

## THE INFLUENCE OF ACCOUNTING AND AUDITING EXPERTISE IN THE AUDIT COMMITTEE ON THE RISK OF FINANCIAL STATEMENT FRAUD: A STUDY ON MINING AND ENERGY SECTOR COMPANIES LISTED ON THE IDX IN 2020-2024

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### Abstract:

Finding out how energy and mining companies listed on the Indonesia Stock Exchange fare in terms of audit committee accounting, auditing expertise, and financial statement fraud from 2020 to 2024 is the main goal of this study. You can tell whether an audit committee is competent if its members are certified professionals or if they have extensive knowledge of financial issues. When evaluating a company's financial statements for indicators of fraud, the Beneish M-Score is a useful tool. This research makes use of quantitative methods and secondary data collected from the company's books and yearly reports. To carry out the sampling procedure, the purposive sample strategy was utilized, using preset criteria. With the help of IBM SPSS software version 29, the data analysis method made use of multiple linear regression. According to the study's findings, having competent auditors and accountants on the audit committee greatly reduces the possibility of financial reporting fraud. In addition, debt and business size have a favorable effect on M-Score, whereas profitability has a considerably negative effect. All of the model's variables were considerably impacted simultaneously, as shown by a determination coefficient value ( $R^2$ ) of 0.918. Findings indicate that energy and mining companies may reduce their risk of financial reporting fraud by establishing an audit committee with sufficient accounting and auditing expertise.

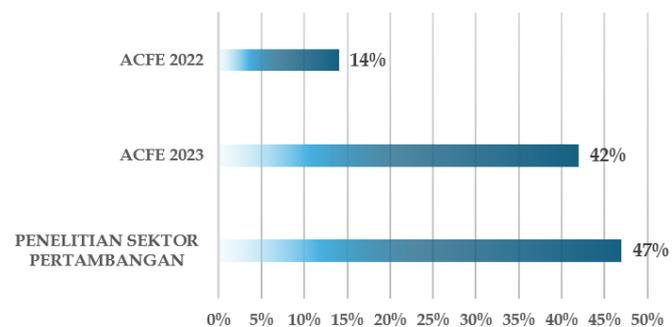
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## INTRODUCTION

Financial statements are the main means for companies to convey information about financial position, performance, and changes in economic conditions to stakeholders, such as investors, creditors, regulators, and the general public. External parties can use financial statements to assess the effectiveness of resource management and assess the prospects for the sustainability of a company's business. Financial statements serve as a means to communicate about finances and inform management about how they manage capital owners' funds. According to Razali & Arshad (2020) The governance structure of a company greatly affects the quality of financial statements, especially how well the audit committee and board of commissioners work, which have a strategic responsibility to guarantee the credibility and transparency of the information presented. Maintaining the credibility and integrity of a company's financial statements is essential to implementing good management principles, such as accountability, independence, and openness.



### STATISTIK FRAUD



Source: ACFE data and Journal processed by the author (2025)

**Figure 1.** Statistics Fraud

Based on the source of image 1. explained that the issue of financial reporting fraud is a major spotlight in the corporate world, especially in strategic sectors such as mining and energy. The complexity of operational activities and the number of transactions that occur in this industry allow the manipulation of financial statements that have the potential to harm various parties. A survey conducted by the Association of Certified Fraud Examiners (ACFE) in Indonesia in 2022, ACFE Report to the Nations (ACFE, 2022) It also indicates that 14% of all global fraud cases fall into the category of financial statement fraud, with the highest average loss impact compared to other types of fraud. In Indonesia, the mining sector is very vulnerable to fraudulent practices in financial statements. The high complexity of operations, the magnitude of transaction value, and the asymmetry of information between management and stakeholders make this sector more vulnerable to potential manipulation of financial statements. This condition is in line with research findings. ACFE Indonesia (2023) 42% of fraud cases in Indonesia occur in the mining and energy sectors. The findings reinforce the findings of empirical research by Rahmawati & Sari (2024). It found that about 47% of mining companies showed indications of manipulation of financial statements. This phenomenon illustrates that fraudulent financial reporting in the mining and energy sectors is a real threat to the transparency of the capital market and also the governance of national resources (Anggraini & Suryani, 2021). Therefore, this research is important to examine more deeply how accounting and auditing expertise in the audit committee can be a controlling mechanism in preventing financial statement fraud in the mining and energy sectors that have a strategic impact in Indonesia.

