

## THE IMPACT OF RETURN ON ASSETS, INSTITUTIONAL OWNERSHIP, AND FIRM SIZE ON TAX AVOIDANCE IN PROPERTY AND REAL ESTATE COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

Ciptawan<sup>1)</sup>, Sheryn Lim<sup>2)</sup>

- 1) Universitas Pelita Harapan, Medan  
 2) Universitas Pelita Harapan, Medan

e-mail: ciptawan.mdn@lecturer.uph.edu

### ABSTRACT

Taxes play a huge role as the state’s main income to develop a country, these funds come from tax payments by taxpayers. Since taxes are used for the country’s well-being, government strive to receive as much amount of tax as possible, while taxpayers try to minimize tax payments as it is viewed as burden that decreases their net income, this practice is known as tax avoidance. Thus, there are a few key factors discussed in this study, namely return on assets, institutional ownership, and firm size on how they impact tax avoidance, focusing on Property and Real estate companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2022. Purposive sampling method is used as sampling technique in this study. From a population of 86 property and real estate companies, 25 of them are used as sample by adopting quantitative research design and utilizing secondary data, which are financial statements published on Indonesia Stock Exchange. Method of data analysis is carried out using multiple linear regression, processed through IBM SPSS version 26. The result of this study shows that return on assets has significant impact on tax avoidance, while institutional ownership and firm size does not have significant impact on tax avoidance. Simultaneously, all three independent variables have significant impact on tax avoidance.

**Keywords: Return on Assets, Institutional Ownership, Firm Size, Tax Avoidance**

### 1. Introduction

One of the key elements that connects a country, and its citizens is through tax payments. These funds are used to create changes and develop the country, such as providing adequate public facility and essential services.

**Table 1. 1 Actual Government Revenue Data**

Sources of Revenue- Public Finance	Actual Government Revenues (Billion Rupiah)		
	2020	2021	2022
Tax Revenue	1,285,136.32	1,547,841.10	1,924,937.50
Non Taxes Revenues	343,814.21	458,493.00	510,929.60
Grants	18,832.82	5,013.00	1,010.70
Total	1,647,783.34	2,011,347.10	2,436,877.80

Source: *Badan Pusat Statistik (2023)*

This table shows that the main source of income originates from taxes that made up to 75-85% of the total state revenue. Despite the importance of taxes to develop a country, on the other hand, companies as one of the main taxpayers consider taxes as a burden that decreases their profits. Thus, causing them to put effort in performing tax avoidance to reduce tax payments and maximize profit. A phenomenon of tax avoidance back in 2020, where The Director General of Taxes at the Ministry of Finance claimed that tax avoidance discoveries are expected to result in losses of up to Rp 68.7 trillion per year.

In 2020, total tax revenue received made up 89.25% of the target. As for 2021, the amount taxes paid to the state reached a value of 1,277.53 trillion rupiah, 3.9% higher than expected. In 2022, the realized tax received is valued at 115.6% of the targeted amount.

Furthermore, data collected from Data Industri Research, ever since 2010, the Gross Domestic Product (GDP) of properties and real estate sector has been increasing every year until 2022 which means that the sector has been doing well economically and improving. But on the other hand, data collected from Kementerian Keuangan RI (2023) states that the tax contribution from this sector decreases by -17.7% in 2020 due to COVID-19 pandemic, and then increases again by 2.1% in 2021. The suspicion of tax avoidance performed can be seen through the drop in contribution of tax in 2022, with a decrease of 13.5% while other sector increases their tax contribution.

