The Effect of Leverage And Profitability on Earnings Management With Managerial Ownership As A Moderating Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange In 2020-2023

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Abstract:
This study aims to analyze the effect of leverage and profitability on earnings management and test the role of managerial ownership as a moderating variable in the relationship in manufacturing companies listed on the Indonesia Stock Exchange (IDX) for 2020-2023. The method used in this study is a quantitative approach with secondary data analyzed using SPSS version 25. The study's results indicate that leverage has a significant effect on earnings management and profitability, which also has a significant effect on earnings management. However, managerial ownership cannot moderate the effect of leverage on earnings management nor the effect of profitability on earnings management.

Keywords: Leverage, Profitability, Managerial Ownership, Earnings Management**.**

1. Introduction

Earnings management has become an essential concern in accounting, especially in the increasingly developing financial markets. Earnings management refers to manipulating financial statements to achieve specific goals, such as influencing stock prices or meeting investor expectations. According to research, earnings management is often done through adjustments that utilize flexible accounting policies (Healy & Wahlen, 1999). In Indonesia, this practice is increasingly relevant in companies listed on the Indonesia Stock Exchange (IDX) that face pressure to meet financial performance targets (Giovani, 2017).

Leverage and profitability are two key factors that play an essential role in influencing earnings management. Leverage, which refers to using debt to finance a company's operations, is often one of the main drivers of earnings management practices. Companies with high leverage levels face a greater risk of default, so they have a greater incentive to engage in earnings management to demonstrate financial stability and meet debt obligations. A study by Christian (2022) found that leverage positively affects earnings management in consumer goods companies listed on the IDX, where companies with high leverage are more likely to manipulate earnings reports to maintain their image in the eyes of creditors.

Meanwhile, profitability is a measure of company performance that investors highly regard. Companies with lower levels of profitability may be encouraged to engage in earnings management to maintain their attractiveness to investors and avoid falling stock prices. However, more profitable companies tend to have lower incentives to engage in this practice because good performance is sufficient to meet market expectations (Scott, 2015). Giovani's (2022) research supports this view, showing that higher profitability significantly reduces the tendency of companies to engage in earnings management. On the other hand, managerial ownership is a corporate governance mechanism expected to moderate the relationship between leverage, profitability, and earnings management. Based on agency theory, managers' share ownership is expected to reduce conflicts of interest between shareholders and management, reducing the likelihood of earnings management practices. This is because managers with significant share ownership will be more motivated to maintain the company's long-term performance rather than focus on short-term profits that can be obtained through earnings manipulation. Research by Haryanto (2023) shows that managerial ownership

has a significant moderating effect in reducing earnings management, especially in companies with complex capital structures and high leverage; however, a study conducted by Dian Wijayanti (2024) stated that Managerial Ownership was unable to moderate the influence between Leverage and Earnings Management.

Manufacturing companies listed on the IDX are interesting to study because this sector is one of the most significant contributors to Indonesia's Gross Domestic Product (GDP) and has a varied capital structure. The manufacturing industry continues to be a significant contributor to the national economy. In the second quarter of 2024, this sector contributed 18.52 percent to the Gross Domestic Product (GDP), an increase from 18.26 percent in the same period the previous year (Hidranto, 2024). The manufacturing sector's characteristics, which involve a high level of competition and the need for stability in financial performance, make it vulnerable to earnings management practices. Recent studies confirm that manufacturing companies in Indonesia tend to manipulate financial statements to maintain their financial performance amidst increasingly intense competition (Chrishtian & Sumantri, 2022).

Seeing the phenomenon and results of previous studies that still show inconsistent results, this study aims to examine the effect of leverage and profitability on earnings management with managerial ownership as a moderating variable in manufacturing companies listed on the Indonesia Stock Exchange in 2020-2023. Through this study, a more profound understanding can be found regarding how these factors influence the quality of financial reports in Indonesia and provide insight for investors and other stakeholders in assessing the company's financial health.

2. Literature Review

Agency Theory

Jensen and Meckling (1976) define agency theory as a contract in which one party (the principal) hires another party (the agent) to carry out various tasks on behalf of the principal, including delegating decision-making authority to the agent. Jensen and Meckling, as quoted by Richard, Christoforus, and Ekadjaja (2018), explain that this agency relationship describes a company as a collection of contracts between the principal and the agent. This theory provides implications for companies, agents, and managers in meeting the principal's expectations. Wibowo (2016) added that there are differences in interests between the principal and the agent, giving rise to information asymmetry. Each party tends to prioritize and maximize personal gain. Agency problems arise because of this information asymmetry, where one party needs more information.

Signal Theory

Signal theory is also used in this study. According to Suganda (2018), signal theory functions to understand how management conveys information to investors, which can ultimately influence investors' decisions in evaluating the company's condition. In general, this theory refers to signals given by the company to investors, either positive or negative, by conveying necessary information owned by the company to external parties as a basis for making investment decisions. Wati et al. (2019) stated that signal theory shows the existence of information asymmetry between the company and shareholders. Management only guides investors regarding their views on the company's prospects. Information received by investors can signal whether the company has good or bad prospects. Management's delivery of information, especially those related to financial statements, is expected to provide a positive signal to stakeholders.

Leverage

Leverage One of the critical factors related to earnings management is leverage, which is used to identify earnings management practices (Amidreza & Mortazai, 2016). According to Kasmir (2018), leverage is a solvency ratio used to measure the extent to which a company's activities are funded by debt. This ratio shows the company's debt burden compared to its assets. If the debt burden is relatively small compared to assets, the company can meet its long-term and short-term obligations. Related to leverage, another alternative that companies can take besides selling shares on the capital market is to obtain external funds through debt. Companies that strive to fulfill debt agreements will get a positive assessment from creditors. High leverage indicates high-profit management practices because management tries to show good company

management by utilizing debt optimally to achieve high profits, even though it is dominated by a large level of debt (Wijayanti, 2024).

