International Journal of Business and Quality Research

https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

The Effect of Pressure, Opportunity, and Rationalization on the Tendency of Financial Statement Fraud

(An Empirical Study on Energy Sector Companies Listed on the IDX for the Period 2020-2024)

Yohana Kristin Bate'e [1] , Achmad Hizazi [2] , & Salman Jumaili [3] *

[1] Student of the Faculty of Economics and Business, University of Jambi , Jambi, Indonesia
[2] Lecturers, Faculty of Economics and Business, University of Jambi, Jambi, Indonesia
[3] Lecturers, Faculty of Economics and Business, University of Jambi, Jambi, Indonesia

*Corresponding author: yohanakbatee17@gmail.com //hizazi@unja.ac.id// salman.jumaili@unja.ac.id

Abstract

This study aims to determine the effect of the fraud triangle, consisting of pressure, opportunity, and rationalization, on the tendency of financial statement fraud in energy sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2020–2024. The population of this study includes all 91 energy sector companies listed on the IDX. Through the purposive sampling method, 26 companies were selected as the research sample, yielding a total of 130 observations over the 5-year observation period. The data analysis technique used is multiple linear regression analysis using EViews software. The partial test results show that the pressure factor, measured by asset changes (ACHANGE) and profitability (ROA), is proven to have a significant effect on triggering the tendency of financial statement fraud. Conversely, the opportunity factor, measured by the monitoring of the independent board of commissioners (BDOUT) and company receivables (RECEIVABLES), as well as the rationalization factor, measured by the type of public accounting firm (AUDIT), do not show a significant effect on the tendency of fraud. However, when tested simultaneously, the combination of pressure, opportunity, and rationalization is proven to have a significant effect on the tendency of financial statement fraud. The results also indicate that these three factors contribute 40.845% to explaining the tendency of financial statement fraud, while the remaining percentage is influenced by other factors outside this study.

Keywords: Financial Statement Fraud, Fraud Triangle, Pressure, Opportunity, Rationalization, Energy Sector Companies.

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

INTRODUCTION

Financial reports are the primary means of communication used by company management to convey information regarding the accountability of resource management and the organization's economic performance to external parties. For investors, creditors, market analysts, and regulators, the accounting information contained in these reports provides a crucial basis for economic decision-making and capital allocation. Given their critical importance, financial reports are required to meet fundamental qualitative characteristics: relevance and a faithful representation of the company's economic reality without any misleading manipulation (Tuanakotta, 2012) .

However, in practice, this ideal of honest reporting is often distorted by various unilateral interests of management as company administrators. The drive to consistently display superior performance triggers the phenomenon of accounting fraud in the form of manipulated financial reporting (fraudulent financial reporting). Cases of major accounting scandals, both in global and domestic corporations, demonstrate that systemic fraud not only harms shareholders financially but also undermines the structure of trust in the capital market as a whole. Therefore, an in-depth study of the motives and determinants behind the tendency towards financial statement fraud remains a relevant and crucial topic in the realm of forensic accounting (Boermawan & Arfianti, 2022) .

To comprehensively understand the root causes of fraud, accounting academics and practitioners have widely adopted the Fraud Triangle Theory framework, first introduced by Donald R. Cressey. This theory states that a breach of trust fraud will not erupt without the presence of three simultaneously interacting driving elements: pressure, opportunity, and rationalization. The application of the fraud triangle theory is considered highly effective in detecting potential fraud because its variables can be measured quantitatively through specific indicators in the annual report, unlike extended models such as the fraud diamond or hexagon, which often require subjective proxies that are difficult to verify (Akbar et al., 2022) .

In this study, the energy sector listed on the Indonesia Stock Exchange (IDX) was selected as the primary object of observation. The energy industry has unique operational characteristics, is capital-intensive, has a high degree of uncertainty, and is highly sensitive to fluctuations in global macro commodity prices. The complexity of transactions and the large value of accounting estimates applied to this sector—such as the valuation of commodity reserves and the depreciation of contractual assets—open wide opportunities for management subjectivity. Furthermore, the post-COVID-19 pandemic economic dynamics in the 2020–2024 period have severely impacted the energy supply chain, placing

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

the industry's financial stability in a vulnerable and stressed position. (Rahmani & Oktalita, 2023) .

These external and internal financial pressures force energy company management to undertake various measures to secure their positions. When companies face high profitability targets or the threat of declining total assets, management often experiences psychological and operational shocks. To maintain the corporation's reputation with investors and ensure continued funding from creditors, net income manipulation is often seen as an unavoidable shortcut. At this point, financial stability and financial targets become the primary stimuli driving the tendency towards fraudulent financial reporting (Siregar & Surianti, 2022) .

On the other hand, the presence of such pressure or pressure will not result in illegal acts unless supported by gaps or opportunities within the corporate governance system. Weak internal oversight, a minimal proportion of independent commissioners acting as objective supervisors, and high uncollectible accounts receivable can be indicators of lax oversight exploited by fraudsters (Baridwan & Subroto, 2024). When such opportunities arise, the third element, rationalization, acts as a moral justification. Management constructs a psychological justification that the financial statement manipulation is temporary and undertaken to save the company and its employees, a mistaken belief often influenced by the reputation or rigor of the external auditor's audit process (Rahma & Suryani, 2019) .

