Yunita Sukma Ayu

by Lee.jieun030101@gmail.com 1

Submission date: 14-Jul-2025 03:33AM (UTC-0400)
Submission ID: 2659377828
File name: Yunita_Sukma_Ayu_05-tinggal_similiarity-_kirim_Sabtu.docx (308.61K)
Word count: 4936
Character count: 28153

Impact of Managerial Ownership, Firm Size, Free Cash Flow, Leverage, and Profitability on Earnings Management in Indonesian Infrastructure Firms

Yunita Sukma Ayu Wandirah[1)*], Etty Herijawati[2)]

[1)]yunitaayuwandirah@gmail.com [2)] etty.herijawati@ubd.ac.id

Keywords:

Company Size;
Free Cash Flow;
Leverage;
Managerial Ownership;
Profitability

ABSTRACT

Companies frequently use earnings management as a tactic to sway financial reports, so that it can have an impact on decision making by stakeholders. This phenomenon is of particular concern in the rapidly growing infrastructure sector in Indonesia. This study's objective is to gather empirical data about the impact of managerial ownership, company size, free cash flow, leverage, and profitability on earnings management. The research sample is infrastructure companies that went public on the Indonesia Stock Exchange between 2020 and 2023. 56 firm-year observations in all and 14 selected businesses were obtained through the application of the purposive sampling method. Descriptive statistics, multiple linear regression analysis, traditional assumption tests, and hypothesis testing are all included in SPSS version 25, which was used to analyze the data. The outputs of the study show that management ownership has a 0.739 significant value, company size 0.079, free cash flow 0.020, leverage 0.116, and profitability 0.003. These findings indicate that managerial ownership, company size, and leverage do not have a significant effect on earnings management, while free cash flow and profitability have a significant effect on earnings management.

INTRODUCTION

Financial statements are a primary tool for assessing the performance of a business and financial condition. Profit is a crucial element as it serves as an indicator of operational success, a basis for dividend distribution, and a consideration in investment decision-making. However, the pressure to demonstrate good performance often drives management to engage in earnings management—manipulating profits through certain accounting policies that remain within permissible accounting guidelines. This practice can mislead stakeholders and reduce the reliability of financial information. This phenomenon is reflected in the case of PT Wijaya Karya

(WIKA), which is suspected of manipulating its financial reports to present the company as profitable, despite having negative operating cash flow and recording significant losses.

Earnings management practices are not independent but are impacted by a number of internal financial variables. Factors such as managerial ownership, company size, free cash flow, leverage, and profitability are often the focus in the literature, as They are thought to support management's decisions to engineer reported earnings. Based on previous research by (Vini Saferiya et al., 2024), managerial ownership does not have a major impact on earnings management. However, the results of this study contradict those of (Aburisheh et al., 2022), who discovered that managerial ownership had a big impact on earnings management. Similarly, research by (Sriayuni Pebrianti & Ayi Mohamad Sudrajat, 2023)suggests that company size does not significantly influence profit management, but other studies, such as (Kusumawardana & Haryanto, 2019), concluded that company size does have a significant effect on profit management. Regarding free cash flow (Santoso, 2023) found that free cash flow has a major detrimental impact on earnings management, which contrasts with the findings(Bailaen & Nugroho, 2023), who found no discernible effect. Furthermore, (Damayanti et al., 2024) supports the idea that leverage has no significant effect on earnings management, while studies by (Joe & Ginting, 2022) argue the opposite, showing a significant impact of leverage on earnings management. Lastly, studies such as (Charen Carolin et al., 2022), found a significant effect of profitability on earnings management, further highlighting the complex nature of these financial determinants (Vini Saferiya et al., 2024).

This study aims to empirically examine the effect of managerial ownership, company size, free cash flow, leverage, and profitability on earnings management in infrastructure firms that were listed between 2020 and 2023 on the Indonesia Stock Exchange (IDX).

This study examines the influence of managerial ownership, firm size, free cash flow, leverage, and profitability on earnings management. High managerial ownership may reduce earnings management due to aligned interests. Larger firms tend to face greater public scrutiny, limiting the opportunity for manipulation. High free cash flow allows managerial discretion, increasing the risk of opportunistic behavior. High leverage puts pressure on firms to maintain financial appearance. Meanwhile, low profitability may encourage managers to take part in earnings management to send positive signals.

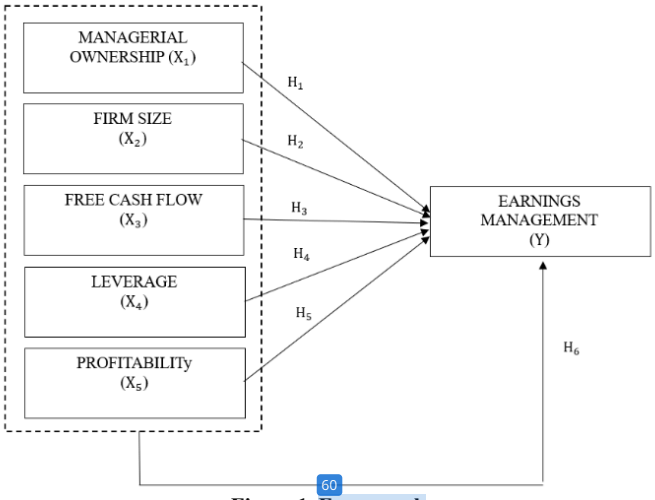

Figure 1. Framework

Based on the literature review and conceptual framework, the proposed hypotheses are as follows:

H1: Managerial ownership has an influence on earnings management.
H2: Company size has an influence on earnings management.
H3: Free cash flow has an influence on earnings management.
H4: Leverage has an influence on earnings management.
H5: Profitability has an influence on earnings management.

