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## Determinants of Tax Evasion in Food and Beverage Manufacturing Companies: A Fraud Pentagon Perspective

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## Abstract

Tax evasion remains a major concern because it reduces state revenue and weakens public trust in the taxation system, particularly in manufacturing companies with high fraud risk exposure. Therefore, this study aims to analyze the influence of Fraud Pentagon Theory, consisting of pressure, opportunity, rationalization, competence, and arrogance, on tax evasion indications in food and beverage manufacturing companies listed on the Indonesia Stock Exchange during the 2021–2024 period. This study employs a quantitative descriptive approach using secondary data obtained from audited financial statements and annual reports. The sample consists of 43 companies selected through purposive sampling, resulting in 172 observations. Data were analyzed using descriptive statistics, classical assumption tests, and multiple linear regression analysis with SPSS. The findings reveal that pressure, opportunity, and rationalization significantly influence tax evasion, while competence and arrogance do not show significant effects. Pressure, proxied by return on assets, is identified as the most dominant factor affecting tax evasion practices. These results imply that financial pressure and weak supervisory mechanisms can encourage companies to engage in tax-related fraud. Therefore, strengthening internal control systems and corporate governance is essential to reduce tax evasion risks.

## Keywords

Financial Statement, Food and Beverage, Manufacturing Companies, Tax Evasion.

## 1. Introduction

Tax is the main source of state revenue that plays an important role in supporting national development and financing various public sectors. The contribution of tax revenue to the State Budget (*Anggaran Pendapatan dan Belanja Negara/APBN*) shows that development success is highly influenced by the level of taxpayer compliance, both individuals and business entities. However, in practice, many companies still make various efforts to reduce their tax burden, one of which is through tax evasion. Tax evasion is an illegal act carried out by taxpayers with the aim of reducing or even eliminating tax obligations that should be paid to the state (Agustin et al., 2023). This phenomenon is a serious concern because it can cause significant losses to state revenue and reduce public trust in the tax system. Previous studies also indicate that financial pressure and company profitability can encourage tax evasion practices (Aini & Rini, 2023; Azizah, 2023).

Manufacturing companies, especially in the food and beverage sector, are among the sectors that make a major contribution to the national economy and also have a high potential for tax evasion practices. Several cases that have occurred in Indonesia indicate the existence of financial statement manipulation and certain strategies used by companies to reduce tax liabilities. Cases involving PT Coca Cola Indonesia, PT Indofood Sukses Makmur Tbk, and PT Uniflor Prima show that tax evasion remains a relevant issue that needs to be studied in more depth. These conditions indicate that companies may take advantage of weak supervision, internal pressures, and managerial capabilities to commit fraud related to taxation. Research by Jaunanda et al. (2020) and Suryani and Setiany (2025) also explains that weak internal control can increase opportunities for fraud and tax evasion practices.

In identifying fraud, one approach that can be used is the Fraud Pentagon Theory (Hermawan & Novita, 2021; Wiraputra et al., 2025). This theory is a development of the Fraud Triangle Theory by adding two new elements, namely competence and arrogance, resulting in five main elements: pressure, opportunity, rationalization, competence, and arrogance (Wolfe & Hermanson, 2004; Horwarth, 2010). These five elements are believed to explain the factors that drive individuals or company management to commit fraud, including tax evasion. Pressure may arise from demands to achieve company targets and unstable financial conditions. Opportunity arises due to weak internal control and company supervision. Rationalization occurs when perpetrators consider their actions to be reasonable. Competence relates to an individual's ability to exploit system loopholes, while arrogance reflects a feeling of being immune to rules and internal control within the company (Puspita et al., 2021; Yanti & Munari, 2021).

Previous studies on the Fraud Pentagon and tax evasion have shown inconsistent results. Some studies state that factors such as return on assets, auditor changes, and the number of CEO photos influence indications of financial statement fraud and tax evasion (Yanti & Riharjo, 2021; Sabatini & Susanti, 2022; Radhiva & Arif, 2024). However, other studies found different results, showing that auditor changes, board of directors changes, and CEO photo frequency do not significantly affect fraud or tax evasion indications (Novitasari & Chariri, 2019; Puspita et al., 2021; Mayasari & Wulandari, 2022). These differences indicate that there is still a research gap requiring further investigation. In addition, studies specifically examining the influence of all five Fraud Pentagon elements on tax evasion in manufacturing companies within the food and beverage sector are still relatively limited, making this research relevant to conduct (Manihuruk, 2021).

