

---

## The Effect of Sales Growth, Company Age, Firm Size and Leverage on Tax Avoidance on Trading Service Company and Listed Investments on The Indonesia Stock Exchange in The Period 2017-2021

---

Ira Widianingrum<sup>1</sup>, Jaquene Kangra<sup>2</sup>, Siti Dini<sup>3</sup>, Anggono<sup>4</sup>

### *Abstract:*

*This study aims to examine the effect of Sales Growth, Company Age, Firm Size, and Leverage on Tax Avoidance. The research focuses on Trading and Investment Services companies listed on the Indonesia Stock Exchange (IDX) for the period 2017-2021. Data collection took place from the end of November 2022 to the beginning of February 2023, allowing for comprehensive analysis and alignment with relevant literature, such as books and journals. The analysis technique employed is multiple linear regression. The results indicate that, simultaneously, Sales Growth, Company Age, Firm Size, and Leverage have a significant effect on Tax Avoidance. However, when analyzed individually, Sales Growth has no significant effect on Tax Avoidance. Firm Size, Company Age, and Leverage each have a negative and insignificant effect on Tax Avoidance. The Adjusted R Square value is 0.49, indicating that 49 percent of the variance in Tax Avoidance is explained by the independent variables of Sales Growth, Company Age, Firm Size, and Leverage. The remaining 51 percent is influenced by other factors not examined in this study, such as earnings management and dividend policy.*

**Keywords:** Sales Growth, Age of The Company, Firm Size, Leverage, Tax Avoidance

## 1. Introduction

One of the obligations of citizens to the state is to pay taxes, which serves as a form of community assistance to the progress of the country. Indonesia is one of the countries that is very concerned about the obedience of its citizens in terms of paying taxes. Taxes, according to Law Number 16 of 2009 concerning General Provisions and Tax Procedures in Article 1 paragraph 1, are mandatory contributions to the state owed by an individual or a corporate body that are compelling based on the law, without direct compensation and used for the state's needs for the greatest prosperity of the people.

From a company's perspective, paying taxes is often seen as a burden that can affect the survival of the business. This is primarily because the benefits of tax payments are not directly felt by the company, leading to non-compliance by taxpayers or company

---

<sup>1</sup> Faculty of Economics, Universitas Prima Indonesia, [irawidianingrum127@gmail.com](mailto:irawidianingrum127@gmail.com)

<sup>2</sup> Faculty of Economics, Universitas Prima Indonesia, [jaquenekangra22@gmail.com](mailto:jaquenekangra22@gmail.com)

<sup>3</sup> Faculty of Economics, Universitas Prima Indonesia, [sitidini@unprimdn.ac.id](mailto:sitidini@unprimdn.ac.id)

<sup>4</sup> Universitas IBBI, [anggono50@gmail.com](mailto:anggono50@gmail.com)

management, which consequently results in efforts to carry out tax avoidance. The service, trade, and investment sectors, particularly companies listed on the Indonesia Stock Exchange (IDX), are of significant interest due to their good prospects for providing profits for business actors, as they act as distributors rather than processors from raw materials to consumers. However, the recent Covid-19 pandemic has negatively impacted these sectors, with travel restrictions and stay-at-home mandates causing many businesses, such as shops, hotels, and tourist attractions, to close or reduce their workforce.

The phenomenon observed in Table 1 indicates varying impacts on sales, company age, total assets, debt, and income tax expense among selected companies in the service, trade, and investment sectors listed on the IDX during the 2017-2021 period. For instance, PT Indoritel Makmur Internasional Tbk saw a 130.24% increase in sales from 2017 to 2018, accompanied by a 49.38% decrease in tax expense. Similarly, PT Enseval Putera Megatrading Tbk experienced a 4% increase in company age from 2019 to 2020, with a corresponding 12.16% decrease in tax burden. PT Sumber Alfaria Trijaya Tbk's total assets grew by 8.24% from 2019 to 2020, resulting in a 4.36% reduction in tax expense. Conversely, PT Link Net Tbk's total debt increased by 41.56% from 2020 to 2021, yet the tax burden decreased by 13.56%.

The phenomenon of tax avoidance has become a significant issue for both regulators and stakeholders. Tax avoidance, which refers to the legal utilization of the tax regime to one's own advantage to reduce the amount of tax that is payable by means that are within the law, differs from tax evasion, which is illegal. Companies often engage in tax avoidance strategies to minimize their tax liabilities and enhance their profitability (Pohan, 2018). The degree of tax avoidance can be influenced by various factors, including sales growth, company age, firm size, and leverage. This study seeks to understand how these factors impact tax avoidance practices within the service, trade, and investment sectors in Indonesia.

**\*\*Sales Growth\*\*** is a critical variable as it represents the increase in sales over a specific period and can indicate the company's market expansion and revenue generation capacity. Higher sales growth can provide companies with more resources to engage in tax planning activities, potentially leading to increased tax avoidance (Agustia & Suryani, 2018). Previous research has shown mixed results regarding the relationship between sales growth and tax avoidance, with some studies indicating a positive relationship while others suggest a negative or insignificant effect (Priscilla, 2021). This study aims to clarify this relationship within the context of Indonesian companies.

Company Age refers to the number of years a company has been in operation. Older companies might have more experience and established strategies for minimizing tax liabilities compared to younger companies. They may also have better-developed relationships with tax authorities and more resources to invest in tax planning (Kurniawan, 2022). Conversely, younger companies may focus more on growth and expansion rather than optimizing their tax positions. The impact of company age on tax avoidance has been explored in various studies, with some suggesting that older

companies are more likely to engage in tax avoidance (Rahmawati & Nani, 2021), while others find no significant effect (Syenie, 2021).

