PROFITABILITY AND TAX AVOIDANCE: 
THE MODERATING EFFECT OF INDEPENDENT COMMISSIONERS

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Abstract
This research aims to empirically test the effect of profitability on tax avoidance, which independent commissioners moderate. The population of this research is manufacturing companies listed on the Indonesia Stock Exchange (IDX) during 2020-2022. The sample in this study was determined using a purposive sampling technique, which resulted in 485 observations. The research method used in this research is quantitative. Moderated Regression Analysis (MRA) tests the interaction effect of moderating variables. The research results show that profitability does not affect tax avoidance. Independent Commissioners cannot moderate the relationship between profitability and tax avoidance. The results of this study were unable to confirm agency theory. The limitation of this research is that not all hypotheses are supported. Further research can use measurements and other variables that influence tax avoidance.

Keywords: Tax Avoidance, Profitability, Independent Commissioners.

1. Introduction
The tax ratio shows the government's ability to collect tax revenues. The higher the country's tax ratio, the better its tax collection performance. Indonesia's tax ratio has increased yearly: In 2021, it reached 9.1%; in 2022, it was 10.4%; and in 2023, the goal is to be above 10% (www.kemenkeu.go.id). A yearly increase in tax revenue will increase the following year's tax target (Sari et al., 2020).

Taxes play a vital role in state revenue because the taxation sector is the largest source of state income compared to other sources of income (Madani et al., 2023). Companies as corporate taxpayers must pay taxes to the state by applicable laws and regulations (Agun et al., 2022; Hanifah, 2022; Ariffin & Sitabuana, 2022). However, many companies must pay the tax burden because it can reduce profits (Susilawati et al., 2022; Edeline & Sandra, 2018). On the other hand, shareholders demand that managers maximize profit income, which can increase shareholder wealth (Susilawati et al., 2022). Tax is an obligation that must be fulfilled by every company which can reduce net profit and net cash flow after tax (Barid & Wulandari, 2021), so it tends to motivate companies to practice tax avoidance (Arbelo et al., 2020; Kurniati & Apriani, 2021; Susilawati et al., 2022).

Tax avoidance is a strategy individual and corporate taxpayers use to minimize the tax owed (Anisran & Ma'wa, 2023). Tax evasion is both legal and illegal. Legal tax avoidance refers to the use of legal methods to minimize the amount of income tax owed by an individual or a company (Lestari & Ningrum, 2018; Ridhawati & Mulyani, 2022; Mahaetri & Muliati, 2020; Jamaludin, 2020). Meanwhile, illegal is tax avoidance that does not comply with tax regulations (Yohanes & Sherly, 2022; Ridhawati & Mulyani, 2022).

Tax avoidance referred to in this research is legal tax avoidance. Tax avoidance is affected by profitability (Sari et al., 2020). Profitability is a ratio to determine a
company's ability to generate profits by comparing total net profit with total assets owned by the company in a period (Saputra, 2022; Afriyan et al., 2022; Masrurroch et al., 2021; Sari & Maryanti, 2023). Previous research regarding the influence of profitability on tax avoidance shows mixed results, including research conducted by Christian and Iskak (2021); Putri (2022), and Saputra (2022) showing that profitability affects tax avoidance. Other results show that profitability does not affect tax avoidance (Aulia & Mahpudin, 2020; Krisyadi & Andi, 2021; Safira & Sahartini, 2021; Indriani & Juniarti, 2022; Masrurroch et al., 2021).

