



**Mount Hope International Accounting Journal**

**JAIMO**

**E-ISSN = 3031-1276**

**THE EFFECT OF APPLICATION OF RETURN ON ASSETS, LEVERAGE,  
COMPANY SIZE AND INSTITUTIONAL OWNERSHIP ON TAX AVOIDANCE  
IN REGISTERED MANUFACTURING COMPANIES IN THE  
TRANSPORTATION AND LOGISTICS SECTOR  
ON THE INDONESIAN STOCK EXCHANGE 2019-2022**

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**Abstract**

The aim of this research is to prove whether there is an influence of Return on Assets, Leverage, Company Size and Institutional Ownership on Tax Avoidance in Transportation and Logistics Sector Manufacturing Companies Listed on the Indonesia Stock Exchange (BEI). This research uses quantitative research using the SPSS version 26 application. The population used in this research is transportation and logistics sector manufacturing companies registered on the BEI for the 2019-2022 period. The results of this research show that (1) Return On Assets has a significant effect on Tax Avoidance, (2) Leverage does not have a significant effect on Tax Avoidance. (3) Company size has a significant effect on Tax Avoidance. (4) Institutional ownership has a significant effect on Tax Avoidance. The results of the Classical Assumption Test which went through the Normality test process, Multicollinearity Test, Autocorrelation Test, Heteroscedasticity Test, Multiple Linear Regression Test, Hypothesis (T Test), Hypothesis (F Test), Coefficient (R<sup>2</sup>) and Adjusted R Square had a 34% effect on Tax Avoidance and the remaining 66% are influenced by other variables.

**Keywords** : Return On Assets, Leverage, Company Size, Institutional Ownership, Tax Avoidance

**INTRODUCTION**

Taxes have a very important role in the life of the state, because taxes are a source of state income to finance all expenses. Understanding taxes according to Law no. 28 of 2007 concerning taxation, "tax is a mandatory contribution to the state owed by an individual or entity that is coercive based on law, without receiving direct compensation and is used for state needs for the greatest prosperity of the people (Susilowati et al. , 2020).

According to the Letter of the Director General of Taxes No. S14/PJ.7/2003, 8 Tax is an important element in order to support the state revenue budget. By paying taxes, companies have indirectly helped the country in realizing people's welfare. However, the implementation of tax collection by the government is not always well received by companies.

Companies always try to pay the lowest possible taxes because taxes will reduce revenue or net profit, while the government wants taxes as high as possible in order to finance government administration (Sukartha & Darmawan,

2014). The difference in these two interests ultimately makes taxpayers have a tendency to minimize the tax burden that must be paid so as to obtain greater profits.

Tax avoidance is a way to legally reduce the tax burden borne by companies that does not violate tax regulations because tax avoidance is permitted in tax regulations. By allowing tax avoidance, many people take advantage of this loophole to reduce the deferred burden on individual or corporate taxpayers. However, despite this, the government does not expect companies to carry out these activities.

Many companies in Indonesia engage in tax evasion based on a survey conducted by IMF investigator Ernesto Crivelli in 2016, analyzed again by PBB University using the International Center for Policy and Research, and International Center for Taxation and Development (ICT) databases on companies in 30 countries. Indonesia is ranked 11th out of 30 countries with losses of U\$6.48 billion due to companies that avoid taxes. This survey was the trigger for this research to be carried out so that shareholders and other stakeholders are more careful in monitoring management actions related to tax avoidance practices (Yulyanah & Kusumastuti, 2019).

For example, several years ago the Directorate General of Taxes investigated a case of tax evasion by PT. Coca Cola Indonesia. PT. CCI is suspected of circumventing taxes, resulting in a tax underpayment of Rp. 49.24 billion. The results of an investigation by the Directorate General of Taxes showed that the company had carried out tax evasion which resulted in reduced tax payments due to the discovery of large cost overruns at the company. Large costs cause taxable income to decrease, so that tax payments also decrease. These costs include advertising from the period 2002 – 2006 with a total of Rp. 566.84 Billion. As a result, there is a decrease in taxable income (Teguh Muji Waluyo, Yessi Mutia Basri, 2015).