Although numerous studies have been published on the fraud triangle, there is a research gap, or empirical inconsistency, in the findings among previous researchers. For example, regarding the pressure variable, some studies state that profitability has a strong influence on triggering fraud, while others find insignificant results. A similar trend occurs with the opportunity and rationalization variables, where the effectiveness of the supervisory board and the reputation of the Public Accounting Firm (KAP) show conflicting effects between studies (Rifa & Tasrif, 2022; Ratmono et al., 2018). Based on these empirical inconsistencies, this study aims to conduct a more in-depth reexamination of the influence of pressure, opportunity, and rationalization on the likelihood of financial statement fraud, focusing on the performance of energy sector companies listed on the Indonesia Stock Exchange during the crucial period of 2020–2024.

Thus, the author chose the research title The Influence of Pressure, Opportunity, and Rationalization on the Tendency of Financial Report Fraud (Empirical Study of Energy Sector Companies on the IDX 2020–2024).

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

THEORETICAL REVIEW

Fraud Triangle Theory

The Fraud Triangle Theory was first introduced by Donald R. Cressey (1953) through research on embezzlers or "trust violators" who commit fraud within organizations. This theory explains that fraud does not occur solely due to an individual's moral weakness, but rather represents the sociological interaction between the individual and their work environment when under pressure. In accounting and auditing practices, this framework is applied as a preventive and detective instrument for management and auditors to map the conditions that trigger fraud, such as financial pressure, weak internal control systems, and the emergence of personal justifications for wrongdoing. By understanding the interaction of these three dimensions, companies can formulate more transparent policies, strengthen internal control structures, and build an organizational culture of high integrity (Tuanakotta, 2012) .

Pressure

According to Tuanakotta (2012), pressure is a condition where someone feels pressured by personal financial problems, performance targets, or work situations that force them to take instant solutions, including violating ethics. This factor does not always stem from individual greed, but often arises because the perpetrator feels they have no other choice to fulfill responsibilities, meet performance expectations, or maintain their reputation. In the context of financial reporting, pressure on management generally stems from shareholder demands, high profit targets, the urgency of maintaining the corporate image, and fluctuating economic conditions. This pressure is the primary trigger for management to manipulate figures to cover up the company's operational failures. Without strong pressure, the tendency to manipulate financial reports would be much less (Tuanakotta, 2012) .

Opportunity

Cressey (in Tuanakotta, 2012) divides the element of opportunity into two dimensions of perception. First, general information, namely knowledge of a position or title that holds trust and the belief that the fraudulent act committed will not be detected. Second, technical skill, namely the special expertise possessed by an individual to execute the fraudulent act. Although these two dimensions can be inherent in all levels of employees, the greatest opportunities generally belong to individuals who occupy strategic positions in the financial sector. When faced with financial problems that cannot be shared, management or

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

employees in the financial sector tend to use their general information and technical skills as instruments for manipulation (Tuanakotta, 2012) .

Rationalization

The final dimension of the fraud triangle is rationalization, defined as a form of self-justification constructed by the perpetrator before committing the fraudulent act, not afterward. This rationalization is necessary so that the perpetrator can align the unlawful behavior with his personal ego, thereby maintaining his identity as a trusted individual. Although the first violation usually causes internal conflict or guilt, repeating the act will feel easier until it eventually becomes a habit. Skousen et al. (2008) added that in the context of financial reporting, rationalization often arises under the pretext of saving the corporation from losses, covering up operational failures, or maintaining the company's image to maintain stock price stability in the capital market (Tuanakotta, 2012) .

Tendency of Financial Report Fraud

The tendency for financial statement fraud is defined as the potential for an entity to manipulate the presentation of financial information with deliberate estimates to mislead users of the report. This fraudulent practice is generally motivated by management's desire to present a performance and financial image that is far more impressive than the actual reality, which is executed through schemes to conceal liabilities, inflate asset values, delay the recording of operational expenses, and recognize fictitious revenue. In the development of accounting research, Rahmani and Oktalita (2023) demonstrated that the accumulation of financial pressures and lax internal control systems have been shown to have a significant influence on the increasing volatility of this fraudulent tendency when identified using the Beneish M-Score measurement model instrument. (Rahmani & Oktalita, 2023) .

The Influence of Pressure on the Tendency of Financial Report Fraud in Energy Sector Companies on the IDX for the 2020-2024 Period

Pressure is the drive or demand faced by an individual or company management to achieve certain targets, thus triggering fraudulent financial reporting practices (Tuanakotta, 2012) . Research conducted by Skousen et al. (2008) showed that pressure has a significant positive effect on increasing the likelihood of financial statement fraud. Meanwhile, research by Sipahutar et al. (2025) found that pressure has no significant effect on financial statement fraud.

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

The Influence of Opportunities on the Tendency of Financial Report Fraud in Energy Sector Companies on the IDX for the 2020-2024 Period

Opportunity in financial statement fraud is a condition or situation that allows an individual or group to manipulate financial statements (Stephany et al., 2025). Hani Fitria Rahmani & Lidya Oktalita (2023) stated in their research that opportunity influences the increase in the M-Score, which indicates an increased potential for financial statement fraud. Meanwhile, research conducted by Dhea Violin Rahma WR & Elly Suryani (2019) found that opportunity has a significant negative effect on financial statement fraud.

