DIJEFA: Dinasti International Journal of Economics, Finance & Accounting
E-ISSN: 2721-303X
P-ISSN: 2721-3021
https://dinastipub.org/DIJEFA dinasti.info@gmail.com +62 811 7404 455

DOI: https://doi.org/10.38035/dijefa.v5i6

The Effect of Leverage, Profitability and Institutional Ownership on Tax Management with Company Size as a Moderating Variable (Case Study on Mining Companies Listed on the IDX in 2021-2023)

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Abstract: This study aims to analyze the effect of leverage, profitability and institutional ownership on tax management using company size as a moderating variable. The population of this study is all mining companies listed on the IDX in 2021-2023. Based on purposive sampling, 20 mining companies were used as samples in this study. This study is a quantitative study with descriptive statistical methods. The data in this study were processed using E-Views software. The results of the study indicate that leverage, profitability and institutional ownership have no effect on tax management. Company size can only moderate the effect of leverage on tax management. Company size weakens the effect of profitability on tax management. Company size cannot moderate the effect of institutional ownership on tax management. Company size can moderate the effect of leverage, profitability and institutional ownership on tax management.

Keywords: Leverage, Profitability, Institutional Ownership, Company Size, Tax Management

INTRODUCTION

Based on Law no. 28 of 2007 Article 1 paragraph (1) states that: "Tax is a mandatory contribution to the state owed by an individual or entity that is coercive based on the law, without receiving direct compensation and is used for state needs for the greatest prosperity of the people (Ariffin & Sitabuana, 2022). In practice, taxes have different interests between taxpayers (companies) and the government. For companies, taxes are a burden that can reduce net profit. Meanwhile, for the government, taxes are a source of state revenue that is used to fund all expenses including national development. According to Muniarti (2022) on (Satriyo et al., 2024) with these different interests, companies will carry out tax management to minimize the tax burden that must be paid to the state. According to Djuniar, (2019) on (Kantohe et al., 2023) tax management is a comprehensive effort carried out by tax managers in a company or organization so that matters related to taxation of the company or organization can be managed properly and efficiently so as to provide benefits to the company.

As quoted from www.finance.detik.com, one of the tax avoidance cases was carried out by PT. Adaro Energy Tbk. Adaro Energy carried out transfer pricing through a subsidiary in Singapore, namely Coaltrade Services International. Adaro is suspected of having arranged income or profit in 2019 in such a way that they only paid US$ 125 million in tax or equivalent to Rp1.75 trillion. This tax burden payment is lower than what must be paid in Indonesia. Adaro Energy sold coal to Coaltrade Services International at a lower price and then resold it to other countries at a higher price so that the tax imposed in Indonesia was smaller. The tax management practices carried out by PT. Adaro actually do not violate the law, but this method is considered unethical because the tax payments are smaller and less than optimal for state revenues. From the Adaro Energy case above, it can be seen that the company carries out tax management through a transfer pricing approach by transferring income or profit from the center to branches in Singapore. Shifting of profits from the center to the branch can be done and this does not violate the provisions of tax laws. So that tax management can be done as long as it does not violate the applicable tax provisions (Sugianto, 2019)

Agency theory states that there are costs that arise as a result of problems between agents and principals. The financial structure of company ownership, such as leverage, profitability, and institutional ownership, affects how companies manage taxes. Agency theory illustrates that in complex financial structures, such as companies with many shareholders, management has the potential and goals that are not in line with the interests of shareholders. According to Adams (1996) on (Bela & Kurnia, 2023)agency theory is the interaction between agents and principals in running a company. Agents are given the trust to manage the company in order to realize the hopes and desires of the principal.

The Effect of Leverage on Tax Management

Leverage is the first factor that is estimated to affect tax management. Kasmir (2014) on (Weny, 2023) stated that leverage can be measured using the Debt to Equity Ratio (DER). The higher the DER value, the riskier the company's condition. According to (Irmadina et al., 2022), leverage shows how much debt finances the company's assets and shows the level of security of the lender. Therefore, this analysis is very important for decisions about financial performance. Companies use debt to reduce taxable income. According to Djuniar (2019) on (Nurfitriani & Hidayat, 2021) companies use debt as a way to reduce taxable income because, when companies have high debt, they have to pay interest on their loans. The results of research conducted by (Afifah & Hasymi, 2020); (Susilo & Sari, 2022); (Mappadang et al., 2022) that leverage has a positive effect on tax management.

