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The Influence of Institutional Ownership, Independent Commissioners and Profitability on Tax Avoidance with Firm Size as a Moderating Variable (Empirical Study on Banking Companies Listed on the Indonesia Stock Exchange (IDX) in 2019-2023)

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ABSTRACT

This research investigates how institutional ownership, independent commissioners, and profitability influence tax avoidance practices, while examining whether firm size serves as a moderating factor in these relationships. The study focuses on banking sector companies listed on the Indonesia Stock Exchange during the 2019-2023 period. Through purposive sampling methodology, researchers selected 22 companies that met the established criteria, resulting in 110 observations across the five-year timeframe (22 companies × 5 years). The analytical approach employed hypothesis testing through t-tests and utilized Moderated Regression Analysis (MRA) to examine the moderating effects of firm size. Data processing was conducted using the E-Views 13 software application, with the Random Effect Model (REM) identified as the most suitable model after comparing various analytical approaches. The findings reveal mixed results regarding the variables' impact on tax avoidance behavior. Neither institutional ownership nor independent commissioners demonstrated significant effects on tax avoidance practices among the studied banking companies. However, profitability emerged as a significant factor influencing tax avoidance decisions. Contrary to expectations, firm size failed to moderate any of the relationships between the independent variables (institutional ownership, independent commissioners, and profitability) and tax avoidance, suggesting that company size does not alter how these factors affect tax avoidance strategies in the banking sector.

Keywords: Institutional Ownership, Independent Commissioners, Profitability, Tax Avoidance, Firm Size.

1. Introduction

In Law Number 28 of 2007, it is specified that taxes constitute mandatory contributions collected from citizens and businesses by the government to finance national development and public services. These payments are made without the expectation of receiving immediate benefits and are utilized as a means to reinforce state-led efforts in optimizing public welfare and socio-economic development. The government and companies have conflicting interests when it comes to tax matters. The government sees tax as essential revenue to support development programs, public services, and economic stability, but companies view it as a burden that eats into profits. This clash of interests often leads companies to find ways to legally or illegally reduce their tax payments, such as through tax avoidance.

According to the report "The State of Tax Justice 2023," Indonesia has been experiencing a loss of \$2.8 billion annually from tax avoidance, with \$2.73 billion attributed to companies evading taxes. While technically allowed, the government is concerned about tax regulations being exploited to lower corporate tax obligations. Tax avoidance, while legal, hinders government development initiatives by causing discrepancies between projected and actual tax revenues each year.

Tax avoidance is a common practice among banking companies in Indonesia. This happened in the findings of a re-examination at Bank Panin which had tax obligations including fines of IDR 1.3 trillion. However, Bank Panin did not agree with the findings. Previously, the tax audit team found potential underpayment of tax from Bank Panin of IDR 926.263 billion. However, Bank Panin negotiated with the tax audit team so that its tax obligations would only be IDR 300 billion. To reach this agreement, Bank Panin promised a "commitment fee" of IDR 25 billion which is a form of tax avoidance through bribery (Detiknews, 2021). This is certainly very detrimental to the state in receiving state revenue.

Many Indonesian companies demonstrate poor corporate governance through tax avoidance practices. This study examines how independent commissioners and institutional ownership affect corporate governance. Higher institutional ownership percentages increase monitoring strictness, helping prevent organizational fraud. The company's tax burden is expected to rise due to the challenging circumstances that make tax avoidance more complex. In addition to institutional ownership, independent commissioners play a vital role in overseeing company operations to maintain regulatory compliance. A more in-depth review is essential to minimize potential conflicts of interest between managerial decision-makers and the shareholders they represent, leading to more prudent decision-making, particularly in relation to tax strategies. Profitability is another factor influencing tax avoidance, as it showcases the company's performance based on its earnings. A high level of profitability attracts investors, but also increases the potential for tax avoidance because a larger tax burden reduces net income. In agency theory, management seeks to reduce the tax burden to maintain performance compensation.

One more reason behind tax avoidance could be the scale of the company. The size of a business could lessen the influence of institutional ownership, the presence of autonomous board members, and the degree of profitability on tax evasion. Major corporations typically have more assets and earnings, resulting in a higher tax liability, which could lead to tax avoidance behaviors. Moreover, larger companies usually employ personnel with advanced knowledge in taxation, allowing them to legally plan tax strategies to minimize their tax obligations.

What sets this study apart is its use of research variables referencing the model used by Putri et al., (2024), specifically institutional ownership, independent board of commissioners, and green accounting as factors influencing tax avoidance, with firm size introduced as a moderating variable. This study does not use the green accounting variable and replaces it with the profitability variable. Furthermore, in Sari et al., (2020), the independent variables used are Profitability, Leverage, Independent Commissioners, Institutional Ownership, Firm Size and the dependent variable Tax Avoidance. Firm Size is considered as a moderating factor in this study. Andini et al., (2022) conducted a study focusing on Consumer Goods Industry companies listed on the IDX during 2015–2019. Their research extended to evaluate the effects of institutional ownership, independent commissioners, and profitability on tax avoidance among banking firms for the 2019–2023 period, with particular attention to the moderating role of firm size.

2. Literature Review

2.1. Agency Theory

The theory of agency examines the interactions between a leader and a representative in relation to Tanjaya & Nazir (2021). Due to conflicting motivations, principals and agents often clash while pursuing their own interests. Principals seek to maximize profits quickly, while agents are motivated by performance-based rewards including bonuses, salary increases, promotions, and benefits.

