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DETECTION OF FINANCIAL STATEMENT FRAUD: STUDY IN INDONESIA BANKING AND ENERGY SECTOR COMPANIES

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Abstract: Fraud potential in financial statements often occurs. For this reason, this study identifies aspects that cause financial statement fraud (FOFS), including financial targets (FTs), total accruals, and total assets (TATAs), and the industries' nature (NOIs) in the banking and energy sector companies in Indonesia. The data sample is the financial and annual reports of 122 banking and energy companies. The purposive sampling is used for the selection of the data. The analysis uses different test analysis methods and panel data regression tests. The results prove that FTs prove to be a strong predictor of FOFS in banking companies, while in energy companies it is not proven. Furthermore, TATAs have not been proven to affect FOFS in companies in both sectors. Meanwhile, NOIs have a negative effect on FOFS. The implication is for the banking sector, the potential for FOFS is more due to the disclosure of high Return on assets (ROA) and low-income ratios. In contrast, in the energy sector, companies are strongly influenced only by low-income ratios.

Keywords: *Financial Target, Accrual, Asset, Industries Nature, Financial Statement Fraud*

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1. Introduction

Financial statements should provide transparent and useful data for making decisions (Abed et al., 2022). Margret and Peck (2014) outline that deceptive portrayals, significant inaccuracies, or deviations resulting from deceitful actions can potentially deceive stakeholders concerning the financial status or other crucial details. That is suspected to be a potential for Fraud of financial statements to occur. According to Wahyudi et al. (2022), It can occur when assets and income are presented inaccurately, not reflecting the true situation. This discrepancy arises from differences in how interests are predetermined.

In agency theory, there is an expectations gap between interests. Good performance in the company is in the interest of stakeholders, while large compensation is the management's desire (Jensen & Meckling, 1976). In Indonesian banking and energy sector companies, the detection of fraud potential in financial reporting is of utmost importance. Therefore, it is necessary to implement effective corporate governance practices that ensure integrity, transparency, and the quality of financial information (Sudjono, 2023).

The study Isayas (2022) explains that meeting FTs leads to greater incentives for management or individuals. However, this statement is still a topic of intense debate in various literature, reflecting the complexity and depth of the issue. For example, Ismail Khan and Muhammad Hapiz (2022), as well as Tarjo et al. (2021) found a positive effect of FTs on

FOFS, while (Ozcelik, 2020) reported the opposite effect. In contrast, research by (Marheni & Suryati, 2021) and (Zhao & Bai, 2022) revealed no significant impact on FOFS, contradicting both conclusions from previous studies. Khoirunnisa et al. (2020) discovered that accruals were utilized as stock splits to indicate positive performance.

The connection between accrual principles and managerial decision-making, along with their role in justifying financial reporting, known as total accruals to total assets, in this context called TATAs, could be a possible factor for Fraud. However, Isayas (2022) contradicted this finding, while presenting conflicting evidence. On the other hand, Marheni and Suryati (2021) as well as (Khoirunnisa et al., 2020) work expressed opposing views. In contrast, Agusputri and Sofie (2019) indicated a negative impact of TATAs on FOFS. Furthermore, the industry nature is identified in the literature as another contributing factor to Fraud in financial reporting.

Isayas (2022) define NOIs as an exemplary condition of an entity in the industry. The accounts in the report of financial can be estimated explicitly, such as bad debts. They that require forecasting will be the manager's focus willing to undertake Fraud in financial statements. Zhao and Bai (2022) revealed that NOIs do not affect FOFS. However, Tarjo et al. (2021) and Ismail Khan and Muhammad Hapiz, (2022) prove otherwise. There is another study with a different conclusion, namely Agusputri and Sofie (2019), which stated that industrial nature had a negative effect on FOFS in the banking and energy sector of Indonesia's companies.