This study aims to analyze the influence of Fraud Pentagon elements on indications of tax evasion in food and beverage manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2021–2024 period. This research uses a quantitative approach by utilizing secondary data in the form of officially published

company financial statements. The analysis is conducted to determine the influence of each Fraud Pentagon element and to identify the most dominant factor driving tax evasion. This study is expected to contribute theoretically to the development of accounting and taxation studies, as well as serve as a reference for companies and related parties in strengthening internal control and preventing fraud practices, especially in taxation.

## **2. Literature Review and Hypothesis Development**

### **2.1. The Effect of Pressure and Opportunity on Tax Evasion**

Pressure refers to a condition in which management faces demands to achieve certain targets, which may drive fraudulent behavior (Summers & Sweeney, 1998). In this study, pressure is proxied by financial stability measured using Return on Assets. ROA is calculated from financial statements by comparing net profit to total assets owned by the organization. The resulting ROA value shows how efficiently a company uses its assets to generate profit. Financial targets set by the company for management create pressure, leading management to engage in financial statement manipulation so that profits appear more favorable. In fact, ROA should be used to measure the efficiency of a company in generating net income from its assets. When a company's financial condition is unstable, management tends to seek ways to maintain performance, including through tax evasion practices. Chalissa and Suryani (2024) state that ROA is an important variable in detecting fraud. From the perspective of the Theory of Planned Behavior (TPB), pressure is related to subjective norms that reflect social pressure or demands from certain parties, thereby encouraging individuals to take specific actions (Ajzen, 1991).

Opportunities arise due to weak supervision systems and internal controls within a company. In this study, opportunity is proxied by ineffective monitoring, measured using the proportion of independent commissioners. A higher proportion of independent commissioners will make supervision within the company stricter, thereby reducing opportunities for financial statement fraud. Conversely, weak supervision (Beasley et al., 1996; Skousen et al., 2009) increases the likelihood of fraud. Weak supervision provides opportunities for management to manipulate financial statements or commit tax evasion because the risk of detection becomes lower. Puspita et al. (2021) state that the greater the number of independent commissioners in a company, the more effective the supervision, thereby reducing the likelihood of fraud.

H1: Pressure has a positive and significant effect on indications of tax evasion.

H2: Opportunity has a positive and significant effect on indications of tax evasion.

### **2.2. The Effect of Rationalization and Capability on Tax Evasion**

Rationalization is the justification made by fraud perpetrators for the actions they commit. In this study, rationalization is proxied by auditor changes. Auditor changes can be used by companies to eliminate traces of fraud previously identified by auditors, making fraudulent activities more difficult to detect. Rizky et al. (2023) state that auditor changes can be one way for companies to conceal fraudulent actions. In the Theory of Planned Behavior (TPB), rationalization is related to an individual's attitude toward behavior that is perceived as beneficial. Previous studies by Novitasari and Chariri (2018) and Radhiva and Arif (2024) state that increased supervision through auditor changes can influence tax evasion.

Competence or capability refers to an employee's ability to bypass internal controls, develop concealment strategies, and control social situations for personal gain (Horwarth, 2010). Companies that are under threat and engage in fraud may change the composition of the board of directors, as this period often represents a

stress period in which the company is unstable and may encourage fraudulent behavior. This can be measured using “board of directors change”. Wolfe and Hermanson (2004) stated in their study that changes in the board of directors create a stress period that opens opportunities for financial reporting fraud. Rizky et al. (2023) explain that changes in directors can indicate efforts to carry out fraud, as individuals in strategic positions have the ability to exploit weaknesses in the company’s control system.

H3: Rationalization has a positive and significant effect on indications of tax evasion.

H4: Capability has a positive and significant effect on indications of tax evasion.