Firm Size is another crucial variable in understanding tax avoidance behaviors. Larger firms typically have more complex structures and greater resources, allowing them to implement sophisticated tax avoidance strategies. They might also benefit from economies of scale in tax planning and have more bargaining power in negotiations with tax authorities (Hery, 2018). Studies have shown that larger companies are more likely to engage in tax avoidance due to these advantages (Pamungkas & Mildawati, 2020). However, larger firms are also more visible and subject to greater scrutiny from tax authorities and the public, which could constrain their tax avoidance activities.

Leverage indicates the extent to which a company is financed by debt. Higher leverage can increase the interest expenses that are tax-deductible, thereby reducing the taxable income and tax liabilities (Sunarsih, Haryono, & Yahya, 2019). This makes leverage a potentially significant factor in tax avoidance strategies. While some studies have found a positive relationship between leverage and tax avoidance (Sterling & Christina, 2021), others have observed that highly leveraged companies may face more financial constraints, limiting their ability to engage in tax avoidance (Mahdiana & Amin, 2020).

Given these phenomena, this study aims to investigate the effect of sales growth, company age, firm size, and leverage on tax avoidance in service, trade, and investment sector companies listed on the IDX for the 2017-2021 period. This research is significant as it addresses a gap in the existing literature, where the combined impact of these factors on tax avoidance has not been thoroughly explored. Previous studies, such as those by Agustia and Suryani (2018) and Ainniyya, Sumiati, and Susanti (2021), have focused on individual factors affecting tax avoidance, but there is limited research examining the simultaneous effect of sales growth, company age, firm size, and leverage. This study aims to fill this gap by providing a comprehensive analysis of these factors and their impact on tax avoidance, thereby contributing to a better understanding of corporate tax behavior in Indonesia's service, trade, and investment sectors.

## **2. Theoretical Background**

### **Theory of the Effect of Sales Growth on Tax Avoidance**

Increasing sales growth will lead to higher profits for a company, which subsequently increases the corporate tax burden. This encourages companies to engage in tax avoidance strategies to mitigate the impact of higher taxes (Agustia & Suryani, 2018). According to agency theory, when sales growth is high, agents (managers) tend to engage in tax avoidance to align their interests with those of the principals (owners). However, agents also aim to provide accurate information to avoid future issues related to information asymmetry (Pamungkas & Mildawati, 2020).

Changes in sales growth directly affect profits. As profits increase, so does the tax burden, prompting companies to consider tax avoidance measures (Priscilla, 2021). High sales growth results in increased profits, which in turn can lead to greater tax avoidance efforts as companies strive to minimize their tax liabilities through various legal mechanisms (Pohan, 2018). Therefore, sales growth is a significant factor influencing tax avoidance behaviors in companies.

### **Theory of the Effect of Company Age on Tax Avoidance**

Company age is influential in the business world as it reflects the company's experience and stability. Older companies often have better-developed strategies for managing and minimizing their tax burdens, which can lead to increased tax avoidance activities (Kurniawan, 2022). The longer a company has been established, the more adept it becomes at organizing and managing its taxes, thereby increasing its propensity for tax avoidance (Rahmawati & Nani, 2021).

Companies that have been listed on the IDX for an extended period tend to be stronger in the trading environment. Their longevity provides them with more experience and skilled human resources, which enhances their ability to manage tax obligations and potentially engage in tax avoidance (Syenie, 2021). The longer the company has been operational, the more it learns to optimize its tax management strategies to minimize tax liabilities effectively.

### **Theory of the Effect of Firm Size on Tax Avoidance**

Firm size, often measured by total assets, significantly influences tax avoidance. Larger companies, with more substantial total assets, tend to engage in tax avoidance practices to reduce their tax liabilities (Hery, 2018). High firm size correlates with the adoption of sophisticated accounting methods that help in reducing business taxes (Sterling & Christina, 2021).

The larger the company, the more resources it has to engage in tax planning and achieve optimal tax savings. This tax saving often manifests as tax avoidance, conducted legally to minimize tax payments (Pamungkas & Mildawati, 2020). Therefore, firm size has a positive effect on tax avoidance, as larger firms can attract government attention and scrutiny related to their tax practices (Syenie, 2021).

### **Theory of the Effect of Leverage on Tax Avoidance**

Leverage, or the extent to which a company uses debt for its financial funding, increases interest payments that are tax-deductible. This reduction in taxable income can lead to greater tax avoidance (Sunarsih, Haryono, & Yahya, 2019). Companies often use debt strategically to minimize tax burdens, as interest expenses can be deducted from taxable income (Mahdiana & Amin, 2020).

High leverage indicates a company's reliance on debt funding, which comes with tax incentives on interest expenses, reducing the overall tax burden (Sterling & Christina, 2021). Companies with high leverage tend to engage in tax avoidance to benefit from these deductions. As leverage increases, so does the likelihood of tax avoidance practices (Hery, 2018). Therefore, high leverage is positively associated with increased tax avoidance activities.

This comprehensive analysis of the impact of sales growth, company age, firm size, and leverage on tax avoidance aims to fill existing research gaps and provide a deeper understanding of the factors influencing corporate tax behavior in Indonesia's service, trade, and investment sectors. By examining these variables collectively, this study contributes to the broader literature on tax avoidance and offers insights for policymakers and stakeholders to develop more effective tax regulations and enforcement mechanisms.

### Conceptual Framework

The conceptual framework explains how the relationship between the four variables partially or simultaneously affects the dependent variable, namely *Tax Avoidance*.