The inconsistency of previous researchers has made researchers interested in re-examining the influence of profitability on tax avoidance, namely whether other variables can strengthen or weaken the relationship between profitability and tax avoidance, namely independent commissioners. Independent Commissioners are a moderating variable due to their role in supervising every action manager (Arianti, 2021; Ummah et al., 2024). Commissioners are members of the board of commissioners who have no financial, management, share ownership, or family relationships with other members of the board of commissioners, directors, or shareholders of the company (Aini & Halimatusadiah 2022; Pratomo & Rana, 2021; Rani et al., 2021; Taner, 2019). According to the provisions of Financial Services Authority Regulation Number 57 /POJK.04/2017, Article 19 paragraph (2), the number of independent commissioners is at least thirty percent (30%) of all commissioners (Rani et al., 2021). Based on this, if the number of independent commissioners is 30% of the total board of commissioners, it will reduce tax avoidance. This opinion is supported by Hanggo and Marlinah (2023) who state that increasing the number of independent commissioners can minimize tax avoidance.

Previous research regarding the relationship between independent commissioners and tax avoidance has mixed results. Chandra (2022) and Masrurroch et al., (2021). conducted research that shows that independent commissioners positively affect tax evasion. Aini & Halimatusadiah (2022) and Pratomo & Rana (2021) showed negative results. Meanwhile (Prasatya et al., 2020) show that independent commissioners do not affect tax avoidance. This research reviews the effect of profitability on tax avoidance by using the independent commissioner variable as a moderating variable.

2. Theoretical Background
2.1 Theory Agency

Jensen and Meckling (1976) define agency theory as an agency relationship described as an agreement between one or more people (principals) who employ another person (agent) whose aim is to provide services and have authority in decision-making. The main aim of agency theory is to resolve agency problems arising from parties collaborating but having different goals (Darsani & Sukartha, 2022; Kyere & Ausloss, 2021). The cause of agency is usually due to an agent assuming that the agent has acted by the principal's objectives (Busdir, 2022; Fauzan et al., 2019; Yohanes & Sherly, 2022).

According to agency theory, independent commissioners are essential in reducing conflicts of interest between shareholders and management (Arianti 2021; Dewi 2019; Nilmawati et al. 2021). Independent commissioners do not directly relate to company management so that they can provide views. Which is objective and independent of management decisions (Ummah et al., 2024). Independent commissioners also tend to focus on optimizing company profits, one of which is by reducing the tax burden to
achieve the desired level of profitability (Carolina, 2022; Hendi & Handianto, 2021; Wirawan et al., 2023). Another benefit of having an independent commissioner is that it can increase trust and transparency in the agency relationship between management and shareholders (Dewi et al., 2019).

Agency theory in the context of tax avoidance is that management has more access and authority than principals in earnings management practices to reduce the tax burden but gives a less favorable impression of the image and assessment by investors as company stakeholders (Wardani & Dawa, 2022; Fadhlan, 2019). Companies act as agents of interested company profits by minimizing company expenses (Erawati & Lestari, 2019). The allocation that should have paid taxes was not used in full because management set the tax burden lower than it should be; the remaining allocation would be a profit for the company (Saputri & Nuswandari, 2022).

2.2 Tax Avoidance

Tax avoidance is one of the practical efforts made by a company to avoid taxes (Septanta, 2023). Tax avoidance is a standard tax planning strategy that exploits loopholes or weaknesses in tax regulations to reduce the amount of tax that must be fulfilled without violating tax provisions (Asih & Darmawati, 2022; Lestari & Ningrum, 2018). Measuring tax avoidance uses the current effective tax rate (ETR) proxy, dividing the current tax burden by profit before tax. The advantage of the ETR measurement compared to other measurements is that it can calculate the effective tax that a company pays (Shafarani et al., 2022; Lutfitriyah & Anwar, 2021; Aini & Halimatusadiah, 2022).

\[
ETR = \frac{Income\ Tax\ Expenses}{Profit\ Before\ Tax}
\]

2.3 Profitability

Profitability is an indicator that reflects how effective a company is in generating profits from using its assets (Prasetyo & Wulandari, 2021). Profitability is one of several factors in the success of a company's profits (Suliyanti & Damyanti, 2022). Profitability is the company's ability to create profits, which is a benchmark for the success of the company's operations. So, the higher the profitability, the lower the level of tax avoidance (Yohanes & Sherly, 2022).