Previous research on tax avoidance such as research by Swingly and Sukartha (2015) shows that company size has a positive effect on tax avoidance, while leverage has a negative effect on tax avoidance. Ngadiman and Puspitasari (2014) show that the leverage variable has no significant effect on tax avoidance, while company size has a significant effect on tax avoidance. Butje and Tjondro (2014) show that company size and leverage have a significant effect on tax avoidance.

Rini Handayani (2018) said that Return On Assets (ROA) influences tax avoidance. And research related to earnings management shows that earnings management influences tax avoidance significantly, both positively (Fajriansyah and Firmansyah (2017); Purba, 2018); (Suryanto & Supramono, 2012) or negative (Rifai and Atiningsih, 2019).

Research conducted by Almaidah, Titisari and Nurlaelah (2017), Permata, Nurlaelah and Marsitoh (2018), and Nugraheni and Pratomo (2018) found that company size has no effect on tax avoidance (Susilowati et al., 2020). However, in contrast to research conducted by Kim and Im (2017), Asri and Suardana

(2016), found that company size has an effect on tax avoidance.

Various factors have been researched to determine the causes of tax avoidance. Pohan (2009); Khurana and Moser (2009); Dyan (2016) found that the size of institutional ownership concentration will influence a company's Tax Avoidance actions. If institutional ownership is greater, the company's CETR value will also be high, so it is indicated that the company is not practicing Tax Avoidance and conversely, the smaller the institutional ownership, the CETR value will be low so that the company is practicing Tax Avoidance. However, this is different from research conducted by Giawan Nur Fitria (2018) which states that institutional ownership has no influence on Tax Avoidance).

#### **The Effect of Return On Assets on Tax Avoidance**

Return on Assets is a financial ratio used to measure the level of profit. ROA, can measure a company's profits from past and projected activities into the future. The assets calculated are the total assets obtained from capital, personal or foreign capital, which have been converted into company assets and used for company activities and operations (Pradnyadari, 2015). A positive Return on Assets indicates that the total assets used for company operations are able to provide profits for those used that do not provide profits. In other words, the higher this ratio, the better the asset productivity in obtaining net profits. Return on Assets is an ongoing increase, so that share prices also increase and vice versa (Bangun & Januardin, 2022)

#### **The Effect of Leverage on Tax Avoidance**

Leverage is a comparison that describes the use of borrowed funds or debt to increase the potential return on an investment. In a business context, leverage often refers to the use of debt to increase company profits. Companies can choose debt funding because there are interest costs as a tax deduction so that the company's tax burden becomes smaller, so the higher the leverage ratio of a company, the higher the company's efforts to avoid tax (Musthafa, 2017).

#### **The Influence of Company Size on Tax Avoidance**

Company size usually refers to financial metrics or indicators used to evaluate or compare financial performance. Company size is a scale for classifying the size of a company, including total assets, total sales, share market value and so on (Hery, 2017). Company size can determine investors' perceptions of the company. The larger the company size, the greater the sales results will be.

#### **The Effect of Institutional Ownership on Tax Avoidance**

Significant institutional ownership in a company increases pressure to maintain transparency and compliance in tax regulations. Institutional ownership has a function in terms of monitoring and disciplining managers to avoid opportunistic behavior (Annisa, 2017). Institutional ownership is the percentage of shares owned by institutions and Blockholder ownership, namely individual ownership or on behalf of individuals above five percent (5%) but not included in the insider or managerial ownership group.

### conceptual framework

The conceptual framework explains the relationship between the independent variables (X), namely Return on Assets, Leverage, company size and institutional ownership, and the dependent variable (Y), namely iTax Avoidance. The conceptual framework below makes it easier for researchers to know the expected research results.