H1: Leverage has a positive effect on tax management

The Effect of Profitability on Tax Management

Profitability is a measure that assesses how effectively a company uses capital by comparing the operating profit generated and the capital employed. The impact of profitability on tax management is the extent to which profitabilityan organization can reduce its tax burden. According to (Afifah & Hasymi, 2020) profitability is measured by Return On Assets (ROA). The higher the ROA value, the better the company's performance. In taxation, this is used as the basis for imposing taxes that will be imposed on the company. Research by (Murniati, 2022); (Susilo & Sari, 2022) proves a positive effect on tax management.

H2: Profitability has a positive effect on tax management

The Effect of Institutional Ownership on Tax Management

Institutional ownership has an important meaning in monitoring management because with institutional ownership it will encourage more optimal supervision. This monitoring will certainly guarantee prosperity for shareholders, the effect of institutional ownership as a

supervisory agent is suppressed through their large investment in the capital market. Activities of shareholders who are larger than the company will have a greater tax avoidance effect for the benefit of the shareholders themselves. This is because shareholders who are larger than the company will intervene in management with the aim of minimizing the amount of corporate tax and increasing their own wealth. Institutional ownership can be measured by the ratio between the number of institutional shares and the number of shares outstanding. According to (Inviolita et al., 2022) and (Apriadi & Putra, 2023) concluded that institutional ownership has a significant effect on tax management.
H3: Institutional ownership has a positive effect on tax management.

The Role of Company Size in Moderating the Effect of Leverage on Tax Management

Company size is a scale of measurement of total net income and total assets during the current year to several years that can indicate the condition of the company. According to (Hanum & Manullang, 2022) the larger the company, the greater the opportunity for the company to carry out good tax management. Large-scale companies certainly have greater resources than small-scale companies.Company size can be measured by calculating the company's total assets. In (Agustin & Rely, 2023) they stated that leverage has a significant effect on tax management which is moderated by company size.
H4: Company size moderates the effect of leverage on tax management.

The Role of Company Size in Moderating the Effect of Profitability on Tax Management

Larger assets indicate the size of a company, the larger the assets owned by the company, the better its long-term prospects. According to (Alfiana, 2021) investors, creditors, and other users of financial statements will be more interested in companies with larger assets. Company Size can describe how small a company is which can be known by total assets or total net sales. The size of the company is described through the total assets owned by the company where the larger the total assets of a company, the greater the control and turnover of total assets. That large companies have extensive shares, but in capital expansion it has a small effect on the loss of control from the relevant party who has a very dominant effect. In the research of (Agustin & Rely, 2023) they stated that profitability has a significant effect on tax management which is moderated by company size.
H5: Company size moderates the effect of profitability on tax management.

The Role of Company Size in Moderating the Effect of Institutional Ownership on Tax Management

Company size can determine whether or not the company's performance is good. Investors usually have more confidence in large companies. This is because large companies are considered capable of continuing to improve their company's performance by trying to improve the quality of their profits. Large companies are also considered to have more information than small companies. Institutional owners have an important role in regulating, disciplining, and influencing. To reduce the chances of managers' behavior not acting selfishly, institutional owners have the right to vote to force managers to focus on economic performance in achieving company profits. With the company's responsibility to fiduciaries, institutional owners have an incentive to ensure that company management makes decisions that will maximize shareholder welfare so that they can encourage management to carry out tax management. According to research conducted by (Aulia & Purwasih, 2023), it shows that company size is not able to moderate the effect of institutional ownership on tax management. Based on this and what makes this study different from previous studies is that this study wants to test whether company size can be used as a moderating variable for the effect of institutional ownership on tax management.

H6: Company size moderates the effect of institutional ownership on tax management.