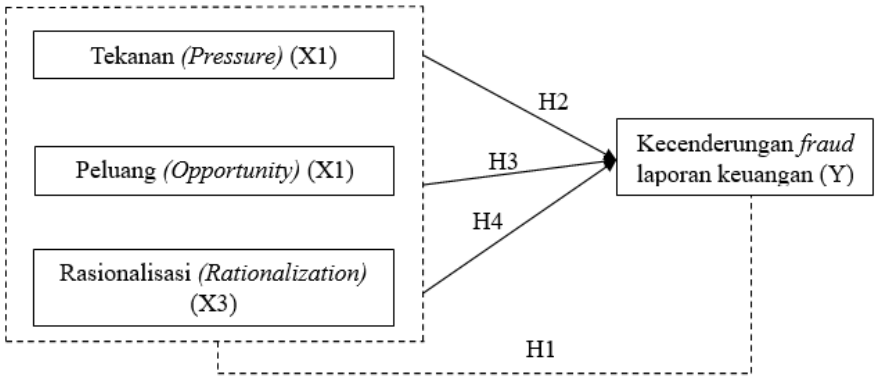
The Influence of Rationalization on the Tendency of Financial Report Fraud in Energy Sector Companies on the IDX for the 2020-2024 Period

Companies with weak regulations or sanctions against fraudsters can lead to rationalization, a tolerance of attitudes, actions, and character traits that allow company management to commit fraud ethically (Iswahyudi & S, 2020) . Research by Raihan Noval Akbar, Adam Zakaria, and Rida Prihatni (2022) demonstrates that rationalization significantly impacts financial reporting fraud. Meanwhile, Grenadi Boermawan & Rizka Indri Arfianti state that the fraud triangle theory, including rationalization, does not significantly impact financial reporting trends.

Research Moel

The research model is used to explain the relationship between independent variables and dependent variables theoretically.

Figure 1. Research Model



Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

Hypothesis

H1: Pressure, Opportunity, and Rationalization Influence the Tendency of Financial Report Fraud

H2: Pressure Influences the Tendency of Financial Report Fraud.

H3: Opportunity Influences the Tendency of Financial Report Fraud.

H4: Rationalization Influences the Tendency of Financial Report Fraud.

METHOD

Population and Sample

The population in this study includes all 91 energy sub-sector companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 observation period. Based on a purposive sampling method with the criteria of completeness of annual report publications and consistent availability of variable data, 26 energy sector companies were selected as units of analysis. Thus, the accumulated data used as objects of empirical observation throughout the five-year observation period amounted to 130 observation sample data in total.

Data Analysis Methods

The data analysis method in this quantitative research was estimated using EViews (Econometric Views) statistical software. EViews was chosen based on its superiority in processing panel data, which is a combination of time series data for the 2020–2024 period and cross-sectional data from 26 sample companies. Using EViews simplifies the implementation of classical assumption tests and accurately proxies for multiple linear regression analysis. This is crucial to ensure that the research model meets statistical requirements, validly explaining the influence of pressure, opportunity, and rationalization variables on the likelihood of financial statement fraud.

Descriptive Statistics

According to Arikunto (2013), descriptive statistics is a method for processing and presenting data to make it clearer and easier to understand, for example through averages, percentages, or other forms of presentation such as tables and graphs. The goal is not to draw conclusions, but to provide a general overview of the data.

Classical Assumption Test

Before conducting multiple linear regression analysis, research data must be tested using a series of classical assumption tests to ensure the regression model meets the

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

statistical feasibility criteria of the Best Linear Unbiased Estimator (BLUE). The series of tests include the Normality Test using the Jarque-Bera method to ensure the residual data is normally distributed, the Multicollinearity Test through correlation matrix analysis to prove the absence of an excessively strong relationship between independent variables, the Heteroscedasticity Test using the Glejser test to detect the similarity of residual variances in each observation, and the Autocorrelation Test using the Durbin-Watson index to ensure there is no residual correlation between observation periods (Boermawan & Arfianti, 2022) .

Simultaneous Test (F Test)

The F test is conducted to determine the influence of all independent variables simultaneously or simultaneously on the dependent variable. The decision-making criteria in the F test are carried out by looking at the significance value and comparing the calculated F value with the F table. If the calculated F value is greater than the F table or the significance value is less than 0.05, then pressure, opportunity, and rationalization are stated to simultaneously have a significant influence on the tendency of financial statement fraud. Conversely, if the calculated F value is less than or equal to the F table or the significance value is greater than 0.05, then it can be concluded that the three independent variables simultaneously do not have a significant influence on the dependent variable. (Akbar et al., 2022) .

Partial Test (t-Test)

The t-test is used to determine the effect of each independent variable on the dependent variable individually or partially. The test criteria are carried out by comparing the calculated t-value and the t-table and observing their significance values. If the calculated t-value is greater than the t-table or the significance value is less than 0.05, then the independent variable is declared to have a significant effect on the dependent variable. Conversely, if the calculated t-value is less than or equal to the t-table or the significance value is greater than 0.05, then it can be concluded that the independent variable does not have a significant effect on the dependent variable (Boermawan & Arfianti, 2022) .

