The Effect of Profitability and Leverage on Tax Avoidance in Property and Real Estate Companies Listed on the Indonesia Stock Exchange in 2018-2020

Hardini Ariningrum¹, Murni Indah Sari²
¹ Universitas Malahayati
hardini.ariningrum@gmail.com

The goal of this study is to determine how profitability and leverage affect tax evasion. Research of this kind is quantitative. Property and real estate businesses that were listed on the Indonesia Stock Exchange (IDX) between 2018 and 2020 make up the study's population. Purposive sampling, or the selection of samples based on specified criteria, was used in this investigation. Using the purposive sampling technique, 45 samples from 15 real estate and property enterprises were gathered. Descriptive statistical analysis, the traditional assumption test, multiple linear regression analysis, and hypothesis testing are the analytical techniques used, and SPSS version 25 is used to handle the data. The findings of this study show that the profitability variable and the leverage variable have no discernible effects on tax evasion.

Keywords: Profitability, Leverage, Tax Avoidance

Introduction

Companies that provide homes or other properties for consumers to live in are known as real estate firms. Due to Indonesia's enormous population, which needs a place to reside in order to survive on a daily basis, property and real estate companies have a great opportunity to expand quickly in Indonesia. As a result, businesses in the property and real estate sectors undoubtedly generate substantial corporate profits. So, it is highly tempting for the government to use the circumstance for the benefit of the state and aid the nation's economy by collecting taxes on real estate and property corporations (Al Ivol, 2020).

Taxes are the source of the State Revenue and Expenditure Budget (APBN), hence they play a crucial part in funding state spending as well as the construction of state infrastructure (Iqbal et al., 2020). Taxes are one factor that can boost state revenue, hence a nation's strategic location will impact the amount of state revenue from the tax sector (Endriati et al., 2013). Tax avoidance is the practice of reducing the amount of taxes paid to the government by taxpayers, particularly businesses since they do not break any tax laws (Hoque & K., 2017).

PT Kawasan Industri Jababeka Tbk (KIJA) saw a very sharp decline in profitability in 2017. This was caused by KIJA's service and sales income, which rose marginally by 2.17% to Rp. 2.99 trillion from IDR 2.93 trillion in service and sales revenue in 2016. When compared to the cost of goods sold and revenues of IDR 1.68 trillion in 2016, KIJA's cost of goods sold and service revenue increased by 10.07% to IDR 1.85 trillion in 2017. As a result, KIJA's service and sales revenue

¹ Corespondent: Hardini Ariningrum. Universitas Malahayati. Jl. Pramuka No. 27 Kemiling, Bandar Lampung 35153. hardini.ariningrum@gmail.com
barely increased that year, while the cost of goods sold increased as well. Naturally, this resulted in a decline in the company's profitability. (Saleh, 2019)

**Literature Review**

**Agency Theory**

The conflict of interest between management and business owners can be seen as a result of agency theory. According to (Jensen et al., 1976) management believes that the success of the company they are managing depends on their ability to fulfill their obligations and responsibilities. Agency conflicts, in which there is a separation of duties or disparities in interests between principals and agents, can arise when management makes decisions that are inconsistent with what investors expect, according to (Graham & Dan Tucker, 2006). To lessen information asymmetry, management's quality of information production must be taken into account.

**Tax evasion**

Taxes are the sums of money that individuals pay into the state treasury in accordance with (enforced) law in lieu of obtaining services (compensation) that can be demonstrably utilized to pay for public expenses(Sidharta, 2017). (Stawati, 2020) explains that tax avoidance is an attempt to reduce taxes by making the best use of rules related to taxation, such as exclusions and permissible deductions, as well as the advantages of things that are not subject to regulation and flaws in the current tax laws. As of now, tax avoidance is a method of reducing a company's tax burden by abiding by the law. By doing this, the firm can gain from using tax avoidance since it reduces its overall tax burden and keeps more of the profits they make. ETR calculation using the formula:

\[
ETR = \frac{\text{Tax expense}}{\text{Profit before tax}}
\]