Profitability

Kasmir (2018) defines the profitability ratio as a tool to measure a company's ability to generate profits. This ratio reflects the level of effectiveness of the company in running its operations to generate profits. Sartono and Fatmawati (2017) added that profitability is the company's ability to generate profits related to sales, total assets, or equity. In general, companies rely on income as the primary source of investment. According to David Wijaya (2017), the profitability ratio is a ratio that shows the company's ability to generate profits, which includes Gross Profit Margin, Basic Earning Power, Operating Profit Margin, Net Profit Margin, Return on Equity (ROE), Return on Asset (ROA), Net Income, Growth Ratio, and Net Sales Growth Ratio. This study uses the ROA indicator to describe the company's ability to generate profits by utilizing its assets. The rate of return on assets reflects the extent of the company's ability (Sari et al., 2019).

Managerial Ownership

Managerial ownership in Indonesia refers to the level of share ownership held by company management. The higher the management's share ownership level, the stronger the relationship between company performance and managers' gain. Research conducted by Susanti and Hariyanto (2022) shows that managerial ownership in Indonesia can reduce the conflict of interest between managers and shareholders because management is incentivized to maximize the company's value, which, in turn, will increase the value of their shares.

   Managerial ownership can moderate the effect of leverage and profitability on earnings management. In companies with high managerial ownership, management has a greater incentive to maintain the integrity of financial statements because they are directly interested in the company's long-term performance. Research by Wicaksono and Widjaja (2021) shows that managerial ownership in Indonesia can weaken the relationship between leverage and earnings management. This is because management is more likely to be responsible for managing the company when they also own shares.
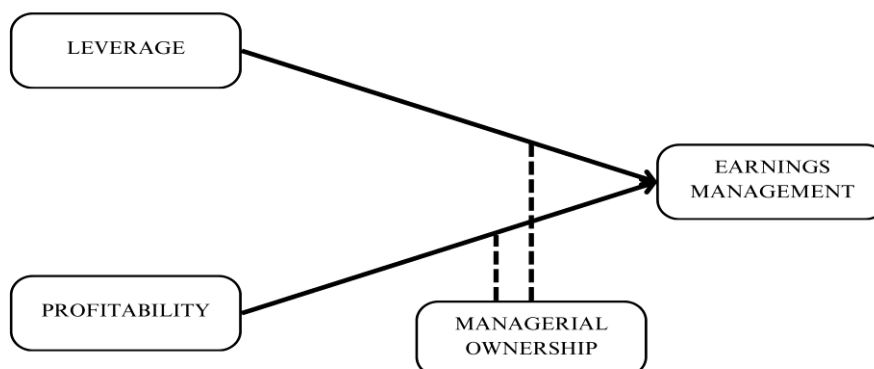
Earnings Management

Earnings management is the manipulation of accounting variables in financial statements by managers to achieve specific goals related to earnings reporting (Scott & O'Brien, 2019). Managers have the flexibility to choose between various transaction recording alternatives and can choose options that apply uniform accounting treatment. Therefore, earnings management can be interpreted as the ability to manipulate and make choices to achieve the desired profit (Belkoui, 2019).

   When management fails to achieve its profit targets, earnings management is used to influence the level of income at a particular time for its interests in order to show good company performance and modify reporting by selecting and implementing accounting methods that can show better profit achievement (Ermawati & Santana, 2018).

Framework

Figure 1. Concieptual framiework of riesiearch

Hypothesis
The Effect of Leverage on Earnings Management
Previous studies have shown that leverage has a positive relationship with earnings management. Companies with high leverage tend to engage in earnings management practices to maintain a good image in the eyes of creditors and avoid violating debt covenants (Sari & Trisnawati, 2021).

H1: Leverage affects earnings management.

The Effect of Profitability on Earnings Management
Profitability can affect earnings management. Companies with low profitability tend to engage in earnings management to improve their financial image in the eyes of investors and shareholders (Putra & Nugroho, 2019).

H2: Profitability affects earnings management.

The Effect of Managerial Ownership as a Moderation on Leverage and Earnings Management
Recent research in Indonesia shows that managerial ownership can weaken the effect of leverage on earnings management. Managers who own company shares tend to be more careful in manipulating earnings because they bear the risk of stock price fluctuations (Haryono & Siti, 2020).

H3: Managerial ownership can moderate the effect of leverage on earnings management.

The Effect of Managerial Ownership as a Moderation on Profitability and Earnings Management
Managerial ownership can also moderate the effect of profitability on earnings management. Managers who own company shares tend to focus more on long-term growth rather than conducting earnings management for short-term profits (Utami & Rahmawati, 2019).

H4: Managerial ownership can moderate the effect of profitability on earnings management.

Method
Research Design
The form of this research is quantitative. This research was conducted on manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2020-2023 (4 years). The data source used in this study is secondary data obtained from the IDX website.

Research Variables
Earnings Management (Y)

The measurement indicator used to determine the extent of earnings management in a company is the Modified Jones Model method.