### 2.3. The Effect of Arrogance on Tax Evasion

Arrogance is defined as an individual’s excessive sense of superiority that leads them to believe they are not bound by organizational rules or internal controls. In the development of fraud theories, arrogance was introduced as an additional factor in the Fraud Pentagon theory that can encourage fraudulent behavior (Horwarth, 2010). This characteristic is often associated with top executives, particularly CEOs, who possess strong authority and influence within the company. As a result, arrogant leaders may ignore regulations or corporate governance mechanisms in order to maintain their power and status.

Several studies explain that the level of CEO arrogance can be reflected through self-promotional behavior, including the frequent display of CEO photographs in annual reports (Puspita et al., 2021; Yanti & Munari, 2021). The higher the frequency of CEO image appearances, the greater the indication of dominance and superiority demonstrated by company leaders. Tessa and Harto (2016) argued that CEOs tend to emphasize their status and position because they seek to preserve authority and reputation within the organization. Similarly, Yanti and Munari (2021) stated that CEOs often highlight their position in ways that may encourage them to disregard company rules in order to maintain control and influence over corporate decisions.

H5: Arrogance has a positive and significant effect on indications of tax evasion.

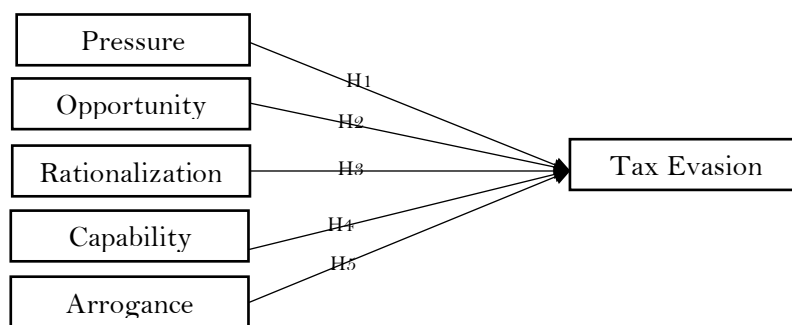


Figure 1. Conceptual Framework

Figure 1 shows a conceptual research framework explaining the influence of five factors in the Pentagon Fraud theory on tax evasion. These factors consist of pressure, opportunity, rationalization, ability, and arrogance. Each independent variable is tested for its influence on the dependent variable, namely tax evasion, using hypotheses H1 to H5. This model is used to determine whether these five factors can encourage tax evasion.

### **3. Methods**

This study employs a quantitative descriptive approach to analyze the influence of Fraud Pentagon elements on tax evasion indications in food and beverage manufacturing companies listed on the Indonesia Stock Exchange (IDX). The quantitative method was selected because the research relies on numerical data analyzed statistically, enabling objective and systematic measurement of the relationships between pressure, opportunity, rationalization, competence, arrogance, and tax evasion (Balaka, 2022).

The population consists of all food and beverage companies listed on the IDX during the 2021–2024 period. This sector was chosen due to its significant contribution to state revenue and its potential exposure to fraud and tax evasion practices. The study applies purposive sampling with the criterion that companies must consistently publish financial statements and annual reports during the research period. Based on these criteria, 43 companies were selected, resulting in 172 observations over four years. The unit of analysis includes audited financial statements and annual reports obtained from the IDX official website and the respective company websites. Therefore, this study uses secondary data derived from publicly available corporate documents.

Pressure is proxied using Return on Assets (ROA). This variable is used to describe the company's financial pressure in achieving profit targets. The higher the pressure experienced by the company, the greater the likelihood that management will engage in fraudulent actions to maintain company performance. Opportunity is proxied using the board of independent commissioners, which represents the proportion of independent commissioners within the company. This variable is used to measure the effectiveness of internal supervision. The weaker the supervision, the greater the opportunity for fraud to occur. Rationalization is proxied using auditor changes. This variable is measured using a dummy variable, coded 1 if the company changes auditors during the research period and 0 if no change occurs. Competence is proxied using changes in directors. This variable is also measured using a dummy variable, coded 1 if there is a change in the board of directors and 0 if no change occurs during the research period. Arrogance is proxied using the frequency of CEO images in the company's annual report. The more frequently the CEO's photo appears, the more it is considered to reflect the level of superiority and dominance of the company leader. The dependent variable in this study is tax evasion, proxied using Cash Effective Tax Rate (CETR). CETR is used to measure the amount of tax paid by the company compared to profit before tax. A consistently low CETR value may indicate tax evasion or tax avoidance practices (Goh et al., 2016).