Profitability in this research is measured using Return on Assets (ROA) on a ratio scale (Anggraini & Oktaviani, 2021). Return on Assets (ROA) is a ratio that reflects how effectively all company operations generate profits (Umar & Savitri, 2020). ROA measurement uses a formula from research Hadi (2018); Dewi (2019); Sihombing et al., (2022); Erawati et al., (2022); Maheswari et al. (2023) is net profit divided by the total assets owned by the company.

\[
ROA = \frac{Net\ Profit}{Total\ assets}
\]

2.4 Independent Commissioners

Independent Commissioners are members of the Board of Commissioners who have no financial, management, share ownership, or family relationships with other members of the Board of Commissioners, directors, or company shareholders (Taner, 2019; Pratomo & Rana, 2021; Rani et al., 2021). According to Hanggo and Marlinah, (2023)
the greater the number of independent commissioners, the more tax avoidance can be minimized. The independent commissioner variable is the ratio of independent commissioners compared to the total commissioners (Pramaiswari & Fidiana, 2022; Liyanto & Anam, 2023; Chandra, 2022).

\[
KI = \frac{Total \ Independent \ Commissioners}{Total \ Board \ of \ Commissioners}
\]

2.5 Research Model

2.6 Hypothesis development

2.6.1 The Effect of Profitability on Tax Avoidance

Profitability is considered a measurement of the percentage level of profit generated within a company (Fadhlan, 2019). The profitability ratio is measured using return on assets (ROA), which describes the company earning profits using the total assets owned by the company (Anggraini & Oktaviani, 2021). Tax will be paid depending on the company's high and low profits (Wahyuni & Wahyudi, 2021).

Agency theory can encourage agents to increase company profits (Erawati & Lestari, 2019). When the profits earned by a company are large, the income tax will increase according to the increase in company profits, and the level of tax avoidance will also be lower (Dewinta & Setiawan, 2016). Research (Arinda & Dwimulyani, 2018; Anggraini & Oktaviani, 2021) states that profitability positively affects tax avoidance. Based on this explanation, the first hypothesis is as follows:

H1: Profitability influences tax avoidance.

2.6.2 Independent Commissioners moderate the influence of Profitability on Tax avoidance

The structure of the board of commissioners is one aspect related to profit information (Setiawan, 2018). By carrying out a supervisory role, the composition of the board of commissioners can influence management in preparing financial reports to obtain quality profit reports (Yona & Helmiati, 2020). Badoa (2020) said that with the increase in independent commissioners, supervision of financial reports will become stricter and more objective. They indicated that it is more difficult for managers to avoid taxes.

According to agency theory, independent commissioners play an important role in supervising management and reducing potential conflicts of interest between management and shareholders (Fadillah, 2017). By ensuring transparency, accountability, and compliance with the principles of good corporate governance, independent commissioners help improve company performance and directly maximize company profits (Hernandez & Nariman, 2023).
According to Herlani and Triyono (2024), independent commissioners can moderate the influence of profitability on tax avoidance. Meanwhile, Badoa's (2020) research shows that independent commissioners can strengthen the influence of profitability on tax avoidance.

H2: The relationship between profitability and tax avoidance moderated by independent commissioners.

3 Methods

This research uses quantitative research with secondary data from the annual reports of each manufacturing company listed on the Indonesia Stock Exchange during the 2020-2022 period. The sample in this research was determined using a purposive sampling method, which resulted in 485 observations. The sample criteria in this study were as follows:
2) Manufacturing sector companies publish annual reports during 2020-2022.
3) Manufacturing sector companies have positive ETR results during 2020-2022.