The Role of Company Size in Moderating the Effect of Leverage, Profitability and Institutional Ownership on Tax Management

In financial reporting, company size is very important, company size can be defined as a comparison of how big or small an organization's business is and the amount of assets it has. Company size is determined by how many assets the company has and how large it is so that the company can allocate its resources. Parties who have institutional ownership in the company's ownership structure are responsible for overseeing the company's management. The greater the institutional ownership in the company's ownership structure, the greater the encouragement and role of institutional voice in decision-making and encouragement for the company. The size of the company's activities can be seen through the size of the company, which in large companies can lead to tax avoidance loopholes. Institutional ownership is one factor that can effect tax avoidance. (Tahar & Rachmawati, 2020) stated that companies that have a high level of institutional ownership will have stricter supervision by shareholders, in order to prevent tax avoidance.

H7: Company size moderates the effect of leverage, profitability and institutional ownership on earnings management.

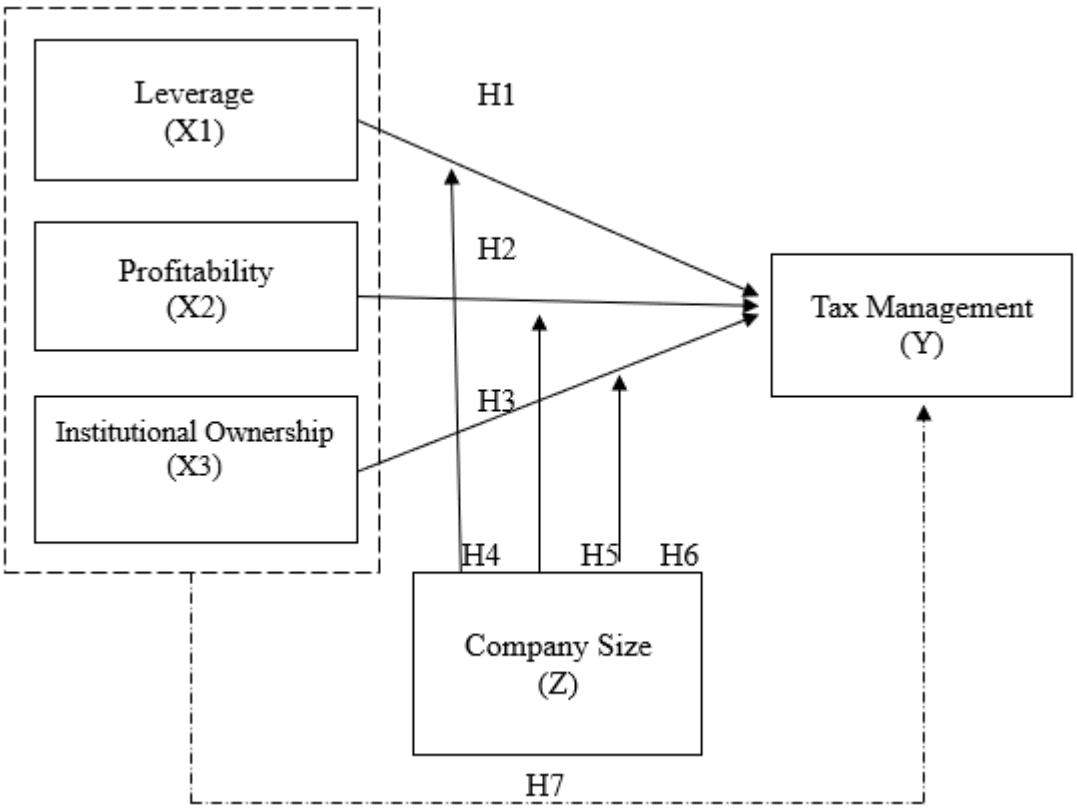


Figure 1. Framwork

METHOD

The type of research chosen by the researcher is quantitative, using descriptive statistical methods. Quantitative research is research that seeks the effect between independent variables and dependent variables. This study uses secondary data in the form of financial reports of coal mining sub-sector companies listed on the Indonesia Stock Exchange for the period 2021-2023 obtained from the IDX website, the data is processed using the E-views

program. The population in this study were all mining companies listed on the IDX in 2021 to 2023. Using purposive sampling, this study used a sample of 20 coal mining companies. Data analysis of this study includes normality tests, heteroscedasticity tests, multicollinearity tests, F tests, R^2 tests, panel data regression and partial t tests to test the hypothesis.