Data analysis is conducted using descriptive statistical analysis, classical assumption tests, and multiple linear regression analysis. The classical assumption tests include normality, multicollinearity, autocorrelation, and heteroscedasticity tests to ensure that the regression model meets statistical assumptions. Furthermore, multiple linear regression is used to examine the effect of each independent variable on tax evasion indications. This study uses SPSS to obtain structured data and produce statistical tests based on relevant methods. The initial stages consist of descriptive analysis, classical assumption tests, and hypothesis testing.

### **4. Results**

This study uses five independent variables derived from the Fraud Pentagon elements, namely pressure, opportunity, rationalization, competence, and arrogance, as well as one dependent variable, tax evasion. The data used in this study are secondary data from companies listed on the Indonesia Stock Exchange (IDX) for the 2021–2024 period. These data consist of annual financial reports published

through the official IDX website. The population in this study consists of manufacturing companies listed on the IDX. This sector was selected based on the significant role of companies in meeting consumer needs and their consistency in maintaining operational activities. Food and beverage companies have a high level of competition, dependence on raw materials, and long operational processes, which may create opportunities for fraud perpetrators. In Table 1, descriptive statistics is a data analysis method that provides a general description of the variables studied and does not draw conclusions. It presents information and data in a summarized form. In this study, the descriptive statistics include minimum value, maximum value, mean, mode, and standard deviation. Data visualization using tables can describe the research data over the study period more clearly (Ghozali, 2021).

**Table 1.** Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Pressure	172	1.00	275.00	9.1579	22.69319
Opportunity	172	25.00	60.00	48.1579	10.33177
Rationalization	172	0.00	1.00	0.0877	0.28372
Competence	172	0.00	1.00	0.0819	0.27497
Arrogance	172	0.00	1.00	0.0936	0.29208
Tax Evasion	172	16.00	39.00	21.9298	2.24284
Valid N	172	1.00	275.00	9.1579	22.69319

Based on the descriptive statistical analysis of 172 samples with 168 valid observations, several findings can be identified. Pressure shows a minimum value of 1.00 and a maximum value of 275.00, with an average of 9.1579 and a standard deviation of 22.69319, reflecting substantial variation in company profitability among the observed firms. Meanwhile, opportunity records a minimum of 25.00 and a maximum of 60.00, with a mean value of 48.1579 and a standard deviation of 10.33177, suggesting that most companies maintain a relatively high proportion of independent commissioners. For rationalization, the values range from 0.00 to 1.00 with an average of 0.0877, indicating that auditor changes are relatively uncommon. Similarly, competence has a minimum value of 0.00, a maximum of 1.00, and a mean of 0.0819, which implies that changes in directors rarely occur within the sampled companies. In addition, arrogance ranges from 0.00 to 1.00 with a mean value of 0.0936, showing that the appearance of CEO photographs in annual reports is relatively limited. As the dependent variable, tax evasion has a minimum value of 16.00 and a maximum of 39.00, while the mean reaches 21.9298 with a standard deviation of 2.24284, indicating relatively moderate variation in effective tax rates across the observed companies.

