HOW TO AVOID TAXES: THE ROLE OF FIRM SIZE IN INDONESIAN FOOD AND BEVERAGE COMPANIES

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Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh profitabilitas, likuiditas, dan solvabilitas terhadap penghindaran pajak dengan ukuran perusahaan sebagai variabel moderasi pada perusahaan sektor makanan dan minuman yang terdaftar di Bursa Efek Indonesia periode 2020-2023. Penelitian menggunakan pendekatan kuantitatif dengan metode kausal. Sampel terdiri dari 116 data yang dianalisis menggunakan regresi linier berganda dengan SPSS versi 25. Hasil penelitian menunjukkan bahwa profitabilitas berpengaruh negatif signifikan terhadap penghindaran pajak, sementara likuiditas berpengaruh positif signifikan. Solvabilitas dan ukuran perusahaan secara langsung tidak menunjukkan pengaruh signifikan. Namun, sebagai variabel moderasi, ukuran perusahaan memperkuat pengaruh likuiditas dan solvabilitas terhadap penghindaran pajak, serta memperlemah pengaruh profitabilitas. Variabel kontrol capital intensity dan inventory intensity konsisten menunjukkan pengaruh negatif signifikan terhadap penghindaran pajak.Temuan ini mengindikasikan bahwa perusahaan besar dengan laba tinggi cenderung lebih patuh pajak, sementara perusahaan besar dengan likuiditas dan solvabilitas tinggi memiliki kecenderungan lebih besar untuk melakukan penghindaran pajak. Hasil penelitian memberikan implikasi penting bagi manajemen perusahaan dalam membangun strategi perpajakan yang transparan dan patuh hukum.

Kata Kunci: Profitabilitas; Likuiditas; Solvabilitas; Ukuran Perusahaan; Penghindaran Pajak.

Abstract

This study looks at how profitable, liquid, and solvent a company is and how that affects its decision to avoid taxes. We concentrated our efforts on companies within the food and beverage sector that have been listed on the Indonesia Stock Exchange between 2020 and 2023. We used a statistical method to analyze the data. The sample consists of 116 data points that were analyzed using multiple linear regression with SPSS version 25. The results indicated that profitability significantly correlates with increased tax avoidance, while liquidity shows a notable positive impact. Solvency and company size directly show no significant effect. However, as a moderating variable, company size strengthens the effect of liquidity and solvency on tax avoidance, and weakens the effect of profitability. The control variables capital and inventory intensity consistently show a significant negative effect toward tax avoidance. These findings suggest that large companies with high profits usually comply with taxes, while those with high liquidity and solvency are more likely to avoid taxes. The results of the study provide important information for company management to develop a clear and legal tax strategy.

Keywords : Profitability; Liquidity; Solvency; Company Size; Tax Avoidance.

Introduction

Taxation represents the most significant form of government fiscal revenue and constitutes a substantial Company expenses (Wang et al., 2020). Taxes constitute the primary source of state revenue, accounting for a larger share than any other income sources (Kadjiman & Tangkau, 2022). Data from the Indonesian Ministry of Finance, (2024), the contribution of tax revenue accounted for 77.38% of total state revenue, underscoring the pivotal role of taxes in the APBN structure. These tax revenues are allocated to various strategic development programs, including infrastructure, education, health, and poverty alleviation, which contribute directly to economic growth and community welfare.

However, implementing taxation policy in Indonesia is confronted with numerous challenges, particularly concerning corporate taxpayer compliance. A common concern is that many companies resort to legal yet non-compliant strategies to avoid paying taxes. Tax avoidance strategies are implemented with the objective of reducing tax liabilities, thereby augmenting the market value of the enterprise (Tambahani et al., 2021). According to reports, Indonesia faces a potential annual tax revenue loss of approximately 42 trillion due to these tax avoidance practices. Tax Justice Network, (2023) report indicates that Indonesia faces a potential annual tax loss of 42 trillion due to these avoidance practices. The issue of tax avoidance is crucial as it limits the government's ability to generate revenue and implement effective policies, when taxpayers look for ways to reduce their tax burdens, it hampers the state's financial resources and its capacity to address public needs (Mocanu et al., 2021).

The food and beverage sector is a significant area of concern regarding tax avoidance, largely due to its distinct characteristics as a strategic industry. In 2022, this sector played a crucial role in the economy, contributing 38. 35% to the Gross Domestic Product (GDP) of the non-oil and gas processing industry (Binekasri, 2023). Globalization and digitalization trends have contributed to the complexity of this phenomenon by enabling food and beverage companies to expand across countries and exploit variations in taxation systems among different jurisdictions.

The literature indicates that tax avoidance practices are significantly influenced by the profit margin of the company (Prabowo, 2020). A company's profitability can be indicative of its ability to generate profits, and companies with high profitability often face a greater tax burden, which can motivate them to engage in tax avoidance strategies. This ratio is indicative of the business's performance in leveraging its resources to generate added value for shareholders and enhance business income (Tarigan & Ubaidillah, 2023). Research by Sonia & Suparmun, (2019) found that companies with high profit levels have greater potential for tax planning to reduce their tax burden, suggesting that such planning may be an indication of tax avoidance.