RESULTS AND DISCUSSION

Descriptive Statistics

Table 1. Descriptive Statistics

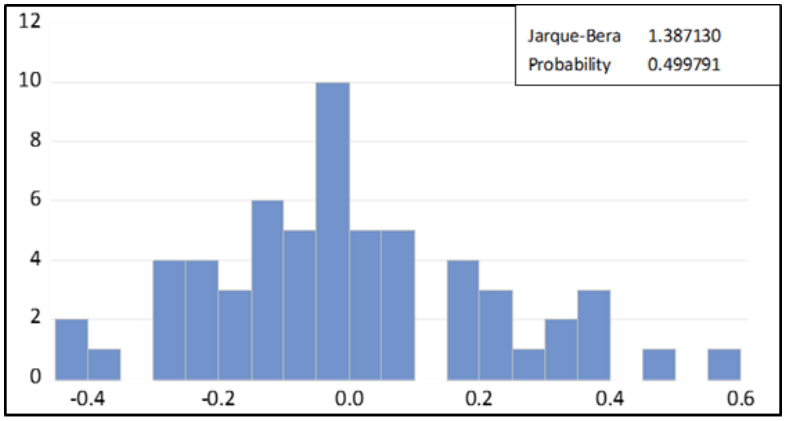
	ETR	DER	ROA	KI	Z
Mean	0.290961	1.294963	0.168888	0.076527	20.39396
Median	0.223548	0.588580	0.125537	0.028238	19.95955
Maximum	2.146863	34.33319	0.617597	0.577624	28.84608
Minimum	-0.221701	-14.39175	-0.092144	-0.075006	13.96275
Std. Dev.	0.404528	5.002268	0.173248	0.109598	3.884768
Skewness	3.219058	4.500511	1.147476	2.296714	0.586252
Kurtosis	14.01491	34.62427	3.561944	9.592995	2.598054
Jarque-Bera	406.9442	2702.782	13.95646	161.4179	3.840818
Probability	0.000000	0.000000	0.000932	0.000000	0.146547
Sum	17.45766	77.69780	10.13327	4.591620	1223.638
Sum Sq. Dev.	9.654938	1476.338	1.770886	0.708689	890.3938
Observations	60	60	60	60	60

Source: Research Result

From the descriptive statistical test, it can be seen that the average value (mean) of the tax management variable proxied by the effective tax rate (ETR) is 0.29. This shows that coal mining companies have an average ability of 29% in avoiding taxes during 2021-2023. In the leverage variable proxied by the debt to equity ratio (DER), the descriptive statistical test shows an average value of 1.294963. This shows that every Rp. 1 of capital owned by the company is used to finance Rp. 1,294963 of the company's liabilities. The maximum value of DER is 34.33 and the minimum value is -14.39. The standard deviation value of 5.00 is greater than the mean value. In the profitability variable proxied by return on assets (ROA), the descriptive statistical test shows an average value (mean) of 0.1688888. This shows that every Rp. 1 coal mining company asset can generate Rp. 0.16888888 profit. The maximum value of DER is 0.61 and the minimum value is -0.09. For the standard deviation of DER of 0.17 is greater than the average value (mean). In the institutional ownership variable proxied by institutional shares divided by outstanding shares, the descriptive statistical test obtained an average value of 0.0765, this indicates that the average institutional ownership in the sample companies is around 7.65%. The median of institutional ownership is 0.028238, which indicates that half of the companies have institutional ownership below 2.82% and the other half above that value. The maximum value of Institutional Ownership is 0.577624 (57.76%) and the minimum value is -0.075006 (-7.50%). The standard deviation is 0.109598, which indicates that there is significant variation in institutional ownership between companies. In the company size variable proxied by the natural logarithm (Ln), the descriptive statistical test shows an average value of 20.39, the maximum value of the Ln variable is 28.84 and the minimum value is 13.96.

For the standard deviation value of 3.88 below the average, meaning that Ln has a low level of data variation.