<table>
<thead>
<tr>
<th>No</th>
<th>Information</th>
<th>Total 2020</th>
<th>Total 2021</th>
<th>Total 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manufacturing companies listed on the Indonesian Stock Exchange (IDX) during 2020-2022.</td>
<td>165</td>
<td>186</td>
<td>195</td>
</tr>
<tr>
<td>2</td>
<td>Manufacturing sector companies publish annual reports during 2020-2022.</td>
<td>(10)</td>
<td>(3)</td>
<td>(12)</td>
</tr>
<tr>
<td>3</td>
<td>Manufacturing sector companies have negative ETR results during 2020-2022.</td>
<td>(16)</td>
<td>(4)</td>
<td>(16)</td>
</tr>
<tr>
<td></td>
<td>Total of samples</td>
<td>139</td>
<td>179</td>
<td>167</td>
</tr>
<tr>
<td></td>
<td>Total of observations</td>
<td>485</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Indonesian Stock Exchange, each company’s annual reports (2024).

Data collection uses documentation techniques by accessing the official website of the Indonesia Stock Exchange (www.idx.co.id) and the official website of each company to obtain data related to manufacturing companies registered during the 2020-2022 period.

The variables used are tax avoidance (dependent variable), profitability (independent variable), and independent commissioner (moderating variable). The operational definition of variables is as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>Variables</th>
<th>Definition</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tax Avoidance</td>
<td>Tax Avoidance is a practice by companies to minimize the amount of tax that must be paid legally and without violating tax regulations. $ETR = \frac{Income \ Tax \ Expenses}{Profit \ Before \ Tax}$</td>
<td>(Irawan &amp; Turwanto, 2023), (Haryanti et al., 2020) and (Ramadhiani &amp; Dewi, 2021)</td>
</tr>
<tr>
<td>2</td>
<td>Profitability</td>
<td>Profitability is a ratio that determines a</td>
<td>(Saputra, 2022),</td>
</tr>
</tbody>
</table>
company's ability to generate profits by comparing its net profit with its total assets owned in a period.

\[ ROA = \frac{\text{Net Profit}}{\text{Total assets}} \]

(Afriyan et al., 2022), (Masrurroch et al., 2021) and (Sari & Eny, 2023).

### 3 Independent Commissioner

Independent commissioners are boards that supervise companies to ensure they comply with applicable laws and regulations.

\[ KI = \frac{\text{Total Independent Commissioners}}{\text{Total Board of Commissioners}} \]

(Aini & Halimatusadiah, 2022) and (Fajri et al. 2021).

Source: Researcher (2024)

The data analysis techniques in this research describe descriptive data analysis, pairwise Correlation, classical assumption testing, and hypothesis testing. Hypothesis testing in research uses Moderated Regression Analysis (MRA). MRA contains elements of interaction with independent variables in the form of multiplication between two or more variables. In this research, MRA aims to test the moderating variable, independent commissioners, in moderating the effect of profitability on tax avoidance.

The regression equation model:

\[ ETR = \beta_0 + \beta_1ROA + \beta_2KI + \beta_3KI_{it} \times ROA_{it} + \epsilon_{it} \]  

\[ \text{ETR} \] : Effective Tax Rate (dependent)

\[ \text{ROA} \] : Return on assets (independent)

\[ \text{KI} \] : Independent Commissioner (moderation)

\[ \beta_0-\beta_3 \] : Regression coefficient

\[ \epsilon \] : error term.

### 4. Results and Discussion

#### 4.1 Descriptive Statistics Test

Descriptive statistics describe each variable's characteristics, generally including minimum, maximum, mean, and standard deviation values (Agustina & Rahmawati, 2023). This test produces the following findings:

#### Table 3. Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETR</td>
<td>485</td>
<td>.318</td>
<td>.366</td>
<td>.001</td>
<td>3.167</td>
</tr>
<tr>
<td>ROA</td>
<td>485</td>
<td>6.965</td>
<td>7.169</td>
<td>.01</td>
<td>34.33</td>
</tr>
<tr>
<td>KI</td>
<td>485</td>
<td>.397</td>
<td>.111</td>
<td>.2</td>
<td>.7</td>
</tr>
<tr>
<td>MOD</td>
<td>485</td>
<td>2.711</td>
<td>3.092</td>
<td>.003</td>
<td>24.031</td>
</tr>
</tbody>
</table>

Source: Stata (2024).