The phenomenon of financial statement fraud in the mining and energy sectors can be explained through the agency theory approach and the Fraud Hexagon Theory. The theory of agency put forward by Jensen & Meckling (1976) explains that the relationship between shareholders as principals and management as portent agents creates a conflict of interest due to information asymmetry. This condition encourages management to act opportunistically, including presenting financial statements that are not fully in accordance with the company's conditions. The high complexity of operations, reliance on accounting estimates, and volatility in commodity prices in the mining and energy sectors further increase the risk of financial statement fraud if not supported by effective supervisory mechanisms. From the perspective of agency theory, the audit committee serves as a control mechanism aimed at reducing conflicts of interest through independent oversight of the financial reporting process, the effectiveness of which is highly dependent on the Accounting and Auditing Skills members.

Furthermore, Fraud Hexagon Theory Vousinas (2019) explained that fraud is influenced by six main elements, where the elements of opportunity and capability are the dominant factors in the context of financial statement fraud. The competence of the audit committee is able to suppress these two elements through strengthening the internal control system and improving the quality of supervision. Thus, the use of agency theory and Fraud Hexagon Theory provides a strong conceptual foundation to analyze the influence of audit committee competence on financial statement fraud in companies in the mining and energy sectors in Indonesia.

Within the framework of Good Corporate Governance, the audit committee functions as an independent supervisor that connects the interests of management and shareholders. The audit committee's task is to ensure that financial statements are prepared in accordance with accounting standards and that there are no material irregularities. However, to be able to function effectively, the audit committee needs to have members who have expertise, especially in the principles of accounting, auditing, and internal control. According to research conducted by Kusumawardani (2024), audit committees whose members have an accounting background and have professional experience in the field of auditing can significantly reduce the risk of fraudulent financial reporting in public companies in Indonesia. This result is in line with global research findings that indicate that the financial expertise of audit committee members is a crucial aspect to maintain the integrity of financial statements. However, empirical studies such as Ruchiatna (2020) indicate that the accounting and auditing expertise of the audit committee members has a significant influence on the detection of indications of fraud in financial statements. The findings show that there is a dimension of accounting and auditing expertise that is an important element affecting the effectiveness of supervision of financial reporting, but still lacks empirical attention, especially in the mining and energy sectors, where there are many risks. Thus, in the context of this research on the mining and energy sectors, it becomes clear that the existence of an effective and experienced audit committee is one of the important factors in preventing the fraudulent practice of financial statements. This study will then examine how accounting and auditing expertise in audit committees in mining and energy companies can affect the risk of financial statement fraud, taking into account that the function of the audit committee itself must be equipped with adequate expertise attributes in the field of accounting and auditing.

In Indonesia, the energy and mining sectors are very strategic sectors, with a large contribution to the national Gross Domestic Product (GDP) and state revenues through taxes and royalties. However, this sector also has high risks related to financial reporting, which is due to operational complexity, dependence on global commodity prices, and the use of significant accounting estimates such as asset impairment, exploration costs and the depreciation of natural resource reserves. This condition creates an opportunity for profit management or even fraudulent reporting, especially when commodity prices fall drastically. Studies conducted by Rasid (2024) show that there is a positive influence of the audit committee's effectiveness on the integrity of financial statements in mining sector companies listed on the Indonesia Stock Exchange during the 2019-2022 period. It shows that oversight from the audit committee has an important role to play in preventing manipulative practices in this highly volatile mining and energy sector. Thus, it is understandable that the issue of accounting and auditing expertise in audit committees suppressing the practice of financial statement fraud still leaves a lot of room for research, especially in high-risk sectors such as mining and energy. The majority of previous studies in Indonesia only emphasized the independence aspect, the size of the audit committee, or the frequency of meetings as indicators of the effectiveness of the audit committee. Audit committee members who have high technical expertise have a great influence on the ability to detect fraud in financial statements. Therefore, the



study seeks to fill the gap by highlighting accounting and audit expertise in audit committees as the main variables tested, its influence on the possibility of financial statement fraud (Sianturi, 2024).