The steps are as follows:

Calculating the total accrual value:

$$\text{Total Accrual (TAC)} = \text{net income after tax (Net Income)} - \text{cash flow from operations} \qquad (1)$$

Calculating the estimated accrual value with the OLS (Ordinary et al.) regression equation:

$$TAC_t / A_{t-1} = \alpha_1(1 / A_{t-1}) + \alpha_2((\Delta REV_t - \Delta REC_t) / A_{t-1}) + \alpha_3(PPE_t / A_{t-1}) + e \qquad (2)$$

Information:

TAC_t = total accrual of the company I in period t

α = fitted coefficient obtained from the regression results on the calculation of total accrual

A_{t-1} = total assets for sample company I at the end of year t-1

REV_t = change in company's income from year t-1 to year t

REC_t = change in company's receivables from year t-1 to year t

PPE_t = fixed assets (gross property plant and equipment) of the company i in year t

Calculating the nondiscretionary accruals model (NDA):

$$NDA_t = \alpha_1(1/A_{t-1}) + \alpha_2((\Delta REV_t - \Delta REC_t) / A_{t-1}) + \alpha_3(PPE_t / A_{t-1}) \qquad (3)$$

Information:

NDAt = nondiscretionary accruals in year t

Calculating discretionary accruals
$$DACt = (TACt / At\text{-}1) - NDAt \quad (4)$$
Information:
DACt = discretionary accruals of the company i in period t

Leverage (X1)
The indicator for calculating the level of leverage uses two methods, namely the ratio between the amount of debt to total assets (Debt to Asset Ratio):
$$\text{Debt to Equity Ratio} = (\text{Total Debt (Debt)}) / (\text{Total Equity}) \quad (5)$$

Profitability (X2)
Profitability can be measured using the Return on Asset (ROA) ratio. The higher the ROA value, the better the company's performance (Pradipta & Supriadi, 2015).
$$ROA = (\text{Net Profit After Tax})/(\text{Total Assets}) \quad (6)$$

Managerial Ownership (Z)
Managerial ownership can be measured by the number of shares owned by managers or directors of the board of commissioners against the total shares outstanding (Rustendi & Jimmi, 2008).

$$MO = (\text{Number of Shares of Managerial Parties})/(\text{Total Shares Outstanding}) \times 100\% \quad (7)$$

Data Analysis Technique
The data analysis used includes descriptive statistics, classical assumption tests, Moderated Regression Analysis - MRA, hypothesis testing, and coefficient of determination using SPSS 25 software. The equation model of Moderated Regression Analysis - MRA in this study is as follows:
$$EM = \alpha + \beta 1\ ROA + \beta 2\ LEV + \beta 3\ MO + \pounds \quad (8)$$
$$EM = \alpha + \beta 1\ ROA + \beta 2\ LEV + \beta 3\ MO + \beta 4\ ROA{*}MO + \beta 5 LEV{*}MO + \pounds \quad (9)$$

Results And Discussion
Description of Research Objects
The population of this company is manufacturing companies listed on the Indonesia Stock Exchange from 2020 to 2023. The number of manufacturing companies listed on the IDX in 2020-2023 is 632 samples. Based on the sampling criteria carried out through purposive sampling using the specified sample criteria, the final sample size was 361 samples.

Descriptive Statistical Test
Descriptive statistical analysis can show a picture or description of data from each research variable's minimum, maximum, average (mean), and standard deviation values . The results of the descriptive analysis test using SPSS Version 25 of the variables in this study are as follows:

Table 1. Results of Descriptive Statistical Tests

Descriptive Statistics					
	N	**Min**	**Max**	**Mean**	**Std. Dev**
Leverage (X1)	361	0.0035	1.0037	0.4606	0.1917
Profitability (X2)	361	-0.1539	0.2522	0.0394	0.0517
Managerial Ownership (Z)	361	0.3219	0.9971	0.7707	0.1541
Earnings Management	361	-0.2052	0.2376	-0.0349	0.0613

(Y)						
Valid N (listwise)	361					

Table 1 shows the calculation of the Earning Management variable (Y) in this study obtained using the discretionary accrual proxy calculation. The results of the descriptive statistical analysis of the earnings management variable show the lowest value of -0.2052, while the highest value is 0.2376. At the same time, the average value of earnings management is -0.0349, with a standard deviation of 0.0613.

The calculation of the Leverage variable (X1) in this study uses the results of the calculation of total debt divided by total equity. The results of the descriptive statistical analysis of the leverage variable show the lowest value is 0.0035. At the same time, the highest value is 1.0037. At the same time, The average leverage value is 0.4606, with a standard deviation of 0.1917.

The calculation of the profitability variable (X2) in this study uses the ROA calculation results, namely net profit after tax divided by total assets. The results of descriptive statistical analysis of the profitability variable show that the lowest value is -0.1539. At the same time, the highest value is 0.2522. At the same time, The average value of profitability is 0.0394, with a standard deviation of 0.0517.

The calculation of the Managerial Ownership variable (X3) in this study was obtained using the results of the number of managerial shares divided by the total outstanding shares multiplied by 100%. The results of descriptive statistical analysis of the managerial ownership variable show that the lowest value is 0.3219. At the same time, the highest value is 0.9971. At the same time, The average value of managerial ownership is 0.7707, with a standard deviation of 0.1541.

Results of the Classical Assumption Test
Before conducting the hypothesis test, the researcher conducted a test for symptoms of classical deviations including the normality test, multicollinearity test and heteroscedasticity test.

Results of the Normality Test
The normality test aims to determine whether the data used is normally distributed or not. The t-test and f-test are assumed to have residual values following a normal distribution. If this assumption is violated, the statistical test becomes invalid for small samples (Ghozali, 2016).

One method used to test normality is the Kolmogorov-Smirnov (K-S) test. If analyzed in a graph, if the data is spread around the diagonal line and follows two directions of the diagonal line, then the regression model meets the normality assumption. The basis for making decisions for the Kolmogorov-Smirnov test is as follows:

If the Asymp. Sig value> significance level of 0.05, the data is normally distributed.

If the Asymp. Sig value <significance level of 0.05, the data is not normally distributed.

