THE EFFECT OF COMPANY SIZE AND PROFITABILITY ON TAX AVOIDANCE WITH LEVERAGE AS INTERVENING VARIABLES
(Empirical Study of Property, Real Estate and Building Construction Companies that Go Public in Kompas 100 Index 2013-2018)

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ABSTRACT
The purpose of this study is as follows: 1) Finding empirical evidence regarding the effect of company size on leverage; 2) Finding empirical evidence regarding the effect of profitability on leverage; 3) Finding empirical evidence regarding the effect of company size on tax avoidance; 4) Finding empirical evidence regarding the effect of profitability on tax avoidance; and 5) Finding empirical evidence regarding the effect of leverage on tax avoidance. The type of research used in this study is causal associative research. The population in this study are property, real estate, and building construction companies that are included in the Kompas 100 index which are listed on the Indonesia Stock Exchange (IDX) during 2013-2018. Sample selection with purposive sampling method. The analytical method used to test hypotheses is the path analysis test and multiple test. The results showed that: 1) Firm size directly affects Leverage in a positive direction, 2) Profitability does not directly affect leverage in a negative direction; 3) Company size has a direct effect on Tax Avoidance in a negative direction; and 4) Profitability has no direct effect on Tax Avoidance in the negative direction, and 5) Leverage has a direct effect on Tax Avoidance in a positive direction.

KEYWORDS: COMPANY SIZE, PROFITABILITY, LEVERAGE, TAX AVOIDANCE

INTRODUCTION
Tax is the biggest source of state revenue. The tax collected by the State functions as a source of funds intended for financing government expenditure and functions as a tool to regulate and implement policies in the social and economic fields and is used for the greatest prosperity of the people. Therefore, corporate and individual taxpayers are expected to be obedient in carrying out their tax obligations voluntarily and in compliance with tax regulations. Non-compliance of taxpayers can cause disruption of State finances. One way of disobedience is done by tax avoidance. Tax avoidance is an act of avoiding taxes, methods and techniques which are carried out by utilizing the weaknesses in the tax provisions, so that they do not violate and oppose the applicable provisions (Pohan, 2017). Tax avoidance is not against the law, but in general all parties agree that tax avoidance is something that is practically unacceptable. This is because tax avoidance directly impacts the erosion of the tax base, which results in reduced tax revenue needed by the state (Cahyanti, et al., 2017)

In 2014, PT Toyota Manufacturing Indonesia practiced tax avoidance by exporting thousands of cars with an export value less than the cost of sales. Meanwhile, the same product is sold in Indonesia at different prices. To export Toyota has a policy with its business unit in Singapore, namely Toyota Motor Asia Pacific Pte., Ltd, because Singapore has the lowest corporate tax rate in Southeast Asia. To reduce the amount of tax that must be paid in Indonesia, PT Toyota carried out transfer pricing beyond the reasonable business limits. The Ministry of Finance's Directorate General of Taxes has suspected TMMIN of using transactions between affiliated companies at home and abroad to avoid tax payments by transfer pricing (Murwaningtyas, 2019).
There are several factors that are indicated to affect the Tax Avoidance action including company size, company age, profitability, leverage, and sales growth. This variable has indeed been taken a lot in several studies by previous researchers, but it still shows variations in research results or inconsistencies. Companies that are classified as large in general will be more transparent in carrying out their operational activities because the company will be paid more attention by external parties, such as the government; investor; and creditors, so as to minimize tax avoidance.

According to Ngadiman & Puspitasari (2014), the size of the company as measured by total assets will affect the tax avoidance measures of the company, the greater the size of the company making company managers tend to choose accounting methods that suspend reported earnings from the current period to the future period in order minimize reported profits. Large companies have more and more complex corporate operational activities so that there are gaps to be used in tax avoidance decisions. While small companies that have limited company operations and few will find it difficult to take tax avoidance measures because of the small gaps that can be exploited by companies in carrying out tax avoidance. In a study conducted by Dewinta & Setiawan (2016), Oktamawati (2017) and Pratiwi (2019) which stated that company size influences tax avoidance. The statement is different from the results of research belonging to Cahyono, et al (2016) and research by Nengsih, et al (2018) which states that company size has no effect on tax avoidance.

Profitability is a measurement of a company's performance. The profitability of a company shows the ability of a company to generate profits for a certain period at the level of sales, assets and certain share capital. Profitability ratio aims as a measure of the level of effectiveness of management and can determine the ability of a company to earn profits for a certain period (Hery, 2016). The greater the profit, the greater the profitability of the company. Taxes are calculated based on profits owned by the company. The large amount of profits owned by the company, making the greater the amount of tax to be paid by the company. The large amount of tax that must be paid, will make the company do tax avoidance engineering. In a study conducted by Dewinta & Setiawan (2016), Oktamawati (2017), Cahyanti, et al (2017) and Nengsih, et al (2018) who stated that profitability affected tax avoidance. This statement is different from the results of research belonging to Permata, et al (2018), and Murwaningtyas (2019) which states that profitability has no significant effect on tax avoidance.