In 2019, the Certified Fraud Examiners Association revealed that Fraud had a particularly detrimental impact on the banking and finance industry, resulting in losses amounting to 41.4% of all reported cases. Within Indonesia, mining experienced the highest average loss at USD 475,000 among all industries and energy sectors, followed closely by an average loss of USD 275,000, findings from the Report published by ACFE-Global revealed in 2020. At present, the Indonesia Stock Exchange has introduced a revised categorization for the industrial sector. Entities previously classified under mining have been reclassified into energy, raw materials, and industrial categories based on their specific operational roles. As per the Financial Services Authority regulation, Fraud of financial statements in banking typically refers to financial statements presented in non-compliance with regulatory provisions. The presentation is designed to show that the documentation of strong performance could have negative repercussions for those involved.

Based on research and real-world evidence, there continues to be a discussion about the impact of FTs, TATAs, and NOIs on FOFS. As such, there remains no definitive conclusion on this issue. Therefore, it is essential to empirically investigate these factors with a specific focus on banking and energy companies in Indonesia. The findings from this study are anticipated to make a valuable contribution by expanding upon previous literature, which has been limited in testing the effect of predictive factors fraud on financial reporting.

Hypothesis Development

The American Institute of Certified Public Accounting SAS 99 describes that management and operating personnel often face significant pressure from management to meet financial goals like profit incentives. Ismail Khan and Muhammad Hapiz (2022) define FTs as the heightened pressure to attain the organization's financial objectives set by management. The strong desire to achieve the target driven by bonuses and incentives can potentially motivate fraudulent behavior. (Isayas (2022) utilized the ROA as a financial performance indicator, as lower company profits increase the likelihood of misstatements in financial statements, while

higher profits decrease this possibility. The attainment of financial goals may lead to FOFS, whereby the entity seeks to achieve the desired performance through any means, as described by Zhao and Bai (2022).

In simpler terms, having a financial goal may raise the chances of manipulating financial statements to meet it. According to agency theory, there is a potential scenario where management and shareholders have conflicting objectives: shareholders aim for the capital to meet the set target. In contrast, management prioritizes earning bonuses to reach this goal. According to Skousen et al. (2009), ROA is commonly used to measure efficiency in utilizing its assets and assess agents' performance for determining incentives and wage increases. Thus, this research posits that financial goals affect the occurrence of FOFS. This assertion aligns with Agusputri and Sofie (2019). Therefore, the hypothesis was formulated:

H1a: FTs affect FOFS in Indonesian banking companies.

H1b: FTs affect FOFS in Indonesian energy companies.

Every individual has a conscious awareness of committing dishonest acts, even the most honest individuals can commit Fraud when pressured by their environment, and such individuals may be able to rationalize the fraudulent actions (Wahyudi et al., 2022). According to Sunardi, (2010), the accrual principle has a relationship with management's determination and rationalization in reporting. The ratio of TATAs can be used by management to illustrate the reasons related to the accrual principle. Also, Sukmadilaga et al. (2022) are more rational and fair.

Supported by the study of Skousen et al. (2009), accruals can represent management policies and provide insight into financial reporting. Accrued income recognition and irregular expenses are a form of management's excessive policies and thus can lead to a fair opinion given by the auditor. The agency theory relates that the agent represents the principal in making policies; the policy in this context is the application of the accrual principle. According to Isayas (2022) the company tries to attract investors by exhibiting a high number of assets and not focusing on liquidity because low liquidity indicates that the company has assets that are greater than its total current liabilities. Therefore, in this study, it is assumed that TATAs influence FOFS. This statement is supported by (Khoirunnisa et al., 2020; Marheni & Suryati, 2021; Sunardi, 2010) found that TATAs affect FOFS. Thus, hypotheses are stated.

H2a: TATAs affect FOFS in Indonesian banking companies.

H2b: TATAs affect FOFS in Indonesian energy companies.

Maulidiana and Triandi (2020) suggested that the NOIs represent the ideal state for a company operating within it. The financial statements of a company can explicitly estimate certain accounts, such as bad debt. According to Achmad et al. (2022) the industrial nature creates opportunities for FOFS through significant transaction anomalies and influential financial performance in specific sectors. Consequently, decisions made by distributors or consumers may result in unreasonable transactions, subjective judgments related to important estimated accounts, or uncertainties that are challenging to corroborate. These factors also encompass uncommon or complex transactions. Wahyudi et al. (2022)highlighted that one crucial factor influencing investors' decisions is the condition of the company investment.

