Tax Avoidance in F&B Companies in Relation Among Leverage, Sales Growth, and Firm Size with Profitability as Mediating

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Abstract

The objective of this research is to examine how leverage, sales growth, and firm size have an effect on tax avoidance through profitability as mediating in food and beverage companies listed on the Indonesia Stock Exchange (IDX). The research utilizes three independent variables: leverage measured by Debt to Asset Ratio (DAR); sales growth measured by the change in current sales relative to previous sales; and firm size measured by the natural logarithm of total assets. The mediating variable is profitability, measured by Return on Assets (ROA), while the dependent variable is tax avoidance, measured by Cash Effective Tax Rate (CETR). The population of this research is all of the food and beverage companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2023. The purposive sampling method was used in determining the sample and there were 21 companies obtained with a total research sample of 84 obtained over four years. The results of this research show that leverage and sales growth partially have a significant effect on profitability, while firm size partially has no significant effect on profitability. Leverage, sales growth, firm size and profitability partially have no significant effect on tax avoidance.

Keywords: Tax Avoidance, Cash Effective Tax Rate, Leverage, Sales Growth, Firm Size, Profitability, Mediating.

1. Introduction

Taxes represent a societal duty to the state and signify community involvement in advancing the nation and homeland. Taxes also function as a revenue source for a nation, intended to meet the country's requirements. Taxation also plays a part in managing the country's economic and financial policies. Corporate tax payments indirectly impact the country's development, which is crucial in funding public services, including infrastructure, food and beverages, healthcare, national defence, and education [1]. Taxes are essential in influencing the Indonesian economy since they are the principal source of money for the Revenue Budget and State Expenditure (APBN) [2].

The data presented in Table 1.1 indicate that tax revenue, in contrast to other sources, dominates our national revenue system. This illustration demonstrates the importance of tax money in improving the country for everyone. The government's efforts to maximize tax income face several challenges. This is due to taxpayers' practice of reducing tax payments through tax avoidance. Tax avoidance is when taxpayers legally and safely try to avoid paying taxes by following the rules set by tax regulations [3]. This practice involves strategically utilizing methodologies and approaches that capitalize on loopholes inherent in taxation laws, thereby reducing the amount of payable taxes. Companies commonly employ tax avoidance as a strategic measure to alleviate their tax liabilities while adhering to the established tax frameworks and regulations [4]. Tax evasion is an intentional understatement of tax responsibilities by taxpayers, including submitting dishonest taxes such as overstating income or earnings less than is received. Besides moral misbehaviour, tax evasion is a breach of tax law (illegal).

Food and beverages are a consumer goods subsector categorised as the fast-moving consumer goods company classification [5]. Fast-moving consumer goods (FMCG) company refers to a wide variety of items that are often eaten fast and have a relatively short shelf life. Food and beverage items, such as packaged snacks, soft drinks, canned goods, and fresh produce, are typical examples of FMCG products. These goods are routinely purchased and constitute a considerable portion of daily consumer consumption. The margins are low in this sector, but the sales turnover is high. The contribution of Food and Beverage Companies to Indonesian tax payments can be significant and varies based on the firm size, type of operation, and various other factors [6].

The food and beverages company frequently incorporates a variety of operations and company structures, such as complicated supply chains, several product brands, and varied operating locations [7]. Due to the high sales turnover, competition in Indonesia's food and beverage companies was also getting more intense. Diversity creates a wide range of competition within the industry. They often face price competition, with consumers looking for the best deals. Competitive pressures can push companies to optimize resource allocation. To remain competitive, companies may seek ways to reduce costs, including managing taxes more efficiently through legal tax avoidance. This can involve optimizing tax deductions, credits, or incentives to maintain competitive pricing [8].

Based on the description above, the researcher finds interest in pursuing this study. Guided by these factors, the research will be entitled The Effect of Leverage, Sales Growth and Firm Size on Tax Avoidance with Profitability as Mediating Variable in Food and Beverage Companies listed on the Indonesia Stock Exchange. Research on this topic is increasingly interesting after there was a research gap in previous research. The Influence of Firm Size on Tax Avoidance that company size does not have a significant influence on tax avoidance [9]. Company size has a significant influence on tax avoidance [10].