Leverage is a ratio used to measure the extent to which a company's assets are financed with debt (Fadila, 2017). That is, how much debt burden borne by the company compared to its assets. It is possible for a company to use debt to fulfill its operational and investment needs. However, debt will cause a fixed rate of return called interest. Interest expense borne by the company can be used as a deduction from the company's taxable income to reduce the tax burden. That way, the higher the value of the leverage ratio, means the higher the amount of funding from third party debt used by the company and the higher the interest costs arising from the debt. The higher interest costs will have the effect of reducing the company's tax burden. The greater the debt, the taxable profit will be smaller because the tax incentives for debt interest are greater (Darmawan & Sukartha, 2014).

In a study conducted by Oktamawati (2017), Nugraha & Mulyani (2019) which stated that leverage affects tax avoidance. This statement is different from the results of research by Dewinta & Setiawan (2016), Cahyono, et al (2016), and Permata, et al (2018) which states that leverage does not have a significant effect on tax avoidance.

Researchers are motivated to conduct research on Property, Real Estate, and Building Construction Companies, because Property, Real Estate and Building Construction Companies play an important role in the field of economy and development in Indonesia. This sector is also one indicator to assess a country's economic development.

For reasons like the above, this study intends to examine the company's size, profitability, leverage, and tax avoidance in property, real estate and building construction companies that go public in the Compass 100 index in 2013-2018 with the title: "The Effect of Company Size and Profitability on Tax Avoidance with Leverage as Intervening Variables (Empirical Study of Property, Real Estate, and Building Construction Companies that Go Public in Compass 100 Index in 2013-2018)".

**LITERATURE REVIEW**

**Agency Theory**

Jensen and Meckling (1976) state that an agency relationship is a contract between a manager (agent) and an investor (principal). There is a conflict of interest between the owner and agent because the possibility of the agent acting is not in accordance with the interests of the principal, thereby triggering agency costs. Conflict in agency theory is usually caused by decision makers who do not participate in taking risks as a result of decision making mistakes. According to decision makers, the risk should be borne by the shareholders. This is what causes the asynchronous between the decision maker (manager) with the shareholders. Conflicts between shareholders and company management can be minimized in a way, managers must run the company in accordance with the interests of shareholders as well as in making decisions by managers must be adjusted to the interests of shareholders (Wahyuni, 2013).
Stakeholders Theory

According to Clarkson (1995) in Fauzan (2013), stakeholders are divided into two groups, namely primary and secondary. Primary stakeholders are groups of stakeholders who do not take part or participate in the operations of a company. Secondary stakeholders are groups of stakeholders who influence and are influenced by the company, but are not involved and are not so important for the survival of the company.

Stakeholder theory is a theory which states that a company is an entity that not only operates for its own interests, but must provide benefits to all its stakeholders, because the survival of a company is supported by stakeholders (Ghazali and Chariri, 2007). Shareholders, creditors, consumers, suppliers, the government, the public, analysts, and other parties are stakeholder groups that are considered by the company to disclose or not reveal information in the company's financial statements. All stakeholders have the right to obtain information about company activities.

Company size

The size of the company is the size of the company, a large established company will have easy access to the capital market (Purnamasari & Fitria, 2015). Large companies are given more attention by the public so that they will be more careful in financial reporting, so that the impact of these companies is reporting conditions more accurately. Peasnell, et. al (1998 in Bintara, 2019) shows a negative relationship between company size and earnings management in the United Kingdom. With this it is concluded that managers who lead larger companies have smaller opportunities to manipulate profits compared to managers in smaller companies.

Song and Windram (2000 in Bintara, 2019) also investigated the relationship between company size and the quality of financial reporting in the United Kingdom. The results found that company size has a significant relationship to the quality of financial reporting. This is supported by the tendency for large companies to be able to hire better external auditors and be able to implement internal controls in their accounting departments better.

Chtourou, et. al (2001 in Bintara, 2019) examines the impact of company size on earnings management in the United States. By grouping earnings management into three parts: high, medium, and low earnings management, they found that firm size negatively affected earnings management in all testing groups. Larger companies have less opportunity to do earnings management than smaller companies.

The size of the company will be symbolized by SIZE, and measured using the natural logarithm (ln) of the book value of total assets owned by the company.

Profitability

In general, every company aims to make a profit. The company's management is required to be able to achieve the planned targets. According to Sartono (2010) the definition of profitability is the ability of companies to earn profits in relation to sales, total assets, and own capital. Thus, long-term investors will be very interested in this profitability analysis. Meanwhile, according to Munawir (2010) understanding of profitability ratios is a ratio that shows the ability of companies to print profits. For shareholders, this ratio shows their level of income in investing.