Based on the literature review and the results of recent empirical research, it is shown that the topic of the influence of accounting and auditing expertise in audit committees on financial statement fraud is still a research gap, especially in the context of the audit committee's competence in Indonesia's mining and energy sector. Most of the previous research has focused on the manufacturing and financial sectors, while the mining and energy sectors have further characteristics in different and more complex ways. This sector faces external pressures such as environmental dependence and high operational risks that can trigger the practice of manipulating financial statements. Research by Kusumosari and Rahardjo (2023) shows that the effectiveness of the audit committee has a negative effect on fraudulent financial reporting in property and real estate companies. Referring to the previous explanation, there is still an empirical research gap regarding the potential influence of audit committee capabilities on the level of fraud in financial reporting. It is especially true for Indonesia's energy and mining sectors, which have high risk characteristics and high transaction complexity. However, previous research has focused more on the influence of corporate governance on the overall quality of financial statements, and little has examined the technical and professional role of audit committee members in detecting and preventing the manipulation of financial statements, especially in highly vulnerable industries. As a result, this study examines how accounting and auditing expertise in the audit committee affects financial statement fraud in companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2024. The results of the research are expected to improve the audit committee's oversight function and help regulators and stakeholders improve the competence and independence of audit committees in the national strategic sector of mining and energy.

## METHODS

This study uses a quantitative approach with a positivistic paradigm framework, meaning that this research is based on numerical data and hypothesis testing systematically and statistically. According to Sugiyono (2018), quantitative research is used to examine a specific population or sample and test hypotheses that have been formulated through variables that can be measured numerically. In this study, measurements are carried out through numbers, which are then processed statistically as a calculation test tool and related to the problem to be studied to produce conclusions. This study aims to test the influence of variables. This study aims to examine the influence of audit committee competence on financial statement fraud. The type of data used is secondary data, namely data sourced from financial statements and annual reports of companies in the mining and energy sectors listed on the Indonesia Stock Exchange (IDX) for the period 2020-2024 (Muhajirin et al., 2024).

This research uses secondary data sourced from audited annual financial statements, annual reports, company publications, and the official website of the Indonesia Stock Exchange (IDX). The data collection technique is carried out through documentation methods and literature studies by downloading official documents, taking data on research variables such as audit committee competence and financial statement fraud, then compiling it in panel data format (company x years). The research population includes mining and energy sector companies listed on the IDX for the 2020-2024 period, with a total of companies per year before the selection process. Samples were determined using the purposive sampling method based on the following criteria:

1. Companies in the mining and energy sectors that are consistently listed on the Indonesia Stock Exchange (IDX) for the 2020-2024 period.



2. Publish audited financial statements and complete annual reports for each year in the research period.

**Table 1. Sampling**

Sample	Quantity	Total Observations
1. Companies in the mining and energy sectors that are consistently listed on the Indonesia Stock Exchange (IDX) for the 2020-2024 period.	91	455
2. The Company does not present a complete annual report, and does not meet the inclusion criteria, and the Company involved in the delisting or merger process during the observation period is excluded from the research sample.	(33)	(165)
<b>Total</b>	<b>58</b>	<b>290</b>

Financial statement fraud is an act of manipulation carried out by management through misrepresentation of materials, account engineering, or omission of important information so that financial statements do not reflect the actual condition. This study measured the risk of fraud using the Beneish M-Score developed by Messod D Beneish (1999). This model has been widely used in various academic studies because it has been proven to be able to detect accrual-based profit manipulation through eight financial ratios that detect the presence of fraud in financial statements between periods. According to Shirley (2022) The Beneish M- Score model is an effective model in identifying potential fraud in public financial statements.