Normality Test



Source: Research Result

Figure 2. Normality Test

Based on the figure, it is known that the Jarque-Bera value is 1.387130 with a probability of 0.499791, so it can be concluded that this study has normally distributed data. Because the probability value of 0.49 is greater than 0.05.

Heteroscedasticity Test

Table 2. Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey Null hypothesis: Homoskedasticity			
F-statistic	1.393109	Prob. F(4,55)	0.2484
Obs*R-squared	5.519772	Prob. Chi-Square(4)	0.2380
Scaled explained SS	33.31657	Prob. Chi-Square(4)	0.0000

Source: Research Result

Based on the figure, it can be seen that the probability results show a value of 0.2380, which means it is greater than the significant value of 0.05. So, it can be concluded that in this study there is no heteroscedasticity problem

Multicollinearity Test

Table 3. Multicollinearity Test

Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.004954	2.113498	NA
X1	9.68E-05	1.085867	1.016584
X2	0.171328	4.242334	2.157410
X3	0.427495	3.222396	2.154267

Source: Research Result

Based on the table, the VIF value of each independent variable is less than 10. It can be concluded that there is no multicollinearity problem in this study.

Data Dimension Test

Common Effect Model (CEM)

Table 4. Common Effect Model (CEM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.302813	0.070383	4.302353	0.0001
X1	0.031518	0.009841	3.202845	0.0022
X2	-0.476163	0.413918	-1.150380	0.2549
X3	0.362633	0.653831	0.554628	0.5814

R-squared	0.184309	Mean dependent var	0.290961
Adjusted R-squared	0.140611	S.D. dependent var	0.404528
S.E. of regression	0.375011	Akaike info criterion	0.940616
Sum squared resid	7.875446	Schwarz criterion	1.080239
Log likelihood	-24.21847	Hannan-Quinn criter.	0.995230
F-statistic	4.217815	Durbin-Watson stat	2.065677
Prob(F-statistic)	0.009275		

Source: Research Result

With the adjusted R-squared value, it means that the R-squared value has been corrected by the standard error value. The adjusted R-squared value is obtained at 0.140611 while the standard error value is 0.375011. Furthermore, the R-squared value of 0.184309 is smaller than the standard deviation of the dependent variable, which is 0.404528. This shows that the independent variable is declared valid.

Fixed Effect Model (FEM)

Table 5. Fixed Effect Model (FEM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.278593	0.027431	10.15619	0.0000
X1	0.032708	0.018181	1.799044	0.0802
X2	-0.427862	0.103131	-4.148740	0.0002
X3	0.552399	0.261177	2.115034	0.0412

Effects Specification
Cross-section fixed (dummy variables)

Weighted Statistics			
R-squared	0.894150	Mean dependent var	1.244323
Adjusted R-squared	0.831212	S.D. dependent var	1.453172
S.E. of regression	0.346736	Sum squared resid	4.448350
F-statistic	14.20687	Durbin-Watson stat	2.272624
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.474254	Mean dependent var	0.290961
Sum squared resid	5.076044	Durbin-Watson stat	3.208947

Source: Research Result

With the adjusted R-squared value, it means that the R-squared value has been corrected by the standard error value. The adjusted R-squared value obtained is 0.831212 while the standard error value obtained is 0.346736. Furthermore, the adjusted R-squared is smaller when compared to the standard deviation value of the dependent variable, which is 1.4543172. This shows that the regression model as an independent variable is declared valid.

Random Effect Model

Table 6. Random Effect Model (REM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.302893	0.073273	4.133735	0.0001
X1	0.030504	0.009810	3.109569	0.0029
X2	-0.486528	0.421725	-1.153661	0.2535
X3	0.401630	0.667925	0.601310	0.5501
Effects Specification				
			S.D.	Rho
Cross-section random			0.092426	0.0600
Idiosyncratic random			0.365884	0.9400
Weighted Statistics				
R-squared	0.177403	Mean dependent var		0.266563
Adjusted R-squared	0.133336	S.D. dependent var		0.391173
S.E. of regression	0.364162	Sum squared resid		7.426378
F-statistic	4.025703	Durbin-Watson stat		2.181294
Prob(F-statistic)	0.011557			
Unweighted Statistics				
R-squared	0.184072	Mean dependent var		0.290961
Sum squared resid	7.877735	Durbin-Watson stat		2.056316

Source: Research Result

The adjusted R-squared value is smaller than the standard deviation of the dependent variable, which is 0.391173. This indicates that the regression model as an independent variable is declared valid.