RESEARCH METHOD

This quantitative study's objective is to elucidate how independent variables affect the dependent variable. The financial statements of firms in the infrastructure industry that were listed between 2020 and 2023 on the Indonesia Stock Exchange (IDX) are examined in this study. In this study, the dependent variable is earnings management as determined by Discretionary Accrual (DA), while the independent factors are Managerial Ownership (KM), Company Size (SIZE), Free Cash Flow (FCF), Leverage (DER), and Profitability (NPM).

The population in this study is all infrastructure sector companies listed on the IDX during 2020–2023, totaling 14 companies. The sample was selected using the purposive sampling method with certain criteria, namely:

Table 1. Criteria Table

No.	Criteria	Data
1.	The Indonesia Stock Exchange lists firms in the infrastructure industry.	67
2.	Infrastructure sector companies listed on the Indonesia Stock Exchange consistently during the 2020-2023 period.	(10)
3.	Infrastructure sector companies that experienced losses during the 2020-2023 period.	(24)

4.	company in the infrastructure sector that did not use the rupiah between 2020 and 2023.	(2)
5.	Infrastructure sector companies that have incomplete data for research	(11)
	Number of Samples Based on Criteria	**20**
	Outliers	(6)
	Number of samples	**14**
	Research year period	**4**
	Total Sample During Research Period	**56**

Table 2. Operational variables

No.	Indicator Variable	Formula	Scale
1	Managerial Ownership (Percentage of shares owned by company management)	$KM = Manajemen\ shares\ /total\ oustanding)x100$ Source = (Dita Prada Claudia et al., 2023)	Ratio
2	Firm Size (Natural logarithm of the company's total sale)	$SIZE = Ln(Sales)$ Source = (Salsa Ramadina & Setiawati, 2025)	Ratio
3	Free Cash Flow (The company's free cash flow)	$FCF = (OCF - ICF)/Total\ ASEET$ Where : OCF (Operation Cash Flow) ICF (Investment Cash Flow) Source = (Irawan & Apriwenni, 2021)	Ratio
4	Leverage (Ratio of total debt equity)	$DER = Total\ Debt\ /\ Total\ Equity$ Source = (Dwi Urip Wardoyo et al., 2023)	Ratio
5	Profitability (Net profit compared to total revenue)	$NPM = Net\ Profit\ /\ Revenue$ Source = (Indrati & Magfiroh, 2023)	Ratio
6	Earnings Management (Discretionary accruals based on the Modified Jones model)	$DA = TA - NDA$ Source = (Tatar & Sujana, 2021)	Ratio

To ascertain relationship between variables, this study used a quantitative methodology. The secondary data used was gathered via documentation approaches from the Indonesia Stock Exchange's official website (www.idx.co.id) and other relevant publications, such as books, journals, and financial reports. IBM SPSS version 25 was used for data analysis. Methods of Data Analysis: Using the Ordinary Least Square (OLS) technique for Multiple Linear Regression Analysis; Hypothesis Tests with F tests (simultaneous), t tests (partial), and coefficients of determination (R2); and Autocorrelation, heteroscedasticity, multicollinearity, and normality tests are examples of classical assumption tests. Model of Regression The regression model is configured as follows to examine how independent variables affect earnings management (discretionary accruals):

$$DA = \alpha + \beta 1KM + \beta 2SIZE + \beta 3FCF + \beta 4DER + \beta 5NPM + \varepsilon \ . \quad \textbf{(1)}$$

The following is how hypothesis testing is assessed: F-test: To assess the simultaneous effect of KM, SIZE, FCF, DER, and NPM on earnings management. A significance level (Sig.) < 0.05 indicates a significa T-test for simultaneous effect: To ascertain each independent variables partial impact. A significance level (Sig.) < 0.05 indicates a significant individual effect, Coefficient of Determination (R^2): to evaluate the independent variables' capacity to

explain the dependent variable. A higher R^2 value indicates a stronger explanatory capacity of the model.

RESULTS AND DISCUSSION

Outlier Test

Table 3. Outlier Test

Casewise Diagnostics[a]

Case Number	Std. Residual	ML	Predicted Value	Residual
13	6.753	1.38	.0252	1.35665

a. Dependent Variable: ML

Source: SPSS 25 data processing results

The outlier test results using Casewise Diagnostics output show that there is one data identified as an outlier, namely in case 13 with a standardized residual value of 6.971, which exceeds the limit of ±3. This indicates that the data deviates significantly from the general pattern of the regression model and can affect the validity of the estimation results. Therefore, this outlier data needs to be considered further in the analysis process.