Of the 113 companies taken, there were 452 samples in the span of 4 years the company was running. There were some extreme data, so outliers were carried out on the research sample. According to Ghozali (2011), outliers are cases or data that have unique characteristics that look very different from other observations and appear in the form of extreme values for either a single variable or a combination. Detection of outliers can be done by determining the limit value that will be categorized as outlier data, namely by converting data values into standardized scores or what is commonly called z-scores (Ghozali, 2011: 41). According to (Ghozali. 2011: 41) the causes of outliers are as follows: ● Errors in data entry ● Failure to specify the presence of missing values in the computer program ● After a normality test using the Kolmogorov-Smirnov (K-S) test and there is abnormal data. Therefore, data trimming is carried out, or outliers are removed. Outliers are done using the univariate outlier method, namely checking the data one by one and then removing extreme data or if the absolute value of the studentized residual is more than 3 (Hair et al., 1995).

Univariate outlier testing is carried out for each indicator variable with SPSS v25 software. Data observations that have a z-score value ≤-3.00 or z-score ≥ 3.00 will be categorized as outliers (Ferdinand, 2002). The process of removing outliers has been completed, and then the normality test is carried out again,

and the normal data results are obtained. After data trimming or removing outliers, 340 research samples were obtained that could be used as research data and calculated in spss.

Table 2. Statistical Normality Test Results

|		Unstandardized Residual
N		361
Normal Parameters[a,b]	Mean	0,0000000
	Std. Deviation	0,00606563
Most Extreme Differences	Absolute	0,032
	Positive	0,032
	Negative	-0,027
Test Statistic		0,032
Asymp. Sig. (2-tailed)		.200[c,d]

Based on the results obtained from SPSS in table 2, it can be seen that Asymp. Sig (2-tailed) has a value of 0.200, which indicates that the level of significance is above 0.05 (0.200 > 0.05). This means that the data used in this study is normally distributed.

Figure 2. Results of the Graph Normality Test
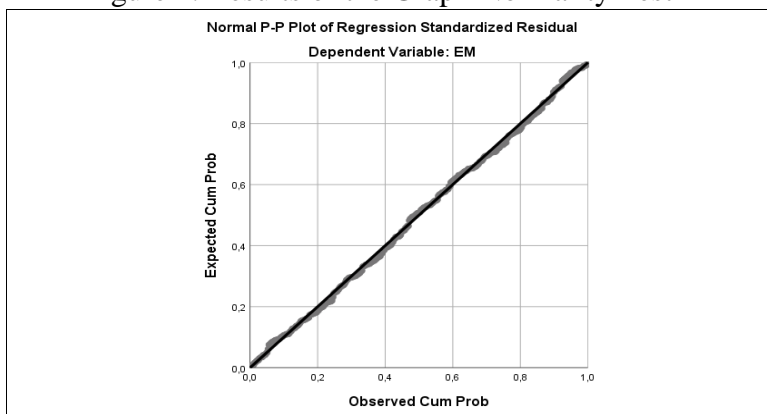
Based on Figure 2, the results show that the normality test using the p-plot method meets the assumption of data normality. The figure above provides information that the data used is spread around the diagonal line and still follows the diagonal line. This indicates that the data used by researchers and this study are normally distributed so that the assumption of data normality is met.

Figure 3. Histogram Graph of Normality Test Results
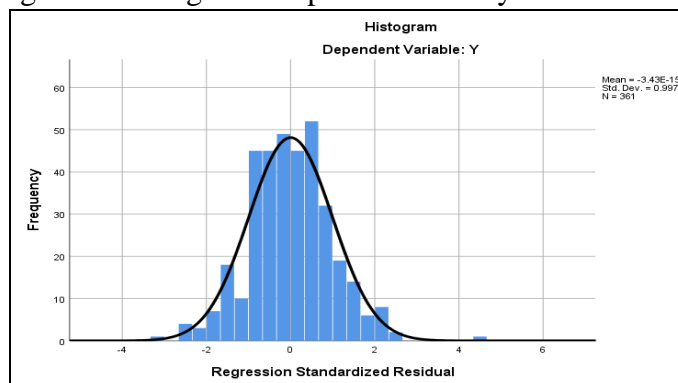
The histogram graph can be seen in Figure 3 has a data distribution that follows a non-skewed bell-shaped curve. From the results of the normality test, it can be concluded that the data is normally distributed.

Multicollinearity Test Results

The Multicollinearity Test aims to test whether the regression model determines the correlation between independent variables. A good regression model should have no correlation between independent variables (Ghozali, 2016). The results of the multicollinearity test can be determined by the Varian Inflation Factor (VIF) value and the tolerance value of each independent variable. If a VIF value is found to be less than 10 and a tolerance value greater than 0.1, then a regression model is considered free from multicollinearity (Ghozali, 2016).

Table 3. Multicollinearity Test Results

|	Collinearity Statistics	
	Tolerance	**VIF**
LEV	1,091	,916
PRO	1,102	,907
MO	1,017	,983

Based on Table 3, the test results can be seen that all tolerance values > 1 and VIF values < 1, so it can be concluded that there is no correlation between independent variables or there is no multicollinearity in the study.

Heteroscedasticity Test Results

The heteroscedasticity test aims to test whether there is a difference in variance from the residuals of one observation to another in the regression model. A good regression model is one that is homoscedastic or does not have heteroscedasticity (Ghozali, 2016).

To see whether or not there is heteroscedasticity in this study, it can be done by looking at the p-plot graph between the bound value, namely ZPRED, and the residual SPRESID. If there is a regular pattern or it accumulates at certain points, then heteroscedasticity occurs.