Coefficient of Determination (R^2)

The coefficient of determination is used to measure the extent to which an independent variable is able to explain variations in the dependent variable, where its value is always between 0 and 1. A value R^2 close to 1 indicates that the independent variable provides a strong explanation for the dependent variable, while a value close to 0 reflects that the independent variable's ability to explain the dependent variable is very limited. If

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

the number of independent variables in the research model is more than one, then the indicator used is Adjusted R-Square (R^2 which have been adjusted) to avoid statistical bias due to the addition of new variables in the model (Siregar & Surianti, 2022) .

RESULTS

Table 1: Results of Descriptive Statistical Tests

	ACHANGE	ROA	BDOUT	REC	AUD	K. FRAUD
Mean	10.75295	11.41331	0.455231	0.729277	0.653846	-2.274477
Median	4.930000	7.025000	0.400000	0.121000	1.000000	-2.311000
Maximum	114.0000	61.64000	0.800000	22.95000	1.000000	-1.102000
Minimum	-52.00000	-10.55000	0.330000	-7.970000	0.000000	-3.243000
Std. Dev.	24.88102	14.62044	0.112555	3.285226	0.477583	0.436283
Skewness	1.518312	1.632670	1.198150	5.103474	-0.646762	0.299905
Kurtosis	6.802580	5.544285	4.140067	31.45124	1.418301	2.993074
Jarque-Bera	128.2705	92.81906	38.14418	4948.963	22.61445	1.949021
Probability	0.000000	0.000000	0.000000	0.000000	0.000012	0.377377
Sum	1397.884	1483.730	59.18000	94.80600	85.00000	-295.6820
Sum Sq. Dev.	79859.42	27574.69	1.634243	1392.260	29.42308	24.55420
Observations	130	130	130	130	130	130

Pressure

Based on descriptive statistical analysis on the pressure variable, the Asset Change (ACHANGE) value in energy sector companies during the research period showed a range between -52.0000 to 114.0000 with an average value (mean) of 10.75295. The fairly large standard deviation figure of 24.88102 indicates that the distribution of ACHANGE data between companies is highly varied or heterogeneous. Meanwhile, the profitability variable proxied by Return on Assets (ROA) has a value range from -10.55000 to 61.64000 with an average value of 11.41331. This reflects that in general the sample companies have a fairly good ability to generate profits from their total assets, although the standard deviation value of 14.62044 still shows a fairly diverse variation in the level of profitability between the energy sector companies.

Opportunity

Descriptive statistical analysis on the opportunity dimension shows that the proportion of independent commissioners proxied through the Board of Directors Outside (BDOUT) has a value range from 0.330000 to 0.800000 with an average value (mean) of 0.455231. The relatively small standard deviation figure of 0.112555 indicates that the distribution of BDOUT data tends to be homogeneous or has narrow variations between sample companies. Meanwhile, the accounts receivable variable proxied through the

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

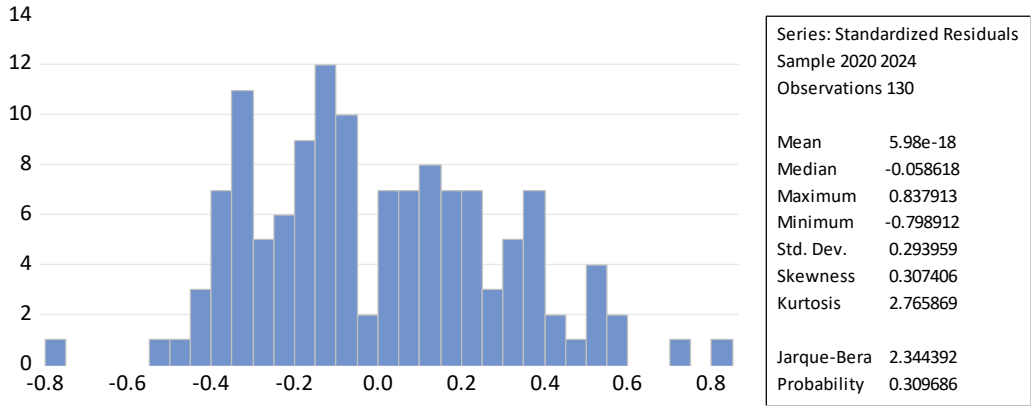
International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

Receivables component recorded a value range between -7.970000 to 22.95000 with an average achievement of 0.729277. The growth rate of this receivable appears to be quite fluctuating and varied among energy sector companies, which is confirmed by the acquisition of a standard deviation value of 3.285226 which indicates a fairly dynamic variation in data distribution.

Rationalization

The rationalization value in energy sector companies during the research period ranged from 0.000000 to 1.000000 with an average value of 0.653846. This indicates that most companies in the study had a rationalization value of 1. The standard deviation value of 0.477583 indicates that the distribution of rationalization data is relatively low.

Table 2: Normality Test Results



Based on the test results, a probability value of 0.308686 was obtained. Because the probability value is greater than 0.05, it can be concluded that the residual data in this study is normally distributed. Thus, the regression model meets the assumption of normality and is suitable for further testing.

Table 3: Multicollinearity Test Results

	ACHANGE	ROA	BDOUT	RECEIVABLES	AUD
ACHANGE	1.000000	0.310496	-0.068647	0.071698	-0.034711
ROA	0.310496	1.000000	-0.241385	0.109520	0.091354
BDOUT	-0.068647	-0.241385	1.000000	-0.063998	-0.124687
REC	0.071698	0.109520	-0.063998	1.000000	-0.185188
AUD	-0.034711	0.091354	-0.124687	-0.185188	1.000000

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

The multicollinearity test was conducted to determine whether there was a high relationship or correlation between the independent variables in the regression model.

