

Income Smoothing in the Indonesian Food and Beverage Sector: The Role of Managerial Ownership, Profitability, Leverage, and Company Size

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Abstract. In the Indonesian food and beverage industry, this study examines how management ownership, profitability, leverage, and firm size affect income smoothing strategies. The study examines financial records from food and beverage companies that were listed between 2017 and 2020 on the Indonesian Stock Exchange. The results show that the key factors influencing income smoothing strategies are company size, profitability, and leverage. Furthermore, managerial ownership modifies the association between these factors and income smoothing, suggesting that greater managerial ownership influences earnings management behaviour by bringing management's interests into line with shareholders'. By stressing the moderating effect of managerial ownership and offering actual data on the factors influencing income smoothing in the Indonesian food and beverage industry, this study adds to the body of literature. The results offer valuable insights for investors, regulators, and company management regarding the implications of earnings management practices.

Keywords: income smoothing, company size, profitability, and leverage.

1. Introduction

Monetary reports serve as a critical medium for conveying important profit information to management, which may lead to dysfunctional behaviors such as the manipulation of earnings. Managers often exploit the flexibility of accounting standards to maximize reported profits. These reports provide essential insights into a company's performance, financial position, and profitability, making them indispensable for various stakeholders, including management, shareholders, employees, creditors, and the general public [1]. Accurate financial reporting is vital for making informed business decisions, particularly for external parties like investors and creditors, who rely on this information to guide their investment choices.

One of the primary indicators of management performance and accountability is profit. Profit information is crucial for assessing a company's future profitability, guiding investment decisions, and helping stakeholders evaluate the company's long-term prospects [2]. However, the flexibility inherent in accounting standards can lead to earnings management, a practice where managers manipulate financial reports to present a more favorable view of the business's financial stability.

Earnings management is often driven by asymmetric information and agency theory, which highlights conflicts of interest between company owners and managers. This practice includes income smoothing, defined as deliberate efforts by management to reduce abnormal variations in profits to achieve a perceived normal level [3].

Several factors influence income smoothing, including profitability, leverage, and company size. Profitability, measured by The ability of a business to produce a profit in the future is indicated by its return on assets (ROA). Income smoothing is more common among businesses with higher ROA, as management can leverage their profit-generating capabilities to present a more stable financial outlook [4].

Leverage, defined as the ratio of debt to assets, also impacts income smoothing practices. Higher leverage increases the risk of meeting financial obligations, prompting companies to manage earnings to present a more favorable financial position [5]. Additionally, company size plays a role in income smoothing. Larger companies are under greater scrutiny from investors, regulators, and the public, motivating them to engage in income smoothing to maintain their reputation and stakeholder confidence [4]. Earnings management can be practiced by both big and small businesses, albeit for different reasons. Small companies may do so to instill creditor confidence, while large companies may aim to avoid regulatory attention and maintain a stable financial appearance.

Earnings management practices can be perceived differently across industries. While some view earnings management within the bounds of accounting standards as acceptable, others see it as misleading if it obscures the true financial performance of the company [2]. This study also considers managerial ownership as a moderating variable. ownership by managers as a moderating factor. Agency theory states that by bringing managers' incentives into alignment, management ownership can reduce agency conflicts and owners. Higher managerial ownership suggests a convergence of interests, potentially influencing the company's capital structure and financial practices [6].

2. Methodology

2.1 Data Types and Sources

The Indonesian Stock Exchange's main website included data research, financial statistics, and annual reports from food and beverage industries. Over a period of 4 years of research, namely 2017 – 2020.

2.2 Dependent Variable

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$$\text{Income Smoothing} = \frac{CV\Delta I}{CV\Delta S} \quad (1)$$

Information:

ΔI : Change in net profit after tax in one period

ΔS : Change in sales in one period

CV: A variable's coefficient of variation is calculated by dividing its standard deviation by its expected value.