**Table 2.** Normality Test

Test	Statistics	Unstandardized Residual
N		168
Normal Parameters <sup>a,b</sup>	Mean	0.0000000
	Std. Deviation	2.07540557
Most Extreme Differences	Absolute	0.100
	Positive	0.100
	Negative	-0.073
Test Statistic		0.100
Asymp. Sig. (2-tailed) <sup>c</sup>		0.26
Monte Carlo Sig. (2-tailed) <sup>d</sup>	Sig.	0.17
	99% Confidence Interval	Lower Bound
Upper Bound		0.021

The normality test is one of the classical assumption tests in regression analysis used to determine whether the residual data in a regression model are normally distributed. Residuals are the differences between the actual values and the predicted values generated by the regression model. A good regression model is one in which the residuals are normally distributed, as this indicates that the model can produce unbiased and accurate estimates. The normality test is important to ensure that statistical analyses such as the t-test and F-test can be applied validly. Table 2 shows that the normality test was conducted using the Kolmogorov-Smirnov test, resulting in a significance value of 0.26. Since the significance value is greater than 0.05, it can be concluded that the residual data are normally distributed. This indicates that the regression model used in this study meets the assumption of normality.

The multicollinearity test is one of the classical assumption tests in multiple linear regression analysis used to determine whether there is a high correlation among the independent variables in the regression model. Multicollinearity occurs when two or more independent variables are strongly correlated with each other. If multicollinearity occurs, the regression model may become unstable because it becomes difficult to accurately determine the individual effect of each independent variable on the dependent variable, as shown in Table 3.

**Table 3.** Multicollinearity and Autocorrelation Test

<b>Variable</b>	<b>Tolerance</b>	<b>VIF</b>	<b>Durbin-Watson</b>
Pressure	0.992	1.008	DW Value= 1.739
Opportunity	0.855	1.170	
Rationalization	0.931	1.074	
Competence	0.859	1.164	
Arrogance	0.926	1.080	

The multicollinearity test results show that all independent variables meet the required criteria, with tolerance values above 0.10 and VIF values below 10. Specifically, pressure has a tolerance value of 0.992 and a VIF of 1.008, opportunity records 0.931 and 1.170, rationalization shows 0.931 and 1.074, while arrogance has 0.926 and 1.080. These results indicate that there is no high correlation among the independent variables, meaning that the regression model is free from multicollinearity and is appropriate for multiple linear regression analysis and hypothesis testing. The autocorrelation test is a regression analysis test used to determine whether there is a correlation between error values (residuals) in one period and those in another period (Ghozali, 2021). Based on Table 3, the Durbin-Watson value is 1.739. This value lies between 1.5 and +2, indicating that no autocorrelation occurs in the regression model used in this study. This shows that the residuals in the regression model are not correlated with residuals from other observations. With the absence of autocorrelation, the regression model in this study meets one of the classical assumptions of multiple linear regression, so the regression estimates can be considered reliable and appropriate for use.

The heteroscedasticity test is used to examine whether there is inequality in the variance of residuals across observations in a regression model (Ghozali, 2021). If heteroscedasticity occurs, the regression model may produce inefficient estimates and less accurate statistical conclusions because the resulting standard errors are not stable. Figure 2 shows that the points are spread randomly and do not form any specific pattern. The distribution occurs both above and below 0 (zero) on the Y-axis; therefore, there is no heteroscedasticity.