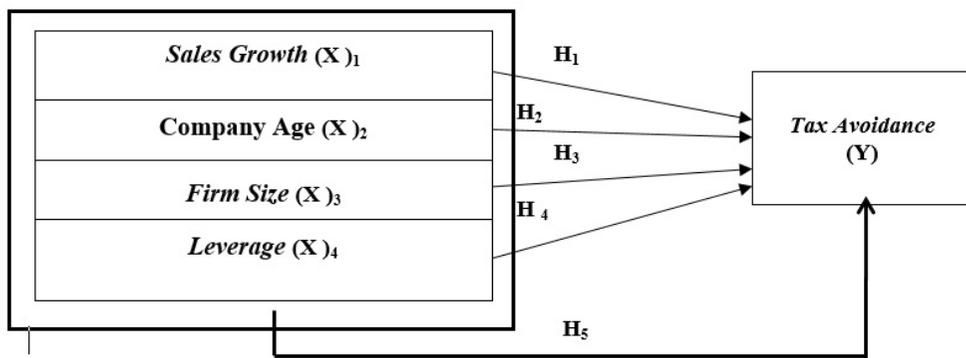


Figure 1. Conceptual Framework

### Research Hypothesis

- H<sub>1</sub>** : *Sales Growth* partially affects *Tax Avoidance*. in Service, Trade and Investment Sector Companies listed on the IDX 2017-2021 Period
- H<sub>2</sub>** : *Company Age* partially affects *Tax Avoidance* in Service, Trade and Investment Sector Companies listed on the IDX 2017-2021 Period
- H<sub>3</sub>** : *Firm Size* partially affects the *Tax Avoidance* on Service, Trade and Investment Sector companies that listed on the IDX 2017-2021 Period
- H<sub>4</sub>** : *Leverage* partially affects *Tax Avoidance* on Service, Trade and Investment Sector companies that listed on the IDX 2017-2021 Period
- H<sub>5</sub>** : *Sales Growth*, *Company Age*, *Firm Size*, and *Leverage* by simultaneously affects *Tax Avoidance* in companies Services, Trade and Investment Sector listed on the IDX period 2017-2021.

### 3. Methodology

#### Place and Time of Research

The place of this research was carried out through the Service, Trade and Investment Sector companies listed on the Indonesia Stock Exchange (IDX) during the 2017-2021 period. While the research took place during the end of November 2022 to the beginning of February 2023. So that this research can be adjusted to what you want to get from research such as books and journals.

#### Research Methods

##### Research Approach

The approach used in this research is quantitative. According to (Sugiyono, 2018: 2) quantitative research methods are methods that use data in the form of ratios and the focus of this research is to determine the magnitude of the influence between the variables studied.

##### Types of Data

The type of data used is secondary data. According to (Sugiyono, 2018: 225) says that secondary data is data collection such as previous research, books and reports. In this study, the company's financial statements were used.

##### Data Collection Technique

In this study, data was collected using documentation of records of events that have passed. Documents in the form of images such as photographs, live pictures, sketches and others according to (Sugiyono, 2018: 240). Documents taken in this study through the website [www.idx.com](http://www.idx.com).

#### Population and Sample

##### Population

According to (Sugiyono, 2018: 117) population is a generalization area consisting of objects / subjects that have certain qualities and characteristics from which conclusions are drawn. And the population in this study are Service, Trade and Investment Sector Companies listed on the Indonesia Stock Exchange in the 2017-2021 period, totaling 217 companies.

##### Sample

According to (Sugiyono, 2018: 118) *purposive sampling* is a sampling technique with certain considerations. The reason the researcher chose the *purposive sampling* technique was because not all samples had criteria in accordance with what the author had determined.

**Table 1. Research Sample Criteria**

No.	Criteria	Sample Quantity
1	Service, Trade and Investment Sector companies listed on the Indonesia Stock Exchange for the period 2017-2021.	217

2	Service, Trade and Investment Sector companies listed on the Indonesia Stock Exchange that do not publish complete and consecutive financial reports during the 2017-2021 period.	(102)
3	Service, Trade and Investment Sector companies listed on the Indonesia Stock Exchange that have negative profits during the period 2017-2021.	(67)
4	Service, Trade and Investment Sector companies listed on the Indonesia Stock Exchange that have decreased sales during the period 2017-2021.	(38)
Total companies that meet the sample criteria		10
Year of observation		5
Total sample during the current period		50

Source: Indonesia Stock Exchange

## Research Variables and Operational Definitions

### Research variables

**Table 2. Operational Definition of Variables**

Variables	Concept	Indicator	Scale
<i>Sales Growth</i> (X1)	<i>Sales growth</i> is a ratio used to measure how much the company's ability to maintain its position in the industry and economy based on its sales level. (Fahmi, 2018:137)	$\frac{\text{Sales Penjualan } t - \text{Penjualan}(t-1)}{\text{Penjualan}(t-1)}$	= Ratio
Company Age (X2)	The age of the company is the age since its establishment until the company has been able to carry out its operations for an indefinite period of time. (Agustia, 2018: 65)	Company Age = Research Year - Year of <i>first issue</i> on the IDX	Ratio
<i>Firm Size</i> (X3)	<i>Firm size</i> is a description of the size of a company which is shown in total assets, total sales, average sales and total assets. (Riyanto, 2018: 299)	<i>Firm Size</i> = LN_Total Assets	Ratio
<i>Leverage</i> (X4)	<i>Leverage</i> is a ratio used to measure the extent to which a company's assets are financed with debt. There are several types of <i>leverage</i> ratios, in this study using the <i>Debt To Equity Ratio</i> . (Hery, 2018: 162)	$\text{Debt To Equity Ratio} = \frac{\text{Total Hutang}}{\text{Equity}}$	Ratio
<i>Tax Avoidance</i> (Y)	<i>Tax avoidance</i> is a tax avoidance strategy and technique that is carried out legally and safely for taxpayers because it does not conflict with tax provisions. (Pohan, 2018:23)	$\frac{\text{Cash Effective Tax Rate}}{\text{Beban Pajak}} = \frac{\text{Laba Sebelum Pajak}}{\text{Laba Sebelum Pajak}}$	= Ratio

## Data Analysis Technique

### Descriptive Statistics

According to (Ghozali, 2018: 19) descriptive statistical analysis is used to provide a description of the data for each variable seen is the amount of data, minimum value, maximum value, average value (*mean*) and standard deviation.