The formula for the Beneish M-Score is as follows:

$$M - Score = -4.84 + (0.92 \times DSRI) + (0.528 \times GMI) + (0.404 \times AQI) + (0.892 \times SGI) + 0.115 \times DI) + (-0.172 \times SGAI) + (4.679 \times TATA) + (-0.327 \times LVGI)$$

Description:

DSRI = Days Sales Receivable Index GMI = Gross Margin Index

AQI = Asset Quality Index SGI = Sales Growth Index

DI = Depreciation Index

SGAI = SG&A Expenses Index LVGI = Leverage Index

TATA = Total Accruals to Total Assets

The independent variable in this study is the accounting and auditing expertise of the audit committee members. Independent variables are variables that affect or explain changes in dependent variables (Scott, 2020). Accounting and auditing expertise possessed by members of the audit committee in understanding the financial statement process, accounting standards, audit procedures, and internal control mechanisms. From the perspective of agency theory, the existence of committee members who have financial expertise can strengthen the supervisory function and reduce information asymmetry between management (agent) and shareholders (principal). Members of the audit committee who have accounting and auditing expertise are expected to be able to identify material misstatements, detect early indications of profit manipulation, and ensure that financial statements are presented reasonably in accordance with applicable accounting standards.

This study applies the perspective of a supervisory mechanism based on accounting expertise and audit committee members as used in previous research, Kusumosari & Nur Rahardjo (2023); Kusumawardani et al. (2024) Which explains that the expertise of the audit committee members



plays a significant role in mitigating financial statement fraud. In this study, accounting and audit expertise were proxied using two structural indicators, namely Audit Committee Financial Expertise (ACEXP) and Professional Certification Ratio (CERT\_RATIO). Both proxies focus on the structural and professional attributes of audit committee members, rather than on disclosure-based governance measures, in order to maintain construct clarity and avoid overlapping measurements with dependent variables (Purwiyanti & Herry Laksito, 2022).

**Table 2.** The operational definition and measurement formula of each proxy are presented

Variable	Definition	Measurement
Financial statement fraud	Financial statement fraud is an act of manipulation of financial statements that causes information not to represent the company's economic condition reasonably. In this study, it was measured using the Beneish M-Score Kusumosari & Nur Rahardjo, 2023).	$M - Score = -4.84 + (0.92 \times DSRI) + (0.528 \times GMI) + (0.404 \times AQI) + (0.892 \times SGI) + 0.115 \times DI + (-0.172 \times SGAI) + (4.679 \times TATA) + (-0.327 \times LVGI)$ <p>Criteria:  <math>M &gt; -2.22</math> = Indicated fraud  <math>M &lt; -2.22</math> = Not cheating</p>
Accounting and auditing expertise of members of the Audit Committee	The expertise of audit committee members is the ability or background of education and professional experience working in the field of accounting/finance and audit of the audit committee in a company. In this study, it was measured using ACEXP (Purwiyanti & Herry Laksito, 2022).	$ACEXP = \frac{\text{Number of audit committee members who have accounting, finance and auditing backgrounds}}{\text{Total number of audit committee members}}$
Professional certification expertise of audit committee members	The professional certification expertise of the audit committee members demonstrated through certification of ownership in accounting, auditing, or finance. In this study, it was measured using CERT_RATIO (Dewi et al., 2021).	$CERT\_RATIO = \frac{\text{Number of audit committee members with professional certification holdings}}{\text{Total number of audit committee members}}$
Profitability	Low profitability can increase financial pressure, prompting management to manipulate financial statements to maintain company performance. In this study, it was measured by the formula ROA (Siboro, 2025) and Squirt (2024).	$ROA = \frac{\text{Ne-t Profit}}{\text{Total Assets}}$

Leverage	A high level of leverage indicates a The company's dependence on external funds, which can increase this pressure potentially prompting management to manipulate Financial Statements Research Astuti (2024) and Ispriyahadi & Abdulah (2021).	$LEV = \frac{\text{Total Liability}}{\text{Total Assets}}$
Company Size-	The size of the Company reflects the operational scale and complexity of business activities. In this study, it was measured by SIZE Astuti (2024) and Azizah & Taqwa (2025)	$SIZE = \ln(\text{Total Assets})$

In addition to independent variables, this study also uses control variables to minimize potential bias in testing the influence of accounting and auditing expertise in the audit committee on the risk of financial statement fraud. The size of the company is proxied using the logarithm of total assets (Ln Total Assets), which describes the operational complexity of the company Astuti, (2024). Large-scale companies have complex reporting activities and pressures, so these variables need to be controlled so that the test results become more objective and reliable (Azizah & Taqwa, 2025).