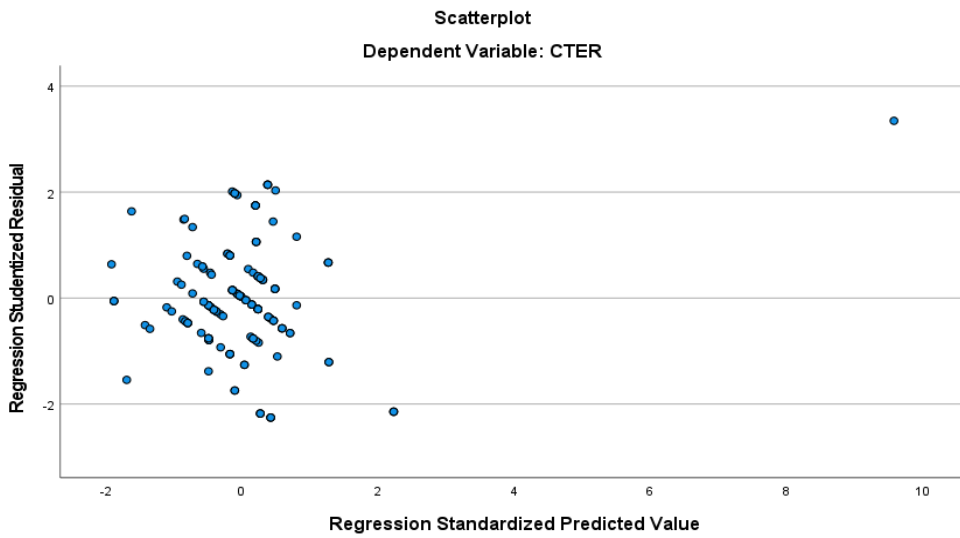


Figure 2. Heteroscedasticity Test

Table 4. Hypothesis Testing

Variable	B	Std. Error	Beta	t-statistics	Sig.
Constant	18.685	0.664		28.123	0.000
Pressure (X1)	0.055	0.005	0.565	9.957	0.000
Opportunity (X2)	0.059	0.013	0.279	4.558	0.000
Rationalization (X3)	-1.268	0.484	-0.153	-2.618	0.010
Competence (X4)	-0.453	0.487	-0.057	-0.929	0.354
Arrogance (X5)	0.764	0.470	0.096	1.626	0.106

The regression results in Table 4 produce the equation  $Y = 18.685 + 0.055X_1 + 0.059X_2 - 1.268X_3 - 0.453X_4 + 0.764X_5$ . The constant value of 18.685 indicates the baseline value of tax evasion when all independent variables are equal to zero. Pressure and opportunity have positive coefficients of 0.055 and 0.059, implying that increases in profitability pressure and the proportion of independent commissioners tend to increase tax evasion values. Conversely, rationalization and competence show negative coefficients of -1.268 and -0.453, meaning that auditor changes and director changes are associated with lower tax evasion values. Meanwhile, arrogance has a positive coefficient of 0.764, indicating that a higher frequency of CEO photo appearances in annual reports tends to increase tax evasion.

The t-test results show that pressure has a t-statistic of 9.957 with a significance level of 0.000, while opportunity records a t-statistic of 4.558 and a significance value of 0.000, indicating that both variables significantly affect tax evasion. Rationalization also has a significant effect, with a t-statistic of -2.618 and a significance value of 0.010, confirming its negative relationship with tax evasion. In contrast, competence has a t-statistic of -0.929 and a significance value of 0.354, while arrogance records a t-statistic of 1.626 with a significance value of 0.106. Since both significance values are above 0.05, competence and arrogance are considered not to have a significant effect on tax evasion.

**Table 5.** Coefficient of Determination and F-Test

<b>Test</b>	<b>Result</b>
R	0.694 <sup>a</sup>
R Square	0.482
Adjusted R-Square	0.466
Std. Error of the Estimate	1.61867
F-Statistics	30.106
Sig.	0.000

According to Table 5, the R value of 0.694 indicates that the relationship between the independent variables and the dependent variable is categorized as strong. The R-squared value of 0.482 shows that 48.2% of the variation in tax evasion can be explained by pressure, opportunity, rationalization, competence, and arrogance, while the remaining 51.8% is influenced by other variables outside this study. Furthermore, Table 6 shows an F-statistic of 30.106 with a significance level of 0.000. Since the significance value is below 0.05, it can be concluded that all independent variables simultaneously have a significant effect on tax evasion.

### **5. Discussion**

Based on the research results, the pressure variable proxied by Return on Assets (ROA) is proven to have a positive and significant effect on tax evasion. Pressure is a condition in which management or employees feel compelled to commit fraud. Financial targets measured through ROA reflect this pressure (Summers & Sweeney, 1998). This study is consistent with previous research by Sabatini and Susanti (2022), which states that individuals are required by companies or management to deliver the best performance, even in unstable conditions. This situation leads to financial reporting fraud, which in turn increases CETR as a proxy for tax evasion. Thus, based on the Theory of Planned Behavior, pressure reflected in profitability is not only an economic condition but also influences intention and ultimately management behavior in tax evasion. This is consistent with the findings that ROA is the most dominant factor in explaining such practices.