Figure 4. Heteroscedasticity Test Results
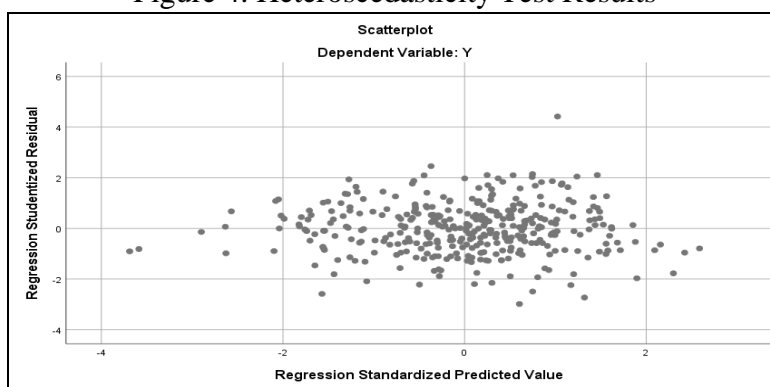
Based on the results of Figure 4, subjectively, it can be seen that the pattern that is formed does not show a regular pattern. However, the pattern obtained from the processed results is formed unclearly,. The points are spread above and below around the number zero, so it can be concluded that heteroscedasticity does not occur.

Multiple Linear Regression Analysis

The multiple linear regression equation is used to determine whether the independent variables and dependent variables have an influence, either partially or simultaneously. As is known, the independent variables in this study are Leverage (X1), Profitability (X2), and Managerial Ownership (Z). While the dependent variable is Profit Management (Y)

Table 5. Results of Multiple Linear Regression Analysis (Equation 1)

Coefficients^a				
Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	-0.063	0.002	
	Leverage (X1)	0.034	0.002	0.701
	Profitability (X2)	0.091	0.007	0.501
	Managerial Ownership (Z)	0.011	0.002	0.188

Based on the output produced by SPSS in Table 5, it is known that the constant value in the Unstandardized coefficients B column is -0.063, the coefficient value of the leverage variable (X1) is 0.034, the coefficient value of the profitability variable (X2) is 0.091, the coefficient value of the managerial ownership variable (Z) is 0.011. Then, the multiple linear regression equation (equation 1) can be known as follows:

$$ML = \alpha + \beta_1\ ROA + \beta_2\ EP + \beta_3\ KM + \pounds \quad (8)$$
$$ML = -0.063 + 0.034 + 0.091 + 0.011 + \pounds$$

Moderated Regression Analysis (MRA)

Moderated Regression Analysis (MRA) is a valuable test to see whether or not the variables moderate the correlation between independent and dependent variables. The results of the moderation test are:

Table 6. MRA Test Results (Equation II)

Coefficients^a				
Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	-0,068	0,004	
	Leverage (X1)	0,046	0,008	0,942
	Profitability (X2)	0,083	0,037	0,460
	Managerial Ownership (Z)	0,018	0,005	0,296
	X1Z	-0,015	0,011	-0,276
	X2Z	0,009	0,046	0,039

Based on the output produced by SPSS in Table 6, it is known that the constant value in the Unstandardized coefficients B column is -0.068, the coefficient value of the leverage variable (X1) is 0.046, the coefficient value of the profitability variable (X2) is 0.083, the coefficient value of the managerial ownership variable (Z) is 0.018, the coefficient value of the profitability and managerial ownership variables is -0.015 and the coefficient value of the leverage and managerial ownership variables is 0.009. Then, it can be seen that the multiple linear regression equation is as follows:

$$ML = \alpha + \beta_1\ ROA + \beta_2\ LEV + \beta_3\ KM + \beta_4\ ROA*KM + \beta_5\ LEV*KM \quad (9)$$
$$ML = -0.068\ \alpha + 0.046\ ROA + 0.083\ LEV + 0.018\ KM + -0.015\ ROA*KM + 0.009\ LEV*KM$$

Hypothesis Testing
T-Test Results

This test analysis is used to determine how far the influence of one independent variable is in explaining the variation of the dependent variable or, in other words, to determine the partial influence of the

independent variable using the t-test. Suppose a significant value is obtained <0.05 or tcount> table at the time of testing. In that case, Ha is accepted, so it is concluded that the independent variable affects the dependent variable. Likewise, if in the test a significant value is obtained > 0.05 or count < table, Ha is rejected, which means that the independent variable does not significantly affect the dependent variable.

Table 7. T-Test Results (Partial)

Model	t	Sig.
(Constant)	-53.959	0.000
Leverage (X1)	18.939	0.000
Profitability (X2)	13.044	0.000

Based on table 7, the following decisions can be made:

H1: Leverage Affects Earnings Management

The leverage variable has a sig value of 0.000. The sig value of 0.00 <0.05, the calculated t is 18.939, and the t table value is 1.97, so the calculated t is > from the t table (18.939> 1.970). This shows that the significance value of the leverage variable (X1) is significant at the 5% level, so the study states that H1 is accepted. So, it can be concluded that partially or individually, the leverage variable (X1) affects earnings management, which means that the first hypothesis (H1), namely "Leverage affects earnings management," is accepted.

H2: Profitability Affects Earnings Management

The Profitability variable has a sig value of 0.000. The sig value is 0.000 < 0.05, the t count is 13.044, and the table value is 1.970, so the t count is > from the t table (13.044> 1.970). This shows that the significance value of the Profitability variable (X2) is significant at the 5% level, so the study states that H2 is accepted. So it can be concluded that partially or individually, the Profitability variable (X2) affects earnings management, which means that the second hypothesis (H2), namely "Profitability affects earnings management," is accepted.