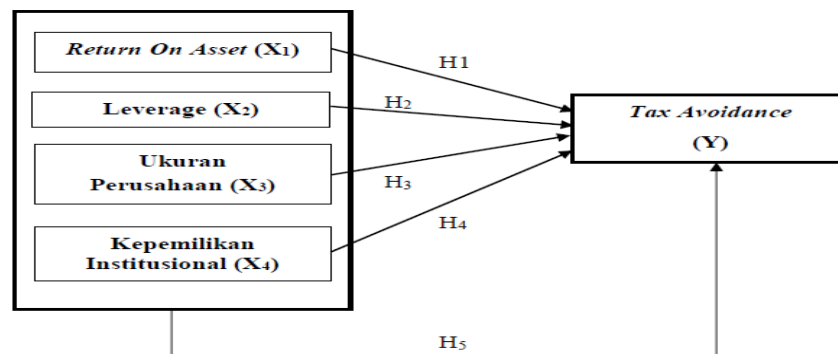


Figure 1. Conceptual Framework

Source: Processed data, 2024

### Research hypothesis

Based on the explanation of the conceptual framework, the hypothesis proposed as a temporary answer to the problem formulation is as follows:

H1: Return on Assets influences Tax Avoidance

H2: Leverage has an effect on Tax Avoidance

H3: Company size influences Tax Avoidance

H4: Institutional Ownership influences Tax Avoidance

H5: Return on Assets, Leverage, company size and institutional ownership influence Tax Avoidance

### RESEARCH METHODS

This research uses a descriptive method with a quantitative approach and uses secondary data by collecting the data and then compiling it, processing it and analyzing it to provide a clear picture of the existing problem. This research was carried out by copying and archiving secondary data in the form of financial reports available on the Indonesia Stock Exchange website, namely [www.idx.co.id](http://www.idx.co.id).

According to Sugiyono (2017) population is a generalized area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn. The population used in this research is transportation and logistics sector manufacturing companies listed on the Indonesia Stock Exchange in 2019-2022.

According to Sugiyono (2017: 81), the sample is part of the number and characteristics of the population. The sample selection in this study used a

purposive sampling method, where sampling was carried out using certain criteria that had been determined to be relevant to the research objectives.

**Table 1. Research Sample Criteria**

No.	Criteria	Amount
1	Transportation and logistics sector companies listed on the Indonesian Stock Exchange and not delisted 2019-2022	34
2	Companies that do not publish period financial reports 2019 -2022	(4)
	Final Sample	30
	Observation time	4
	Number of Observations (n) = 30 x 5	120

Processed sources, [www.idx.co.id](http://www.idx.co.id)

Based on the criteria above, researchers found a population of 34 companies in the transportation, logistics and real estate sectors that were registered on the Indonesia Stock Exchange (BEI) for the 2019-2022 period. There were 30 companies that met these criteria.

The data analysis method aims to determine the data processing process carried out in this research. Data processing was carried out with the help of SPSS 26.

## RESULTS AND DISCUSSION

### Statistical Descriptive Analysis

Descriptive statistics provide an overview of the minimum value, maximum value, average value and standard deviation for the data used in research. Standard deviation is a statistical value used to determine how spread out the data is in a sample, and how close individual data points are to the mean or average of the sample values. General statistical data from all the data used can be seen in table 2 below.