From the definitions above, it can be concluded that profitability ratios are ratios used to measure the ability and success of a company in obtaining profits related to sales, assets or investment. In this study, profitability is proxied by ROA (Return On Assets). According to Hery (2016), ROA is a ratio to measure the amount of net profit generated from each rupiah in total assets. Profitability can be calculated as follows:

\[ ROA = \frac{\text{Earning after Tax}}{\text{Total Asset}} \]

Tax avoidance

Tax Avoidance is a business transaction scheme aimed at minimizing the tax burden by utilizing the weaknesses (loophole) of a country's taxation provisions. According to Lim (2011) defines tax avoidance as tax savings that arise by utilizing tax provisions that are done legally to minimize tax obligations.

Tax avoidance (tax avoidance) is an effort to avoid tax that is done legally and safely for taxpayers because it does not conflict with taxation provisions, where the methods and techniques used tend to exploit the weaknesses (gray areas) contained in the laws and regulations taxation itself, to reduce the amount of tax owed (Pohan, 2017).

According to Dyreng et al. (2010) this variable is calculated using the cash effective tax rate (CETR), which is the payment of income tax divided by profit before tax.

Leverage

Leverage is the use of fixed costs in an effort to increase profitability. When a lever (level) is used appropriately, then the pressure applied to a point will be formed or enlarged into pressure or movement at another point. Leverage affects the level and variability of income after tax which in turn affects the level of risk and overall corporate returns. The greater the level of leverage means the high level of uncertainty of returns, but on the other hand the amount of return given will be even greater (Van Horne et al., 2007).
According to Sari (2012), leverage is a tool to measure how much a company depends on creditors in financing company assets. According to Brigham and Houston (2006) financing with leverage or debt has three important implications, namely:

a. Obtaining funds from debt allows shareholders to maintain control of the company with limited investment.

b. The creditor sees the equity or the owner's deposit to provide a safety margin so that if the shareholders only provide a small portion of the total financing, then the company's risk is largely on the creditor.

c. If the company gets a greater return on investment financed with loan funds than interest payments, the return on owner's capital will be greater.

According to Brigham and Joel (2010) the procedure used by analysts to review corporate debt is that they examine the balance sheet to determine the proportion of the total funds represented by debt, and they review the income statement to see the extent to which fixed expenses can be covered by operating income. The measurement of leverage used in this study is the ratio of total debt to total assets (debt ratio). The ratio of total debt to total assets, which is generally called the debt ratio. Formulated as follows:

\[
\text{Leverage} = \frac{\text{Total liabilities}}{\text{Total assets}}
\]

Previous Research Review

Previous research that can support this research is Christopher, et al. (2015) in his study entitled "Corporate governance, incentives, and tax avoidance" provides empirical evidence that a positive relationship between board independence and financial sophistication is for a low level of tax avoidance, but a negative relationship for a high level of tax avoidance. These results indicate that these governance attributes have a stronger relationship with more extreme levels of tax avoidance, which are more likely to be symptoms of over-investment and under-investment by managers.

Dewinta & Setiawan (2016) in their research entitled "Effect of Company Size, Company Age, Profitability, Leverage, and Sales Growth on Tax Avoidance". Against Tax Avoidance ". The results of his research show that the higher the size of the company, the age of the company, profitability, and sales growth will lead to increased tax avoidance. Leverage has no effect on tax avoidance. This means that the higher the leverage will not affect the increase in tax avoidance ..

Permata, et al (2018) in his research entitled "Effect of Size, Age, Profitability, Leverage and Sales Growth on Tax Avoidance". The results of his research showed that company size, company age, profitability, leverage, and sales growth had no effect on tax avoidance.

Nugraha & Mulyani (2019) in his research entitled "The Role of Leverage as Mediating the Effects of Executive Character, Executive Compensation, Capital Intensity, and Sales Growth on Tax Avoidance". The results showed that executive character has no effect on leverage. Executive compensation has a positive effect on leverage. Capital intensity has a positive effect on leverage. Sales growth has a positive effect on leverage. Leverage has a positive effect on tax avoidance. Executive character has a positive effect on tax avoidance. Executive compensation has a positive effect on tax avoidance. Capital intensity has a positive effect on tax avoidance. Sales growth has a positive effect on tax avoidance. Leverage is able to mediate the effect of executive compensation on tax avoidance, but leverage is not able to mediate the effect of executive character capital, the intensity of tax avoidance, and sales growth on tax avoidance.

Murwaningtyas (2019) in his study entitled "Factors Affecting Tax Avoidance" provides empirical evidence that corporate social responsibility, corporate age, fiscal loss compensation has a significant positive effect on tax avoidance, and profitability has no significant effect on tax avoidance.

