



The Effect of Profitability on Tax Avoidance Among Property & Real Estate Companies on the Idx Period 2020–2024

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ARTICLE INFO

Keywords: Profitability, ROA, Tax Avoidance, ETR, Real Estate Companies

Received : 27, April

Revised : 20, May

Accepted: 8, June

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ABSTRACT

The purpose of this study is to determine how much profitability, as determined by Return on Assets (ROA), affects tax avoidance behavior, as determined by the Effective Tax Rate (ETR), among real estate and property companies listed on the Indonesia Stock Exchange (IDX) between 2020 - 2024. All businesses that operate in the property and real estate sector on the IDX are included in the research's overall population. Purposive sampling was used to choose a sample of thirty businesses, yielding 150 units of analysis. The study's data came from secondary sources, namely the companies' annual financial reports. Simple linear regression analysis was employed as the analytical method, processed using SPSS software. The findings indicate that ROA does not contribute statistically significant ETR, as seen from the t-value of -0.541 and a significance level of 0.589, which exceeds the threshold of 0.05. Furthermore, the R-squared value of 0.002 indicates that profitability only contributes 0.2% of the variation in tax avoidance, for the rest 99.8% is due to other factors. These results lead to the conclusion that tax avoidance practices in the real estate and property sector are not dominated by profitability levels.

INTRODUCTION

Government revenue derived from taxation plays a fundamental role in driving national development and progress. Tax collection serves as the primary mechanism through which authorities finance various public services and infrastructure projects. Nevertheless, from a corporate perspective, taxes are regarded as a financial obligation that diminishes overall profitability, prompting business managers to adopt several strategic approaches including tax avoidance as means of minimizing their tax liabilities.

Tax avoidance refers to official efforts made by taxpayers to minimize their tax obligations by exploiting loopholes in existing tax regulations (Hanlon & Heitzman, 2010). Although this practice does not violate the law, it remains a significant concern for tax authorities due to its capacity to considerably reduce state revenue. In the context of Indonesia, the property and real estate sector represents an industry with considerable revenue-generating potential, yet it continues to face close scrutiny with regard to tax compliance practices.

A business's ability to generate income from its operations is known as profitability. Return on Assets (ROA) is a profitability metric that indicates how well a business generates returns from its assets. Businesses with significantly higher profitability are considered to have a greater incentive to engage in tax avoidance because they often have higher tax liabilities.

The relationship between profitability and tax avoidance has attracted considerable academic attention, though the evidence produced remains inconclusive. A number of these studies argue that profitability exerts a positive effect on the tendency of firms to engage in tax avoidance (Chen et al., 2010; Oktamawati, 2017), while others have shown a negative or insignificant effect (Dewinta & Setiawan, 2016; Saputra et al., 2020). This inconsistency in research findings underscores the need for further study, particularly in the real estate and property sectors on the IDX.

The property and real estate sector was selected because it is a dynamic sector with unique characteristics in terms of taxation, including specific provisions regarding final income tax on the transfer of rights to land and buildings. The research period of 2020–2024 covers the post-COVID-19 pandemic period, which has had a significant impact on corporate financial performance and tax policies in Indonesia.

The primary objective of this research is to analyze the extent to which ROA mediates the effect of ETR on real estate and property firms listed on the IDX between 2020–2024 period.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Agency Theory

The link between the principal (shareholders) and the agent (management) is explained by the agency theory put out by Jensen and Meckling (1976). When it comes to taxes, management, as the agent, has a stake in raising the company's worth by reducing the tax burden so that shareholders can receive more profits. This idea explains why profitable businesses are more likely to engage in tax planning.

Tax Avoidance

The legal practice of minimizing tax obligations by exploiting existing tax laws is known as "tax avoidance" (Dyrenge et al., 2008). The Effective Tax Rate (ETR) is one of the most widely utilized proxies for assessing tax evasion. A high ETR denotes a higher degree of tax compliance, whereas a low ETR denotes more extensive tax avoidance measures.

ETR is assessed using the formula:
$$ETR = \text{Income Tax Expense} / \text{Pre-Tax Profit} \times 100\%$$

In this study, the ETR is expressed as a percentage. The lower the ETR value, the stronger the indication of tax avoidance by the company.

Profitability

A company's ability to generate profit serves as a key indicator of its financial health. Return on assets (ROA) is a financial metric that measures how effectively a business utilizes its total assets to produce earnings. When a company achieves a high ROA, it demonstrates that management is efficiently optimizing the resources at its disposal.

To quantify ROA, the following formula is employed:
$$ROA = \text{Net Profit} / \text{Total Assets} \times 100\%$$

The Relationship Between Profitability and Tax Avoidance

Highly profitable companies face a heavier tax burden. This encourages management to seek legal ways to reduce that tax burden. With greater resources, profitable companies have the ability to hire experienced tax consultants and design more sophisticated tax planning strategies (Chen et al., 2010).

