

THE EFFECT OF INSTITUSIONAL OWNERSHIP, MANAGERIAL OWNERSHIP, PROFITABILITY AND AUDIT QUALITY ON TAX AGRESSIVITY

PENGARUH KEPEMILIKAN INSTITUSIONAL, KEPEMILIKAN MANAJERIAL, PROFITABILITAS DAN KUALITAS AUDIT TERHADAP AGRESIVITAS PAJAK

Muhammad Zaid Al Fikri^{1*}, Herlin Tundjung Setijaningsih²

Accounting Departement, School of Accounting - Master of Accounting, Universitas Bina Nusantara^{1,2}

Muhammad.fikri004@binus.ac.id

ABSTRACT

The purpose of this study is to analyze the causality relationship, which explains the independent variables consisting of institutional ownership, managerial ownership, profitability and audit quality against the dependent variable of tax aggressiveness. The data analysis of this research is quantitative analysis and uses EViews software. EViews is software used for statistical analysis and econometrics. EViews allows users to process data, test hypotheses, and create statistical models for data analysis. EViews methods include the use of time series and cross-sectional data to perform regression analysis, multivariate analysis, causality testing, and data stationary testing. EViews can also be used to design, test, and estimate econometric models such as linear regression models, autoregressive models, and mobile autoregressive models. The results of this study show that the pattern of data that has been collected and the results of testing that has been carried out using Eviews 12 with the panel data regression analysis method show that first, institutional ownership has a negative and significant effect on tax aggressiveness. Second, managerial ownership has a significant negative effect on tax aggressiveness. Third, profitability has a significantly positive effect on tax aggressiveness. Fourth, audit quality has a significant negative effect on tax aggressiveness.

Keywords: institutional ownership, managerial ownership, profitability and quality checks on tax aggressiveness

ABSTRAK

Tujuan dari penelitian ini adalah untuk menganalisis hubungan kausalitas, yang menjelaskan variabel independen yang terdiri dari kepemilikan institusional, kepemilikan manajerial, profitabilitas dan kualitas audit terhadap variabel dependen yaitu agresivitas pajak. Analisis data penelitian ini adalah analisis kuantitatif dan menggunakan software Eviews. EViews merupakan software yang digunakan untuk analisis statistik dan ekonometrika. EViews memungkinkan pengguna untuk mengolah data, menguji hipotesis, dan membuat model statistik untuk analisis data. Metode EViews mencakup penggunaan data time series dan cross-sectional untuk melakukan analisis regresi, analisis multivariat, pengujian kausalitas, dan pengujian stasioneritas data. EViews juga dapat digunakan untuk merancang, menguji, dan mengestimasi model ekonometrika seperti model regresi linier, model autoregressive, dan model mobile autoregressive. Hasil dari penelitian ini menunjukkan bahwa pola data yang telah dikumpulkan dan hasil pengujian yang telah dilakukan dengan menggunakan Eviews 12 dengan metode analisis regresi data panel menunjukkan bahwa pertama, kepemilikan institusional berpengaruh negatif dan signifikan terhadap agresivitas pajak. Kedua, kepemilikan manajerial berpengaruh negatif signifikan terhadap agresivitas pajak. Ketiga, profitabilitas berpengaruh positif signifikan terhadap agresivitas pajak. Keempat, kualitas audit berpengaruh negatif signifikan terhadap agresivitas pajak.

Kata Kunci: Kepemilikan Institusional, Kepemilikan Manajerial, Profitabilitas Dan Kualitas Pemeriksaan Terhadap Agresivitas Pajak

INTRODUCTION

Indonesia is a country whose income is very dependent on the tax sector, it can be said that taxes are the country's main source of capital in carrying out national development. The

role of taxes on state revenue is very important, as evidenced by state revenue which is completely dominated by the tax sector. Based on data reported by DDTC.co.id, income in Indonesia is very dependent on the tax sector, because

taxes always have the most contribution each year (DDTC.co.id, 2020). Even so, on the tax realization side, it is known that tax revenue from 2018-2020 always misses the target that has been set. Tax targets that are not achieved can be caused by various factors, one of which is due to tax burden management actions by the company. Based on data reported by PricewaterhouseCoopers (PwC) Indonesia, that only 30 percent of 40 large mining companies have adopted tax transparency reporting in 2020 (Suwiknyo, 2021a). This is also in accordance with data from the Directorate General of Taxes (DGT) presented in table 1.

Table 1. Percentage of Mining Tax Revenue in 2018-2021 (in billion rupiah)

Year	Tax Revenue	Tax Targets	Difference
2018	155.318,34	136.691,08	18.627,26
2019	123.308,12	139.152,77	(15.844,65)
2020	69.552,03	115.662,27	(46.110,24)
2021	59.210,23	139.305,70	(80.095,47)

Source: Laporan Tahunan DJP, 2021

Based on the data above, it can be seen that tax revenue in the mining sector from 2018-2021 always decreases. In addition, tax revenue in the mining sector always misses the target that has been set. Based on data from DGT's annual report, the mining sector is in the fifth position of tax contributor sectors, and is preceded by the processing, trade, financial and construction services and *real estate industries* (DGT, 2021). This is also what motivates this study using research samples from the mining sector. Indonesia is one of the most productive countries in the coal sector mining industry in the world and is the fifth largest coal producing country in the world (Suwiknyo, 2021b).