Analysis of Descriptive Statistics

Table 4. Analysis of Descriptive Statistics

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Earnings Management	56	.19898	-.07879	.12019	.0030168	.04070753
Managerial Ownership	56	.79289	.00000	.79289	.0939774	.21696576
Firm Size	56	7.61599	25.67466	33.29065	29.8169075	2.14416473
Free Cash Flow	56	.55385	-.14466	.40918	.1304557	.13343222
Leverage	56	2.79931	.00025	2.79956	.7038451	.75861395
Profitability	56	.54265	.00219	.54484	.1592535	.15199715
Valid N (listwise)	56					

The discretionary accruals (DA) variable has an average value of 0.0030 and a standard deviation of 0.0407, according to the descriptive statistics. This shows that the DA values, which range from a minimum of -0.07879 to a maximum of 0.12019, are reasonably close to the mean. With a mean of 0.0939 and a standard deviation of 0.2170, the managerial ownership variable reveals significant variation among the enterprises under observation. This variable's lowest value is -0.00000, and its highest value is 0.79289, indicating notable variations in managers' levels of ownership.

The standard deviation of the company size variable is 2.1442, and its average is 29.8169. Significant variance in firm scale is indicated by the range of values, which range from 25.6747 to 33.2907. In the meantime, the free cash flow variable has a standard deviation of 0.1334 and a mean of 0.1305. Its values, which vary from -0.14466 to 0.40918, show how much cash a variety of businesses can make after capital and operating expenses.

The leverage variable has a very high standard deviation of 0.7586 and an average of 0.7038. There is a wide range in the capital structure of businesses, especially in terms of their dependence on debt financing, as indicated by the smallest and maximum leverage values of 0.00025 and 2.79956, respectively. Finally, the profitability variable shows values ranging from 0.00219 to 0.54484, with a mean of 0.1593 and a standard deviation of 0.1520. This points to

significant variations in businesses' capacity to produce profits, which may be a major factor in determining their financial behavior, including earnings management.

Classical Assumption Test

Normality test

Table 5. Normality Test

One-Sample Kolmogorov-Smirnov Test			
			Unstandardized Residual
N			56
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		.03592203
Most Extreme Differences	Absolute		.090
	Positive		.069
	Negative		-.090
Test Statistic			.090
Asymp. Sig. (2-tailed)			.200[c,d]
Monte Carlo Sig. (2-tailed)	Sig.		.725[e]
	99% Confidence Interval	Lower Bound	.714
		Upper Bound	.737

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
e. Based on 10000 sampled tables with starting seed 2000000.

Analyzing the outcomes of the One Sample Kolmogrov Smirnov test, it shows significant results because it meets the assumption test according to the standard or criteria for normality. In the Asymp. Sig (2-tailed) column, it is 0.200, which is greater than 0.05, indicating that the regression model is normally distributed.

Linearitas Test

Managerial Ownership

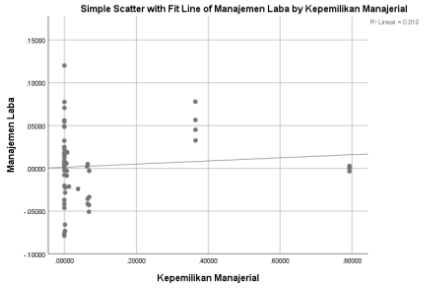

Figure 2. Linearitas Test Managerial Ownership

Linearity test is conducted using scatterplot between the independent variable Managerial Ownership and dependent variable Earnings Management. From the scatterplot result, it appears

that the pattern of data points is spread around the linear regression line with a small slope. The linear R^2 value of 0.010 indicates that the relationship between Managerial Ownership and Earnings Management is linear although its strength is low. Thus, the linearity assumption for this variable is acceptable.

Firm Size

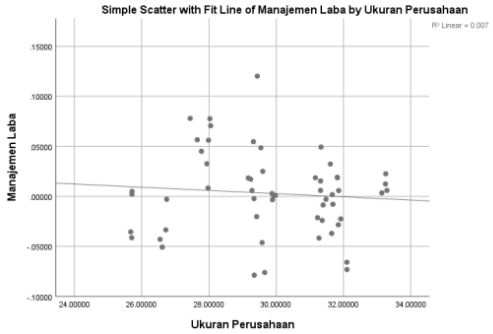

Figure 3. Linearitas Test Firm Size

The scatterplot results for the variable Company Size on Earnings Management also show a nearly linear pattern with a very small slope of the regression line and a Linear R^2 value of 0.007. This indicates that the relationship between Company Size and Earnings Management is linear although its strength is very weak. Thus, the linearity assumption for the variable Company Size is acceptable in this regression analysis.