Wahyuni and Budiwitjaksono (2017) describe the characterization of an industry by utilizing the ratio of related party transactions, as these transactions are intricate and pose a high inherent risk due to subjective decision-making involvement by management. In contrast, (Akbar and Nuryatno (2018) employs the total inventory ratio for industry characterization because inventory is viewed as a susceptible current asset prone to Fraud, given its large quantities and significant impact on financial statements. Moreover, Wahyudi et al. (2022)

contend that managers driven to commit financial statement fraud tend to focus on accounts requiring estimates. The receivables ratio serves as a reliable indicator for evaluating whether there are any indications of Fraud in an industry.

Isayas (2022) suggested that allowing the company to estimate the value of receivables may lead to Fraud in financial statements. Shareholders prefer estimates that align with the circumstances, but when managers have different objectives, they may present an estimated value that does not reflect the actual account. Fraud is connected to agency theory, where the agent representing the principal makes estimates on certain accounts for the principal's benefit. Wahyuni and Budiwitjaksono (2017) stated that NOIs are linked to a higher risk of material misstatement as they can be manipulated by management. Therefore, this study supports Khoirunnisa et al. (2020) and Sukmadilaga et al. (2022), indicating how industry nature influences fraudulent financial statements. Finally, we propose the following hypothesis.

H3a: NOIs affect FOFS in Indonesian banking companies.

H3b: NOIs affect FOFS in Indonesian energy companies.

2. Research Methods

Data for this study was collected from financial and annual reports published on the official media and IDX for the years 2017 to 2019. The research focused on the financial statements of banking and energy sector companies. A purposive sampling technique was utilized to select the data, with specific criteria: listing between 2017-2019, audited annually. After eliminating outliers, a total of 66 banking and 56 energy companies were used as sampling data. The STATA application is used for the analysis of the data. The first step involved testing the estimation of the regression model to determine the best-fit model. Classic assumption and coefficient of determination were then performed to assess the extent of the relation among variables. Additionally, a t-test was used to partially verify the significance of effects between variables across two sample groups (see Table 1).

The research variables are designed by defining and measuring four main variables based on theory and related literature. These variables include FOFS, FTs, TATAs, and NOIs. The FOFS measurement is represented by a method of (Dechow et al., 2011). For FTs, measurement using ROA is calculated based on the approach of Skousen et al. (2009). TATAs are measured through the ratio of total accruals divided by total assets, formulated according to the method presented by Marheni and Suryati (2021). Finally, the NOIs are measured through the change in accounts receivable to sales (ARTS) based on the formula developed by Wahyudi et al. (2022).

Table 1. Instrument measurement

No	Variables	Indicator's formulation	References
1	FOFS	$\textbf{FScore} = \text{Accrual Quality} + \text{Financial Performance}$	Dechow et al. (2011)
2	FT	$\textbf{ROA} = \frac{\text{Net Income}(t-1)}{\text{Total Assets}(t-1)}$	Skousen et al. (2009)
3	TATA	$\textbf{TATA} = \frac{\text{Net Income (t)} - \text{Cash Flow from Operation(t)}}{\text{Total Assets(t)}}$	Marheni and Suryati (2021)
4	NOI	$\textbf{ARTS} = \frac{\text{Receivable(t)}}{\text{Sales(t)}} - \frac{\text{Receivable (t}-1)}{\text{Sales(t}-1)}$	Wayudi et al. (2022)
Note: FOFS is Fraud of Financial Statement; FT is financial targets; TATA is total accrual to total asset; NOI is the nature of industry.			

Source: Research process (2024)

3. Result and Discussion

Model Estimation

The fit model was determined through testing, such as the Chow test. This test is used to determine the best-fit model between a common effect (CEM) or fixed effect (FEM) by examining the Prob>F value in the fixed effect regression result. The FEM was chosen for both banking and energy companies, which showed that Prob>F 0.0000, smaller than 0.05. The Lagrange multiplier test was used to compare the CEM and random effect models (REM) by examining the value of Prob>chi^2. The results for the banking and energy companies show that the value of Prob>chi^2 is less than 0.04, suggesting that the REM was suitable for both companies. The Hausman test is used to compare REM and FEM by analyzing the value of Prob>chi^2. For banking companies, the value of Prob>chi^2 is 0.8956, indicating that the chosen model is a REM as it is greater than 0.05. Similarly, for energy companies, with a value of Prob>chi^2 at 0.0043 (less than 0.005).