In addition, there are cases that can strengthen the fact that the mining sector manages the tax burden. According to news reported by finance.detik.com, PT Adaro Energy utilizes its subsidiary

located in Singapore to move the profits it earns to countries that have low tax rates. From these actions PT. Adaro Energy Tbk can minimize the tax paid up to US\$ 125 million (Sugianto, 2019). The next case was carried out by PT Kaltim Prima Coal in 2007 which carried out sales engineering. According to data reported by tempo.co, the sale was supposed to be carried out directly by PT Kaltim Prima Coal, but was transferred to PT Indocoal Resource Limited, which is a subsidiary of its corporate affiliate. The sale of coal to this affiliated company is to make a low turnover of coal sales of PT. Kaltim Prima Coal, thus causing PT Kaltim Prima Coal's tax burden to be lower (Wijaya, 2019).

The tax burden management carried out by PT Adaro Energy and PT Kaltim Prima Coal is more familiar with the term *tax avoidance*. According to Supartini & Permana (2019), *tax avoidance* is the practice of legally manipulating income that is still in accordance with the provisions of tax legislation to reduce the amount of tax owed. Taxes are a burden that will reduce profits, while one of the company's goals is *profit oriented*. In accordance with the aim of optimizing profits, both domestic and multinational companies try to minimize the tax burden by utilizing existing tax provisions.

Factors that influence a company to take tax aggressiveness actions, including the implementation of *corporate governance*. The National Committee for Governance Policy (KNKG) defines *good corporate governance* as an effort to motivate management to be able to increase success and control management behavior in order to continue to heed the interests of *stakeholders* (Komite Nasional Kebijakan Governance (KNKG), 2015) Companies that have

good *corporate governance* tend to take tax actions that are not risky and more obedient to established regulations. (Jensen & Meckling, 2012), stated that institutional ownership and managerial ownership are two *corporate governance mechanisms* that can control agency issues, especially those related to corporate tax decisions.

According to Hikmah & Sulistyowati (2020), institutional ownership is shared ownership by other institutions, namely ownership by other companies or institutions. A certain percentage of shares owned by institutions increases oversight and gives encouragement to companies to comply with tax regulations. In the supervisory function, institutional investors are believed to have the ability to monitor management actions better than individual investors. Institutional investors are classified as experienced investors (*sophisticated*), so they will supervise effectively and tend to be skeptical of actions from management (Putra et al., 2019). That way, management will be careful in making decisions, especially related to corporate tax aggressiveness.

Terdapat banyak penelitian yang meneliti pengaruh kepemilikan institusional terhadap agresivitas pajak. Salah satu contohnya adalah penelitian oleh (Hanlon & Heitzman, 2010) yang menunjukkan bahwa kepemilikan institusional memiliki pengaruh negatif signifikan terhadap agresivitas pajak pada perusahaan-perusahaan di Amerika Serikat. Hasil penelitian ini didukung oleh penelitian oleh (Hanlon et al., 2012) yang menunjukkan bahwa kepemilikan institusional juga berpengaruh negatif terhadap agresivitas pajak di Kanada. Di Indonesia, penelitian oleh (Puspitaningtyas, 2019) menunjukkan bahwa kepemilikan institusional berpengaruh negatif terhadap agresivitas

pajak. Hasil ini menunjukkan konsistensi dengan penelitian di Amerika Serikat dan Kanada yang menyatakan bahwa kepemilikan institusional dapat mempengaruhi agresivitas pajak.

According to Prasetyo & Pramuka (2018), managerial ownership is the level of share ownership of management who actively participate in decision making, such as directors, management and commissioners. Managerial ownership is one way to overcome agency conflicts, where it can align the interests of managers both as *agents* and *principals*. With this, managers will also feel the benefits of the decisions taken and bear losses as a consequence of making wrong decisions, one of which is tax avoidance.

Research conducted by (Amila & Suryadi, 2014) shows that managerial ownership has a significant positive influence on tax aggressiveness in companies in the United States. The results of this study are supported by research by (Guay et al., 1996) which shows that managerial ownership also positively affects tax aggressiveness in Canada. In Indonesia, research by (Kurniawan, 2018) shows that managerial ownership has a positive influence on tax aggressiveness. These results are consistent with research in the United States and Canada that suggests that managerial ownership can increase tax aggressiveness.

In addition to institutional ownership and managerial ownership, another factor capable of influencing tax aggressiveness is profitability. Profitability is the ability of a company to make a profit (Astuti, 2020). In this study, researchers used ROA as a tool to calculate profitability in the company. *Return on assets* (ROA) is one of the ratios of profitability that aims to measure the effectiveness of the company in generating profits by

utilizing its assets (Sumardi & Suharyono, 2020). The higher this ratio, the better the company's performance by using assets to earn profits. The amount of tax liability that must be paid by the taxpayer is based on the gross profit generated, in measuring the potential profit generated using the *Return On Asset* (ROA) ratio.

Research conducted by (Triyanti et al., 2020), (Anggraeni & Oktaviani, 2021) states that there is a positive effect of *Return On Asset* (ROA) on tax avoidance, this means stating that companies with a high *Return On Asset* (ROA) ratio have the opportunity to position themselves by planning taxes, so as to reduce the amount of tax burden.