According to Rahayu et al., (2022), another factor influencing tax avoidance behavior is liquidity. This ratio reflects a company's ability to meet its short-term financial commitments, which can impact its decisions regarding tax avoidance strategies. Companies with strong liquidity often pursue tax avoidance measures to help maintain a steady cash flow in the future, ensuring they can meet their financial obligations effectively (Agyei et al., 2020).

Another factor influencing tax avoidance practices is a company's solvency, as measured by the leverage approach (Kalbuana et al., 2020). Solvency is a key metric that assesses a company's ability to meet its obligations, offering insight into its capital structure. A significant amount of leverage can motivate companies to engage in tax avoidance, as the interest expenses associated with it can lower their taxable income (Pangaribuan et al., 2021). This creates an incentive for companies to take advantage of existing tax loopholes.

The findings of the study suggest that the size of a company plays a crucial role in its tax avoidance practices (Jarboui & Riguen, 2020). Large companies generally have better resources and expertise in tax planning, but also face greater scrutiny from regulators and other stakeholders. Large companies often engage in intricate business activities, which allows

them to implement strategies aimed at minimizing their tax liabilities in pursuit of maximum profits. The relationship between the size of a company and its likelihood of utilizing tax avoidance tactics is well-established (Yahaya & Yusuf, 2020).

The current study expands on the foundational research Rahayu et al., (2022), which explored the role of company size as a moderating variable in the relationship between liquidity and solvency. Building on this foundation, research Khamisan & Astuti, (2023) utilized company size as a moderating variable to examine how capital intensity, transfer pricing, and sales growth impact tax avoidance practices. Unlike previous studies, this research incorporates company size as a moderating variable to examine the relationship between profitability, liquidity, and solvency. Additionally, it uses capital intensity and inventory intensity as control variables to enhance the depth of analysis. Capital intensity represents the ratio of a company's capital allocated to fixed assets, influencing depreciation expenses and their associated tax implications. On the other hand, inventory intensity refers to the proportion of inventory within the company's total assets, which affects profitability and can indirectly influence tax avoidance strategies.

The 2020-2023 research period was selected to offer a thorough understanding of the topic at hand, with particular attention to the post-pandemic economic recovery period, which offers a unique context for corporate tax behavior. During this period, the food and beverage sector encountered various challenges and adapted to changes in tax regulations, including the implementation of the Harmonization of Tax Regulations Law in 2022.

In light of the aforementioned context, the objective of this study is to examine the impact of profitability, liquidity, and solvency on tax avoidance practices in companies operating within the food and beverage sector in Indonesia. The analysis will consider the moderating effect of company size and the influence of control variables, including capital intensity and inventory intensity.

Agency theory and tax avoidance are a bit of a complicated pair when we're talking about corporate governance. Agency theory is all about the relationship between shareholders (the principals) and management (the agents), who often have different interests. Shareholders want to maximize the value and return of the firm, while agents might have their own motivations related to compensation and bonuses (Jensen & Meckling, 1976).

When it comes to taxes, agents can practice tax avoidance to boost corporate profits by reducing the tax burden. They might do this to meet performance targets and get bonuses, or they might do it for their own benefit. Either way, when a company's profits go up, shareholders get more value and higher dividend distributions.

Profitability as an indicator of company performance is closely related to tax avoidance practices. This relationship can be explained using agency theory, which describes the relationship between shareholders (the principal) and management (the agent). According to Jensen & Meckling, (1976), both parties try to maximize their respective interests, which often leads to conflicts of interest. Within the context of a company, management, acting as agents, seeks to maximize their bonuses and compensation, which are often linked to company performance, including profitability levels.

As a company's profitability rises, its tax liability tends to increase as well. This relationship drives management to explore tax avoidance strategies aimed at maintaining the company's net profit. Furthermore, highly profitable companies often have access to greater resources, allowing them to develop and execute more complex tax avoidance techniques. According to agency theory, management is motivated to minimize the tax burden through these practices because doing so directly impacts their compensation by maximizing net income. Additionally, company executives can further reduce taxes by leveraging assets through depreciation and amortization expenses, which ultimately influence the net profit of the company (Sonia & Suparmun, 2019). The greater a company's profitability, the more likely it is that conflicts related to tax policy will arise. This study aims to enhance the existing literature on this topic by providing empirical evidence to support the hypothesis that increased

profitability positively influences tax avoidance. This hypothesis is supported by the findings of Yoon et al., (2021) and Novianto, (2021), which indicates that profitability positively influences tax avoidance.

Drawing from these theoretical arguments, we can formulate the hypothesis that profitability positively influences tax avoidance. This hypothesis suggests that as a company's profitability increases, the likelihood of management engaging in tax avoidance practices also rises. This propensity is driven by management's strategic motivations to preserve net profit and compensation levels, bolstered by the presence of adequate resources to implement aggressive tax planning strategies. The hypothesis is consistent with agency theory, illustrating how the inherent conflict of interest between the principal and the agent can intensify during periods of rising company profitability. This escalation may, in turn, encourage practices related to tax avoidance.