**Table 1. 2 The Phenomenon of Return on Assets, Institutional Ownership, and Firm Size towards Tax Avoidance on Property and Real Estate Companies listed in IDX**

No	Company Name	Year	Return on Asset	Institutional Ownership	Firm Size	Effective Tax Rate
1.	PT Bumi Serpong Damai Tbk (BSDE)	2020	0.80	64.85	31.74	33.12
		2021	2.50	65.50	31.75	13.74
		2022	4.09	69.15	31.81	11.32
2.	PT Perdana Gapura Prima Tbk (GPRA)	2020	2.01	76.45	28.18	22.05
		2021	2.81	78.14	28.20	21.01
		2022	4.29	68.96	28.21	12.80
3.	PT Roda Vivatex Tbk (RDTX)	2020	7.95	85.51	28.72	14.47
		2021	6.19	81.02	28.78	17.40
		2022	8.00	65.40	28.85	15.66

Source: Compiled by writer (2023)

There are many factors that influence tax avoidance, namely return on assets, institutional ownership, and firm size which will be further discussed in this paper. From the phenomenon table and previous research collected, there is still uncertainty whether these factors impact tax avoidance in a negative or positive way which interest the writer to find out more. Through the research gap and phenomenon of tax avoidance in the property and real estate companies stated above, the researcher is interested to find out more with the title **"The Impact of Return on Asset, Institutional Ownership and Firm Size towards Tax Avoidance in Property & Real Estate Companies listed on the Indonesia Stock Exchange."**

## 2. Literature Review

### 2.1.1 Agency Theory

According to Jensen & Meckling (1976), a legal arrangement known as agency theory occurs when one or more parties (referred to as the principal) appoint a third party, company managers (referred to as the agent) to perform particular tasks on their behalf and grant the agent some degree of decision-making authority. According to the research of Bubanic et al. (2018), the government's primary goal is to ensure a long-term stable increase in tax revenue for the purpose of funding public expenditures. Whereas the objective of the taxpayer as the agent is to lower taxes through increased economic strength and the realization of personal

short-term gains. Due to conflicting goals between the government and the taxpaying public, tax avoidance happens.

### **2.1.2 Return on Assets**

Return on Assets (ROA) belongs to part of the profitability ratio that is used to measure a company's potential to generate return on all the funds invested in assets to run company's operational system. The more efficiently a company uses its assets to produce after-tax net income, the greater its return on assets (Kurniawan, 2021). Since companies with high profits must pay relatively high taxes annually, compared to companies that generate little profit or even experience losses and will pay less tax or none, return on assets is one of the elements influencing the tax burden. If these companies with high ROA paid a low amount of tax, there is a high possibility of tax avoidance (Wahyuni, 2021).

### **2.1.3 Institutional Ownership**

According to Madyan & Arianto (2019), institutional ownership is ownership of corporate stock that is owned by an institution with the authority to supervise, discipline, and influence managers to compel them to refrain from acting egotistically. To meet shareholders' expectations, the manager (agent) tries to boost the company's profitability. Companies strive to pay the lowest tax possible because taxes tend to reduce net profit, but on the other hand, the government (principal) anticipates the maximum amount of tax possible to support development plans (Darsani & Sukartha, 2021).

### **2.1.4 Firm Size**

One of the elements affecting a company's capacity for profit is its size. Compared to small businesses, large corporations are less risky. Naturally, this is because large businesses have superior control and can react swiftly to different economic situations, enabling them to compete. In addition, the bigger the company, may indicate a larger profit, thus leading to more tax expense. (Ernawati et al., 2019). According to Savitra & Andyarini (2022), the bigger the company, the more likely it is to be involved in performing tax avoidance. It is because major companies frequently have access to more resources, including lots of very skilled individuals at managing effective tax-saving measures to help reduce tax payments.