Interaction Significance Test (Moderated Regression Analysis - MRA)

This moderation test uses the interaction test approach (MRA), where the moderating variable is multiplied by the independent variable to form the interaction variable. The following are the regression results obtained

Table 8. MRA Test Results

Model	t	Sig.
(Constant)	-15.689	0.000
Leverage (X1)	5.583	0.000
Profitability (X2)	2.238	0.026
Managerial Ownership (Z)	3.269	0.001
X1Z	-1.461	0.145
X2Z	0.190	0.849

H3: Managerial Ownership is unable to moderate the effect of Leverage on Earnings Management

The results obtained in the moderation test on the multiplication of Leverage with managerial ownership t count of -1.461 and the t table value of 1.97, then t count <from t table (0.190<1.970). This shows that the significance value of the Leverage variable (X1) with managerial ownership (Z) is insignificant at the 5% level, so this study rejects H3. So it can be concluded that partially or individually, the managerial ownership variable (Z) is unable to moderate the effect of Leverage (X1) on earnings management, which means that the first hypothesis (H3), namely "Managerial Ownership is unable to moderate the effect of leverage on Earnings Management" is rejected.

H4: Managerial Ownership is not able to moderate the effect of Profitability on Earnings Management

The results obtained in the moderation test on the multiplication of profitability with managerial ownership t count of 0.190 and the t table value of 1.97, then t count <from t table (0.190<1.970). This

shows that the significance value of the profitability variable (X2) with managerial ownership (Z) is insignificant at the 5% level, so this study rejects H4. So it can be concluded that partially or individually, the managerial ownership variable (Z) is not able to moderate the effect of profitability (X2) on earnings management, which means that the first hypothesis (H4), namely "Managerial Ownership is not able to moderate the effect of profitability on Earnings Management" is rejected.

Results of the Determination Coefficient Test (R^2)

The Determination Coefficient (R^2) aims to see how much the model can explain the variation of the dependent variable. The value of the determination coefficient is between zero and one. A small R^2 value indicates that the ability of independent variables to explain the dependent variable is minimal.

Table 9. Results of the Determination Coefficient Test (R^2)

Model Summary[b]			
Model	R	R Square	Adjusted R Square
1	.736[a]	0.542	0.539

Table 9 shows that the R Square value is 0.542. This means that the variables Leverage, Profitability, and Managerial Ownership explain the Earnings Management variable by only about 54.2%.

Discussion

The Effect of Leverage on Earnings Management

The results of the statistical test in this study indicate that the leverage variable has a Sig value of 0.000, which is smaller than 0.05 or 5%. This means that the leverage variable affects earnings management. This influence is suspected because most manufacturing companies have high leverage values.

The higher the level of leverage, the higher the earnings management practice in a company. If the company cannot use the funds it has efficiently, it will incur large debts and have difficulty paying them (Guna and Herawaty, 2010).

The results of this study are in line with research conducted by Agustia & Suryani (2018), Mahawyahrti & Budiasih (2016), and Agustia (2013), which show that leverage affects earnings management. The study explains that the greater the company's debt, the company will improve its financial performance. If the company's financial performance does not match the planned target, creditors' trust will be reduced. However, this study contradicts Marlisa's (2016) and Bestivano's (2013) research, which states that leverage does not affect earnings management.

The Effect of Profitability on Earnings Management

The statistical test results in this study indicate that the profitability variable has a Sig value of 0.000, which is smaller than 0.05 or 5%, which means that the profitability variable affects earnings management. This is suspected because manufacturing companies have a low profitability level, so they have high earnings management.

Profitability can encourage earnings management practices because of management's various incentives and pressures to maintain or improve the company's financial performance. Earnings management is used to meet market expectations, gain personal gain through profit-based incentives, and manage stakeholder perceptions of company performance.

The results of this study are not in line with research conducted by Gunawan., et al. (2015) and Sari (2015), which state that profitability does not affect earnings management. However, this study is in line with the results of research by Tala and Karamoy (2017) and Wibisana and Ratnaningsih (2014), which stated that profitability positively affects earnings management. The higher the profitability, the better the company's performance and shareholders will benefit from the increased performance. Managers will also benefit if the company's performance increases, so managers will not carry out earnings management.

Managerial Ownership Moderates the Effect of Leverage on Earnings Management

Based on the results of the moderation test with MRA, the analysis shows that managerial ownership cannot moderate the relationship between leverage and earnings management, so the third hypothesis (H₃) is rejected. Thus, the third hypothesis (H3), which states that managerial ownership can strengthen the effect of leverage on earnings management, is rejected.

These results indicate that managerial ownership can only partially moderate the relationship between leverage and earnings management and show a negative direction. This study reveals that managerial ownership cannot strengthen or weaken the positive or negative relationship between leverage and earnings management. This means that the company's debt level is independent of the company's tendency to carry out earnings management. However, managerial ownership does not affect the risks arising from high levels of debt, such as the company's inability to meet obligations. This study aligns with research conducted by Dian Wijayanti (2024), which states that managerial ownership cannot moderate the influence of leverage and earnings management. However, this study contradicts the results of research by Sari and Khafid (2020), which states that managerial ownership can moderate the influence of leverage and earnings management.

Managerial Ownership Moderates the Effect of Profitability on Earnings Management

Based on the results of the moderation test with MRA, the analysis shows that managerial ownership cannot moderate the relationship between profitability and earnings management, so the third hypothesis (H4) is rejected. This is due to managerial ownership's role as a mechanism to reduce agency problems by aligning the interests of managers and shareholders. Managerial ownership tends to strengthen the alignment of interests between management and shareholders. The more significant the proportion of managerial ownership, the stronger the management's efforts to meet the interests of shareholders.