CV ΔI or CV ΔS can be calculated using the following formula (2):

$$CV \Delta I \text{ or } CV \Delta S = \frac{\text{Standard Deviation } \Delta X_i}{\Delta X} \text{, or} \quad (2)$$

$$\frac{\sum (\Delta X_i - \Delta X)^2}{\Delta X \cdot n - 1}$$

Information:

CV Δ I = Coefficient of Variation for changes in net profit after tax in a single time frame

CV Δ S = Coefficient of variation for variations in sales over a specific time frame

Δ X_i = Variation in sales (S) or profit (I)

Δ X = Average change in profit (I) or sales (S)

n = Number of years observed

2.3 Independent Variable

Profitability

The proxy used to measure profitability in this research is Return on Assets (ROA), as this ratio may demonstrate how well a business has made money in the past and then forecast future performance. Because management is aware of the company's potential for future profits, companies with greater ROA can implement income smoothing strategies, which facilitates the acceleration of profits. A corporation is said to be performing well in producing net profits for the return on total assets owned if its Return on Assets (ROA) is higher. This implies that a high or low ROA will impact investors' desire to invest, which in turn will impact the volume of shares sold by the company [8].

$$ROA = \frac{\text{Net Income}}{\text{Total Asset}} \quad (3)$$

Leverage

The debt to total asset ratio (DAR), which determines the proportion of a company's total assets financed by total debt or loan funds, is the ratio employed in this study to quantify leverage according to (4).

$$DAR = \frac{\text{Total Debt}}{\text{Total Assets}} \quad (4)$$

Company Size

Size of the Company A company's size is determined by a number of factors, such as its log size, total assets, sales, and stock market value. A total assets proxy is used in this study. Since the value of total assets represents the total assets that the firm owns, it is considered that the larger the company, the higher the value of its total assets. The size of the business will have an impact on its capacity to withstand risks that may emerge from the many operational circumstances that the business may encounter [9]. Therefore, the following formula (5) can be used to determine the size of a company: The more effectively a corporation manages its assets, the higher the ratio. The following formula is used to calculate ROA (3).

$$\text{Company Size} = \text{Ln}(\text{Total Assets}). \quad (5)$$

Variable Moderating

The moderating variable used is Managerial ownership. Managerial ownership refers to the proportion of managerial shares in a corporation. Managerial share ownership indicates that management has two roles: management and investor. Managerial ownership can make management equalize its own interests with those of shareholders, which means that every policy made by management towards the company will have a direct impact on it. The managerial ownership formula can be formulated as follows (6):

$$\text{Managerial Ownership} = \frac{\text{Management Shares}}{\text{Total Company Shares}} \quad (6)$$

2.4 Data Analysis Tools

Descriptive statistics

Descriptive statistics are used to provide an initial knowledge of data characteristics such as mean, standard deviation, variance, maximum, minimum, total, range, kurtosis, and skewness [10]. These statistics help researchers identify patterns or trends in the data, allowing for initial conclusions about the dataset.

Classical Assumption Tests

Classical assumption tests are essential for ensuring the precision and dependability of the findings of multiple regression analysis. These tests confirm the timeliness, impartiality, and consistency of the regression equations. Several fundamental presumptions need to be fulfilled before performing multiple regression analysis:

Normality Test

The normality test assesses whether the data distribution in a dataset or variable is normal. It is crucial for testing the regression model's significance and the meaning of regression coefficients. A good regression model should have a distribution that is normal or close to normal, making it suitable for statistical testing. The Kolmogorov-Smirnov test can be used to determine if residuals are normally distributed [10].

Multicollinearity Test

In a regression model, the multicollinearity test looks for correlations between the independent variables. There should be no correlation between the independent variables in a decent regression model. If the correlation coefficient between independent variables exceeds 0.60, multicollinearity is present. Ideally, the correlation coefficient should be 0.60 or less to ensure no multicollinearity [10].

Test of Heteroscedasticity

The heteroscedasticity test looks at whether the residuals in a linear regression model have unequal variance between observations. Whereas heteroscedasticity denotes varying variances, homoscedasticity denotes continuous variance. An effective regression model ought to ideally be homoscedastic. Methods for testing heteroscedasticity include plotting residuals, graphical methods, the Park test, the Spearman test, and the Glejser test. This study uses the residual value to test if the standardized residual regression value is normally distributed [10].