The concept of liquidity, which refers to a company's ability to meet its immediate financial obligations, has been shown to be linked to tax avoidance practices. This connection can be understood through the lens of agency theory. Agency theory explores the complex relationship between shareholders, who act as the principals, and management, who serve as the agents. This relationship is based on differing interests: while management is tasked with ensuring that the company maintains sufficient liquidity for its operational needs, it is also responsible for maximizing shareholder value.

In the context of corporate finance, low liquidity in a company can exert significant pressure on the entity to fulfill its short-term obligations, including tax payments. This phenomenon, as postulated by agency theory, can give rise to agency conflicts. Specifically, the management, in its capacity as an agent, may prioritize meeting operational needs and short-term obligations over the payment of taxes. According to Agyei et al., (2020), When a company's ability to meet its short-term obligations deteriorates, it may resort to tax planning as a strategy to save costs. In such situations, management may be motivated to pursue tax avoidance strategies to preserve the company's liquidity. This is because tax payments often require significant cash reserves, which can hinder the company's capacity to fulfill its immediate financial commitments. This assertion is consistent with the findings of Rahayu et al., (2022) and Oktari et al., (2024), who found an inverse relationship between liquidity and tax avoidance.

Building on these theoretical arguments, we can propose a hypothesis indicating that liquidity negatively impacts tax avoidance. This hypothesis implies that when a company's liquidity decreases, its management becomes more inclined to pursue strategies aimed at avoiding taxes. This tendency is driven by the management's need to maintain sufficient liquidity for operational needs and other short-term obligations. When liquidity is limited, agency conflicts escalate because management prioritizes the company's operational interests over tax obligations. This hypothesis is consistent with agency theory, illustrating how liquidity constraints can exacerbate the conflict of interest between the principal and the agent when it comes to making taxation decisions.

Solvency, which refers to a company's ability to meet its financial obligations, is closely linked to tax avoidance strategies. This phenomenon can be elucidated through the framework of agency theory. Agency theory elucidates the dynamic relationship between shareholders (the principal) and management (the agent) in the context of potential conflicts of interest. Management, as the entity responsible for the company's capital structure, is entrusted with the duty to optimize shareholder interests.

It has been demonstrated that companies with a high level of solvency have a greater debt burden, which results in interest expense that can reduce company profits (Yahaya & Yusuf, 2020). Based on agency theory, this condition can trigger agency conflicts where management as an agent will tend to make various efforts to reduce the company's tax burden because it is already burdened with high debt interest payments. This propensity can be attributed to the strategic decision of management to curtail the company's tax liability, thereby

ensuring its financial performance aligns with the expectations of lenders and shareholders.This assertion finds corroboration in the findings of Jarboui & Riguen, (2020) and Mocanu et al., (2021), who identified a positive correlation between the Debt to Equity ratio and tax avoidance.

Given these theoretical foundations, we can propose a hypothesis suggesting a positive relationship between solvency and tax avoidance. Specifically, this hypothesis asserts that a company's level of solvency is directly correlated with its management's inclination to pursue tax avoidance strategies. This phenomenon can be attributed to the management's attempts to alleviate the already substantial financial burden of the company, which is primarily attributable to the interest debt obligations.As solvency levels rise, the likelihood of agency conflicts intensifies, as management is inclined to adopt more assertive tax planning decisions to counterbalance the mounting financial obligations. This phenomenon aligns with the principles of agency theory, highlighting how higher levels of debt can exacerbate the conflicts of interest between the principal and agent, particularly in the realm of tax decision-making.

The concept of company size can be quantified in several ways, one of which is by using the natural logarithm of total assets. This metric serves as a scale that illustrates the overall magnitude of a company. Within the framework of agency theory proposed by Jensen & Meckling, (1976), agency relationships arise when one or more principals, such as shareholders, engage agents, like management, to perform a service and, in doing so, delegate decision-making authority to these agents. This theoretical framework provides a foundation for understanding how company size can influence tax avoidance practices.

The relationship between company size and the inclination toward tax avoidance has been extensively explored in academic research. Mocanu et al., (2021) identified a positive correlation between company size and the propensity for tax avoidance, indicating that larger firms are more inclined to employ tax planning strategies. This inclination can be partially explained by the ample resources at the disposal of larger companies, including knowledgeable personnel skilled in formulating and executing effective tax strategies. This phenomenon is consistent with the principles of agency theory, which suggests that management, acting as agents, often holds more information than the company's principals. Such information asymmetry can be leveraged by management to exploit allowable tax avoidance strategies, utilizing loopholes within tax legislation. Furthermore, the ability of management to engage in tax planning is enhanced by their access to tax experts and consultants, a practice commonly adopted by larger firms.