Based on the research results, the opportunity variable proxied by the proportion of independent commissioners shows a positive and significant effect on tax evasion. This finding is supported by previous studies by Jaunanda et al. (2020), Suryani and Setiany (2025), and Gunawan and Tjandrawan (2025), which state that fraud can occur due to weak internal control. However, it contradicts Novitasari and Chariri (2019), who argue that effective supervision does not significantly influence the likelihood of fraud, which may indicate tax evasion. From the perspective of the Theory of Planned Behavior, opportunity is related to perceived behavioral control. Although companies have independent commissioners, the results show that such supervision has not fully restricted management actions. This makes tax evasion still perceived as something that can be carried out, thereby strengthening the tendency of such behavior.

Based on the research results, the rationalization variable proxied by auditor change shows a significant negative effect on tax evasion. This finding is consistent with previous studies by Novitasari and Chariri (2019) and Radhiva and Arif (2024), which state that increased supervision through auditor changes can influence tax evasion. However, it contradicts studies by Puspita et al. (2021) and Mayasari (2024), which argue that auditor changes do not affect or encourage tax evasion. From the perspective of the Theory of Planned Behavior, rationalization shows that auditor changes can influence a company's perspective on tax management. When an auditor change occurs, companies tend to be more cautious, thereby reducing the tendency

for tax evasion. This indicates that the way management justifies actions significantly influences decision-making (Loebbecke et al., 1989).

Based on the research results, the capability variable proxied by the board of directors change shows no significant effect on tax evasion. This is indicated by a significance value of 0.354 (greater than 0.05) and a t-statistic of -0.929. This finding is consistent with Novitasari and Chariri (2019) and Puspita et al. (2021), who state that board of directors changes do not influence the likelihood of fraud. From the perspective of the Theory of Planned Behavior, capability in this study does not play a meaningful role. Infrequent changes in the board of directors do not produce significant changes in company policies, including taxation. This means that capability at the level of board changes is not a key factor driving tax evasion.

Based on the research results, the arrogance variable proxied by the frequency of CEO image appearance in annual reports shows no significant effect on tax evasion. This finding is not consistent with Yanti and Riharjo (2021), who found that the frequency of CEO photos influences fraud. However, it aligns with Novitasari and Chariri (2019) and Puspita et al. (2021), who found that financial reports containing more CEO image do not affect fraud risk, which may indicate tax evasion. The arrogance variable does not have a significant effect on tax evasion, suggesting that this indicator is not strong enough to represent arrogance in this research context. From the perspective of the Theory of Planned Behavior, this variable does not significantly contribute to shaping attitudes, subjective norms, or perceived behavioral control that could drive tax evasion.

## 6. Conclusion

This study concludes that the Fraud Pentagon elements have varying effects on tax evasion in food and beverage manufacturing companies listed on the Indonesia Stock Exchange during the 2021–2024 period. The regression model fulfilled the classical assumption tests and demonstrated a strong relationship between the independent and dependent variables. Simultaneously, pressure, opportunity, rationalization, competence, and arrogance significantly influenced tax evasion. Partially, pressure proxied by return on assets and opportunity proxied by the proportion of independent commissioners were found to have a positive and significant effect on tax evasion. Rationalization measured through auditor change showed a significant negative effect, while competence proxied by director change and arrogance measured by CEO picture frequency did not significantly affect tax evasion.

These findings imply that financial pressure and weak supervisory effectiveness remain important factors driving companies to engage in tax evasion practices. Therefore, companies are expected to strengthen internal control systems, improve governance quality, and maintain transparency in financial reporting to minimize fraudulent behavior. In addition, regulators and tax authorities may use these findings as consideration for improving supervision of companies with high profitability and potential fraud risks. This study is limited to food and beverage manufacturing companies listed on the Indonesia Stock Exchange and only examines variables within the Fraud Pentagon framework. Future research is recommended to expand the research scope by including other sectors, such as banking or state-owned enterprises, which also have high fraud risk exposure. Further studies may also incorporate additional variables such as firm size, firm age, corporate governance quality, or organizational culture to provide a more comprehensive explanation of tax evasion practices.

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Ethical approval was obtained for this study. The manuscript represents original work and has not been previously published, nor is it under consideration by another journal.

### ***Data Disclosure Statement***

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



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