The correlation coefficient of ROA and ACHANGE is 0.310496 < 0.85, ROA and BDOUT is -0.068647 < 0.85, ROA and REC is 0.071698 < 0.85, ROA and AUD is 0.034711 < 0.85, ROA and BDOUT is 0.241385 < 0.85, ROA and REC is 0.109520 < 0.85, ROA and AUD is 0.091354 < 0.85, BDOUT and REC is 0.063998 < 0.85, BDOUT and AUD is 0.124687 < 0.85, REC and AUD is -0.185188 < 0.85. So it can be concluded that it is free from multicollinearity or passes the multicollinearity test.

Table 4: Heteroscedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.358829	0.144249	2.487575	0.0145
ROA	-0.000456	0.000641	-0.710604	0.4790
ACHANGE	0.002627	0.001733	1.515409	0.1329
BDOUT	-0.443513	0.323720	-1.370050	0.1738
RECEIVABLES	0.007790	0.006471	1.203918	0.2315
AUDIT	0.085752	0.104115	0.823630	0.4121

Based on the results of the heteroscedasticity test using the Glejser test in the table above, it is known that the probability value of each independent variable is 0.4790 for X1A, 0.1329 for X1B, 0.1738 for X2A, 0.2315 for X2B, and 0.4121 for X3. Considering that all probability values are consistently greater than the significance level of 0.05, it can be concluded that the regression model used does not experience heteroscedasticity problems or in other words, this regression model is declared to have passed the heteroscedasticity test and is worthy of further analysis.

Table 5: Autocorrelation Test Results

Mean dependent variable	-2.274477
SD dependent var	0.436283
Akaike info criterion	0.858447
Schwarz criterion	1.542244
Hannan-Quinn criter.	1.136297
Durbin-Watson stat	2.418806

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

Based on the results of the autocorrelation test using the Durbin-Watson (DW) method, the Durbin-Watson statistic value was 2.418806. This value is in the range of 1.5 to 2.5, thus it can be concluded that the regression model does not experience autocorrelation problems. Thus, the regression model in this study has met the autocorrelation assumptions and is suitable for further analysis.

Table 6: Simultaneous Test Results (F Test)

R-squared	0.546020
Adjusted R-squared	0.408450
SE of regression	0.335555
Sum squared residual	11.14712
Log likelihood	-24.79907
F-statistic	3.969036
Prob(F-statistic)	0.000000

Based on the test results in the table above, the F-statistic value of 3.969036 is obtained, which is greater than the F-table of 2.287367, and is strengthened by the Prob(F-statistic) value of 0.000000 which is much smaller than the significance level of 0.05. These results indicate that H_0 is rejected and H_a is accepted, which means that the variables ACHANGE, ROA, BDOUT, RECEIVABLES, and AUD simultaneously or together have a significant effect on the tendency of financial statement fraud. Thus, it can also be concluded that the multiple linear regression model proposed in this study is considered very suitable (goodness of fit) to be used in explaining the influence of these independent variables on the dependent variable.

Table 7: Partial Test Results (t-Test)

Dependent Variable: Y
Method: Panel Least Squares
Date: 05/04/26 Time: 20:58
Sample: 2020 2024
Periods included: 5
Cross-sections included: 26
Total panel (balanced) observations: 130

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.972861	0.315801	-9.413725	0.0000
ACHANGE	0.003379	0.001403	2.407520	0.0179
ROA	0.018513	0.003795	4.878760	0.0000
BDOUT	0.650429	0.708714	0.917759	0.3610
RECEIVABLES	0.022503	0.014166	1.588520	0.1154
AUDIT	0.211442	0.227936	0.927637	0.3559

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

Based on the results of the partial t-test in the table above, the ACHANGE variable (X1A) recorded a t-count value of 2.407520 which is greater than the t-table of 1.978671, as well as a significance value of 0.0179 which is smaller than 0.05, so thatH_0 rejected and H_{a1}accepted which means that ACHANGE has a significant effect on the tendency of financial statement *fraud* in energy sector companies on the IDX for the 2020–2024 period. The test results on the ROA variable (X1B) also show a pattern that is in line with the obtained t-count value of 4.878760 which is greater than the t-table of 1.978671, and is supported by a significance value of 0.0000 which is smaller than 0.05, so H_0it is rejected and H_{a2}accepted which indicates that profitability proxied through ROA has been proven to have a significant effect on the tendency of financial statement *fraud* in energy sector companies listed on the Indonesia Stock Exchange throughout the observation period .

Based on the partial t-test results in the table above, the BDOUT (X2A) variable recorded a t-count value of 0.917759 which is smaller than the t-table of 1.978671 with a significance value of 0.3610 which is greater than 0.05, so it $H_{a3}$is rejected and H_0accepted which means BDOUT does not have a significant effect on the tendency of financial statement *fraud* in energy sector companies on the IDX for the 2020–2024 period. The consistent results are also shown by the RECEIVABLES (X2B) variable with a t-count value of 1.588520 which is smaller than the t-table of 1.978671 and is strengthened by a significance value of 0.1154 which is greater than the 0.05 level, so H_{a4}it is rejected and H_0accepted which indicates that the growth of accounts receivable does not have a significant effect on the level of financial statement *fraud tendencies* in all sample companies in the energy sector during the observation period.