The preceding arguments substantiate the notion that larger companies possess superior resources and capabilities in implementing tax planning strategies that can ultimately result in tax avoidance. Research conducted by Jarboui & Riguen, (2020) along with Agyei et al., (2020) supports this assertion by revealing a positive correlation between company size and tax avoidance. This finding is in line with agency theory, which suggests that larger companies have the operational complexity and resources needed to engage in more aggressive tax planning strategies.

Both theoretical and empirical research backs the hypothesis that company size positively impacts tax avoidance. Specifically, larger companies, as measured by their total assets, tend to adopt more pronounced tax avoidance strategies. This trend can be attributed to their ability to leverage substantial resources and expertise to implement effective tax planning. However, it's crucial to recognize that these companies must also consider political costs when deciding on their tax avoidance practices.

Agency theory highlights the divergence of interests between management and shareholders. Management tends to prioritize compensation and bonuses, which are often associated with the company's profitability. In contrast, shareholders seek to increase the value of the company in the long term. The possession of substantial total assets by a company is often indicative of its robust prospects over an extended timeframe, enhanced stability, and superior capacity to generate optimal profits in comparison to entities with minimal assets

(Kalbuana et al., 2020). Large companies, in particular, possess a distinct advantage in terms of resources, encompassing financial wherewithal and specialized expertise, to engage in more intricate tax planning strategies. Conversely, when these entities attain high levels of profitability, they encounter heightened pressure from the tax obligation that is commensurate with their income. This dynamic can exacerbate agency conflicts, as management in large companies may have both the capacity and incentive to adopt tax avoidance strategies in order to safeguard their net profits and maintain their compensation levels (Oktari et al., 2024). This assertion is consistent with the findings of Oktari et al., (2024), which demonstrate that company size strengthens the relationship between profitability and tax avoidance.

Theoretical arguments suggest that company size enhances the positive relationship between profitability and tax avoidance. According to this hypothesis, the impact of profitability on tax avoidance practices is more pronounced in larger companies. This is because larger firms typically have greater opportunities and resources for aggressive tax planning, as well as a stronger negotiating position when dealing with tax audits. The complexity of agency conflicts in the context of taxation is further compounded in large companies due to their intricate organizational structures and the involvement of numerous stakeholders. The conclusion of this hypothesis is in line with the concept of agency theory, as it highlights how larger corporations can exacerbate conflicts of interest between the principal and the agent when making taxation decisions due to their size.

Agency theory emphasizes the potential conflicts of interest between two key parties: management and shareholders. Management, acting as the company's steward, has the responsibility to ensure that there is enough cash available for operations. Meanwhile, shareholders expect effective resource management to maximize the company's value. Additionally, the size of the company serves as a moderating factor, potentially diminishing the strength of this relationship. As companies increase in size, there is a concomitant increase in the tendency to have superior management and funding sources necessary for company operation (Sonia & Suparmun, 2019). Large companies generally have superior access to capital markets and other funding sources, thereby providing greater flexibility in managing their liquidity. When confronted with liquidity problems, large companies have more alternative funding sources available than tax avoidance strategies. This phenomenon can mitigate agency conflicts within the corporate structure, as management in large companies possess a more diverse array of options to address liquidity challenges without resorting to tax avoidance strategies.

Drawing from these theoretical insights, we can propose the hypothesis that firm size reduces the negative impact of liquidity on tax avoidance. This suggests that larger firms experience a diminished effect of liquidity on their tax avoidance strategies. This is because large firms have more options to manage their liquidity, such as bank loans, debt issuance, or other capital market instruments. Agency conflicts related to liquidity management become more manageable in large firms due to stricter monitoring mechanisms and reputations to be maintained. This hypothesis aligns with agency theory by demonstrating how firm size can alleviate the conflicts of interest between principals and agents, particularly regarding tax decisions, especially in situations where firms encounter liquidity challenges.

The potential for conflicts of interest between management and shareholders is emphasized in agency theory. Company managers are responsible for managing the capital structure and meeting company obligations, while shareholders expect optimal debt management to maximize firm value. The correlation between corporate debt levels and the subsequent impact on interest expenses and the reduction in corporate tax liability has been extensively documented (Pangaribuan et al., 2021). Firms with high solvency often face significant pressure from the burden of managing significant debt and interest expenses. Despite their superior access to funding sources, the substantial debt burden exerts pressure on their financial performance. This dynamic can intensify agency conflicts, as management

in large companies may be more motivated and capable of engaging in tax avoidance strategies to alleviate the substantial financial burden imposed by debt.

Given these theoretical underpinnings, a hypothesis can be postulated that posits the strengthening of the positive effect of solvency on tax avoidance by company size. This hypothesis suggests that the relationship between solvency and tax avoidance practices will be more pronounced in larger companies. This phenomenon can be attributed to the fact that large companies possess greater resources and expertise, enabling them to engage in sophisticated tax planning strategies. Additionally, these companies are subject to heightened pressure to meet the expectations of various stakeholders, including creditors and shareholders. The complexity of agency conflicts in the context of debt management is further compounded in large companies due to the substantial value of debt managed and the extensive involvement of stakeholders in financial decision-making. In line with agency theory, this hypothesis suggests that the size of a firm can increase or decrease conflict of interest between the principal and the agent in matters of taxation decisions, particularly when the firm has large debt burdens.