Another factor that is thought to affect tax aggressiveness is the quality of the audit. Audit quality is the accumulation and evaluation of evidence about information to determine and report the level of correspondence between the information and the established criteria (Maharani & Juliarto, 2019a). Audit quality is one way in corporate governance to control the actions of managers and can prevent and detect accounting manipulation. One form of accounting manipulation is the act of tax avoidance. Companies that have been monitored by high-quality external audits, will reduce tax avoidance activities.

Research conducted by (Gaaya et al., 2017) found that audit quality negatively affects tax aggressiveness. This is because auditors who have low ability and experience make it possible to engage in tax avoidance. In a study conducted by (Maharani & Juliarto, 2019) which found that auditors included in the *Big Four* have a low association with tax avoidance, because they are more concerned about reputational damage. Research conducted in Indonesia itself has found that audit

quality has a negative and significant effect on tax aggressiveness (Damayanti & Susanto, 2016).

Research conducted by (Mulawarman, 2020) found that there is tax avoidance behavior in the mining sector in Indonesia. This study was conducted in the period 2017-2018. Research by Pangaribu and Sukoharsono (2019) also shows that most coal mining companies listed on the Indonesia Stock Exchange do tax avoidance by using transfer pricing. This study was conducted in 2018. Research by (Rukmana, 2018) examines the factors that influence tax avoidance in mining companies in Indonesia. The study was conducted in 2017. Research by (Lusida et al., 2022) examines factors that influence tax non-compliance behavior in coal mining companies listed on the Indonesia Stock Exchange. This study was conducted in 2020. Research by (Kartikasari et al., 2020) also shows that there is tax non-compliance behavior in the mining sector in Indonesia in 2019.

This research was conducted in the last five years, namely 2017-2021 on the Indonesia Stock Exchange (IDX) related to tax avoidance behavior in the mining sector because the IDX is an institution that facilitates securities trading in Indonesia, including securities from companies operating in the mining sector. Therefore, IDX is an important source of data for researchers to analyze the behavior of companies in the sector, especially in terms of tax avoidance. In addition, IDX also has strict rules and mechanisms in terms of submitting financial statements by companies listed on the stock exchange, so that the available data is relatively reliable and accurate. This allowed the researchers to conduct a more precise and valid analysis of tax avoidance behavior in the mining sector in Indonesia. Therefore, research conducted in the last five years

on the IDX can make an important contribution to the development of tax science and practice in Indonesia.

Researchers took a time span in the last five years, namely 2017-2021, because according to the news reported by www.dataindustri.com the rise and fall of prices was caused by two things, namely *supply* and *demand*. *Coal supply* or production is strongly influenced by weather factors, producer country policies, production and shipping factors. Meanwhile, *demand* or demand is influenced by the level of electrical energy demand in the buyer country, weather factors in the coal buyer country, buyer country policies, and *energy supply* in the buyer country.

Based on agency theory that explains the relationship between *agent* and *principal*, where in this context the agent is positioned as company management and *the principal* is positioned as the government. The two entities have agency conflicts, due to different perspectives in looking at taxes. In the eyes of tax management, it is a burden that will reduce the company's profits, while according to the government, taxes are the country's largest source of revenue. With the background that has been described, the author is interested in conducting research entitled "The Effect of Institutional Ownership, Managerial Ownership, Profitability and Audit Quality on Tax Aggressiveness".

RESEARCH METHODS

The population in this study is 17 coal mining companies listed on the Indonesia Stock Exchange. The sample used in this study is the purposive sampling method, namely, 1) Coal mining companies that have complete financial statements for the 2017-2021 period. 2) Coal mining companies that have an Annual Report for the period

2017-2021. 3) Companies that have institutional ownership and managerial ownership respectively during 2017–2021.

This research is a type of quantitative research using secondary data obtained from the financial statements of coal mining industry companies listed on the Indonesia Stock Exchange for the period 2017 to 2021. The purpose of this study is to analyze the causality relationship, which explains the independent variables consisting of institutional ownership, managerial ownership, profitability and audit quality against the dependent variable of tax aggressiveness. The data analysis of this research is quantitative analysis and uses Eviews software. EViews is software used for statistical analysis and econometrics. EViews allows users to process data, test hypotheses, and create statistical models for data analysis. EViews methods include the use of time series and cross-sectional data to perform regression analysis, multivariate analysis, causality testing, and data stationary testing. EViews can also be used to design, test, and estimate econometric models such as linear regression models, autoregressive models, and mobile autoregressive models (Gujarati, 2004).

RESULTS AND DISCUSSION

Descriptive statistical analysis provides an overview of data using the average value (mean), maximum value, minimum value and standard deviation (std.dev) of each variable in the study. Here are the descriptive statistical results.

1. The managerial ownership variable shows a minimum value of 0.627694. With a maximum value of 1.078953, the average value is 0.781084 and the standard deviation is 0.098401. The higher the percentage proportion of

institutional ownership, the greater the influence of institutional shareholders in the Company's decision making.