2.2. Tax Avoidance

Handoyo et al., (2022) suggest that tax avoidance constitutes a strategic approach to tax planning wherein individuals or corporations utilize provisions and gaps in tax legislation to lawfully reduce their tax obligations. The objective is to lessen the financial strain of taxes on a business. Citing Gunawan (2022), tax avoidance is a tactic employed by organizations to legally decrease the amount of taxes they owe by exploiting weaknesses in tax regulations, offering a reliable approach for taxpayers. Moreover, companies engage in tax avoidance strategies with the primary goal of reducing their tax liabilities in order to increase their profits, as stated by Ainnyya et al., (2021).

2.3. Good Corporate Governance

Corporate governance encompasses the mechanisms, processes, and structures through which the interests of stakeholders are aligned and organizational activities are monitored, with a primary emphasis on investors, the governing body, and oversight committee, in order to achieve company goals (Rahardjo, 2018). Good Corporate Governance (GCG) is a structural process utilized by state-owned enterprises to enhance business performance and accountability in order to achieve sustainable shareholder value, taking into consideration the welfare of all stakeholders in accordance with legal and ethical principles as outlined in Ministerial Decree KEP-117 / M-MBU / 2002.

2.4. Institutional Ownership

Institutional ownership refers to the proportion of a company's outstanding shares that are held by large entities other financial institutions. (Natalia, 2022). According to agency theory, institutional ownership functions as an essential control mechanism, ensuring effective monitoring of managerial performance within the corporate governance framework. As dominant shareholders, institutional investors have a significant role in shaping strategic decisions, ensuring managerial accountability, and promoting effective corporate governance.

2.5. Independent Commissioner

Anggraeni & Adiwijaya (2020) stated that an unaffiliated board member is someone who serves on the board without any ties to management, fellow board members, or large shareholders. They should not have any business or personal connections that could influence their decisions to act in the best interests of the company. Based on Regulation Number 33/POJK.04/2014 from the Financial Services Authority, an independent commissioner is a board member who comes from a different organization than the Issuer or Public Company and meets the criteria to be classified as an Independent Commissioner. Seeing from an agency theory viewpoint, having board members from external sources (Independent Commissioners) plays a crucial role in supervising the company executives' performance. This is because there is the potential for manipulative or fraudulent actions that can be carried out by executives to maintain their positions which can ultimately harm the interests of shareholders. Therefore, the oversight provided by Independent Commissioners plays a key role in maintaining openness, responsibility, and fairness in corporate governance, safeguarding the concerns of stakeholders.

2.6. Profitability

Profitability represents a company's ability to earn profits from its ongoing business processes (Jusman & Nosita, 2020). It is measured by calculating the ratio of the company's profits over a specific period (Wulandari et al., 2023). In essence, profitability indicates how efficiently a company utilizes its resources to make profits.

2.7. Firm Size

Suyanto & Kurniawati (2022) explained that the notion of company size is a method of classifying businesses into either big or small categories, depending on factors such as total net sales or total assets. The average sales level of a company's stock can also be used to assess its size. Factors like equity value, total sales, number of employees, and total assets are considered when determining the size of a company.

2.8. The Influence of Institutional Ownership on Tax Avoidance

Research by Sunarto et al., (2021) explored how institutional ownership impacts tax avoidance, revealing a notable connection between the two variables. Similarly, a separate study by Oktaviana & Kholis (2021) also found that strong institutional ownership has the power to deter managers from participating in tax evasion tactics to maintain the positive reputation of the organization.

H1: Institutional ownership has an effect on tax avoidance.

2.9. The Influence of Independent Commissioners on Tax Avoidance

According to Wiratmoko (2018) independent commissioners have a significant impact on reducing tax avoidance. This aligns with Tahar & Rachmawati (2020) findings that independent commissioners can effectively oversee company management to deter tax evasion.

H2: Independent commissioners have an influence on tax avoidance

2.10. The Influence of Profitability (Return on Assets) on Tax Avoidance

Suyanto & Kurniawati (2022) explores how profitability impacts tax avoidance. Their study suggests that companies with higher profitability are more adept at managing their resources to maximize profits. This aligns with the findings of Yohanes & Sherly (2022), who discovered that companies with greater profits tend to have lower Effective Tax Rates (ETR), signaling higher levels of tax avoidance.

H3: Profitability has an effect on tax avoidance

2.11. Firm Size Moderates the Effect of Institutional Ownership on Tax Avoidance

Studies by Putri et al., (2024) and A. A. Putri et al., (2020) that firm size strengthens Institutional Ownership in Tax Avoidance. The tendency of larger firms to exercise tighter control and manage tax obligations more responsibly is consistent with agency theory. The theory suggests that institutional investors, especially in large firms, are empowered to monitor management decisions, including those related to tax avoidance.

H4: Firm size moderates the effect of institutional ownership on tax avoidance.

2.12. Firm Size Moderates the Effect of Independent Commissioners on Tax Avoidance

In the research of Nursavitri & Parinduri (2023) and Nabila & Kartika (2023) showed that the size of a company can enhance the impact of independent commissioners on tax evasion. Larger companies frequently hire workers with advanced expertise, allowing independent boards of directors to effectively monitor the management's activities. This makes managers more careful in decision making, including in terms of tax avoidance, because the board of commissioners can easily detect wrong decisions, especially regarding tax payments.

