

The Effect of Leverage, Profitability and Sales Growth on Tax Avoidance in Manufacturing Companies Listed on the IDX

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Abstract

The purpose of this study was determined and analyze the effect of leverage, profitability, sales growth on tax avoidance in food and beverage sub sector companies listed on The IDX for the 2020 to 2024 period. The study population was 15 sub sector companies listed on The IDX. Observation were 75 samples and were selected using the purposive sampling method. Data is processed using panel data regression statistical test methods. The results of this study prove that leverage not effect on tax avoidance, Profitability and sales growth have a positive effect on tax avoidance on sub sector companies listed on The IDX.

Keywords

Tax Avoidance, Leverage, Profitability, Sales Growth



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INTRODUCTION

Taxes are one of the largest sources of state revenue and a significant source of expenditure. Taxpayers include not only individuals but also corporations. A significant portion of government revenue is generated through tax revenue, which is used to fund public services and support infrastructure development and maintenance. In the evolving global era, the relationship between growth, sales, and tax avoidance has become a crucial topic (Shubita, 2024). Tax avoidance is a crucial issue for governments, businesses, and researchers worldwide. In Indonesia, as in many other countries, understanding the relationship between profitability, sales growth, and tax avoidance is crucial for policy formulation, business strategy, and academic investigation. Tax avoidance, as a legal method to reduce the tax burden, has become a complex phenomenon in Indonesian companies, particularly in the primary consumer goods sector, which faces changing sales and capital structure pressures (Sulistiana et al., 2025). High sales growth has the potential to increase tax

planning capacity through the allocation of financial resources (Dwi Hapsoro et al., 2024).

Tax avoidance is a widespread phenomenon in Indonesia. One company that engaged in tax avoidance practices was PT Adaro Energy Tbk through transfer pricing, shifting large amounts of profits from Indonesia to companies in countries with tax exemptions or low tax rates. This practice was carried out from 2009 to 2017, allowing the company to pay Rp 1.75 trillion, or US\$ 125 million, less in taxes than it would have paid in Indonesia (Kompasiana, 2022). The phenomenon of tax avoidance cases at PT Toyota Motor Manufacturing Indonesia (TMMIN). According to Kontan.co.id news, in its tax report, TMMIN stated that its sales value reached Rp 32.9 trillion, but the Directorate General of Taxes corrected the figure to Rp 34.5 trillion, or a correction of Rp 1.5 trillion. With the correction of Rp 1.5 trillion, TMMIN had to pay an additional Rp 500 billion in taxes (Idris, 2013).

DDTCNews reported on another case related to tax avoidance, namely the case of six US technology companies engaging in aggressive tax avoidance: Amazon, Google, Facebook, Netflix, Apple, and Microsoft. Tax avoidance is carried out by diverting income and profits through tax havens or low-tax countries and delaying the payment of taxes (Wicaksono, 2019). Another case of tax avoidance is the case of PT EIB, which caused the state a loss of Rp 110,723,045,700.00. PT EIB intentionally issued and/or used tax invoices that were not based on actual transactions during the 2020-2021 period, and intentionally submitted Tax Returns (SPT) or provided false or incomplete information.

According to the Trade-Off Theory, tax avoidance is the result of a company's rational consideration of the benefits and costs. Companies engage in tax avoidance to obtain benefits in the form of tax savings that can increase profit after tax and cash flow. However, this practice also carries risks and costs, such as potential tax audits, sanctions, and damage to the company's reputation. Therefore, based on the Trade-Off Theory, companies tend to engage in controlled tax avoidance, namely at a level where the economic benefits outweigh the risks and costs.

One of the impacts of tax avoidance on the government can be detrimental to state revenue, as taxes are a significant source of revenue. However, for companies, tax avoidance benefits them by reducing their tax obligations. Several factors can influence tax avoidance, such as leverage, profitability, and sales growth. Leverage is one factor influencing tax avoidance. According to Kasmir (2021), leverage is a ratio used to measure the extent to which a company's assets are financed by debt.

This ratio reflects a company's ability to meet all short-term and long-term obligations. Some studies (Dwi Hapsoro et al., 2024; Gultom, 2021; Sulaeman, 2021) state that leverage negatively affects tax avoidance, while other researchers have found the opposite. Researchers (Hermawan & Amyar, 2021; Sulistiana et al., 2025), (Lintang, 2023), and (Hendayana et al., 2024) state that leverage influences tax avoidance. (Wahyuni et al., n.d.) state that leverage has a positive effect on tax avoidance.