**Profitabilitas**

A company's capacity to produce earnings (profit) within a predetermined time frame is known as its profitabilitas. The profitability ratio, according to (Hery, 2016), is the ratio used to gauge a business' capacity to turn a profit within a specific period of its operational operations. Businesses that are profitable will be able to readily raise money for their operations, which can then be utilized to pay off debt(Utami, 2019). The following is the formula used to calculate this ratio:

\[
ROA = \frac{\text{Profit After Tax}}{\text{Total Assets}}
\]

**Leverage**

(Idawati & Wisudarwanto, 2021) cite Sugiono (2018) who defines leverage as the use of debt to finance investment. Leverage is a ratio that gauges how much a business relies on borrowing money. In (Desyana & Yanti, 2020), the leverage ratio is a number that gauges how much a company relies on borrowing money, according to (Brigham & Houston, 2014).

\[
DAR = \frac{\text{Total Amount of debt}}{\text{Total Assets}}
\]

**Mindset**

A framework, according to (Sugiyono, 2017), is a theoretical connection between variables and research difficulties that helps researchers solve problems and develop research hypotheses in the form of charts with qualitative justifications. A strong framework will provide theoretical justification for the variables you wish to investigate. So the framework in this study is as follows:
Framework

![Figure 1 Framework](Image)

Methods

Population and Sample

Population, according to (Sugiyono, 2017), is a broad category made up of things or people with particular attributes and characteristics chosen by researchers for investigation before making inferences. The population of this study consists of real estate and property firms that are listed on the Indonesia Stock Exchange for the 2018–2020 period. There were 65 companies in the study's total population. According to (Sugiyono, 2017), the sample method employs a purposive sampling approach, which is a sampling method with specific concerns. As for some of the criteria for sampling in this study are:

<table>
<thead>
<tr>
<th>No</th>
<th>Information</th>
<th>Number of Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Property and real estate company listed on the Indonesia Stock Exchange for the 2018-2020 period</td>
<td>65</td>
</tr>
<tr>
<td>2</td>
<td>Property and real estate companies that do not publish complete financial reports for 2018-2020</td>
<td>(32)</td>
</tr>
<tr>
<td>3</td>
<td>Property and real estate companies that do not use Rupiah (Rp) in their financial statements</td>
<td>(8)</td>
</tr>
<tr>
<td>4</td>
<td>Property and real estate companies that are not listed on the Indonesia Stock Exchange for the 2018-2020 period</td>
<td>(10)</td>
</tr>
<tr>
<td></td>
<td>Number of Mining Companies used as research samples</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>The total number of samples is 15 x 3 years of research samples</td>
<td>45</td>
</tr>
</tbody>
</table>

(Source: processed research data, 2022)

Method of collecting data

This study uses a type of quantitative research, where the research data source is using secondary data. The data source is the annual financial reports in Property and Real Estate companies listed on the Indonesia Stock Exchange (IDX) for 2018-2020 which can be accessed via www.idx.co.id/.

Data Analysis Tools

In this study, descriptive statistical analysis, the traditional assumption test, multiple linear regression analysis, and hypothesis testing were utilized as the data analysis techniques. Data were processed using SPSS version 25.

Results

a. Descriptive Statistical Analysis

Descriptive statistics give a summary or description of a set of data based on its mean, standard deviation, minimum, and maximum values (maximum). The descriptive statistics of the research variables are shown in Table below:
Table 2. Descriptive Statistical Analysis

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitabilitas</td>
<td>45</td>
<td>.370</td>
<td>14.970</td>
<td>4.79933</td>
<td>4.319393</td>
</tr>
<tr>
<td>Leverage</td>
<td>45</td>
<td>.042</td>
<td>.755</td>
<td>.41271</td>
<td>.172105</td>
</tr>
<tr>
<td>Tax evasion</td>
<td>45</td>
<td>.401</td>
<td>.636</td>
<td>.48496</td>
<td>.071759</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Results of data processing with SPSS 25, 2022)