### Classical Assumption Test

#### Normality Test

According to (Ghozali, 2018: 161) the normality test is a test that aims to determine whether the independent or dependent variable. To test normality in this study using the *One Sample Kolmogorov Smirnov Test*. The basis for returning a decision is if

*asympt. sig.* 2-tailed > 0.05, then the regression model fulfills the assumption of normality and vice versa.

### **Multicollinearity Test**

According to (Ghozali, 2018: 108) the multicollinearity test is carried out to determine whether the independent variables are multicollinear or not. A good regression model is a model that is free from multicollinearity.

### **Autocorrelation Test**

According to (Ghozali, 2018: 161) the autocorrelation test aims to determine whether in the regression model there is a regression between confounding errors in period (t) and period t-1. A good regression model is free from autocorrelation.

### **Heteroscedasticity Test**

According to (Ghozali, 2018: 137) the heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. A good regression model is one with homoscedasticity or no heteroscedasticity.

### **Multiple Linear Analysis**

According to (Ghozali, 2018: 95) The multiple regression equation aims to measure the strength of the linear association (relationship) between two variables. The multiple regression model equation is:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

Description:

$Y$  : Tax Avoidance (CETR)

$a$  : Constant

$b_1, b_2, b_3, b_4$  : Regression Coefficient of Variable  $X_1, X_2, X_3, X_4$

$X_1$  : Sales Growth

$X_2$  : Company Age

$X_3$  : Firm Size

$X_4$  : Leverage (DER)

$e$  : error

### **Analysis of the Coefficient of Determination (*Adjusted R Square*)**

According to (Ghozali, 2018: 97) the coefficient of determination (*Adjusted R Square*) essentially measures how far the model's ability to explain variations in dependent or dependent variables. A small *adjusted R Square* value means that the ability of the value of the independent variables to explain the variation in the dependent value is very limited.

### **Hypothesis Test**

#### **Overall Significance Test of Sample Regression (F Test)**

According to (Ghozali, 2018: 98) unlike the T test which tests the significance of the partial coefficient of regression individually with a separate hypothesis test that each regression coefficient is equal to zero. The F test tests the joint hypothesis that  $b_1, b_2, b_3$  and  $b_4$  are mutually equal to zero or

$H_0: b_1 = b_2 \dots = b_k = 0$

$H_A: b_1 \neq b_2 \dots \neq b_k \neq 0$

Hypothesis testing like this is called an overall significance test.

### Individual Parameter Significance Test (T Test)

According to (Ghozali, 2018: 99) the T statistical test basically shows how far the influence of one variable individually in explaining the variation in the dependent variable. The null hypothesis ( $H_0$ ) to be tested is whether a parameter ( $b_i$ ) is equal to zero or:  $H_0 : b_i = 0$ .

This means whether an independent variable is not a significant explanatory of the dependent variable. The alternative hypothesis ( $H_A$ ) is that the parameter of a variable is not equal to zero or:  $H_A: b_i \neq 0$ .

## 4. Empirical Findings/Result

### Research Results

#### Descriptive Statistics

Descriptive statistics is a data management aims to see the minimum value, maximum value, average value (*mean*) and standard deviation below:

**Table 4. Descriptive Statistics Test Results**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
SALES GROWTH	50	.0072	1.4878	.198291	.3169822
COMPANY AGE	50	1.0000	27.0000	10.200000	6.8332919
FIRM SIZE	50	14.0000	30.0000	21.360000	6.4039529
LEVERAGE	50	.1437	4.2858	1.283559	1.1572757
TAX AVOIDANCE	50	.0112	.4700	.205371	.0865984
Valid N (listwise)	50				

Source: SPSS output results, 2023

Based on the table above with a sample of 50 can be seen:

1. *Sales Growth* has a minimum value of 0.0072% in LINK (2019) and a maximum value of 1.48% in DNET (2017), with an average value of 0.19% and a standard deviation of 0.31%.
2. *Company Age* has a minimum value of 1.00% in PRDA (2017) and a maximum value of 27.00% in MPMT (2021), with an average value of 10.20% and a standard deviation of 6.83%.
3. *Size Firm* has a minimum value of 14.00% in PRDA (2017) and a maximum value of 30.00% in MPMT (2017), with an average value of 21.36% and a standard deviation of 6.40%.
4. *Leverage* has a minimum value of 0.14% in MIKA (2018) and a maximum value of 4.28% in MIDI (2017), with an average value of 1.28% and a standard deviation of 1.15%.
5. *Tax Avoidance* has a minimum value of 0.01% in DNET (2018) and a maximum value of 0.47% in CSAP (2020), with an average value of 0.20% and a standard deviation of 0.08%.