Based on the above discussion, the hypothesis proposed in this study is:

H1: Profitability (ROA) has a significant effect on tax avoidance (ETR) in property and real estate companies listed on the IDX for the 2020–2024 period.

RESEARCH METHODOLOGY

Research Design

This study examines how profitability is influenced by tax avoidance using quantitative methodology and causal research design. The data used are panel data that integrates cross-sectoral and time-series data.

Population and Sample

Each company in the property and real estate sector listed on the IDX is included in this research demographic. Purposive sampling was used in the sampling process, and the following criteria were used: (1) real estate and property firms that remained actively listed on the IDX over the observation period of 2020–2024; (2) companies that released full audited annual financial reports; and (3) companies that had the information needed to calculate the research variables. A sample of thirty businesses with a total of 150 observation units was obtained based on these parameters.

Research Variables

The dependent variable in this study is Tax Avoidance, namely ETR. The independent variable is Profitability, namely ROA. The operational definitions of these variables are summarized as follows:

$$a) ETR = \text{Income Tax Expense} / \text{Pre-Tax Profit} \times 100\%$$

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

Data Analysis Techniques

Data analysis using IBM SPSS Statistics software version 26. The analytical procedures consisted of several sequential stages, encompassing descriptive statistical analysis, classical assumption testing which included normality, autocorrelation, and heteroscedasticity tests followed by simple linear regression analysis, and finally hypothesis testing carried out through both the t-test and F-test.

The regression equation model used is:

$$ETR = a + \beta_1 ROA + \varepsilon$$

Notes: ETR = Effective Tax Rate; α = constant; β_1 = ROA regression coefficient; ROA = Return on Assets; ε = error term.

RESEARCH RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive statistics for the variables utilized in this investigation are shown in the following table:

Table 1. Descriptive Statistics

Variable	N	Minimum	Max	Mean	Standard Deviation
ROA (Profitability)	150	-6.3148	8.3916	0.2648	1.3868
ETR (Tax Avoidance)	150	0.8879	486,714.51	14,744.11	49,142.87
Valid N (listwise)	150				

Source: SPSS output, processed data (2026)

Table 1 shows that the ROA variable has a minimum value of -6.3148 (INPP in 2020), a maximum value of 8.3916 (JRPT in 2024), and a mean value of 0.2648 with a standard deviation of 1.3868. Property companies on the IDX were generally able to make money from their assets during the study period, as indicated by the positive mean value of ROA.

The ETR variable, used as a proxy for tax avoidance, shows a very high average value of 14,744.11 with a standard deviation of 49,142.87. This extremely high value is due to several companies with extreme ETR values, such as MKPI in 2023, which reached 486,714.52. The high variation in ETR indicates significant differences in tax policies among the companies in the sample.

Classical Assumption Tests

Normality Test

The normality test uses the One-Sample Kolmogorov-Smirnov (KS) Test and the Shapiro-Wilk Test to determine whether the residuals of the regression model are normally distributed.

Table 2. Tests of Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	.431	150	.000	.523	150	.000

Source: SPSS output, processed data (2026)

Referring to the results of the normality test, the residuals are not normally distributed, indicating a KS significance value of 0.000 below 0.05 and a Shapiro-Wilk significance value of 0.000 below 0.05. This condition is common in corporate financial data with a large number of observations ($n = 150$) that contain outliers. Based on the Central Limit Theorem, with $n \geq 30$, regression analysis can still be performed because parameter estimates remain consistent and unbiased (Hair et al., 2014).

Autocorrelation Test

The Durbin-Watson (DW) test was used to test for autocorrelation. The DW value obtained was 1.047. Referring to the DW table with $n=150$ and $k=1$, the values are $dL=1.720$ and $dU=1.746$. The DW value of 1.047 is below dL , indicating the presence of positive autocorrelation. This condition is common in annual panel data and was anticipated by using pooled data as the analytical approach.

Heteroscedasticity Test

A test for heteroscedasticity was conducted using a scatter plot analysis of the predicted values (ZPRED) and the residuals (SRESID). Visual examination of the scatter plot reveals that there is no discernible heteroscedasticity in the regression model because the data points are dispersed randomly above and below the 0 line on the Y-axis and do not create any particular pattern.

Correlation Analysis

A Pearson correlation test was used to determine the direction and strength of the link between ROA and ETR before performing the regression analysis.

Table 3. Correlations

		ROA	ETR
ROA	Pearson Correlation	1	-.044
	Sig. (2-tailed)		.589
	N	150	150
ETR	Pearson Correlation	-.044	1
	Sig. (2-tailed)	.589	
	N	150	150

Source: SPSS output, processed data (2026)

The results of the Pearson correlation analysis indicate an r value of -0.044 at a significance level of 0.589, reflecting a negative relationship between ROA and ETR that is negligibly weak in magnitude. Since the obtained significance value of 0.589 surpasses the 0.05 threshold, the observed association between the two variables is deemed statistically insignificant.