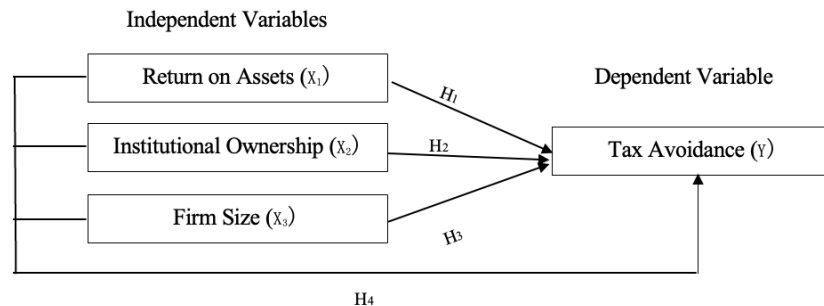
### **2.1.5 Tax Avoidance**

Taxes are people's payments to the government under the law (which may be enforced), without the exchange of directly observable reciprocal services (counter-performance), and they are used to pay for public expenses. It is normal that attempting to avoid taxes is a fundamental human impulse. Whatever the case, paying taxes is a burden on the business and will unquestionably lower future profits, leading to tax planning, tax avoidance, and even tax evasion. Tax planning can be either legal or illegal, according to Kagan (2023), tax avoidance is done by seeking gaps in the rules that apply to a country's tax legislation, tax avoidance is the legal way. To lower the amount of tax due, taxpayers engage in tax avoidance by seeking opportunities from loopholes and other inconsistencies in the tax rules and regulations. Due to information asymmetry, this action will cause financial reporting in businesses to be less reliable because they do not accurately reflect the company's financial situation. Calculation of tax avoidance can be determined by ETR (Effective Tax Rates) using data extracted from

financial statements to measure the proportion of income before tax used to pay off its tax expenses. ETR lower than 19% shows greater possibility of tax avoidance practices.

## 2.2 Research Model

Based on theoretical background and existing research conducted, there are 3 independent variables and 1 dependent variable. The dependent variable is Tax Avoidance (X), whereas the independent variables are Return on Assets (X1), Institutional Ownership (X2), and Firm Size (X3). Therefore, the writer has prepared a research model as follows:



**Figure 2. 1 Research Model**  
Source: Prepared by writer (2023)

$H_1$  : Return on Assets has significant impact on Tax Avoidance in Property and Real Estate Companies listed on Indonesia Stock Exchange.

$H_2$  : Institutional Ownership has significant impact on Tax Avoidance in Property and Real Estate Companies listed on Indonesia Stock Exchange.

$H_3$  : Firm Size has significant impact on Tax Avoidance in Property and Real Estate Companies listed on Indonesia Stock Exchange.

$H_4$  : Return on Assets, Institutional Ownership, and Firm Size have significant impact on Tax Avoidance in Property and Real Estate Companies listed on Indonesia Stock Exchange.

## 3. Research Methodology

### 3.1 Research Design

The research method used in this paper is the quantitative descriptive approach which involves the process of gathering and evaluating data using statistical methods. Secondary data obtained from financial statements listed on Indonesia Stock Exchange will be used in this research to determine the impact of return on assets, institutional ownership, and firm size on tax avoidance in Property & Real Estate companies from 2020-2022.

### 3.2 Population and Sample

According to Creswell (2012), the term population refers to a whole group of individuals or objects with similar certain attribute and represents what the researcher is trying to determine. The population used in this research involves companies in the Property & Real Estate sector listed on the Indonesia Stock Exchange from year 2020-2022 and here are 86 companies in total.

A sample refers to a group of data chosen from the selected population as representatives which are of the same characteristics and elements needed in the study. (Creswell, 2012) Purposive sampling method is applied in this research, a non-random sampling method that focuses on certain or elements contained by the sample that meets the criteria and is relevant to the research purpose.

### 3.3 Independent Variable

#### 3.3.1 Return on Assets

Return on Assets refers to one of the profitability ratios that measures the company’s ability to generate profit.

$$\text{Return on Assets (ROA)} = (\text{Net Income} / \text{Total Assets}) \times 100\%$$

#### 3.3.2 Institutional Ownership

Institutional ownership is often found in Indonesian companies which refers to the number of public shares owned by other institutions or foundations, and individual owners who owns at least 5% of the company shares.

$$\text{Institutional Ownership} = \text{Shares owned by institution} / \text{Outstanding shares}$$

#### 3.3.3 Firm Size

The more assets a company has, it tends to show that the company is greater or earning more profit.

$$\text{Firm Size} = \text{Ln (Total Assets)}$$

### 3.4 Data Analysis Method

In this study, quantitative approach will be implemented by using SPSS (Statistical Package for Social Science) Version 26 to analyze the data. In addition, descriptive statistics, classical assumption test, multiple linear regression analysis, and hypothesis testing to prove whether the independent variables have any impact on the dependent variable.