Method

The present study employs a quantitative approach with a causal method that aims to analyze the effect of profitability, liquidity, and solvency on tax avoidance, with company size serving as a moderating variable. This study encompasses a multitude of variables, including dependent, independent, moderating, and control variables, which are meticulously measured in Table 1. The population of this study comprises annual reports of food and beverage sector companies listed on the Indonesia Stock Exchange during the period from 2020 to 2023. These reports were obtained through the respective companies' websites. The sample utilized in this study comprised 116 data points, meticulously selected through purposive sampling. The selection criteria included the stipulation that the company in question was duly registered and consistently listed on the Indonesia Stock Exchange during the designated observation period. To ensure the integrity of the data, certain outlier values were excluded from the analysis.

The data analysis technique employed in this study utilizes multiple linear regression analysis, implemented through the utilization of the Statistical Product and Service Solution (SPSS) version 25 program. Prior to conducting multiple linear analyses and hypothesis tests, a series of classic assumption test steps are executed to ascertain the validity and accuracy of the regression equation. The classic assumption tests employed in this research include the following: the Kolmogorov-Smirnov normality test, the multicollinearity test, the heteroscedasticity test (evaluated using the Park test), and the autocorrelation test (analyzed with the Durbin-Watson method).

The research model can be formulated in three equations:

$$\text{ETR'} = \alpha + \beta_1 \text{ROA} + \beta_2 \text{CR} + \beta_3 \text{DER} + \beta_4 \text{Size} + e \tag{1}$$

$$\text{ETR} = \alpha + \beta_1 \text{ROA} + \beta_2 \text{CR} + \beta_3 \text{DER} + \beta_4 \text{Size} + \beta_5 \text{CAPIN} + \beta_6 \text{INVIN} + e \tag{2}$$

$$\text{ETR} = \alpha + \beta_1 \text{ROA} + \beta_2 \text{CR} + \beta_3 \text{DER} + \beta_4 \text{Size} + \beta_5 \text{ROA*Size} + \beta_6 \text{CR*Size} + \beta_7 \text{DER*Size} + \beta_8 \text{CAPIN} + \beta_9 \text{INVIN} + e \tag{3}$$

Explanation:

α   : constant
ETR   : Effective Tax Rate
ROA   : Return on Asset
CR   : Current Ratio
DER   : Debt to Equity Ratio
Size   : Firm Size
CAPIN : Capital Intensity
INVIN : Inventory Intensity
β   : regression coefficient
e   : Error term

Table 1 Definition and Measurement of Variables in Operation

Variables	Symbols	Definition	sources
Tax Avoidance	ETR	Tax expense/pre-tax income	(Tambahani et al., 2021)
Profitability	ROA	Net Income/Total Asset	Khamisan & Astuti, (2023)
Liquidity	CR	Current Assets/Current Liabilities	Tarigan & Ubaidillah, (2023)
Solvability	DER	Total liabilities/Total Equity	Prabowo, (2020)
Firm Size	Size	Natural logarithm of the total assets	Agyei et al., (2020)
Capital intensity	CAPIN	Total net fixed asset/Total asset	Widiatmoko & Mulya, (2021)
Inventory Intensity	INVIN	Total inventory/Total asset	Sonia & Suparmun, (2019)

Source: Author's Design, 2025.

Result and Discussion

As illustrated in Table 2, The analysis of the Effective Tax Rate (ETR) shows considerable variation, with values ranging from a low of -86. 00 to a high of 39. 00, and an average of -12. 1132. The high standard deviation of 26. 63164 highlights significant differences in tax management practices among companies in this sector. Similarly, the Return on Assets (ROA) analysis indicates a wide range of profitability, featuring a minimum of -22. 00% and a maximum of 97. 00%, with an average of 7. 5377%. The standard deviation of 13. 53737 further underscores the notable differences in how effectively companies are able to generate profits from their assets. These findings reflect a substantial disparity in asset management efficiency across the industry.

The Current Ratio (CR) serves as a vital liquidity indicator, showcasing a wide range of values from a minimum of 2022. 00 to a maximum of 135,919. 00, with an average of 26,155. 90. The substantial standard deviation of 26,732. 72 highlights significant variation in the company's ability to meet its short-term obligations. In contrast, the capital structure is assessed through the Debt to Equity Ratio (DER), which spans a minimum value of 3. 00 to a maximum of 94. 00, averaging at 44. 12. The standard deviation of 20. 22 indicates a moderate variation in the reliance on debt as a funding source.

In terms of company size within this sector, there is noticeable diversity, ranging from a minimum of 2,091. 00 to a maximum of 3,282. 00, with an average of 2,813. 11. The standard deviation of 224. 07 suggests a moderate level of variability in firm size. Additionally, both Capital Intensity (CAPIN) and Inventory Intensity (INVIN) exhibit similar degrees of heterogeneity; CAPIN has an average of 48. 05 with a standard deviation of 22. 70, while INVIN shows a mean of 16. 02 and a standard deviation of 14. 53..