**Table 2. Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Return On Assets (X1)	120	-.59930	3.32694	.0575541	.39122391
Leverage (X2)	120	.00092	322.15115	3.2006562	29.36480805
Company Size (X3)	120	25.01498	36.34387	31.6120762	2.47474074
Institutional Ownership (X4)	120	.00032	1.00099	.5777002	.29946783
Tax Avoidance (Y)	120	-5.41968	7.07767	.2519661	.96139871
Valid N (listwise)	120				

Source: Data processed by SPSS, 2024

Table 2 shows the results of descriptive statistical tests for each variable studied by the researcher. There were a number of samples studied totaling 120 observations. The results of the descriptive analysis are as follows:

1. The Return On Assetsso(X1) variable has a minimum value of -0.59930;

- maximum value 3.32694; the average value (Mean) is 0.05755 with a standard deviation of 0.39122.
2. The Leverage variable (X2) has a minimum value of 0.00092; maximum value 322.15115; the average value (Mean) is 3.20065 with a standard deviation of 29.36480.
  3. The Company Size variable (X3) has a minimum value of 25.01498; maximum value 36.34387; the average value (Mean) is 31.61207 with a standard deviation of 2.47474.
  4. The Institutional Ownership Variable (X4) has a minimum value of 0.00032; maximum value 1.00099; the average value (Mean) is 0.57770 with a standard deviation of 0.29946.
  5. The Tax Avoidance (Y) variable has a minimum value of -5.41968; maximum value 7.07767; the average value (Mean) is 0.25196 with a standard deviation of 0.96139.

### Multiple Linear Regression Test

Multiple linear regression aims to test the influence of two or more independent variables on the dependent variable. The results of the multiple linear regression test can be seen in the following table.

**Table 3. Multiple Linear Regression Test Results**

Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	,191	6,662	
	ROA	-.586	.105	-.533
	Leverage	,150	.108	.133
	Company Size n	-1,022	1,937	-.051
	Institutional Ownership	.211	,115	,177

a. Dependent Variable: Tax Avoidance

Source: Data processed by SPSS, 2024

$$Y = 0.191 + (-0.586)X_1 + 0.150X_2 + (-1.022)X_3 + 0.211X_4 + \varepsilon$$

Based on table n4.8 above it shows that: ghjk

1. The constant value is 0.191, meaning that if X1, X2, X3, and X4 = 0, then Y = 0.191.
2. The value of the regression coefficient for Return On Assets (X1) is -0.586, this shows that increasing the Return On Assets variable will increase the Y variable by 0.586.
3. The regression coefficient value of Leverage (X2) is 0.150, this shows that increasing the Leverage variable will increase the Y variable by 0.150.fghjk
4. The regression coefficient value of company size (X3) is -1.022, this shows that increasing the company size variable will increase the Y variable by -1.022.cghjkl
5. The regression coefficient value for institutional ownership (X4) is 0.211, this shows that increasing the institutional ownership variable will increase the Y variable by 0.211.

### Hypothesis Testing

**T Test (Partial Test)**

The t-statistical test is intended to find out how much influence an independent variable individually has in explaining the dependent variable. The partial test or t test is used to determine whether or not there is an influence of one independent variable on the dependent variable, while one or more other independent variables are in a fixed or controlled state.

**Table 4 T Test Results (Partial)**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,191	6,662		,029	,977
	ROA	-.586	.105	-.533	-5,578	,000
	Leverage	,150	.108	.133	1,383	,171
	Company Size	-1,022	1,937	-.051	-.528	,599
	Institutional Ownership	.211	,115	,177	1,842	,070

a. Dependent Variable: Tax Avoidance

Source: Data processed with SPSS, 2024

From the table above, it can be seen from the P Value or significance as follows:

1. Return On Assets Variable, Test results with SPSS, the coefficient of the variable X1 (Return On Asset) is - 5.578 with sig. 0.000 ( $P > 0.05$ ), meaning that partially Return On Assets has a significant effect on Tax Avoidance.
2. Variable Leverage, Test results with SPSS, the variable coefficient X2 (Leverage) is 1.383 with sig. 0.171 ( $P > 0.05$ ), meaning that partially Leverage has no significant effect on Tax Avoidance.
3. Company Size Variables, Test results with SPSS, the coefficient of variable X3 (Company Size) is -0.528 with sig. 0.599 ( $P > 0.05$ ), meaning that partially company size has no significant effect on Tax Avoidance.
4. Variabel Institutional Ownership, Test results with SPSS, the coefficient of the variable X4 (Institutional Ownership) is 1.842 with sig. 0.070 ( $P > 0.05$ ), meaning that partially company size has no significant effect on Tax Avoidance.