H5: Firm size moderates the influence of independent commissioners on tax avoidance.

2.13. Firm Size Moderates the Effect of Profitability on Tax Avoidance

Amiah (2022) and Suyanto & Kurniawati (2022) opined that the company's size plays a role in influencing the connection between profit margins and tax avoidance. Larger firms, due to their expansive operations, often generate substantial profits, leading to higher tax burdens. This condition may increase the incentive for such firms to engage in tax avoidance strategies.

H6: Firm size moderates the effect of profitability on tax avoidance.

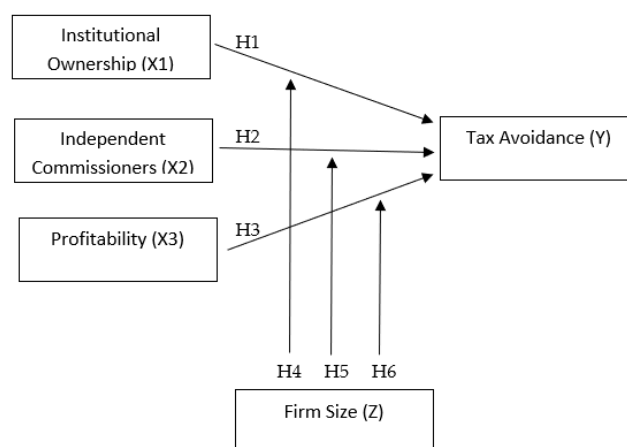


Figure 1. Conceptual framework

Source: processed by the author (2025)

3. Methodology

3.1. Type of Research

This study adopts a quantitative research methodology. Ismail (2018) describes quantitative research as a method that establishes a relationship between variables, generates numerical data, starts with a hypothesis, uses various tools for data collection, analyzes data with statistical methods, and yields results that are representative of the population.

3.2. Data Source

Secondary data serve as the primary source of information in this research. These sources provide data that was not directly collected by the researchers but instead acquired from external sources. Secondary data is already compiled and does not require additional analysis or interpretation by the researchers (Riyanto & Hatmawan, 2020). Panel data for banking firms listed on the IDX from 2019 to 2023 were utilized in this research. The data were sourced from the Indonesia Stock Exchange's official portal: <http://www.idx.co.id>.

3.3. Operational Variables

This research involves the utilization of five variables: three variables that are independent, one variable that is dependent, and one variable that serves as a moderator. The research includes institutional ownership (X1), independent commissioners (X2), and profitability (X3) as independent variables. Tax avoidance (Y) is the dependent variable, and firm size (Z) functions as a moderator of the relationships.

Table 1. Operational Variables

No	Variables	Conceptual Definition	Operational Definition
1	Tax avoidance (Y)	Tax avoidance is the legal practice of minimizing tax obligations by utilizing provisions or gaps in tax regulations, while remaining compliant with the law.	$ETR = \frac{\text{Tax Expense}}{\text{Profit Before Tax}}$
2	Institutional Ownership (X1)	Institutional ownership refers to the holding of corporate stocks by institutions or organizations.	$\text{Institutional Ownership} = \frac{\text{Total shares owned by institutions}}{\text{Total shares outstanding}}$
3	Independent Commissioner (X2)	An autonomous commissioner serves on the board without any financial, managerial, or familial ties to other board members, directors, or major shareholders that could compromise their independent decision-making.	$\text{Independent Commissioner} = \frac{\text{Number of independent commissioners}}{\text{Number of commissioners}}$

No	Variables	Conceptual Definition	Operational Definition
4	Profitability (X3)	Profitability is an indicator of how well a company can make money from its operations during a specific timeframe.	$ROA = \frac{Net\ Profit}{Total\ Assets}$
5	Firm size (Z)	The size of a company is indicative of the overall wealth it possesses.	$Firm\ Size = Ln \times Total\ Assets$

3.4. Population and Sample

Table 2. Sampling Description

No.	Criteria	Amount
1	Banking companies listed on the Indonesia Stock Exchange (IDX)	49
2	Banking companies that are not listed on the Indonesia Stock Exchange (IDX) consecutively in 2019-2023	(6)
3	Banking companies that do not publish annual financial reports ending December 31 during the 2019-2023 period	(1)
4	Companies that did not make a profit consecutively in 2019-2023	(14)
5	Companies that are research samples	28
6	Number of Samples of Company Financial Reports for 5 Years (28 x 5)	140

The research sample consists of 49 general banks listed on the Indonesia Stock Exchange (IDX). Through purposive sampling, the researcher selected 28 samples from the population based on specific criteria. Analysis was conducted using audited financial statements from 2019 to 2023 for each company, resulting in a dataset of 140 financial statements. After removing outlier data, the researcher was left with 110 samples from 22 companies over the five-year period.

3.5. Statistical Methods

This study adopts a systematic data analysis approach to address the research problem. Data processing is conducted using E-Views 13 software. Descriptive statistics are employed to summarize the central tendency and dispersion of the data. The regression model's validity is then assessed through classical assumption tests: normality, autocorrelation, multicollinearity, and heteroscedasticity. This study uses Moderated Regression Analysis (MRA) to test the moderating effect of firm size. Model validity is further assessed through F-statistics and t-statistics, with R² indicating the strength of the model's explanatory ability.