Based on table 3, the average ETR value is 0.318, with a standard deviation of 0.366. The minimum value is 0.001, and the maximum value is 3.167, indicating that the minimum value of the tax paid compared to profit before tax is 0.001. The maximum
The value of tax paid compared to profit before tax is 3.167. The higher the ETR, the higher the tax paid compared to profit before tax.

The average profitability (ROA) value is 6.965, with a standard deviation 7.169. The minimum value is 0.01, and the maximum is 34.33. The company can generate net profit from total assets owned at a minimum of 0.01 and a maximum of 34.33. The higher the ROA, the higher the company's ability to generate net profits from total assets.

Independent Commissioners show an average value of 0.397, meaning the ratio of independent commissioners to the total board of commissioners is 39.6%. The minimum independent commissioner ratio is 20%, and the maximum is 70%. The higher the value indicates, the higher the ratio of independent commissioners to the total board of commissioners.

4.2 Classic assumption test

4.2.1 Normality test

The normality test determines whether the research variable data is normally distributed (Irmalsari et al., 2022). In this study, data normality using the Shapiro-Wilk Test. The following are the results of the normality test in this study:

| Variable | Obs | W   | V   | Z    | Prob>|z |
|----------|-----|-----|-----|------|-----|
| ROA      | 485 | 0.812   | 61.683   | 9.895   | 0.000 |
| ETR      | 485 | 0.451   | 179.751   | 12.463   | 0.000 |
| KI       | 485 | 0.973   | 8.870     | 5.240    | 0.000 |

Table 4. Normality Test Results

Source: Stata (2024).

Table 4 shows that the probability value for each variable is 0.000 < 0.05, which means the data is not a normal distribution. Company-specific factors vary in each column, namely the standard error of the company estimate (Petersen, 2009). Therefore, further testing can be continued with the amount of company observation data and comparing the amount of data with high variables.

4.2.2 Multicollinearity Test

The multicollinearity test aims to test whether, in the regression model, there is a relationship between the independent variables (Afriyan et al., 2022), detecting the existence of a high correlation between the independent variables in the regression model. In this study, the data multicollinearity test used Tolerance (1/VIF) and Variance Inflation Factor (VIF). The following are the results of the multicollinearity test in this study:

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1.00</td>
<td>0.999933</td>
</tr>
<tr>
<td>KI</td>
<td>1.00</td>
<td>0.999933</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Multicollinearity Test Results

Source: Stata (2024).

Table 5 explains that the VIF value of each variable is 1.00 < 10 and the 1/vif value is 0.999933 > 0.10; there are no symptoms of multicollinearity.

4.3.3 Heteroscedasticity test

The heteroscedasticity test aims to test whether the regression model has unequal variance from the residuals of one observation to another (Danie et al., 2024). In this
study, the heteroscedasticity using the white test; if the p-value was > 0.5, there were no heteroscedasticity symptoms. The following are the results of the heteroscedasticity test.

**Table 6. Heteroscedasticity Test Results**

<table>
<thead>
<tr>
<th>Source</th>
<th>chi2</th>
<th>Df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heteroscedasticity</td>
<td>3.37</td>
<td>5</td>
<td>0.0664</td>
</tr>
</tbody>
</table>

Table 6 shows that a p-value > chi2 (0.0664 > 0.05) indicates that heteroscedasticity does not occur.

### 4.3 Pairwise Correlation

Pairwise Correlation measures the statistical relationship between two variables to test the extent to which two variables move together or against each other.

**Table 7. Pairwise Correlations Test**

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) ETR</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) ROA</td>
<td>-0.200*</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>(3) DKI</td>
<td>0.053</td>
<td>-0.008</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*shows significance at p<.01

Table 7 pairwise explains that Profitability (ROA) has a significant negative correlation with Tax Avoidance (ETR). The higher the profitability (ROA), the lower the tax avoidance (ETR). Independent commissioners (KI) do not correlate with tax avoidance (ETR).