Theoretical Thought Framework

Based on the theoretical basis and some previous research, the framework in this study can be shown by the following picture:
RESEARCH HYPOTHESIS
From the above thought framework, the researcher draws a hypothesis as follows:

- $H_{a1} = \text{Company size has a direct effect on leverage}$
- $H_{a2} = \text{Profitability directly affects Leverage}$
- $H_{a3} = \text{Leverage has a direct effect on Tax Avoidance}$
- $H_{a4} = \text{Company size has a direct effect on Tax Avoidance}$
- $H_{a5} = \text{Profitability has a direct effect on Tax Avoidance}$

RESEARCH METHODOLOGY

Types of research
This type of research used in this study is casual associative research. According to Sanusi (2011), associative-causal research is research that looks for relationships between two or more variables. The purpose of associative research is to look for relationships between one variable and another.

Operational Definition and Variable Measurement
The variables used in this study consisted of the dependent variable, independent variable and intervening variable. Operational research variables can be summarized in table 1.1.

| Tabel 1.1 Operasionalisasi Variabel |
|------------------------------------|
| Variables | Concept Variables | Indicator | Scale |
| Dependent | Tax Avoidance | Tax avoidance efforts are carried out legally and safely for taxpayers because they do not conflict with taxation provisions, where the methods and techniques used tend to exploit the weaknesses (gray area) contained in the laws and tax regulations themselves, to reduce the amount tax payable | Cash Effective Tax Rate (CETR) | Rasio |
|          | Company Size | Large-scale small companies, an established large company will have easy access to the capital market | Logaritma Natural Total Aset | Rasio |
|          | Profitabilitas | Ratio that shows the ability of a company to make a profit | ROA | Rasio |
| Intervening | Leverage | Tool to measure how much a company depends on creditors in financing company assets | Total debt to total assets | Rasio |

Data Types and Sources
The data used in conducting this research is secondary data, that is data obtained through intermediaries from both parties and certain media that support this research. The data used in this study are secondary data in the form of financial statements of property companies, real estate, and building construction which are included in the Kompas 100 index listed on the Indonesia Stock Exchange during 2013-2018 obtained from the Indonesia Stock Exchange website (www.idx.co.id) and the official website of each bank.
Population and Research Samples

The population in this study are property, real estate, and building construction companies which are included in the Kompas 100 index which are listed on the Indonesia Stock Exchange (IDX) during 2013-2018. The sample is part of the population used to estimate population characteristics. The sampling technique is using purposive sampling technique. According to Widyani (2010) the purposive sampling method is the selection of samples on the basis of the suitability of the characteristics of the sample with the specified sample selection criteria. The sample criteria used in this study are:

1. Property, Real Estate, and Building Construction Companies included in the Kompas 100 index and listed on the Indonesia Stock Exchange (IDX) within 2013-2018.
2. Publish audited financial statements for the period 2013-2018
3. The company did not experience a loss during the study year.
4. Data owned by the company are complete and in accordance with the variables studied.

According to the criteria above, the number of samples used were 13 companies during the 6 periods namely 2013, 2014, 2015, 2016, and 2018. Then the number of samples obtained was 13 companies x 6 periods = 78 data to be used in this study.

Data collection technique

Data collection methods in this study are library study methods and documentation methods. Literature study method by studying literature and reviewing various literature literatures such as various journals, articles and other literature books that support this research process. While the documentation method is the process of collecting data by recording documents related to this study.

Analysis Method

Descriptive statistics

Descriptive statistics in this study are used to provide a description of the character of the research variable using a frequency distribution table that shows the mode number, the range of scores and the standard of division.

Test Prerequisite Analysis

To be able to use path analysis in hypothesis testing, it is necessary to first test statistical prerequisites for the data. The analysis prerequisite tests include tests for normality, homogeneity, and significance and linearity.

Hypothesis testing

The design of hypothesis testing used in this study is to use path analysis and Sobel Test. According to Ghozali (2013) to calculate the path coefficient through the following work steps: 1). Draw a path diagram that explains the relationship between variables that reflect the proposed conceptual hypothesis, 2). Calculate the amount of influence (structural parameters) between a cause variable and an effect variable.

The path analysis method used in this study is explained in the figure as follows:

Regression models in this study are:

X₃ = α + ρₓ₃x₁X₁ + ρₓ₃x₂X₂ + ε₁ .......................................................... (Substruktural 1)
Y = α + ρyx₁X₁ + ρyx₂X₂ + ρyx₃X₃ + ε₂ .................................................. (Substruktural 2)

Dimana:

Y = Tax Avoidance
X₃ = Company Size
X₂ = Profitabilitas
X₁ = Leverage

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Figure 1.2 Structure of a Path Diagram

Regression models in this study are:

X₃ = α + ρₓ₃x₁X₁ + ρₓ₃x₂X₂ + ε₁ .......................................................... (Substruktural 1)
Y = α + ρyx₁X₁ + ρyx₂X₂ + ρyx₃X₃ + ε₂ .................................................. (Substruktural 2)

Dimana:

Y = Tax Avoidance
X₃ = Company Size
X₂ = Profitabilitas
X₁ = Leverage
\[ \rho = \text{Path coefficient} \]
\[ \varepsilon_1 = \text{Error} \]
\[ \alpha = \text{Konstanta} \]

In this study, the significance level (\( \alpha \)) of 0.05 or 5% was used. This multiple regression analysis was carried out with the help of the SPSS (Statistical Package For Social Sciences) Release 25.0 for Windows program so that the coefficient of determination, the statistical value of F and the statistical value of t were used in hypothesis testing.