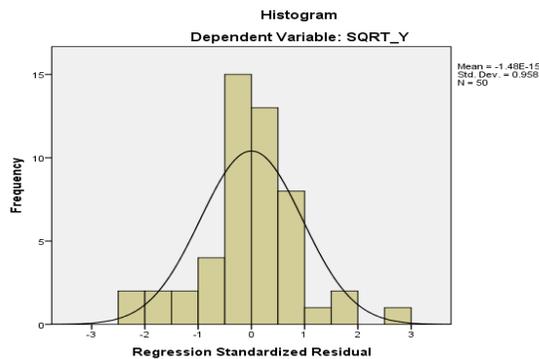
## Classical Assumption Test

### Normality Test

The normality test aims to test whether in regression, the confounding or *residual* variables have a normal distribution with graph analysis and statistical analysis.

#### 1. Graph Analysis

##### a. Histogram Graph

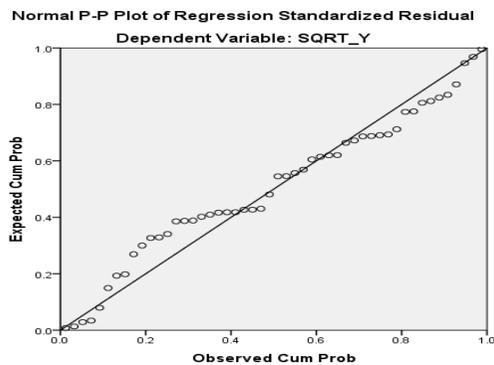


**Figure 2. Histogram Test Results**

Source: SPSS output results, 2023

From the picture above after being *transformed*, it can be seen that the normality test with the *histogram* graph shows that the data distribution follows a bell-shaped curve, so it can be concluded that the regression model has met the assumption of normality.

##### b. Normal Probability Plot



**Figure 3. Probability Plot Normality Results**

Source: SPSS output results, 2023

From the results of Figure III.2, it shows that the data spreads following around the diagonal line and follows the direction of the diagonal line, it can be concluded that the regression model has fulfilled the assumption of normality.

## 2. Statistical Test

*Kolmogorov-Smirnov* (K-S) non-parametric statistical test with decision-making guidelines about normally distributed data with the following conditions:

- If the significance value  $< 0.05$  then the residual data distribution is not normal.
- If the significance value  $> 0.05$  then the residual data is normally distributed.

**Table 5. One-Sample Kolmogorov-Smirnov Test Results**  
**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		50
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	.07785919
Most Extreme Differences	Absolute	.121
	Positive	.080
	Negative	-.121
Kolmogorov-Smirnov Z		.854
Asymp. Sig. (2-tailed)		.459
a. Test distribution is Normal.		
b. Calculated from data.		

Source: SPSS output results, 2023

From the table above, it can be seen that the *Asymp.Sig* value. (*2-tailed*) in the data above is 0.459. Where the value of *Asymp. Sig. (2-tailed)* > a significant value of 0.05 so that the data is concluded to be normally distributed.

### Multicollinearity Test

The multicollinearity test aims to detect the presence or absence of multicollinearity in the regression model, which can be seen by the criteria of *tolerance value* > .010 and *Variance Inflation Faptor* (VIF) < 10.

**Table 6. Multicollinearity Test Results**

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics	
	B	Std. Error	Beta	Tolerance	VIF
(Constant)	.679	.105			
1	SQRT SALES GROWTH	-.320 .051	-.696	.843	1.186
	SQRT AGE OF COMPANY	-.002 .015	-.021	.520	1.924
	SQRT SIZE FIRM	-.020 .024	-.123	.499	2.006
	SQRT LEVERAGE	-.021 .028	-.093	.638	1.567

a. Dependent Variable: SQRT CETR

Source: SPSS output results, 2023

Based on the explanation of the table above, the *tolerance* value of the *Sales Growth* variable is 0.843, *Company Age* is 0.520, *Size Firm* is 0.499 and *Leverage* is 0.638. These values are greater than 0.10 and the VIF value of *Sales Growth* 1.186, *Company Age* 1.924, *Size Firm* 2.006 and *Leverage* 1.567, the value is smaller than 10, meaning there is no multicollinearity.

### Autocorrelation Test

A good regression model is a regression that is free from autocorrelation in this study using the *runs test*. The basis for decision making in the *runs test*, namely:

- If the value of *Asymp. Sig. (2-tailed)* value is smaller <0.05 then there are symptoms of autocorrelation

- Conversely, if the value of Asymp. Sig. (2-tailed) is greater  $> 0.05$  then there are no symptoms of autocorrelation.

**Table 7. Runs Test**

Test Runs	
	Unstandardized Residual
Test Value <sup>a</sup>	.00267
Cases < Test Value	25
Cases $\geq$ Test Value	25
Total Cases	50
Number of Runs	22
Z	-1.143
Asymp. Sig. (2-tailed)	.253
a. Median	

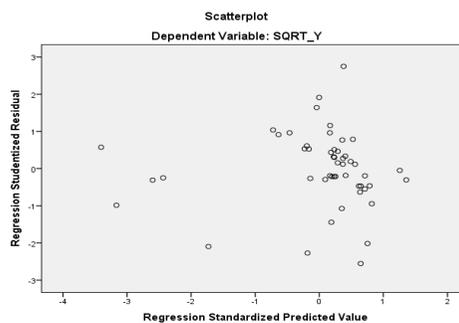
Source: SPSS output results, 2023

Based on the table above, it is known that the value of *Asymp. Sig. (2-tailed)* is greater than  $0.253 > 0.05$ , so there are no symptoms of autocorrelation. Thus, the autocorrelation test problem that cannot be solved with *Durbin Watson* can be resolved with the *run test*.

### Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of *variance* from the residuals of one observation to another. A good regression model is that heteroscedasticity does not occur.

#### 1. Scatterplot Graph

**Figure 4. Heteroscedasticity Test Results Scatterplot**

Source: SPSS output results, 2023

The results above show that the data spreads randomly and does not form a good pattern. The data is scattered and below the 0 line on the Y axis which indicates that heteroscedasticity does not occur.