2.5 Hypothesis Testing

Determination Coefficient (R²)

The degree to which the model can account for changes in the dependent variable is indicated by the coefficient of determination (R²). The range of the R² value is 0 to 1. A greater R² value suggests that the independent variables provide substantial information for predicting the dependent variable, whereas a lower R² value suggests limited explanatory power.

T-Test (Partial Test)

The t-test assesses the relationship between the dependent variable and each independent variable individually. This test is conducted at a 95% confidence level with a significance level of 0.05. The criteria for accepting or rejecting a hypothesis are based on the significance value: if the significance value is greater than 0.05, the hypothesis is rejected; if it is less than 0.05, the hypothesis is accepted.

3. Result And Discussion

3.1 Descriptive Statistical Analysis

Table 1. Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|---------|---------|---------|----------------|
| PROF | 44 | 0.09 | 124.15 | 21.1646 | 25.909 |
| LEV | 44 | 14.06 | 64.67 | 37.4844 | 16.259 |
| SIZE | 44 | 14.74 | 30.62 | 24.1761 | 6.04123 |
| INCOME SMOOTHING | 44 | 1.75 | 9.62 | 5.6180 | 2.41219 |
| GCG | 44 | 00 | 75.00 | 12.5397 | 2.05040 |
| Valid N (listwise) | 44 | | | | |

The table indicates that the Profitability (PROF) has a standard deviation of 25.909, an average of 21.1646, a maximum value of 124.15, and a lowest value of 0.09. The value of leverage (LEV) ranges from 14.06 to 64.67, with an average of 37.4844 and a standard deviation of 16.259. The Company Size (SIZE) variable shows a standard deviation of 6.04123, an average of 24.1761, a maximum of 30.62, and a minimum of 14.74. Income Smoothing (INCOME SMOOTHING) displays a standard deviation of 2.41219, an average of 5.6180, a maximum of 9.62, and a minimum of 1.75. The values of Good Corporate Governance (GCG) range from 0.00 to 75.00, with an average of 12.5397 and a standard deviation of 2.0504.

3.2 Classic Assumption Test

Normality Test

The table indicates that the 2-tailed Asymp. Sig value is 0.074, which is higher than 0.05. This suggests that the study's residual data is regularly distributed, which qualifies it for inclusion in a regression model. Because the points are dispersed along the diagonal line and around the diagonal, the analysis's findings demonstrate that the variables have a normal distribution.

Table 2. One-Sample Kolmogorov-Smirnov Test

| | | Unstandardized Residual |
|----------------------------------|----------------|-------------------------|
| N | | 44 |
| Normal Parameters ^{a,b} | Mean | .0000000 |
| | Std. Deviation | .19138670 |
| Most Extreme Differences | Absolute | .127 |
| | Positive | .075 |
| | Negative | -.127 |
| Test Statistic | | .127 |
| Asymp. Sig. (2-tailed) | | .074 ^c |

Table 3. Multicollinearity Test

| Model | Unstandardize Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|--------|----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Cons) | .955 | .167 | | 5.731 | .000 | | |
| PROF | .897 | .398 | .292 | 2.253 | .030 | .935 | 1.070 |
| LEV | -.660 | .194 | -.445 | -3.408 | .002 | .923 | 1.083 |
| SIZE | -.011 | .005 | -.285 | -2.236 | .031 | .970 | 1.031 |

It can be seen that the tolerance value for the Profitability variable is 0.935, Leverage is 0.923 and Company Size is 0.970, where all of these variables have a tolerance value > 0.1. The VIF value for the Profitability variable is 1.070, Leverage is 1.083 and Company Size is 1.031, where all VIF values for these variables are <10 so it can be indicated that this model is free from multicollinearity problems.

Heteroscedasticity Test

Based on the results of the heteroscedasticity test in the image above, it is clear that the points are spread randomly and do not form a particular pattern. This indicates that there is no heteroscedasticity in the regression model, so this regression model can be used to analyze the influence of profitability, leverage and company size on income smoothing.