4. Results and Discussion

4.1. Descriptive Statistical Test Results

Table 3. Descriptive Statistics of Research Variables

Variable	X1	X2	X3	Y	Z
Min	0.396	0.333	0.001	0.125	15,386
Max	0.999	1	0.035	0.659	30,439
Mean	0.763	0.598	0.012	0.243	19,877
Std. Deviation	0.167	0.119	0.009	0.066	3.725

Source: Secondary data processed with E-Views 13

As can be seen in Table 3, it shows that the observations used in this study are 110 observations or 55 companies (110 observations/5 years). The number of observations is the total of the company sample after eliminating outliers, where the initial number of company samples is 140 observations or 28 companies (140 observations/5 years). Outlier data stands out from the rest of the observations due to its distinct characteristics and extreme values, whether they are individual or combined.

Table 3 displays the statistical summaries for every variable examined in the research. The extent of Tax Avoidance falls between 0.125 and 0. The data in Table 3 illustrates the statistical summaries for all variables investigated in the study, offering a glimpse into how they are distributed. Tax Avoidance shows a spread from 0.125 as the smallest value to 0.659 as the largest, with businesses having an average tax avoidance rate of 0.243 and exhibiting fairly consistent levels with a standard deviation of 0.066. Institutional Ownership exhibits high levels across the sample, ranging from 0.396 to 0.999, with a substantial mean of 0.763 and moderate dispersion reflected in a standard deviation of 0.167. Independent Commissioners show considerable variation, spanning from 0.333 to a perfect score of 1.000, averaging 0.598 with a standard deviation of 0.119, indicating diverse governance structures among the sampled banks. Profitability presents the most constrained range, varying from 0.001 to 0.035, with a modest average of 0.012 and the smallest standard deviation of 0.009, suggesting relatively consistent profitability levels across institutions. Firm Size displays the greatest absolute variation, ranging from 15.386 to 30.439, with a mean of 19.877 and the largest standard deviation of 3.725, reflecting significant differences in bank sizes within the sample.

4.2. Classical Assumption Test Results

4.2.1. Normality Test Results

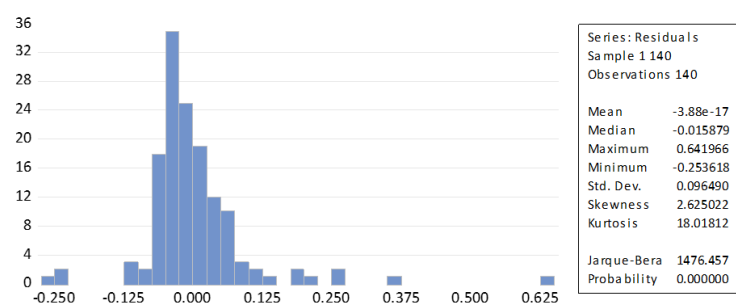


Figure 2. Jarque-Bera (JB) Test Results

Source: Secondary data processed with E-Views 13

Referring to Figure 2, it can be observed that the Jarque-Bera (JB) statistic yields a probability value of 0.000000. Given that the probability value falls below the 0.05 threshold, the assumption of normality is violated. As such, the regression model does not meet the prerequisites for further analysis. To standardize the data, it will be necessary to apply a treatment, such as Log Transformation.

If a variable does not have a normal distribution, one way to address it is by using Log Transformation. This involves applying the formula $\text{Log}y = \log(y)$ where Y represents the dependent variable. To analyze the data, the equation $\text{Log}y = c + x_1 + x_2 + x_3 + x_4 + x_5 + x_6 + x_7 + x_8 + x_9 + x_{10} + x_{11} + x_{12} + x_{13} + x_{14} + x_{15} + x_{16} + x_{17} + x_{18} + x_{19} + x_{20} + x_{21} + x_{22} + x_{23} + x_{24} + x_{25} + x_{26} + x_{27} + x_{28} + x_{29} + x_{30} + x_{31} + x_{32} + x_{33} + x_{34} + x_{35} + x_{36} + x_{37} + x_{38} + x_{39} + x_{40} + x_{41} + x_{42} + x_{43} + x_{44} + x_{45} + x_{46} + x_{47} + x_{48} + x_{49} + x_{50} + x_{51} + x_{52} + x_{53} + x_{54} + x_{55} + x_{56} + x_{57} + x_{58} + x_{59} + x_{60} + x_{61} + x_{62} + x_{63} + x_{64} + x_{65} + x_{66} + x_{67} + x_{68} + x_{69} + x_{70} + x_{71} + x_{72} + x_{73} + x_{74} + x_{75} + x_{76} + x_{77} + x_{78} + x_{79} + x_{80} + x_{81} + x_{82} + x_{83} + x_{84} + x_{85} + x_{86} + x_{87} + x_{88} + x_{89} + x_{90} + x_{91} + x_{92} + x_{93} + x_{94} + x_{95} + x_{96} + x_{97} + x_{98} + x_{99} + x_{100} + x_{101} + x_{102} + x_{103} + x_{104} + x_{105} + x_{106} + x_{107} + x_{108} + x_{109} + x_{110} + x_{111} + x_{112} + x_{113} + x_{114} + x_{115} + x_{116} + x_{117} + x_{118} + x_{119} + x_{120} + x_{121} + x_{122} + x_{123} + x_{124} + x_{125} + x_{126} + x_{127} + x_{128} + x_{129} + x_{130} + x_{131} + x_{132} + x_{133} + x_{134} + x_{135} + x_{136} + x_{137} + x_{138} + x_{139} + x_{140}$ is used. Following the log transformation, the data is then tested for normality.