The classic assumption test

After selecting the best model, the next step is to conduct a classic assumption test. Firstly, a multicollinearity test should be carried out to assess the relationship among independent variables in a regression model.

Table 2. The multicollinearity test

No	Code	Variables	VIF of BS	VIF of ES	Critical value	Result
1	FOFS	Fraud of financial statements	1.31	1.08	<10	No issue
2	FTs	Financial targets	1.14	1.16	<10	No issue
3	TATAs	Total accrual to total asset	1.21	1.09	<10	No issue
4	NOIs	Nature of industry	1.22	1.11	<10	No issue
Note: BS is Banking sectors; ES is energy sectors						

Source: Research results (2024)

Based on Table 2, a multicollinearity test for the banking and energy sectors found no significant issues related to multicollinearity in the variables used, such as FOFS, FTs, TATAs, and NOIs. The use of the variance inflation factor called VIF as a measure resulted in values well below the critical threshold of 10. For example, FOFS recorded values of 1.31 in the banking sector and 1.08 in the energy sector; FTs with 1.14 and 1.16; TATAs at 1.21 and 1.09; NOI had values of 1.22 and for both sectors, respectively, indicating that this regression model is robust without being distorted by multicollinearity effect.

Additionally, a test for heteroscedasticity was conducted. In the banking sector, the REM eliminates the need for a heteroscedasticity test. According to Cox (2013) the REM suggests that Generalized Least Squares can address issues of heteroscedasticity and autocorrelation. In the interim, energy businesses in need of using the FEM should conduct heteroscedasticity testing. The test findings indicate that the value of Prob>chi2 for energy companies is 0.000, which is less than alpha. Thus, it is evident that the data exhibits heteroscedasticity issues. As indicated by the results of the generalized least squares test, it has been concluded that the data in this study lacks and fails to fulfill the criteria for heteroscedasticity. The research data does exhibit homoscedasticity as per initial findings.

The next step involves employing the Shapiro-Wilk method to examine the normality of data that either follows a normal distribution or cannot be validated using traditional normality tests. Data is deemed to be normally distributed if the p-value exceeds alpha (0.05). Nevertheless, this study contains outlier data. Studies often label research data that deviate

from normal distribution as outliers, and excluding these outlier data tends to result in a tendency to conform to a normal distribution.

Regression Model

This study employed a multiple linear regression model to evaluate the impact of FTs, TATAs, and NOIs on FOFS in both the banking sectors and energy sectors. The significance level adopted for this model is 0.5, at the 95% confidence level. The banking companies equation is FOFS = -0.645973 + 5.016002FTs + 0.1702123 TATAs - 0.0553858 NOIs + *e*. This equation indicates that FTs have the greatest positive impact on FOFS, with a one-unit increase in FT leading to a 5.016002 unit increase in FOFS. TATAs also contribute positively, although to a lesser extent, while NOIs have a negative effect on FOFS.

For energy sector companies, the regression model is FOFS = 0.3703575 - 0.6749498 FTs + 0.5833742 TATAs - 4.857043 NOIs + *e*. In this model, TATAs have a stronger positive effect than the banking sector. A one-unit increase in TATAs results in a 0.5833742 unit increase in FOFS. On the other hand, FTs and NOIs have negative effects, with NOIs having a notably large impact by decreasing FOFS by 4.857043 units for every one-unit increase. The impact of variables on FOFS varies between the banking and energy sectors, indicating sector-specific dynamics that shape how financial and industry variables impact financial reporting practices. These findings offer valuable insights for stakeholders about factors influencing the FOFS risk.