## 1. Glejser Test

**Table 8. Glacier Test Results**

Coefficients <sup>a</sup>						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
	(Constant)	-.079	.067		-1.190	.240
	SQRT SALES GROWTH	-.002	.033	-.010	-.067	.947
1	SQRT AGE OF COMPANY	-.003	.010	-.061	-.312	.756
	SQRT SIZE FIRM	.025	.015	.322	1.616	.113
	SQRT LEVERAGE	.034	.018	.330	1.874	.067

a. Dependent Variable: SQRT RES2

Source: SPSS output results, 2023

From the data *output* above, it can be seen that the significance value of the four independent variables *Sales Growth* 0.94, *Company Age* 0.75, *Firm Size* 0.11 and *Leverage* 0.06. These values are greater than 0.05. So it can be concluded that heteroscedasticity does not occur.

## Data Analysis Results

The analysis method used is multiple linear regression analysis. Multiple linear regression analysis is to increase the number of independent variables from one to two or more independent variables.

**Table 9. Multiple Linear Regression Test Results**

Coefficients <sup>a</sup>			
Model	Unstandardized Coefficients		
		B	Std. Error
	(Constant)	.679	.105
	SQRT SALES GROWTH	-.320	.051
1	SQRT AGE OF COMPANY	-.002	.015
	SQRT SIZE FIRM	-.020	.024
	SQRT LEVERAGE	-.021	.028

a. Dependent Variable: SQRT CETR

Source: SPSS output results, 2023

Based on the above results, the multiple linear regression equation is as follows:

$$\text{Tax Avoidance} = 0.679 - 0.320\text{Sales Growth} - 0.002\text{Company Age} - 0.020\text{Size Firm} - 0.021\text{Leverage}$$

From the multiple linear equations of the research hypothesis, the following information is obtained:

1. The constant value (a) is 0.679, which means that if the independent variables, namely *Sales Growth*, *Company Age*, *Firm Size* and *Leverage* are considered constant, then *Tax Avoidance* in the Trade and Investment Service Sector companies listed on the Indonesia Stock Exchange in 2017-2021 is 0.679.
2. The regression coefficient value of *Sales Growth* ( $X_1$ ), is -0.320. This indicates that every one percent increase in *Sales Growth* will see a 32 percent decrease in *Tax Avoidance*.

3. The regression coefficient value of Company Age ( $X_2$ ), is -0.002. This shows that every one percent increase in Company Age will see a decrease in *Tax Avoidance* by 0.2 percent.
4. The regression coefficient value of *Firm Size* ( $X_3$ ), is -0.020. This indicates that every one percent increase in Company Age will see a decrease in *Tax Avoidance* by 2 percent.
5. The regression coefficient value of *Leverage* ( $X_4$ ), is -0.021. This shows that every one percent increase in Company Age will see a decrease in *Tax Avoidance* by 0.2 percent.

### Test Coefficient of Determination (*Adjusted R Square*)

The coefficient of determination is used to measure how much influence *Sales Growth*, *Company Age*, *Firm Size* and *Leverage* have on *Tax Avoidance* in Trading and Investment Service Sector companies listed on the Indonesia Stock Exchange in 2017-2021.

**Table 10. Coefficient of determination test results**

<b>Model Summary</b>				
Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.729 <sup>a</sup>	.532	.490	.0812459

a. Predictors: (Constant), SQRT\_LEVERAGE, SQRT\_AGE OF COMPANY, SQRT SALES GROWTH, SQRT SIZE OF FIRM

Source: SPSS Output Results, 2023

Based on the table above, the *Adjusted R Square* value is 0.490 (49%). So the effect of *Sales Growth*, *Company Age*, *Firm Size* and *Leverage* on *Tax Avoidance* is 49%. The remaining 51% is influenced by other variables not examined such as earnings management variables and dividend policy.

### Simultaneous Hypothesis Testing (F-test)

Simultaneous hypothesis testing (F-test) is used to determine how far the influence of the independent variable on the dependent variable simultaneously.

**Table 11. Result (F-test)**

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.338	4	.084	12.786	.000 <sup>b</sup>
	Residuals	.297	45	.007		
	Total	.635	49			

a. Dependent Variable: SQRT CETR

b. Predictors: (Constant), SQRT\_LEVERAGE, SQRT\_AGE OF COMPANY, SQRT SALES GROWTH, SQRT\_SIZE OF FIRM

Source: SPSS output results, 2023

From the table above, it can be seen that the  $F_{count}$  value is 12.786 and the value of  $f_{tabel}$  at the 0.05 significance confidence level is 2.58 thus  $f_{count} = 12.786$ , the conclusion is  $F_{count} > F_{tabel} = 12.786 > 2.58$  with a significance value of  $0.000 < 0.05$ . So, simultaneously *Sales Growth*, *Company Age*, *Firm Size* and *Leverage* have a significant and significant effect on *Tax Avoidance* in Trading and Investment Service Sector companies listed on the Indonesia Stock Exchange in the 2017-2021 period.

### Partial Hypothesis Testing (t)

Partial test (t) is basically used to determine the effect of each independent variable on the dependent.