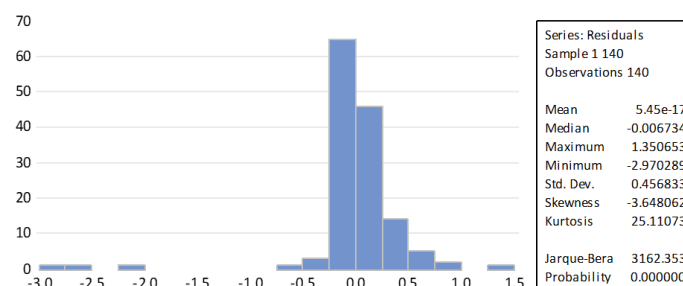


Figure 3. Results of the Jarque-Bera (JB) Test After Data Transformation

Source: Secondary data processed with E-Views 13

According to the information shown in Figure 3, the JB statistic has a probability value of 0.000000. The probability value of 0.0000, being less than 0.05, indicates a violation of the normality assumption. The reason for the non-normal distribution of residuals is due to the presence of outliers in the data used for the study. To ensure that the data conforms to a normal distribution, the researcher removed the outliers

identified in the study. The total number of observations initially included in the study was 140 (28x5). After eliminating the outlier data, the number of observations became 110 (22x5). The following is data processing after data transformation and elimination of outlier data:

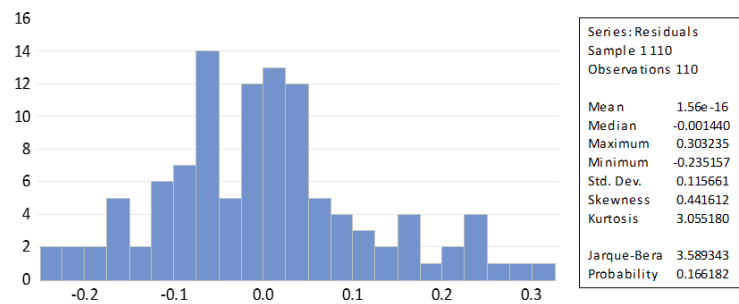


Figure 4. Results of the Jarque-Bera (JB) Test After Data Transformation and Outlier Elimination

Source: Secondary data processed with E-Views 13

Figure 3 shows that there is a higher probability of 0.166182 compared to 0.05, indicating that the data conforms to a normal distribution with the residuals forming a normally distributed curve.

4.2.2. Multicollinearity Test Results

Table 4. Multicollinearity Test Results

Variables	VIF
X1	1.163917
X2	1.091591
X3	1.207999
Z	1.392341

Source: Secondary data processed with E-Views 13

Based on the results presented in Table 4, it appears that there is no evidence of multicollinearity between the independent variables. This can be seen in the VIF value, which is below the threshold of 10.

4.2.3. Heteroscedasticity Test Result

Table 5. Heteroscedasticity Test Results

F-statistic	2.225111	Prob. F(4,105)	0.071
Obs*R-squared	8.595653	Chi-Square Prob.(4)	0.072

Source: Secondary data processed with E-Views 13

The Breusch-Pagan test results in Table 5 indicate a Chi-Square probability value of 0.072 (> 0.05), thereby confirming the absence of heteroscedasticity in the regression model.

4.2.4. Autocorrelation Test Results

Table 6. Autocorrelation Test Results

Log likelihood	81.69923	Hannan-Quinn critter.	-1.091489
F-statistic	18.86076	Durbin-Watson stat	1.960101

Source: Secondary data processed with E-Views 13

Based on Table 6, the Durbin-Watson statistic is calculated as 1.960101. This value was derived with a sample size of 110 and 3 independent variables. By consulting the Durbin Watson reference table with a significance level of 5%, the following outcomes were determined:

- DL = 1.6336
- 4-DL value = 2.3664
- DU = 1.7455
- 4-DU value = 2.2545
- DW value = 1.960101

Given that the Durbin-Watson statistic lies between the upper bound and $4 - DU$, such as 1.9601 falling between 1.7455 and 2.2545, the absence of autocorrelation can be inferred. This determination is made by analyzing the Durbin Watson Statistics value in comparison to both the DU and $4-DU$ values.

4.2.5. Chow Test

Table 7. Results of the Chow Test

Redundant Fixed Effects Tests			
Equation: Untitled			
Cross-section fixed effects test			
Effects Test	Statistics	df	Prob.
Cross-section F	3.084762	(21.84)	0.0001
Cross-section Chi-square	62.881709	21	0.0000

Source: Secondary data processed with E-Views 13

As indicated in Table 7, the Chow test produces a probability value of 0.000, which is below the 0.05 threshold. Therefore, the Fixed Effect Model (FEM) is selected as the appropriate estimation approach over the Common Effect Model (CEM).

4.2.6. Hausman test

Table 8. Results of the Hausman Test

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Cross-section random effects test			
Test Summary	Chi-Sq. Statistic	Chi-Sq. df	Prob.
Random cross section	4.368516	4	0.3584

Source: Secondary data processed with E-Views 13

To select between the Fixed Effect Model (FEM) and the Random Effect Model (REM), the Hausman test is applied using E-Views 13. As shown in Table 8, the resulting probability value is 0.3584, which is greater than 0.05. Thus, the Random Effect Model (REM) is considered suitable for this analysis.