Profitability is proxied by Return on Assets, which describes the company's ability to generate profits from its assets. The low level of profitability can put pressure on management, resulting in the potential for manipulation of financial statements (Siboro, 2025; Squirt, 2024). Then leverage is proxied through debt ratios that show the level of dependence of the company on external funding, thus potentially increasing the risk of financial statement fraud (2024) and Ispriyahadi & Abdulah (2021).

The data analysis technique in this study uses the help of IBM SPSS software version 29. The initial stage is carried out through descriptive statistical analysis to describe the characteristics of the research data (Scott, 2020). Before the hypothesis test, this study first conducted a classical assumption test consisting of a normality test, a multicollinearity test, a heteroscedasticity test, and an autocorrelation test to ensure that the regression model meets the BLUE (Best Linear Unbiased Estimator) assumption (Ghozali, 2021). Then followed by hypothesis testing to analyze The Influence of Accounting and audit expertise in the Audit Committee on the Risk of Financial Statement Fraud in Mining and Energy Sector Companies Listed on the Indonesia Stock Exchange for the 2020-2024 Period (Ghozali, 2021).

## RESULTS AND DISCUSSION

Descriptive statistical analysis was carried out on 290 observations to provide an overview of the characteristics and distribution of research data before further testing was carried out. This statistic presents the minimum, maximum, average, and standard deviation values of each variable, so that the level of distribution, stability, and variation of data between companies in the sample can be known.



**Table 3. Descriptive Statistical Analysis**

	N	Minimum	Maximum	Red	Std. Deviation
X1 (ACEXP)	290	-11032.05	753.23	0.7210	682.11647
X2 (CERT_RATIO)	290	.33	1.00	.8256	.22158
C1 (LONG)	290	-1.12	.62	.0520	.16221
C2 (LEV)	290	-39.33	35.33	1.1640	4.61373
C3 (SIZE)	290	25.66	32.76	29.0783	1.68261
Y (M SCORE)	290	-10.06	227.05	-1.2135	13.89270
<b>Valid N (listwise)</b>	<b>290</b>				

Based on the results of descriptive statistical analysis, the ACEXP variable (X1) has a minimum value of -11,032.05, a maximum of 753.23, an average of 0.7210, and a standard deviation of 682.11647. This data shows high variation and possible extreme values, indicating inhomogeneity between companies. The CERT\_RATIO variable (X2) has a minimum value of 0.33, a maximum of 1.00, an average of 0.8256, and a standard deviation of 0.22158, indicating a high and stable corporate certification ratio. The control variable ROA (C1) shows a minimum of -1.12, a maximum of 0.62, an average of 0.0520, and a standard deviation of 0.16221, indicating positive profitability, but there are companies that are losing money. The LEV variable (C2) recorded a minimum value of -39.33, a maximum of 35.33, an average of 1.1640, and a standard deviation of 4.61373, indicating a large diversity of capital structure and the possibility of negative equity.

The variable SIZE (C3) has a minimum of 25.66, a maximum of 32.76, an average of 29.0783, and a standard deviation of 1.68261, indicating the stability of the company's size. The dependent variable M-SCORE (Y) shows a minimum of -10.06, a maximum of 227.05, an average of -1.2135, and a standard deviation of 13.89270, indicating that companies generally do not manipulate financial statements, although there are strong indications in some companies. Overall, the results of descriptive statistical analysis showed that the CERT\_RATIO and SIZE variables had a relatively low and stable level of variation, while the ACEXP, LEV, and M-SCORE variables showed a high rate of data dissemination. Therefore, at the next stage of analysis, it is necessary to test classical assumptions to ensure that the regression model used meets the required statistical criteria.

**Classical Assumption Test, Normality Test.** The normality test in this study was carried out using the One-Sample Kolmogorov-Smirnov (K-S) Test on the residual unstandardized value. The test aims to find out if the residual data in a distributed regression model is normal, which is one of the classic assumptions in linear regression analysis.