Research on the effect of leverage on tax avoidance also shows mixed results, leverage has a significant influence on tax avoidance. On the other hand, leverage does not have a significant effect on tax avoidance [11]. This research will be an effort to verify the existence of gaps in the research results above by developing an alternative research model to find an answer to whether Leverage, Sales Growth, and Firm Size have an effect on Tax Avoidance. The novelty of this research is the research model offered, namely includes Profitability as a mediator variable.

The content of the research is the answer to the question does leverage have a significant effect on profitability in food and beverage companies listed on the Indonesia Stock Exchange?; Does sales growth have a significant effect on profitability in food and beverage companies listed on the Indonesia Stock Exchange?; Does firm size have a significant effect on profitability in food and beverage companies listed on the Indonesia Stock Exchange?; Does leverage have a significant effect on tax avoidance in food and beverage companies listed on the Indonesia Stock Exchange?; Does sales growth have a significant effect on tax avoidance in food and beverage companies on the Indonesia Stock Exchange?; Does firm size have a significant effect on tax avoidance in food and beverage companies on the Indonesia Stock Exchange?; Does profitability have a significant effect on tax avoidance in food and beverage companies listed on the Indonesia Stock Exchange?.

This research will use the Cash Effective Tax Rate (CETR) formula to determine tax avoidance because cash is essential in determining a company's tax payments. Furthermore, the Cash Effective Tax Rate (CETR) measures short-term tax avoidance [12]. A greater CETR compared to the corporate income tax rate suggests less tax avoidance. A lower CETR indicates increased tax avoidance [13]. The formula is as follows (1).

$$CETR = \frac{Cash\,Tax\,Paid}{Profit\,Before\,Tax} \qquad (1)$$

Leverage ratios quantify the relationship between a firm's liabilities and shareholder equity. This metric reflects the extent to which a company relies on debt financing (external sources) compared to its own capital (ownership interest) [14]. This research will be using the Debt to Asset Ratio (DAR). The Debt to Asset Ratio (DAR) has a significant impact on a company's profitability, which is commonly measured by return on assets (ROA). A higher Debt to Asset Ratio (DAR) value lowers the company's ROA [15]. This problem is due to the expenditures associated with debt payments or loan management, which decreases the enterprise's total profitability. The metric for assessing the leverage indicator is (2).

$$DAR = \frac{Total\,Liabilities}{Total\,Assets} \qquad (2)$$

Sales growth is the percentage increase in sales between the current and preceding periods. A company's success in its operations can be inferred from the consistent growth in sales. The corporation experiences a positive correlation between sales growth and profit expansion [16]. Companies that generate substantial profits can exert influence over the tax burden they bear. A higher sales volume typically corresponds to increased profits and improved overall performance. The evaluation of sales growth involves examining alterations in sales between the previous and subsequent periods [17]. Sales growth (3).

$$Sales\,Growth = \frac{Sales_t - Sales_{t-1}}{Sales_{t-1}} \qquad (3)$$

The measurement of firm size can be conducted by transforming the total assets of an entity into natural logarithms (Ln). Assessing firm size using Ln (total assets) is considered more stable compared to other proxies. The total value of assets usually tends to be larger, therefore the total asset value is simplified by natural logarithms without altering the actual proportion of the assets [18]. Hence, the formula for measuring firm size is Firm Size = Ln Total Assets.