Hypotheses Test

To assess the impact of the FTs, TATAs, and NOIs factors on FOFS to a certain extent, as presented in Table 3. The FTs in banking companies have a significant relationship with a positive coefficient (0.0019, $p<0.05$). **Hypothesis 1a is accepted**, suggesting that higher FTs in a company correlate with a higher likelihood of the company performing FOFS. The findings align with agency theory, suggesting that principals' direct agents to manage the company effectively. The objective may be viewed as maximizing profits. Consequently, the agent endeavors to generate profit in line with targets to attract investors and secure a bonus for meeting these objectives.

Table 3. The hypotheses test

No	Path	Coefficient	P-Value	Sector	Result
1	FT → FOFS	5.0160020	0.019	Banking	Accepted
2	FT → FOFS	-0.6749498	0.359	Energy	Rejected
3	TATA → FOFS	0.1702123	0.310	Banking	Rejected
4	TATA → FOFS	0.5833742	0.547	Energy	Rejected
5	NOI → FOFS	-0.0553858	0.000	Banking	Accepted
6	NOI → FOFS	-4.8570430	0.000	Energy	Accepted

Source: Result result (2024).

A narrow profit margin is likely to incentivize management to engage in manipulation and raise the likelihood of FOFS. The findings align with Wahyudi et al. (2022), indicating that FTs have a considerable favorable impact on FOFS in banking firms. Nevertheless, the outcomes of this study oppose the studies by Zhao and Bai (2022) as well as Sukmadilaga et al. (2022), which suggests that FTs do not affect FOFS in banking companies.

The test findings for FTs in energy firms indicate a probability value of 0.359, exceeding the threshold of 0.05, suggesting an absence of a substantial association. Consequently, **hypothesis 1b is refuted**. These research outcomes diverge from agency theory's expectations

that the principal requires the agent to run the company effectively. The desired level of demand can be seen as a representation of profitability. In doing so, the individual aims to meet the targeted profit to attract investors and earn a bonus for reaching this goal. A lower profit margin may prompt management to engage in manipulation and raise the likelihood of FOFS. The test outcome for the financial target factor in energy firms demonstrates that the entity achieves its goal with utmost exertion and without any tampering.

The findings agree with Wahyuni and Budiwitjaksono (2017) suggesting that FTs do not exert a substantial impact on FOFS. Asset fund investment originates from share sales, and when the company's ROA condition is favorable, investor confidence also grows, leading to higher stock prices and dividend payments. Consequently, under these circumstances, management faces constraints in engaging in earning management activities. The findings align with those of Wahyudi et al. (2022) indicating that FTs are not effective in identifying FOFS. However, this differs from those of Khoirunnisa et al. (2020), and (Nugraheni and Wijayanti (2017), as they suggested that FTs had a notable beneficial impact on FOFS.

Furthermore, the variable representing TATAs in banking companies has a probability value of 0.310, indicating an insignificant relationship as it exceeds 0.05. Therefore, **hypothesis 2a is not supported**. Skousen et al. (2009) suggest that accruals can reflect management strategies and offer valuable information for financial reporting purposes. Accrual income recognition and irregular expenses may indicate excessive managerial tactics impacting the auditor's assessment of fairness. This finding contradicts agency theory, which asserts that the agent acts on behalf of the principal in formulating policies. In this case, the policy refers to the implementation of the accrual principle within a company.

Sukmadilaga et al. (2022) suggest that adopting the accrual basis is intended to represent information in line with real circumstances. The research findings indicate that total accruals as a proportion of total assets have a substantial impact on FOFS in banking companies. Management does not utilize the accrual value to manipulate financial statements, as indicated by this study. The findings align with Skousen et al. (2009) which suggests that TATAs do not have a significant impact on FOFS. However, these results differ from the investigations carried out by (Marheni & Suryati, 2021).

The TATAs ratio does not have an impact on FOFS significantly in energy companies, as indicated by the probability value of 0.547, above 0.05. Therefore, **hypothesis 2b is not supported**. Hence, it can be concluded that the level of the TATAs does not influence the occurrence of FOFS. The findings of this research deviate from the predictions of agency theory, which posits that the agent acts on behalf of the principal in formulating policies. In this context, the policy pertains to the implementation of accrual principles within a company like (Agusputri & Sofie, 2019).