The second factor influencing a company's tax avoidance is profitability. According to (Fahmi, 2020), the profitability ratio is used to measure overall management effectiveness based on the level of profit earned from the company's operational activities. Based on the results of several studies on profitability and tax avoidance, several gaps exist. Research by Dwi Hapsoro et al., 2024, Wahyuni et al., n.d., Gultom, 2021, Nursoleh & Tjun, 2025, and Sulistiana et al., 2025 indicates that profitability has no effect on tax avoidance. Research by Hendayana et al., 2024, Sulaeman, 2021, Hermawan & Amyar, 2021, Mahdiana, Maria Amin, 2020, and Lintang, 2023 indicates that profitability has a positive effect on tax avoidance.

Sales growth is one factor influencing tax avoidance. According to Kasmir (2021), sales growth is an indicator used to assess a company's sales development over time. The higher the sales growth rate, the greater the company's potential for profit generation. High sales growth is generally accompanied by increased company profits. This increase in profits will increase the tax burden. This condition can encourage management to engage in tax avoidance, namely efforts to minimize the tax burden legally through tax planning without violating tax regulations. In research (Dwi Hapsoro et al., 2024), (Khoirunnisa, 2021), (Norisa, Ismi, et al., 2022) influence tax avoidance, (Wahyuni et al., n.d.) sales growth has a positive effect on tax avoidance, while researchers (Sulistiana et al., 2025) and (Lintang, 2023) say sales have no effect.

An agency relationship is an agreement in which one or more principals appoint an agent to represent them, granting the agent decision-making authority. Tax avoidance practices can be explained through Agency Theory, which states that a contractual relationship exists between shareholders as principals and management as agents. In this relationship, management has more information about the company's condition than shareholders (information asymmetry), thus giving management the opportunity to make decisions that benefit itself, including determining the company's tax strategy. One such strategy is tax avoidance by exploiting loopholes in tax regulations that are still legally permitted. Although tax

avoidance does not violate tax regulations, aggressive practices can increase corporate risk, incur agency costs, and undermine stakeholder trust (Firmansyah & Triastie, 2021).

Tax avoidance is a legal effort to save taxes by exploiting applicable tax regulations to reduce the amount of tax payable (Suandy, 2016). Based on the concept of tax planning (Gunadi, 2014), tax avoidance can be defined as efforts made by taxpayers to fulfill their tax obligations correctly while simultaneously streamlining the tax burden in accordance with applicable laws and regulations. According to (Kasmir, 2021), leverage is a ratio used to measure the extent to which a company's assets are financed by debt. This ratio indicates the company's ability to meet all its obligations, both short-term and long-term. According to (Fahmi, 2020), leverage is a company's ability to use funds from debt to finance assets or operational activities with the aim of increasing returns for shareholders.

Profitability is a ratio used to measure a company's ability to generate profits using all its resources. According to (Kasmir, 2021), a high level of profitability indicates that a company is able to manage assets and capital effectively to generate profits, and the profitability ratio is often used as an indicator of a company's financial performance. Profitability is a company's ability to generate profits through its operational activities. The higher the profitability value, the greater the company's profits. This situation can encourage companies to engage in tax avoidance in an effort to minimize the increasing tax burden that accompanies increasing profits.

According to (Khoirunnisa, 2021), sales growth is one indicator of a company's success in increasing sales volume through the implementation of effective marketing and sales strategies. The higher the sales growth rate, the greater the company's potential for profit generation. This increase in profits can increase the company's tax burden, thus encouraging management to engage in tax avoidance, a tax management strategy aimed at minimizing the tax burden while still utilizing applicable tax regulations.

METHODS

According to Sugiyono (2024), a research method is a scientific approach used to obtain data for specific objectives and practical purposes through rational, empirical, and systematic procedures, ensuring that the findings are scientifically valid and accountable. This study employed a quantitative research design with a causal approach to examine the cause-and-effect relationships between independent and dependent variables. As explained by Sujarweni (2023), causal research aims to identify whether changes in independent variables lead to changes in dependent