## 4. Research Result

### 4.1 General View of Properties and Real Estate Companies listed in Indonesia Stock Exchange

Shelter is the third most essential requirement for humans, after food and clothing, which means everybody requires a roof above their heads. This necessity leads to a big demand for properties and real estate, especially in major cities and its surrounding areas. In addition, the property and real estate sector is one of the main contributors to Indonesia's economy. This industry has a backward linkage and multiplier effect that greatly impacts other sectors. As a result, the property industry significantly influences the growth and encouragement of other sectors.

## 4.2 Research Result

### 4.2.1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Standard. Deviation
Return on Asset (X1)	75	.01	19.97	3.5624	3.65361
Institutional Ownership (X2)	75	27.20	96.62	64.1607	18.61345
Firm Size (X3)	75	25.25	31.81	28.7711	1.75648
Effective Tax Rate (Y)	75	.18	105.22	24.3453	18.08051
Valid N (listwise)	75				

Source: Data processed by writer with SPSS 26 (2023)

### 4.2.2 Classical Assumption Test

#### 4.2.2.1 Normality Test

<b>One-Sample Kolmogorov-Smirnov Test (After Outlier)</b>
---

		Unstandardized Residual
N		67
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Standard Deviation	10.1458300
Most Extreme Differences	Absolute	.080
	Positive	.080
	Negative	-.068
Test Statistic		.164
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance		

Source: Data processed by writer with SPSS 26 (2023)

After the process of eliminating outliers, the following results were acquired with significance value of 0.200 which is greater than 0.05, thus indicating a normally distributed data.

#### 4.2.2.2 Multicollinearity Test

Coefficients <sup>a</sup>			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Return on Asset (X1)	.768	1.302
	Institutional Ownership (X2)	.828	1.208
	Firm Size (X3)	.881	1.135
a. Dependent Variable: ETR			

Source: Data processed by writer with SPSS 26 (2023)

All 3 variables have tolerance value higher than 0.1 and VIF less than 10.

#### 4.2.2.3 Heteroscedasticity Test

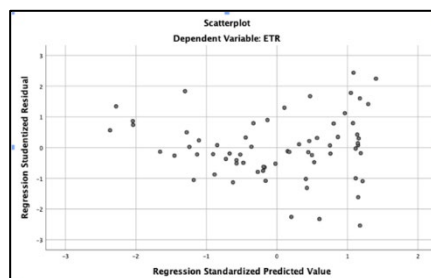


Figure 4. 1 Heteroscedasticity test with scatterplot  
 Source: Data processed by writer with SPSS 26 (2023)

All sample data are scattered randomly above and below axes and no indication of specific pattern created. Thus, this result concludes the absence of heteroscedasticity.

#### Glesjer Test

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			

1	(Constant)	25.627	14.394		1.780	.080
	Return on Asset (X1)	-.462	.391	-.163	-1.183	.241
	Institutional Ownership (X2)	-.042	.048	-.118	-.887	.378
	Firm Size (X3)	-.481	.483	-.128	-.997	.323
a. Dependent Variable: RES_3						

Source: Data processed by writer with SPSS 26 (2023)

In the table above, it shown that all 3 variables have significance value greater than 0.05 which indicates there is no heteroscedasticity detected.

#### 4.2.2.4 Autocorrelation Test

Runs Test (After Transformation)	
	Unstandardized Residual
Test Value <sup>a</sup>	-.69206
Cases < Test Value	33
Cases >= Test Value	33
Total Cases	66
Number of Runs	33
Z	-.248
Asymp. Sig. (2-tailed)	.804
a. Median	

Source: Data processed by writer with SPSS 26 (2023)

Significance value obtained is 0.804, which is greater than 0.05, thus the transformed data now does not contain autocorrelation.