Consequently, this study suggests that management employs accrual values to accurately represent the company's performance and financial status based on real transactions rather than using them for fraudulent activities. The findings contrast with those of Skousen et al. (2009), who argue that the TATAs ratio has a notable positive impact on FOFS. They suggest that the accrual principle is closely linked to managerial decision-making and rationalization in reporting, indicating that management may utilize the TATAs ratio to justify their use of the accrual principle.

Based on the findings, the characteristics of the banking industry indicate a probability value of 0.000, which is below 0.05, indicating a notable association with a negative coefficient. Therefore, **hypothesis 3a is affirmed**. It can be concluded that a decline in the volume of company receivables compared to the previous year may signal potential FOFS

within the company's operations, as indicated in this research study. This study suggests that the dynamic characteristics of the industry, as outlined by Isayas (2022), are to be expected when there is a rise in changes related to operations other than interest within the banking sector. The findings indicate that these industry dynamics have a detrimental impact on FOFS. These conclusions are further substantiated. However, the results contrast with those of Maulidiana and Triandi (2020), who suggested that NOIs do not have a substantial impact on FOFS.

Finally, there is a notable association between the industry variable and energy companies, as indicated by the probability value of 0.00, which is lower than 0.05, along with a negative coefficient result. It suggests that a low receivable ratio impacts the occurrence of FOFS, thereby **supporting hypothesis 3b**. This study aligns with (Khoirunnisa et al., 2020) which found that NOIs have a notable adverse impact on FOFS due to companies aiming for a reduced number of receivables. These findings also correspond with Agusputri and Sofie (2019), indicating that NOIs significantly affect FOFS.

Agency theory aligns with the research, suggesting that principals enlist agents to manage business operations effectively. The company will strive to reduce its accounts receivable. High levels of receivables are viewed as indicative of poor cash turnover within the company, potentially leading management to engage in financial statement manipulation. However, different from Maulidiana and Triandi (2020), which show that the NOIs have no significant effect on FOFS. The research findings show that energy companies tend to focus on managing risks regarding the company's reputational decline.

The findings of this study contrast with Maulidiana and Triandi (2020) which suggested that NOIs do not have a significant impact on FOFS. The current research reveals that energy companies prioritize mitigating risks associated with potential damage to their reputation. The banking and energy sector companies play a crucial role in the Indonesian economy. Shareholders seek an accurate estimate that aligns with the current situation, but if managers prioritize other objectives, they may present a misleading estimated value in financial records. A company is perceived favorably when it demonstrates a strong cash turnover. Thus, to uphold its standing with investors, the company may manipulate the actual receivable ratio.

The comparative model

The study utilizes an independent sample t-test technique (presented in Table 4) to ascertain if there is a difference between the two sample groups. The data in the FTs variable for banking sector companies and energy companies follows a normal distribution, as indicated by probability values of 0.07657 and 0.12728, respectively, which are greater than alpha. Using Welch's approximation, the homogeneity test results show that the assumption of equal variance is not met (2*Pr = 0.0000), leading to the selection of an independent sample t-test with unequal variance.

Table 4. Difference test of FTs

Sector	Obs	Mean	Std. Err.	Std. Dev.
Banking	66	0.0134705	0.0008836	0.0071784
Energy	56	0.0521992	0.0051264	0.0383626
Combined	122	0.0312476	0.0029645	0.0327440
Different		-0.0387287	0.0052020	
Ha: diff < 1	Ha: diff!= 1		Ha: diff > 1	
Pr(T < t) = 0.0000	Pr(|T| > |t|) = 0.0000		Pr(T > t) = 1.0000	

Source: Research result (2024).

Table 4 shows a notable variance in the mean values as evidenced by Pr(|T| > |t|)= 0.0000, which is lower than alpha. It suggests that there are meaningful distinctions in the financial target variables between banking sector companies and energy sector companies. Banks primarily raise funds from the general population and then redistribute them through credit or loans. In doing so, they aim to balance liquidity and profitability and meet the required capital for investment. Extensive planning is essential in the mining industry before any financial returns can be realized from its activities.