Table 2. Statistical Descriptive Test Results

	BTD	INS	MNJ	ROA	QTY
Mean	0.609111	0.174132	0.781084	27.4140	0.102011
Median	0.545988	0.061757	0.746368	27.3619	0.082125
Maximum	1.600000	0.900000	1.078953	27.8838	0.312918
Minimum	0.240000	0.004185	0.627694	27.2855	0.000562
Std. Dev.	0.216691	0.239244	0.098401	0.139399	0.079742
Skewness	1.626211	2.010656	1.449147	1.578721	0.654469
Kurtosis	7.296874	6.090161	4.187403	4.910775	2.461924
Jarque-Bera	102.6371	85.73348	32.70011	45.40166	6.676139
Probability	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	48.72888	13.93058	62.48674	2193.125	8.160873
Sum Sq. Dev.	3.709431	4.521766	0.764930	1.535137	0.502346
Observations	80	80	80	80	80

Source: Processed data, 2023

From the results of descriptive statistical testing in table 2 above, it can be explained as follows:

1. In the variable tax aggressiveness proxied with Book *Tax Difference* (BTD) shows a minimum value of 0.240000, a maximum value of 1.600000, an average value of 0.609111 and a standard deviation of 0.216691. Tax avoidance is indicated, if the BTD value is getting closer to 0 then it can be said that the company is not too aggressive in tax avoidance, and vice versa.
2. The institutional ownership variable shows a minimum value of 0.004185. With a maximum value of 0.900000, the average value is 0.174132 and the standard deviation is 0.239244. The higher the percentage proportion of institutional ownership, the greater the influence of institutional shareholders in corporate decision-making.
3. The managerial ownership variable shows a minimum value of 0.627694. With a maximum value of 1.078953, the average value is 0.781084 and the standard deviation is 0.098401. The higher the percentage proportion of institutional ownership, the greater the influence of institutional shareholders in corporate decision-

making.

4. The profitability variable proxied with *Return on Asset* (ROA) has a minimum value of 0.00, a maximum value of 0.32, an average value of 0.0904 and a standard deviation of 0.08169. The greater the ROA value, the more it illustrates that the company is able to maximize profits from the assets owned.

Model Specification Test Results

The specification test aims to determine the panel data analysis model to be used. The test used is the chow test and then if needed can be continued with the hausmann and lagrange tests.

Test Chow

The Chow test is used to choose between a *fixed effect* model or a *common effect* model that should be used. So, the hypothesis used, namely:

H_0 : *Common Effect*

H_i : *Fixed Effect*

If the probability result is less than 0.05, then H_0 is rejected. So, the selected model is *Fixed Effect Method* (FEM). The results of estimation using fixed specification effects are as follows:

Tabel 3. Hasil Uji Chow-Redundant Fixed Effect Tests

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.906867	(15,60)	0.0017
Cross-section Chi-square	43.697737	15	0.0001

Source: Processed Data, 2023

Based on the results above, it is known that the probability is 0.0017, which means it is less than 0.05, so H_0 is rejected. So, the model chosen is the Fixed Effect Method (FEM). When the selected model is a fixed effect, it continues with the Hausmann test.

Hausman Test

The *hausman* test is used to determine whether the *Random Effect Method* (REM) model is better to use than the *Fixed Effect Method* (FEM) model. So, the hypothesis used, namely:

H_0 : Random Effect

H_i : Fixed Effect

If the probability result is more than 0.05, then using the *Random Effect Method* (REM) model will be better. The results of estimation using random specification effects are as follows:

Table 4. Hausman Test Results – Correlated Random Effects Test

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.999697	4	0.5579

Source: Processed Data, 2023

Based on the results above, it is known that the probability of 0.5579 which means more than 0.05 then H_0 Accepted. , it can be concluded that the model that should be used is the *Random Effect Model* (REM).

Lagrange Multiplier Test

The *Lagrange Multiplier* test is used to determine whether the *Random Effect Method* (REM) model is better than the *Common Effect Model* (CEM) model. So, the hypothesis used, namely:

H_0 : Random Effect

H_i : Common Effect

If the probability result is less than 0.05, then using the *Random Effect Method* (REM) model will be better. The results of estimation using random specification effects are as follows:

Table 5. Lagrange Multiplier Test Result

Lagrange Multiplier Tests for Random Effects			
Null hypotheses: No effects			
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives			
	Cross-section	Test Hypothesis Time	Both
Breusch-Pagan	2.773035 (0.0959)	0.260221 (0.6100)	3.033256 (0.0816)

Source: Processed data, 2023

Based on the above results, it is known that the Breusch-Pagan probability of 0.0959 which means more than 0.05 then H_1 Accepted. So it can be concluded that the model used in this study is the *Common Effect Model* (CEM).

Classical Assumption Test Results

The classical assumption test in this study was carried out using normality test, multicollinearity test, heterokedasticity test, and autocorrelation test.

Normality Test

The normality test aims to test whether in a regression model, the dependent variable and the independent variable have a normal distribution or not. Decision making using the *JarqueBera Test* or *J-B Test*. If the probability value > 0.05, then the variables in the study have a normal distribution. The test results can be seen in figure 1.