**Table 12. T Test Results**

Model	Coefficients <sup>a</sup>				
	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	.679	.105		6.485	.000
SQRT SALES GWORDH	-.320	.051	-.696	-6.262	.000
SQRT AGE OF COMPANY	-.002	.015	-.021	-.146	.885
SQRT SIZE FIRM	-.020	.024	-.123	-.854	.398
SQRT LEVERAGE	-.021	.028	-.093	-.729	.470

a. Dependent Variable: SQRT CETR

Source: SPSS output results, 2023

With a 2-sided test (significance = 0.025) the results obtained for the t table of -2.01410 (45) with a significant 0.05 each independent variable partially on the dependent variable can be analyzed as follows:

1. *Sales Growth* ( $X_1$ ), has a  $t_{count}$  value of -6.262 with a significant level of 0.000. So the conclusion is  $t_{hitung} < t_{tabel}$ , namely  $-6.262 < -2.01410$  and sig value of  $0.000 < 0.05$ , it means that the *Sales Growth* variable partially has no effect and is significant on *Tax Avoidance*.
2. *Company Age* ( $X_2$ ), has a  $t_{count}$  value of -0.146 with a significant level of 0.885. So the conclusion is  $t_{count} > t_{tabel}$ , namely  $-0.146 > -2.01410$  and sig value  $> 0.05$ , so partially *Company Age* has a negative and insignificant effect on *Tax Avoidance*.
3. *Firm Size* ( $X_3$ ), has a  $t_{count}$  value of -0.854 with a significant level of 0.398. While the value of  $t_{tabel}$  is -2.01410 with a significant 0.05. So the conclusion is  $t_{count} > t_{tabel}$  which is  $-0.854 > -2.01410$  and sig value  $> 0.05$ , it means that the *Size Firm* variable partially has a negative and insignificant effect on *Tax Avoidance*.
4. *Leverage* ( $X_4$ ), has a  $t_{count}$  value of -0.729 with a significant level of 0.470. While the value of  $t_{tabel}$  is -2.01410 with a significant 0.05. So the conclusion is  $t_{count} > t_{tabel}$  which is  $-0.729 > -2.01410$  and sig value  $> 0.05$ , it means that the *Leverage* variable partially has a negative and insignificant effect on *Tax Avoidance*.

## 5. Discussion

The partial hypothesis testing (t-test) results provide insights into the effects of sales growth, company age, firm size, and leverage on tax avoidance among service, trade, and investment sector companies listed on the Indonesia Stock Exchange from 2017 to 2021. Each independent variable's impact on tax avoidance is examined to understand their individual contributions and implications.

The results indicate that sales growth has a significant negative effect on tax avoidance. This finding aligns with Agustia and Suryani (2018), who argued that higher sales growth increases profitability, subsequently raising the tax burden and leading to tax avoidance strategies. However, the negative coefficient suggests that

higher sales growth may reduce tax avoidance. This could be due to increased scrutiny from tax authorities on profitable companies, making tax avoidance riskier and less attractive. This result highlights the need for companies to balance growth and compliance, ensuring that growth does not lead to aggressive tax avoidance practices that might attract regulatory penalties.

The analysis shows that company age has a negative and insignificant effect on tax avoidance. This is consistent with Kurniawan (2022), who found that older companies have more experience and established systems for managing their tax obligations, potentially reducing the need for tax avoidance. As companies age, they may develop better compliance practices and face more scrutiny, reducing the likelihood of engaging in tax avoidance. This finding suggests that the longevity and stability of a company contribute to more conservative tax practices.

The results also reveal that firm size has a negative and insignificant effect on tax avoidance. This contradicts some previous studies, such as those by Hery (2018) and Sterling & Christina (2021), which suggested that larger firms, with more substantial total assets, tend to engage in tax avoidance to reduce their tax liabilities. The discrepancy might be attributed to the diverse strategies large firms use to comply with tax regulations and the increased regulatory oversight they face, which can deter aggressive tax avoidance practices. Therefore, while larger firms have more resources for tax planning, they also have more to lose from non-compliance, leading to more cautious tax strategies.

Lastly, leverage is found to have a negative and insignificant effect on tax avoidance. This finding aligns with Mahdiana and Amin (2020) and Sunarsih, Haryono, and Yahya (2019), who posited that higher leverage increases interest expenses, which are tax-deductible, thus reducing taxable income and potentially lowering the need for aggressive tax avoidance. Companies with high leverage might rely more on debt-related tax shields than on other tax avoidance strategies. This suggests that while leverage can provide tax benefits, it does not necessarily lead to more tax avoidance activities.

In summary, the study finds that sales growth significantly impacts tax avoidance, while company age, firm size, and leverage do not have significant effects. These results contribute to the understanding of how different company characteristics influence tax behavior, emphasizing the complex interplay between growth, size, age, and financial strategies in shaping tax practices. The findings are consistent with previous research, though they also highlight unique dynamics in the Indonesian context, particularly in the service, trade, and investment sectors.

## **6. Conclusions**

The findings of this study can be summarized as follows: Sales Growth has no significant effect on Tax Avoidance in companies in the Trade and Investment Services Sector listed on the Indonesia Stock Exchange in the 2017-2021 period.

Company Age has a negative and insignificant effect on Tax Avoidance in these companies. Similarly, Firm Size also exhibits a negative and insignificant effect on Tax Avoidance in the Trade and Investment Services Sector companies. Leverage, too, shows a negative and insignificant effect on Tax Avoidance. However, when considering Sales Growth, Company Age, Firm Size, and Leverage simultaneously, there is a significant effect on Tax Avoidance in these companies.

Based on these conclusions, the researcher suggests the following: Future researchers should consider using other measures beyond the Cash Effective Tax Rate to explain the level of corporate tax avoidance. This approach can help capture various phenomena occurring during the research period. Additionally, using different types of industries could yield more comprehensive results. Companies are encouraged to engage in correct and efficient tax planning that complies with applicable tax laws and regulations to avoid any negative impacts in the future.