A comprehensive analysis of the Indonesian food and beverage sector reveals a multifaceted financial landscape, characterized by significant variations in financial performance among stakeholders. The substantial variation in financial performance signifies both opportunities and challenges for stakeholders. This underscores the necessity for investors to undertake meticulous analysis prior to making investment decisions. Conversely, management of these enterprises stands to benefit from the opportunity to measure their performance against the most successful companies in the sector, thus facilitating the enhancement of operational efficiency. Furthermore, regulatory authorities can utilize these data to formulate policies that promote equitable growth in the Indonesian food and beverage sector.

Table 2. Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
ETR	106	-86.00	139.00	-12.1132	26.63164
ROA	106	-22.00	97.00	7.5377	13.53737
CR	106	2022.00	135919.00	26155.8962	26732.72003
DER	106	3.00	94.00	44.1226	20.22290
Size	106	2091.00	3282.00	2813.1132	224.06850
CAPIN	106	7.00	99.00	48.0472	22.70489
INVIN	106	.00	68.00	16.0189	14.52812

Source: Output SPSS, 2025.

Based on the findings from the classical assumption tests presented in Table 3, several key interpretations can be made. The normality test, performed using the Kolmogorov-Smirnov method, yielded an Asymp. Sig. (2-tailed) value of 0. 073. At a 95% confidence level, this value exceeds the significance threshold of 0. 05, indicating that the data for this study are normally distributed. This result confirms that the regression model meets the normality assumption, making it suitable for further analysis.

Additionally, the multicollinearity test, assessed through the Variance Inflation Factor (VIF), showed that all independent variables have VIF values below 10. Specifically, the VIF values are as follows: ROA at 2. 098, CR at 1. 172, DER at 1. 283, Size at 1. 072, CAPIN at 1. 286, and INVIN at 1. 366. These results imply that multicollinearity is not a significant issue in the research model, suggesting that the independent variables do not exhibit strong correlations with one another..

The results of the heteroscedasticity test, as indicated by the significance values, show that all variables have significance values exceeding 0. 05. Notably, the Return on Assets (ROA) and Current Ratio (CR) displayed high values of 0. 685 and 0. 878, respectively, while the Debt to Equity Ratio (DER), Size, Capital Intensity (CAPIN), and Inventory Intensity (INVIN) recorded moderate values of 0. 725, 0. 572, 0. 199, and 0. 095. These outcomes suggest that the regression model is not influenced by heteroscedasticity, implying that the variance of the residuals remains constant across observations. Furthermore, the Durbin-Watson (DW) statistic was calculated at 1. 545, confirming the absence of autocorrelation issues within the regression model. This value is within an acceptable range, further supporting the notion that there is no autocorrelation present, as described by (Field, 2017). This indicates that there is no correlation between the error in the current period (t) and the error in the previous period (t-1).

The results of the classical assumption testing show that the regression model used in this study meets all the necessary classical assumptions. The model in question can be regarded as a Best Linear Unbiased Estimator (BLUE), a designation that signifies its suitability for conducting multiple linear regression analyses and subsequent hypothesis testing. This substantiates the reliability and validity of the subsequent analysis' findings, ensuring the accuracy and dependability of the results obtained.

Table 3. Classical Assumption Test

Variables	Normality (*Kolmogorov Smirnov*)	Multikolinearity (*VIF*)	heteroscedasticity (*Sig*)	Autocorrelation (*DW*)
ROA		2.098	.685	
CR		1.172	.878	
DER	0.073	1.283	.725	1.545
Size		1.072	.572	
CAPIN		1.286	.199	
INVIN		1.366	.095	

Source: Output SPSS, 2025.

The results of multiple linear regression analysis in Table 4 indicate that three models were tested with ETR (Effective Tax Rate) as the dependent variable. This analysis reveals noteworthy developments in each of the models that were examined.

Table 4. Multiple Linear Regression Analysis Results

Variables	Model 1		Model 2		Model 3	
	t	Sig	t	Sig	t	Sig
ROA	-11.717	.000	-11.690	.000	-6.645	.000
CR	2.112	.037	2.284	.024	2.861	.005
DER	-.834	.406	1.235	.220	.942	.349
Size	-.092	.927	-.782	.436	-.408	.684
ROA*Size					-5.428	.000
CR*Size					2.273	.025
DER*Size					3.116	.002
CAPIN			-3.454	.001	-5.545	.000
INVIN			-5.120	.000	-7.133	.000

Dependent Variable: ETR

Source: Output SPSS, 2025.