3.3 Hypothesis testing

Multiple linear regression analysis

Table 4. Multiple linear regression

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|-----------------------------|------------|---------------------------|---|------|
| | B | Std. Error | Beta | | |

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | .955 | .167 | | 5.731 | .000 |
| PROFIT | .897 | .398 | .292 | 2.253 | .030 |
| LEV | -.660 | .194 | -.445 | -3.408 | .002 |
| SIZE | -.011 | .005 | -.285 | -2.236 | .031 |

To determine the relationship between the independent factors (profitability, leverage, and company size) and the dependent variable (income smoothing), the multiple linear regression equation was examined. The constant coefficient value is 0.955, indicating that the baseline value of income smoothing will be 0.955 if all independent variables (profitability, leverage, and company size) are held constant. In the event that the independent variables do not vary, this suggests a positive intercept.

The regression coefficient for Profitability (X1) is 0.897. This coefficient implies a negative relationship between Profitability and income smoothing. Specifically, a 1% increase in Profitability is associated with a decrease in income smoothing by 0.897 units, holding other variables constant. This significant negative association suggests that higher profitability may discourage income smoothing practices, possibly due to increased scrutiny and higher transparency demands from stakeholders when profits are substantial.

The regression coefficient for Leverage (X2) is -0.660. This indicates a negative relationship between Leverage and income smoothing. For every 1% increase in Leverage, income smoothing decreases by 0.660 units, assuming other variables remain constant. This inverse relationship could suggest that companies with higher leverage are less likely to engage in income smoothing, possibly due to the increased financial risk and scrutiny from creditors that demand more accurate financial reporting.

The regression coefficient for Company Size (X3) is -0.11. This signifies a negative relationship between Company Size and income smoothing. A 1% increase in Company Size results in a 0.11 unit decrease in income smoothing, with other variables held constant. This smaller coefficient indicates that larger companies are slightly less inclined to engage in income smoothing. This could be attributed to larger companies facing more regulatory scrutiny and having more robust internal controls compared to smaller firms.

MRA Test (Moderating Regression Analysis)

Table 5. MRA Test

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | .617 | .252 | | 2.446 | .019 |
| PROF | .317 | .132 | .340 | 2.397 | .022 |
| LEV | -.637 | .256 | -.429 | -2.491 | .017 |
| SIZE | .005 | .008 | .123 | .638 | .527 |
| GCG | 1.964 | .950 | 1.669 | 2.067 | .046 |
| X1*GCG | -.504 | 2.321 | -.092 | -.217 | .829 |
| X2*GCG | 1.059 | 1.510 | .457 | .701 | .488 |
| X3*GCG | -.091 | .039 | -2.101 | -2.354 | .024 |

Based on the results of the analysis in the table, the following linear regression equation is obtained (7):

$$Y = \alpha + \beta_0 + \beta_1\text{PROF} + \beta_2\text{LEV} + \beta_3\text{SIZE} + \beta_1\text{PROF}*\beta_4\text{MO} + \beta_2\text{LEV}*\beta_4\text{MO} + \beta_3\text{SIZE}*\beta_4\text{MO} + \varepsilon \quad (7)$$

According to the interpretation of the regression coefficients, the baseline value of income smoothing will be 0.617 if all independent variables stay constant. The regression equation uses this as a point of reference. Profitability has a regression coefficient of 0.317. This coefficient shows that income smoothing and profitability are positively correlated. In particular, there is a 0.317 rise in profitability for every 1% increase in income smoothing, assuming all other variables are held constant. This suggests that higher profitability may encourage income smoothing, potentially as a strategic move to manage earnings perception.

The regression coefficient for Leverage is -0.637. This indicates a negative relationship between Leverage and income smoothing. For every 1% increase in Leverage, income smoothing decreases by 0.637, assuming other variables remain constant. This inverse relationship suggests that higher leverage may deter income smoothing, possibly due to the increased oversight and pressure from creditors demanding accurate financial reporting. The regression coefficient for Company Size is 0.005. This coefficient suggests a slight positive relationship between Company Size and income smoothing. Although this effect is small, it indicates that larger companies may engage in income smoothing to a minor extent, perhaps due to the complexities and expectations associated with managing larger operations.