variables through statistical analysis. Accordingly, this study investigated the effects of leverage (X_1), profitability (X_2), and sales growth (X_3) as independent variables on tax avoidance (Y) as the dependent variable. The research population consisted of companies listed on the Indonesia Stock Exchange (IDX), while the research subjects were manufacturing companies in the food and beverage sector during the 2021–2024 period. The study utilized secondary data obtained from the annual financial statements and annual reports of companies listed on the IDX covering the 2020–2024 period. The sampling process employed a purposive sampling technique, which, according to Arikunto (2021), is a non-probability sampling method in which samples are selected based on specific research objectives rather than random or stratified procedures. Based on predetermined inclusion criteria, 15 companies were selected as the research sample. The research instrument consisted of a documentation sheet (data sheet) developed according to the indicators of each research variable, namely leverage, profitability, sales growth, and tax avoidance. In line with Sugiyono (2024), research instruments are tools used to measure observed natural or social phenomena. The collected secondary data were systematically recorded, classified, and processed to facilitate hypothesis testing. Data analysis was conducted using panel data regression techniques preceded by classical assumption tests, including normality, multicollinearity, autocorrelation, and heteroscedasticity tests, to ensure that the regression model satisfied the required statistical assumptions. Furthermore, model selection was performed using the Chow test (Likelihood Ratio Test) to determine the most appropriate model between the Common Effect Model and the Fixed Effect Model, followed by the Hausman test to select the most suitable estimation model between the Fixed Effect Model and the Random Effect Model. The conceptual framework of this study illustrates the influence of leverage, profitability, and sales growth on tax avoidance. Based on this framework, three research hypotheses were formulated: (H1) leverage has a positive effect on tax avoidance, (H2) profitability has a positive effect on tax avoidance, and (H3) sales growth has a significant effect on tax avoidance.

FINDINGS AND DISCUSSION

According to Ghozali (2021), descriptive statistical analysis provides an overview or description of the data through measures such as the mean, standard deviation, variance, maximum value, minimum value, sum, range, skewness (distribution asymmetry), and kurtosis (distribution peakedness), enabling researchers to understand the characteristics of the data used in the study. The results of the descriptive statistical analysis are presented in Table 1.

Table 1. Descriptive Statistics of the Variables for the 2020–2024 Period

Variable	Min	Max	Mean	Std. Deviation
Tax Avoidance (Y)	0.00	5.45	1.3903	0.9681
Leverage (X ₁)	50.61	113.3	85.885	11.6008
Profitability (X ₂)	-11.15	4.5	0.9835	2.4667
Sales Growth (X ₃)	-0.882	1.379	0.1486	0.2245

Source: Processed using EViews software.

Based on Table 1, the maximum value of tax avoidance is 5.45, while the minimum value is 0.00, with a mean of 1.3903 and a standard deviation of 0.9681. For the leverage variable, the minimum value is 50.61, the maximum value is 113.3, the mean is 85.885, and the standard deviation is 11.6008. The profitability variable has a minimum value of -11.15, a maximum value of 4.5, a mean of 0.9835, and a standard deviation of 2.4667. Meanwhile, sales growth has a minimum value of -0.882, a maximum value of 1.379, a mean of 0.1486, and a standard deviation of 0.2245.

Classical Assumption Tests

In this study, the normality of the residuals was tested using the Jarque–Bera (J–B) test. The normality test produced a Jarque–Bera probability value of 0.073513. Since the probability value (0.073513) is greater than the significance level of 0.05, the normality assumption is satisfied, indicating that the residuals are normally distributed.

The presence of multicollinearity was examined using the correlation matrix among the independent variables. According to Ghozali (2021), if the correlation coefficient between independent variables exceeds 0.90, it indicates the presence of multicollinearity. The results of the multicollinearity test showed that no multicollinearity existed among the independent variables because all correlation coefficients were below 0.90. The results are presented in Table 2.

Table 2. Multicollinearity Test Using the Correlation Matrix

	Leverage	Sales Growth	Profitability
Leverage	1.000000	0.446713	0.410436
Sales Growth	0.446713	1.000000	0.470598
Profitability	0.410436	0.470598	1.000000

Source: Processed using EViews software.

Based on the multicollinearity test results, it can be concluded that there is no indication of multicollinearity among the independent variables because the correlation coefficients do not exceed 0.90. The heteroscedasticity test results indicate that the regression model does not suffer from heteroscedasticity. This is demonstrated by the significance values of all independent variables, which are greater than 0.05 (Sig. > 0.05). Specifically, the probability value obtained is 0.6338, which is greater than 0.05. Therefore, the residual variances are constant across

observations (homoscedasticity), indicating that the regression model satisfies one of the classical assumption requirements.

The assumption of residual independence (non-autocorrelation) was tested using the Durbin–Watson test. Based on the autocorrelation test, the Durbin–Watson statistic is 2.0283993. Since the Durbin–Watson value lies between 1 and 3 ($1 < 2.0283993 < 3$), the assumption of non-autocorrelation is fulfilled. In other words, there is no significant autocorrelation among the residuals.

Heteroscedasticity was also examined using the Breusch–Pagan test. The test results show that the Prob. Chi-Square value is 0.6272, which is greater than 0.05. Therefore, it can be concluded that the regression model does not exhibit heteroscedasticity.

Based on the results of the Chow test, the probability value is 0.4343. Since the probability value of 0.4343 is greater than 0.05, the appropriate estimation model is the Common Effect Model (CEM). Consequently, the Hausman test was not required in this study.