Determination of Regression Model

Chow Test

Table 7. Chow Test

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.619282	(19,36)	0.1044
Cross-section Chi-square	37.060830	19	0.0078

Source: Research Result

Based on table 7 above, it can be seen that the probability value of the cross-section chi-square obtained a value of 0.0078. This value is smaller than the significance level of 0.05,

so it can be concluded that the fixed effect model (FEM) is better used compared to the common effect model (CEM).

Hausman test

Table 8. Hausman 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	11.254768	4	0.0238

Source: Research Result

Based on table 8 above, it is known that the value of the probability of the random cross-section obtains a value of 0.0238. This means that the value is smaller than the significance level of 0.05, so it can be concluded that the fixed effect model (FEM) is better used than the random effect model (REM). Because the results of the Chow test and the Hausman test are the same, there is no need to do a Lagrange multiplier test.

Partial Hypothesis Test

Table 9. Hypothesis Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.236196	0.016558	14.26436	0.0000
X1	-0.483468	0.117216	-4.124573	0.0002
X2	-0.496327	0.141145	-3.516444	0.0013
X3	1.021991	0.661488	1.544989	0.1319
X1Z	0.022007	0.004763	4.620143	0.0001
X2Z	-3.370341	0.636613	-5.294175	0.0000
X3Z	0.057155	0.045196	1.264602	0.2149
X1X2X3Z	0.154046	0.053156	2.897985	0.0066

Effects Specification

Cross-section fixed (dummy variables)

Weighted Statistics

R-squared	0.999151	Mean dependent var	2.038834
Adjusted R-squared	0.998482	S.D. dependent var	7.509258
S.E. of regression	0.237787	Sum squared resid	1.865914
F-statistic	1493.875	Durbin-Watson stat	2.987222
Prob(F-statistic)	0.000000		

Source: Research Result

The Effect of Leverage on Tax Management

The first hypothesis (H1) in this study is to test whether Leverage (X1) has an effect on tax management (Y). In table 9, leverage obtains a regression coefficient value of -0.483468 table with a negative beta direction. Then the t-statistic value is obtained at -4.124573. The probability value of company size shows a value of 0.0002, this shows that the probability value of leverage is less than 0.05. This means that leverage has a negative effect on tax

management. Thus, the first hypothesis stating that leverage has a positive effect on tax management is rejected.

The Effect of Profitability on Tax Management

The second hypothesis (H2) in this study is profitability, which aims to test how profitability (X2) affects tax management (Y). In table 9, profitability obtains a regression coefficient value of -0.496327 with a negative beta direction. Then the t-statistic value is obtained -3.516444. The probability value of the profitability variable shows a value of 0.0013, this shows that the probability value of the profitability variable is less than 0.05. This means that the profitability variable has a negative effect on tax management. Therefore, the second hypothesis stating that the profitability variable has a positive effect on tax management is rejected.

The Effect of Institutional Ownership on Tax Management

The third hypothesis (H3) proposed in this study is to test wether the institutional ownership (X3) has a positive effect on tax management (Y). In table 9, institutional ownership obtains a regression coefficient value of 1.021991 with a positive beta direction. Then the t-statistic value is obtained at 1.544989. The probability value of institutional ownership shows a value of 0.1319, this shows that the probability value of institutional ownership is greater than 0.05. This means that institutional ownership does not affect tax management. Therefore, the third hypothesis stating that company size has a positive effect on tax management is rejected.

The Role of Company Size in Moderating the Effect of Leverage on Tax Management

The fourth hypothesis (H4) in this study is that company size moderates the effect of leverage on tax management. Based on table 9, it is known that leverage moderated by company size has a regression coefficient value of 0.022007 with a positive beta direction. The probability value of the company size variable moderating leverage on tax management is 0.0001. This value is lower than the significance value of 0.05. So it can be concluded that company size can moderate the effect of leverage on tax management. Therefore, the fourth hypothesis stating that company size moderates the effect of leverage on tax management is accepted.