In Model 1, which examines the direct influence of the independent variable, profitability reveals a significant negative effect, evidenced by a t value of -11. 717 and a significance level of 0. 000. These results indicate a negative correlation between the level of profit generated and the extent of tax avoidance practices utilized by food and beverage companies in Indonesia. This outcome stands in contrast to the predictions of agency theory, which posits that managers of high-profit businesses, motivated by the desire to maintain bonuses and compensation, will engage in tax avoidance practices. The findings of the present study demonstrate that companies with high profit margins managed by management tend to engage in less tax avoidance. According to Widiatmoko & Mulya, (2021), High-profit companies effectively manage their revenue while fulfilling their tax obligations. These companies prioritize maintaining a positive image and avoiding significant violations to ensure their continued viability. Furthermore, the study underscores the pivotal role of heightened regulatory oversight by tax authorities and the government's strategic tax amnesty program in compelling companies with substantial profits to adhere to tax compliance. The results of this study challenge the initial hypothesis and do not align with the reported conclusions by Yoon et al., (2021) and Novianto, (2021), while corroborating the observations documented by Sonia & Suparmun, (2019) and Jarboui & Riguen, (2020).

The study's findings reveal that liquidity has a significant positive impact, as reflected in a t value of 2. 112 and a statistical significance of 0. 037. This finding indicates that liquidity exerts a substantial positive influence on tax avoidance practices. The findings suggest a direct

correlation between the liquidity levels of a company and its propensity for tax avoidance strategies. Conversely, a company's ability to meet its obligations declines as its capacity for tax avoidance decreases. This outcome stands in contrast to the predictions of agency theory, which posits that management will prioritize fulfilling its tax obligations over its operational interests. As illustrated in Table 2, food and beverage sector companies possess substantial assets, providing them with greater options for meeting their tax obligations despite their suboptimal ability to settle short-term debts. Companies with high liquidity can also use professional tax consultants to help them minimize their tax burden. The findings of this study challenge the initial hypothesis and differ from the results reported by Agyei et al., (2020), Rahayu et al., (2022), and Oktari et al., (2024), while supporting the empirical results of Novianto, (2021).

Meanwhile, solvency and company size demonstrated no significant effect, with significance values of 0.406 and 0.927, respectively, which are above the significance threshold of 0.05. These findings indicate that the ratio of corporate debt to assets does not influence tax avoidance practices, which contradicts the original hypothesis. This outcome not only challenges the initial assumption but also supports the conclusions reported by Sonia & Suparmun (2019). They argued that an elevated debt ratio leads to increased interest expense, which can be offset against taxable income, thereby reducing the incentive for tax avoidance strategies. Another factor that emerged during the 2019 novel corona virus (nCoV) pandemic was the implementation of tax incentive and relaxation policies by the government, as outlined in Minister of Finance Regulation Number 9 / PMK.03 / 2021 concerning Tax Incentives for Taxpayers Affected by the 2019 Corona Virus Disease Pandemic and Minister of Finance Regulation Number 34 / PMK.04. / 2020 concerning Provision of Customs and/or Excise Facilities and Taxation on Imports of Goods the 2019 Corona Virus Disease (Covid-19) Pandemic, assist companies in settling debt burdens without having to practice tax avoidance. This research is consistent with the findings of Handoyo et al., (2022) and Oktari et al., (2024), which suggest that the debt-to-equity ratio has no effect on tax avoidance strategies. However, these results contrast with those reported by Jarboui & Riguen, (2020) and Mocanu et al., (2021), who discovered that the levels of solvency have an impact on tax avoidance.

The hypothesis suggesting that firm size significantly influences tax avoidance has not been supported by the regression results. Specifically, the size of a firm's assets appears to have no impact on its tax avoidance decisions. These findings contrast with prior research conducted by Jarboui & Riguen, (2020), Agyei et al., (2020), and Yoon et al., (2021) that the size of the company's assets affects tax avoidance practices. Conversely, various studies carried out by Sonia & Suparmun, (2019), Kalbuana et al., (2020) and Rahayu et al., 2022) support these findings. Management does not take advantage of the information asymmetry and use its resources and capabilities to engage in tax avoidance. In Table 2, the size of food and beverage companies has a very high mean value, which makes it easier for companies to handle high interest expenses by using their assets. According to Rahayu et al., (2022), Companies with substantial assets often enjoy a strong liquidity position, enabling them to effectively manage upcoming debt obligations.

Model 2 incorporates control variables for capital intensity and inventory intensity into the analysis. In this model, profit consistently demonstrates a strong and significant negative effect (t = -11. 690, sig = 0. 000). This means that as profits increase, tax avoidance practices tend to decrease. Conversely, liquidity exhibits a significant positive effect (t = 2. 284, sig = 0. 024), suggesting that greater financial flexibility is associated with higher levels of tax avoidance.

Additionally, both control variables show significant effects; capital investment (CAPIN) has a notable negative impact (t = -3. 454, sig = 0. 001), as does inventory (INVIN) (t = -5. 120, sig = 0. 000). This implies that increased capital investment and inventory levels are linked to a reduction in tax avoidance practices.

On the other hand, the debt-equity ratio and the size of the firm do not reveal significant effects within the model, indicating that these factors do not influence tax avoidance. Nevertheless, the findings underscore that higher levels of capital investment and inventory exert a more considerable significant impact on return on assets (ROA), current ratio (CR), debt-equity ratio (DER), and overall firm size as they relate to tax avoidance practices..