Profitability plays a crucial role within a company, as the primary objective of any business is to generate income or revenue. Profitability measures a company's capacity to generate earnings over a specific timeframe. When a company demonstrates strong profitability, creditors, suppliers, and investors can gauge its ability to generate profits from its sales and investments [19]. This research uses the Return on Asset Ratio (ROA). Return on assets (ROA) is a financial metric that assesses a company's capacity to generate profits based on the funds invested in its operational activities [20]. The ratio under consideration can illustrate the outcomes concerning the quantity of assets the organization uses. Consequently, the return on assets (ROA) metric can evaluate the company's efficiency in employing its assets (4).

$$ROA = \frac{Net\,Income}{Total\,Assets} \qquad (4)$$

2. Research Method

The study used a quantitative research design. Quantitative approaches encompass the activities of

gathering, examining, interpreting, and documenting the findings of a study. The writer chooses to employ the quantitative methodology for the investigation. The data being utilized is secondary data acquired from the website of the Indonesia Stock Exchange. The population for this research comprises all companies operating in the food and beverage sector listed on the Indonesia Stock Exchange. The sample embodies particular characteristics of the population. The sample was selected using purposive sampling to obtain a sample that sufficiently satisfied the predetermined criteria [21].

The focus of this research is based on the Food and Beverage Companies listed on the Indonesia Stock Exchange (IDX) during the year 2020-2023. The study specifically targets these companies, concentrating on the impact of leverage, sales growth, and capital intensity on tax avoidance through profitability. The research uses path analysis as the data analysis method. Path analysis is a statistical method used to examine the causal linkages between variables in multiple regressions [22]. It allows for the examination of both direct and indirect effects of independent factors on dependent variables. The extent to which mediation occurs through the mediator variables is indicated by the size of the indirect effect. Furthermore, this path analysis, which is the extension of the multiple linear regression test, and conducted in order to determine whether there are causal relationships between the variables. $Z = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e_1$. $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 Z + e_2$. Next Path Analysis Diagram on Figure 1.
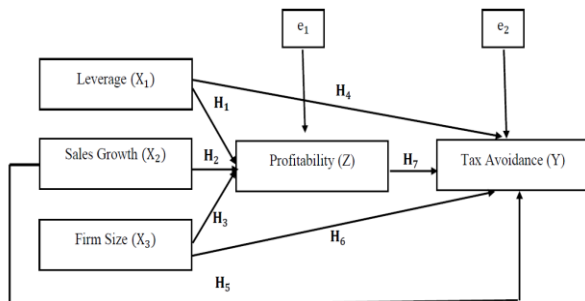

Figure 1. Path Analysis Diagram

Based on Figure 1, the hypothesis of food and beverages companies listed on the Indonesia Stock Exchange period 2020 to 2023 whereas H1 is obtained as follows Leverage impacts Profitability; H2 Sales Growth impacts the Profitability; H3 Firm Size impacts Profitability; H4 Leverage impact to Tax Avoidance; H5 Sales Growth to Tax Avoidance; H6 Firm size impact to Tax Avoidance; H7 Profitability as mediating impact to Tax Avoidance.

3. Result and Discussion

A descriptive statistic is a widely recognized statistical method used to summarize and show data. The objective of employing descriptive statistics in this study is to provide a comprehensive summary of the minimum, maximum, mean, and standard deviation values for each variable. The total samples are 71 with the minimum, maximum, mean, and standard deviation of each variable.

The t-Test assesses the individual impacts of the independent variables-leverage, sales growth, and firm size-on the dependent variable, profitability. Determining the t-Test decision involves evaluating the significance level and comparing the calculated t-value with the critical t-value from the table. The partial t-test for leverage towards profitability results in a t-count value of -4.890 and a significance value of 0.000. The negative t-count value is smaller than the negative t-table value (-4.890<-1.668). Additionally, the significance value of 0.000 is below 0.05. This outcome indicates that leverage have a significant effect on profitability. The partial t-test for sales growth towards profitability results in a t-count value of 2.051 and a significance value of 0.044. The positive t-count value is greater than the positive t-table value (2.051 > 1.688). Additionally, the significance value of 0.044 is below 0.05. This outcome indicates that sales growth significant effect on profitability. The partial t-test for firm size towards profitability results in a t-count value of 0.357 and a significance value of 0.772. The negative t-count value is greater than the negative t-table value (-0.357>-1.672). Additionally, the significance value of 0.772 is above 0.05. This outcome indicates that firm size has no significant effect on profitability. Therefore, in summary and upon analysis of these results, the conclusion drawn from the findings is as follows *H*1: Leverage has a significant effect on profitability is accepted. *H*2: Sales Growth has a significant effect on profitability is accepted. *H*3: Firm Size have a significant effect on profitability is rejected. Next The Result of Significant Testing of the First Substructure on Figure 2.
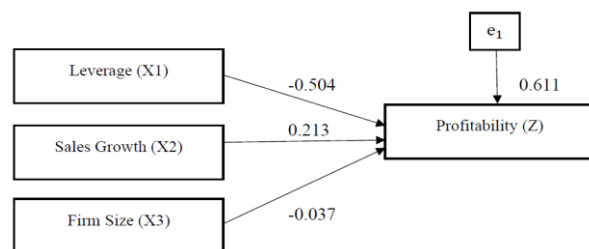