Based on table 2 above, N = 45 yields a minimum value of 0.042 for the leverage variable, indicating the lowest value of the sample data used. The profitability variable's maximum value, 14.970, is the highest value of the data sample that was used. The mean value is calculated as the average of 45 data samples. The standard deviation is the range or range of two or more groups of data. In the table above, the standard deviation values for the profitability, leverage, and tax evasion variables are lower than the mean value, demonstrating that the data are more evenly distributed around the calculated average value.

b. Classic assumption test

1. Normality Test

Table 3 Normality Test Results
One-Sample Kolmogorov-Smirnov Test

<table>
<thead>
<tr>
<th>N</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Normal Parameters</td>
<td>Mean</td>
</tr>
<tr>
<td>x,b</td>
<td>.0000000</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
</tr>
<tr>
<td>Test Statistic</td>
<td>.119</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.122</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

(Source: Results of data processing with SPSS 25, 2022)

Based on the table, all variables in the normality test are normally distributed, because the Sig value is 0.122 > 0.05.

Figure 2. Histogram
It may be inferred from the figure that the data is regularly distributed because the histogram exhibits characteristics of a normal distribution.

2. **Multicollinearity Test**

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Profitabilitas</td>
<td>.633</td>
<td>1.579</td>
</tr>
<tr>
<td></td>
<td>Leverage</td>
<td>.633</td>
<td>1.579</td>
</tr>
</tbody>
</table>

Based on the table, it can be described that no multicollinearity symptoms were detected because the independent variables in this study had a VIF value <10 and a tolerance value > 0.1.

3. **Heteroscedasticity Test**

The dots in the image above appear to be dispersed randomly or to lack any discernible pattern. The dots are distinct and dispersed above and below the y-axis value of 0. Thus, it may be said that there was no heteroscedasticity in this study.

4. **Autocorrelation Test**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.383*</td>
<td>.146</td>
<td>.106</td>
<td>.067859</td>
<td>1.716</td>
</tr>
</tbody>
</table>

Based on the number of samples (n) 45 and the number of variables (k = 2), the results of the autocorrelation test using Durbin Watson indicated a significant value of 14.6%.
From the Durbin Watson table, the values were as follows: \( dl = 1.4298 \), \( du = 1.6148 \), \( 4-dl = 2.5702 \), and \( 4-du = 2.3852 \). The DW in the table above indicates 1.766, and the actual value is between 1.6148 and 1.716 and 2.3852, or du dw 4-du. Hence, it can be said that there is no autocorrelation symptom.

c. Multiple Linear Regression Analysis

Table 6. Multiple Linear Regression Analysis Coefficients\(^a\)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.471</td>
<td>.042</td>
<td>11.141</td>
<td>.000</td>
</tr>
<tr>
<td>Profitabilitas</td>
<td>-.004</td>
<td>-.237</td>
<td>-1.325</td>
<td>.192</td>
</tr>
<tr>
<td>Leverage</td>
<td>.079</td>
<td>.189</td>
<td>1.055</td>
<td>.297</td>
</tr>
</tbody>
</table>

\(^a\) Dependent Variable: Tax evasion

(Source: Results of data processing with SPSS 25, 2022)

In this study, multiple linear regression analysis was utilized to ascertain how the independent (independent) factors affected the dependent variable. From the table above, the multiple linear regression equation can be compiled as follows:

\[ Y = a + b_1X_1 + b_2X_2 + e \]

\[ Y = 0.471 - 0.004X_1 + 0.079X_2 + e \]

d. Hypothesis testing

1. Testing the Regression Coefficient Simultaneously (Test F)

Table 7. Test F ANOVA\(^a\)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.033</td>
<td>2</td>
<td>.017</td>
<td>3.601</td>
<td>.036</td>
</tr>
<tr>
<td>Residual</td>
<td>.193</td>
<td>42</td>
<td>.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.227</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Dependent Variable: Tax evasion

b. Predictors: (Constant), Leverage, Profitabilitas

(Source: Results of data processing with SPSS 25, 2022)

The table shows that the significance value is 0.036 and the Fcount value is 6.546. It can be deduced that Fcount > Ftable is 3.601 > 3.200 and has a significance value of 0.036 > 0.05, indicating that the Profitability and Leverage variables have an impact on Tax Avoidance simultaneously.