Free Cash Flow

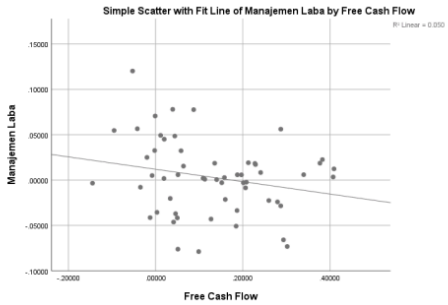

Figure 4. Linearitas Test Free Cash Flow

The scatterplot results for the Free Cash Flow variable against Earnings Management show a linear pattern with a slightly decreasing fit line and a Linear R^2 value of 0.050. This indicates that the relationship between Free Cash Flow and Earnings Management is linear,

although the strength of the relationship is quite weak. Thus, the linearity assumption for the Free Cash Flow variable is acceptable in this regression analysis.

Leverage

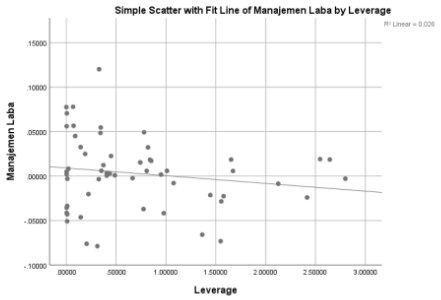

Figure 5. Linearitas Test Free Leverage

The scatterplot results for the Leverage variable against Earnings Management show a fit line with a negative slope and a Linear R^2 value of 0.026. This suggests that leverage and earnings management have a weakly negative linear connection. Accordingly, the greater the leverage, the earnings management tends to decrease slightly, but this relationship is not very strong.

Profitability

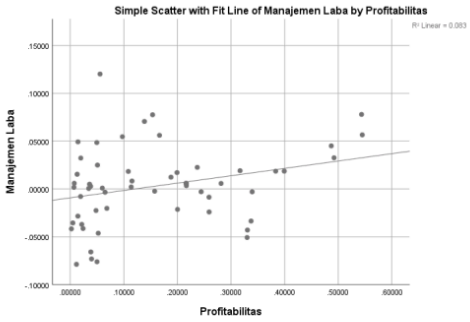

Figure 5. Linearitas Test Free Profitability

From the scatterplot showing the relationship between Profitability and Earnings Management, a fit line with a positive slope and a Linear R^2 value of 0.083 is seen. This shows that there is a fairly weak positive linear relationship between profitability and earnings management, meaning that the higher the profitability, the tendency for earnings management to also increase slightly.

Multicollinearity Test

Table 6. Multicollinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-.175	.100		-1.756	.085		
	Earnings Management	-.008	.025	-.044	-.335	.739	.888	1.126
	Managerial Ownership	.006	.003	.327	1.790	.079	.467	2.141
	Firm Size	-.111	.046	-.364	-2.411	.020	.684	1.463
	Free Cash Flow	-.015	.009	-.271	-1.600	.116	.541	1.848
	Leverage	.119	.037	.445	3.180	.003	.795	1.258

Based on the coefficients table with the test results for the managerial ownership VIF value of 2.795. The company size VIF value is 2.274. The free cash flow VIF value is 1.902. The leverage VIF value is 1.944 and the profitability VIF value is 3.084. The VIF values of the five independent variables above are between 1-10, which means that it can be concluded that there is no multicollinearity.

Heteroscedasticity Test

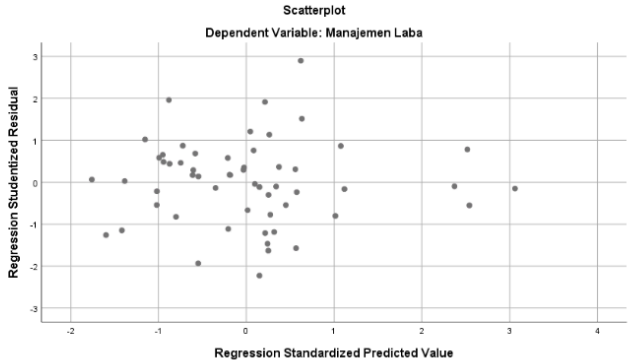

Figure 6. Heteroscedasticity Test

The data points in the scatterplot graph are randomly distributed above and below zero on the Y-axis and do not form any specific pattern, according to the findings of the heteroscedasticity test. either a narrowing or widening pattern. This random distribution pattern indicates that the residual variance is constant (homoscedastic), which means that there is no indication of heteroscedasticity symptoms in the regression model. Thus, the classical assumptions regarding homoscedasticity are met and the regression model used in this study can be declared feasible and valid for use in hypothesis testing and drawing statistical conclusions.

Autocorrelation Test

Table 7. Autocorrelation Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.470[a]	.221	.143	.03767534	1.440

Based on the results in Table IV.12, it is known that the Durbin-Watson (DW) test value is 1.440. With the number of independent variables (k) and sample size (n) used in this study, the lower limit value (dl) is 1.3815 and the upper limit (du) is 1.7678. Because the DW value is between dl < DW < du (1.3815 < 1.440 < 1.7678), then according to the Durbin-Watson criteria, it can be concluded that the test results do not provide certainty of positive autocorrelation. This means that this condition is included in the indecision area. However, because the DW value is close to the upper limit and does not show strong autocorrelation symptoms, the regression model can still be considered suitable for use, although it is advisable to be careful in interpreting the results and consider additional tests if necessary.