The results of the t-test on the AUD variable (X3) obtained a t-count value of 0.927637 < t-table, namely 1.978671 and a sig. value of 0.3559 > 0.05, so H_{a5}it was rejected and H_0accepted, meaning that AUD does not have a significant effect on the tendency of financial report fraud in energy sector companies listed on the Indonesian stock exchange for the 2020-2024 period.

Table 8: Results of the Determination Coefficient Test (R^2)

R-squared	0.546020
Adjusted R-squared	0.408450
SE of regression	0.335555
Sum squared residual	11.14712
Log likelihood	-24.79907
F-statistic	3.969036
Prob(F-statistic)	0.000000

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

Based on the determination coefficient test in the table above, the Adjusted R-Square value is 0.408450 or 40.845%. This value indicates that the variation of independent variables consisting of the dimensions of pressure (ACHANGE, ROA), opportunities (BDOUT, RECEIVABLES), and rationalization (Audit Dummy) together are able to explain the variation of the dependent variable of the tendency of financial statement fraud by 40.845%. Meanwhile, the remaining 59.155% is explained by other factors or variables outside the research model that are not included in this observation, so it can be concluded that the contribution ability of all independent variables in explaining the level of tendency of financial statement fraud in this energy sector company is in the moderate category.

Multiple Linear Equations

Fraud = -2.97 + 0.003(ACHANGE) + 0.019(ROA) + 0.65(BDOUT) + 0.023(RECEIVABLES) + 0.21(AUD)

1. The constant value is -2.973, meaning that without ACHANGE, ROA, BDOUT, RECEIVABLES, and AUD, the fraud tendency variable (Y) measured by the Beneish M-Score is -2.973.
2. The ACHANGE coefficient value is 0.0034, if other variables are constant and ACHANGE increases by 1 unit, then variable Y will increase by 0.0034. Likewise, if ACHANGE decreases, then Y will also decrease.
3. The ROA coefficient value is 0.0185. If other variables are held constant and ROA increases by 1 unit, then variable Y will increase by 0.0185. Vice versa.
4. The BDOUT coefficient value is 0.6504, if other variables are constant and BDOUT increases by 1 unit, then the Y variable will increase by 0.6504. Vice versa.
5. The RECEIVABLES coefficient value is 0.0225, if other variables are constant and RECEIVABLES increases by 1 unit, then the Y variable will increase by 0.0225. Vice versa.
6. The coefficient value of AUD is 0.2114, if other variables are constant and AUD (dummy Big Four) has a value of 1, then the Y variable will be higher by 0.2114 compared to companies that are not audited by the Big Four.

DISCUSSION

The Influence of Pressure on the Tendency of Financial Report Fraud

Based on the results of the partial test (t-test), the pressure dimension proxied by *Asset Change (ACHANGE)* and *Return on Assets (ROA*) is proven to have a significant influence on the tendency of financial statement *fraud* in energy sector companies. This is empirically proven by the acquisition of a significance value of *ACHANGE* of 0.0179 and *ROA* of 0.0000,

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

where both values are much smaller than the standard significance level of 0.05 so that the proposed research hypothesis is declared accepted. This finding confirms that financial and operational pressures experienced by organizations play a very crucial role in stimulating management to engineer or manipulate accounting. This motivation is strengthened when management is required to maintain the performance and stability of corporate financial performance consistently amidst various dynamics and competitive business challenges. Massive external demands from investors, creditors, and major shareholders for companies to always display a prime performance portrait in order to secure funding flows and maintain market trust are what ultimately shift objective governance into a trigger for *fraud* .

Specifically, the ACHANGE variable, which represents year-to-year fluctuations in total assets, indicates that aggressive shifts in asset values create a psychological burden for management to maintain the impression of stable growth. When a company faces the threat of asset depreciation or instability in asset ownership, management tends to be compelled to manipulate the presentation of figures in financial statements to maintain the public's appearance of corporate health. In line with this, the profitability indicator, proxied by ROA, is also a significant determining factor because this ratio reflects the company's effectiveness in generating net income from optimizing its total assets. Setting excessively high profit targets often creates excessive internal pressure on management, especially when actual operational conditions on the ground are unable to support the achievement of these objective targets. In such pressing situations, management is vulnerable to taking shortcuts by manipulating revenue items or concealing operating expenses to ensure the company's final profit remains superior on paper and meets stakeholder expectations.

This pressure situation becomes much more complex for energy sector issuers because the industry is highly susceptible to external macroeconomic factors, such as fluctuations in energy commodity prices on the global market, the high cost of technology investment, and the instability of macroeconomic conditions during the study period. This economic uncertainty directly affects market absorption capacity, exchange rate volatility, and funding accessibility, triggering the risk of declining profitability or even business losses. To maintain a corporate image and avoid negative market sentiment, management often presents financial reports that have been beautified (*window dressing*) beyond the reality of actual performance. Theoretically, all empirical findings in this study are very much in line with and strengthen the pillars of *the Fraud Triangle Theory* , which places pressure as the primary motive behind fraudulent financial reporting. Given the high correlation between pressure levels and the potential for data manipulation, energy sector companies are recommended to tighten their internal control and oversight systems , *while*

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

investors are urged to be more careful and skeptical in analyzing a company's fundamental financial health, especially when the entity is indicated to be facing high market pressure.

