., & Baningrum, R. M. (2018). Deteksi fraudulent financial reporting menggunakan analisis fraud pentagon: Studi kasus pada perusahaan manufaktur yang listed di BEI tahun 2014-2016. *Riset Akuntansi dan Keuangan Indonesia*, 3(2), 91–106. <https://doi.org/10.23917/reaksi.v3i2.6645>
- Shiri, M. M., Ahmadzadeh, R., & Yazdani, S. (2022). Corporate governance and financial reporting quality: Evidence from Iran. *International Journal of Accounting & Information Management*, 30(4), 654–674. <https://doi.org/10.1108/IJAIM-10-2021-0207>
- Sihombing, K. S., & Rahardjo, S. N. (2023). Analisis fraud diamond dalam mendeteksi financial statement fraud: Studi empiris pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia (BEI) tahun 2010-2012. *International Journal of Sciences*, 3(4), 1–12.
- Skousen, C. J., Smith, K. R., & Wright, C. J. (2008). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. 99. *Journal of Forensic Accounting*, 99, 53–81.
- Suhardi, A., Purwanti, E., & Yulianti, Y. (2023). Audit rotation, auditor reputation, and audit quality: An Indonesian evidence. *Asian Journal of Business Ethics*, 12(1), 55–73. <https://doi.org/10.1007/s13520-023-00152-3>
- Suryani, I. C. (2019). Analisis fraud diamond dalam mendeteksi financial statement fraud: Studi empiris pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia (BEI) tahun 2016-2018. *Prosiding Seminar Nasional Cendekiawan*, 2. <https://doi.org/10.25105/semnas.v0i0.5780>
- Ulfah, M., Nuraina, E., & Wijaya, A. L. (2017). Pengaruh fraud pentagon dalam mendeteksi fraudulent financial reporting (Studi empiris pada perbankan di Indonesia yang terdaftar di BEI). *The 9th FIPA: Forum Ilmiah Pendidikan Akuntansi*, 5(1), 399–418.
- Wahyuni, W., & Budiwitjaksono, G. S. (2017). Fraud triangle sebagai pendeteksi kecurangan laporan keuangan. *Jurnal Akuntansi*, 21(1), 47. <https://doi.org/10.24912/ja.v21i1.133>
- Wicaksono, A., & Suryandari, D. (2022). The analysis of fraudulent financial reports through fraud hexagon on public mining companies. *Accounting Analysis Journal*, 10(3), 220–228. <https://doi.org/10.15294/aaj.v10i3.54999>