Model 3 represents the most comprehensive approach, incorporating the moderating effect of Size on ROA, CR, and DER. The analysis reveals noteworthy findings: the interaction between ROA and Size has a significant negative impact (t = -5. 428, p < 0. 001), while the interactions of CR and Size, as well as DER and Size, show significant positive effects (t = 2. 273, p = 0. 025 and t = 3. 116, p = 0. 002, respectively). Additionally, the control variables CAPIN and INVIN consistently exhibit significant negative effects, with CAPIN registering (t = -3. 545, p < 0. 001) and INVIN (t = -7. 133, p < 0. 001).

Overall, the analysis reveals that company size (Size) serves as a significant moderating variable in the relationship between the independent variables and effective tax rate (ETR). In particular, size strengthens the effect of CR and DER on ETR, but weakens the effect of ROA on ETR. The larger the size of the firm, the lower the tendency to engage in aggressive tax avoidance practices, despite the firm's relatively high level of profitability. Strict supervision by tax authorities of large companies is an important factor influencing tax behavior. High legal risks and potential consequences of tax violations make the management of large companies more cautious in implementing tax avoidance strategies. Management prefers to focus on compliance rather than seeking aggressive loopholes to lighten their tax obligations while preserving their strong reputation. This conclusion rejects the original hypothesis and contradicts the findings of (Cindy & Ginting, 2022; Sulaeman & Surjandari, 2024).

Firm size serves as a factor that exacerbates the negative impact of liquidity on tax avoidance. Large firms have more sophisticated internal systems for managing liquidity and taxes. When liquidity is low, large firms tend to be more cautious in implementing tax avoidance strategies because they face greater risks. The complexity of the organizational structure and the strict supervision by various stakeholders limit the scope for aggressive tax avoidance practices. The low liquidity of large companies encourages management to be more tax compliant. They develop strategies for efficiency and transparency in financial management, including tax management. The ability to access external funding sources and a good reputation in the capital market are important considerations in maintaining tax compliance. These results reject the hypothesis and are not consistent with Rahayu et al., (2022), Those who study the relationship between tax avoidance and liquidity levels are not affected by the size of an organization.

Size serves as an important moderating factor, enhancing the positive correlation between solvency and tax avoidance. Large firms with high levels of solvency have financial and structural capabilities that allow them to develop more sophisticated tax avoidance strategies. The ability to access external funding sources, have a global financial network and a team of in-house tax experts becomes a competitive advantage in designing complex and measurable tax avoidance schemes.

Company size acts as a catalyst that increases the potential for solvency-based tax avoidance. Complex organizational structures allow large companies to exploit tax loopholes, engage in intercompany transfer pricing, and optimize debt structures for tax purposes. The greater the solvency of a firm, the more opportunities it has to develop profitable tax strategies. This result confirms the initial hypothesis and is inconsistent with Cindy & Ginting, (2022), Rahayu et al., (2022) and Sulaeman & Surjandari, (2024), findings that firms of any size do not have an impact on the relationship between leverage and tax avoidance.

The control variables CAPIN and INVIN consistently show a significant and negative effect on ETR in all models tested. The conclusion is drawn that the size of the company is a

significant factor in determining the effectiveness of corporate tax management, and management needs to consider this factor when making decisions related to tax policy.

Conclusions and suggestions

This study reveals the complex dynamics of tax avoidance among firms In Indonesia's food and drink industry. Profitability shows a significant negative relationship with tax avoidance, meaning that firms with high profits tend to be more compliant with their tax obligations. This contradicts agency theory, which originally suggested that management would aggressively avoid taxes to maintain bonuses. Liquidity plays a crucial role in enhancing tax avoidance practices, indicating that companies with stronger financial resources are better positioned to implement tax avoidance strategies. Interestingly, neither solvency nor firm size demonstrates a direct significant influence on tax avoidance across any of the models tested. However, the moderating effect of firm size emerges as a noteworthy research insight. It appears that larger firms can amplify the impact of liquidity and solvency on tax avoidance while simultaneously diminishing the effect of profitability. The larger the firm, the more complex the internal and external control mechanisms that promote tax compliance.

For management, the study recommends the importance of developing a transparent and legally compliant tax strategy. Tax-related decisions should take into account not only financial aspects, but also legal, reputational and regulatory risks from tax authorities. Companies are advised to develop a comprehensive tax governance system and optimize internal resources. Future research is anticipated to broaden its scope beyond the food and beverage sector, taking into account additional contextual variables that could influence tax avoidance behavior. Extending the research period and employing diverse analytical methods could offer a richer insight into the dynamics of tax avoidance in Indonesia. From a theoretical standpoint, the findings of this study enhance our understanding of the factors influencing tax avoidance, particularly highlighting the moderating role of firm size. Additionally, the results can serve as a valuable resource for academics, practitioners, and policymakers striving to develop more effective tax policies and regulations.

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