#### Durbin-Watson Test after transformation

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.651 <sup>a</sup>	.424	.396	9.41044	1.962
a. Predictors: (Constant), LAG_X3, LAG_X2, LAG_X1					
b. Dependent Variable: LAG_Y					

Source: Data processed by writer with SPSS 26 (2023)

The d value in this table shows  $1.6988 < 1.962 < 2.3012$  which means there is no autocorrelation detected.

#### 4.2.3 Multiple Linear Regression Analysis

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.228	18.821		1.022	.311
	LAG_X1 (Return on Assets)	-3.619	.570	-.660	-6.354	.000
	LAG_X2 (Institutional Ownership)	.028	.083	.035	.334	.740
	LAG_X3 (Firm Size)	-.008	1.013	-.001	-.007	.994
a. Dependent Variable: LAG_Y (ETR)						

$$Y = 19.228 - 3.619X_1 + 0.028X_2 - 0.008X_3 + e$$

#### 4.2.4 Hypothesis Testing

##### 4.2.4.1 Partial t-test

Coefficients <sup>a</sup>	
---------------------------	--

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	19.228	18.821		1.022	.311
	LAG_X1 (Return on Assets)	-3.619	.570	-.660	-6.354	.000
	LAG_X2 (Institutional Ownership)	.028	.083	.035	.334	.740
	LAG_X3 (Firm Size)	-.008	1.013	-.001	-.007	.994

a. Dependent Variable: LAG\_Y

- Return on Assets has partial significant impact toward Effective Tax Rate (Tax Avoidance). Thus, first hypothesis ( $H_1$ ) is accepted.
- Institutional Ownership has no partial significant impact toward Effective Tax Rate (Tax Avoidance). Thus, second hypothesis ( $H_2$ ) is rejected.
- Firm Size has no partial significant impact toward Effective Tax Rate (Tax Avoidance). Thus, third hypothesis ( $H_3$ ) is rejected.

#### 4.2.4.2 Partial f-test

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4035.317	3	1345.106	15.189	.000 <sup>b</sup>
	Residual	5490.495	62	88.556		
	Total	9525.811	65			

Dependent Variable: LAG\_Y  
Predictors: (Constant), LAG\_X3, LAG\_X2, LAG\_X1

- Return on Assets, Institutional Ownership, and Firm Size have simultaneous significant impact on tax avoidance. Hence, the fourth hypothesis ( $H_4$ ) is accepted.

#### 4.2.4.3 Coefficient of Determination

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.651 <sup>a</sup>	.424	.396	9.41044

a. Predictors: (Constant), LAG\_X3, LAG\_X2, LAG\_X1  
b. Dependent Variable: LAG\_Y

Return on Assets, Institutional Ownership, and Firm Size can explain approximately 39.6% of the dependent variable, which is tax avoidance. The remaining 60.4% can be explained or correlated to other variables not mentioned in this study.

## 5. Conclusion

- Return on Assets have partial significant impact on tax avoidance in property and real estate companies listed on the IDX from 2020 to 2022. Hence, the first hypothesis ( $H_1$ ) is accepted. This shows that greater return on assets or greater net profit leads to greater income tax expense, causing companies to have bigger tendencies to dodge these tax payments by performing tax avoidance.
- Institutional Ownership does not have partial significant impact on tax avoidance in property and real estate companies listed on the IDX from 2020 to 2022. Hence, the second hypothesis ( $H_2$ ) is rejected. With more institutional owners present and holding shares of the company, reduces the chance of tax avoidance as the managers are being supervised to not act egoistically, such as trying to avoid tax.