4.2.7. Lagrange Multiplier (LM) Test

Table 9. Results of the Lagrange Multiplier Test

	Hypothesis Testing		
	Cross section	Time	Both
Breusch Pagan	14.07914 (0.0002)	0.203685 (0.6518)	14.28283 (0.0002)
Honda	3.752219 (0.0001)	0.451314 (0.3259)	2.972347 (0.0015)
King Wu	3.752219 (0.0001)	0.451314 (0.3259)	1.914524 (0.0278)
Standardized Honda	4.687041 (0.0000)	0.805849 (0.2102)	-0.178431 (0.5708)
Standardized King Wu	4.687041 (0.0000)	0.805849 (0.2102)	-0.611795 (0.7297)
Gourieroux, et al.	--	--	14.28283 (0.0003)

Source: Secondary data processed with E-Views 13

The Lagrange Multiplier (LM) Test is used in panel data estimation to assess and select between random effect and common effect models. The table shows a probability value of 0.0002, which is lower than 0.05 ($0.0002 < 0.05$), resulting in the acceptance of H_1 and rejection of H_0 . Based on the Lagrange Multiplier test, the Random Effect Model is deemed the most appropriate. Thus, it is selected as the final panel data model.

4.2.8. Random Effect Model

Table 10. Random Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.716189	0.414935	1.726026	0.0874
X1	-0.073061	0.395281	-0.184833	0.8537
X2	-0.531741	0.351482	-1.512854	0.1334
X3	-12.92521	4.992811	-2.588765	0.0110
Z	-0.017597	0.022567	-0.779768	0.4373
X1Z	-0.000315	0.021496	-0.014658	0.9883
X2Z	0.026529	0.018689	1.419445	0.1588
X3Z	0.397052	0.226775	1.750866	0.0830
Effects Specification				
			SD	Rho
Random cross section			0.036972	0.3752
Idiosyncratic random			0.047714	0.6248
Weighted Statistics				
R-squared	0.230943	Mean dependent variable		0.121368
Adjusted R-squared	0.178164	SD dependent var		0.053073
SE of regression	0.048114	Sum squared residual		0.236123
F-statistic	4.375700	Durbin-Watson stat		1.952624
Prob(F-statistic)	0.000280			
Unweighted Statistics				
R-squared	0.261762	Mean dependent variable		0.242799
Sum squared residual	0.349102	Durbin-Watson stat		1.320702

Source: Secondary data processed with E-Views 13

4.2.9. Determination Coefficient Analysis

According to the information provided in Table 10, the coefficient of determination (R-squared) is calculated as 0.230943. This suggests that Institutional Ownership, Independent Commissioners, Profitability jointly account for 23.09% of the variation in Tax Avoidance, with the remaining 76.91% being influenced by other variables.

4.2.10. Simultaneous Effect Significance Test (F Test)

The main goal of the F test is to assess how various independent factors influence dependent variables simultaneously. As per the data in table 10, the calculated f value of 4.375700 surpasses the critical f value of 2.69, with a corresponding probability value of 0.000280 which is lower than 0.05. This suggests that when combined, Institutional Ownership, Independent Commissioners, and Profitability all play a substantial role in influencing Tax Avoidance.

4.2.11. Panel Data Regression Equation and Partial Effect Significance Test (t-Test)

The multiple linear regression equation, as shown in Table 10, is presented as follows:

$$Y = 0.716189 - 0.073061X_1 - 0.531741X_2 - 12.92521X_3 + e$$

Table 10 provides evidence that:

- The statistical output in Table 10 indicates that institutional ownership fails to exhibit a statistically significant effect on tax avoidance ($t = -0.184833$; $p = 0.8537 > 0.05$). Given that the t-value does not surpass the critical threshold and the significance level exceeds 5%, the null hypothesis cannot be rejected.
- According to the results, the independent commissioner variable fails to reach statistical significance in relation to tax avoidance ($t = -1.512854$; $p = 0.1334 > 0.05$). The t-value lies below the critical threshold, and the p-value exceeds the significance level of 0.05, resulting in rejection of the corresponding hypothesis.
- Profitability is the only variable demonstrating a significant partial effect on tax avoidance ($t = -2.588765$; $p = 0.0110 < 0.05$), thus supporting the hypothesis that increased profitability correlates with reduced tax avoidance.

4.2.12. Moderate Regression Analysis (MRA) Testing

The researchers conducted a thorough analysis using Moderate Regression Analysis, specifically examining the impact of capital structure on the correlation between institutional ownership, independent commissioners, profitability, and tax avoidance. The results from Table 10 reveal the equation for moderation.

$$Y = 0.716189 - 0.073061X_1 - 0.531741X_2 - 12.92521X_3 - 0.017597Z - 0.000315X_1Z + 0.026529X_2Z + 0.397052X_3Z + e$$

Based on Table 10, it is known:

- Firm size is not significant as a moderator of the influence of institutional ownership on tax avoidance, with a probability value of $0.9883 > 0.05$.
- Firm size is not significant as a moderator of the influence of independent commissioners on tax avoidance, with a probability value of $0.1588 > 0.05$.
- Firm size is not significant as a moderator of the effect of profitability on tax avoidance, with a probability value of $0.0830 > 0.05$.