Figure 2. The Result of Significant Testing of the First Substructure

$Z = -0.504 X_1 + 0.213 X_2 - 0.037 X_3 + e_1$. $e_1 = \sqrt{1 - R^2}$. $e_1 = \sqrt{1 - 0.627}$. $= 0.611$. The equation above shows that leverage has a regression coefficient of -0.504. The equation assumes a proportional increase in profitability with each unit of leverage. Sales Growth has a 0.213 regression coefficient. This means that increasing sales growth by one unit results in a corresponding increase in profitability. Firm Size has a regression coefficient of -0.037, indicating a decrease in profitability per unit of firm size.

Outcome of the partial t-Test, as follows the partial t-test for leverage towards tax avoidance results in a t-count value of -1.725 and a significance value of 0.089. The negative t-count value is greater than the negative t-table value (-1.725>-1.667). Additionally, the

significance value of 0.089 is above 0.05. This outcome indicates that leverage have no significant effect on tax avoidance. The partial t-test for sales growth towards tax avoidance results in a t-count value of 0.534 and a significance value of 0.595. The positive t-count value is smaller than the positive t-table value (0.534 < 1.667). Additionally, the significance value of 0.595 is above 0.05. This outcome indicates that sales growth has no significant effect on tax avoidance.

The partial t-test for firm size towards tax avoidance results in a t-count value of -0.065 and a significance value of 0.597. The negative t-count value is greater than the negative t-table value (-0.065 > -1.667). Additionally, the significance value of 0.597 is above 0.05. This outcome indicates that firm size has no significant effect on tax avoidance. The partial t-test for profitability towards tax avoidance results in a t-count value of -0.966 and a significance value of 0.338. The negative t-count value is greatrer than the negative t-table value (-0.966 > -1.667). Additionally, the significance value of 0.338 is above 0.05. This outcome indicates that profitability have no significant effect on tax avoidance. Therefore, in summary and upon analysis of these results, the conclusion drawn from the findings is as follows *H*4: Leverage have significant effect on tax avoidance is rejected. *H*5: Sales Growth have significant effect on tax avoidance is rejected. *H*6: Firm Size have significant effect on profitability is rejected. *H*7: Profitability have significant effect on tax avoidance is rejected. Next The Result of Significant Testing of Second Substructure on Figure 3.
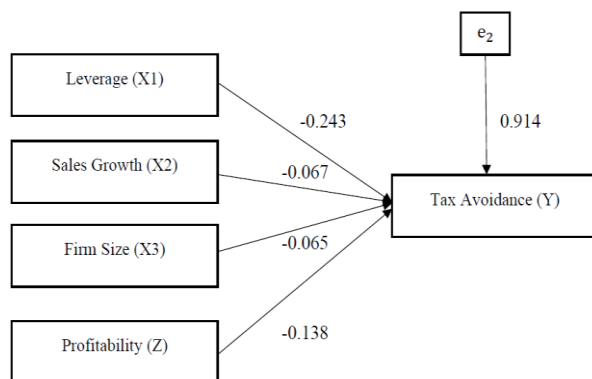