**Sobel test and Bootstrapping test.**

Sobel test is done by testing the strength of the indirect effect of the independent variable (X) to the dependent variable (Y) through the intervening variable (Z). An alternative approach to test the significance of mediation using bootstrapping techniques. Bootstrapping is a non-parametric approach that does not assume the shape of the variable distribution and can be applied to a small sample size. Heyes and Preacher (2004) in Ghozali (2013) have developed a sobel and bootstrapping test in the form of SPSS script 25. The hypothesis is that exogenous variables individually influence indirectly on endogenous variables. Basis for Decision Making: 1) If the probability count> t table then the hypothesis is accepted; 2) If the probability is tcount <ttable, the hypothesis is rejected. (Ghozali, 2013)

**RESEARCH RESULTS AND DISCUSSION**

**Research Data Description**

Descriptive statistical results about the research variables are presented in table 1.2. From this table we can find information about the average, maximum value, minimum value and standard deviation.

| Variabel          | Min  | Max  | Mean   | Std. Deviation |
|-------------------|------|------|--------|----------------|
| Company Size      | 28.84| 32.45| 30.58  | 0.749          |
| Profitability     | 0.01 | 0.24 | 0.07   | 0.042          |
| Leverage          | 0.22 | 0.84 | 0.56   | 0.155          |
| Tax Avoidance     | 0.00 | 0.49 | 0.15   | 0.145          |

Source: Data processed (2019)

Based on table 1.2 above, it can be presented descriptive statistical results about the research variables as follows: Firm size variables have an average value of 30.58 trillion with a standard deviation value of 0.749 trillion, which shows the level of variation in the distribution of data. Company size variables range from the lowest value of 28.84 trillion, the Bekasi Fajar Industrial Estate company in 2013 to the highest value of 32.45 trillion, namely the Waskita Karya (Persero) Tbk company. in 2018.

The profitability variable proxied by ROA has an average value of 0.07 (7%) with a standard deviation of 0.042 (4.2%), which indicates the level of variation in the data distribution. The profitability variable ranges from the lowest value of 0.01 (1%), namely the company Sentul City Tbk. in 2015 up to the highest value of 0.24 (24%), the Bekasi Fajar Industrial Estate company in 2013. The average value of ROA of 0.07 indicates that the return on corporate profits to investors is 7%.

The leverage variable has an average value of 0.56 (56%) with a standard deviation of 0.155 (15.5%), which indicates the level of variation in the data distribution. The leverage variable ranges from the lowest value of 0.22 (22%), the Bekasi Fajar Industrial Estate company in 2014 to the highest value of 0.84 (84%), namely the Adhi Karya (Persero) Tbk company. in 2014.

The average value of the Tax Avoidance variable which is proxied by cash effective tax rates (CETR) has an average of 0.15 (15%) with a standard deviation of 0.145 (14.5%) which shows the level of variation in the data distribution. Tax Avoidance variable ranges from the lowest value of 0 (0%), namely Sentul City Tbk company. in 2016 up to the highest value of 0.49 (49%), namely the Adhi Karya (Persero) Tbk company. in 2016.

**Classic assumption test**

**Normality test**

Testing for normality using the Lilliefors test. Provisions in the error test are if the statistic L count <L table (\( \alpha = 0.05 \)), then the error data is normally distributed. But if L count > L table (\( \alpha = 0.05 \)), then the data is not normally distributed. The calculation results are as follows:
Table 1.3 Summary of the Normality Test

| No | Taksiran | n | L_hitung | L tabel | Keputusan |
|----|----------|---|----------|---------|-----------|
|    |          |   |          | α = 0.05 | α = 0.01  |
| 1  | X3 atas X1 | 78 | -0.0686  | 0.1003  | 0.1167  | Normal   |
| 2  | X3 atas X2 | 78 | -0.0686  | 0.1003  | 0.1167  | Normal   |
| 3  | Y atas X1  | 78 | 0.0269   | 0.1003  | 0.1167  | Normal   |
| 4  | Y atas X2  | 78 | 0.0119   | 0.1003  | 0.1167  | Normal   |
| 5  | Y atas X3  | 78 | -0.1048  | 0.1003  | 0.1167  | Normal   |

Source: Data processed (2019)

### Homogeneity Test

Another requirement for using path analysis is that the verifiable variance bound to the independent variable must be homogeneous. Homogeneity variance testing is done through SPSS and Excel using the Barlett test. A homogeneous variance is produced when $\chi^2$ arithmetic < $\chi^2$ tables. Thus overall the homogeneity test calculation results can be seen in the following table:

Table 1.4 Summary of Homogeneity Tests

| No | Galat Taksiran | $X_1^2$ | df | $X_1^2$ | Keputusan |
|----|----------------|---------|----|---------|-----------|
| 1  | X3 atas X1     | 22,282  | 49 | 66,339  | Homogen   |
| 2  | X3 atas X2     | 8,559   | 60 | 79,082  | Homogen   |
| 3  | Y atas X1      | 38,673  | 49 | 66,339  | Homogen   |
| 4  | Y atas X2      | 11,767  | 60 | 79,082  | Homogen   |
| 5  | Y atas X3      | 35,846  | 39 | 54,572  | Homogen   |

Source: Data processed (2019)

### Test Path Analysis

Path analysis is used to analyze the pattern of relationships between variables with the aim of finding out the direct and indirect effects of a set of independent (exogenous) variables on the dependent variable (endogenous). From the data processing through the SPSS program the following results are obtained:

Tabel 1.5 Hasil Analisis Jalur

| Information | $\rho$ | $T_{hitung}$ | Sig | $T_{table}$ | $R^2$ | $F_{hitung}$ | Sig |
|-------------|-------|--------------|-----|-------------|------|-------------|-----|
| Sub-Structure 1 |       |              |     |             |      |             |     |
| Company Size | 0,250 | 2,165        | 0,034 | 1,665 | 0,132 | 5,684 | 0,005 |
| Profitability | 0,188 | 1,630        | 0,107 |       |      |      |       |
| Sub-structure 2 |       |              |     |             |      |             |     |
| Company Size | -272  | -2,798       | 0,007 | 1,665 | 0,425 | 18,257 | 0,000 |
| Profitability | 0,072 | 0,942        | 0,000 |       |      |      |       |
| Leverage     | 0,684 | 7,236        | 0,000 |       |      |      |       |

Source: Data processed (2019)

Based on the results of the path analysis in Sub-Structure 1, the path coefficient of firm size and profitability to leverage is 0.250, and -0.188 with the coefficient reflected or the contribution of company size and profitability to leverage is (Rsquare) = 0.132, which means that 13.2% Leverage can be explained by company size and profitability variables. The amount of residual coefficient ($\rho x 3 \epsilon 1 = \sqrt{1-0.132}$) = 0.932 or 93.2% is the influence of other variables beyond company size and profitability. While the path analysis results in Sub-Structure 2 obtained the path coefficient of firm size variables, profitability and leverage on Tax Avoidance of -0.272, -0.007, and 0.684, with the coefficient reflected or the contribution of company size variables, profitability and leverage to Tax Avoidance are (Rsquare) = 0.425, which means that 42.5% Tax Avoidance can be explained by variables of company size, profitability and leverage. The amount of residual coefficient ($\rho x 2 = \sqrt{1-0.425}$) = 0.758 or 75.8% is the
influence of other variables outside the company size, profitability and leverage variables. The results of the path coefficients in sub-structure 1 and sub-structure 2 produce structural equations, as follows:

\[ X_3 = 0.250X_1 - 0.188X_2 + 0.932\varepsilon_1 \] \[ Y = -0.272X_1 - 0.007X_2 + 0.684X_3 + 0.758\varepsilon_2 \]

\[ R^2_{3x2x1} = 0.132 \]

**Hypothesis test**

**Company size has a direct effect on leverage**

Based on the calculation results it can be seen that the value of the path coefficient (px3x1) of 0.250 with tcount = 2.165, at \( \alpha = 0.05 \) obtained ttable = 1.665. Because the value of \( t = 2.165 \) is greater than t table = 1.665, the path coefficient is significant. The results showed that company size had a direct effect on leverage by (0,250 x 0,250 x 100% = 6.25%). Thus Ha1 was accepted.

**Profitability has a direct effect on leverage**

Based on the calculation results, it can be seen that the value of the path coefficient (px3x2) of -0.188 with tcount = -1.630, at \( \alpha = 0.05 \) obtained ttable = 1.665. Because the value of \( t = -1.630 \) is smaller than t table = 1.665, the path coefficient is not significant. The results showed that profitability had no direct effect on leverage. Thus Ha2 rejected.

**Company size has a direct effect on Tax Avoidance**

Based on the calculation results it can be seen that the value of the path coefficient (pxy1) of -0.272 with tcount = -2.798, at \( \alpha = 0.05 \) obtained ttable = 1.665. Because the \( t \)-value = -2.798 is greater than ttable = 1.665, the path coefficient is significant. The results showed that company size had a direct effect on Tax Avoidance of (-0.272 x -0.272 x 100% = 7.40%). Thus Ha3 was accepted.