**Table 4. Normality Test Results**

One-Sample Kolmogorov-Smirnov Test	Unstandardized Residual
N	290
Test Statistic	0,046
Asymp. Sig. (2-tailed)	0,200

Source: Data Processed by Researchers, 2026

Based on Table 4. X, an Asymp. Sig. (2-tailed) A value of 0.200 was obtained, which was greater than the set significance level ( $\alpha = 0.05$ ). These results show that there is no significant difference between the residual data distribution and the normal distribution. Thus, the null ( $H_0$ ) hypothesis that the normally distributed residual cannot be rejected. Therefore, it can be concluded that the regression model in this study has met the assumption of normality, so it is suitable for use in subsequent hypothesis testing.



**Multicollinearity Test.** The multicollinearity test was performed to find out if there is a high correlation between independent variables in the regression model. A good regression model should not experience multicollinearity. The test was carried out by looking at the Tolerance and Variance Inflation Factor (VIF) values. The criteria used were a Tolerance value of  $> 0.10$  and a VIF value of  $< 10$ , so the model was declared free of multicollinearity.

**Table 5.** Multicollinearity Test Results

Models	Collinearity Statistics	
	Tolerance	VIVID
X1 (ACEXP)	0.644	1.553
X2 (CERT_RATIO)	0.687	1.456
C1 (LONG)	0.850	1.176
C2 (LEV)	0.905	1.105
C3 (SIZE)	0.836	1.197

Source: Data Processed by Researchers, 2026

Based on the results of the multicollinearity test, all independent variables in the regression model showed a Tolerance value above 0.10 and a Variance Inflation Factor (VIF) value below 10, with a VIF range between 1.105 and 1.553. This value indicates that there is no high correlation between independent variables in the research model. Thus, the regression model is free from the symptoms of multicollinearity, so the regression coefficient estimation can be considered stable and suitable for further hypothesis testing.

**Heteroskedasticity Test.** The heteroscedasticity test was performed to find out whether in the regression model there was an unevenness of residual variance at each level of the independent variables. A good regression model should meet the assumption of homogeneity, i.e., constant residual variance. In this study, heteroscedasticity testing was carried out using the Glejser method by regressing the residual absolute value (ABS\_RES) on all independent variables.

**Table 6.** Heteroskedasticity Test Results

Variable	B	t	Sig.	Remarks
X1 (ACEXP)	-1.733	-0,424	0,672	No hemorrhoidity occurs
X2 (CERT_RATIO)	0,870	6,817	<0.001	Occurrence of hemorrhoidity
C1 (LONG)	-0,035	-0,191	0,849	No hemorrhoidity occurs
C2 (LEV)	0,003	0,519	0,604	No hemorrhoidity occurs
C3 (SIZE)	-0,036	-1,969	0,050	No hemorrhoidity occurs

Source: Data Processed by Researchers, 2026

Based on the results of the heteroscedasticity test using the Glejser method, it is known that the variable X1 (ACEXP) has a significance value of 0.672, C1 (ROA) of 0.849, C2 (LEV) of 0.604, and C3 (SIZE) of 0.050. These values are greater than or equal to a significance level of 0.05, so there are no symptoms of heteroscedasticity in these variables. However, the variable X2 (CERT\_RATIO) has a significance value of  $< 0.001$ , which is smaller than 0.05, thus indicating an indication of heteroscedasticity. Thus, it can be concluded that the regression model in this study is generally relatively free from heteroscedasticity, but there are indications of variance inequality in the CERT\_RATIO variable, so it is necessary to consider the use of adjustment methods such as robust standard error to ensure the accuracy of the estimation results (Heykal et al., 2024).

**Autocorrelation Test.** The autocorrelation test was carried out to find out whether in the regression model there was a correlation between the residual in a certain period and the residual in the previous period. A good regression model should not contain autocorrelations. In this study, autocorrelation testing was carried out using the Durbin-Watson test (DW Test).