The Role of Company Size in Moderating the Effect of Profitability on Tax Management

Based on table 9, it is known that the probability value of the company size variable that moderates profitability on tax management is 0.0000. This value is lower than the significance value of 0.05. The coefficient value is -3.370341 (negative). So it can be concluded that company size can weaken the effect of profitability on tax management. Therefore, the fifth hypothesis (H5) which states that company size moderates the effect between profitability and tax management is rejected.

The Role of Company Size in Moderating the Effect of Institutional Ownership on Tax Management

Based on table 9, it is known that the probability value of the company size variable that moderates institutional ownership on tax management is 0.2149. This value is higher than the significance value of 0.05. So it can be concluded that company size cannot moderate the effect of institutional ownership on tax management. Therefore, the sixth hypothesis (H6) which states that company size moderates the effect between profitability and tax management is rejected.

The Role of Company Size in Moderating the Effect of Leverage, Profitability and Institutional Ownership on Tax Management

Based on table 9, it is known that the probability value of the company size variable that moderates leverage, profitability and institutional ownership on tax management is 0.0066. This value is lower than the significance value of 0.05. The regression coefficient value is 0.154046 with a positive beta direction. So it can be concluded that company size can moderate the effect between leverage, profitability and institutional ownership on tax management. So, the seventh hypothesis which states that company size moderates the effect between leverage, profitability and institutional ownership on tax management is accepted.

F Test (Stimultan)

Table 10. Stimultan Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.236196	0.016558	14.26436	0.0000
X1	-0.483468	0.117216	-4.124573	0.0002
X2	-0.496327	0.141145	-3.516444	0.0013
X3	1.021991	0.661488	1.544989	0.1319
X1Z	0.022007	0.004763	4.620143	0.0001
X2Z	-3.370341	0.636613	-5.294175	0.0000
X3Z	0.057155	0.045196	1.264602	0.2149
X1X2X3Z	0.154046	0.053156	2.897985	0.0066
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.999151	Mean dependent var		2.038834
Adjusted R-squared	0.998482	S.D. dependent var		7.509258
S.E. of regression	0.237787	Sum squared resid		1.865914
F-statistic	1493.875	Durbin-Watson stat		2.987222
Prob(F-statistic)	0.000000			

Source: Research Result

Based on table 10, it can be seen that the probability value of f-statistic of 0.000000 is lower than the significance value of 0.05. This shows that the independent variable can affect the dependent variable. So it can be concluded that leverage, profitability and institutional ownership have a simultaneous effect on tax management.

R^2 Test

Table 11. R^2 Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.236196	0.016558	14.26436	0.0000
X1	-0.483468	0.117216	-4.124573	0.0002
X2	-0.496327	0.141145	-3.516444	0.0013
X3	1.021991	0.661488	1.544989	0.1319
X1Z	0.022007	0.004763	4.620143	0.0001
X2Z	-3.370341	0.636613	-5.294175	0.0000
X3Z	0.057155	0.045196	1.264602	0.2149
X1X2X3Z	0.154046	0.053156	2.897985	0.0066
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.999151	Mean dependent var		2.038834
Adjusted R-squared	0.998482	S.D. dependent var		7.509258
S.E. of regression	0.237787	Sum squared resid		1.865914
F-statistic	1493.875	Durbin-Watson stat		2.987222
Prob(F-statistic)	0.000000			

Source: Research Result

Based on table 11, it is known that the Adjusted determination coefficient (R-squared) value is 0.998482. This shows that Tax Management can be explained by leverage, profitability and institutional ownership by 99.84%, the remaining 0.16% is effectd by other variables not examined in this study.

Discussion of Research Results

Leverage has an effect on tax management. Therefore, the first hypothesis (H1) stating that leverage has a positive effect on tax management is rejected. This result implies that leverage is not always a significant factor in tax management efforts, especially if the company does not have enough flexibility to utilize debt as a tax deduction. Thus, companies may focus more on other factors such as profitability or company size in determining their tax management policies. This result does not support the research conducted by (Afifah & Hasymi, 2020) and (Susilo & Sari, 2022) that stated leverage has a positive effect on tax management. This research is in line with research conducted by (Kantohe et al., 2023) that stated leverage has no effect on tax management.