The results of this study are consistent with Faradella's (2020) findings, which also concluded that managerial ownership cannot moderate the relationship between profitability and earnings management. However, this study contradicts Dian Wijayanti's (2024) finding that Managerial ownership can moderate the relationship between profitability and earnings management.

Conclusion

This study produces several significant findings related to the influence of leverage, profitability, and managerial ownership on earnings management: Leverage significantly influences earnings management, with a significance value of 0.000. The higher the leverage of a company, the greater the likelihood of earnings management practices. Profitability has a significant influence on earnings management, with a significance value of 0.000. Managerial Ownership as a Moderator of the Relationship between Leverage and Earnings Management shows that managerial ownership cannot moderate the influence of leverage on earnings management. Managerial Ownership as a Moderator of the Relationship between Profitability and Earnings Management shows that the influence of profitability on earnings management needs to be determined.

References

1. Abdullah, M. F. (2005). Dasar-dasar Manajemen Keuangan (2nd ed.). Penerbitan Universitas Muhammadiyah.
2. Abdurrahman, M. A., & Ermawati, W. J. (2018). Pengaruh Leverage, Financial Distress dan Profitability terhadap Konservatisme Akuntansi pada Perusahaan Pertambangan di Indonesia Tahun 2013-2017. 9(3), 164–173.
3. Agus Sartono. (2010). Manajemen Keuangan Teori dan Aplikasi (4th ed.). BPFE.
4. Agustia, D. (2013). Pengaruh Faktor Good Corporate Governance, Free Cash Flow dan Leverage Terhadap Earnings Management. Jurnal Akuntansi Dan Keuangan, 15(1), 27–42.
5. Agustia, Y. P., & Suryani, E. (2018). Pengaruh Ukuran Perusahaan, Umur Perusahaan, Leverage, Dan Profitability Terhadap Earnings Management (Studi Pada Perusahaan Pertambangan yang Terdaftar

di Bursa Efek Indonesia Periode 2014-2016). Jurnal Aset (Akuntansi Riset), 10(1), 71–82. https://doi.org/10.17509/jaset.v10i1.12571

6. Astari, Agung & Ratih, K. (2017). Faktor-Faktor Yang Mempengaruhi Earnings Management. E-Jurnal Akuntansi Universitas Udayana, 20, 290–319.

7. Astuti, P. W. (2017). Pengaruh Profitability, Ukuran Perusahaan, Leverage, dan Kualitas Audit Terhadap Earnings Management. Universitas Muhammadiyah Surakarta.

8. Atri & Darsono. (2017). Managerial Ownership, Dan Kualitas Audit Terhadap Earnings Management. Jurnal Riset Akuntansi Kontemporer, 9(2), 66–70.

9. Ayu, S. (2015). Pengaruh Rasio Keuangan Terhadap Profitability Perbankan Di Indonesia. Jurnal Ilmu & Riset Akuntansi, 4(6).

10. Bambang Riyanto. (1997). Dasar-dasar Pembelanjaan Perusahaan (4th ed.). BPFE.

11. De Angelo, L. (1988). Managerial Competiition, Information Costs and Corporate Governance: The Use of Accounting Performance Measures in Proxy Contest. Journal of Accounting and Economcs, 10, 3–36.

12. Dela, F. & K. S. (2010). Pengaruh Asimetri Informasi, Ukuran Perusahaan, dan Managerial Ownership terhadap Praktik Earnings Management. Kajian Akuntansi, 5(1), 54–65.

13. Dwijayanti, N. & Suryanawa, I. (2017). Pengaruh Asimetri Informasi, Managerial Ownership Dan Kepemilikan Institusional Pada Earnings Management. E-Jurnal Akuntansi Universitas Udayana, 18(1), 303–326.

14. Ferdinand. (2002). Metode Penelitian Manajemen: Pedoman penelitian untuk Skripsi, Tesis, dan Desertasi Ilmu Manajemen. Badan Penerbit Universitas Diponegoro.

15. Ghozali. (2016). Aplikasi Analisis Multivariete Dengan Program IBM SPSS. Badan Penerbit Universitas Diponegoro.

16. Gu, Z., & Lee, C. J. (1999). How Widespread is Earnings Management? The Intra-year Timing Evidence. Working Paper, Carnegie Mellon University.

17. Guna, W. I., & Herawaty, A. (2010). Pengaruh Mekanisme Good Corporate Governance, Independensi Auditor,Kualitas Audit Dan Faktor Lainnyaterhadap Earnings Management. Jurnal Bisnis Dan Akuntansi, 12(1), 53–68. https://jurnaltsm.id/index.php/JBA/article/view/162/137

18. Gunawan, et al. (2015). Pengaruh Ukuran Perusahaan, Profitability, dan Leverage Terhadap Earnings Management. Jurnal Akuntansi Universitas Pendidikan Ganesha, 3(1).

19. Hair J.F. et.al. (1995). Multivariate Data Analysis With Reading (4th ed.). New Jersey.

20. Harahap, S. S. (1999). Akuntansi Aktiva Tetap: Akuntansi Pajak, Revaluasi (5th ed.). Badan Percetakan Fakultas Ekonom.

21. Hidayat & Sugiyono. (2017). Pengaruh Struktur Modal, Kebijakan Dividen, Profitability Terhadap Nilai Perusahaan Pada Perusahaan Manufaktur. Jurnal Ilmu Dan Riset Manajemen, 6(1), 1–16.

22. Holthausen, Robert W, D. F. L. R. G. S. (1995). Annual Bonus Schemes and The Manipulation of Earnings. Journal of Accounting and Economic, 19(1), 29–74.