**Profitability has a direct effect on Tax Avoidance**

Based on the calculation results, it can be seen that the value of the path coefficient (pxy2) of -0.072 with tcount = -0.072, at \( \alpha = 0.05 \) obtained ttable = 1.665. Because the \( t \)-count = -0.072 is smaller than ttable = 1.665, the path coefficient is not significant. The results showed that profitability had no direct effect on tax avoidance. Thus Ha4 was rejected.

**Leverage has a direct effect on Tax Avoidance**

Based on the calculation results, it can be seen that the value of the path coefficient (pxy3) of 0.684 with tcount = 7.236, at \( \alpha = 0.05 \) obtained ttable = 1.665. Because the \( t \)-value = 7.236 is greater than t table = 1.665, the path coefficient is significant. The results showed that Leverage directly influenced Tax Avoidance by (0.684 x 0.684 x 100% = 46.79%). Thus Ha5 was accepted.

**Mediation Factor Testing**

To test the significance of the indirect effect, it can be done by comparing the Z value of the calculated ab coefficient with the Ztable value of 1.96. If the value of Zhitung is greater than the value of Ztable, it can be concluded that there is a mediating effect (Ghozali, 2013). The calculation of mediation factor testing will be explained as follows:

1. **The influence of leverage in mediating the relationship between company size and tax avoidance**

   **Table 1.6 Results of Mediation Test with Sobel Test**

   | DIRECT AND TOTAL EFFECTS | Coeff | se | t | Sig (two) |
   |---------------------------|-------|----|---|----------|
   | b(YX)                     | -0.0102| 0.0222| -0.4596| 0.6471 |
   | b(MX)                     | 0.0656 | 0.0225| 2.9197 | 0.0046 |
   | b(YMX)                    | 0.6440 | 0.0867| 7.4257 | 0.0000 |
   | b(YKM)                    | -0.0524| 0.0170| -2.9285| 0.0045 |

   **INDIRECT EFFECT And SIGNIFICANCE USING NORMAL DISTRIBUTION**

   | Value | se | z | Sig (two) |
   |-------|----|---|----------|
   | Effect| 0.0422| 0.0157| 2.6961| 0.0070 |

   Source: Data processed (2019)

   Testing the significance of indirect effects with the Sobel test obtained \( z \) values = 2.6961 and \( p = 0.0070 \). Because \( z \)-value in absolute price > 1.96 and the level of statistical significance \( z \) (p-value) < 0.05, it means that there is an effect of leverage mediation on the relationship between company size and Tax Avoidance.
2. The effect of leverage in mediating the relationship between profitability and tax avoidance

| DIRECT AND TOTAL EFFECTS | Coeff | se   | t     | Sig (two) |
|--------------------------|-------|------|-------|-----------|
| b(YX)                    | -0.3444 | 0.3969 | -0.8676 | 0.3884 |
| b(MX)                    | -1.0295 | 0.4078 | -2.5242 | 0.0137 |
| b(YMX)                   | 0.5825  | 0.0900 | 6.4707  | 0.0000 |
| b(YX,M)                  | 0.2553  | 0.3332 | 0.7662  | 0.4459 |

| INDIRECT EFFECT And SIGNIFICANCE USING NORMAL DISTRIBUTION | Value | se | z | Sig (two) |
|-----------------------------------------------------------|-------|----|---|-----------|
| Effect                                                    | -0.5997 | 0.2576 | -2.3276 | 0.0199 |

Source: Data processed (2019)

Testing the significance of indirect effects with the Sobel test obtained z values = 2.3276 and p = 0.0199. Because z-value in absolute price> 1.96 and level of statistical significance z (p-value) <0.05, it means that there is an effect of leverage mediation on the relationship between profitability and Tax Avoidance.

DISCUSSION

Company size has a direct effect on leverage

Testing hypothesis 1 proves that firm size has a direct effect on leverage in a positive direction. This means that the larger the size of the company, the higher the level of debt use, and the larger the size of the company, the greater the funding needs and the company can do debt to fund it. So, debt will increase as company size increases. Larger companies have more facilities in entering the market to get external financing.

According to Angelina & Mustanda (2016), company size is one of the factors that considers companies in determining how large a funding decision policy is in meeting the size or size of a company's assets. The larger a company, the greater the funds that will be issued by the company, both in the form of debt policy or own capital in order to maintain or develop the company. So it can be said that large companies are more likely to use larger loans than smaller companies. Therefore, the larger the company, the greater the debt it has.

This research is in line with research conducted by Dewi & Sulismitiyati (2018), and Kadim & Sunardi (2019) which states that company size has a positive effect on leverage.

Profitability has a direct effect on leverage

Hypothesis testing 2 proves that profitability has no direct effect on leverage in a negative direction. This means that with the company's profitability getting smaller cannot increase the company's leverage. Profitability does not affect leverage because companies that have a high level of profit will use retained earnings or their own capital to meet the needs of company funds on the grounds that the level of debt used by the company has reached the maximum limit so that the company cannot withdraw the source of funds anymore from debt. This is in accordance with the pecking order theory that the company in a state of need of funds and the main priority is to use internal funding. The results of this study support the research conducted by Dewi & Sulismitiyati (2018) which states that profitability does not have a significant effect on leverage proxied by DER. But not in line with research conducted by Kadim & Sunardi (2019) which states that profitability has a positive effect on leverage.