**Table 7.** Autocorrelation Test Results

Models	R	R Square	Adjusted R-Square	Std. Error	Durbin-Watson
1	0,189	0,036	0,019	1,376,190	1,991

Source: Data Processed by Researchers, 2026

Based on the table above, the Durbin-Watson value is 1.991. In general, the decision-making criteria state that if the Durbin-Watson value is between 1.5 and 2.5, then the regression model is declared to be autocorrelated. Since the value of 1.991 is in that range and close to 2, it can be concluded that there are no symptoms of autocorrelation in this regression model.

**Hypothesis Test, T Test.** The t-test was performed to determine the influence of each independent variable on the dependent variable, namely M-SCORE. The test was carried out with a significance level ( $\alpha$ ) of 0.05. If the significance value  $< 0.05$ , then the independent variable partially has a significant effect on the dependent variable.

**Table 8.** T Test Results

Variable	B	t	Sig.	Remarks
X1 (ACEXP)	-0,020	-251,224	<0.001	Significant negative effects
X2 (CERT_RATIO)	-9,967	-40,124	<0.001	Significant negative effects
C1 (LONG)	-6,673	-18,579	<0.001	Significant negative effects
C2 (LEV)	0,120	10,054	<0.001	Has a significant positive effect
C3 (SIZE)	0,449	12,733	<0.001	Has a significant positive effect

Source: Data Processed by Researchers, 2026

Based on the results of the t-test, all independent variables had a significant value of  $< 0.05$ , so that they partially had a significant effect on the M-Score. Accounting and auditing expertise (ACEXP) had a significant negative effect with a coefficient of -0.020 ( $p < 0.001$ ), which indicates that the higher the expertise of the audit committee members, the lower the indication of financial statement fraud. Accounting and auditing skills were strengthened with a Certification Ratio (CERT\_RATIO), which also had a significant negative effect with a coefficient of -9.967 ( $p < 0.001$ ), indicating that a higher proportion of certifications is able to reduce the risk of financial statement fraud. Profitability (ROA) as a control variable also had a significant negative effect with a coefficient of -6.673 ( $p < 0.001$ ), which means that companies with better profit performance tend to have a lower risk of fraud.

On the other hand, Leverage (LEV) had a significant positive effect with a coefficient of 0.120 ( $p < 0.001$ ), indicating that the higher the company's debt level, the greater the risk of financial statement fraud. Company size (SIZE) also had a significant positive effect with a coefficient of 0.449 ( $p < 0.001$ ), which indicates that large-scale companies have a higher indication of the risk of financial statement fraud, possibly due to operational complexity. Overall, these findings confirm that accounting and auditing expertise in the audit committee plays an important role in reducing the risk of financial statement fraud, while financial pressure and company complexity actually increase the risk of financial statement fraud in companies in the mining and energy sector for the 2020-2024 period.



**Test F.** The F test was conducted to find out whether all independent variables in the research model simultaneously affected the dependent variable, namely M-SCORE. The test was carried out with a significance level ( $\alpha$ ) of 0.05. The model is declared significant if the significance value  $< 0.05$ .

**Table 9.** F Test Results

Models	F count	Sig.	Remarks
Regression	13033,032	$< 0.001$	Significant simultaneous effect

Source: Data Processed by Researchers, 2026

Based on the table above, the F value was obtained as 13033.032 with a significance value of  $< 0.001$ . Because the significance value is less than 0.05, it can be concluded that independent variables consisting of ACEXP, CERT\_RATIO, ROA, LEV, and SIZE simultaneously have a significant effect on financial statement fraud (M-SCORE). Thus, the regression model used in this study is feasible and can be used to explain the relationship between independent variables and dependent variables.