3. Firm Size does not have partial significant impact on tax avoidance in property and real estate companies listed on the IDX from 2020 to 2022. Hence, the third hypothesis (H<sub>3</sub>) is rejected. A bigger firm has more ability to generate profit with greater range of resources. These resources are also utilized to help in tax planning as bigger firms with greater profit is most likely to have more tax expense.
4. Return on Assets, Institutional Ownership, and Firm Size simultaneously have significant impact on tax avoidance in property and real estate companies listed on the IDX from 2020 to 2022. Hence, the fourth hypothesis (H<sub>4</sub>) is accepted.
5. The adjusted coefficient of determination obtained is 39.6% which indicates that 39.6% of tax avoidance practice in in property and real estate companies listed in IDX from 2020 to 2022 can be explained by the 3 independent variables studied in this research, which are return on assets, institutional ownership, and firm size. Whereas the remaining 60.4% can be explained by other factors not discussed in this study.

## References

- Bubanic, M., Lackovic, I. D., & Kokotec, I. D. (2018). *A MODEL OF TAX EVASION THROUGH THE AGENCY THEORY PRISM*. November.
- Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*.
- Darsani, P. A., & Sukartha, I. M. (2021). The Effect of Institutional Ownership, Profitability, Leverage and Capital Intensity Ratio on Tax Avoidance. *American Journal of Humanities and Social Sciences Research*, 5, 13–22. [www.ajhssr.com](http://www.ajhssr.com)
- Ernawati, S., Chandrarin, G., & Respati, H. (2019). Analysis of the Effect of Profitability, Company Size and Leverage on Tax Avoidance (Study on Go Public Companies in Indonesia). *International Journal of Advances in Scientific Research and Engineering*, 05(10), 74–80. <https://doi.org/10.31695/ijasre.2019.33547>
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *The Economic Nature of the Firm: A Reader, Third Edition*, 283–303. <https://doi.org/10.1017/CBO9780511817410.023>
- Kagan, J. (2023). *Tax Avoidance Is a Legal Way To Limit Taxes; Tax Evasion Is Not*. [https://www.investopedia.com/terms/t/tax\\_avoidance.asp](https://www.investopedia.com/terms/t/tax_avoidance.asp)
- Kementerian Keuangan RI. (2023). APBN Kita edisi 2023. *Media.Kemenkue.Go.Id*, 1–146. <https://media.kemenkeu.go.id/getmedia/1a28b5ae-91df-44f0-8e40-5e21056a974e/V-1-Final-Publikasi-APBN-KiTa-Edisi-Januari-2023.pdf?ext=.pdf>
- Kurniawan, A. (2021). Analysis of the Effect of Return on Asset, Debt To Equity Ratio, and Total Asset Turnover on Share Return. *Journal of Industrial Engineering & Management Research*, 2(1), 2722–8878. <http://www.jiemar.org>
- Madyan, M., & Arianto, A. R. (2019). Institutional ownership and january effect. *Journal of Advanced Research in Dynamical and Control Systems*, 11(5 Special Issue), 1285–1292. [https://repository.unair.ac.id/91066/1/Moh. Madyan-Karya Ilmiah-004\\_Institutional Ownership and January Effect.pdf](https://repository.unair.ac.id/91066/1/Moh. Madyan-Karya Ilmiah-004_Institutional%20Ownership%20and%20January%20Effect.pdf)
- Savitra, M. A., & Andyarini, K. T. (2022). The Effect Of Leverage And Firm Size On Tax Avoidance With Company Transparency As Moderating Variable (Case Study on Manufacturing Companies Listed On BEI). *SCIENTIFIC JOURNAL OF REFLECTION: Economic, Accounting, Management and Business*, 5(1), 29–37. <https://doi.org/10.37481/sjr.v5i1.422>

Wahyuni, T. (2021). *PENGARUH RETURN ON ASSET (ROA), LEVERAGE DAN UKURAN PERUSAHAAN TERHADAP PENGHINDARAN PAJAK PADA PERUSAHAAN SEKTOR PERTAMBANGAN YANG TERDAFTAR DI BEI 2017 – 2019.*