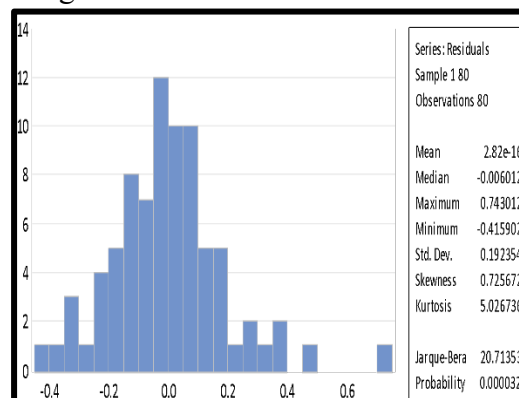


Figure 1. Normality Test Results

Source: Processed data, 2023

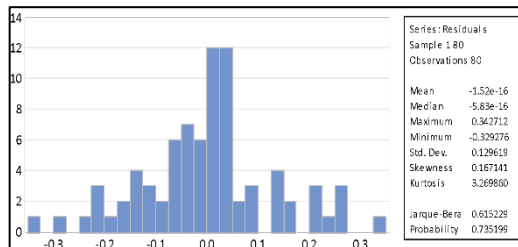
Based on the normality test using the *Jarque Bera Test* above, the probability of data in this study is 0.000032 which shows that the probability < 0.05. These results can be said that the variable data in this study is not normally distributed. This is because there are several *outliers* or distorted data, so outlier detection is carried out, as follows.

Table 6. Detection Outlier Test Result

Dependent Variable: BTD				
Method: Least Squares				
Date: 02/16/24 Time: 22:57				
Sample: 1 80				
Included observations: 80				
Indicator Saturation: IIS, 80 indicators searched over 3 blocks				
7 IIS variables detected				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.449550	3.404102	1.894641	0.0624
INS	-0.152699	0.070043	-2.180076	0.0327
MNJ	-0.562837	0.172410	-3.264520	0.0017
QTY	-0.197891	0.122523	-1.615126	0.1109
ROA	0.355396	0.214140	1.659640	0.1016
@ISPERIOD("3")	-0.382106	0.142180	-2.687488	0.0090
@ISPERIOD("5")	-0.343925	0.142518	-2.413202	0.0185
@ISPERIOD("7")	0.854155	0.149322	5.720218	0.0000
@ISPERIOD("8")	0.447038	0.142263	3.142326	0.0025
@ISPERIOD("27")	-0.321860	0.141471	-2.275097	0.0261
@ISPERIOD("59")	0.489259	0.141388	3.460402	0.0009
@ISPERIOD("71")	0.417651	0.143775	2.904899	0.0050

Source: Processed data, 2023

Based on the outlier detection test, there are several outliers in this study, namely data numbers 3, 5, 7, 8, 27, 59 and 71. Even so, the reviews 12 system will adjust the regression model by transforming data automatically to normalize data distribution. Furthermore, another normality test was carried out with *Jarque Bera*, the results were as follows.

**Figure 2. Normality Test Results**

Source: Processed data, 2023

Based on the normality test using the *Jarque Bera Test* above, the probability data in this study is 0.735199 which shows that the probability > 0.05 . These results can be said that the variable data in this study is normally distributed.

Multicollinearity Test

This test is useful to find out whether the regression model found a correlation between independent variables. A good model is one in which there is no correlation between independent variables. According to Hamid et al. (2020), if the correlation coefficient between independent variables > 0.90 , it can be concluded that the model has a multicollinearity problem. In contrast, the correlation coefficient < 0.90 hence the model is free

of multicollinearity. In detecting multicollinearity symptoms, this study uses a correlation matrix between independent variables, as follows.

Table 7. Multicollinearity Test Results

	INS	MNJ	ROA	QTY
INS	1.000000	0.11133928	0.23474281	-0.1416385
MNJ	0.11133928	1.000000	0.06699463	-0.2858913
ROA	0.23474281	0.06699463	1.000000	-0.03733118
QTY	-0.1416385	-0.2858913	-0.03733118	1.000000

Source: Processed data, 2023

Based on the results in table 7, it can be seen that all correlations between independent variables, none of which have a value of more than 0.90. This means that in this regression model there are no symptoms of multicollinearity or in this model there is no correlation between independent variables. However, if there is a multicollinearity problem in this study can be ignored because the multicollinearity problem arises as a result of the effect of the moderation variable, the multicollinearity problem above cannot be overcome because if overcome it will remove the moderation variable, so that the multicollinearity problem in the moderation variable above becomes a limitation for this study (D. Gujarati, 2014).

Heteroscedasticity Test.

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residual of one observation to another (Sugiyono, 2015). The heteroscedasticity test uses the Breusch Pagan Godfrey test, as follows:

Table 8. Heteroscedasticity Test Results

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
Null hypothesis: Homoskedasticity			
F-statistic	1.246869	Prob. F(11,68)	0.2744
Obs*R-squared	13.42761	Prob. Chi-Square(11)	0.2663
Scaled explained SS	11.01046	Prob. Chi-Square(11)	0.4424

Source: Processed data, 2023

From the results of the heteroscedasticity test analysis above, the *p value* is indicated by the value of Prob. *The chi square* on Obs*R-Squared is 0.2663. Since the *p value* is $0.2663 > 0.05$, then accepting H_0 means that the regression model has no problem assuming heteroscedasticity.