The regression coefficient for this interaction term is -0.504. This negative coefficient indicates that when both Profitability and Managerial Ownership increase by 1%, income smoothing decreases by 0.504, assuming other variables are constant. This suggests that higher managerial ownership can mitigate the propensity for income smoothing in profitable firms, likely due to alignment of management's interests with those of shareholders. The regression coefficient for this interaction term is 1.059. This positive coefficient suggests that when both Leverage and Managerial Ownership increase by 1%, income smoothing increases by 1.059, assuming other variables are constant. This implies that in firms with high leverage, managerial ownership might exacerbate income smoothing practices, potentially due to managers' efforts to manage earnings under financial pressure.

The regression coefficient for this interaction term is 0.091. This negative coefficient indicates that when both Company Size and Managerial Ownership increase by 1%, income smoothing decreases by 0.091, assuming other variables are constant. This suggests that in larger firms, managerial ownership can reduce income smoothing, possibly due to enhanced governance mechanisms and alignment of managerial incentives with long-term company performance.

Coefficient of determination test

Table 6. Result of determination test

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---|----------|-------------------|----------------------------|
|-------|---|----------|-------------------|----------------------------|

| | | | | |
|---|-------------------|------|------|--------|
| 1 | .609 ^a | .370 | .323 | .19843 |
|---|-------------------|------|------|--------|

Table 7. Result of determination test

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .670 ^a | .449 | .342 | .19570 |

According to the results of the coefficient of determination test, the coefficient, or R square value, is 0.370. 37%, or 0.370, is the coefficient of determination. This image shows a 37% simultaneous influence of the variables Profitability, Leverage, and Company Size (X) on the variable Income smoothing (Y). The remaining 63% is impacted by additional factors that were not thoroughly investigated.

The R square value has grown from 0.37, or 37%, to 0.449, or 44.9%, according to the findings of the coefficient of determination test in table 4.7 above. Thus, it may be said that the moderating variable GCG (managerial ownership) can improve the way that company size, leverage, and profitability are related to income smoothing.

T test – test (partial)

Table 8. T test

| No | Hypothesis | B | T Count | sig | Description |
|----|--------------|-------|---------|------|----------------|
| 1 | PROF - IS | .897 | 2.354 | .030 | Influential |
| 2 | LEV- IS | -.660 | -3.408 | .002 | Influential |
| 3 | SIZE - IS | -.011 | -2.236 | .031 | Influential |
| 4 | PROF*MO – IS | -.504 | -.217 | .829 | Not Moderating |
| 5 | LEV*MO – IS | 1.059 | .701 | .448 | Not Moderating |
| 6 | SIZE*MO - IS | -.091 | -2.354 | .024 | Moderating |

3.4 The Influence of Profitability on Income Smoothing

As demonstrated by a t value of 2.354, which is higher than the essential t value of 2.028, and a significance value of 0.030, which is lower than the 0.05 threshold, the research findings show that profitability significantly affects income smoothing. This suggests that as profitability increases, management is more likely to engage in income smoothing practices. This result aligns with the bonus plan hypothesis, which posits that management may use income smoothing to meet performance targets tied to bonus agreements. The incentive to smooth earnings stems from the desire to present stable financial performance, particularly when future profitability is uncertain or when aligning reported earnings with performance goals is crucial. The research also highlights that firms with higher profitability ratios are more efficient in utilizing capital for income smoothing. This implies that well-performing firms can manage income smoothing practices more effectively without compromising the quality of their financial statements. This efficiency in income smoothing can be seen as a reflection of sophisticated financial management strategies.

The study's findings diverge from those of [1] and [11], which reported no significant effect of profitability on income smoothing. These discrepancies may be attributed to differences in sample characteristics, methodologies, or economic contexts. Conversely, the results are consistent with Sari et al. (2020), which also found a significant influence of profitability on income smoothing. This alignment reinforces the notion that income smoothing is indeed utilized to manage financial performance in response to profitability.