**Coefficient of Determination Test ( $R^2$ ).** The determination coefficient ( $R^2$ ) test aims to find out how much of an independent variable is capable of explaining the variation of the dependent variables in a regression model. The results of the determination coefficient test can be seen in the following table:

**Table 10.** Determination Coefficient ( $R^2$ ) Test Results

Models	R	R Square	Adjusted R-Square	Std. Error
1	0,958	0,918	0,917	210,788

Source: Data Processed by Researchers, 2026

Based on the results of the determination coefficient test, an R Square value of 0.918 was obtained, which means that 91.8% of the variation in the M-SCORE variable can be explained by the variables ACEXP, CERT\_RATIO, ROA, LEV, and SIZE in this research model. At the same time, the remaining 8.2% is explained by other factors outside the model. The Adjusted R Square value of 0.917 indicates that after adjusting for the number of independent variables, the model remains to have very strong explanatory capabilities. Thus, it can be concluded that the regression model has a very good level of accuracy in explaining financial statement fraud.

The findings of this research can be strongly explained through Agency Theory, which can suppress conflicts of interest between management (agent) and shareholders (principal) due to information asymmetry. In mining and energy sector companies listed on the Indonesia Stock Exchange, transaction complexity, high accounting estimates, and fluctuations in commodity prices magnify the potential for opportunistic management actions. Accounting and auditing expertise in the audit committee has proven to play a role as an effective monitoring mechanism to reduce the risk of financial statement fraud. The results of this study are in line with research by Kusumosari and Rahardjo (2023), which states that the effectiveness of the audit committee has a significant negative effect on financial statement fraud.

The results of this study also explain from the perspective of Fraud Hexagon Theory Vousinas (2019), which states that cheating is influenced by six elements, namely pressure, opportunity, rationalization, capability, arrogance, and collusion (Tarmizi, Imam, and Imang Lugar et al., 2022). Thus, leverage that has a significant positive effect reflects financial pressure that can encourage management to manipulate or fraudulently disclose financial statements. Meanwhile, the large size of the company increases operational complexity and the potential for collusion if there is oversight



that is not carried out effectively. Accounting and auditing expertise in the audit committee is able to suppress the elements of capability and opportunity through the evaluation of accounting policies and strengthening internal controls.

These findings are supported by Purwiyanti and Herry Laksito (2022) and Kusumawardani (2024), which proves that the professional attributes of the audit committee, especially the background of financial accounting and audit and ownership of certifications, have a significant effect in reducing the risk of fraud of financial statements measured using the Beneish M-Score. The results show that accounting and auditing expertise in audit committees improves the quality of supervision and strengthens the evaluation process for high-risk accounting policies. In addition, Ruchiatna, Hidayat, and Pamungkas (2022) and Goddess (2024) emphasized that the expertise-based governance mechanism has a significant role in improving the integrity of the financial statements of public companies, especially in companies with high complexity, such as mining and energy. Thus, improving the quality of accounting and auditing expertise and professionalism in the audit committee is an effective governance strategy in mitigating the risk of financial statement fraud in mining and energy companies listed on the IDX for the 2020-2024 period.

## CONCLUSION

This study aims to analyze the influence of accounting and auditing expertise in the audit committee on the risk of financial statement fraud in mining and energy sector companies listed on the Indonesia Stock Exchange for the 2020-2024 period. Based on the results of the partial test (t-test), the accounting and audit expertise of the audit committee which is duplexed with ACEXP and the possession of professional certification (CERT\_RATIO) is proven to have a negative and significant effect on the M-Score, which shows that the higher the accounting and auditing expertise in the audit committee, the lower the risk of financial statement fraud. The control variable also showed significant results, where profitability (ROA) had a negative effect, while leverage (LEV) and company size (SIZE) had a positive effect on the risk of financial statement fraud. Simultaneously (F test), all variables in the model had a significant effect, with a determination coefficient value ( $R^2$ ) of 0.918, indicating that the study variable could explain 91.8% of the M-Score variation.

Overall, this study concludes that the audit committee's competence is an effective governance mechanism in reducing the risk of financial reporting fraud, especially in sectors with high risk characteristics such as mining and energy. On the other hand, financial pressure due to high leverage and operational complexity of large companies actually increases the potential for manipulation of financial statements. These findings reinforce the relevance of Agency Theory in explaining the importance of monitoring mechanisms to reduce agency conflicts and support the Fraud Hexagon Theory, which emphasizes that pressure and capability are important factors in the occurrence of fraud. Thus, improving the quality and professionalism of the audit committee is the main strategy in strengthening the integrity of financial statements in Indonesia.

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