The Influence of Opportunity on the Tendency of Financial Report Fraud

Based on the results of the partial test (t-test), the opportunity dimension proxied by *Board of Directors Outside* (BDOUT) and *Receivables* showed no significant effect on the tendency of financial statement *fraud* . This is empirically proven by the significance value of BDOUT of 0.3610 and *Receivables* of 0.1154, both of which are greater than the 0.05 level, so the hypothesis stating that opportunity influences the tendency *of fraud* is rejected. This finding indicates that opportunities measured through ineffective supervision and receivables components have not been able to stimulate fraudulent actions. This condition reflects that the energy sector companies that are the research sample generally have internal control mechanisms and the implementation of good corporate governance so that the opportunity for management to manipulate is very limited.

Specifically, the insignificant BDOUT variable indicates that the proportion of independent commissioners in energy sector companies has optimally carried out its supervisory function in maintaining corporate transparency and accountability. Their presence is effective in monitoring management policies to ensure they remain aligned with sound governance principles, allowing for early detection of irregularities. On the other hand, the *receivables variable* also has no significant effect, proving that the high balance of a company's receivables does not necessarily reflect the practice of fictitious revenue manipulation. In the energy industry, the large amount of receivables is normal because the business characteristics involve large-value transactions with relatively long payment terms, and are protected by strict credit policies and collection systems to minimize the risk of loss.

The results of this study theoretically disagree with the *Fraud Triangle Theory* , which places opportunity as a crucial factor triggering fraud due to weak oversight. However, in the context of energy sector issuers in Indonesia, opportunity is successfully mitigated by strict government regulations and the implementation of routine internal and external audits, which enforce careful financial reporting. This finding aligns with research by Rahma & Suryani (2019), which states that *opportunity* has no significant effect on the tendency for financial statement *fraud* due to the effectiveness of corporate control systems. This demonstrates that the presence of opportunity will not necessarily lead to *fraud* as long as the company maintains management integrity, tightens oversight, and consistently complies with regulatory regulations.

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

The Influence of Rationalization on the Tendency of Financial Report Fraud

Based on the partial test results (t-test), the rationalization dimension, proxied using *an Audit Dummy,* showed no significant effect on the tendency for financial statement *fraud* . This was empirically proven by obtaining a significance value of 0.3559, which is greater than the 0.05 level, so the hypothesis stating that rationalization influences the tendency *for fraud* was rejected. This finding indicates that external audit quality, as measured by the reputation of *Big Four* and *non-Big Four accounting firms* , has a relatively equal probability of detecting or preventing fraud. In other words, differences in the type of public accounting firm are not the main determining factor behind the presence or absence of financial statement manipulation practices in the energy sector issuers included in the study sample.

The insignificance of this *dummy audit variable* is due to the fact that all public accounting firms, both *Big Four* and *non-Big Four* , are essentially obligated to carry out audits independently in accordance with applicable professional standards. Furthermore, stringent external oversight from regulators, governments, and investors in the energy industry forces companies to consistently maintain the quality of their reporting, regardless of their auditor. These results also reflect that when management faces significant business pressures such as global energy price fluctuations and high operational costs, they tend to prioritize the organization's internal conditions before engaging in manipulation, without overly worrying about the reputation of the public accounting firm that audits them.

Theoretically, rationalization is a psychological element that provides justification for fraudulent acts, inherently difficult to measure quantitatively using only a *dummy audit proxy* . Therefore, the results of this study do not support *the Fraud Triangle Theory* , which places rationalization as the primary driver of fraudulent financial reporting. However, these findings align closely with research by Ratmono et al. (2018) and Boermawan & Arfianti (2022), which asserts that *the dummy audit* is less able to optimally represent the rationalization variable. Although insignificant, these results provide an important note: using a reputable external auditor is not an absolute guarantee that a company is free from *fraud risk* . Therefore, strengthening internal control systems, professional skepticism of auditors, and upholding management ethics remain urgent aspects that need to be improved.

The Simultaneous Effect of Pressure, Opportunity, and Rationalization on the Tendency of Financial Report Fraud

Based on the results of the simultaneous test (F-test), the *F-statistic value was obtained* at 3.969036 with *a Prob(F-statistic) value* of 0.000000 which is smaller than 0.05. These results prove that the dimensions of pressure, opportunity, and rationalization

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

together (simultaneously) have a significant effect on the tendency of financial reporting *fraud in energy sector companies on the IDX for the 2020–2024 period. This finding supports the pillars of the Fraud Triangle Theory* which emphasizes that financial reporting fraud is not caused by a single factor, but rather the result of an accumulation and interactive combination of financial needs, gaps or opportunities, and psychological justification at the management level.

Although partial test results indicate that not all variables have an individual effect, the simultaneous interplay of these three elements remains a strong predictor of organizational deviant behavior. Amidst the uncertain nature of the energy industry, which is characterized by fluctuations in global commodity prices and high operational costs, management often faces massive performance pressure. When this external pressure combines with even the slightest weakness in the internal control system (opportunity) and rationalizations to safeguard the corporation's reputation with investors, the probability of financial statement manipulation increases exponentially.