23. I Gede & I Made. (2014). Pengaruh Penerapan Corporate Governance, Leverage, Return on Assets, dan Ukuran Perusahaan Pada Penghindaran Pajak. E-Jurnal Akuntansi Universitas Udayana, 9(1), 143–161. https://doi.org/10.26623/slsi.v18i2.2296

24. Jensen, M., C., dan W. M. (1976). Theory of the firm: Managerial behavior, agency cost and ownership structure. Journal of Finance Economic, 3, 305–360.

25. Kasmir. (2013). Bank dan Lembaga Keuangan Lainnya. PT Raja Grafindo Persada. Koming, N., & Praditasari, A. (2017). Pengaruh Good Corporate Governance, Ukuran Perusahaan, Leverage Dan Profitability Pada Tax Avoidance. E-Jurnal Akuntansi, 2017(1), 1229–1258.

26. L. Mamu, Y. T., & Eka Damayanthi, I. G. A. (2018). Moderasi Kualitas Auditor terhadap Pengaruh Leverage, Managerial Ownership, dan Kepemilikan Institusional Pada Earnings Management. E-Jurnal Akuntansi, 25, 272. https://doi.org/10.24843/eja.2018.v25.i01.p11

27. Mahawyahrti, T., & Budiasih, G. N. (2017). Asimetri Informasi, Leverage, dan Ukuran Perusahaan pada Earnings Management. Jurnal Ilmiah Akuntansi Dan Bisnis, 11(2), 100. https://doi.org/10.24843/jiab.2016.v11.i02.p05

28. Mamu, Yohanes Teofilus L., & I. G. A. E. D. (2018). Moderasi Kualitas Auditor Terhadap Pengaruh Leverage, Managerial Ownership, Dan Kepemilikan Institusional Pada Earnings Management. E-Jurnal Akuntansi Universitas Udayana, 25, 272.

29. Marlisa, O., & Fuadati, S. R. (2016). Analisis Faktor-Faktor yang Mempengaruhi Earnings Management Perusahaan Properti dan Real Estate. Jurnal Ilmu Dan Riset Manajemen Sekolah Tinggi Ilmu Ekonomi Indonesia (STIESIA) Surabaya., 5(7), 1–20. https://core.ac.uk/download/pdf/151520429.pdf

30. Munawir. (2010). Analisa Laporan Keuangan. Liberty. Panjaitan, D. K., & Muslih, M. (2019). Earnings Management : Ukuran Perusahaan , Managerial Ownership Dan Kompensasi Bonus. 11(1), 1–20.

31. Pradipta, D. H., & Supriyadi. (2015). Pengaruh Corporate Social Responsibility (CSR), Profitability, Leverage, Dan Komisaris Independen Terhadap Praktik Penghindaran Pajak. Kompartemen Jurnal Ilmiah Akuntansi, XV(1), 1–25.

32. Rahyuningsih & Ayem, S. (2020). Pengaruh Leverage dan Managerial Ownership Terhadap Earnings Management dengan Agency Cost Sebagai Variabel Intervening Pada Perusahaan Manufaktur. Kajian Bisnis Sekolah Tinggi Ilmu Ekonomi Widya Wiwaha, 28(2), 188–206.

33. Rajgopal, S., M. Venkatachalam, & J. J. (1999). Is Institutional Ownership Associated with Earnings Management and the Extent to which Stock Prices Reflect Future Earnings? Working Paper. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=163433

34. Rustendi & Jimmi. (2008). Analisis Pengaruh Struktur Modal, Pertumbuhan Perusahaan, Ukuran Perusahaan dan Profitability Terhadap Nilai Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia (BEI) Pada Tahun 2007-2009 dalam Jurnal Novita Santi Puspita.

35. Savitri, E. (2014). Analisis Pengaruh Leverage dan Siklus Hidup terhadap Earnings Management pada Perusahaan Real Estate dan Property yang Terdaftar di Bursa Efek Indonesia. Jurnal Akuntansi: Media Riset Akuntansi & Keuangan, 3(1), 72–89.

36. Subramanyam, K. R. & J. J. W. (2010). Analisis Laporan Keuangan (Salemba Empat (ed.); 10th ed.).

37. Sutrisno. (2009). Manajemen Keuangan Teori, Konsep dan Aplikasi (Pertama). Penerbit Ekonisia. Tala & Karamo. (2017). Analisis Profitability Dan Leverage Terhadap Earnings Management Pada Perusahaan Manufaktur Di Bursa Efek Indonesia. Jurnal Accoutability Universitas Sam Ratulangi.

38. Tomi Sutoro, Nella Yantiana, & Sari Rusmita. (2024). DETERMINANTS OFF COMPANY VALUE AND PROFITABILITY AS A MEDIATOR. Neraca: Jurnal Ekonomi, Manajemen Dan Akuntansi, 2(3), 405–427. https://doi.org/10.572349/neraca.v2i3.1206

39. Tsabat, A. (2015). Pengaruh Tax Avoidance, Kepemilikan Institusional, Kepimilikan Manajerial, komisaris Independen, Komite Audit, dan Auditor Eksternal Terhadap Nilai Perusahaan. Universitas Pasundan.

40. Wibisana, I & Ratnaningsih, D. (2014). Analisis Faktor – Faktor Yang Mempengaruhi Arah Earnings Management. E-Journal Universitas Atma Jaya.

41. Widyaningsih, D. (2018). Managerial Ownership , Kepemilikan Institusional , Komisaris Independen , Serta Komite Audit Pada Nilai Perusahaan Dengan Pengungkapan CSR sebagai Variabel Moderating dan Firm Size sebagai Variabel Kontrol. 19(01), 38–52.

42. Zamria, Nurhayati., et al. (2013). The Impact of Leverage on Real Earnings Management. International Conference on Economics and Business Research.

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