Test of Multiple Linear Regression

Table 8. Test of Multiple Linear Regression

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	-.175	.100		-1.756	.085
	Earnings Management	-.008	.025	-.044	-.335	.739
	Managerial Ownership	.006	.003	.327	1.790	.079
	Firm Size	-.111	.046	-.364	-2.411	.020
	Free Cash Flow	-.015	.009	-.271	-1.600	.116
	Leverage	.119	.037	.445	3.180	.003

a. Dependent Variable: Manajemen Laba

The multiple linear regression equation above has the following meaning:

$$DA = -0{,}175 - 0{,}008\ (MO) + 0{,}006\ (FS) - 0{,}111(FCF) - 0{,}015(LV) + 0{,}019(PR) + e \quad \textbf{(2)}$$

Where DA is discretionary accruals, used as a proxy for earnings management, MO is managerial ownership, FS is Firm size, FCF is free cash flow, LV is leverage, PR is profitability, and e is the error term.

The constant value is -0.175, meaning that if managerial ownership company size, free cash flow, company size, leverage, and profitability is 0, then other earnings management is -0.175. Value of the coefficient of managerial ownership (X1) has a value of -0.008, meaning that it can be interpreted that if managerial ownership increases by one unit, then earnings management will decrease by 0.008. when management owns more shares, they tend to prefer to use internal resources to fund business operations, thus decreasing earnings management.

The value of the company size coefficient (X2) has a value of 0.006, meaning that it can be interpreted that if the company size increases by one unit, then profit management will

experience an increase of 0.006. This shows that larger companies have more resources or assets to influence financial statements.

The value of the free cash flow coefficient (X3) has a value of -0.111, meaning that it can be interpreted that if free cash flow increases by one unit, then profit management will experience a decrease of 0.111. free cash flow has an effect because when a company has high free cash flow, the more cash flow is used. This will allow for the freedom of profit management to occur

The value of the leverage coefficient (X4) has a value of -0.015, meaning that it can be interpreted that if leverage increases by one unit, then profit management will experience a decrease of 0.015. low leverage indicates that the Company has a high amount of loans to finance the Company, the more the company uses its debt, the lower the company's earnings management.

Finally, the profitable relationship is indicated by the profitability coefficient (X5) which is 0.119. Earnings management must grow by 0.119 units for every unit increase in profitability. This indicates that companies that have more incentives or profits tend to use earnings management techniques.

The R^2 or R Square (determination coefficient test)

The Determination Coefficient Test (R^2) gauges how well the model can elucidate variations in the dependent variable (Imam Ghozali, 2018).

Table 9. The R2 or R Square (determination coefficient test)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.470[a]	.221	.143	.03767534

The level of influence caused by the variables of managerial ownership, free cash flow, company size, leverage, and profitability. In the Adjusted R Square column, a figure of 0.143 or 14.3% is obtained, meaning that the Adjusted R^2 value is close to 1, which means that the independent variables, namely managerial ownership, company size, free cash flow, leverage, and profitability in 95% explain the dependent variable. The remainder 85.7% is explained by independent factors not included in this study model, such as sales growth, debt policy, net financial, and dividend policy.

This research adds to the existing body of literature by enhancing comprehension of the functions of free cash flow and profitability in influencing earnings management, particularly within the context of infrastructure companies in Indonesia—an area that has been relatively underexplored in prior research. The findings offer practical implications for companies to strengthen financial governance and for investors to evaluate earnings quality more critically.

However, the study is subject to certain limitations. The analysis is restricted to a three-year period (2020–2023) and focuses solely on infrastructure firms listed on the Indonesia Stock Exchange. Additionally, the study employs the Modified Jones model as the sole proxy for earnings management, which may not capture all dimensions of accrual-based manipulations. Future research is recommended to broaden the observation period, include more industry sectors, and utilize alternative models or proxies to improve robustness and generalizability.

t Test

Table 10. t Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.175	.100		-1.756	.085
	Earnings Management	-.008	.025	-.044	-.335	.739
	Managerial Ownership	.006	.003	.327	1.790	.079
	Firm Size	-.111	.046	-.364	-2.411	.020
	Free Cash Flow	-.015	.009	-.271	-1.600	.116
	Leverage	.119	.037	.445	3.180	.003

a. Dependent Variable: Earnings Management

The test results indicate that the managerial ownership variable has no effect on earnings management, with a t-value of -0.335 0.05. Management's decision to engage in earnings management is unaffected by the number of shares they possess. This could happen as a result of corporate rules or policies that regulate how managers prepare financial reports.

The Test findings show that the Company Size variable has no effect on earnings management, with a t-value of 1.790 <t table 2.00856 and a significant value of 0.079> 0.05.This indicates that there aren't any notable distinctions between the earnings management strategies of large and small businesses. While small businesses might not have much motivation to engage in earnings management, large corporations probably already have a stringent monitoring system in place.