The Automobile

The autocorrelation test aims to test whether in one regression model there is a correlation between confounding errors in the current period (t) with errors in the previous period (t-1) (Ghozali, 2016). A good regression model is one that is free from autocorrelation. To detect the presence or absence of autocorrelation this study used the Breusch-Godfrey test, as follows:

Table 9. Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:			
Null hypothesis: No serial correlation at up to 2 lags			
F-statistic	1.225472	Prob. F(2,66)	0.3002
Obs*R-squared	2.864468	Prob. Chi-Square(2)	0.2388

Source: Processed data, 2023

From the results of the analysis, it can be seen that the *Probability Chi Square* value, which is the *p value* of the Breusch-Godfrey test, is 0.2388 where > 0.05 so that it accepts H_0 or which means there is no serial autocorrelation problem.

Panel Data Regression Test Results

Table 10. Panel Data Regression Test Result Common Effect Model (CEM)

Dependent Variable: BTD Method: Panel Least Squares Date: 02/16/24 Time: 23:44 Sample: 2017 2021 Periods included: 5 Cross-sections included: 16 Total panel (balanced) observations: 80				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11.15201	4.644869	2.400931	0.0188
INS	-0.209234	0.096605	-2.165864	0.0335
MNJ	-0.771361	0.236430	-3.262537	0.0017
ROA	0.658894	0.286809	2.297326	0.0244
QTY	-0.363725	0.167397	-2.172834	0.0330

Source: Processed data, 2023

Based on table 10 above, the regression equation can be obtained as follows:

$$\text{BTD} = 11.152009266 - 0.209233800989 \cdot \text{INS} - 0.771360939944 \cdot \text{MNJ} + 0.658894247923 \cdot \text{ROA} - 0.36372503273 \cdot \text{QTY}$$

Information:

TD	=	Aggressiveness Pajak (Book Tax Difference)
NS	=	Institutional Ownership.
NJ	=	Managerial Ownership.
OA	=	Profitability (Return On Asset)
TY	=	Audit Quality.

Based on the regression results that can be interpreted the relationship between independent and dependent variables, both partially and simultaneously, the following explanation:

$$\text{BTD} = 11.152009266 - 0.209233800989 \cdot \text{INS} - 0.771360939944 \cdot \text{MNJ} + 0.658894247923 \cdot \text{ROA} - 0.36372503273 \cdot \text{QTY}$$

C	=	11.152009266 That is, if there is no change in institutional ownership, managerial ownership, profitability and audit quality included in the independent variable then the value of 11.152009266 as a constant value for the dependent variable.
INS	=	-0.209233800989 That is, any increase in institutional ownership will affect the decrease in tax aggressiveness by 0.209233800989.
MNJ	=	-0.771360939944 That is, any increase in managerial ownership will affect the decrease in tax aggressiveness by 0.771360939944.
ROA	=	0.658894247923 That is, any increase in profitability will affect the increase in tax aggressiveness by 0.658894247923.
QTY	=	-0.36372503273 That is, any increase in audit quality will affect the decrease in tax aggressiveness by 0.36372503273.

Discussion

Table 11. Testing of Regression Testing Results

Variable	Coefficient	Std. Error	t-Statistic	Prob	Conclusion	Influence on tax aggressiveness
C	11.1520	4,644869	2,400931	0,0188		
INS	-0,20923	0,096605	-2,16586	0,0335	H1 Diterima	Negative and partially significant effect
MNJ	-0,77136	0,236430	-3,26254	0,0017	H2 Diterima	Negative and partially significant effect

ROA	0,65889	0,286809	2,297326	0,0244	H3 Diterima	Negative and partially significant effect
QTY	-0,36373	0,167397	-2,17283	0,0330	H4 Diterima	Negative and partially significant effect

The Effect of Institutional Ownership on Tax Aggressiveness

Based on the results of the hypothesis test on the coefficient table, it shows that the institutional ownership variable has a significance level smaller than 0.05, which is 0.000. A positive notation on the value of the coefficient indicated by institutional ownership indicates that there is a negative influence of institutional ownership on tax aggressiveness. This can be interpreted as if the variable of institutional ownership increases, the value of tax aggressiveness will increase. This means that **this study supports the third hypothesis (H1)** or it can be stated that there is a negative influence of institutional ownership on tax aggressiveness.

The negative influence of institutional ownership on tax aggressiveness means that higher institutional ownership decreases tax aggressiveness. In agency theory, institutional ownership is considered as one of the corporate governance mechanisms that carry out effective monitoring of management. Institutional ownership is able to discipline and influence managers, thus forcing management to avoid opportunistic behavior. Opportunistic actions taken by management are one of minimizing the tax burden by all means to maximize profits. It can be argued that the higher proportion of institutional ownership will strengthen oversight of management, thereby reducing tax aggressiveness.

The results of this study are in line with research conducted by (Khurana et al., 2013; Krisna, 2019) which concludes that institutional ownership negatively affects tax aggressiveness. Likewise, the

results of research conducted by (Sunanti et al., 2020) stated that institutional ownership negatively affects tax aggressiveness. However, this is not in line with research conducted by (Fadhilah, 2014) which found that institutional ownership has no effect on tax aggressiveness.

The Effect of Managerial Ownership on Tax Aggressiveness

Based on the results of the hypothesis test on the coefficient table, it shows that the managerial ownership variable has a significance level smaller than 0.05, which is 0.011. A negative notation on the value of the coefficient indicated by managerial ownership indicates that there is a negative influence of managerial ownership on tax aggressiveness. This can be interpreted as, if the variable of managerial ownership increases, the value of tax aggressiveness will decrease. This means that **this study supports the second hypothesis (H2)** or it can be stated that there is a negative influence of managerial ownership on tax aggressiveness.