3.5 The Effect of Leverage on Income Smoothing

A computed t value of -3.408 and a significance value of 0.002 demonstrate that leverage has a considerable impact on income smoothing. The debt covenant hypothesis, which holds that businesses with a lot of leverage are more inclined to use income smoothing techniques, is supported by this finding. This is justified by the fact that high-leverage companies may employ income smoothing if they have substantial debt commitments or anticipate future increases in debt repayment. To manage their financial statements. By smoothing income, these companies aim to present a more stable and favorable financial performance to potential lenders and investors, which is crucial for securing additional funding or negotiating better loan terms. In contrast, firms with lower leverage, which experience fewer issues related to debt financing and repayment, might not need to engage in income smoothing to the same extent. These companies typically have greater financial flexibility and less pressure to manipulate earnings to attract external funding.

The findings are consistent with previous studies by [7] and [12], both of which identified a significant effect of leverage on income smoothing. These studies reinforce the idea that leverage can drive firms to adjust their earnings to meet financial covenants or improve their financial appearance. However, the results diverge from [13], who found no significant effect of leverage on income smoothing. This discrepancy could be due to differences in research design, sample characteristics, or the economic context in which the studies were conducted. Variations in methodologies or definitions of income smoothing and leverage might also contribute to the differing conclusions.

3.6 The Influence of Company Size on Income Smoothing

The research results demonstrate that company size significantly influences income smoothing, as indicated by a calculated t value of -2.236 and a significance value of 0.031. This supports the hypothesis that larger companies are more likely to engage in income smoothing practices. The rationale behind this is that firms with higher total assets often face greater scrutiny from investors and regulatory bodies. To maintain a favorable image and attract investment, these larger companies may smooth profits to present a more stable and predictable financial performance.

Larger firms are also subject to stricter government inspections and regulatory requirements. To avoid the potential tax implications associated with higher reported profits, these companies might use income smoothing to manage their earnings in a way that minimizes their tax liabilities. This behavior aligns with the political cost theory, which suggests that companies with significant political or economic visibility, such as large corporations, may engage in earnings management to avoid adverse consequences from increased scrutiny and tax burdens.

The findings are consistent with [5], who found that company size affects income smoothing. Wilton's research supports the notion that larger firms are motivated to smooth profits to present a stable performance and mitigate the impact of governmental and investor scrutiny. However, the results diverge from [8], who reported no significant influence of company size on income smoothing. This discrepancy may arise from differences in research methodologies, sample sizes, or contextual factors such as economic conditions or industry specifics. Variations in how company size and income smoothing are defined and measured could also contribute to differing outcomes.

3.7 Relationship Between Profitability and Income Smoothing Moderated by Managerial Ownership

The analysis reveals that managerial ownership does not moderate the relationship between profitability and income smoothing. The statistical results indicate that the interaction term between profitability and managerial ownership has a t value of -0.217, which is less than the critical t value of 2.028, and a significance value of 0.829, exceeding the 0.05 threshold. This suggests that managerial ownership does not significantly affect the impact of profitability on income smoothing. A possible explanation for this finding is that low managerial ownership implies that management holds only a small proportion of shares in the company. When managerial ownership is low, it is unlikely to exert substantial influence over company decisions, including those related to income smoothing. This limited ownership stake means that management may not have sufficient incentives to alter their behavior based on their ownership levels.

These findings align with [11], who also found that managerial ownership does not moderate the relationship between profitability and income smoothing. Putra's research supports the idea that in firms where managerial ownership is minimal, decisions related to income smoothing are less likely to be influenced by management's personal financial stakes. Consequently, companies with low managerial ownership might continue to engage in income smoothing practices regardless of profitability, as the management's limited ownership does not significantly affect their decision-making processes. Overall, this research underscores that managerial ownership, when low, does not play a significant moderating role in the relationship between profitability and income smoothing. This insight suggests that other factors, such as governance structures or external pressures, might be more influential in shaping income smoothing practices. Future research could explore these alternative factors to gain a more comprehensive understanding of the determinants of income smoothing.