**F Test (Simultaneous Test)**

**Table 5. F Test Results (Simultaneous Test)**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64,026	4	16,006	9,383	,000b
	Residual	124,529	73	1,706		
	Total	188,555	77			

a. Dependent Variable: Tax Avoidance

b. Predictors: (Constant), Return On Assets, Leverage, Company Size, Institutional Ownership

Source: Data processed with SPSS, 2024

Basis for decision making:  $F_{table} = F(k; nk) = F(4; 120-4) = F(4; 116) = 2.45$

The final results of the F test for the first hypothesis (H1) based on the output above show that the sig value for the influence of X1, together Return On Assets, Leverage, company size, and institutional ownership have a significant influence on Tax Avoidance.

### **Coefficient of Determination Test (R2)**

The coefficient of determination is used to measure how far the model's ability to explain the dependent variable. The coefficient of determination value is between zero and one ( $0 \leq R^2 \leq 1$ ). If the coefficient of determination value is close to 1, then the ability of the independent variable to explain the dependent variable is stronger.

**Table 6. Determinant Coefficient Test Results (R2)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.583a	.340	.303	1.30609
a. Predictors: (Constant), Return On Assets, Leverage, Company Size, Institutional Ownership				
b. Dependent Variable: Tax Avoidance				

Source: Data processed with SPSS, 2024

Basis for decision making:

**Table 7 Correlation Interval**

Correlation Interval	Relationship Level
0.00 – 0.199	Very low
0.20 – 0.399	Low
0.40 – 0.599	Currently
0.60 – 0.799	Strong
0.80 – 1,000	Very strong

Based on table 7, the correlation coefficient shows that the R number is 0.583, which indicates that the (r) value is in the interval 0.40 – 0.599 at a medium relationship level. Meanwhile, the results of the R2 determination show an R Square figure of 0.340 or 34%, so it can be concluded that the ability of an independent variable, namely Return On Assets, Leverage, company size and institutional ownership, can explain variations in the dependent variable, namely Tax Avoidance, at a moderate level with an ability of 34%. while the rest can be influenced by other variables outside the regression in this research.

### **CONCLUSION**

Based on the results of research and analysis carried out for Manufacturing Companies Listed on the Indonesia Stock Exchange in 2019-2022 with a total sample of 30 companies that have met the criteria and results

of the tests carried out and it can be concluded as follows:

1. Return On Assets (X1) partially has a significant effect on Tax Avoidance (Y) in the annual reports of Manufacturing companies listed on the Indonesia Stock Exchange for the 2019-2022 period. The test results with SPSS were obtained for the variable coefficient Return On Assets (X1) of -5.578 with sig. 0.000 ( $P > 0.05$ ), with the decision  $H_a$  accepted and  $H_0$  rejected.
2. Leverage, company size, and institutional ownership have a negative effect on Tax Avoidance in manufacturing companies in the transportation and logistics sector on the Indonesia Stock Exchange for the 2019-2022 period.
3. The results of the F Test show that Return On Assets, Leverage, company size and institutional ownership have a significant effect on Tax Avoidance in manufacturing companies in the transportation and logistics sector on the Indonesia Stock Exchange for the 2019-2022 period.
4. The results of the hypothesis determination coefficient test with Adjusted R<sup>2</sup> were 0.340. This shows that 34% of the Tax Avoidance (Y) variable can be explained by the variables Return On Assets (X1), Leverage (X2), company size (X3), and institutional ownership (X4). The remaining 66% are other variables outside of this research.

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**Mount Hope International Accounting Journal**

**JAIMO**

***E-ISSN = 3031-1276***

Research; Vol. 9, no. 1.

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