4.3. Discussion

The F-test results demonstrate a statistically significant joint effect of institutional ownership, independent commissioners, and profitability on tax avoidance in banking firms listed on the Indonesia Stock Exchange from 2019 to 2023. In Indonesian banking firms, it is believed that tax avoidance strategies are impacted by both corporate governance and profitability. However, when examined individually through t-test analysis, not all variables show a significant impact. In Indonesian banking firms, it is believed that tax avoidance strategies are impacted by both corporate governance and profitability. Although in theory institutions are expected to act as supervisors who pressure management not to engage in tax avoidance, in reality their influence is limited due to low involvement in operations and more focus on financial gain. Independent commissioners do not contribute significantly to the reduction of tax evasion.

Although it has a supervisory function, its effectiveness is often limited by lack of authority, dominance of affiliated parties, and weak independence. In some cases, independent commissioners are only used as a formality to comply with regulations without any real influence on the company's strategic decisions. A significant negative relationship between profitability and tax avoidance has been identified. Companies with high profits tend to be more compliant with tax obligations because they have adequate financial capacity and try to maintain their reputation. Conversely, companies with low profitability are more motivated to do tax avoidance to maintain profits. These findings suggest that tax avoidance is less prevalent among companies with higher levels of profitability.

The results derived from the Moderated Regression Analysis (MRA) demonstrate that there is no evidence that firm size moderates the effect of institutional ownership on tax avoidance, independent commissioners, profitability, and tax avoidance. Despite the fact that institutional ownership can impact corporate decisions like tax avoidance, this impact is not contingent on the size of the business. Larger corporations often undergo more intense scrutiny and have a wider range of shareholders, leading to a weaker alignment in the execution of tax avoidance practices. Second, the moderating role of firm size is not evident in the relationship between independent commissioners and tax avoidance. The supervisory function of independent commissioners continues to run regardless of the scale of the company, but its effectiveness can be hampered by affiliations and external pressures that affect their independence. Third, the moderating effect of firm size on the linkage between profitability and tax avoidance is not supported by the data. Companies with high profitability, both large and small, tend to be careful in conducting tax avoidance because they consider reputational risks and business sustainability. Therefore, these three variables indicate that firm size does not act as a significant moderating variable in tax avoidance practices.

5. Conclusion

Focusing on Indonesian banking firms between 2019 and 2023, this study analyzes the impact of institutional ownership, independent commissioners, and profitability on tax avoidance, with firm size tested as a moderating factor. The data supports the conclusion that individually, none of the variables significantly impact tax avoidance, as all show significance values above 0.05. However, when analyzed collectively, institutional ownership, independent commissioners, and profitability demonstrate a significant simultaneous effect on tax avoidance with a combined significance value below 0.05. This indicates that while each factor alone lacks influence, their joint presence meaningfully affects tax avoidance behavior. Additionally, firm size fails to serve as a significant moderator, with probability values exceeding 0.05, suggesting that company size does not alter how the independent variables influence tax avoidance practices in the banking sector.

6. References

- Ainniyya, S. M., Sumiati, A., & Susanti, S. (2021). Pengaruh Leverage, Pertumbuhan Penjualan, dan Ukuran Perusahaan Terhadap Tax Avoidance. *Owner: Riset & Jurnal Akuntansi*, 5(2), 525–535. <https://doi.org/10.33395/owner.v5i2.453>
- Amiah, N. (2022). Profitabilitas, Intensitas Modal Dan Penghindaran Pajak : Ukuran Perusahaan Sebagai Variabel Pemoderasi. *LITERA: Jurnal Literasi Akuntansi*, 2(1), 63–73.
- Andini, R., Andika, A. D., & Pranaditya, A. (2022). Analisa Pengaruh Kepemilikan Institusional, Proporsi Dewan Komisaris Independen, dan Profitabilitas Terhadap Penghindaran Pajak dengan Ukuran Perusahaan sebagai Variabel Moderating (Studi Empiris pada Industri Barang Konsumsi yang Terdaftar di BEI Tahun 2020). *Jurnal Akuntansi Dan Pajak*, 22(2), 530–538. <https://doi.org/http://dx.doi.org/10.29040/jap.v22i2.3193>
- Anggraeni, M. D., & Adiwijaya, Z. A. (2020). Pengaruh Kepemilikan Institusional, Ukuran Perusahaan, Lverage, Dewan Komisaris Independen Dan Profitabilitas Terhadap Manajemen Laba. *Prosiding Konferensi Ilmiah Mahasiswa Unissula (KIMU)* 4, 1121–1152.
- Detiknews. (2021). *Saksi Ungkap Pajak Bank Panin Diperiksa Ulang Hasilnya Kurang Rp 1,3 Triliun*.
- Gunawan, A. (2022). Peranan Good Corporate Governance Dalam Meminimalisir Praktik Penghindaran Pajak Pada Perusahaan Go Publik. *Owner: Riset & Jurnal Akuntans*, 6(1), 379–385.
- Handoyo, S., Wicaksono, A. P., & Darmesti, A. (2022). Does Corporate Governance Support Tax Avoidance Practice in Indonesia? *International Journal of Innovative Research and Scientific Studies*, 5(3), 184–201. <https://doi.org/10.53894/ijirss.v5i3.505>
- Ismail, F. (2018). *Statistika Untuk Penelitian Pendidikan Dan Ilmu-Ilmu Sosial*. Prenadamedia Group.
- Jusman, J., & Nosita, F. (2020). Pengaruh Corporate Governance, Capital Intensity dan Profitabilitas Terhadap Tax Avoidance pada Sektor Pertambangan. *Jurnal Ilmiah Universitas Batanghari Jambi*, 20(2), 697. <https://doi.org/10.33087/jiubj.v20i2.997>
- Nabila, K., & Kartika, A. (2023). Pengaruh Capital Intensity dan Komisaris Independen terhadap Penghindaran Pajak dengan Ukuran Perusahaan sebagai Variabel Moderasi. *Ekonomis: Journal of Economics and Business*, 7(1), 591. <https://doi.org/10.33087/ekonomis.v7i1.746>
- Natalia, E. (2022). Pengaruh Kepemilikan Institusional, Ukuran Perusahaan, dan Profitabilitas terhadap Nilai Perusahaan pada Perusahaan Subsektor Properti dan Real Estate yang Terdaftar di BEI (Periode 2016–2019). *Jurnal Mahasiswa Manajemen Dan Akuntansi*, 2(2), 188–206.
- Nursavitri, M. A., & Parinduri, A. Z. (2023). Pengaruh Good Corporate Governance Terhadap Tax Avoidance Pada Perusahaan Food and Beverage Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Ekonomi Trisakti*, 4(1), 13–22. <https://doi.org/10.25105/jet.v4i1.18158>
- Oktaviana, D., & Kholis, N. (2021). Corporate Governance dan Profitabilitas Terhadap Penghindaran Pajak.