## References:

- Agustia, Y. P., & Suryani, E. (2018). The effect of company size, age company, leverage, and profitability on earnings management (Study of mining companies listed on the Indonesia Stock Exchange 2014-2016 period). *ASET Journal (Accounting Research)*, 10(1), 71-82.
- Ainniyya, S. M., Sumiati, A., & Susanti, S. (2021). The effect of leverage, sales growth, and company size against tax avoidance. *Owner: Accounting Research and Journal*, 5(2), 525-535.
- Anasta, L. (2021). The effect of sales growth, profitability and capital intensity to tax avoidance. *Scientific Journal of Economic Gema*, 11(1), 1803-1811.
- Aulia, I., & Mahpudin, E. (2020). The effect of profitability, leverage, and size company on tax avoidance. *Accountable*, 17(2), 289-300.
- Riyanto, B. (2018). *Fundamentals of Corporate Finance* (4th ed.). BPFE-Yogyakarta.
- Carolina, V., & Purwantini, A. H. (2020, November). The effect of control internal, ownership structure, sales growth, environmental uncertainty, and political connections to tax avoidance (Empirical study of manufacturing companies listed on the IDX for the 2015-2019 period). In *UMMagelang Conference Series* (pp. 154-173).
- Kasmir. (2017). *Financial Statement Analysis*. PT Rajagrafindo Persada.
- Pohan, C. A. (2018). *Comprehensive Discussion of Indonesian Taxation: Theory and Cases*. Mitra Wacana Media.
- Fahmi, I. (2018). *Introduction to Financial Management*. Alfabeta.
- Ghozali, I. (2018). *Application of Multivariate Analysis with the IBM SPSS Program 25*. Diponegoro University Publishing House.
- Hery. (2018). *Financial Statement Analysis (Integrated and Comprehensive edition)*. Grasindo.
- Kurniawan, F. A. (2022). Effect of profitability, leverage, company size and company age on tax avoidance (Doctoral dissertation, Hayam Wuruk University Perbanas Surabaya).
- Mahdiana, M. Q., & Amin, M. N. (2020). The effect of profitability, leverage, company size, and sales growth on tax avoidance. *Trisakti Journal of Accounting*, 7(1), 127-138.
- Pamungkas, D. A., & Mildawati, T. (2020). Effect of profitability, leverage and sales growth against tax avoidance in manufacturing companies listed on the Indonesia Stock Exchange. *Journal of Accounting Science and Research (JIRA)*, 9(10).

- Pitaloka, S., & Merkusyawati, N. K. L. A. (2019). The effect of profitability, leverage, audit committee, and executive character on tax avoidance. *E-Journal of Accounting*, 27(2), 1202-1230.
- Pohan, C. A. (2018). *Taxation Management: Tax Planning Strategies and Business* (revised ed.). PT Gramedia Pustaka Utama.
- Prapitasari, A., & Safrida, L. (2019). The effect of profitability, leverage, firm size, political connection and fixed asset intensity on tax avoidance (Empirical study on mining companies listed in Indonesia Stock Exchange 2015-2017). *ACCRUALS (Accounting Research Journal of Sutaatmadja)*, 3(2), 247-258.
- Pratiwi, N. P. D., Mahaputra, I. N. K. A., & Sudiartana, I. M. (2021). The influence of financial distress, leverage and sales growth against tax avoidance in manufacturing companies listed on BEI in 2016-2018. *KARMA (Accounting Student Research Works)*, 1(5), 1609-1617.
- Priscilla, K. (2021). Effect of company size, company age, profitability and leverage on tax avoidance in manufacturing companies listed on the Indonesia Stock Exchange for the 2017-2019 period. (Unpublished undergraduate thesis).
- Rahmawati, D., & Nani, D. A. (2021). Effect of profitability, size company, and debt level against tax avoidance. *Journal of Accounting and Finance*, 26(1), 1-11.
- Richie, R. (2021). The influence of company size, leverage, sales growth, and company age against tax avoidance in manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2018 period. (Unpublished undergraduate thesis).
- Sari, A. Y., & Kinasih, H. W. (2021). The effect of profitability, leverage, and institutional ownership on tax avoidance. *Dynamics of Financial Accounting and Banking*, 10(1), 51-61.
- Setianti, P. (2019). The effect of profitability, leverage, company age, capital intensity and managerial ownership on tax avoidance (Doctoral dissertation, STIE Perbanas Surabaya).
- Sholeha, Y. M. A. (2019). The effect of capital intensity, profitability, and sales growth against tax avoidance. *AKUNESA Accounting Journal*, 7(2).
- Sterling, F., & Christina, S. (2021). Effect of financial ratios, size company, and company age on tax avoidance. *E-Journal of TSM Accounting*, 1(3), 207-220.
- Sugiyono. (2018). *Quantitative Research Methods*. Alfabeta.
- Sulistiyanto, S. (2018). *Earnings Management: Theory and Empirical Models*. Grasindo.
- Sunarsih, S., Haryono, S., & Yahya, F. (2019). The effect of profitability, leverage, corporate governance, and company size on tax avoidance (Case study on companies listed on the Jakarta Islamic Index in 2012-2016). *INFERENCE: Journal of Social and Religious Research*, 13(1), 127-148.
- Syenie, G. (2021). The effect of profitability, leverage, company size, and sales growth on potential tax avoidance in food and beverages subsector companies listed on the Indonesia Stock Exchange for the 2018-2020 period. (Unpublished undergraduate thesis).
- Triyani, Y. (2023). The effect of company size, leverage, sales growth, and company age on tax avoidance. *Journal of Accounting*, 12(1).
- Wahyuni, T., & Wahyudi, D. (2021). Effect of profitability, leverage, size company, sales growth and audit quality on tax avoidance. *Compact: Scientific Journal of Accounting Computerization*, 14(2), 394-403.