Figure 3. The Result of Significant Testing of Second Substructure

$Z = -0.243X1 - 0.067X2 - 0.065X3 - 0.138Z + e2$. $e2 = \sqrt{1-R2}$. $e2 = \sqrt{1-0.164} = 0.914$. The equation above shows that leverage has a regression coefficient of -0.250. The equation assumes a proportional decrease in tax avoidance with each unit of leverage. Sales Growth has a -0.094 regression coefficient. This means that decreasing sales growth by one unit results in a corresponding decrease in tax avoidance. Firm Size has a regression coefficient of -0.011, indicating a -0.011 decrease in profitability per unit of firm size. Profitability has a regression coefficient of -0.135, which assumes a proportional decrease in tax avoidance with each unit of profitability. Next Result of Mediation Testing on Figure 4.
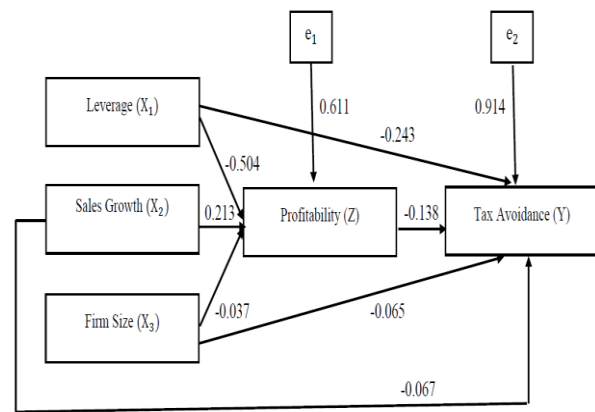

Figure 4. Result of Mediation Testing

From the previous result, it can be concluded that the Path coefficient value from leverage to profitability is negative significant and the path from profitability to tax avoidance is also negative significant. It means that profitability is not significant to mediate the relationship between leverage and tax avoidance. The Path coefficient value from sales growth to profitability is positive significant and the path from profitability to tax avoidance is negative significant. It means that profitability is not significant to mediate the relationship between sales growth and tax avoidance. The Path coefficient value from firm size to profitability is negative significant and the path from profitability to tax avoidance is negative significant. It means that profitability is not significant to mediate the relationship between firm size and tax avoidance.

4. Conclusion

This research aims to examine the relation of leverage, sales growth and firm size as the independent variable, tax avoidance as the dependent variable and profitability as the mediating variable, within the food and beverage companies listed on the Indonesia Stock Exchange. The findings are subjected to descriptive statistical tests, classical assumption tests, multiple linear regression, hypothesis testing, coefficient of determination and path analysis. Below are the following conclusions leverage have significant effect on profitability in the food and beverage companies listed on the Indonesia Stock Exchange during the year 2020- 2023. As a result, H1 is accepted. Sales Growth have significant effect on profitability in the food and beverage companies listed on the Indonesia Stock Exchange during the year 2020- 2023. As a result, H2 is accepted. Firm Size have no significant effect on profitability in the food and beverage companies listed on the Indonesia Stock Exchange during the year 2020- 2023. As a result, H3 is rejected. Leverage has no significant effect on tax avoidance in the food and beverage companies listed on the Indonesia Stock Exchange during the year 2020- 2023. As a result, H4 is rejected. Sales Growth has no significant effect on tax avoidance in the food and beverage companies listed on the Indonesia Stock Exchange during the year 2020-2023. As a result, H5 is rejected. Firm Size has no significant effect on tax avoidance in the food and beverage companies listed on the Indonesia Stock

Exchange during the year 2020- 2023. As a result, H6 is rejected. Profitability has no significant effect on tax avoidance in the food and beverage companies listed on the Indonesia Stock Exchange during the year 2020-2023. As a result, H7 is rejected. According to the coefficient of determination (Adjusted R 2) of the first substructure, leverage, sales growth and firm size, have a 61 % % impact on the profitability. The remaining 39% is due to other variables not examined in this study. According to the coefficient of determination (Adjusted R 2) of the second substructure, leverage, sales growth and firm size, have an 11.4 % % impact on the profitability. The remaining 88.6% is due to other variables not examined in this study.

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