Bagaimana Pengaruhnya? *Jurnal Bisnis Dan Akuntansi*, 23(2), 217–228.

- Putri, A. A., Wijaya, R. A., & Dewi, R. C. (2020). Tax Avoidance Melalui Ukuran Perusahaan sebagai Variabel Moderasi : Kepemilikan Institusional, Intensitas Modal dan Umur Perusahaan. *Journal of Business and Economics (JBE) UPI YPTK*, 5(1), 1–11. <https://doi.org/10.35134/jbeupiyptk.v5i1.93>
- Putri, R. A., Sembiring, C. L., & Nasihin, I. (2024). The Effect of Institutional Ownership, Independent Board of Commissioners, and Green Accounting on Tax Avoidance With Company Size as a Moderating Variable. *Journal of Economic, Business and Accounting*, 7(4), 11359–11375.
- Rahardjo, S. S. (2018). *Etika dalam Bisnis & Profesi Akuntan dan Tata Kelola Perusahaan*. Salemba Empat.
- Riyanto, S., & Hatmawan, A. A. (2020). *Metode Riset Penelitian Kuantitatif Penelitian Di Bidang Manajemen, Teknik, pendidikan dan Eksperimen*. CV Budi Utama.
- Sari, N., Luthan, E., & Syafriyeni, N. (2020). Pengaruh Profitabilitas, Leverage, Komisaris Independen, Kepemilikan Institusional, dan Ukuran Perusahaan terhadap Penghindaran Pajak pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia pada Tahun 2014-2018. *Jurnal Ilmiah Universitas Batanghari Jambi*, 20(2), 376. <https://doi.org/10.33087/jiubj.v20i2.913>
- Sunarto, S., Widjaja, B., & Oktaviani, R. M. (2021). The Effect of Corporate Governance on Tax Avoidance: The Role of Profitability as a Mediating Variable. *Journal of Asian Finance, Economics and Business*, 8(3), 217–227. <https://doi.org/10.13106/jafeb.2021.vol8.no3.0217>
- Suyanto, S., & Kurniawati, T. (2022). Profitabilitas, Pertumbuhan Penjualan, Leverage, Penghindaran Pajak: Ukuran Perusahaan Sebagai Variabel Moderasi. *Jurnal Manajemen Terapan Dan Keuangan*, 11(04), 820–832. <https://doi.org/10.22437/jmk.v11i04.16725>
- Tahar, A., & Rachmawati, D. (2020). Pengaruh Mekanisme Corporate Governance, Corporate Social Responsibility, Ukuran Perusahaan, dan Leverage terhadap Penghindaran Pajak (Studi pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2015–2017). *Kompartemen: Jurnal Ilmiah Akuntansi*, XVIII(1), 98–115.
- Tanjaya, C., & Nazir, N. (2021). Pengaruh Profitabilitas, Leverage, Pertumbuhan Penjualan dan Ukuran Perusahaan terhadap Penghindaran Pajak. *Jurnal Akuntansi Trisakti*, 8(2), 189–208. <https://doi.org/10.54082/jupin.543>
- Wiratmoko, S. (2018). The Effect of Corporate Governance , Corporate Social Responsibility , and Financial Performance on Tax Avoidance. *The Indonesian Accounting Review*, 8(2), 245–257.
- Wulandari, S., Rachmawati Meita Oktaviani, Sunarto, & Widhian Hardiyanti. (2023). Pengaruh Kinerja Keuangan dan Corporate Governance terhadap Penghindaran Pajak. *Kompak :Jurnal Ilmiah Komputerisasi Akuntansi*, 16(2), 405–416. <https://doi.org/10.51903/kompak.v16i2.1352>
- Yohanes, & Sherly, F. (2022). Pengaruh Profitability , Leverage , Audit Quality , dan Faktor Lainnya. *E-Jurnal Akuntansi Tsm*, 2(1), 543–558.