In other words, with the increase in the number of managerial holdings the tendency to engage in tax avoidance will be lower. This is because giving share ownership to managerial ranks will align the company's goals. That way the manager will consider every decision for the sake of the continuity of the company. This makes managers reduce high-risk actions such as tax avoidance. In agency theory, this is a form of agency conflict. The agency problem occurs because of the information asymmetry between *the principal* and *agent*.

These agency problems can harm the *principal* who is not directly involved in managing the company so that *the principal* only has limited access to information. One of the efforts to

reduce or minimize these conflicts is by implementing good corporate governance. Granting share ownership to managerial ranks as an effort to align company goals, where managers have the same interests as *principals*.

The results of this study are also in line with research conducted by Noorica & Asalam (2021), Nur & Subardjo (2020) and Sari et al. (2022), which stated that there is a negative influence of managerial ownership on tax aggressiveness. A high concentration of managerial ownership will make management in decision making more careful. This is because management as well as shareholders will also experience losses as well. Likewise, in making decisions to do tax avoidance that is considered too high risk. So, with the greater the managerial ownership in the company, the lower the corporate tax avoidance will be.

The effect of profitability on tax aggressiveness

Based on the results of the hypothesis test in the coefficient table, it shows that the variable *Return on Asset* (ROA) has a significance level smaller than 0.05, which is 0.000. A positive notation on the value of the coefficient indicated by *Return on Asset* (ROA) indicates that there is a positive effect of *Return on Asset* (ROA) on tax aggressiveness. This can be interpreted, if the variable *Return on Asset* (ROA) increases, the value of tax aggressiveness will increase. This means that **this study supports the third hypothesis (H3)** or it can be stated that there is a positive effect of *Return on Assets* (ROA) on tax aggressiveness.

Higher company profitability can cause companies to carry out careful tax planning so as to produce optimal taxes. Companies that are able to make large profits tend to want the taxes paid not too

large. This means that profitability is a determining factor against high and low tax avoidance. The relationship of profitability to the theory of agency in tax avoidance is that tax is a mandatory contribution to an individual or entity (company) (*agent*) deposited to the state (*principal*). The results of this study can illustrate that companies do not want to sacrifice part of the profits earned to be given to the state in the form of taxes. Therefore, the agent (company management) makes efforts to minimize tax payments.

The results of this study are in line with research conducted by Triyanti et al., (2020), Anggraeni & Oktaviani (2021) and Putri (2018) stating that there is a positive influence of *Return on Asset* (ROA) on tax aggressiveness. This means stating that companies with a high *Return on Asset* (ROA) ratio have the opportunity to position themselves by planning taxes, so as to reduce the amount of tax burden. Companies with good tax planning will get optimal profits, so the company's tendency to do tax avoidance will increase.

The Effect of Audit Quality on Tax Aggressiveness

Based on the results of the hypothesis test on the coefficient table, it shows that the audit quality variable has a significance level smaller than 0.05, which is 0.000. A positive notation on the value of the coefficient indicated by audit quality indicates that there is a negative influence of audit quality on tax aggressiveness. This can be interpreted as if the audit quality variable increases, the value of tax aggressiveness will increase. This means that **this study supports the third hypothesis (H4)** or it can be stated that there is a negative

effect of audit quality on tax aggressiveness.

The negative effect of audit quality on tax aggressiveness means that higher audit quality reduces tax aggressiveness. Audit quality proxied by *professional fees*, illustrates that the high cost of auditing will provide quality audit results. This is because high audit costs illustrate the reputation of KAP or auditors who are experienced in auditing. In agency theory, this audit fee is included in the cost of engineering to address agency issues. A quality audit report is a *red flag* for principals that there are unusual actions taken by *agents*. Therefore, the high quality of audits will reduce management's intention in carrying out tax avoidance actions.

The results of this study are in line with research conducted by (Gaaya et al., 2017) found that audit quality negatively affects tax aggressiveness. This is because auditors who have low ability and experience make it possible to engage in tax avoidance. In a study conducted by Maharani & Juliarto (2019) which found that auditors included in the *Big Four* have a low association with tax avoidance, because they are more concerned about reputational damage. Research conducted in Indonesia itself has found that audit quality has a negative and significant effect on tax aggressiveness (Damayanti & Susanto, 2016).