### 4.4 Hypothesis Test

The hypothesis test in this research was carried out in Table 8, as follows:

**Table 8.**

<table>
<thead>
<tr>
<th>ETR</th>
<th>Coef.</th>
<th>St.Err.</th>
<th>t-value</th>
<th>p-value</th>
<th>[95% Conf Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>-0.01</td>
<td>0.002</td>
<td>-6.32</td>
<td>0.00</td>
<td>-.013 -.007</td>
</tr>
<tr>
<td>KI</td>
<td>.177</td>
<td>.15</td>
<td>1.18</td>
<td>.237</td>
<td>-.117 .472</td>
</tr>
<tr>
<td>MOD</td>
<td>-.004</td>
<td>.006</td>
<td>-0.79</td>
<td>.428</td>
<td>-.015 .007</td>
</tr>
<tr>
<td>Constant</td>
<td>.329</td>
<td>.056</td>
<td>5.88</td>
<td>0.00</td>
<td>.219 .439</td>
</tr>
</tbody>
</table>

Mean dependent var | 0.318 | SD dependent var | 0.366 |
R-squared | 0.044 | Number of obs | 485 |
F-test | 14.835 | Prob > F | 0.000 |
Akaike crit. (AIC) | 386.251 | Bayesian crit. (BIC) | 402.988 |

***p<.01, **p<.05, *p<.1

Table 8 shows that Profitability (ROA) significantly negatively affects Tax Avoidance (ETR) at the 1% level with a coefficient value of -0.01 and a p-value of -6.32 or smaller than 0.05. This result indicates that the higher the profitability of tax avoidance, the lower it is. These results indicate that hypothesis 1 is not supported. Companies with high profits will be able to pay their taxes, so the company will report its tax burden by applicable tax regulations and minimize tax avoidance. These results support research conducted by (Aulia & Mahpudin, 2020; Krisyadi & Andi, 2021; Safira & Sahartini, 2021; Indriani & Juniarti, 2022; Masrurroch et al., 2021), which...
states that profitability does not affect tax avoidance. Research (Mariadi & Dewi, 2022) states that profitability positively affects tax avoidance. Tax avoidance is risky, so management will not take risks to minimize investment risk.

The Independent Commissioner (KI) coefficient in moderating the relationship between profitability and Tax Avoidance (ETR) is -0.004 with a p-value of 0.428 or greater than 0.05. This result indicated that an independent Commissioner cannot moderate the profitability of Tax Avoidance (ETR). So, the results of this study indicate that hypothesis 2 is not supported. Independent commissioners should be able to carry out their responsibilities in supervising company management. The existence of independent commissioners is only to comply with Financial Services Authority Regulation Number 57 /POJK.04/2017, Article 19 paragraph (2), the minimum requirement of thirty percent (30%) of all commissioner members. Based on descriptive data (table 3), the average ratio for the board of commissioners is 0.397 (39.7%) of the total board of commissioners or higher than the requirements determined by the OJK. This condition proves that the company's independent commissioners must achieve their supervisory objectives (Supriyanto, 2021; Sunarsih et al., 2019). The results of this research cannot confirm agency theory because independent commissioners cannot supervise management. This result is supported by research (Arianti, 2021), which shows that independent commissioners cannot moderate the relationship between capital intensity and tax aggressiveness.

4. Conclusion

Based on the research results, profitability does not affect tax avoidance. The higher the profitability, the lower the tax avoidance. Independent commissioners cannot moderate the relationship between profitability and tax avoidance. The existence of independent commissioners is only to meet the minimum requirements of OJK regulations, namely 30%. The role of independent commissioners does not carry out its functions as it should. The research results show that not all hypotheses are supported. Future research will use measurements and other variables that influence tax avoidance.

References


www.kemenkeu.go.id