Company size has a direct effect on Tax Avoidance

Testing hypothesis 3 proves that firm size has a direct effect on Tax Avoidance in a negative direction. This means that the smaller the size of the company, the Tax Avoidance will be lower. The results of this study are in line with the results of research conducted by Devinta & Setiawan (2016), Oktamawati (2017) and Pratiwi (2019) which states that company size has a significant effect on Tax Avoidance. According to Ngadiman & Puspitasari (2014), the smaller the size of the company, the lower the CETR it has because large companies are better able to use their resources to make a good tax planning (political power theory). Managers of large companies tend to choose accounting methods that defer reported profits from the present period to future periods in order to minimize reported profits. Large companies have more and more complex corporate operating activities so that there are gaps to be utilized in tax avoidance decisions. While small companies that have limited activities and are a bit
difficult to do Tax Avoidance. However, the results of this study contradict the results of research conducted by Cahyono, et al (2016) and Nengsih, et al (2018) which states that company size does not have a significant effect on Tax Avoidance.

**Profitability has a direct effect on Tax Avoidance**

Testing hypothesis 4 proves that profitability does not directly influence the Tax Avoidance in a negative direction. This means that the low or high profitability of the company does not affect the high or low Tax Avoidance. Profitability has an effect on Tax Avoidance because a company that has high ROA means being able to carry out its operations efficiently and by the government this will be rewarded by providing a lower effective tax rate compared to companies that operate less efficiently (tax subsidy). In other words, companies that have high ROA will be obliged to pay higher taxes so that company management has a tendency to do Tax Avoidance, even reducing the possibility of doing Tax Avoidance.

In addition, the higher the profitability, the lower the tax avoidance company means the company can pay taxes according to regulations, high-income companies so to issue or pay taxes there is no problem because it has sufficient cash flow to pay taxes. So, companies do not have to hide to avoid tax avoidance, the sample used by public companies means that every manager's actions can be monitored by shareholders and shareholders are happy with high profits so that the price of share earnings is high. There may be efforts by managers to avoid taxes that can damage the reputation of the company if the tax authorities find out, if the reputation decreases the share price will also decrease. So companies do not avoid taxes even though high profitability.

The results of this study are in line with the results of research conducted by Dewinta & Setiawan (2016), Oktamawati (2017), Cahyono, et al (2017) and Nengsih, et al (2018) which states that profitability has an effect on Tax Avoidance. However, the results of this study contradict the results of research conducted by Dewinta & Setiawan (2016), Cahyono, et al (2016), and Permata, et al (2018) which states that leverage does not have a significant effect on tax avoidance.

**Leverage has a direct effect on Tax Avoidance**

Testing hypothesis 5 proves that leverage has a direct effect on Tax Avoidance in a positive direction. This means that the higher the leverage, the higher the Tax Avoidance. Leverage has a positive effect on Tax Avoidance because debt that results in the emergence of interest expense can be a deduction from taxable profit, while dividends derived from retained earnings cannot be a deduction from profit. Interest expense that can be used as a deduction for taxable profit is the interest expense arising from loans to third parties or creditors who have no relationship with the company (Oktamawati, 2017).

The results of this study are in line with the results of research conducted by Oktamawati (2017), Nugraha & Mulyani (2019), which states that Leverage affects Tax Avoidance. However, the results of this study contradict the results of research conducted by Dewinta & Setiawan (2016), Cahyono, et al (2016), and Permata, et al (2018) which states that leverage does not have a significant effect on tax avoidance.

**CONCLUSIONS**

Based on the results of the analysis conclusions can be drawn as follows: 1) Firm size directly affects Leverage in a positive direction, 2) Profitability does not directly affect leverage in a negative direction; 3) Company size has a direct effect on Tax Avoidance in a negative direction; and 4) Profitability has no direct effect on Tax Avoidance in the negative direction, and 5) Leverage has a direct effect on Tax Avoidance in a positive direction.

**SUGGESTIONS**

Considering the existing limitations, it is expected that future research will improve the following factors: 1) For the Directorate General of Taxes, the results of this study are expected to be used as a reference for evaluation and input for the improvement of the General Taxation Provisions Act in various aspect. Specifically so that corporate taxpayers do not practice tax avoidance; 2) For investors, the results of this study are expected to provide input for practitioners in making decisions and be taken into consideration when investing capital in a company; and 3) For practitioners, the results of this study are expected to provide input for the government in making policies in the field of taxation so as to minimize the practice of tax avoidance on manufacturing companies listed on the Indonesia Stock Exchange.

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