According to the test results, the Free Cash Flow variable has a substantial negative impact on earnings management, with a t-value of -2.411 < t-table 2.00856 and a significant value of 0.020 < 0.05. This implies that a company's likelihood of engaging in earnings management decreases with increasing free cash flow. This may be as a result of the lack of pressure on businesses with strong liquidity to aggressively manage earnings.

The Leverage variable has no effect on earnings management, according to the test results, with a t-value of -1.600 < t-table 2.00856 and a significant value of 0.116> 0.05. This demonstrates that management choices about profit management are not immediately impacted by the amount of debt the business owns. Creditors could be more interested in other factors including operating cash flow, than accounting profit.

The test findings show that the profitability variable has a strong positive impact on earnings management, with a value of 3.180 t-count> t-table 2.00856 and a significant value of 0.003 <0.05. This implies that a company's propensity of engaging in earnings management increases with its level of profitability. High-profit businesses might be urged to keep up the profit-growth trend in order to draw in investors and keep their stock prices stable.

The F Test

Table 11. The F Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.020	5	.004	2.842	.025[b]
	Residual	.071	50	.001		
	Total	.091	55			

The management of earnings is impacted by managerial ownership, free cash flow, company size, leverage and profitability has a calculated f value of 2.842 > 2.40 f table and has a 0.025 is less than the significance level of 0.05. The independent variables in this study influence each other together.

Discussion

The outcomes of the initial Hypothesis testing indicates that there is no appreciable relationship between managerial ownership and earnings management. The regression coefficient is -0.335 with a *t*-statistic of -0.335, which is lower than the *t*-table value of 2.00856, and a significance level of 0.739, which exceeds the 0.05 threshold. This suggests that an increase in managerial ownership does not influence earnings management practices. When management holds more shares, they tend to utilize internal resources more efficiently, thereby reducing the likelihood of earnings manipulation. This finding is consistent with Kusumawardana and Haryanto (2019), but contradicts the study by Avriani and Suhendra (2023), which found a significant effect.

Similarly, firm size is found to have no significant effect on earnings management. The regression coefficient is 1.790 with a *t*-statistic of 1.790, which is lower than the *t*-table value of 2.00856, and a significance level of 0.079. This indicates that the size of a company does not directly influence its tendency to engage in earnings management. Although larger firms have greater resources, this does not necessarily lead to manipulation of financial statements. These results are in line with Sriayuni and Sudrajat (2023), but differ from Kusumawardana and Haryanto (2019) who found a significant relationship.

A different result is observed in the third hypothesis, where free cash flow has a significantly negative effect on earnings management. The regression coefficient is -2.411 with a *t*-statistic of -2.411 and a significance level of 0.020, which is below the 0.05 threshold. This implies that higher levels of free cash flow are associated with reduced earnings management. Companies with more free cash flow may experience less pressure to manipulate their financial reports. This finding supports the results of Fatmala and Riharjo (2021), but contrasts with Budianto (2023), who found no significant effect.

Leverage, However it doesn't significantly impact earnings management. The regression coefficient is -1.600 with a *t*-statistic of -1.600 and a significance level of 0.116. This indicates that the company's capital structure does not significantly influence earnings management behavior. High levels of debt may encourage companies to be more prudent in financial reporting. This finding is supported by Damayanti et al. (2024), but contradicts the results of Christian and Sumantri (2022), who found a significant relationship.

In contrast, profitability is found to have a positive and significant effect on earnings management. The regression coefficient is 3.180 with a *t*-statistic of 3.180, which exceeds the *t*-table value, and a significance level of 0.003. This implies that companies with higher profits are more inclined to manipulate their earnings management, possibly to maintain favorable perceptions among investors and stakeholders. This result is consistent with Sriayuni and Sudrajat (2023), but not with Damayanti et al. (2024).

Simultaneously, the five independent variables—managerial ownership, firm size, free cash flow, leverage, and profitability—are found to significantly affect earnings management. The *F*-statistic is 2.842, which is greater than the *F*-table value of 2.40, with a significance level of 0.025. This indicates that these variables collectively explain variations in earnings management practices among the companies studied.

CONCLUSION

Based on the results of statistical tests and discussions, several It is possible to draw conclusions. First, managerial ownership does not have a significant effect on earnings management, as indicated by a t value of -0.335 (0.739 > 0.05), so H1 is rejected. Second, company size also does not show a significant effect on earnings management, with a t value of 1.790 (0.079 > 0.05), so H2 is rejected. Third, free cash flow has a negative and significant effect on earnings management, as evidenced by a t value of -2.411 (0.020 < 0.05), which supports H3. These findings imply that higher levels of free cash flow are associated with reduced earnings management practices. Fourth, leverage does not significantly affect earnings management, indicated by a t value of -1.600 (0.116 > 0.05), so H4 is rejected. Fifth, profitability has a positive and significant effect on earnings management, with a t value of 3.180 (0.003 <0.05), thus H5 is accepted. Finally, the simultaneous F test shows that all independent variables—managerial ownership, free cash flow, firm size, leverage, and profitability—collectively affect earnings management, as indicated by the F value of 2.842 (0.025 <0.05), thus supporting H6.