CONCLUSION AND SUGGESTION

Based on the description above, it can be concluded that the pattern of data that has been collected and the results of tests that have been carried out using Eviews 12 with the panel data regression analysis method show that first, institutional ownership has a negative and significant effect on tax

aggressiveness. Second, managerial ownership has a significant negative effect on tax aggressiveness. Third, profitability has a significantly positive effect on tax aggressiveness. Fourth, audit quality has a significant negative effect on tax aggressiveness

REFERENCES

- Amila, K., & Suryadi, K. (2014). Keefektifan Online Knowledge Sharing Behavior (Studi Kasus: Blended Learning Itb). *JRSI (Jurnal Rekayasa Sistem Dan Industri)*, 1(1), 129–136.
- Anggraeni, T., & Oktaviani, R. M. (2021). Dampak Thin Capitalization, Profitabilitas, dan Ukuran Perusahaan Terhadap Tindakan Penghindaran Pajak. *Jurnal Akuntansi Dan Pajak*, 21(2), 390–397.
- Astuti, E. P. (2020). *Manajemen Keuangan*. Dsanta Multivisitama.
- Damayanti, F., & Susanto, T. (2016). Pengaruh Komite Audit, Kualitas Audit, Kepemilikan Institusional, Risiko Perusahaan Dan Return on Assets Terhadap Tax Avoidance. *Esensi*, 5(2), 187–206. <https://doi.org/10.15408/ess.v5i2.2341>
- Gaaya, S., Lakhal, N., & Lakhal, F. (2017). Does family ownership reduce corporate tax avoidance? The moderating effect of audit quality. *Managerial Auditing Journal*, 32(7), 731–744.
- Guay, W. R., Kothari, S. P., & Watts, R. L. (1996). A market-based evaluation of discretionary accrual models. *Journal of Accounting Research*, 34, 83–105.
- Gujarati, D. N. (2004). *Basic Econometrics. Fourth Edition*. Mc Graw Hill/Irwin.2003.
- Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of*

- Accounting and Economics*, 50(2–3), 127–178.
- Hanlon, M., Krishnan, G. V., & Mills, L. F. (2012). Audit fees and book-tax differences. *Journal of the American Taxation Association*, 34(1), 55–86.
- Jensen, M., & Meckling, W. (2012). Theory of the firm: Managerial behavior, agency costs, and ownership structure. In *The Economic Nature of the Firm: A Reader, Third Edition* (pp. 283–303).
<https://doi.org/10.1017/CBO9780511817410.023>
- Kartikasari, N. F., Wibowo, A. S., & Kartikasari, N. F. (2020). *PROSEDUR PEMERIKSAAN LOPOGRAFI PADA KASUS POST COLOSTOMY*.
- Komite Nasional Kebijakan Governance (KNKG). (2015). Pedoman Good Corporate Governance Perusahaan. In *Pedoman GCG*.
- Kurniawan, A. (2018). *Metodologi penelitian pendidikan*. Remaja Rosda Karya.
- Lusida, M. A. P., Salamah, S., Jonatan, M., Wiyogo, I. O., Asyari, C. H., Ali, N. D., Asmara, J., Wahyuningtyas, R. I., Triyono, E. A., & Ratnadewi, N. K. (2022). Prevalence of and risk factors for depression, anxiety, and stress in non-hospitalized asymptomatic and mild COVID-19 patients in East Java province, Indonesia. *Plos One*, 17(7), e0270966.
- Maharani, W., & Juliarto, A. (2019a). Pengaruh Kepemilikan Keluarga Terhadap Tax Avoidance Dengan Kualitas Audit Sebagai Variabel Moderating. *Diponegoro Journal of Accounting*, 8(4), 1–10.
- Maharani, W., & Juliarto, A. (2019b). Pengaruh Kepemilikan Keluarga Terhadap Tax Avoidance Dengan Kualitas Audit Sebagai Variabel Moderating. *Diponegoro Journal of Accounting*, 8(4), 1–10.
- Mulawarman, W. G. (2020). Persoalan dosen dan mahasiswa masa pandemik Covid 19: Dari gagap teknologi hingga mengeluh boros paket data. *Prosiding Seminar Nasional Hardiknas*, 1, 37–46.
- Puspitaningtyas, D. M. (2019). Inventory and exploration of orchid in Polewali Mandar, West Sulawesi, Indonesia. *Biodiversitas Journal of Biological Diversity*, 20(7).
- Rukmana, P. A. (2018). *ANALISIS PENGARUH UKURAN PERUSAHAAN, MARGIN LABA KOTOR, VARIABILITAS PERSEDIAAN DAN RASIO PERPUTARAN PERSEDIAAN TERHADAP PEMILIHAN METODE AKUNTANSI PERSEDIAAN PADA PERUSAHAAN MANUFAKTUR DI BURSA EFEK INDONESIA*. Universitas Satya Negara Indonesia.
- Sugianto, D. (2019). *Mengenal soal Penghindaran Pajak yang Dituduhkan ke Adaro*. DetikFinance.Com.
- Sumardi, R., & Suharyono, S. (2020). *Dasar-dasar manajemen keuangan* (LPU-UNAS, Ed.).
- Suwiknyo, E. (2021a). Mayoritas Perusahaan Tambang Belum Transparan Soal Pajak. In *Bisnis.com* (p. 1).
- Suwiknyo, E. (2021b). Mayoritas Perusahaan Tambang Belum Transparan Soal Pajak. In *Bisnis.com* (p. 1).
- Triyanti, N. W., Titisari, K. H., & Dewi, R. R. (2020). Pengaruh Profitabilitas, Size, Leverage, Komite Audit, Komisaris Independen dan Umur Perusahaan

terhadap Tax Avoidance. *Jurnal Ilmiah Universitas Batanghari Jambi*, 20(1), 113–120.
<https://doi.org/10.33087/jiubj.v20i1.850>

Wijaya, A. (2019). Jalan Panjang Kasus Pajak KPC. In *Tempo.co* (pp. 1–2).