In addition, the *Adjusted R-Square value* of 0.408450 indicates that the combination of pressure, opportunity, and rationalization variables is able to explain the variation in the tendency of financial statement *fraud* by 40.845%, while the remaining 59.155% is influenced by other factors outside the model such as competence, arrogance, and quality of governance. Overall, the results of this study provide important implications that energy sector issuers are required to not only focus on formal supervision, but also must build an organizational culture that upholds business ethics, transparency, and strengthening the internal control system to minimize fraud gaps comprehensively.

CONCLUSION

Based on the results of research on the tendency of financial statement *fraud* in energy sector companies listed on the Indonesia Stock Exchange for the period 2020–2024, it can be concluded that partially, only the pressure dimension *proxied* by ACHANGE and ROA is proven to have a significant effect, while the *opportunity dimension* proxied by BDOUT and RECEIVABLES and the rationalization dimension *proxied* by AUD show no significant effect. However, simultaneously (together), the pressure, opportunity, and rationalization variables are proven to have a significant influence on the tendency of financial statement *fraud* . The combination of the three independent variables has the ability to explain the variation of the dependent variable by 40.845% as indicated by the *Adjusted R-Squared value* of 0.408450, while the remaining 59.155% is explained by other factors outside this research model.

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Business and Quality Research
https://e-journal.citakonsultindo.or.id/index.php/IJBQR
E-ISSN: 2985-9468

Several strategic recommendations were proposed to various stakeholders to minimize the risk of future accounting fraud. Energy sector company management is advised to strengthen internal controls and maintain financial stability, while investors are urged to more carefully analyze indicators of issuer financial distress. Auditors and regulators are recommended to increase the intensity of oversight and audit quality for high-risk companies. Finally, future researchers are advised to expand the scope of their research by adding variables outside *the fraud triangle* , such as *capability* or *arrogance* , and extending the observation period to different industrial sectors to obtain more accurate results.

Recommendations

Based on the research findings, several strategic recommendations can be considered by various stakeholders. For energy sector company management, primary attention should be dedicated to improving internal oversight and governance systems, particularly in establishing early detection mechanisms when companies experience financial pressure in the form of fluctuating profitability or asset instability. Meanwhile, investors and regulators are expected to act more carefully and not simply rely on the strong reputation of a Big Four Public Accounting Firm (KAP) as an absolute guarantee of financial report freedom from manipulation. Investors must be more critical in analyzing fluctuations in financial performance and the stability of a company's assets before making investment decisions. Finally, for future researchers, the limitations of this research model, which has an Adjusted R-Square value of 40.845%, open up significant opportunities to expand the scope of the analysis by adding other governance variables, or developing models using the latest fraud theories such as the pentagon or hexagon fraud with more specific indicators.

Limitations and suggestions for further study

This study has several limitations that are expected to be improved in further research. First, this study only focuses on the classic *fraud triangle theory* with a proxy limited to *the annual report* , where the *Adjusted R-Square value* obtained of 40.845% indicates that there is still 59.155% of the variation in *fraud tendencies* explained by other factors outside this model . Second, the use of audit quality *dummy variables* (Big Four and Non-Big Four Public Accounting Firms) proved to be insignificant and was considered less able to capture the psychological aspects of management rationalization elements in depth . Based on these limitations, further researchers are advised to expand the scope of the analysis by using a more comprehensive fraud theory, such as *the fraud pentagon* or *hexagon theory* . In addition, further research can add corporate governance variables, internal

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.

control quality, or executive personal characteristics such as arrogance with more specific proxies to improve the model's predictive power in detecting financial statement fraud .

REFERENCES

Akbar, R., Zakaria, A., & Prihatini, R. (2022). FINANCIAL STATEMENT ANALYSIS OF FRAUD WITH HEXAGON . 3 (1), 137–161.

Boermawan, G., & Arfianti, RI (2022). THE EFFECT OF FRAUD TRIANGLE ON FRAUDULENT FINANCIAL REPORTING WITH THE BENEISH M-SCORE MODEL . 6 (2), 173–186.

Iswahyudi, M., & S, P. (2020). A FRAUD TRIANGLE ANALYSIS 'DETERMINANTS OF FRAUD IN FINANCIAL STATEMENTS OF STATE-OWNED COMPANIES' FRAU TRIANGLE ANALYSIS 'DETERMINANTS OF FRAUD FINANCIAL STATEMENTS IN BUMN.' 8 (4), 1222–1230.

Rahma, D., & Suryani, E. (2019). The Influence of Fraud Triangle Factors on Financial Statement Fraud . 11 (2), 301–314.

Rahmani, HF, & Oktalita, L. (2023). Variables Related to the Formation of Financial Statement Fraud with Beneish M Score in the Triangle Theory Concept Framework. Jurnal AKSI (Accounting and Information Systems) , 8 (1), 77–85. https://doi.org/10.32486/aksi.v8i1.358

Siregar, E., & Surianti, M. (2022). Detecting Financial Statement Fraud from a Fraud Triangle Perspective in Infrastructure, Utilities, and Transportation Sector Companies on the Indonesia Stock Exchange. Journal of Accounting, Finance, and Taxation , 5 (1), 27–39. https://doi.org/10.51510/jakp.v5i1.771

Tuanakotta, TM (2012). FORENSIC ACCOUNTING & INVESTIGATIVE AUDITING (2nd ed.). Salemba Empat.

Copyright to the author of some rights reserved This work is licensed under aCreative Commons Attribution-ShareAlike 4.0 International License.