Results of Simple Linear Regression Analysis

Model Summary

Table 4. Model Summary

Model	R	R-Square	Adjusted R-Square	Standard Error of the Estimate
1	.044a	.002	-.005	49,142.867

Predictors: (Constant), ROA Source: SPSS output, processed data (2026)

Table 4 shows an R-value of 0.044, representing the correlation strength between the independent variable (ROA) and the dependent variable (ETR). An R-squared value of 0.002, or 0.2%, indicates that the ROA variable can only explain 0.2% of the variation in ETR, while 99.8% is explained by other variables outside the research model.

F-Test (ANOVA)

Table 5. ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	706,490,382.4	1	706,490,382.4	.293	.589b
	Residual	356,742,826,254	148	2,410,424,502		
	Total	357,449,316,636	149			

Dependent Variable: ETR

Predictors: (Constant), ROA | Source: SPSS output, processed data (2026)

The F-test outcome reveals that the regression model fails to meet the criteria for statistical significance, as evidenced by an F-value of 0.293 and a significance level of 0.589. Since the obtained significance value surpasses the 0.05 threshold and the F-statistic falls short of the critical value of 3.905, it can be concluded that ROA exerts no significant effect on ETR.

t-Test (Coefficients)

Table 6. Coefficients

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	15,161.036	4,026.489		3,765	.000
	ROA	-1,574,332	2,910,007	-.044	-.541	.589

Dependent Variable: ETR | Source: SPSS Output, processed data (2026)

Based on Table 6, the resulting regression equation is:

$$\text{ETR} = 15,161,036 + (-1,574,332) \text{ ROA} + \varepsilon$$

The constant of 15,161.036 means that the expected value of ETR is 15,161.036 if ROA is zero. The regression coefficient for ROA is -1,574,332, meaning that ETR will drop by 1,574,332 for every unit rise in ROA. With a significance level of 0.589, the computed t-value for the t-test is -0.541.

Test criteria: H1 is rejected because |calculated t| 0.541 below table t 1.976 and significance value 0.589 exceeds 0.05. This indicates that ETR in real estate and property enterprises on the IDX for the 2020–2024 period is not significantly impacted by ROA.

DISCUSSION

Evidence from this study reveals that the level of profitability, proxied by ROA, does not meaningfully determine the degree of tax avoidance, proxied by ETR, in property and real estate companies listed on the IDX throughout 2020 to 2024. This outcome corroborates the findings of Saputra et al. (2020) and Rinaldi & Cheisviyanny (2015), who similarly concluded that profitability holds no decisive role in shaping tax avoidance decisions.

This discovery can be explained in a number of ways. First, Indonesia's property and real estate industry is subject to special tax treatment, especially when it comes to the final income tax imposed on the transfer of building and land rights. According to this clause, a company's tax liability is based on both the amount of final property transfers and its profitability.

Second, the large variability in ETR values in this research data indicates that there are other factors that are more dominant in determining the level of tax avoidance, such as company size, capital intensity, leverage, and quality of corporate governance. Third, the post-COVID-19 pandemic macroeconomic conditions during the 2020–2024 period also influenced corporate tax policies, as the government provided various tax incentives that could affect firms' ETRs to varying degrees.

Fourth, from the perspective of agency theory, the absence of a significant effect can be explained by the existence of effective oversight mechanisms by the principal (shareholders and regulators), so that management does not automatically increase tax aggressiveness even as profitability rises. This is consistent with the argument that profitable companies are actually more cautious in engaging in tax avoidance due to higher reputational and audit risks.

Conclusion

The following conclusions can be made in light of the analysis and discussion that were done:

Among real estate and property businesses listed on the IDX between 2020 - 2024, profitability as calculated by ROA has no discernible impact on tax evasion as calculated by the ETR. A computed t-value of -0.541 below the crucial t-value of 1.976 and a significance level of 0.589 exceed 0.05 demonstrate this.

Only 0.2% of the variability in tax evasion can be depicted by profitability characteristics, with other variables outside the research model influencing 99.8%, according to the coefficient of determination (R-squared) value of 0.002 (0.2%).

The negative sign of the regression coefficient (-1.574, 332) indicates that there is a tendency for an inverse correlation ROA and ETR, meaning that companies with higher ROA have slightly lower ETRs. (and are more aggressive in their tax strategies), although this correlation is not statistically significant.

RECOMMENDATIONS

Based on the above conclusions, several recommendations can be made: It is advised that future studies incorporate other independent factors such as leverage, firm size, capital intensity, institutional ownership, and audit quality that may have an impact on tax evasion. To account for firm-level heterogeneity,

panel data with fixed-effects or random-effects models should be taken into consideration.

For companies, these findings highlight the need to consider various non-financial factors when managing tax obligations, including compliance with applicable tax regulations.

For regulators and tax authorities, there is a need for increased oversight of financial and tax reporting practices by companies in the real estate sector, given the unique characteristics of taxation in this sector that could potentially be exploited for tax avoidance.

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