This research adds to the body of literatur by expanding the understanding of the role of free cash flow and profitability in influencing earnings management, particularly in the context of infrastructure companies in Indonesia—an area that has been relatively under-explored in previous studies. These findings offer practical implications for companies to strengthen financial governance and for investors to evaluate earnings quality more critically.

However, this study is subject to certain limitations. The analysis is limited to a three-year period (2020–2023) and focuses only on infrastructure companies listed on the Indonesia Stock Exchange. In addition, this study uses the modified Jones model as the only proxy for earnings management, which may not capture all dimensions of accrual-based manipulation. Future research is advised to expand the observation period, cover more industry sectors, and utilize alternative models or proxies to improve robustness and generalizability.

RECOMMENDATIONS

Investors intending to invest in company stocks are advised to carefully examine the company's financial statements and assess all potential risks that may arise in the future.

In terms of Free Cash Flow, companies with high cash flow levels should pay greater attention to identifying ineffective earnings management practices. This can be achieved by ensuring transparency in the use of free cash flow, such as for long-term investments, dividend distribution, or share repurchases.

In terms of Profitability, companies should maintain the integrity of their financial reporting and ensure that reported earnings accurately reflect actual performance. Companies are also encouraged to focus on sustainable growth and ensure that earnings practices support long-term objectives.

Companies are expected to implement sound financial management strategies to maximize profits by reducing unnecessary costs and improving financial reporting performance, thereby supporting profitable investment activities.

Future researchers are encouraged to expand the research sample by increasing the number of companies and infrastructure sub-sectors analyzed, while also considering earnings

management indicators to establish more precise research criteria. Additional variables that may influence earnings management—such as sales growth, debt policy, net financing, and dividend policy—should be incorporated to enrich the analysis. Furthermore, researchers are advised to explore alternative proxies for earnings management beyond the Modified Jones model, such as the Conditional Revenue Model proposed by Stubben using discretionary revenue (DR). Extending the research period and utilizing the most recent data is also recommended to improve the relevance and accuracy of future findings.

REFERENCES

Yunita Sukma Ayu

ORIGINALITY REPORT

26%	20%	20%	7%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	journal.formosapublisher.org Internet Source	2%
2	ecojoin.org Internet Source	2%
3	jurnal.buddhidharma.ac.id Internet Source	2%
4	Dwi Irawan, Agung Prasetyo, Nugroho Wicaksono, Aviani Widyastuti, Rizki Febriani, Ali Roziqin. "Economic Sustainability and Social Equality in the Technological Era", CRC Press, 2024 Publication	1%
5	jurnal.itbsemarang.ac.id Internet Source	1%
6	Dian Savitri, Mahameru Rosy Rochmatullah. "Determinants of Earnings Management in Public Manufacturing Firms During Covid-19", Jurnal EMT KITA, 2025 Publication	1%
7	Irwan Trinugroho, Evan Lau. "Business Innovation and Development in Emerging Economies", CRC Press, 2019 Publication	1%
8	Abdul Rojak, Agus Sahyono. "THE INFLUENCE OF SOCIAL COMPANION COMPETENCE ON THE EFFECTIVENESS OF PKH SOCIAL ASSISTANCE UTILIZATION BY KPM", Jurnal Maneksi, 2025	1%

	Publication	
9	assets.researchsquare.com Internet Source	1 %
10	Hurriyati Ratih, Tjahjono Benny, GafarAbdullah Ade, Sulastri, Lisnawati. "Advances in Business, Management and Entrepreneurship", CRC Press, 2020 Publication	1 %
11	ijpsat.org Internet Source	1 %
12	profesionalmudacendekia.com Internet Source	1 %
13	Dian Puteri Ramadhani, Indira Rachmawati, Cahyaningsih, Nidya Dudija et al. "Acceleration of Digital Innovation & Technology towards Society 5.0", Routledge, 2022 Publication	<1 %
14	ije3.esc-id.org Internet Source	<1 %
15	ejournal.unsri.ac.id Internet Source	<1 %
16	www.sciencegate.app Internet Source	<1 %
17	Submitted to UIN Jambi Student Paper	<1 %
18	jsss.co.id Internet Source	<1 %
19	Siska Noviaristanti, Ong Hway Boon. "Sustainable Future: Trends, Strategies and Development", Routledge, 2022 Publication	<1 %
20	eprints.hud.ac.uk	