3.8 Relationship Between Leverage and Income Smoothing Moderated by Managerial Ownership.

The analysis reveals that managerial ownership does not moderate the relationship between leverage and income smoothing. The statistical results show that the interaction term between leverage and managerial ownership has a t value of 0.701, which is below the critical t value of 2.028, and a significance value of 0.488, which exceeds the 0.05 threshold. This indicates that managerial ownership does not significantly influence the effect of leverage on income smoothing. These findings challenge the assumptions of agency theory, which posits that when managers hold significant ownership stakes in a company, their interests align more closely with those of shareholders, thereby reducing agency problems and influencing earnings management practices. According to agency

theory, higher managerial ownership should incentivize managers to act in the best interests of shareholders, including moderating income smoothing activities. However, the results suggest that managerial ownership may not be substantial enough to exert a meaningful impact on the relationship between leverage and income smoothing.

The lack of significant moderation by managerial ownership can be attributed to the relatively small proportion of shares held by management. When managerial ownership is low, managers may not have sufficient influence or incentive to alter their accounting practices in response to leverage. This limited ownership stake does not provide the necessary leverage to impact earnings management decisions significantly. The research findings align with [6], who also concluded that managerial ownership does not moderate the relationship between leverage and earnings management. This supports the view that small levels of managerial ownership do not effectively address agency issues or influence income smoothing practices in the presence of leverage.

3.9 Relationship Between Company Size and income smoothing moderated by Managerial Ownership

The research findings demonstrate that The estimated t value of -2.354, which is higher than the crucial t value of 2.028, and the significance value of 0.024, which is lower than the 0.05 threshold, show that management ownership moderates the link between business size and income smoothing. This suggests that the effects of firm size on income smoothing methods is significantly moderated by managerial ownership. In particular, whereas bigger businesses are more likely to use income smoothing because to the increased scrutiny and expectations from investors, high levels of managerial ownership can mitigate this tendency. The presence of significant managerial ownership aligns the interests of managers with those of shareholders, thereby reducing the incentives for income smoothing. Managers with substantial ownership stakes are more likely to focus on long-term shareholder value rather than short-term financial manipulation, leading to a more balanced approach to earnings management.

This moderating effect suggests that in firms where managers hold a considerable number of shares, the negative pressures to smooth profits, driven by the size of the company, are counteracted. Managerial ownership can thus act as a stabilizing force, encouraging transparency and reducing the need for aggressive income smoothing practices. These ¹findings are consistent with [4], who also reported that managerial ownership can moderate the effect of company size on income smoothing. Komang's research supports the idea that high managerial ownership can align managerial actions with shareholder interests, thereby influencing income smoothing behaviors in larger firms.

4. Conclusions

This study was carried out with the intention of obtaining information regarding the influence of profitability, leverage and company size on income smoothing. The tools for analysis in this research were carried out by testing hypotheses using regression analysis and MRA with the IBM SPSS Statistics 23 program. The research shows that profitability,

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leverage, and company size all significantly affect smoothing of income with higher profitability and leverage increasing the likelihood of income smoothing, and larger companies more prone to these practices due to increased scrutiny. Managerial ownership has a nuanced role: it does not moderate the relationship between profitability and leverage with income smoothing but does influence the impact of company size on income smoothing. Specifically, high managerial ownership can reduce the tendency for large companies to engage in income smoothing by aligning managerial interests with those of shareholders. Overall, while managerial ownership alone may not always influence income smoothing, it can play a significant role in certain contexts.

To address the findings, companies should consider increasing managerial ownership to better align management's interests with shareholders, potentially reducing aggressive income smoothing practices. Strengthening governance structures and revising incentive frameworks can help ensure more transparent financial reporting. Future research should explore how various contextual factors influence income smoothing, providing deeper insights into differing study outcomes. Additionally, companies should review and adapt their financial policies to balance stability with transparency, particularly in high-leverage or large firms. It is also important to consider broader influences beyond managerial ownership, such as market conditions and regulatory changes, to manage income smoothing effectively.

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