Profitability has a negative effect on tax management. Therefore, the second hypothesis (H2) stating that the profitability variable has a positive effect on tax management is rejected. Companies with high profitability tend to have good operational performance and may focus more on activities that improve operational efficiency than on tax management. In this context, companies prioritize internal performance improvement strategies rather than focusing on reducing tax burdens through tax management practices. This result is not in line with research conducted by (Murniati, 2022) that stated profitability has a positive effect on tax management. This result is in line with research conducted by (Tholibin et al., 2022) that concluded profitability has no effect on tax management.

Institutional ownership does not have a significant effect on tax management. Therefore, the third hypothesis (H3) stating that company size has a positive effect on tax management is rejected. This finding indicates that company with a high proportion of institutional ownership does not always have more proactive and effective tax management. In this context, institutional ownership plays an important role in directing tax management policies. This result is not in line with research conducted by (Inviolita et al., 2022) and (Apriadi & Putra, 2023) that concluded institutional ownership has a significant effect on tax management. This research is in line with research conducted by (Riny, 2024) that stated institutional ownership has no effect on tax management.

Company size can moderate the effect of leverage on tax management. Therefore, the fourth hypothesis (H4) stating that company size moderates the effect of leverage on tax management is accepted. This study is in line with agency theory, where the level of leverage management is related to the way a company funds its operations, using more debt or capital from shareholders. Leverage shows how much of a company's assets are financed by debt and is an indication of the security of the guarantors. Companies use debt as a mechanism to reduce taxable income because when a company has high debt, the company has an obligation to pay interest on its loans. This result is in line with research conducted by (Agustin & Rely, 2023) stated that leverage has a significant effect on tax management which is moderated by company size.

Company size can weaken the effect of profitability on tax management. Therefore, the fifth hypothesis (H5) which states that company size moderates the effect of profitability on tax management is rejected. This study is in line with agency theory, in this theory shareholders are assumed to be interested in increasing financial results from their investment in the company. In this case, shareholders expect high dividend distribution. The higher the return on assets (ROA), the better the company's performance. The higher the income, the higher the tax burden that must be paid. This result is not in line with research conducted by (Agustin & Rely,

2023) that stated profitability has a significant effect on tax management which is moderated by company size.

Company size cannot moderate the effect of institutional ownership on tax management. Therefore, the sixth hypothesis (H6) stating that company size moderates the effect of profitability on tax management is rejected. In the context of agency theory, institutional ownership is generally considered as a monitoring mechanism for management, because institutional shareholders usually have sufficient power and incentives to ensure that management makes decisions that support the interests of shareholders. However, the results of this study indicate that monitoring by institutional ownership is not always strengthened by company size, especially in terms of tax management. This result is in line with research conducted by (Aulia & Purwasih, 2023) that stated company size can not moderate the effect of institutional ownership on tax management.

Company size can moderate the effect between leverage, profitability and institutional ownership on tax management. Therefore, the seventh hypothesis (H7) which states that company size moderates the effect between leverage, profitability and institutional ownership on tax management is accepted. Overall, company size moderation strengthens the effect of leverage, profitability and institutional ownership on tax management because larger firms have more tools and flexibility to design tax policies.

CONCLUSION

The results of this study conclude that leverage and profitability have a negative effect on tax management. Institutional ownership has no effect on tax management. Company size can moderate the effect of leverage on tax management. Company size can weaken the effect of profitability on tax management. Company size cannot moderate the effect of institutional ownership on tax management. Company size can moderate the effect of leverage, profitability and institutional ownership simultaneously on tax management. Researchers provide advice to companies to increase leverage because it is moderated by company size on tax management so that companies can plan and control tax aspects from the right side and can benefit the company's business value. This study has limitations related to sampling because it only examines mining companies listed on the IDX in 2021-2023. Researchers suggest that further research can expand sampling and consider the use of other financial ratios as independent variables.

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