	Internet Source	<1%
21	mail.ajmesc.com Internet Source	<1%
22	Submitted to Universitas Jember Student Paper	<1%
23	ji.unbari.ac.id Internet Source	<1%
24	repository.umnaw.ac.id Internet Source	<1%
25	media.neliti.com Internet Source	<1%
26	Akhmad Solikin, Yuniarto Hadiwibowo, Benny Setiawan, Amrie Firmansyah, Hendrati Dwi Mulyaningsih. "Public Sector Accountants and Quantum Leap: How Far We Can Survive in Industrial Revolution 4.0?", Routledge, 2020 Publication	<1%
27	Submitted to Higher Education Commission Pakistan Student Paper	<1%
28	worldwidescience.org Internet Source	<1%
29	Dewi Kurniawati, Agus Munandar. "The effect of capital structure and company size on profit management with profitability as a moderating variable", JPPI (Jurnal Penelitian Pendidikan Indonesia), 2024 Publication	<1%
30	Rizky Mega Arini, Audina Rahmi, Ananda Sabrida Tora Boru Sinaga, Riyadatul Muthmainnah, Annisa Tri Hidhayati. "The Effect of Service Quality on Customer Satisfaction at Asrin Cafe in Langkat",	<1%

	Quantitative Economics and Management Studies, 2025 Publication	
31	jurnal.kdi.or.id Internet Source	<1 %
32	ilomata.org Internet Source	<1 %
33	Mengshu Hao, Jieying Hong. "The disciplinary role of options trading: Evidence from earnings manipulation", International Review of Economics & Finance, 2025 Publication	<1 %
34	Submitted to Vrije Universiteit Amsterdam Student Paper	<1 %
35	hrmars.com Internet Source	<1 %
36	journal.yrpipku.com Internet Source	<1 %
37	Satria Bangsawan, MS Mahrinasari, Ernie Hendrawaty, Rindu Rika Gamayuni et al. "The Future Opportunities and Challenges of Business in Digital Era 4.0", Routledge, 2020 Publication	<1 %
38	Submitted to Institute of Graduate Studies, UiTM Student Paper	<1 %
39	es.scribd.com Internet Source	<1 %
40	theijbmt.com Internet Source	<1 %
41	www.ijafibs.pelnus.ac.id Internet Source	<1 %
42	Submitted to Trisakti School of Management	

	Student Paper	<1 %
43	cluteinstitute.com Internet Source	<1 %
44	journal.smbjupmi.com Internet Source	<1 %
45	mafiadoc.com Internet Source	<1 %
46	www.ijlrhss.com Internet Source	<1 %
47	a7c53b2e-4fea-4712-a1fc-9fc942c03b2f.filesusr.com Internet Source	<1 %
48	ekonomis.unbari.ac.id Internet Source	<1 %
49	jurnal.peradabanpublishing.com Internet Source	<1 %
50	repository.dkut.ac.ke:8080 Internet Source	<1 %
51	Agil Nova Dwi, Didik Subiyanto, Tri Ratna Purnamarini. "Analysis of Factor Affecting Work Spirit in Employees PDAM Tirta Gemilang Magelang", Equity: Jurnal Ekonomi, 2025 Publication	<1 %
52	Anderson Assuah, Kelvin Tsun Wai Ng. "Solid Waste Management in Canada - Approaches, Practices, and Experiences", Routledge, 2025 Publication	<1 %
53	Feni Maria Sofa, Nanik Suryani, Fentya Dyah Rahmawati. "The Influence of Industrial Work Practice (Internship), Corporate World Information, and Motivation of Entering	<1 %

Corporate World towards Working Readiness of Students at Class XII Office Administration Department in SMK Negeri 2 Temanggung 2018/2019", KnE Social Sciences, 2020
Publication

54	Jamel Chouaibi, Ghazi Zouari, Sawssen Khlifi. "How does the real earnings management affect firms innovative? Evidence from US firms", International Journal of Law and Management, 2019 Publication	<1 %
55	Perry R. Hinton, Isabella McMurray, Charlotte Brownlow, Peter C. Terry. "SPSS Explained", Routledge, 2023 Publication	<1 %
56	Sekhu, Madimetja Solomon. "An Investigation of Construction Professionals' Perceptions of Construction Managers' Soft Skills in Complex Construction Projects in South Africa", University of the Witwatersrand, Johannesburg (South Africa), 2025 Publication	<1 %
57	Steven E. Kaplan, James C. McElroy, Susan P. Ravenscroft, Charles B. Shrader. "Moral Judgment and Causal Attributions: Consequences of Engaging in Earnings Management", Journal of Business Ethics, 2007 Publication	<1 %
58	aimos.ugm.ac.id Internet Source	<1 %
59	archive.aessweb.com Internet Source	<1 %
60	ijssei.in Internet Source	<1 %

61	journal.admi.or.id Internet Source	<1 %
62	jurnal.unigo.ac.id Internet Source	<1 %
63	pdfs.semanticscholar.org Internet Source	<1 %
64	repository.uinsaizu.ac.id Internet Source	<1 %
65	text-id.123dok.com Internet Source	<1 %
66	Abdul Manap, Arko Pujadi, Betari Kilisuci Kartika Chandra, Mohamad Ramadhan Agung. "The Effect of Shopping Lifestyle, Influencers, and Price Discounts on Impulse Buying on Tiktok Shop", RIGGS: Journal of Artificial Intelligence and Digital Business, 2025 Publication	<1 %
67	hdl.handle.net Internet Source	<1 %

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	Off		