Consequently, the Return on assets is high due to the future profits generated from previously owned assets. The findings are backed by the differences in the activities of the two sectors. There is a noticeable average disparity between banking companies and energy companies when examining their FT variables. The probability value for the FTs variable in banking sector companies is 0.34033, while it is 0.64672 for the energy sector. These values indicate that they are both greater than alpha, suggesting that the data follows a normal distribution. Additionally, the homogeneity test results show that the assumption of equal variance is met with a 2*Pr(F<f) value of 0.2096 exceeding alpha, confirming can be used.

Table 5. Difference test of the TATAs

Sector	Obs	Mean	Std. Err.	Std. Dev.
Banking	66	0.0114236	0.0048265	0.0392103
Energy	56	-0.0109442	0.0061606	0.0461019
Combined	122	0.0011564	0.0039642	0.0437864
Different		0.0223678	0.0077229	
Ha: diff < 1	Ha: diff!= 1		Ha: diff > 1	
Pr(T < t) = 0.9978	Pr(|T| > |t|) = 0.0045		Pr(T > t) = 0.0022	

Source: Research result (2024).

Based on the findings in Table 5, the calculated value of Pr(|T| > |t|) is 0.0045, indicating that it falls below alpha. It suggests a noteworthy variance in averages. Therefore, we can infer that there are disparities in TATAs between banking sector companies and energy sector companies. Banks primarily function by redistributing the funds collected from the public through providing credit or loans. As a result of these operations, they generate regular interest income soon. The disparity in operating profit periods between the banking sector and the energy sector lends support to diverse findings in this study. The comparison of TATAs for banking and energy companies indicates a notable average disparity between the two industries.

In the realm of industry variables within banking sector companies, a probability value of 0.44779 and an energy value of 0.77945 were observed, indicating that they exceed alpha and, therefore, suggesting a normal distribution of the data. The homogeneity test yielded a result of 2*Pr(F<f) being 0.0000, which is less than alpha, revealing that the assumption of equal variance is not satisfied. As a result, the selected type of independent sample t-test is based on unequal variance using Welch's approximation method.

Table 6. Difference test of the NOIs

Sector	Obs	Mean	Std. Err.	Std. Dev.
Banking	66	0.3298554	0.0882199	0.7167018
Energy	56	-0.0020225	0.0039993	0.0299281
Combined	122	0.1775180	0.0499112	0.5512874
Different		0.3318779	0.0883105	
Ha: diff < 1	Ha: diff!= 1		Ha: diff > 1	

Pr(T < t) = 0.9998	Pr(|T| > |t|) = 0.0004	Pr(T > t) = 0.0002

Source: Research result (2024).

The significance level indicated in Table 6 as Pr(|T| > |t|) is lower by 0.0004 than alpha, suggesting a notable disparity in the averages. It implies that distinctions exist between the instances of FOFS for banking and energy sector companies. Banking institutions are currently changing, including the implementation of a digital data loan feature that simplifies public access to credit. This increased ease of applying for loans also raises the likelihood of higher receivables in banking firms. The initial stage of preparing for mining operations, particularly for energy companies listed on the IDX and basic materials sectors, often involves a substantial period during which no income is generated from activities. As a result, these businesses usually make deals with clients. The research findings from independent t-tests show a noticeable average distinction between banking companies and energy sector companies in terms of their industry characteristics.

4. Conclusion

The financial objectives of a banking company have a notable influence on FOFS, while the impact is less significant for energy companies. However, the industrial nature has a considerable adverse effect on potential Fraud in financial reporting activities. In the case of energy companies, neither the FTs nor TATAs exhibit a significant effect on FOFS. Subsequently, notable distinctions exist between banking firms and energy firms concerning financial objectives and industry characteristics. The findings of the study indicate variations in test results for both sectors owing to differences in operational activities and profit period durations. Given the existing disparities in literature addressing similar themes, further investigation by other studies could potentially enhance understanding of the outcomes of this study. This study still has various limitations in the data it collects. Despite meeting the minimum sample requirements and using appropriate statistical procedures, the panel data testing utilized in this research necessitates a broader range of data. The challenges associated with gathering historical data across a wide range create an opportunity for future studies to assess this research model with more comprehensive data sets, potentially enhancing confidence levels in its findings.

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