Multiple linear regression analysis was employed to determine the effect of one variable on another. Based on the results of the multiple linear regression analysis, the estimated regression equation is as follows:

$$Y = -14.32 - 0.25X_1 + 0.09X_2 + 0.22X_3 + e$$

Discussion

The Effect of Leverage on Tax Avoidance

Based on the research results obtained from the t-test, which indicates that leverage negatively impacts tax avoidance, leverage negatively impacts tax avoidance. Therefore, the first hypothesis in this study is rejected. This is because companies with high debt levels do not necessarily engage in tax avoidance because, despite their high debt levels, they still comply with their tax obligations. This means that companies with high debt levels do not necessarily engage in tax avoidance because, despite their high debt levels, they still comply with their tax obligations. For example, when a company has high debt to purchase fixed assets, it is still subject to tax, meaning the company cannot engage in tax avoidance (Lintang, 2023).

This aligns with the Trade-Off Theory. The higher the level of leverage, the greater the legal tax savings obtained through reduced interest expenses, thus reducing the need for companies to employ tax avoidance strategies. Therefore, the Trade-Off Theory can explain the negative relationship between leverage and tax avoidance. The results of this study align with those of several researchers, including (Dwi Hapsoro et al., 2024), (Mahdiana, Maria. Amin, 2020), (Shubita, 2024), and (Lintang, 2023), who stated that leverage negatively impacts tax avoidance.

The Effect of Profitability on Tax Avoidance

Based on the results of the statistical t-test, profitability positively impacts tax avoidance, thus accepting Hypothesis 2 in this study. This indicates that during the study year, if food and beverage sub-sector companies had higher profitability, the opportunity for tax avoidance would increase. This is because companies with high profits would be unable to pay taxes at the applicable rate. More profitable companies tend to strive to maintain high net income to attract investors and maintain their financial image. One way to do this is by reducing their tax burden through tax avoidance.

According to the Agency Theory proposed by Michael C. Jensen and William H. Meckling (1976), profitability can influence a company's propensity to engage in tax avoidance. Agency Theory explains that the separation of ownership and management of a company creates a conflict of interest between shareholders (principals) and management (agents). Management has an incentive to improve company performance, one of which is by increasing after-tax profits. When a company has a high level of profitability, taxable profits also increase, resulting in a greater tax burden. This condition can encourage management to implement tax planning strategies, including tax avoidance within the scope of tax regulations, to reduce the tax burden and maximize company profits. Thus, Agency Theory supports the positive effect of profitability on tax avoidance because the higher the profitability, the greater the incentive for management to manage the tax burden efficiently to meet shareholder expectations.

The results of this study align with those of researchers (Hendayana et al., 2024), (Sulaeman, 2021), (Hermawan & Amyar, 2021), (Mahdiana, Maria. Amin, 2020), and (Lintang, 2023), who stated that profitability has a positive effect on tax avoidance.

The Effect of Sales Growth on Tax Avoidance

Based on the results of the statistical t-test, sales growth positively impacts tax avoidance. Therefore, Hypothesis 3 in this study is accepted. Increased sales volume reflects a company's sales growth. Higher sales growth leads to greater profits, leading to increased profitability (Wahyuni et al., n.d.). This indicates improved company performance. However, increased profits also increase the company's tax burden. Therefore, companies tend to engage in optimal tax planning to minimize their tax burden, one of which is through tax avoidance practices within the limits of applicable tax regulations. Agency theory supports a positive relationship between sales growth and tax avoidance, as higher sales growth increases management's incentive to manage the tax burden to maximize company value and meet

shareholder expectations. High sales growth is generally accompanied by increased revenue and profits. Increasing profits also increase the company's tax burden. This situation can encourage management to implement efficient tax planning, including tax avoidance practices within the scope of tax regulations, to reduce the tax burden and maintain corporate profitability. Based on the results of this study, this research aligns with several other studies, including (Dwi Hapsoro et al., 2024), (Khoirunnisa, 2021), (Norisa, Ismi, et al., 2022), which found that sales growth has a positive effect on tax avoidance. (Wahyuni et al., n.d.).

CONSLUSSION

Based on the results of the analysis and discussion, it can be concluded that leverage has a negative effect on tax avoidance among food and beverage manufacturing companies listed on the Indonesia Stock Exchange during the 2020–2024 period. In contrast, profitability has a positive effect on tax avoidance, indicating that companies with higher profitability tend to engage in greater tax avoidance activities. Furthermore, sales growth has a negative effect on tax avoidance among food and beverage manufacturing companies listed on the Indonesia Stock Exchange during the 2020–2024 period. These findings demonstrate that leverage and sales growth reduce the tendency of companies to engage in tax avoidance, whereas profitability increases the likelihood of tax avoidance practices.

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