2. Testing the Partial Regression Coefficient (T Test)

Table 8. Test T Coefficients\(^a\)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.471</td>
<td>.042</td>
<td>11.141</td>
<td>.000</td>
</tr>
<tr>
<td>Profitabilitas</td>
<td>-.004</td>
<td>-.237</td>
<td>-1.325</td>
<td>.192</td>
</tr>
<tr>
<td>Leverage</td>
<td>.079</td>
<td>.189</td>
<td>1.055</td>
<td>.297</td>
</tr>
</tbody>
</table>

\(^a\) Dependent Variable: Tax evasion

(Source: Results of data processing with SPSS 25, 2022)

The partial profitability results from the first hypothesis test do not significantly affect tax avoidance, as shown by the significance value of 0.192. significance level greater than
0.05, so that it is possible to state that H01 is accepted but Ha1 is denied. Leverage does not significantly affect tax evasion, according to the results of the second hypothesis test, as indicated by the significance value of 0.297: significance level greater than 0.05. In order to say that H02 is rejected and Ha2 is approved.

3. Testing the Coefficient of Determination (R2)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.383*</td>
<td>.146</td>
<td>.106</td>
<td>.067859</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Leverage, Profitabilitas
b. Dependent Variable: Tax evasion
(Source: Results of data processing with SPSS 25, 2022)

Based on the table, the value of R2 (R Square) is 0.146 or 14.6%. This shows that the percentage influence of Profitability and Leverage on Tax Avoidance is 14.6%. While the remaining 85.4% is influenced or explained by other factors not included in this research model.

Discussion

Effect of Profitability (X1) on Tax Avoidance (Y)

Profitability (X1) has a significance level (sig t) of 0.192 more than a = 0.05 and tcount 1.325 < ttable 2.01808 it can be concluded that partially profitability has no significant effect on tax evasion. This demonstrates that H01 is accepted whereas Ha1 is rejected. This data so supports the idea that tax evasion is unaffected by profitability. The findings of this study corroborate those of (Rachmithasari, 2015), who found no connection between profitability and tax avoidance. As tax evasion involves risk, managers won't take chances to lower their investment risk. In addition to the fees paid to tax advisors, the time required to complete tax audits, the reputational costs, and the fines paid to tax authorities, tax cheating can also result in large financial losses for businesses and their managers (Desyana & Yanti, 2020).

Effect of Leverage (X2) on Tax Avoidance (Y)

With a significance threshold (sig t) for leverage (X2) of 0.297 higher than a = 0.05 and a tcount of 1.055 ttable of 2.02108, it can be said that leverage partially has no discernible impact on tax evasion. This demonstrates that H02 is accepted whereas Ha2 is rejected. Thus this study confirms that leverage has no effect on tax evasion. This is because if a company finances its operations using debt-based financing, it will result in the company having a high debt ratio and the interest expense that must be paid is greater so that the company will consider not conducting large-scale debt financing. A high debt ratio also causes the company to be seen as unhealthy by investors and creditors if it is unable to show good profit conditions so that it will affect the funding that the company will receive in the future. As using a significant amount of debt will put the company at danger, management will exercise caution and refrain from taking the chance of using excessive debt to evade taxes. The findings of this study are consistent with those of Saifudin and (Saifudin & Yunanda, 2016), (Cahyono et al., 2016), and (Susanti, 2018), who found no connection between leverage and tax evasion.

Conclusion

It is clear from the results of the hypothesis testing and subsequent discussion that neither the profitability variable nor the leverage variable significantly affects tax evasion. Additionally, the
outcomes of the concurrent testing show that Tax Avoidance is impacted by the Profitability and Leverage variables.

References


